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Title: **A Historical Survey Report for Lake Hodges Water Quality and Quagga Mitigation Measure Project, San Diego, California**

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I. PROJECT DESCRIPTION AND LOCATION

The following report details the survey results for the cultural resources survey conducted for the Lake Hodges Water Quality and Quagga Mitigation Measure Project (proposed project) in the City of San Diego, California, and follows the report format specified in the City of San Diego Historical Resources Guidelines.

Project Description

The proposed project will install a Speece cone hypolimnetic oxygenation system (HOS) in order to meet water quality objectives for pH, manganese, turbidity, nitrogen and phosphorous. Components of this project include constructing a concrete masonry unit onshore building, installation of a 600-ampere main electrical service, three ESA oxygen generation units, installation of a programmable logic controller, installation of a skid-mounted Speece cone with a rock or concrete base measuring approximately 10 feet x 20 feet x 3 feet on the lake bottom, and a power cable and oxygenation pipeline connecting the shoreline facilities to the Speece cone and pump. Grading, trenching and vegetation removal, as needed, will be part of the activities during the project.

Project Location

The proposed project is located at one of two potential locations: the RK (Reservoir Keeper) Residence and the VSA site at Lake Hodges Dam. At the RK Residence, the Area of Potential Effects (APE) includes the residence driveway, building and building pad, and the land between the building pad and the reservoir. At the VSA site, the APE includes two areas adjacent to the dam.

The proposed project area consists of an area 0.6 miles northeast of the Lake Hodges Dam on Lake Drive on City of San Diego Property (APN 7601701300) (Figure 1). It consists of two areas measuring approximately 1.5 acres combined (Figure 2).

The proposed project area is located off Lake Drive and is accessible by an existing 10-foot wide unpaved access road. The property itself is a part of the Public Utilities Department and is accessible through a locked gate system not accessible to the public, although numerous trails in and around the project area are used recreationally.

The project APE can be found in Township 13 South, Range 2 West, Section 18 of the 1996 Escondido and Rancho Santa Fe USGS 7.5-minute topographical quadrangles (United States Geological Survey 1996 and 1996a, respectively).

II. SETTING

Natural Setting

Geologically, the project APE is found within Mesozoic undivided metasedimentary and metavolcanic rocks (MzU) (Kennedy et al. 2007). The climate is classified as Mediterranean (Pryde 2014).

The average January minimum temperature is 43°F while maximum temperature in August averages 89°F with rainfall averaging almost 15 inches per year (usclimatedata.com 2015).

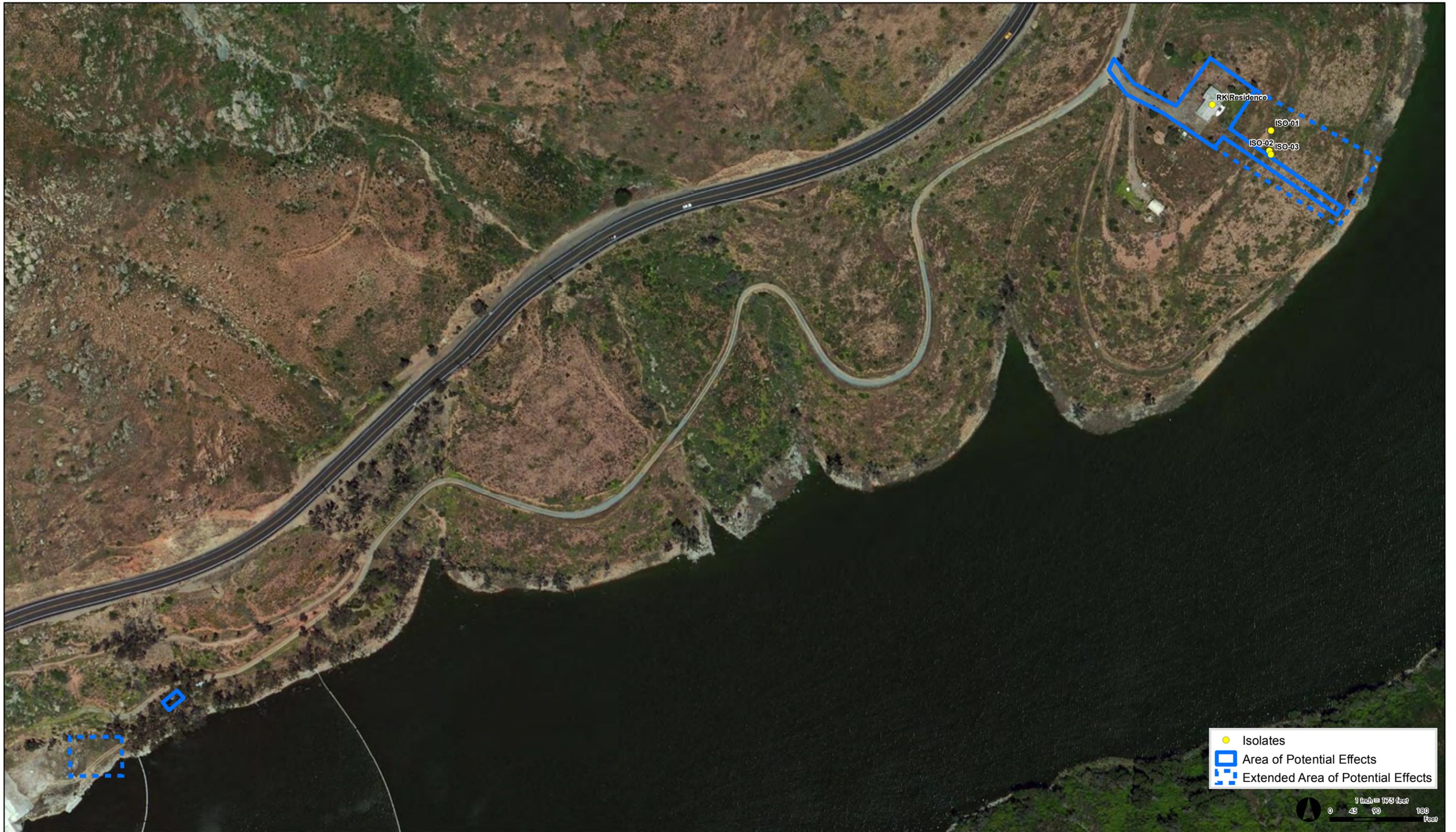


FIGURE 1
General Location Map

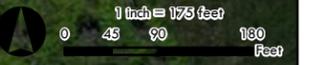
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Lake Hodges Quagga

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- Isolates
- Area of Potential Effects
- Extended Area of Potential Effects



Source: ESRI, 2015



FIGURE 2
Local Vicintiy Aerial Map

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Lake Hodges Quagga

The predominant natural vegetation community of the region is chaparral, although perhaps mixed with coastal sage scrub (Pryde 2014). Typical plant species for this community include laurel sumac (*Rhus laurina*), black sage (*Salvia mellifera*), manzanita (*Arctostaphylos* spp.), oak (*Quercus* spp.), chamise (*Adenostoma fasciculatum*), and California lilac (*Ceanothus* sp.), along with various grasses and legumes. Riparian species are associated with drainages. Mammals, birds, and reptiles within these communities provided potential food sources to prehistoric inhabitants. Much of the natural vegetation in nearby low-lying areas has been displaced by modern land uses for grazing and orchards. However, the steep mountain slopes harbor relatively intact, dense chaparral and oak communities.

III. HISTORICAL OVERVIEW

Occupation in the San Diego region can be firmly attributed to over 7,000 years Before Present (B.P.) by radiocarbon dating, although there are some who suggest occupations beyond 10,000 years ago (Moratto 1984). However, there has been much debate in past years over how to synthesize a regional chronology.

Using Malcolm Rogers' chronology along the coast (Moratto 1984; Rogers 1939, 1945), the La Jolla I Complex can be characterized by flexed burials and "crude" scrapers. The La Jolla II Complex adds multiple projectile point types, formal cemeteries, and discoidal groundstone. The La Jolla III Complex is influenced by the eastern Yuman culture at around 4,000 B.P. After this point, an increase in terrestrial resources, especially acorn, is introduced and cremations firmly replace inhumations before 1,500 B.P. (Moratto 1984).

The people whom the Spanish first encountered in this area are known as the Kumeyaay. Their territory extended from the Pacific Ocean in the west, to the San Luis River/San Felipe Creek/Salton Sea to the north, almost to the Colorado River to the east, to approximately 30 miles south of Ensenada in Baja California, Mexico. Their language is in the Yuman language family of Hokan stock, and the two dialects are Ipai and Tipai (Luomala 1978).

Within Kumeyaay territory, bands comprised of approximately five to 15 autonomous kinship groups controlled portions of land measuring between 10 and 30-miles in length. These areas were located within drainage systems extending from the coast to the desert via the foothills and mountains (Shipek 1982). This allowed the groups to have access to resources from multiple ecological zones throughout the year. Thus, Kumeyaay subsistence patterns included fishing and hunting, as well as desert irrigation farming along the Colorado River and its tributaries. Wild plants and seeds were also harvested, including agave, yucca, manzanita, elderberry, chia, buckwheat, cholla, prickly-pear cactus, piñon nuts, and acorns. Acorns were gathered from several different species of oak in the late summer, and were stored in family and village granaries. Mesquite replaced acorn as a primary staple for Kumeyaay living in the eastern deserts (Luomala 1978). Wild game included woodrats, rabbits, doves, geese, quail, deer, antelope, and mountain sheep.

Shelter consisted of winter village structures and summer camp dwellings. Winter village sites were often found at lower elevations and within sheltered locations. These villages were comprised of dispersed single-family dwellings, which were composed of semi-subterranean, circular wooden pole frameworks that were covered with brush thatch and/or earth. Rectangular openings were constructed and faced east, while doors were placed to guard against the wind. A family-owned platform granary may have also accompanied this structure. Other structures found in the winter village included a communal ceremonial flat-roofed brush shelter, a dance

ground, and a semicircular shelter for the *keruk* mourning ceremony. The dance circle and ceremonial shelter were often reinforced with a low rock wall. Summer campsites were less elaborate, and were selected for access to water, drainage, dietary resources, and protection from the elements. Windbreaks, trees, and/or caves with rocky overhangs served as summer campsite shelters (Luomala 1978).

Kumeyaay peoples had a varied material culture reflective of the many ecosystems they utilized. They created finely woven baskets; twined caps; agave fiber sandals; a variety of ceramic vessels, including miniature forms, pipes, and human figures; throwing sticks; mesquite war clubs; and a double-bladed paddle which was used with their tule watercraft (Luomala 1978; Pritzker 2000). They largely traded amongst their own group; however, they also participated in trade between the southwest and the Pacific coast.

The historic period in San Diego is considered to have begun with the founding of Mission San Diego de Alcalá in 1769. The Spanish Mission system served both as a way to provide a means of colonization for the Spanish and also as a safe rest stop for travelers along El Camino Real, or the King's Highway. Mission San Luis Rey de Francia was founded in 1798 (California Missions Resource Center 2015a), and is still an active Catholic Church. After the Mission System became secularized in 1833 (California Missions Resource Center 2015b), portions of mission lands were granted as *ranchos*.

The current project is directly related to the operations of Hodges Reservoir, created in 1918 by the damming of San Dieguito Creek by Hodges Dam. The dam and reservoir were purchased by the City of San Diego in 1925 and currently serves the San Dieguito Water District, Santa Fe Irrigation District, as well as the City of San Diego. Capacity of the reservoir at maximum is 30,251 acre-feet, with a maximum depth of 115 feet and 27 miles of shoreline (City of San Diego 2015).

IV. STUDY METHODS

In order to ascertain the proximity of existing cultural resources to the APE and project area, a record search was undertaken by the South Coast Information Center (SCIC), at San Diego State University. The search encompassed a one-mile search radius around the proposed project's APE. This records search was completed to determine the general character of the cultural resources within the project area as well as to gauge the potential effects of the proposed construction activities. A Sacred Land File search was also conducted with the California Native American Heritage Commission (NAHC).

A pedestrian survey was conducted on April 20, 2015 to inspect the ground surface for cultural resources. In areas that were thickly vegetated, the survey transect was redirected through areas that were more traversable. Digital photographs were taken to document the character of the proposed project's APE and survey conditions.

V. RESULTS OF STUDY

Archival Research

A California Historical Resources Information System (CHRIS) data request form was submitted to the SCIC and the results were received in the Atkins San Diego office on March 24, 2015 (Attachment A). There were no previously recorded resources within the APE. However, there were 64 previously recorded resources and one historic address within a one-mile buffer of the

project's APE (Table 1). These resources consist of five historic buildings, one historic foundation, one historic mine, three historic trash scatters, one flume (Lake Hodges Flume), one resource with pictographs and milling, one resource with pictographs and lithic and ceramic artifacts, 10 lithic scatters, 13 prehistoric quarries, two camps, 16 resources with bedrock milling features (10 milling only, the remainder with lithic, groundstone, and/or ceramic artifacts), 10 lithic isolates, and one multicomponent site (lithic scatter and historic ceramic scatter). One additional resource, recorded as a camp, also included human remains.

In addition, there are 32 reports on file at the SCIC for the APE and within one-mile of the proposed project's APE (Table 2). Three of these reports address various portions of the APE, which indicates that approximately 100 percent of the APE has been previously surveyed for cultural resources, and 100 percent of the APE has been addressed through literature reviews. One report mentions the village of Sinyau-pichkara as being located in the San Dieguito River Valley, and is now below the waters of Lake Hodges (Hector and Brewster 2002), which is located adjacent to the APE.

The majority of the quarry sites within the record search area are defined as Santiago Peak Volcanics. This material has been used as long ago as 9,000 B.P. at the C.W. Harris site (Gallegos and Associates 2002), located in the San Dieguito River valley.

A Sacred Lands File search was requested with the NAHC on March 19, 2015 and a response received on April 08, 2015. The NAHC response was that there are Native American cultural resources within the Escondido USGS 7.5-minute topographical quadrangle that may be impacted by project activities. The NAHC suggested that we contact the San Luis Rey Band of Mission Indians. Tribal scoping letters were sent out on April 09, 2015 to all contacts listed in the NAHC response, and no responses were received by the time of the survey (the form letter for Tribal Scoping is in Attachment B). However, Lucia Majel, a representative of the Pauma Band of Luiseño Indians, was present during the survey. Soboba Band of Luiseno Indians replied in a letter dated June 02, 2015 and does not have any specific concerns regarding this project. Pauma Band of Luiseno Indians replied via email on June 05, 2015 and recommends archaeological and Kumeyaay monitors during all ground-disturbing activities during this project.

A review of USGS topographical maps for the project shows the San Dieguito River labeled as the Bernardo River in 1893 (United States Geological Survey 1893), with the name changed to its present name on the 1901 Escondido USGS 15-minute quadrangle (United States Geological Survey 1901). The residence for the Reservoir Keeper is not visible on the 1948 Escondido USGS 7.5-minute quadrangle, but is visible on the 1968 Escondido USGS 7.5-minute quadrangle (United States Geological Survey 1968). A review of historic maps showing the local ranchos show the project area as being open land, though several ranchos are located nearby (San Diego County Assessor 1955; M.C. Wheeler Co. Survey 1872).

The City of San Diego provided a Building and Structure Record for the Reservoir Keeper Residence, also known as Building No. 3363 (City of San Diego n.d.). It is listed as a 5 room, one garage, 1,500 square feet frame and stucco residence on a concrete slab. The roof is hipped and has asbestos shingles. Interior walls are plaster, with vinyl tile flooring, forced air (gas) heating, standard plumbing and standard lighting. It measures 55.5 feet long and 32 feet wide. Listed in use for the purpose of the Dam Keeper's House, it was acquired by the City of San Diego on February 01, 1960 for public purposes.

Table 1. Cultural Resources within 1-mile of the Proposed Project's APE

Primary No. P-37-	Trinomial No. CA-SDI-	Resource Description	Recording Events	Proximity to APE
P-37-005815	CA-SDI-005815	Prehistoric – metavolcanic quarry and lithic scatter in two loci	Originally recorded in 1978 by M. Aasved and J. Murray. Updated in 1979 by Thesken. Updated in 1980 by W.T. Eckhardt.	Outside
P-37-007118	CA-SDI-007118	Prehistoric – metavolcanic quarry and associated lithic reduction	Originally recorded in 1979 by J. Thesken Updated in 1980 by W.T. Eckhardt	Outside
P-37-007123	CA-SDI-007123	Prehistoric – metavolcanic quarry and associated lithic reduction	Originally recorded in 1979 by J. Thesken Updated in 1980 by W.T. Eckhardt	Outside
P-37-011488	CA-SDI-011488	Prehistoric – Temporary camp: Bedrock milling features, Tizon Brownware sherds, groundstone, cores, debitage, scrapers, utilized flakes, bifaces and midden	Originally recorded in 1989 by B.F. Smith Tested and updated in 1995 by B.F. Smith	Outside
P-37-011491	CA-SDI-011491	Prehistoric – basalt quarry and associated lithic reduction	Originally recorded in 1989 by B.F. Smith	Outside
P-37-011501	CA-SDI-011501	Prehistoric – lithic scatter, tools, several hearths	Originally recorded in 1989 by B.F. Smith	Outside
P-37-011502	CA-SDI-011502	Prehistoric – lithic debitage, groundstone, tools	Originally recorded in 1989 by B.F. Smith Tested and updated in 1995 by B.F. Smith	Outside
P-37-011506	CA-SDI-011506	Prehistoric – Santiago Peak Volcanics quarry and associated lithic reduction	Originally recorded in 1989 by B.F. Smith Tested and updated in 1995 by B.F. Smith	Outside
P-37-011507	CA-SDI-011507	Prehistoric – Bedrock milling feature with one slick.	Originally recorded in 1989 by B.F. Smith	Outside
P-37-012027	CA-SDI-012027	Prehistoric – Human remains, habitation site; Ceramics, faunal, obsidian, lithics; Tested	Originally recorded in 1990 by Van Horn and White. Undated updated mentions 1997 RECON testing as significant, and 2000 Gallegos & Associates testing. 2003 Gallegos data recovery and preservation. East half of site capped.	Outside
P-37-012028	CA-SDI-012028	Prehistoric – 2 bedrock milling features, debitage, groundstone.	Originally recorded in 1990 by Van Horn and White. Updated 1993 by Briggs, James, Pignolo and Glenn. Updated 1999 by Ashkar and Hilton, recommended monitoring though not relocated due to vegetation.	Outside
P-37-012029	CA-SDI-012029	Prehistoric – disturbed midden: Tizon Brownware, groundstone vessel rim, felsite and andesite debitage, felsite scraper, shell	Originally recorded in 1990 by Van Horn and White. Updated 1992 by C.S., B. Glenn, M.M., K.C., E.S.	Outside
P-37-012684	CA-SDI-012684	Prehistoric – Pictograph/occupation site of four loci	Originally recorded in 1992 by Glenn, et al. Updated with 6 loci, mentions 1997 and 2001 reports. Tested by RECON in 1997	Outside
P-37-012685	CA-SDI-012685	Prehistoric – Bedrock milling feature and pictographs with historic petroglyphs (graffiti)	Originally recorded in 1992 by Glenn, et al. Tested and updated in 1997 by RECON. Unknown update (2001?)	Outside
P-37-012687	CA-SDI-012687	Prehistoric – four bedrock milling features	Originally recorded in 1992 by Glenn et al.	Outside
P-37-012773	CA-SDI-012773	Prehistoric – lithic scatter (cores, flakes, tools); Tested	Originally recorded in 1992 by Pierson Updated and tested in 1995 by B.F. Smith	Outside
P-37-012774	CA-SDI-012774	Prehistoric – metavolcanic quarry and associated lithic reduction	Originally recorded in 1992 by Pierson	Outside
P-37-012775	CA-SDI-012775	Prehistoric – artifact scatter suggesting resource extraction	Originally recorded in 1992 by Pierson	Outside
P-37-012776	CA-SDI-012776	Historic – 1800s and 1900s sparse artifact scatter	Originally recorded in 1992 by Pierson Updated in 1995 by B.F. Smith, Locus B tested	Outside
P-37-012779	CA-SDI-012779	Prehistoric – sparse felsite artifact scatter.	Originally recorded in 1992 by Pierson.	Outside
P-37-012780	CA-SDI-012780	Prehistoric – metavolcanic quarry and associated lithic reduction	Originally recorded in 1992 by Pierson	Outside

Table 1. Cultural Resources within 1-mile of the Proposed Project's APE

Primary No. P-37-	Trinomial No. CA-SDI-	Resource Description	Recording Events	Proximity to APE
P-37-012781	CA-SDI-012781	Prehistoric – bedrock milling station and sparse artifact scatter	Originally recorded in 1992 by Pierson	Outside
P-37-012782	CA-SDI-012782	Historic – 1940s-era historic trash deposit	Originally recorded in 1992 by Pierson	Outside
P-37-012783	CA-SDI-012783	Prehistoric – bedrock milling features and sparse lithic scatter; Tested	Originally recorded in 1992 by Pierson Updated and tested in 1995 by B.F. Smith	Outside
P-37-012784	CA-SDI-012784	Prehistoric – bedrock milling feature	Originally recorded in 1992 by Pierson	Outside
P-37-012785	CA-SDI-012785	Prehistoric – bedrock milling feature with two manos and a scraper	Originally recorded in 1992 by Pierson Updated and tested in 1995 by B.F. Smith	Outside
P-37-012786	CA-SDI-012786	Prehistoric – bedrock milling feature	Originally recorded in 1992 by Pierson	Outside
P-37-013021	CA-SDI-013021	Prehistoric - lithic scatter of 30+ Santiago Peak Metavolcanic	Originally recorded in 1992 by James and Campbell	Outside
P-37-013025	CA-SDI-013025	Prehistoric – metavolcanic quarry and associated lithic reduction (3 loci of outcrops)	Originally recorded in 1992 by James, B.G., S.C., M.M.	Outside
P-37-013052	CA-SDI-013052	Prehistoric – three metavolcanic quarries, three cairns, and lithic scatter (all Santiago Peak)	Originally recorded in 1992 by Glenn, D.J., M.M., K.C., S.C., E.S., C.S.	Outside
P-37-013053	CA-SDI-013053	Prehistoric – one bedrock milling feature with one slick	Originally recorded in 1992 by Campbell, D.J., M.M., K.C., B.G.	Outside
P-37-013054	CA-SDI-013054	Prehistoric – one bedrock milling feature with one slick	Originally recorded in 1992 by James, Mealey, and Campbell	Outside
P-37-013056	CA-SDI-013056	Prehistoric – one bedrock milling feature, a rock wall, and lithic scatter	Originally recorded in 1992 by Collins, Glenn, D.J., M.M., and S.C.	Outside
P-37-013063	CA-SDI-013063	Prehistoric - Santiago Peak lithic scatter (30+ flakes)	Originally recorded in 1992 by James	Outside
P-37-013064	CA-SDI-013064	Prehistoric – metavolcanic quarry and associated lithic reduction	Originally recorded in 1992 by James and Campbell	Outside
P-37-013066	CA-SDI-013066	Prehistoric – metavolcanic quarry and associated lithic reduction, and one lithic scatter	Originally recorded in 1992 by Campbell, James, M.M., K.C., C.S., E.S.	Outside
P-37-013067	CA-SDI-013067	Prehistoric - Santiago Peak lithic scatter of 75+ flakes	Originally recorded in 1992 by James, Mealey, Campbell, and Collins	Outside
P-37-013068	CA-SDI-013068	Prehistoric – metavolcanic quarry and associated lithic reduction, one bedrock milling feature and one rock wall	Originally recorded in 1992 by Scott and Campbell	Outside
P-37-013069	CA-SDI-013069	Prehistoric – lithic scatter of Santiago Peak volcanics (50+ flakes) and one flake tool; also one bedrock milling feature with one slick	Originally recorded in 1992 by James, Campbell, Mealey, and Collins	Outside
P-37-013070	CA-SDI-013070	Prehistoric – Santiago Peak Volcanic quarry and associated lithic reduction	Originally recorded in 1992 by Glenn, Mealey and Collins	Outside
P-37-013315	CA-SDI-013315	Prehistoric - lithic scatter	Originally recorded in 1993 by Buysse	Outside
P-37-013316	CA-SDI-013316	Historic - pump house and well, wooden water tank base, and dam	Originally recorded in 1993 by Buysse	Outside
P-37-013317	CA-SDI-013317	Prehistoric – one bedrock milling station with one basin	Originally recorded in 1993 by Buysse	Outside
P-37-013602	CA-SDI-013602	Prehistoric - one bedrock milling feature. Tested with STPs and recovered one flake. Determined not significant.	Originally recorded at unknown date by Collins. Updated and tested as not significant in 2006 by Gallegos and Associates.	Outside
P-37-013604	CA-SDI-013604	Prehistoric - one bedrock milling feature with five slicks and four mortars	Originally recorded in 1993 by James, Pignolo, Collins, and Briggs. Updated in 2000 by Moslak.	Outside
P-37-013650	CA-SDI-013650	Historic – mine and associated stacked rock wall	Originally recorded in 1993 by Glenn, James, Pignolo and Briggs	Outside
P-37-014109	CA-SDI-014042	Prehistoric – SPV flake scatter, one fragmented metale and several manos Historic – white earthenware and one blue bottle base	Originally recorded in 1995 by Green and Glenn	Outside

Table 1. Cultural Resources within 1-mile of the Proposed Project's APE

Primary No. P-37-	Trinomial No. CA-SDI-	Resource Description	Recording Events	Proximity to APE
P-37-015252		Prehistoric – one porphyritic metavolcanic flake	Originally recorded in 1992 by Mealey, Glenn, K.C., C.S. E.S.	Outside
P-37-015253		Prehistoric – one aphanitic metavolcanic flake	Originally recorded in 1992 by K.C., Glenn, D.J., S.C., M.M., C.S., E.S.	Outside
P-37-015273		Prehistoric – two aphanitic Santiago Peak metavolcanic flakes	Originally recorded in 1992 by James, Glenn, Campbell and Mealey	Outside
P-37-015278		Prehistoric – one porphyritic Santiago Peak metavolcanic flake	Originally recorded in 1992 by James, Glenn, S.C., M.M., K.C.	Outside
P-37-015280		Prehistoric – one black porphyritic Santiago Peak metavolcanic flake	Originally recorded in 1992 by James, Glenn, M.M., S.C., K.C.	Outside
P-37-015281		Prehistoric – bifacial mano	Originally recorded in 1992 by Campbell, James and Mealey	Outside
P-37-015282		Prehistoric – one black porphyritic Santiago Peak metavolcanic flake	Originally recorded in 1992 by James, Campbell and Mealey	Outside
P-37-015284		Prehistoric – hammerstone and two flakes	Originally recorded in 1992 by Campbell and Glenn	Outside
P-37-015585	CA-SDI-014331	Historic – foundation and stone walls, landscaping plants. Early 20 th Century	Originally recorded in 1996 by York and Mullen	Outside
P-37-019224		Historic – three historic structures	Originally recorded in 2000 by Moslak	Outside
P-37-023709		Historic – Lake Hodges Flume	Originally recorded in 2000 by Schaefer and Moslak	Outside
P-37-025444		Historic – single family ranch house NRHP code 7	Originally recorded in 2004 by Pierson	Outside
P-37-026482	CA-SDI-017378	Historic – historic trash scatter and fence	Originally recorded in 2005 by Wilson and Wise; Evaluated	Outside
P-37-028976	CA-SDI-018581	Prehistoric – one bedrock milling feature with one basin	Originally recorded in 2007 by Murphy	Outside
P-37-028977	CA-SDI-018582	Prehistoric – one bedrock milling feature with four slicks and two basins	Originally recorded in 2007 by Murphy	Outside
P-37-031746		Prehistoric - one metavolcanic assayed cobble and one metavolcanic core fragment	Originally recorded in 2010 by Dalope, Johnson and Stoneburner	Outside

Table 2. Previous Studies Conducted within 1-mile of the Proposed Project's APE

Report Number	NADB	Authors	Year	Title	Proximity to APE
SD-00125	1120125	Archaeological Associates	1978	Archaeological Survey Report: The Proposed 320 +/- Acre Garner Anthony Lot Split Near Rancho Santa Fe in San Diego County, California	Outside
SD-00288	1120288	Carrico, Richard	1978	Archaeological/Historical Survey of the Lake Hodges Fishing Program Project San Diego, California	Outside
SD-00365	1120365	Carrico, Richard, Stephen B. Lacy, and Roberta A. Herdes	1979	Archaeological/Historical and Biological Reconnaissance of the Austin-Hansen Property, Del Dios	Outside
SD-00672	1120672	Gallegos, Dennis, Roxana Phillips, and Andrew Pignoli	1988	A Cultural Resource Overview for the San Dieguito River Valley San Diego, California	APE within
SD-02168	1122168	Mooney-Lettieri and Associates, Inc.	1984	Draft Supplemental Environmental Impact Report for the Rancho Cielo Project	Outside
SD-02202	1122202	PRC Engineering, Inc.	1984	Draft Environmental Impact Report for 4-S Ranch Specific Plan and General Plan Amendment	Outside
SD-02315	1122315	Smith, Brian F.	1986	Research Design for the Sampling of Site W-3376 (SDI-9956)	Outside
SD-03060	1123060	Smith, Brian, Kathryn Smith, and James Moriarty	1983	A Cultural Resources Inventory at the Alva R-45 Ranch, San Diego County, California	Outside
SD-03280	1123280	American Pacific Environmental Consultants	1980	Rancho Cielo: Draft Environmental Impact Report – Volumes I & II	Outside
SD-04157	1124157	Nancy A. Whitney-Desautels	1991	Archaeological and Historical Literature Search and Records Check for Alternative Alignments for Highway 680 San Diego County, California	Outside
SD-04176	1124176	Schaefer, Jerry Ph.D. and Ken Moslak	2000	A Cultural Resource Inventory and Evaluation for the San Dieguito Reservoir Rehabilitation and Lake Hodges Flume Replacement Project	Outside
SD-04236	1124236	APEC (American Pacific Environmental Consultants, Inc.)	1981	Environmental Impact Report for San Dieguito River Study Draft Conceptual Master Plan	APE within
SD-04879	1124879	Ogden Environmental and Energy Services	1995	Santa Fe valley Specific Plan Draft Environmental Impact Report(Specific Plan 95-001; Rezone 95-008; Log 95-8-21)	Outside
SD-06445	1126445	Smith, Brian F., Stephen J. Burke, and James R. Moriarty III	1996	Results of a Cultural Resource Study at the 4S Ranch	Outside
SD-06699	1126699	Wier Biological Consultants	1984	Biological Field Survey Report and Planning Recommendations for the Alva R4-S Ranch, Rancho Bernardo	Outside
SD-06708	1126708	Gallegos, Dennis R. and Tracey Stropes	1997	Cultural Resource Survey Report for the Sterling Property Carlsbad, California	APE within
SD-07320	1127320	Abeyta, Daniel and David Blaha	1999	Nextel Telecommunication Facility, Four Gee Road, North of Artesian Road, San Diego, California	Outside
SD-07441	1127441	Duke, Curt	2001	Cultural Resource Assessment Cingular Wireless Facility No. SD 365-01 San Diego County, California	Outside
SD-08326	1128326	Mason, Roger D.	2002	Cultural Resources Records Search and Field Survey Report for a Verizon Telecommunications Facility: Lake Hodges Dam in the City of San Diego, San Diego County, California	Outside
SD-08720	1128720	Advance Planning and Research Associates	1978	Anthony Lot Split Archaeological and Biological Survey TPM 14960, EAD LOG # 78-8-203 Rancho Santa Fe, California	Outside
SD-10371	1130371	Mooney & Associates	2002	Cultural Resource Survey for the Oak Rose Tentative Map, Escondido, California (TM 5204) LOG 00-08-012	Outside

Table 2. Previous Studies Conducted within 1-mile of the Proposed Project’s APE

Report Number	NADB	Authors	Year	Title	Proximity to APE
SD-10639	1130639	Gallegos & Associates	2002	Cultural Resource Data Recovery Plan for the Shaw Project: Sites CA-SDI-46085 and CA-SDI-13067, San Diego County, California	Outside
SD-10640	1130640	Glenn, Brian	2004	Existing Conditions Report and Treatment Plan for CA-SDI-13052 AND CA-SDI-13067 Within the Shaw Santa Fe Project, TM-5081, San Diego County, California (LOG NO. 95-08-021B)	Outside
SD-11206	1131206	McGinnis, Patrick	2007	Cultural Resources Survey Monitoring for the Del Dios/San Diego Coast to Crest Trail Segment and Pedestrian Bridge Project	Outside
SD-11623	1131623	Hector, Susan M. and Alice Brewster	2002	San Dieguito River Valley Inventory of Archaeological Resources	Outside
SD-11921	1131921	Ni Ghablain, Sinead and Jerry Schaefer	2002	Historic American Engineering Record – Lake Hodges Flume, HAER NO. CA-307	Outside
SD-12011	1132011	Stropes, Tracy A. and Dennis R. Gallegos	2003	Cultural Resource Data Recovery and Preservation Program for CA-SDI-12027 San Diego County, California	Outside
SD-12031	1132031	Guerrero, Monica, Larry Tift, and Dennis R. Gallegos	2006	Historical Resources Test Report for the San Dieguito River Park Del Dios Gorge Trail Study San Diego, California	Outside
SD-12316	1132316	Smith, Brian F.	2005	4S Ranch Cultural Resource Data Recovery Program for Four Sites: Sites SDI-11,502, SDI-11,506, SDI-12,771, and SDI-12,776H	Outside
SD-12700	1132700	Willoughby, Kerry	2010	AT&T Cell-on-Wheels (C.O.W.) Site NS0600 COW Kreitzer Property 17505 Camino Brisa Del Mar San Diego, San Diego County, California 92127	Outside
SD-13857	1133857	Ni Ghablain, Sinead, Sarah Stringer-Bowsher, Shelby Gunderman, and Michelle Dalope	2011	Archaeology Survey Report for Pascoe, Helix-Lambron, and Cielo Azul Parcel Additions to the Del Dios Highlands Preserve San Diego County, California	Outside
SD-14060	1134060	Ni Ghablain, Sinead, Sarah Stringer-Bowsher, Shelby Gunderman, and Michelle Dalope	2011	Archaeological Survey Report for Pascoe, Helix-Lambron, and Cielo Azul Parcel Additions to the Del Dios Highlands Preserve San Diego County, California	Outside

Field Survey and Evaluation of Significance

Principal Investigator Sandra P. Pentney and archaeologist Michael M. DeGiovine conducted an intensive pedestrian survey of the project area on April 20, 2015. Kumeyaay monitor Lucia Majel was also present as a representative of the Pauma Band of Luiseño Indians. Access to the project area was provided by City of San Diego Public Utilities Department Staff Summer Adleberg, who was present during the intensive pedestrian survey of the APE. Resources were recorded using a sub-meter Trimble GPS and California Department of Parks and Recreation (DPR) 523 forms.

At the VSA site nearest the Dam, ground visibility ranged between 100 percent and less than 10 percent. The portion covered with water was not surveyed. No cultural resources were observed.

At the RK Residence (Photo 1), ground visibility in the project area was approximately 70-80%, with the majority of vegetation being sage and other brush. Around the house, leaf litter from associated landscaping trees was present. It is located on a prepared house pad that was graded prior to the California Environmental Quality Act (CEQA) and the environmental review process. This is important because there is potential for cultural resources to still exist beneath the house and property. Landscaping, fencing and a red brick grilling station are still present, as are power lines. Between the residence and the current shoreline, terracing of the slope is evident. Towards the water line, three isolates were recorded. Isolate 1 is a fragment sunbleached, weathered bone of a medium-to-large non-human long bone of indeterminate species. It appears to have been burned. Isolate 2 is a fragment of a medium-to-large non-human bone of indeterminate species that also appears to have been burned. Isolate 3 includes one fragment of *Chione* and one fragment of *Mytilus* (photo 2). These resources were recorded using DPR 523 forms and a Trimble GeoXH GPS receiver as well as being photographed. They are all located on the slope between the RK Residence and the water line. Sparse amounts of modern trash (alcohol bottle fragments) were noted in the APE as well.



Photo 1. RK Residence façade



Photo 2. Isolate 3, shell fragments.

The entire project area was surveyed for cultural resources. Three previously unrecorded isolates were recorded within the APE. These resources are located on a lightly-terraced slope between the RK Residence and the water line. The faunal remains were not able to be speciated. No other cultural resources were observed during the survey. The items recorded as a result of this survey are considered to be 'Non-Significant Resource Types' according to the City of San Diego Guidelines and no further documentation of the resources is required. Due to the demonstrated potential of the area to have cultural resources it is recommended that archaeological monitor and Kumeyaay monitoring take place during any project-related ground-disturbing activity (Attachment C).

A second field visit was conducted on May 21, 2016, to verify that Isolates 1 and 2 were not human. The visit was attended by Dr. Madeline Hinkes a medical examiner, along with Sandra Pentney, Clint Linton of Red Tail Monitoring and Research and Summer Adleberg, City of San Diego project manager. ISO 1 and ISO 3 were relocated, however ISO #2 was not. The project site had much more lush vegetation than was present during the initial survey and had signs of recent erosion. It is thought that ISO #2 is no longer in the location where it was recorded. In agreement with the original recordation of these isolates, Dr. Hinkes determined the remains to

most likely be nonhuman (Appendix F). An evaluation of the remains was sent to Kumayaay tribal representative Clint Linton. Mr. Linton concurred with Sandra Pentney and Dr. Hinkes's determination (Appendix F). Additionally, two more non-human bone fragments were located, one of which is bone and is associated with a modern occupation the historic reservoir keeper's residence. However, both were determined to be modern and not relevant to survey or construction activities.

VI. RECOMMENDATIONS

Previously recorded sites adjacent to the project area illustrate the regional sensitivity of the APE. Though the APE has demonstrated areas of disturbance, the depth of disturbance and depth of sediments within the APE is unknown, and additional cultural resources may be encountered during construction activities. Additionally, although the RK Residence was constructed on an elevated and graded pad, it was constructed prior to CEQA and the environmental review process. Given the high frequency of quarry sites and lithic reduction sites containing Santiago Peak Volcanics in the area, and the depth of time which this material has been utilized, a resource of this nature may be encountered during construction activities. A City of San Diego-approved archaeological monitor and Kumeyaay monitor should be on site during construction to observe ground-disturbing activities. If cultural material deposits are discovered during project construction, a qualified archaeologist shall be contacted to assess the deposit. Construction crews should be made aware of the fact that important cultural resources are nearby and off-road activity outside of the direct construction zone, in vehicles or on foot, should be discouraged and carefully monitored. In addition, if human remains of any age are discovered, the county coroner must be called.

Since none of the resources recorded during the survey are considered significant according to the City Guidelines, It is Atkins' opinion that the City of San Diego water quality improvements at Hodges Reservoir will not affect significant cultural resources. The project area has a demonstrated sensitivity for cultural resources as evidenced by the response from the NAHC, the results of the SCIC records search, and the finding of shell and bone fragments during the pedestrian survey. Three newly recorded resources are isolates are not significant resources under CEQA; however their presence increases the possibility that further resources are present within the APE. Archaeological and Kumeyaay monitors on site during construction will minimize any damage to newly discovered potential historic resources as they will halt and redirect equipment if any resources are uncovered during project construction. Ground-disturbing activities should not occur outside of the surveyed area.

VII. SOURCES CONSULTED

California Missions Resource Center. 2015a. San Luis Rey de Francia. Accessed online April 2015 at <http://www.missionscalifornia.com/keyfacts/san-luis-rey-de-francia.html>

California Missions Resource Center. 2015b. California Missions Timeline. Accessed online April 2015 at <http://www.missionscalifornia.com/california-missions-timeline.html>

City of San Diego. n.d. Building and Structure Record, Building No. 3363. Record on file with City of San Diego.

City of San Diego. 2015. Hodges Reservoir. Accessed April 2015 at <http://www.sandiego.gov/water/recreation/reservoirs/hodges.shtml>

- Gallegos and Associates. 2002. DATA RECOVERY PLAN: Cultural Resource Data Recovery Plan for the Shaw Project: Sites CA-SDI-13052 and CA-SDI-13067, San Diego County, California. Report on file at South Coastal Information Center.
- Hector, Susan and Alice Brewster. 2002. San Dieguito River Valley Inventory of Archaeological Resources. Report on file at South Coastal Information Center.
- Kennedy, M.P., S.S. Tan, K.R. Bovard, R.M. Alvarez, M.J. Watson, and C.I. Gutierrez. 2007. Geologic map of the Oceanside 30x60-minute quadrangle, California. Accessed online April 2015 at http://ngmdb.usgs.gov/Prodesc/proddesc_82679.htm
- Luomala, Katharine. 1978. Tipai-Ipai. *In* Handbook of North American Indians, vol. 8: California. Pp. 592-609. Washington, Smithsonian Institution.
- M. C. Wheeler Co. Survey. 1872. Official Map: The Western Portion San Diego County California.
- Moratto, Michael. 1984. California Archaeology. Orlando, Academic Press, Inc. Pp. 147-154.
- Pritzker, B.M. 2000. A Native American Encyclopedia, History, Culture, and Peoples. New York: Oxford University Press.
- Pryde, Philip R. 2014 *San Diego: An Introduction to the Region*. Sunbelt Publications, San Diego.
- Rogers, Malcolm. 1939. Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Desert Areas. San Diego: San Diego Museum of Man Papers 3.
- Rogers, Malcolm. 1945. An Outline of Yuman Prehistory. *Southwestern Journal of Anthropology* 1(2):167-198.
- San Diego County Assessor. 1955. San Diego County California, Map Showing Roads & Trails in use from 1769-1885.
- Shipek, F.C. 1982. Kumeyaay Socio-Political Structure. *Journal of California and Great Basin Anthropology*, 4(2).
- Usclimatedata.com. 2015. Escondido, California climate data. Accessed online April 24 at <http://www.usclimatedata.com/climate/escondido/california/united-states/usca0356>
- United States Geological Survey. 1893. Escondido, CA, 15' quadrangle.
- United States Geological Survey. 1901. Escondido, CA, 15' quadrangle.
- United States Geological Survey. 1968. Escondido, CA, 7.5' quadrangle.
- United States Geological Survey. 1996. Escondido, CA, 7.5' quadrangle.
- United States Geological Survey. 1996a. Rancho Santa Fe, CA, 7.5' quadrangle.

VIII. CERTIFICATION

Preparer: Sandra P. Pentney, M.A., RPA
Title: Principal Archaeologist/Associate Project Manager

Signature:



Date: June 14, 2016

IX. ATTACHMENTS

- A. SCIC Record Search Results
- B. NAHC and Tribal Communication
- C. Tribal Fieldwork Summary
- D. Resumes of Project Personnel

Confidential Attachments – Not for Public View

- E. Confidential – DPR Forms
- F. Confidential – Communications with Dr. Madeline Hinkes and Clint Linton

ATTACHMENT A
SCIC Record Search Results



South Coastal Information Center
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-5320
Office: (619) 594-5682
www.scic.org
nick@scic.org

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM RECORDS SEARCH

Company: Atkins
Company Representative: Sandra Pentney
Date Processed: 3/24/2015
Project Identification: Lake Hodges Quagga Support #100044728

Search Radius: 1 mile

Historical Resources: YES

Trinomial and Primary site maps have been reviewed. All sites within the project boundaries and the specified radius of the project area have been plotted. Copies of the site record forms have been included for all recorded sites.

Previous Survey Report Boundaries: YES

Project boundary maps have been reviewed. National Archaeological Database (NADB) citations for reports within the project boundaries and within the specified radius of the project area have been included.

Historic Addresses: YES

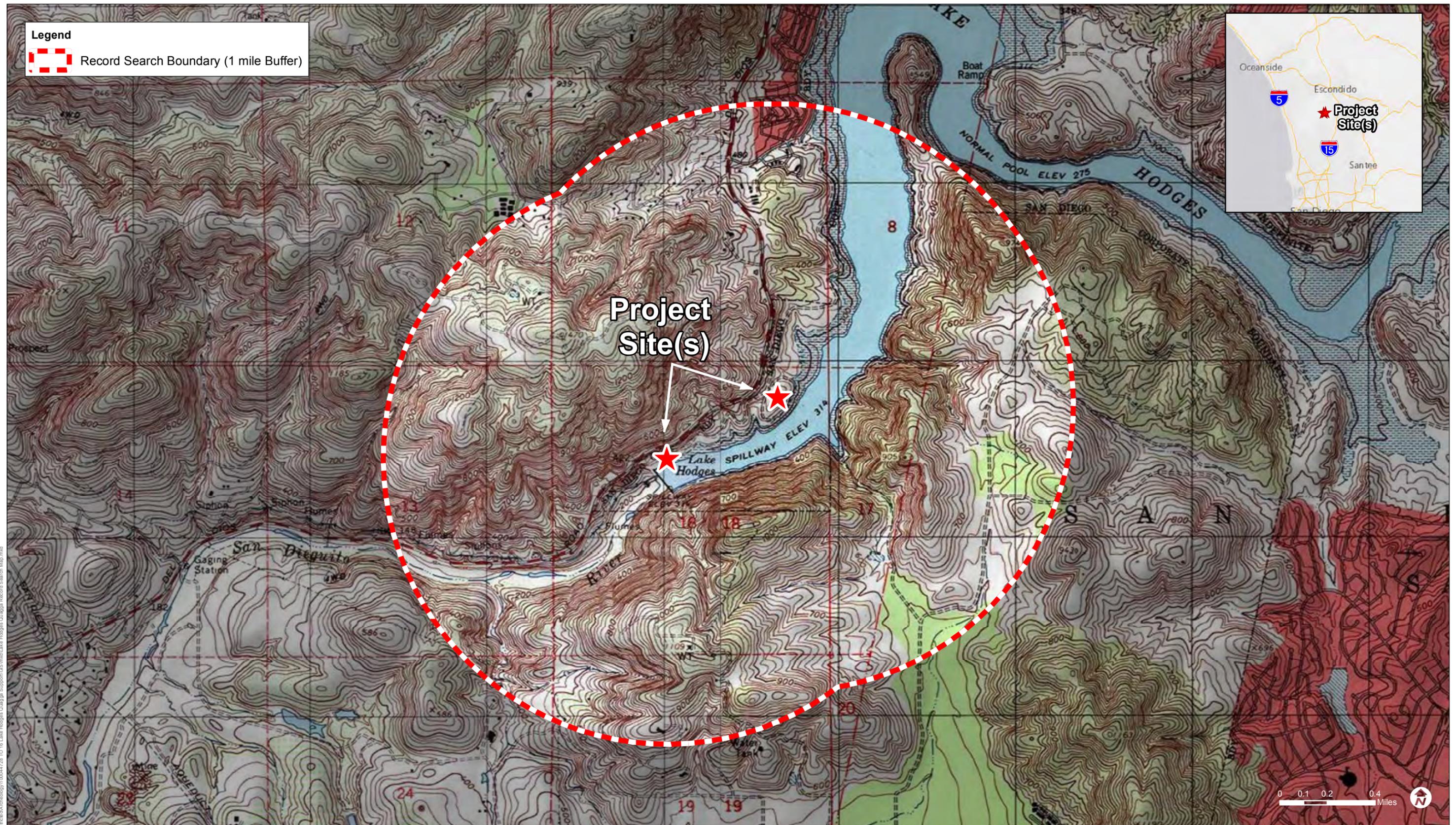
A map and database of historic properties (formerly Geofinder) has been included.

Historic Maps: YES

The historic maps on file at the South Coastal Information Center have been reviewed, and copies have been included.

Summary of SHRC Approved CHRIS IC Records Search Elements

RSID:	983
RUSH:	no
Hours:	1
Spatial Features:	98
Address-Mapped Shapes:	no
Digital Database Records:	0
Quads:	1
Aerial Photos:	0
PDFs:	Yes
PDF Pages:	348



3/16/2015 10:47:28 TO 16 Lake Hodges Quagga Support GIS.mxd

FIGURE 1
LAKE HODGES QUAGGA RECORD SEARCH BUFFER

USGS Quad Name: Rancho Santa Fe & Escondido
 Township 13 South, Range 3 West, Section 18

Source: Atkins 2015, National Geographic Society 2011-2013



ATTACHMENT B
NAHC and Tribal Communications



Atkins North America, Inc.
3570 Carmel Mountain Road, Suite 300
San Diego, California 92130

Telephone: +1.858.874.1810
Fax: +1.858.259.0741

www.atkinsglobal.com/northamerica

April 09, 2015

«Contact_1»
«Reservation»
«Mailing_Address»
«City_State_Zip»

Subject: The City of San Diego Lake Hodges Water Quality Project and Quagga Mitigation Measures Project, located adjacent to Lake Hodges, San Diego County, California (USGS Escondido and Rancho Santa Fe, CA. 7.5-minute topographic quadrangles)

Dear «Contact_»:

Atkins is preparing a cultural resources assessment report for the City of San Diego Lake Hodges Water Quality Project and Quagga Mitigation Measures Project. The project consists of addressing water quality concerns at Lake Hodges by installing a Speece Cone hypolimnetic oxygenation system (HOS) at one of two locations, the LOX Site at RK (Reservoir Keeper) Residence with Pipeline and the VSA Site at Dam. The Speece Cone will require lake bottom resurfacing prior to installation. A power cable and oxygen pipeline will connect the cone to facilities on the shoreline. The potential disturbances from this project include trenching, ground preparation for facilities which may include alteration or demolition of an existing structure, access road improvements and installation of slope stabilizing rip-rap.

Atkins has requested a cultural resources records search completed at the South Coastal Information Center (SCIC), and a Native American Heritage Commission (NAHC) Sacred Lands File database search to support the Cultural Resources Assessment. To identify any cultural resources within or near the area of potential effect (APE), a one mile search radius was used for the cultural resources search from the SCIC (Attachment 1). The results of the cultural resources search from the SCIC identified 64 known cultural resources; five historic buildings (some recorded as a single resource), one historic foundation, one historic mine, three historic trash scatters, one flume (Lake Hodges Flume), two resources with pictographs, 10 lithic scatters, 13 prehistoric quarries, two camps, 16 resources with bedrock milling features, 10 lithic isolates, and one multicomponent site (lithic scatter and historic ceramic scatter). One additional resource, recorded as a camp, is positive for human remains. The records search concluded that 32 area-specific survey reports are on file with the SCIC for the one mile search radius. Furthermore, three of these reports address various portions of the APE, which indicates that approximately 100 percent of the APE has been previously surveyed for cultural resources, and 100 percent of the APE has been addressed through literature reviews. Additionally, the NAHC record search results indicated that there are known Native American sacred sites located within the same quadrangle as the project that may be impacted, but did not disclose how close they are to the project site. The NAHC strongly recommends additional Native American consultation.

Based upon the results of the original cultural resources assessment for the Lake Hodges Water Quality Project and Quagga Mitigation Measures Project, the APE contains no known cultural resources; however, a pedestrian cultural resources survey will be done to confirm this finding. The NAHC has identified you as an individual who may have knowledge of cultural resources within or near this APE area. If you are aware of any such properties, or if you have any information or concerns about the change in this project or the project area, please feel free to contact me at 858.514.1083 or sandra.pentney@atkinsglobal.com. You may also address and mail a response to my attention at the San Diego office.

Sincerely,

Sandra Pentney, M.A., RPA
Associate Project Manager/Archaeologist

Enclosure: Figure 1 - Regional Location Map



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San Diego, California 92130

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March 19, 2015

Native American Heritage Commission
c/o Katy Sanchez
915 Capitol Mall, Suite 364
Sacramento, CA 95814-4801

VIA EMAIL: Katy Sanchez (katy.sanchez@nahc.ca.gov)

Subject: Request for a Sacred Land Files Search for the City of San Diego Lake Hodges Water Quality Project and Quagga Mitigation Measures Project, located adjacent to Lake Hodges, San Diego County, California (USGS Escondido and Rancho Santa Fe, CA. 7.5-minute topographic quadrangles).

Dear Ms. Sanchez:

Atkins would like to determine whether any sacred sites are listed in the NAHC Sacred Lands File (SLF) for a project area relating to the City of San Diego Lake Hodges Water Quality Project and Quagga Mitigation Measures Project. The project consists of addressing water quality concerns at Lake Hodges by installing a Speece Cone hypolimnetic oxygenation system (HOS) at one of two locations, the LOX Site at RK (Reservoir Keeper) Residence with Pipeline and the VSA Site at Dam. The Speece Cone will require lake bottom resurfacing prior to installation. A power cable and oxygen pipeline will connect the cone to facilities on the shoreline. The potential disturbances from this project include trenching, ground preparation for facilities which may include alteration or demolition of an existing structure, access road improvements and installation of slope stabilizing rip-rap.

The project area is located in the City of San Diego, San Diego County, and is found on USGS Escondido and Rancho Santa Fe, CA 7.5' topographic quadrangles.

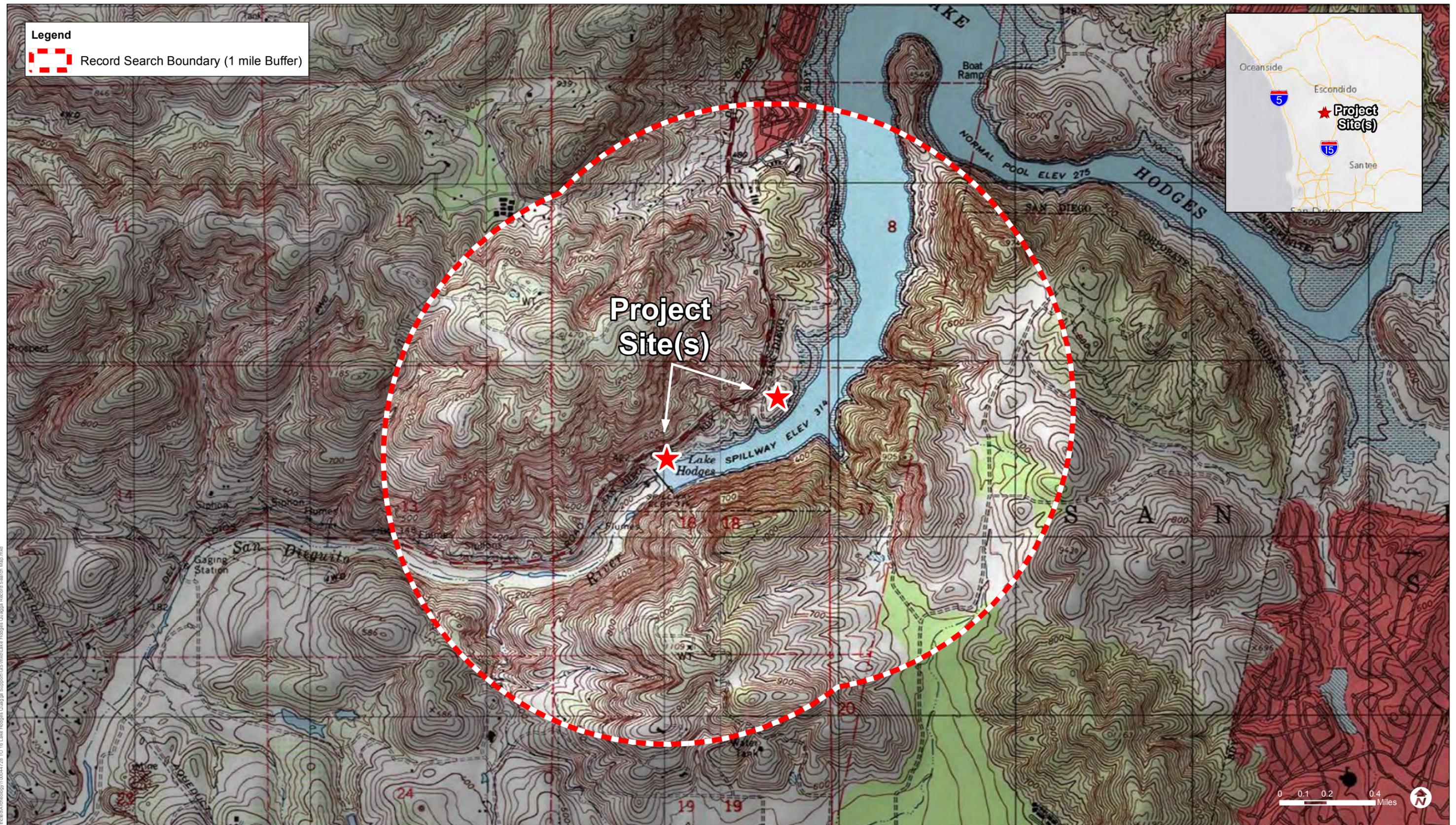
Please notify us of any SLF-listed resources that may be affected by the proposed project and provide a current list of Native American contacts who have interests in this area so that Atkins may alert them to the project.

If you have any questions or concerns, please do not hesitate to contact me via the contact information below. Atkins thanks you in advance for your time and effort.

Sincerely,

Sandra Pentney, M.A., RPA
Archaeologist/Associate Project Manager
Sandra.pentney@atkinsglobal.com

Enclosures: Figure 1 – Location and APE Map



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FIGURE 1
LAKE HODGES QUAGGA RECORD SEARCH BUFFER

USGS Quad Name: Rancho Santa Fe & Escondido
 Township 13 South, Range 3 West, Section 18

Source: Atkins 2015, National Geographic Society 2011-2013

STATE OF CALIFORNIA

Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471



April 6, 2015

Sandra Pentney
Atkins North America, Inc.
3570 Carmel Mountain Road, Suite 300
San Diego, CA 92130

Faxed to: (858) 259-0741
Number of Pages: 4

Re: City of San Diego Lake Hodges Water Quality Project and Quagga Mitigation
Measures Project, San Diego County.

Dear Ms. Pentney,

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) for the project referenced above. The search indicates the potential of Native American cultural resources in the Escondido Quadrangle that may be impacted. For specific information regarding this site, please contact the San Luis Rey Band of Mission Indians on the San Diego County list.

The absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE. Other sources of cultural resources information should be contacted regarding known and recorded sites. Please contact all of the people on the attached *Native American Contact List*. The list should provide a starting place to locate areas of potential adverse impact within the APE. I suggest you contact all of those listed, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: Katy.Sanchez@nahc.ca.gov.

Sincerely,

A handwritten signature in black ink that reads "Katy Sanchez".

Katy Sanchez
Associate Government Program Analyst

**Native American Contact List
San Diego County
April 2, 2015**

San Pasqual Band of Mission Indians
Allen E. Lawson, Chairperson
P.O. Box 365 Diegueno
Valley Center, CA 92082
allenl@sanpasqualtribe.org
(760) 749-3200

(760) 749-3876 Fax

Mesa Grande Band of Mission Indians
Mark Romero, Chairperson
P.O. Box 270 Diegueno
Santa Ysabel, CA 92070
mesagrandeband@msn.com
(760) 782-3818

(760) 782-9092 Fax

Pala Band of Mission Indians
Shasta Gaughen, PhD, THPO
PMB 50, 35008 Pala-Temecula Luiseno
Pala, CA 92059 Cupeno
sgaughen@palatribe.com
(760) 891-3515

(760) 742-3189 Fax

Pauma & Yuima Reservation
Randall Majel, Chairperson
P.O. Box 369 Luiseno
Pauma Valley, CA 92061
(760) 742-1289 ext 317

(760) 742-3422 Fax

Pechanga Band of Mission Indians
Paul Macarro, Cultural Resources Manager
P.O. Box 1477 Luiseno
Temecula, CA 92593
pmacarro@pechanga-nsn.gov
(951) 770-8100

(951) 506-9491 Fax

Rincon Band of Mission Indians
Vincent Whipple, Tribal Historic Pres. Officer
1 West Tribal Road Luiseno
Valley Center, CA 92082
vwhipple@rincontribe.org
(760) 297-2635

(760) 297-2639 Fax

Soboba Band of Mission Indians
Rosemary Morillo, Chairperson; Attn: Carrie Garcia
P.O. Box 487 Luiseno
San Jacinto, CA 92581
carrieg@soboba-nsn.gov
(951) 654-2765

(951) 654-4198 Fax

Pauma Valley Band of Luiseño Indians
Bennaec Calac
P.O. Box 369 Luiseno
Pauma Valley, CA 92061
bennaecalac@aol.com
(760) 617-2872

(760) 742-3422 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 6097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting Native Americans with regard to cultural resources for the proposed City of San Diego Lake Hodges Water Quality Project and Quagga Mitigation Measures Project, San Diego County.

DeGiovine, Michael M

From: Pentney, Sandra P
Sent: Friday, June 05, 2015 1:25 PM
To: DeGiovine, Michael M
Subject: FW: Lake Hodges Water Quality Project

Please add this and the letter I am bringing over to you to the Lake Hodges report. Once that is done make sure it is ready for the client.

Sandra P Pentney, M.A., RPA
Associate Project Manager/Archaeologist

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3570 Carmel Mountain Road, Suite 300 San Diego, California 92130 | Tel: +1 (858) 514 1083 | Fax: +1 (858) 259 0741
Email: sandra.pentney@atkinsglobal.com | Web: www.atkinsglobal.com | Careers: www.atkinsglobal.com/careers
LinkedIn: www.linkedin.com/company/atkins

From: Cultural [mailto:Cultural@pauma-nsn.gov]
Sent: Monday, June 01, 2015 11:19 AM
To: Pentney, Sandra P
Cc: Dixon, Patti; Jeremy Zagarella
Subject: Lake Hodges Water Quality Project

Ms. Pentney,

The Pauma Band of Luiseno Indians has received your April 9 notice for the Lake Hodges Water Quality Project. Based on the information that was provided in your notice, we are recommending the use of monitors (archaeological and Native) during all ground disturbance activities. If the project falls under CEQA, the City of San Diego has drafted mitigation measures that describe the process for any inadvertent discoveries. Please keep us apprised of the progression of the project. If there are any questions, please contact us.

Thank you,

Chris Devers
Cultural Liaison
Pauma Band of Luiseno Indians

The IS team in Atkins has scanned this email and any attachments for viruses and other threats; however no technology can be guaranteed to detect all threats. Always exercise caution before acting on the content of an email and before opening attachments or following links contained within the email.



June 2, 2015

Attn: Sandra Pentney, Associate Project Manager
Atkins
3570 Carmel Mountain Road, Suite 300
San Diego, CA 92130

Re: The City of San Diego Lake Hodges Water Quality Project and Quagga Mitigation Measures Project, located adjacent to Lake Hodges, San Diego County, CA

The Soboba Band of Luiseño Indians appreciates your observance of Tribal Cultural Resources and their preservation in your project. The information provided to us on said project(s) has been assessed through our Cultural Resource Department, where it was concluded that although it is outside the existing reservation, the project area does fall within the bounds of our Tribal Traditional Use Areas. At this time the Soboba Band does not have any specific concerns regarding this project, and wishes to defer to the La Jolla Band of Luiseño Indians, the Pala Band of Luiseño Indians, the Rincon Band of Luiseño Indians, and the San Luis Rey Band of Luiseño Indians. The tribe requests notification of any inadvertent discoveries that may be discovered during the course of the project.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph Ontiveros", is written over a faint, stylized graphic element that resembles a large, thin letter 'A' or a similar shape.

Joseph Ontiveros
Cultural Resource Director
Soboba Band of Luiseño Indians
P.O. Box 487
San Jacinto, CA 92581
Phone (951) 654-5544 ext. 4137
Cell (951) 663-5279
jontiveros@soboba-nsn.gov

ATTACHMENT C
Tribal Fieldwork Summary

Native Ground Monitoring, Research and Consulting, LLC

~LUISENO~CAHUILLA~KUMEYAAY~CUPENO~

Bi-Weekly

Name: Lucia Majel Arch/FIRM: ASM

Job Location: Escondido, Lake Hodges Job Name/#: # 100044728 - Lake Hodges

Day	Date	Time (actual times worked)	On site hours	Log Hrs	
Monday					ARCH
Tuesday					
Wednesday					
Thursday	4/16/15	10am - 2pm	4		Sandra
Friday					
Saturday					
Sunday					
Total Hrs.			4		

Day	Date	Time (actual times worked)	On site hours	Log Hrs	
Monday					
Tuesday					
Wednesday					
Thursday					
Friday					
Saturday					
Sunday					
Total Hrs.					

Total Hours for Both Weeks: 4 / /

Lucia Majel 4/30/15
 Sub Contractor Signature Date

Native Grounds Monitoring, Research and Consulting, LLC.

~LUISENO~CAHUILLA~KUMEYAAY~CUPENO~
DAILY LOG/SITE PROTECTION MONITORING

Monitor: Lucia majel	Dates: 4/14/15
Archaeology Monitor: Sandra Pentney	Arrival Time: 10am
Crew Activities: Survey	Departure Time: 2pm
Landowner/Jurisdiction: Cetey Cetey	
Agency/Project Personnel Present: ATKINS -	Location: Lake Hodges
Cetey Summer Sandra Cetey Mike	Log Time:
ARCH FIRM: ASM - Mark	
Project Name or Number: #100044728	
Narrative on day's activities, including problems and concerns: Arrived on site & meet with the Archis & Summer from the County. Drove through along the North side of the lake to the furthest point West by the dam walked around. Not much on surface some paved (concrete) areas. Some small dry brush throughout. Then drove up & walked around the house. House was for the men who ran the dam & was built in 1920's. Vegetation was high. 15 meters on the South east side of house. Found some medium to large bone fragment on surface. Roughly 13 meters South east from there. Found another bone fragment. Maybe 1 1/2-2 meters SW found some shell. Took GPS coordinates of all surface sighting. Due to the year the house was built & how long it hasn't been utilized, I recommend area to be monitored during all ground disturbance. There is also a shed & old well on West side of house.	
Isolate #1 (2) bone frags @ 488678.49 / 3656795.22	
Isolate #2 (1) bone frag @ 488678.25 / 3656783.85	
Isolate #3 (2) Shell frags @ 488679.95 / 3656782.78	
Signature: Lucia Majel	Title: Native Monitor

ATTACHMENT D
Resumes

Sandra P. Pentney, RPA

Senior Archaeologist

Sandra Pentney has 15 years of experience and has managed and conducted numerous cultural resource investigations throughout California. Veteran principal investigator, having performed numerous cultural resource inventories; archaeological surveys, evaluations, and mitigation; consultation with involved agencies, interested parties, and Native American groups; and evaluation of compliance with California state and federal laws. Her projects include archaeological testing, monitoring, and surveys; record searches; artifact analysis; and report writing. A skilled technical report writer, prepares cultural resource sections for environmental assessments, reports, and impact statements as required by the National Environmental Policy Act, Sections 106 and 110 of the National Historic Preservation Act, stipulations of the Federal Energy Regulatory Commission, and state legislation.

Ms. Pentney's Atkins project experience includes:

Mitigation Monitoring Oversight, Palomar Community College District, San Marcos, CA. Project manager overseeing the mitigation monitoring and reporting plan for Palomar Community College District's master plan improvement projects across the campus. Worked with various subconsultants to provide paleontological, archaeological, and biological resource monitoring services for three projects. The projects have involved blasting and mass excavation during nesting bird breeding season. Creative work sequencing was devised to allow blasting activities to continue near an active birds nest. **Duration:** 2013-2015

Murrieta Hills Specific Plan Environmental Impact Report, City of Murrieta, CA. Archaeological principal investigator overseeing cultural resources studies for this project that involves environmental review and environmental impact report preparation for an urban land development project and Specific Plan amendment. Tasks include records search, comprehensive review of previous studies, intensive level field survey of nearly 1,000 acres, and preparation of a report and cultural resources testing plan. The survey resulted in recordation of several newly discovered archaeological sites including petroglyphs, fertility symbols, and extensive lithic scatters. **Duration:** 2014-2016

Otay Mesa Conveyance and Disinfection System, Otay Mesa Water District, Spring Valley, CA. Senior archaeologist who conducted a cultural resources survey for this project and contributed to both the cultural resources survey report and the project environmental impact report. Atkins is providing engineering design services for the design of the Otay Mesa conveyance and disinfection system project. The project includes a pipeline, disinfection facility, and a pump station to convey potable water from Otay Mesa to the 571-1 Reservoir. Work activities for the project include investigation of existing conditions and facilities; utility coordination; geotechnical investigation; preliminary design report for the pipeline, disinfection facility, and pump station; environmental documentation; professional surveying; public outreach and community relations; California Department of Public Health compliance regulations; water quality and corrosion study of desalinated water; preparation of construction contract documents for 30, 60, 90, and 100 percent phases; easement appraisal and acquisition; construction phase services; and water quality testing. **Duration:** 2013-2016

Buchanan Canyon Emergency Sewer Project Archaeological Monitoring Services, Spring Valley, CA. As part of Atkins' as-needed environmental services

Education

M.A., Archaeology, University of Saskatchewan, 2002

B.A., Anthropology (Honors), Lakehead University, 1997

Registrations/licenses

Registered Professional Archaeologist (RPA), 2004

Certifications

San Diego County Qualified Archaeological Consultant

Professional affiliations

Register of Professional Archaeologists, 2004-present
Society for American Archaeology, 1996-present

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contract with the City of San Diego, served as senior archaeologist providing cultural resources monitoring services for an emergency sewer repair project. This project included the widening of an access road through a canyon with a documented controversial cultural resource, and the potential for previously undiscovered cultural resources to be disturbed from the required ground disturbance. Completed background research on the recorded site, monitored ground disturbing activities, and conducted archival research on a historic feature that was in danger of being impacted by trenching activities. A report of findings is currently being prepared for submittal to the City. **Duration:** 2013–2015

Richmond Ferry Terminal and Route Environmental Assessment, Water Emergency Transportation Authority, San Francisco, CA. This project involves changes to existing infrastructure at the Richmond Ferry Terminal to accommodate upgrades to an existing ferry line. As Atkins California-based archaeologist, oversaw the completion of a Section 106 report for this project and assisted the Federal Transit Authority with Section 106 Consultation efforts. Impact considerations for this project included consideration of the National Register of Historic Places listed Rosie the Riveter Ford Assembly Plant Building. **Duration:** 2014-2015 est.

Environmental Impact Report, Academy of Arts University, San Francisco, CA. Assisted with the review and response to comments on the draft environmental impact report section. This long term project pertains to building modifications under the control of the Academy of Arts University in San Francisco. Many of the buildings are historic resources and required an in-depth review of impacts. The comments were extensive due to a large number of historical resources that will potentially be affected by the project. **Duration:** 2014-2015 est.

Black Mountain Access Road Repair Cultural Resources, City of San Diego, CA. As part of Atkins' as-needed environmental services contract with the City of San Diego, served as senior archaeologist who oversaw a sub consultant specializing in historic-era resources as they reviewed project impacts to potentially historic water infrastructure elements. **Duration:** 2014-2015 est.

Lake Camanche Village Water Storage Tank, Amador Water Agency, Amadore County, CA. Atkins provided services for the replacement of an aging water transmission pipeline tank and associated pipeline. Provided cultural resources review of the project under the California Environmental Quality Act and Section 106 which included archival research, a field survey and subsequent report. **Duration:** 2014

R-10A Reservoir Project, City of Henderson, NV. Atkins is providing engineering and environmental services to the City of Henderson for this access road project. Provided Section 106 cultural resources services to support the project including archival research, field surveys and report preparation. The road alignment travels through portions of an National Register of Historic Places listed site. **Duration:** 2014

Gilman Drive Bridge Environmental, University of California, San Diego, CA. The University of California, San Diego in cooperation with the California Department of Transportation wishes to construct a bridge over Interstate 5. Atkins was contracted to provide California Environmental Quality Act environmental review for the project, including cultural resources studies. Prepared a historic



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Senior Archaeologist

properties survey report in consultation with Caltrans archaeologists to support the project. **Duration:** 2013-2014.

Prior to joining Atkins, Ms. Pentney's project experience included:

NAS Fallon Environmental Assessment, Naval Facilities and Engineering Command Southwest, NV. In coordination with over five different Navy departments, served as deputy project manager for this multi-faceted project to modify and enhance the existing Training Range, Bravo-16. Oversaw all aspects of the project from inception to completion; provided client liaison, prepared work plans and schedules, oversaw preparation of the environmental assessment, and prepared monthly progress reports. The project proposed closure of public land widely used for recreational activities, as the addition of a C-130 landing strip and expansion of a surface danger zone would put the public and military personnel in too close proximity to gunfire. Assisted the Navy in conducting targeted public meetings that presented the proposed closure and alternatives. **Duration:** 2012-2013

Confidential Client, Confidential Project, CA. For a confidential client, served as project manager to help complete a Department of Energy grant application, prepare a Form 200 application to obtain a waste discharge requirements permit, and identify an appropriate type of waste discharge facility to dispose of sludge of an unknown origin at a project site in Imperial County. This project had short timelines and a very eclectic mix of tasks.

Port Angeles Harbor, Washington State Dept. of Ecology, Port Angeles, WA. Under a statewide toxics cleanup program for the Washington State Department of Ecology, was the cultural resources task manager for the Port Angeles Harbor sediment study and the upland dioxin sampling project associated with investigations of the former Rayonier Pulp Mill located on the Port Angeles Harbor shoreline. Both projects supported State efforts to address and remediate nearshore and submerged contaminated sites in the greater Puget Sound basin, as part of the Governor's Puget Sound Cleanup Initiative. Completed record searches, consulted with agency and tribal archaeologists, and oversaw field monitoring for harbor coring and grab sample activities. The investigation for the sediment study resulted in documentation of a submerged prehistoric site.

Biosolids Ordinance Environmental Impact Report, Kern County, CA. For the Kern County Planning Department, prepared the cultural resources section of an environmental impact report addressing a proposed amendment to Kern County's highly controversial ordinance for the land application of biosolids (treated sewage sludge) within its jurisdiction.

Solar and wind energy projects

Solar Star Project, SunPower Corporation, Kern and Los Angeles Counties, CA. Provided on-call services for construction monitoring, which involves construction of a 579-MW, 3,230-acre project that will be the world's largest solar power plant when completed in 2015. On-call work required being able to mobilize with little notice to assess cultural resources finds.

West Chocolate Mountains Renewable Energy Programmatic Environmental Impact Statement, Imperial and Riverside Counties, CA. For the Bureau of Land Management's California Desert District Office, prepared the cultural resource



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Senior Archaeologist

section of the National Environmental Policy Act environmental impact statement addressing the issuance of solar and wind energy rights-of-way and geothermal leasing within the West Chocolate Mountains Renewable Energy Evaluation Area.

California Valley Solar Ranch, SunPower Corporation, San Luis Obispo County, CA. Core contributor for the National Environmental Policy Act environmental assessment (EA) submitted in support of a loan guarantee from DOE for this project, which includes a proposed 250-MW solar photovoltaic power plant to be located on an approximately 4,700-acre site and reconductoring of a 35-mile segment of the Morro Bay-Midway transmission line of Pacific Gas and Electric, which crosses both San Luis Obispo and Kern Counties. Conducted limited field studies pertaining to the inadvertent discovery of a National Register of Historic Places-eligible resource, prepared cultural resources reports, and oversaw the work of a cultural resource subconsultant. Also prepared the cultural resource section for the EA, prepared and presented data to Native American Tribal contacts for the project, provided guidance on appropriate Tribal outreach, interacted with the California State Historic Preservation Office to ensure proper compliance for the EA process, and facilitated Native American consultation.

Silver State Solar Project, Clark County, NV. Prepared the cultural resource section of a third-party environmental impact statement addressing the 400-MW solar development project of First Solar Development, Inc., proposed for location on 2,900 acres of land under jurisdiction of U.S. Department of the Interior, Bureau of Land Management (BLM). Assisted in the public scoping meetings and collected data, reviewed studies prepared by the proponent on behalf of BLM, and worked with BLM and other agency staff to identify appropriate mitigation measures to reduce project impacts.

Lucerne Valley Solar Project, San Bernardino County, CA. Member of the team that prepared a third-party environmental impact statement for Chevron's 49-MW Lucerne Valley photovoltaic solar project on Bureau of Land Management (BLM) land, for submission to the BLM Barstow field office, contributed to the cumulative impact analysis, provided peer reviews, and helped finalize the section.

Solar PV Project, Los Angeles County, CA. On behalf of a confidential client, was a member of the team that provided permitting support for a 225-acre PV site.

Solar Power Generating Facilities, Fresno and Kings Counties, CA. For a confidential client, conducted field studies and archival research and contributed to the initial studies for nine potential solar project sites.

Mule Mountain Photovoltaic Solar Project, Riverside County, CA. For a confidential client, conducted a Class I cultural resource inventory for a photovoltaic solar project that was planned for location on Bureau of Land Management land.

Solar Energy Sites, California and New Mexico. For a confidential client, conducted a desktop critical issues analysis addressing cultural resources and potential conflicts for 11 potential solar energy sites.

Clipper Wind Energy Sites, Clipper Windpower Development Company; Washington, Oregon, Colorado, Oklahoma. As part of critical issue analyses, completed file searches and cultural resource assessments of four proposed wind farm sites in Washington, Oregon (two sites), and Oklahoma. To support the environmental constraints analysis for a proposed 25,000-acre wind energy project

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site in El Paso County, Colorado, conducted a Class I site file search, developed a cultural resource constraints map, and prepared the cultural resource section of the final report. Based on the recommendations provided in the constraints analysis, the client retained the project team to provide full permitting and environmental studies for the proposed project site.

Mineral Mountain Wind Project, enXco Development Corporation (now EDF Renewable Energy), Beaver County, UT. Contributed to the critical issues and environmental permitting analysis for this 80-MW wind turbine project, being considered for location in a very archaeologically sensitive area near two large prehistoric obsidian quarries and many prehistoric archaeological sites on land administered by Bureau of Land Management (BLM). Conducted an intensive site file and archival records search, and then completed a fatal flaw analysis with recommendations for further study. Subsequently, conducted intensive field surveys and completed the survey report that was submitted to BLM.

Noble Power Wind Farm Sites, Noble Environmental Power, LLC, TX. Managed the archaeological field survey of areas of the Great Plains wind project in Hansford County that were covered under a U.S. Army Corps of Engineers Nationwide Permit. Also completed a cultural resources review as part of a site characterization study for a proposed Noble wind farm in Mitchell County.

Four Wind Energy Facilities, BP Wind Energy North America, Multiple Location in Texas. Conducted Class I cultural resource studies as part of the constraints analysis for four proposed wind farm projects located in Wichita, Archer/Young, Childress, and Hardeman counties.

Wind Energy Projects, Nevada and California. For a confidential client, contributed to the constraint reviews focusing to support planning for two potential wind energy sites in Washoe County, Nevada. For AltaGas, also conducted a Class III cultural resource survey and prepared the associated report for the proposed Walker Ridge wind project in Lake and Colusa counties, California.

Multiple Wind Energy Sites; California, Arizona, and Nevada. For a confidential client, was a member of the team that completed critical issue analyses (fatal flaw/feasibility studies) addressing visual resources, biological resources, hydrology, and cultural resources for seven very large areas of interest in California, Arizona, and Nevada. Conducted similar critical issue analyses for another client with six potential solar sites in six California counties.

Proposed Wind Farm, Lea County, NM. In support of critical issues analysis for this proposed wind energy site, conducted a site file search, completed cultural resources assessment, and oversaw the field survey conducted by a cultural resources subcontractor.

Transmission lines

Santa Barbara Reliability Enhancement Project, California Public Utilities Commission, Santa Barbara and Ventura Counties, CA. The project team prepared a third-party California Environmental Quality Act addressing the reconductoring and upgrading of an existing 66-kV subtransmission line and eight substations operated by Southern California Edison. Worked with the project manager to establish an appropriate tribal outreach program for the project. Because it traverses some areas of sensitivity to the Chumash, also worked with

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Senior Archaeologist

several Chumash contacts to establish a complete tribal notification contact list and to ensure that pertinent tribal members were afforded the opportunity to comment and participate in the project.

Alberhill Substation and Transmission Lines, California Public Utilities Commission, Riverside County, CA. The project team prepared the third-party draft EIR for construction and operation of a SCE substation and transmission lines. Worked with the project manager and CPUC to establish an appropriately scoped tribal outreach program for the project, which traverses areas of sensitivity to the Soboba and Pechanga Tribes, including ethnographic village sites, sites with human remains, and traditional cultural landscapes. Worked with the tribes to ensure their concerns were taken into consideration in the EIR.

Eldorado-Ivanpah Transmission Project, California Public Utilities Commission and U.S. Dept. of the Interior, Bureau of Land Management; Nevada to California. Cultural resources team leader for the award-winning, joint third-party environmental impact report (EIR)/environmental impact statement (EIS) that was prepared under California Environmental Quality Act and National Environmental Policy Act for this 35-mile transmission line and substation project of Southern California Edison. Wrote the cultural resources section of the EIR/EIS; reviewed technical reports prepared by the applicant; and coordinated with Bureau of Land Management (BLM) archaeologists and the State Historic Preservation Offices of both California and Nevada to ensure that impacts on cultural resources were adequately assessed and that appropriate mitigation measures were delineated. A Historic Architecture and Engineering Report was required as part of project mitigation because the Eldorado-Ivanpah Transmission Project required the destruction of a historic transmission line. Reviewed the report to verify that it provided adequate documentation to mitigate for this loss of this resource. Also supported BLM in its Native American notification and consultation process, to help ensure that the EIR/EIS adequately addressed potential effects on the Native American community.

Valley-Ivyglen Subtransmission Line and Fogarty Substation, California Public Utilities Commission, Riverside County, CA. Identified and addressed data gaps, then helped prepare the cultural resources section of the draft environmental impact report for the 25-mile, 115 kV Valley-Ivyglen subtransmission line and the Fogarty substation, on behalf of CPUC.

Aliso Canyon Natural Gas Turbine Replacement Project, California Public Utilities Commission, Aliso Canyon, CA. Prepared the cultural resource section of the third-party environmental impact report for this natural gas turbine replacement project, which involves Southern California Edison's proposed installation of new electric-driven compressors, a new compressor station, a new substation, and over 25 miles of new fiber optic cable; as well as replacement of over 8 miles of existing transmission line. Also commented on a historic architectural and engineering report for a historic transmission line.

Power Plant, Northern Oregon. For a confidential client, helped complete the site certificate application that was submitted to the Oregon Department of Energy, Energy Facility Siting Council for a 400-MW, natural gas-fired, combined cycle generating station and associated transmission line.

Baja Transmission Line, Sempra Generation, San Diego County, CA. Conducted a Class II archaeological investigation to ascertain compliance with



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Section 106 of the National Historic Preservation Act, as part of the preparation of an environmental assessment for this 1-mile transmission line extending from the Mexico border to the South West Power Link Line.

Oil and gas industry

Natural Gas Flex Plant, Pipeline, and Transmission Line; Umatilla and Morrow Counties, OR. For a confidential client, the project team conducted a preliminary site investigation to examine the proposed location for a natural gas flex (combined heat and power) generation plant and the proposed and alternative routes for a natural gas pipeline and transmission line. The objective was to look for the presence of wetlands, bodies of surface water, noxious weeds, and special status plants and wildlife, including raptors (e.g., golden and bald eagles); burrowing owls; and Washington ground squirrels. Provided peer review of consultant-prepared reports and assessed them for adequacy per FERC guidelines. The project was subject to several delays which required expedited turnaround of reviews.

Clearwater LNG Port, Clearwater Port, LLC; Oxnard, CA. Provided cultural resource evaluations to support the preparation of a third-party environmental impact report (EIR)/environmental impact statement (EIS) under direction of the U.S. Coast Guard (lead agency). Participated in public scoping meetings, reviewed cultural resource studies, and prepared the cultural resource sections of the EIR/EIS. Also responsible for devising the cultural resource mitigation and monitoring plans.

Ruby Natural Gas Pipeline, El Paso Corporation (now Kinder Morgan, Inc.), Wyoming to Oregon. Conducted a cultural resource records search as part of the critical issues and alternatives analysis for this 675-mile, four-state natural gas pipeline crossing private, state, and federal lands, including those managed by U.S. Department of the Interior, Bureau of Land Management and the U.S. Department of Agriculture, Forest Service. Delineated areas that might have cultural resource issues that could hinder project development.

Oil and Gas Development Projects, British Columbia, Canada. Based in Fort St. John, crew chief for an archaeological survey of oil and gas developments located in remote areas of northeastern British Columbia. Developed the testing strategy, supervised the field crews, and wrote and submitted interim reports for several clients including PetroCanada, Shell, and El Paso Corporation. The work included application of GPS technology and use of both all-terrain vehicles and helicopters to access the sites.

Department of Defense

Navy Base Point Loma, Naval Facilities Engineering Command Southwest, San Diego, CA. Prepared the cultural resource section of the Phase II base realignment and closure (BRAC) environmental assessment (EA) and compiled the site administrative records for both phases of the BRAC EA and associated documents. The project included reviews of prior cultural resource surveys and management plans for archaeological and architectural resources at Naval Base Point Loma, Naval Base San Diego, and Naval Base Coronado.

Chocolate Mountain Aerial Gunnery Range, Naval Facilities Engineering Command Southwest, Niland, CA. Cultural resource task leader for the preparation of National Environmental Policy Act environmental assessment (EA)

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documentation addressing ongoing training activities conducted by the Naval Special Warfare Group ONE at this desert training facility. Identified cultural resource survey requirements, developed the survey field strategy, and prepared the cultural resource section of the EA.

Naval Air Weapons Station China Lake, Naval Facilities Engineering Command Southwest, Ridgecrest, CA. Member of the cultural resource team for the base realignment and closure environmental assessment for the Weapons Survivability Laboratory at Naval Air Weapons Station China Lake. Many existing structures at the site are eligible for listing on the National Register of Historic Places, either individually or as contributing elements to a historic district. Reviewed the cultural resource report.

Other federal clients

Truckhaven Geothermal Leasing Area Environmental Impact Statement, U.S. Dept. of the Interior, Bureau of Land Management, Salton Sea, CA. Provided cultural resource evaluations for the environmental impact statement addressing environmental impacts of the proposed Truckhaven Geothermal Leasing Area in California's Imperial Valley.

Circuit Rider Program, U.S. Environmental Protection Agency; California, Nevada, and Arizona. Supported Environmental Protection Agency, Region 9 in its Public Water Systems Supervision and Underground Injection Control programs, assessed the content of ongoing Native American water/wastewater system operation and management training seminars.

Additional cultural resources

Lancaster Water Reclamation Plant, Lancaster, CA. Led a 7,500-acre survey in the western Mojave Desert to support facility expansion. The project resulted in the discovery of three previously unrecorded prehistoric archaeological sites and 15 isolates. Subsequently completed the testing phases for the sites and also completed a separate Section 106 report for a later project phase.

Planning Area 6, The Irvine Company, Irvine, CA. Managed full-time cultural resource monitoring at the Planning Area 6 urban land development. At times, the project required up to six cultural resource monitors working concurrently to keep up with a hectic grading schedule. The cultural resource monitoring resulted in the discovery of 13 archaeological sites—some more than 25 feet below ground surface. Oversaw and conducted test and data recovery excavations for the newly recorded sites. In support of the Planning Area 6 land development project, also managed field and laboratory work involving a crew of up to 18 field and laboratory employees at the Tomato Springs site.

Hellman Ranch, Seal Beach, CA. For nearly a year, provided archaeological monitoring and data recovery excavation for a new housing development. Excavation of a shell midden, included responsibility for the careful excavation and reburial of human remains in close coordination with Native American site monitors.

Additional Cultural Resource and Archaeological Investigations, Multiple Locations in California. Project archaeologist based in Irvine, California, supervised archaeological testing, monitoring, and survey projects; conducted lithic analyses for excavation projects; and consulted with clients on projects that

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involved Native American organizations and communities. Contributed to the development of a historic properties treatment plan for a residential development project, and completed Phase I cultural resource assessments and associated reports for two proposed bicycle path rights-of-way in El Dorado County.

Highway 63 Expansion Project, Government of Alberta Ministry of Transportation, Edmonton, Alberta, Canada. For two years, as project archaeologist and cataloging/analysis coordinator, was responsible for over 250,000 artifacts collected from 17 prehistoric archaeological sites. During the same period, catalogued and analyzed lithic artifacts recovered from many additional sites in northeastern Alberta.

Forest and Wood Industry Sites, Prince George, British Columbia, Canada. In 2000, was assistant field supervisor for an archaeological survey of wood industry cut blocks that included a walkover survey; shovel testing; and the coring and recording of culturally modified trees, including trees with bark removed and trees with scars from plank removal. In addition to providing periodic crew supervision, helped identify botanical species in the field and was a major contributor for the project report. In addition, was the technical writer and coauthor for archaeological impact assessments for the Small Business Forest Enterprise Program and the Evans Forest Products Golden Woodlands Division in the Columbia Forest District, Wardell Woodlot 12564 in the Invermere Forest District, and Fraser Lakes Sawmills in the Lakes Forest District. **Duration:** 2000

Additional Archaeological Projects, Canada.

- Field supervisor for the Lac La Ronge Historical Society, planned and oversaw all aspects of an archaeological field project in northern Saskatchewan.
- Master's thesis project for the University of Saskatchewan involved archaeological project planning, scheduling/cost control, and on-site management of a seven-person field crew conducting archaeological excavations at four sites in northern Saskatchewan.
- Field/laboratory technician supporting a joint research project of Lakehead and Brandon Universities; cleaned, identified, and catalogued artifacts from the Vera site in southwestern Manitoba.

Additional archaeological laboratory experience included cleaning and cataloging of artifacts and research on aboriginal history and prehistory for the Royal Saskatchewan Museum. At Lakehead University, reviewed 19th-century fur trade reports and diaries and helped create a multimedia software package focusing on archaeological education.

Instructor, University of Saskatchewan, Canada. Graduate teaching assistant with the University of Saskatchewan, co-supervised the laboratory section of an archaeology course focusing on map reading, artifact identification, and analytical techniques. Helped create exercise materials and examinations and assisted in test evaluation.

Additional training

To support her fieldwork in remote areas, completed training in wilderness first aid, standard first aid, and cardiopulmonary resuscitation (St. John's Ambulance). Trained spotter for the Civil Air Search and Rescue Association in Dryden, Ontario and Edmonton, Alberta, Canada.



Sandra P. Pentney, RPA
Senior Archaeologist

Publications (Heading)

McCollum C., G. Timothy Gross, and S. Pentney, "Class I and III Cultural Resources Inventory for the Proposed Walker Ridge Wind Project, Lake and Colusa Counties, California," 2011.

Pentney, Sandra, "Cultural Resources Investigations for Energia Sierra Juarez Gen-Tie Project, Jacumba, California," 2009.

Pentney, Sandra, "Cultural Resources Monitoring for Port Angeles Upland Dioxin Characterization Study," 2009.

Pentney, Sandra, M. Pritchard-Parker, H. Roberts, S. Eskenazi, J. Stout, V. Parker, "A Class I and III Cultural Resources Inventory of the Mineral Mountain Wind Project Area, Beaver County, Utah," 2009.

Pentney, Sandra, C. McCollum, G. Cardenas, and G. Timothy Gross, "Cultural Resources Investigations in Portions of the Naval Special Warfare Desert Warfare Training Facility," 2009.

Pentney, S., and H. Thomson, "Cultural Resources Monitoring for Port Angeles Harbor Sediment Characterization Study," 2008.

Pentney, Sandra, "Port Angeles Harbor Sediment Investigation Cultural Resources Monitoring and Reporting Protocols," 2008.

Pentney, Sandra. "Port Angeles Upland Sediment Investigation Cultural Resources Monitoring and Reporting Protocols," 2008.

Pentney, Sandra, "Phase 1 Cultural Resources Assessment of a Proposed Bicycle Path Right-of-Way along Sawmill Road, El Dorado County, California," 2006.

Pentney, Sandra. "Phase 1 Cultural Resources Assessment of a Proposed Bicycle Path Right-of-Way along Lake Tahoe Boulevard, El Dorado County, California," 2006.

Pentney, Sandra and G. Archer. "Cultural Resource Inventory for the Lancaster Water Reclamation Plant 2020 Facilities Plan," 2006.

Pentney, Sandra, "Analysis of Lithic Artifacts from the Center Village Sites, Irvine, California," 2006.

Archer, Gavin H. and S. Pentney, "Historic Properties Treatment Plan for the Planning Area 6, Phase 2 Residential Project," 2005.

Brandzin, Vera, Bruce Low, and Sandra Pentney, "Results of the Year 2000 Archaeological Impact Assessment for the Small Business Forest Enterprise Program, Columbia Forest District," 2000.

Brandzin, Vera, Bruce Low, and Sandra Pentney, "Results of the Year 2000 Archaeological Impact Assessment for Evans Forest Products, Golden Woodlands Division, Columbia Forest District," 2000.

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Brandzin, Vera, Bruce Low, Paul Harrison, and Sandra Pentney, "Results of the Archaeological Impact Assessment of Wardell Woodlot 1564, Invermere Forest District," 2000.

Low, Bruce, Vera Brandzin, and Sandra Pentney, "Results of 2000 Archaeological Impact Assessment within the Lakes Forest District, for Fraser Lake Sawmills," 2000.

Low, Bruce, Vera Brandzin, and Sandra Pentney, "Results of 2000 Archaeological Impact Assessment within the Vanderhoof Forest District, for Fraser Lake Sawmills," 2000.

Pentney, Sandra., L. Carson, et al. 10th Annual Anthropology, Physical Anthropology, Linguistics, and Archaeology (APALA) Student Conference, Proceedings and Abstracts. University of Saskatchewan, Saskatoon, January 28-30, 2000.

"The Archaeology of Brabant Lake: Interactions between Two Archaeologists, a Lake, and the Family Who Grew Up There," In 10th Annual APALA Student Conference, Proceedings and Abstracts, University of Saskatchewan, Saskatoon, January 28-30, 2000. pg 143-146.

"Proceedings and Abstracts of the 8th Annual APALA Student Conference January 23-25, 1998." Edited by Carson, L.L., N. Friesen, J. Taylor-Hollings, and S. Pentney. University of Saskatchewan, Saskatoon.

"Intra-Site Artifact Distributions at the Jackson Site (DiMe-17)," in Proceedings and Abstracts: 6th Annual APALA Student Conference: January 12-14, 1996. pp. 5-10. Edited by B. D. Low and R. Wondrasek, University of Saskatchewan Printing Services, Saskatoon.

Presentations (Heading)

Pentney, Sandra P., "California Archaeology and Climate Change," presented at the Society for American Archaeology (SAA) Annual Meeting, San Francisco, CA, April 16, 2015.

Pentney, Sandra P., "Climate Study in San Diego County," presented at the Society for California Archaeology Annual Meeting, Redding, CA, March 14, 2015.

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Michael M. DeGiovine

Field Technician

Michael DeGiovine serves in the capacity of field technician in Atkins' cultural resources program. His experience includes all phases of archeological investigation. As a field technician, Mr. DeGiovine's responsibilities include impact evaluations, trenching, linear and acreage surveys, National Register of Historic Places (NRHP) and California Register of Historic Resources (CRHR) testing and data recovery excavations, mapping of sites and excavated remains, and the cataloging of excavated data in the field. He has served as a field technician for both historic and prehistoric sites. Mr. DeGiovine's project experience includes:

City of San Diego El Capitan Blow-off Stabilization Project. Atkins provided cultural resources support for the City of San Diego in regards to cultural resources that may be considered for eligibility on the NRHP, CRHR, and/or the San Diego Register of Historic Resources under Section 106 of the NHPA and CEQA. Mr. DeGiovine conducted background research, participated in the cultural resources survey, and co-authored the report.

City of Vista Green Oak Trunk Sewer Replacement Project. Atkins provided cultural resources support for the City of Vista in regards to cultural resources that may be considered for eligibility on the CRHR under CEQA. Mr. DeGiovine conducted background research, participated in the cultural resources survey, and co-authored the report.

Bureau of Land Management Gray's Well and Gecko Road Improvements Project. Atkins provided cultural resources support for the Bureau of Land Management in regards to cultural resources that may be considered for eligibility on the NRHP under Section 106 of the NHPA. Mr. DeGiovine conducted background research, provided archaeological monitoring for the project, and co-authored the report.

Bureau of Land Management Gecko Road Improvements Project. Atkins provided cultural resources support for the Bureau of Land Management in regards to cultural resources that may be considered for eligibility on the NRHP under Section 106 of the NHPA. Mr. DeGiovine conducted background research, participated in the archaeological survey, and co-authored the report.

City of San Diego Kalmia Street Emergency Sewer Reroute Project. Atkins provided cultural resources support for the City of San Diego in regards to cultural resources that may be considered for eligibility on the NRHP, CRHR, and/or the San Diego Register of Historic Resources under Section 106 of the NHPA and CEQA. Mr. DeGiovine conducted background research and was the archaeological monitor on site during ground disturbing activities.

City of San Diego 32nd Street Long-Term Access Project. Atkins provided cultural resources support for the City of San Diego in regards to cultural resources that may be considered for eligibility on the NRHP, CRHR, and/or the San Diego Register of Historic Resources under Section 106 of the NHPA and CEQA. Mr. DeGiovine conducted background research, participated in the archaeological survey, and co-authored the report.

City of San Diego Manning Canyon Long-Term Access Project. Atkins provided cultural resources support for the City of San Diego in regards to cultural resources

Education

B.A., Anthropology, University of California, 2005

Professional affiliations

San Diego County
Archaeological Society

Texas Archaeological Society

Michael M. DeGiovine

Field Technician

that may be considered for eligibility on the NRHP, CRHR, and/or the San Diego Register of Historic Resources under Section 106 of the NHPA and CEQA. Mr. DeGiovine conducted background research and assisted with the survey.

Stadium Wetland Mitigation Project (San Diego River). Atkins provided cultural resources support for the City of San Diego in regards to cultural resources that may be considered for eligibility on the NRHP, CRHR, and/or the San Diego Register of Historic Resources under Section 106 of the NHPA and CEQA. Mr. DeGiovine conducted background research, participated in the archaeological survey, and co-authored the report.

Otay Mesa Conveyance and Disinfection System Project, Otay Water District, Spring Valley, CA. Atkins is providing engineering and environmental services for the design of the Otay Mesa conveyance and disinfection system project. Work activities for the project include investigation of existing conditions and facilities; utility coordination; geotechnical investigation; preliminary design report for the pipeline, disinfection facility, and pump station; environmental documentation; professional surveying; public outreach and community relations; California Department of Public Health compliance regulations; water quality and corrosion study of desalinated water; preparation of construction contract documents for 30%, 60%, 90%, and 100% phases; easement appraisal and acquisition; construction phase services; and water quality testing.

U.S. Army Corps of Engineers (USACE) 88th Regional Support Command, Tumwater, Washington State. Atkins provided cultural resources support for USACE in regards to compliance with Sections 106 and 110 of the National Historic Resources Act. Mr. DeGiovine conducted background research, conducted a Phase I archaeological survey, and co-authored the report.

Prior to joining Atkins Mr. DeGiovine's project experience included:

Sewer & Water Group 809, City of San Diego, CA. Excavation and screening of selected locations throughout the neighborhood of La Jolla Shores in advance of utilities update and/or replacement.

Genesis Solar Energy and Mojave Solar Project, CA. Archaeological monitoring of construction activities in both direct and indirect support of solar plant construction. Mass grading, fine grading, trenching, auguring, fiber optic conduit installation, and other activities involved. Recording and collection of unanticipated discoveries.

Transmission Line Projects

- Devers-Palo Verde II: Phase I survey for alignment and substations throughout 2008. Updating archaeological site forms as well as recording previously unknown archaeological sites with Trimble GPS units. Also monitored construction of alignment and associated activities.
- Sunrise Powerlink: Archaeological monitor for field survey crews in layout of the Sunrise Powerlink Southern Route in Imperial and San Diego Counties. Also provided monitoring during construction phase of the project.

Military Facilities

- Donnelly and Yukon Training Areas: Systematic survey in the Donnelly and Yukon Training Areas in Fort Wainwright and Fort Greeley, Delta Junction,

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Alaska. Survey and test and evaluation of archaeological sites as part of a multi-year project of military base surveying.

- Fort Irwin NTC: Participated in on-base 10,000 acre survey and co-author on its report. Performed on-call surveys as needed, site testing and evaluation, and quarterly monitoring of NRHP-eligible sites.

On-Call Archaeological Support, City of San Diego, CA. Archaeological Monitor during ongoing utility undergrounding operations.

On-Call Environmental Work, Southern California Edison, CA, AZ.

Archaeologist and/or report co-author for multiple components of an extensive on-call contract for necessary maintenance work completed on both private and federal lands. Duties included survey of areas of potential effect and resulting testing and monitoring for the replacement of deteriorated poles, operations and maintenance activities, and distribution substation planning in locations throughout southern California, to include the Mojave and Colorado Deserts.

Environmental Support for Telecommunications Projects, CA. Field survey of cities and school districts for determination of categorical exemption for cultural resources as defined by CEQA standards for NextG Networks and Sunesys LLC. These clients provide “last mile” broadband access through fiber optic lines and Distributed Antenna Systems (DAS) throughout a large portion of the state of California.

Archaeological Support for the Mexican Hollywood Project, Port of Los Angeles, San Pedro, CA. Archaeological monitor during excavation for construction of two water features near Berths 91 and 93.

Environmental Support for the Tomato Springs Development Project, Irvine Company, Irvine, CA. Excavation, wet screening, lab sorting and tree removal monitoring as mitigation for the Irvine Company’s Portola Spring housing development.

CONFIDENTIAL ATTACHMENT E
DPR 523 Forms

CONFIDENTIAL ATTACHMENT F
Communications with Dr. Madeline Hinkes
and Clint Linton