UNIVERSITY OF CALIFORNIA, SAN DIEGO UCSD

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO SANTA BARBARA • SANTA CRUZ

DEPARTMENT OF ANTHROPOLOGY
9500 GILMAN DRIVE, 0532
LA JOLLA, CALIFORNIA 92093–0532

Fax: (858) 534-5946

March 22, 2007

Gary C. Matthews
Interim Vice Chancellor, Resource
Management and Planning
Mail Code: 0057

Dear Gary:

Please find enclosed a Report I have prepared in response to John Woods's letter of August 31, 2007 (Attachment A), concerning a request from the Kumeyaay Cultural Repatriation Committee for the repatriation of certain human remains found on university property (Attachmnet B). Such requests must be reviewed under existing University of California procedures, in accordance with the federal Native American Graves Protection and Repatriation Act (NAGPRA), passed in 1990.

I hope that the Report is sufficiently comprehensive to enable Chancellor Fox to submit the entire matter to the Office of the President. In the normal course, UCOP forwards such matters for review to the system-wide University Advisory Group on Cultural Affiliation and Repatriation of Human Remains and Cultural Items. After consideration of the Advisory Group's advice, the Office of the President will instruct the campus on the action to be taken. Our role, then, as the cognizant campus, is not to recommend what final action should be taken, but to present the facts to higher-level University authority for final deliberation and decision.

If you or Chancellor Fox require further information, or wish to discuss the Report, please call on me.

Sincerely,

Catherine Pressley

for Donald Tuzin
Distinguished Professor of
Anthropology

Enclosure, with attachments.

ATTACHMENT A

SAN DIEGO: OFFICE OF THE VICE CHANCELLOR
RESOURCE MANAGEMENT AND PLANNING
Mail Code 0057

August 31, 2006

PROFESSOR TUZIN
Anthropology
0532

SUBJECT: Repatriation Request

Dear Don:

In a letter to Chancellor Fox dated August 7, 2006 (Attachment 1), Mr. Steve Banegas, Spokesman for the Kumeyaay Cultural Repatriation Committee (KCRC) requested the return of burials that were removed from UCSD lands over a number of decades. On August 16, 2006 (Attachment 2), Campus Community Planner Phegley responded and indicated that the University is investigating the status of those remains and will take appropriate actions. In addition, on August 15, 2006 (Attachment 3), Associate Counsel Shanle provided an opinion indicating that UCSD should undertake responsibilities for processing this request. Therefore, given Vice Chancellor Attiyeh's May 10, 2006 (Attachment 4) request that you represent UCSD on the UC Advisory Group on Cultural Affiliation and Repatriation of Human Remains and Cultural Items (see Attachment 5 for the germane UC policy), I would greatly appreciate it if you would confer with UCSD faculty members whose expertise may be relevant to this request, and report your findings (per section III.C. in the UC policy) to me so that a recommendation from the campus may be advanced to the President for review by the UC Advisory Group.

Given the inherently sensitive nature of this request, I would appreciate it if you would engage in this consultative process as expeditiously as possible. Please feel free to contact Assistant Director Presmyk for any assistance you may require in gathering information related to this matter, and thank you for your service to the University.

Sincerely,

John A. Woods

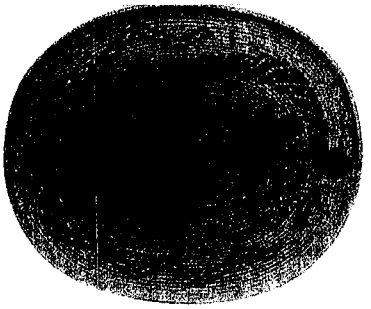
Attachments

cc/wo: A. Ellis
M. Fox
A. Parode
M. Phegley
✓ C. Presmyk
J. Steindorf

ATTACHMENT B

Mission Statement

To protect and preserve ancestral remains, sacred lands and sacred objects under the Native American and Graves Protection Act (NAGPRA) for today and future generations.



Member Tribes

Barona Campo Ewiiaapaayp Inaja Jamul La Posta Manzanita Mesa Grande San Pasqual Santa Ysabel Sycuan Viejas

Steve Banegas, Spokesman

Kumeyaay Cultural Repatriation Committee

August 7, 2006

Chancellor Marye Anne Fox
Chancellor's Office
University of California, San Diego
9500 Gilman Drive,
MC 0005
La Jolla, California 92093-0005

Dear Chancellor Fox,

It is our understanding that the Chancellor's House will be demolished and disruptions to burials at the site will likely occur during the preparation and building of your new home. We request that a Native American monitor be present at the site during excavation, and will request return of any burials uncovered during this period so they can be re-interred on reservation land.

Under the auspices of the Native American Graves Protection and Repatriation Act, we are requesting the return of burials removed from the Chancellor's House site (archaeological site SDM-W-12) during its association with the University of California, San Diego. These burials are:

Two burials that were removed in 1949 by an employee of Scripps Institution of Oceanography now part of the University of California.

Two additional burials that were removed during a field class excavation, were the subject of study by a University of California employee and are presently at the Smithsonian Institution.

If you have any questions, please feel free to call me at 619/742-5587.

Sincerely,

Steve Banegas
Spokesman
Kumeyaay Cultural Repatriation Committee

cc: M.J Phegley

1095 Barona Road Lakeside, CA 92040 • Phone 619-443-6612 or 390-1588 Fax 619-443-0681

Report on Current Issues Surrounding Human Remains
Found on the University House Site of the University of California, San Diego

Donald Tuzin
Distinguished Professor of Anthropology

Introduction

In a letter to Chancellor Fox dated August 7, 2006 (Attachment 1), Mr. Steve Banegas requested, on behalf of the Kumeyaay Cultural Repatriation Committee (KCRC), custody of human remains that had been removed from UCSD lands over a number of decades. The KCRC request was issued under the auspices of the federal Native American Graves Protection and Repatriation Act (NAGPRA), passed by Congress in 1990. Under the Act, repatriation events are mandated when existing Native American groups can demonstrate, to legal standard, biological descent or cultural affiliations with respect to the materials at issue.

The site in question is the University's cliff-top property on which is located the Chancellor's official residence, University House. Since the 1920s, archaeological materials had been removed from the site and, to the best of our knowledge, deposited at the San Diego Museum of Man. The house, built in the early 1950s and originally a private home, became university property in 1967. In 1976, an archaeological field excavation project was mounted under the direction of Professor Gail Kennedy of UCLA with a student crew from CSU-Northridge, from which Professor Kennedy had recently moved. The site was severely disturbed from decades of farming and construction activities. During the 1976 season, three sets of human remains were excavated: one was in a very poor state of preservation, but two others were quite intact. Remarkably, these two skeletons comprised a double burial: a male, aged 33-44, and a female, aged 40-54. The two were on their sides in a reversed, flexed position, with the female's feet resting on or near the head of the male. The legs of both individuals appear to have been bound, with hands and forearms tucked between the knees. The skeletons were encased in plaster and removed, intact, to Kennedy's UCLA laboratory. There, upon closer study, three finger bones were found in the male's mouth, which corresponded with bones missing from his right and left hands (Attachment 2).

Subsequent radiocarbon measurements conducted by the Smithsonian Institution (see below) produced a date of 8690 +/- 40 years before the present (B.P.), which has been calibrated to 9600-9750 years B.P. (68.2% probability) and 9590-9920 years B.P. (95.4% probability); see Attachment 3, p.4.

The human remains from the University House site were found in apparent association with a number of artifacts, including several unique and interesting objects; i.e., a long (17 cm) schist blade and a painted stone ball.

These other artifacts were initially deposited at UCSD's Scripps Institution of Oceanography, before being moved to the San Diego Archaeological Center, which

continues to look after them for us, and has produced an inventory (see Attachment 4, pp. 7, 12-13). The assumption is that these materials will share in the ultimate disposition of the skeletal materials.

Vicissitudes

As noted, the remains were initially removed from UCSD for study and preservation by Professor Kennedy. There, a full plaster cast was created to simulate their exact positions, *in situ*. In 2000, the bones were removed from Kennedy's lab and sent to the San Diego Museum of Man. The Museum did not accession the materials, but accepted them for safekeeping. Later that year (2000), the individuals of the "double burial," the third burial from the 1976 excavation, another poorly preserved individual from a non-UCSD site, and additional bones from at least six individuals recovered from the site in 1948, were moved to the Smithsonian Institution under a study loan between the two institutions. There, they presently reside and are being studied by Dr. Douglas Owsley and Dr. David Hunt (See Attachment 3 for the full inventory.)

It should be noted that none of these movements and successive custodianships, other than the initial removal in 1976, occurred with UCSD's knowledge or approval; indeed, there is no "paper trail" at all. Since NAGPRA specifies that institutions in control and possession of remains at the time the law was passed are the legally responsible parties, the question arose as to whether UCLA, and not UCSD, was the campus that the KCRC should be petitioning. An inquiry was made to the UC Office of the General Counsel. In an opinion dated August 15, 2006, Counsel Maria Shanle advised us that the issue was UCSD's responsibility; hence the present initiative.

Interests

The scientific interest in these skeletal remains and artifacts is quite substantial. Their antiquity places them at the earliest period of known human habitation in North America, on a par with a tiny handful of individuals, such as Kennewick Man, Spirit Cave Woman, and Minnesota Man. The importance of these individuals lies in the possibility of identifying the oldest genetic heritage of Native Americans, or, indeed, of an even older population, presumably of Asian origin, entering North America along an ice-free Pacific shoreline route. The researches of Smithsonian scientists Owsley and Hunt are directed to these sorts of questions, and it is a strong argument for concluding that the UCSD double burial should be preserved for study, rather than repatriated.

Against this position is the principle valorized in NAGPRA, namely, that Native Americans and Native Hawaiians are entitled, for reasons both humane and cultural, to claim ownership of precious ancestral relics. Unfortunately, the Act did not fully anticipate custody battles involving individuals of such very great antiquity—possibly pre-dating the ancestors of Native Americans living today—as indicated by the dates of the double burial. Rather than needing to decide which Native American group is entitled to the remains, the authorities in this case must determine whether, under the NAGPRA standard, *any* Native American group can demonstrate the necessary biological connection or cultural affiliation. Of possible relevance to this issue is a

repatriation claim made by the Kumeyaay in 2001, which was the subject of a report submitted to the UCLA NAGPRA Coordinating Committee (Attachment 5).

In estimating where the campus community might stand on the issue, I consulted a number of faculty members knowledgeable about NAGPRA and the principles articulated around questions of repatriation. I also met with the Senate Council, at its December meeting, to brief them on the issue, review for them the procedural requirements, and invite their comments. The majority of parties with whom I spoke strongly objected to the loss of these materials, believing that the scientific imperative was great, and that the claim of a KCRC connection would have to be extremely weak. The minority perspective strongly favored immediate, unconditional repatriation on the grounds that the KCRC should be the ones to decide their spiritual heritage and the associated obligations of spiritual stewardship.

Conclusion

In responding to the KCRC request for repatriation, UCSD planners and faculty have attempted to assemble all of the facts and perspectives necessary for an informed, judicious rendering from the UC Office of the President. In this endeavor, we have solicited information and advice from members of the campus community, outside consultants, local museum authorities, legal counsel, and informed scholars from UC and other universities.

In summary, most of the human materials removed from the University House site are fragmentary and scattered, their disturbed habitat obscuring stratigraphic associations, radiocarbon measurements, taphonomic assessments, and other interpretational aids of scientific examination. The double burial, by contrast, was well articulated, preserved, and available for age determination. The great antiquity (over 9,000 years B.P.) now known for these individuals places them among a tiny set that represent the earliest known human inhabitants of North America. With the advantage of new concepts, methods, and technologies, these individuals might well provide answers to questions science and the public, including many Native Americans, have been pondering for centuries.

This is the scientific case, and it is well known to members of the scientific and scholarly community. New intercultural sensitivities have arisen in recent decades, however, that introduce new and different criteria into the mix of values surrounding the scientific investigation of past populations and, most literally, human remains. No longer may scientists, even in the name of science, dismiss the right of persons to protect and shelter their biological and cultural heritage. Rightly so. NAGPRA was an important milestone in this development, and it is my impression that the great majority of practicing archaeologists and human paleontologists support the letter, spirit and intentions of that legislation.

The present case is complicated by the demonstrated great age of the human remains. NAGPRA requires that Native American claimants demonstrate biological descent or cultural affiliation in relation to materials for which custody is being sought Pursuant to UC Policy we are forwarding this case and associated support materials to the UC

Provost and Senior Vice President-Academic Affairs for consideration of the request to repatriate the human remains in question. We look forward to the instructions on how to resolve this important matter.

Attachments

1. Kumeyaay Cultural Repatriation Committee. Letter of August 7, 2006.

2. G.E. Kennedy, "An Unusual Burial Practice at an Early California Indian Site." Journal of New World Archaeology 5(3):4-6, 1983.

3. Susan Hector. Letter of February 20, 2007, with inventory of materials currently held by the Smithsonian Institution.

4. San Diego Archaeological Center. Letter of September 15, 2004, with inventory and discussion of artifacts being held for UCSD.

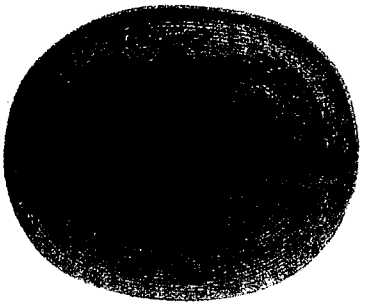
5. Diana Drake Wilson. Report on Kumeyaay Cultural Affiliation. October, 2001.

ATTACHMENT 1

Kumeyaay Cultural Repatriation Committee.
Letter of August 7, 2006.

Mission Statement

To protect and preserve ancestral remains, sacred lands and sacred objects under the Native American and Graves Protection Act (NAGPRA) for today and future generations.



Member Tribes

Barona Campo Ewiiaapaayp Inaja Jamul La Posta Manzanita Mesa Grande San Pasqual Santa Ysabel Sycuan Viejas

Steve Banegas, Spokesman

Kumeyaay Cultural Repatriation Committee

August 7, 2006

Chancellor Marye Anne Fox
Chancellor's Office
University of California, San Diego
9500 Gilman Drive,
MC 0005
La Jolla, California 92093-0005

Dear Chancellor Fox,

It is our understanding that the Chancellor's House will be demolished and disruptions to burials at the site will likely occur during the preparation and building of your new home. We request that a Native American monitor be present at the site during excavation, and will request return of any burials uncovered during this period so they can be re-interred on reservation land.

Under the auspices of the Native American Graves Protection and Repatriation Act, we are requesting the return of burials removed from the Chancellor's House site (archaeological site SDM-W-12) during its association with the University of California, San Diego. These burials are:

Two burials that were removed in 1949 by an employee of Scripps Institution of Oceanography now part of the University of California.

Two additional burials that were removed during a field class excavation, were the subject of study by a University of California employee and are presently at the Smithsonian Institution.

If you have any questions, please feel free to call me at 619/742-5587.

Sincerely,

Steve Banegas
Spokesman
Kumeyaay Cultural Repatriation Committee

cc: M.J Phegley

1095 Barona Road Lakeside, CA 92040 • Phone 619-443-6612 or 390-1588 Fax 619-443-0681

ATTACHMENT 2

G.E. Kennedy, "An Unusual Burial Practice at an Early California Indian Site." Journal of New World Archaeology 5(3):4-6, 1983.

NEW WORLD ARCHAEOLOGY

VOLUME V NUMBER 3 JANUARY 1983

An Unusual Burial Practice at an Early California Indian Site

G. E. Kennedy

Introduction

In August 1976 two human burials were removed from the "Chancellor's Site" (SDi 4669) on the University of California, San Diego campus. Bone collagen from one individual (W12-76/1) has been dated to 8350 ± 90 BP:6400 B.C. (pta 1812). The interred individuals consist of a young, adult male (W12-76/1) and an older female (W12-76/2). It is assumed that both individuals were interred at the same time: both were at the same depth below present surface level (99 cm); the vertebral columns of both individuals were aligned along a similar axis and finally, the calcanei of the male rested 3-4 cm from the top of the female's cranium, indicating that at the time of burial his feet may have been resting on or very near the top of her scalp. Both individuals were longitudinally oriented along a SE by NW axis and were tightly flexed (bound?) with the arms and hands extended between the knees. The male faced to the northeast on his right side and the female faced to the southwest on her left side. No cultural materials were found in association with either burial. The burial matrix was a heavily consolidated sandstone; the condition of the bones in the burials was generally good except for some loss of the spongy or cancellous areas of the bones. The good preservation of the bones would seem to indicate that complete closure of the grave occurred very soon after interment.

The Burial

At the time of the initial exposure during excavation it was recognized that the male had a left third metacarpal adherent to matrix on the anterior (symphyseal) surface of his mandible. The mandible and maxilla were tightly closed. Both burials were removed *en bloc* and returned to the UCLA campus where the bones were systematically documented and removed. Upon separation of the male's mandible from the calvarium three additional hand bones were found within the mouth cavity: a right first metacarpal, a right first proximal phalanx and a left third proximal phalanx. Thus, the metacarpal and the first bone of the right thumb and the metacarpal and the first bone of the left middle finger are present in the mouth region of the male individual. It is virtually certain that these bones can be attributed to the young male with which they were associated; such an association is strongly suggested for several reasons. First, none of the hand bones in the mouth region are duplicated in the carpals, metacarpals phalanges in the male's knee region. Second, the right first proximal phalanx from the mouth cavity very closely resembles, in all respects, the left first proximal phalanx from the knee region. Finally, and most significantly, the medial aspect of the distal articulation of the left third metacarpal articulates very closely

Figure 1: Double burial from SDi-4669, en bloc. The male individual (at top) still has the left third metacarpal adherent to the matrix on his chin.

with the lateral aspect of the distal articulation on the left fourth metacarpal found in the male's knee region.

It is difficult to explain the presence of four hand bones in and around the mouth cavity of this individual. No other bones in either burial were displaced from their normal anatomical position and none of the bones show any evidence of rodent or other animal activity. Sub-surface soil disturbance subsequent to the interment, either through ground water, human activity or other agencies, was not evident during excavation. In the absence of post-interment disturbance, the only explanation apparently remaining is that the bones were cut from the male individual prior to burial and placed in and around the mouth cavity. The third ray was apparently severed at the carpometacarpal joint; the left capitate was found in the knee region. The first ray may have been severed at the carpometacarpal joint, although

Figure 2: Enlargement of the face of the male individual: note finger bone against mandible.

the trapezium was not found among the hand bones at the knees. The terminal phalanges of the thumb and third finger were not found; however, since no terminal phalanges were found in the knee region either, conditions seem not to have been favorable for the preservation of these highly cancellous bones.

With the suggestion that the thumb and middle finger of W12-76/1 had been severed before interment, it is then necessary to evaluate the techniques by which this might have been accomplished without damage to the bones involved or to surrounding bones. During life, the proximal portions of the metacarpals are surrounded by the fibrous capsule of the common carpometacarpal joint and are very tightly bound to the carpals and to the neighboring metacarpals by interosseous ligaments. Distally, the metacarpophalangeal joints are tightly bound by the transverse ligaments and other strong

joint tissues. The fibrous joint tissues are, in fact, very tough and degrade much slower than the softer tissues of skin, muscle and fat.

Replicative Experiment

In an effort to assess the types of difficulties encountered during the operative procedures suggested here, an experimental dissection was performed. Fixed, human cadaver material was obtained from the UCLA Medical School, Department of Anatomy. The dissection instruments consisted of fresh, unmodified flakes of California obsidian in random sizes. Modern ethnographic evidence has indicated that such small, unmodified flakes are often used in butchery activities (Issac 1976). The dissection was performed by a graduate student in anthropology.

The first ray (thumb) was severed at the carpometarpal joint in seven minutes. A moderate sized flake seemed most efficient and examination under light microscopy (40X) showed that no damage was inflicted on the trapezium, first metacarpal, or the flake. A somewhat larger flake seemed more useful for the more difficult excision of the third ray (the middle finger); a very small flake, however, was used for the final excision at the joint capsule. Although a longer time was needed for this part of the procedure (15 minutes) no damage was seen under 40X magnification. The second, fourth and fifth rays were left in place and were undamaged.

The lack of damage to the bones was somewhat surprising, but additional comparative evidence suggests that pre-mortem damage in such cases of amputation may be the exception rather than the rule. Observations were conducted on a series of auto-amputated phalanges from a Classic Maya site in Guatemala (Salinas de los Nueve Cerros). This site, excavated by Brian D. Dillon and the University of California, Berkeley, in one operation produced several small pottery vessels which held 29 phalanges from a probable total of 12 fingers. Small obsidian blades were found in direct association with the severed fingers, also inside the vessels. The fingers had been amputated at the metacarpophalangeal joint. Under 40X light microscopy, only one phalanx (a proximal) showed any evidence of pre-mortem damage. This bone displayed three short, horizontal cut marks just distal to the proximal articular area.

Conclusions

It is therefore apparent that the bones in question can be quickly and efficiently removed without significant damage. Sophisticated or specialized tools and detailed anatomical knowledge are not required. The obsidian flakes were, in fact, extremely effective on the fixed material which is somewhat tougher than fresh tissue.

The presence of phalanges in or around the mouth cavity, while rarely reported, is not unknown in the New World. The presence of hand phalanges in the oral cavity has been reported in early descriptions of burials from Santa Barbara, California: "... in a few cases the fingers of the right hand were in the mouth" (Putnam 1879:36). Moreover, Thomas Jefferson reported the presence of "small bones of the foot in the hollow of a scull (sic)" in a burial from Virginia (1801:144). While post-mortem sub-surface and/or animal activity may, on occasion, be responsible for such discoveries, it is possible that alternative, cultural explanations also exist.

Acknowledgments

I would like to thank Jan Austin who supervised the removal and preparation of this material; Tommy Thomas who performed the experimental dissection and Professor E. Eldred who supplied the cadaver material. I would also like to thank Dr. Brian Dillon for allowing me to examine the Mayan material in his care and Dr. C. Meighan for bringing the Jefferson reference to my attention.

ATTACHMENT 3

Susan Hector. Letter of February 20, 2007, with inventory of materials currently held by the Smithsonian Institution.

ASM affiliates
archaeology
history
architectural history
ethnography

February 20, 2007

Kim Howlett
PBS&J
9275 Sky Park Court, Suite 200
San Diego, CA 92123

Dear Mr. Howlett:

At the request of UCSD planning staff, I have conducted a review of the inventory data sheets provided to ASM by Kari Bruwelheide, Department of Anthropology, Smithsonian Institution. For the past few years, the Smithsonian has had a collection of skeletal material on study loan from the San Diego Museum of Man. This collection includes burials from SDM-W-12, the University House site.

The Museum and UCSD understood that two burials from the 1976 California State University, Northridge, archaeology field class at SDM-W-12 were in the possession of the Smithsonian. When we received and analyzed the inventory data sheets, we saw that there are actually ten identified burials and additional human bones representing an unknown number of individuals included in the study loan. The entire collection borrowed by the Smithsonian had been transferred to the Museum by UCLA, where it was being studied by Dr. Gail Kennedy. The Smithsonian was primarily interested in the two burials from the 1976 field class, but were given the entire UCLA collection, which included the other materials.

The other materials include two additional burials, one of which is from SDM-W-12, collected in 1976 by persons associated with the field class but not excavated from the site by the class. There are also six burials from 1948. These were collected from the site by George Carter during trenching and construction activity.

I reviewed the data forms provided by the Smithsonian and present the results in two tables. I have also included as an attachment to this letter lists of skeletal materials from burials SDM-100 and SDM-200 as identified by the Smithsonian. Note that the lists describe fragmentary remains contained in bags; both burials were well articulated when they were removed from the site, so other more intact bones are also present and are inventoried separately. Specifically, both burial SDM-100 and burial SDM-200 included cranial bones and long bones. These are the "double burials" described by Kennedy (1983).

2034 Corte del Nogal, Carlsbad, CA 92011 • 760-804-5757 • 760-804-5755-fax
260 S. Los Robles Ave., Suite 311, Pasadena, CA 91101 • 626-793-7395 • 626-793-2008-fax
120 Vine St., Reno, NV 89503 • 775-324-6789 • 775-324-9666-fax
www.asmaffiliates.com

Table 1. Burials from SDM-W-12 Collected in 1948 and Located at the Smithsonian

Burial No.	Description	Pathology	Comments
1948-21-1	Male adult Age 25-35	Healed depression in right parietal.	Found with five small bags of bone fragments, all labeled the same. The bones are partially mineralized.
1948-21-2	Young adult female Age 17-21 Bone fragments from two other individuals (adolescent and adult male)	Large teeth with enamel hypoplasia indicating nutrition stress.	Bones mineralized and highly fragmented. There was an additional distal 3/4 of the right tibia of an adolescent, unfused and not mineralized; and a portion of the fibula from an adult male included in this bag.
1948-21-2	Adult female Age 30-49	Lipping of bone from age-related arthritis	Right femur only; mineralized.
1948-21-2	Young adult male Age 17-19	Unfused distal end of the femur	Highly fragmented, not mineralized with dark soil adhering to bones.
1948-21-3	Adult female Age 30-39	Lipping of bone from age-related arthritis	Left tibia has been previously cut for some type of chemical testing, probably age determination. Bones are mineralized.
1948-21-3	Adult male Age 25-29	No pathologies	Partially mineralized bone.

Table 2. Burials from SDM-W-12 Collected During the 1976 Field Class and Located at the Smithsonian.

Burial No.	Description	Pathology	Comments
W-12/76 Burial 1 SDM 100 "double burial"	Adult male Age 33-44	Little muscle marking on cranium. Teeth are very worn. Abcesses in the maxilla.	Radiocarbon dated at 8350 +/- 90 years before present (Kennedy 1983: 4) and 8690 +/- 40 years before the present (uncalibrated)*. The skull has been fractured from soil pressure. The ends of the long bones are deteriorated from decomposition .
W-12/76 Burial 2 SDM 200 "double burial"	Older female Age 40-54	Bones dished from age, in general they are delicate in form (head is narrow with a high, vertical forehead). Large sciatic notch and right auricular sulcus (indicating female). The individual had lost most of her teeth.	Cranial sutures are nearly nonexistent due to age of the individual. The skull is warped from ground pressure.
1976	Older male Age 40-49 Rib fragments from infant	Lipping and porosity of bones due to the age of the individual.	These remains are not from W-12 but were collected from a nearby area. A vial was included with the burial stating that bone fragments and beads from an infant were found in association. Two rib fragments from an infant were found by the Smithsonian but no beads. The bones were not mineralized.
1976 W-12	Adult male Age 30-44	Lipping and porosity of bones due to the age of the individual.	The bones were collected from the cliff and are partially mineralized. A note with the bones states, "Bones from bluff collected by museum from Pat Helfman [and] Jeff Bada." They had been sectioned and some surfaces coated with plaster.

*the Smithsonian's uncalibrated date of 8690 +/- 40 years before the present has been calibrated to 9600-9750 years before the present (68.2% probability) and 9590-9920 years before the present (95.4% probability). Source: email correspondence from Kari Bruwelheide to Susan Hector, 8/31/06.

The focus of the inventory conducted by the Smithsonian was creating a list of the bone elements present, and identifying any pathologies present. They also identified the gender and age of the individual represented.

Please let me know if you require any additional information about the inventory.

Sincerely,

Susan M Hector

Susan M. Hector, Ph.D.
Senior Archaeologist

Attachment: Smithsonian inventory lists

Kennedy, Gail E.
1983 An Unusual Burial Practice at an Early California Indian Site. *Journal of New World Archaeology* V(3):4-6. University of California at Los Angeles.

SDI4669-SDM-100
W12/76 Burial #1

36 small bags labeled W12/76 Burial #1: Bags contain one or more tiny fragments of bone.

1 bag containing tiny fragments identified as proximal right tibia

1 bag containing fragments identified as pieces of humerus

1 bag containing a left and right trapezium (carpal), left metacarpals 1 through 3, 1 unidentified metacarpal, and four phalanges

1 bag containing left fifth metacarpal

1 bag containing left and right calcanei, tali, 1st and 2nd cuneiforms, right third cuneiform, right cuboid, right navicular, and right 1st and 4th metatarsals

1 bag containing fragments of os coxae

1 bag containing small bone fragments, some identified as rib

4 bags of miscellaneous bone fragments

1 bag containing a soil sample

SDI4669-SDM-200
W12/76 Burial #2

26 small bags labeled W12/76 Burial #2 : Bags contain one or more tiny fragments of bone.

1 bag containing small fragments of os coxae

1bag containing tiny fragments of pelvis and dirt

1 bag containing small bone fragments identified as being from "screen #2"

1 bag of tiny bone fragments identified as "ribs"

1 bag of small, unidentified, bone fragments

1 bag containing a partial metatarsal (side unknown)

1 bag containing small pieces of non-human bone

1 bag containing the right first metatarsal

1 bag containing a proximal foot phalanx embedded in dirt

1 bag containing small fragments of right radius and ulna

1 bag containing three carapals, a partial metacarpal, pieces of four tarsals, a left first metatarsal, four additional partial metatarsals, 1 distal foot phalanx, and three fragments of unidentified hand or foot bone.

Inventory	Bags marked "Unaccessioned"	
SDi-4669	W-12/76; SD:-4669 A-10 20-40cm	Middle Hand Phalanx
SDi-4669	W-12/76; SD:-4669 D-9 20-40cm	Rt. 1st Mandibular Premolar
SDi-4669	W-12/76; SD:-4669 A-11 40-60cm	Lt. Malar
SDi-4669	W-12/76;SD:-4669 A-10 20-40cm	Lt. Radius (shaft only)
SDi-4670	W-12/76; SD:-4670 F-9 90-98cm	Proximal Foot Phalanx

W-12 La Jolla Not Associated with burials 1 or 2 Year 1976

W12/76 NE ¼ F9 28 Aug 76 92-95cm From location II	Long bone fragment
W-5-76 No Location Possible surface Bill McIntosh	Small bag of bone fragments
W-12-76 A-11 70-84cm 22-July 76 Wasson (human)	Bag of small misc. bone fragments
W12/76 NE ¼ F9 28 Aug 76 Bone 97cm Near left femur	Bag of tiny bone fragments
W12/76 SW ¼ F8 Human rib 30 Aug 76 91.5cm At top	Rib fragment
W12/76 SW ¼ F8 80-90cm Below datum 29 Aug 76	Bag of small misc. bone fragments
W12/76 NE ¼ F9 28 Aug 76 95.5cm Burned bone near left femur	Two tiny fragments of bone

W12/76
NW ¼ F9
30 Aug 76
98-108cm
No location

Left first metatarsal

W12/76
NE ¼ F9
98-120cm
Human rib
No location
31 Aug 1976

Rib fragments

W12/76
NE ¼ F9
28 Aug 76
92-95cm
Location VI

Misc. bone fragments

W12/76
NE ¼ F9
28 Aug 76
92-95cm

4 bags of misc. bone fragments

W12/76
NW ¼ F9
29 Aug 76
80-90cm
No location
Possibly human

Small bone fragment

W12/76
NW ¼ F9
31 Aug 76
98-103.5cm
No location

Bone fragment

W12/76
NW ¼ F9
29 Aug 76
74.5cm below datum

Bone fragment

W12/76
SW ¼ F8
29 Aug 76
70-80cm

Misc. bone fragments

W12/76 D-1 6 Aug 76 80-90cm Tooth	Right mandibular molar
Surface collection Over bluff	Partial molar
W12/76 NW ¼ F9 29 Aug 76 84 cm from south wall 25 cm from west wall	Animal bone
W12/76 28 Aug 76 (Burial) Bone 6cm NE of Frontal/parietal suture	Misc. bone fragments
W12/76 NW ¼ F9 29 Aug 76 80-90cm Possible human bone	Animal bone fragment
W12/76 SE ¼ F8 28 Aug 76 91cm Phalanx	Hand phalange
W12/76 SW ¼ F8 29 Aug 76 80-90cm Possible prox. Phalanx	Misc. bone fragments
W12/76 NE ¼ F9 30 Aug 76 100 cm to top	Misc. bone fragments

W12/76
NE ¼ F9
30 Aug 76
101 cm below datum at top

Metacarpal

W12/76
NE ¼ F9
30 Aug 76
102 cm at top

Misc. bone fragments

W12/76
SW ¼ F8
31 Aug 76
98-103.5 cm

Misc. bone fragments

W12/76
NW ¼ F9
31 Aug 76
98-103.5
Bone
No Location

Misc. bone fragments

W12/76
NW ¼ F9
31 Aug 76
98-103.5 cm
Foot Phalanges
No Location

Foot Phalanges

W12/76
SW ¼ F8
29 Aug 76
80-90 cm
No Location

Misc. bone fragments

W12/76
NE ¼ F9
30 Aug 76
98-106cm
No Location

Misc. bone fragments

W12/76
NW ¼ F9
31 Aug 76
98-120 cm
No Location

Misc. bone fragments

W12/76 SW ¼ F8 29 Aug 76 80-90cm Human	Misc. bone fragments
W12/76 SW ¼ F8 31 Aug 76 96.5cm below datum 75.5cm from N wall 78cm from W wall	Bone fragment
W12/76 NE ¼ F9 80-90 cm Bone (Human)	Misc. bone fragments
W12/76 NE ¼ F9 92-95 cm Location VII Phalanx	Non-human bone
W12/76 NE ¼ F9 105.5 cm Below datum at bottom Metatarsal Fragments	Hand phalanx
W12/76 SW ¼ F8 99 cm Below datum Human rib fragments	Rib fragments
W12/1976 Burial (Skull) 95.5 cm 28 Aug 76 Bone left parietal	Two small bone fragments

W12/1976
NE ¼ F9
90-100 cm
27 Aug 1976
Location I, II, and III

4 small bags of misc. bone fragments

ATTACHMENT 4

San Diego Archaeological Center.
Letter of September 15, 2004, with inventory and discussion of artifacts being held for UCSD.

San Diego Archaeological Center
preserving pieces of the past
16666 San Pasqual Valley Road
Escondido, CA 92027-7001
V760-291-0370 / F 760-291-0371

September 15, 2004

Catherine Presmyk
UCSD
Physical Planning
9500 Gilman Drive
La Jolla, CA 92093-0965

UCSD Archaeological Collections

Dear Ms. Presmyk:

The San Diego Archaeological Center (the Center) is pleased to provide you with an analysis of University of California at San Diego's (UCSD) present curation needs.

To provide a little background, the Center accepted a collection of artifacts from Dr. Patricia Masters on March 7, 2000. A contract was entered into with UCSD-SIO to rehabilitate the collection and evaluate it for objects subject to the Native American Graves Protection and Repatriation ACT (NAGPRA). The contract was finalized in October 2000 for $15,200, approximately $400 per box. The project was completed in October 2002. (A copy of the final report is attached.) The collection consists of 35-1/4 boxes of artifacts and two boxes of associated documents. For the past two years, the Center has sought guidance from UCSD-SIO as to their desire to enter into a curation contract or accession the collection, and to resolve the NAGPRA issues. The curation fees that accrued during that time are $3,525.

There are two options under our current curation operations: 1) Enter into an annual curation contract; or, 2) have the collection accessioned into the Center's permanent collections. There are two options regarding the NAGPRA issues: 1) UCSD may initiate the repatriation process itself; or, 2) have the Center act as an agent for UCSD and initiate the NAGPRA process for repatriation of human remains and sacred object.

Curation Contract
Under a curation contract, UCSD would retain title to the collections and the Center would administer the collection in accordance with our Curation Contract (*please see attached*). The Center charges $50 per box per year for curation of archaeological collections and associated documentation. The cost for curation for the UCSD collection would be $1,862.50 annually.

Accession Agreement
Under an Accession Agreement, the Center would assume title of the collection under the terms of our Collections Management Policy (*please see attached*). The Center charges a one-time accession fee of $600 per box. The cost for accession of the UCSD collection would be $22,350.

NAGPRA Process
The Center is experienced with the NAGPRA process and conducts consultations and repatriations on a regular basis. Because of the importance of repatriating human remains and sacred objects, the Center is willing to act as an agent for UCSD at no charge under a curation contract. UCSD would designate a contact person to consider and sign off on the repatriation request. Under an accession agreement, the Center would be the collection owner and would conduct the NAPGRA process.

I hope that this information has been helpful. Please don't hesitate to call me if I can be of further service.

Sincerely,

Cindy Stankowski
Director

Via email

Final Report by San Diego Archaeological Center
UCSD Collections
October 7, 2002

Please note: This report and attachments should be considered confidential and not eligible for public distribution because they contain information about existing archaeological sites.

This report constitutes a final summary of the work performed by the San Diego Archaeological Center for the University of California, San Diego, Scripps Institution of Oceanography under a contract for the revitalization and NAGPRA evaluation of archaeological artifacts excavated from UCSD.

Understanding the site number system

San Diego County has employed two different methods to designate archaeological site numbers in the past. The San Diego Museum of Man site numbering system, started by Malcolm Rogers, begin with SDM for San Diego Museum of Man; the designator W for western region and a unique number. Later, the California Historic Resources Inventory System (CHRIS) was used. These site numbers start with CA for California; SDI for San Diego County and a unique number. Artifacts in this collection are marked with W or SDI numbers, sometimes both. There is concordance between the numbering system, as indicated in the table below. All of the catalogues prepared by SDAC used the CHRIS site numbering system, except for W-151, which doesn't appear to have had a CHRIS number assigned.

Museum of Man Site Number	Chris Site Number
SDM-W-5	CA-SDI-4670
SDM-W-9	CA-SDI-525(S)
SDM-W-12	CA-SDI-4669
SDM-W-3683	CA-SDI-11075
SDM-W-151	
SDM-W-137	CA-SDI-4990
SDM-W-34(A)	CA-SDI-10940

Narrative

History

Early in 2000, the San Diego Archaeological Center (SDAC) was contacted by Patricia Masters concerning archaeological collections excavated from UCSD that were stored in a warehouse-type facility at Scripps Institution of Oceanography. Center Director Cindy Stankowski visited the collections with Ms. Masters and agreed that the collections were significant and deserved rehabilitation, continued research and curation. The artifacts were contained in cardboard boxes and plastic washing-up bins and stored on open shelves. The

warehouse facility was being emptied and Ms. Masters was concerned about the disposition of the artifacts unless they were removed to a safer location. Ms. Stankowski agreed to accept the collections on loan, pending a contractual arrangement between SDAC and UCSD SIO for rehabilitation and curation of the collections.

Ms. Masters arranged for the UCSD collections to be transported to SDAC on March 7, 2000. At that time, SDAC was located in downtown San Diego. Thirty-six boxes of artifacts were delivered that day, although one box was found to be empty and one box was taken back by Ms. Masters for a total of 34 boxes of artifacts left at SDAC. Delivered with the collections were a set of index cards with artifact information and some photos of artifacts attached. The UCSD collection was infested with pests and were double bagged to prevent contamination of SDAC collections. The initial inventory was performed, recording the site numbers written on the boxes. The site numbers originally recorded were W-5, W-9, W-12 and W-3683. Upon further examination of the collection, however, there were additional sites represented in the collection: SDI-4990, W-151, SDI-10940 and site unknown. (Receipt of collections and initial inventory attached.)

On April 6, 2000, John Hildebrand SDAC boardmember and UCSD professor supplied the following information about the collections in an email (copy attached):

> Here is what I know about the UCSD collection now in temporary storage at SDAC:
>
> There are 34 boxes of materials from 5 sites:
> W-12 Chancellor's House (UCSD property) excavated 1976
> W-5 Open Space Preserve (UCSD property) excavated ?
> W-9 Scripps Estates (Shumway Property) excavated ?
> W-9S Scripps Estates (UCSD property near tennis court) excavated ?
> W-34 Del Mar Site (? property owner) one column sample excavated 1970's
> W-3683 SIO Campus (UCSD property) excavated 1986
>
> I do not have an accounting of how much material is from each site. The bulk of the material is apparently from a 1976 field school class that was jointly run by UCSD (Pat Masters and Jeff Bada) and Cal State Northridge (Jason Smith and Gail Kennedy). The main location for these excavations was the Chancellor's House (W-12), but some work may have also been done at adjacent sites (W-5 and W-9) at this time. Pat described the work at the Del Mar site (W-34) as a single column sample. A few units were excavated on the SIO campus (W-51) in 1986. Pat's understanding was that these boxes should include shell, lithics, and faunal materials, but not human remains.
>
> All the human remains from the 1976 field school were to have gone with Gail Kennedy, a physical anthropologist, who took them first to CSN and then with her when she moved to UCLA. They were included in a NAGPRA inventory (conducted by Glenn Russell, then of the UCLA Fowler Museum) and were sent to the San Diego Museum of Man for storage. A repatriation request for these human remains by the Kumeyaay (I assume KCRC) is now before the UCLA repatriation committee.

> I have contacted Cathy Presmyk (a UCSD Campus Planner) and asked for UCSD's permission for SDAC to conduct an assessment of what is needed to bring these 34 boxes of materials into compliance with federal standards. A letter is being drafted for the SIO Director's signature that would allow SDAC to examine the collections and come up with an estimate for the cost and scope of work needed. The implication is that once an assessment is done, funds will be forthcoming to bring the collection into compliance.

On June 8, 2000, SDAC received a letter from Charles F. Kennel granting permission to inspect the UCSD collection (copy attached).

On July 17, 2000, a letter proposal was sent to Charles F. Kennel, Director SIO, from SDAC for the revitalization of the UCSD collections and performing a NAGPRA assessment for a total of $15,200 (copy attached).

On October 16, 2000, SDAC received letter authorization to begin revitalization and NAGPRA evaluation of the USCD collections. The letter made note of an additional four boxes of artifacts to be acquired from Pat Masters; however, these boxes were never delivered to SDAC (copy attached.)

On November 15, 2000, a check for $15,200 and a signed Revitalization, NAGPRA Evaluation and Curation Agreement was received from UCSD (copy attached).

In December 2000, work on the UCSD collection began. Of great concern was the potential presence of Human Remains in the collection, and the reorganization of the artifacts proceeded with respect.

A great liability in processing the UCSD collection was the lack of reports or catalogues. Without a catalogue created at the time of excavation, there was no way of knowing if the collection was complete, i.e. if artifacts were missing. Without a report there was no way of knowing what the research design had been, the date of excavation, the exact location of the excavation or the interpretation of the findings. SDAC staff was not sure that the artifacts represented a single project or a group of unrelated excavations.

Research was conducted at the South Coastal Information Center, the regional office for CHRIS and repository for archaeological site forms and reports. A search on the National Archaeological Database (NADB) revealed three reports that might shed light on the UCSD collections. However, it appeared that none of these reports actually documented the project resulting in the excavation of the artifacts on hand. The reports consulted were: *A Cultural Resource Inventory of the University of California at San Diego*, by David Hanna, Jr., for RECON, 1980; *Archaeological Resources Evaluation for the University of California, San Diego-Scripps Institution of Oceanography Master Plan*, David Chavez for David Chavez and Associates, 1988; and *A Cultural and Paleontological Inventory Update for the University of California at San Diego and Scripps Institution of Oceanography*, Dennis Gallegos for ERC Environmental, 1989.

The report that proved to be the most useful was Hanna's, and is quoted in this report. In his report he mentioned work done by Flower, Ike & Roth (FIR), which seemed to match the dates on the little documentation we had and with information on the index cards that accompanied the UCSD collections from sites W-5, W-9 and W-12. In his bibliography, Hanna referenced "Ike, Darcy, 1978, Letter to Ms. Patricia Collum and Appendices I-IV. An unpublished report submitted to UCSD by Flower, Ike and Roth, Archaeological Consultants. April 4." I contacted David Hanna by email and he remembered a meeting with Ike concerning the site, but that there was no true report of the excavation at that time (copy attached).

SDAC staff contacted libraries at UCSD and SIO, Kathy Presmyk, Pat Masters, John Hildebrand and others concerning the whereabouts of this correspondence, but were unable to locate it. SDAC staff sent registered mail to Linda Roth, formerly of FIR, with no response. Attempts to contact Doug Flower were unsuccessful. Community belief was that Darcy Ike had passed away, but SDAC staff recently found out that he is alive, does not participate in archaeology any longer and his whereabouts are unknown. Therefor, it appeared that there was no comprehensive report nor catalogues available that would document this collection.

On October 2, 2001, a letter was sent to Charles Kennel, UCSD advising him of the difficulties in researching this collection. Estimated dated of completion for the project was Summer 2002 (copy attached).

In Spring 2002, the San Diego Archaeological Center was planning a move to a permanent location and collections were put in stasis from May to July 2002. At that time, the UCSD collection had been revitalized, but the final report was not completed until October 2002.

Findings

Collection Condition

The collections were in extremely poor condition upon delivery to the Center. This is not unlike many other collections SDAC has revitalized from the same time period. Every effort was made to gather as much information from the artifact packaging as possible, including scraps of paper, markings on artifacts, even association in the same box. Many of the artifacts appeared to be unwashed and they were not washed at the Center. Some artifacts were marked with pen and ink directly on the artifact, some with a white paint-like substance first, others with a yellow china marker. Most of the artifacts were not bagged in plastic bags, but some were in paper bags.

The first effort was to separate the artifacts by probable site number and try to match them up with the limited documentation available. The artifacts were

catalogued and packaged using the SDAC's Collection Preparation Guidelines. A paper and digital catalogue were created for each site number. The artifacts were then packaged by site number and material class. A document box houses paper catalogues printed on acid-free paper and copies of other documentation.

SDM-W-5 / CA-SDI-4670

929 catalogued items were attributed to this site number. The collection consists of chipped stone artifacts, groundstone artifacts, other lithic artifacts, faunal bone, unmodified shell, soil samples, vegetal ecofacts and historic artifacts. The only documentation accompanying this collection were 374 index cards with catalogue information and some had photos attached. SDAC staff created a catalogue using this information for objects represented on the cards, and catalogued other objects according to our Collection Preparation Guidelines.

The index cards began with catalogue number 1 and end with catalogue number 493. However, a total of 119 catalogue numbers were skipped within that sequence, i.e., there were no cards for 119 numbers. This could indicate missing cards, missing artifacts or deaccessioned objects. (These catalogue numbers are listed as "skipped" in the master catalogue.) There were 12 cards for which no artifact existed: numbers 37, 40, 245, 270, 289, 290, 374, 400, 402, 409, 462 and 493. (These objects are listed as "missing" in the master catalogue.) However, index cards 289, 400, 402, 409, and 462 were marked "void" without further explanation as to the disposition of the artifact. Some of the cards documented more than one artifact. In other words, 400 objects in the collection could be matched up with the 374 index cards. The remaining objects in the collection were assigned catalogue numbers 494 through 1032.

Nine chipped stone items were set aside for NAGPRA review either because their artifact card listed an association with human bone or their provenience placed them near a burial or Human Remains (artifact nos. 485, 486, 488, 489, 490, 491, 492, 1030, and 1031). In addition, a utilized quartz crystal flake, artifact no. 481, was set aside because such items are often ceremonial in Kumeyaay tradition. The artifact card for artifact no. 487 also listed an association with human bone. However, the decision was made not to pull those objects because they were historic in nature, specifically grenade fragments, a 22-caliber shell, and glass fragments. Artifacts set aside for NAGPRA review were placed in the NAGPRA restricted access cabinet at the Center.

From Hanna's report, we believe that the artifacts in the collection marked W-5 are from an investigation conducted by Jason Smith and supervised by Darcy Ike in July and August of 1976. (Note: Hanna's report lacks page numbers, excerpts presented in this report are from "Section B. Prehistoric Cultural Resources."

> Recent attention focused upon Dr. Jason Smith's excavations at SDM-W-5 and SDM-W-12 in July and August of 1976. Field operations were supervised by Ike, who has been of great assistance in compiling baseline data on the site.

> Despite financial difficulties, Ike and his associates have completed artifact cataloging from the 1976 excavations (Ike, Flower, Ike & Roth, 10/2/79) .A catalog card and contact prints are available for each of the nearly 500 lithic artifacts; and records are maintained at Flower, Ike & Roth Archaeological Consultants. A summary of surface and subsurface lithic artifacts has been presented. Munsell coding of soil samples and identification of the approximately ten pounds of recovered marine shell have also been completed but not yet published. Cataloging of the over 3,000 fragments of bone, including human remains, is complete. Faunal analysis is also complete, and Dr. Gail Kennedy of UCLA is analyzing the human osteological remains. Dr. Jeffrey Bada and Dr. Pat Masters of SIO have maintained an active involvement in dating of organic remains.

It appears that the San Diego County Archaeological Society also participated in the excavation at this site.

> A rectilinear posthole sampling program, undertaken by the San Diego County Archaeological Society (SDCAS) on July 24 and 25, 1976, revealed that midden depth varies from approximately 60 centimeters in the eastern portion to about 120 centimeters near the cliff edge at the site's western margin (Ike 1978:2).

Hanna's report goes on to summarize Ike's interpretation of the findings and actions taken to protect this important site. It is SDAC's recommendation that further analysis of the artifacts be undertaken by archaeologists qualified to assess the value of these artifacts in adding to the body of knowledge for this cultural period.

SDM-W-9 / CA-SDI-525S

93 catalogued items were attributed to this site number. The collection consists of chipped stone artifacts, groundstone artifacts, other lithic artifacts and historic artifacts. The only documentation accompanying this collection were 81 index cards with catalogue information and some had photos attached. SDAC staff created a catalogue using this information for objects represented on the cards, and catalogued other objects according to our Collection Preparation Guidelines.

The index cards began with catalogue number 1 and end with catalogue number 95. However, a total of 11 catalogue numbers were skipped within that sequence, i.e., there were no cards for 11 numbers. This could indicate missing cards, missing artifacts or deaccessioned objects. (These catalogue numbers are listed as "skipped" in the master catalogue.) There were 8 cards for which no artifact existed: numbers 13, 79, 84, 92, 93, 94.01, 94.02 and 94.03. (These objects are listed as "missing" in the master catalogue.) In other words, 76 objects in the collection could be matched up with the index cards. The remaining 17 objects in the collection were assigned catalogue numbers 96 through 110.

No items were set aside from this site number for NAGPRA review. However, according to the index card, artifact no. 94.02 was listed as two human long bone fragments and were not found in the collection.

From Hanna's report, we believe that the artifacts from this site were excavated in 1976 by Jason Smith and Darcy Ike.

> Investigation of SDM-W-9S began in November 1976, when unauthorized grading came to the attention of archaeologists participating in cataloging and analysis of materials recovered from Dr. Smith's 1976 excavations at SDM-W-5 and SDMW-12. A letter was written to UCSD Chancellor William D. McElroy, suggesting that SDM-W-9E should be protected from further impacts and that the site should be surveyed, mapped, and registered. Grading operations ceased soon afterwards, but the site was not. mapped and recorded until January 1977, when additional unauthorized midden removal impelled a voluntary surface reconnaissance, mapping, and recording effort by local archaeologists under auspices of the SDCAS. Artifacts were collected from most of the site's surface, while hearth stones, shell, and soil samples were recovered from the new borrow pit area. A posthole was excavated one meter off the eastern edge of the borrow pit, and soil samples were recovered from arbitrary intervals.
>
> Soil phosphate, pH, and Munsell readings from soil samples have been completed, as has cataloging of collected artifacts (Ike, Flower, Ike & Roth, 11/20/79). Results of the voluntary study have yet to be published, but four important pieces of information are available (Ike, Flower, Ike & Roth,11/20/79).

Since the above mentioned results do not appear to have been published, there is no way to know for sure if these artifacts are the ones mentioned in the report. Hanna goes on at some length to discuss the importance of this site. It is SDAC's recommendation that further analysis of the artifacts be undertaken by archaeologists qualified to assess the value of these artifacts in adding to the body of knowledge for this cultural period.

SDM-W-12 / CA-SDI-4669

1,342 artifacts are attributed to this site number. The collection consists of chipped stone artifacts, groundstone artifacts, other lithic artifacts, modified and unmodified shell, soil samples, vegetal ecofacts, historic artifacts and possible Human Remains. There was no documentation accompanying this collection. SDAC staff created a catalogue using this information for objects represented on the artifacts and according to our Collection Preparation Guidelines.

The catalogue numbers in this collection are very confusing. 257 of the artifacts were marked with a catalogue number, presumably by the original excavators, and these numbers were preserved. However, there were gaps in the original numbering system. There are a series of artifacts numbered 1 through 135, with 22 catalogue numbers skipped. There are no artifacts marked 136 through 199. The numbering picks up again from 200 through 389, with 45 numbers skipped. It is not known if the artifacts are missing or were deaccessioned by the original excavators. The remaining 1,085 objects were assigned a catalogue number by SDAC staff starting with number 390. It was elected not to "fill in" the skipped numbers with the artifacts requiring an assigned a number, in case the remainder of the artifacts are located in the future.

There were 25 catalogued items identified as possibly NAGPRA related due to the material, relationship to Human Remains or information on the artifact bags, e.g., "Burial 1". These items include chipped stone artifacts, charcoal, shell, an olivella bead and possible Human Remains. Artifacts set aside for NAGPRA review were placed in the NAGPRA restricted access cabinet at the Center.

From Hanna's report, we believe these artifacts were excavated in 1976 as part of Jason Smith's project. It is truly unfortunate that Smith's nor Ike's documentation may never be recovered.

> It is unclear to what extent portions of SDM-W-12 remain intact within the site's original area. Some remnants do exist, and the area surrounding the William H. Black home, now property of the University of California, became the scene of archaeological survey and excavation in 1976. The 1976 project, run under the direction of Dr. Jason Smith, resulted in recording of the investigated site remnant as SDI-4669. It also gave rise to the site's common name of the McElroy Site, derived from the Black home's occupant, Chancellor William D. McElroy.
>
> Dr. Jason Smith's 1976 excavations at SDM-W-12 were restricted to the southern margin of locus A. According to Ike (Flower, Ike & Roth, 10/2/79} this was a function of both the research interests pursued by Smith and the location of known site remnants. As Smith was evidently interested in finding intact skeletal material suitable for dating and hoped to find artifacts in association with human remains of sufficient age to warrant an Early Man designation, it was unlikey that he would choose to excavate in less known areas away from the cliff margin.
>
> The results of Smith's excavation demonstrate that undisturbed cultural deposits remain along the southern edge of locus A and similarities among artifacts suggest to some that SDM-W-12 and SDM-W-5, were at least in part, contemporaneously occupied Ike, Flower, Ike & Roth, 10/2/79).
>
> Failure of the Smith project to product a final report has reduced the current generation's oppurtunity to understand the role of SDM-W-12 in regional prehistory. Nevertheless, much of the necessary initial work has been completed under the guidance of Ike. All artifacts have been catalogued. Shell identification, Munsell coding, and soil phosphate tests have been completed. Recovered skeletal material is a subject of continuing study, and a large volume of accessioned and keyed photographs is maintained by Ike.

It is SDAC's recommendation that further analysis of the artifacts be undertaken by archaeologists qualified to assess the value of these artifacts in adding to the body of knowledge for this cultural period.

SDM-W-3683 / CA-SDI-11075 1986 Excavation

106 catalogued items were attributed to this site excavated in 1986, as indicated on artifacts and on the handwritten catalogue. A 6-page handwritten catalogue accompanied this collection, starting with catalogue no. 1 and ending at no. 90. SDAC staff assigned numbers to additional artifacts, no. 91 through 100. 18 items listed on the handwritten catalogue were not present in the collection, and are indicated as missing in the master catalogue. The artifacts are lithic and unmodified shell.

Since this collection apparently post dates the Hanna report, it is not mentioned. Gallegos' report from 1989 mentions this site on page 3-20.

> This site was excavated by Masters in 1987 and the final report is in progress. The present study located intact portions of this site near the cliff edge and cultural material was also located east of the previously recorded site area which included shell, lithic debitage and a tarring pebble.

Research at SCIC revealed an Archaeological Site Record submitted by Pat Masters on January 6, 1989 for this site (copy attached). There does not appear to be a final report on file at SCIC.

No items from this collection were set aside for NAGPRA review, although without documentation there is no way of knowing if some of the artifacts were associated with burials.

It is SDAC's recommendation that further analysis of the artifacts be undertaken by archaeologists qualified to assess the value of these artifacts in adding to the body of knowledge for this cultural period.

SDM-W-3683 / CA-SDI-11075 1987 Excavation

110 catalogued items were attributed to this site excavated in 1987, as indicated on artifacts. No documentation accompanied this collection. Many objects in the collection were marked with catalogue numbers, starting at no. 1. However, there were many breaks in the numbering. There were no objects marked 3, 21, 30-256, 258, 259, 260, 261 and 264. The remaining unmarked artifacts were assigned catalogue numbers 266 though 344 by SDAC staff. The artifacts include lithics, shell and soil samples.

SDAC believes that this collection is related to the 1986 excavation mentioned above because of similarities in artifact markings.

No items from this collection were set aside for NAGPRA review, although without documentation there is no way of knowing if some of the artifacts were associated with burials.

It is SDAC's recommendation that further analysis of the artifacts be undertaken by archaeologists qualified to assess the value of these artifacts in adding to the body of knowledge for this cultural period.

SDM-W-151

4 objects are attributed to this site number, however they may have been mistakenly associated with the site number W-151. Hanna goes to some length in his report to explain the confusion with the site numbers in this location, and it appears that these artifacts are from an as yet unknown site in this area. Because of the lack of documentation, it could not be ascertained which is the correct site number.

> In November 1979, Ike encountered bone and shell at a location closely adjacent to the Smith and Kennedy units (Ike, Flower, Ike & Roth, 11/14/27/79) .He was serving as an archaeological observer for UCSD during grading associated with construction of a new seawall segment. The bone and shell which Ike recovered have been sent to Dr. Masters of SIO for analysis and possible dating.
>
> However it began, the mistaken identification of the Cliff Site as SDM-W-151 has had serious consequences. Smith and Kennedy (1976) entitled their report Archaeological Investigations at the Scripps Site (W-151); this error will have to be rectified. Because of this report, Ike believed he was observing construction-related activities at SDM-W-151 and thus provided SDM-W-1SI labels on shell and bone samples submitted to Dr. Masters (Ike, Flower, Ike & Roth, 11/27/79). This will also have to be corrected.

SDAC assumes that these four artifacts are the ones that were turned over to Pat Masters. However, it is not know how many artifacts initially were excavated.

No items from this collection were set aside for NAGPRA review, although without documentation there is no way of knowing if some of the artifacts were associated with burials.

It is SDAC's recommendation that further analysis of the artifacts be undertaken by archaeologists qualified to assess the value of these artifacts in adding to the body of knowledge for this cultural period. However, without documentation, it may not be possible to ascertain which location they were excavated from.

SDM-W-137 / CA-SDI-4990

There is one small bag of shell associated with this site number. Research at SCIC revealed that this site is not on UCSD property. SDI-4990 is located in the San Luis Rey USGS Quadrangle and was recorded by Darcy Ike on April 28, 1977. A comment on the Archaeological Site Survey Records reads, "See Darcy Ike at UCSD SIO" (copy attached). It is not known what relationship UCSD has with this site, as it was scheduled for development by the Carlsbad Development Corp. Perhaps the artifacts were mistakenly placed with the UCSD collections by Ike.

No items from this collection were set aside for NAGPRA review, although without documentation there is no way of knowing if some of the artifacts were associated with burials.

It is SDAC's recommendation that an attempt be made to return this collection to the landowner if possible.

SDM-W-34 / CA-SDI-10940

34 objects were associated with this site number, including shell, lithics, charcoal and faunal bone. Research at SCIC revealed that this site is not

on UCSD property. SDI-10940 is located in the Del Mar USGS Quadrangle on a bluff overlooking the Del Mar racetrack. This site is known as the "Del Mar Man" site and was recorded by Malcom Rogers and updated by Andrew Pigniolo on April 12, 1988. The Archaeological Site Record indicates that the property is in a park owned by the City of Del Mar.

It is not known that relationship UCSD has with this site. However, the artifacts were marked with "UC Pit" as the locus. It might be that students, San Diego County Archaeological Society or Darcy Ike were investigating the site. A call to Andrew Pigniolo revealed that he updated the site form so that it could be assigned a CHRIS number and had not actually excavated any artifacts from the site at that time.

No items from this collection were set aside for NAGPRA review, although the Archaeological Site Record indicates that there were exposed burials at the site.

It is SDAC's recommendation that this collection be returned to the City of Del Mar, if they are still the landowner of the property, and be advised of the potential for NAGPRA.

Site Unknown

14 objects were located in the collection that had no site number and could not be positively attributed to any of the other sites present in the collection. The objects were catalogued and assigned numbers in accordance with the SDAC Collection Preparation Guidelines.

No items from this collection were set aside for NAGPRA review, although it is not known if the objects were found in association with Human Remains.

Summary of NAGPRA Evaluation

A total of 35 items were identified in the UCSD owned archaeological collections that may be eligible for NAGPRA. Since UCSD receives Federal funds, they are responsible for executing NAGPRA. The new "California NAGPRA" legislation also applies in this case. Most facilities undertaking NAGPRA, including SDAC, are sending out dual notices which fulfil the requirements for both laws.

UCSD or an agent acting on their behalf should prepare an official NAGPRA Inventory and Summary for distribution to the Kumeyaay to advise them of these holdings and seek consultation. After consultation, UCSD or their agent should accept and process requests for repatration in accordance with the laws.

SDI-4670

10 items were set aside for possible NAGPRA eligibility.

CAT	OBJECT	REASON
481	Flake, utilized quartz crystal	Object was pulled because quartz crystal items are often ceremonial in Kumeyaay tradition.
485	Chopper	Object was pulled because other objects from the same provenience (S44 E18, 0-20 cm) were associated with human bone.
486	Scraper	Object was pulled because artifact card listed association with human bone.
488	Chopper	Object was pulled because artifact card listed association with human bone.
489	Core	Object was pulled because artifact card listed association with human bone.
490	Core	Object was pulled because artifact card listed association with human bone.
491	Scraper	Object was pulled because artifact card listed association with human bone.
492	Scraper	Object was pulled because artifact card listed association with human bone.
1030	Flake (8)	Bag was pulled because other objects from the same provenience (S44 E18, 0-20 cm) were associated with human bone.
1031	Debitage (114)	Bag was pulled because other objects from the same provenience (S44 E18, 0-20 cm) were associated with human bone.

SDI-525

No items were set aside from this site number for NAGPRA review. However, according to the index card, artifact no. 94.02 was listed as two human long bone fragments and were not found in the collection. Without documentation, we have no way of knowing if any of the artifacts presently in the collection may have been associated with the Human Remains.

SDI-4669

25 items were set aside for possible NAGPRA eligibility.

CAT	OBJECT	REASON
1384	Bulk Shell	Object was pulled because original artifact tag listed association with human bone.
1391	Bulk Shell	Object was pulled because original artifact tag listed association with human bone.
1400	Flake (3)	Object was pulled because original artifact tag listed association with human bone.
1410	Flake	Object was pulled because original artifact tag listed association with human bone.
1411	Debitage (7)	Object was pulled because other objects from the same provenience (NW1/4 F9, 98-103.5 cm) were associated with human bone.
1412	Flake (2)	Object was pulled because other objects from the same provenience (T5 U1, 60-70 cm) were associated with human bone.
1418	Flake (7)	Object was pulled because original artifact tag listed association with human bone.
1426	Charcoal (4)	Object was pulled because other objects from the same provenience (SW1/4 F8, 95-103.5 cm) were associated with human bone.
1427	Charcoal	Object was pulled because original artifact tag listed association with human bone.
1428	Charcoal	Object was pulled because original artifact tag listed association with human bone.
1429	Charcoal	Object was pulled because original artifact tag listed association with human bone.
1432	Charcoal (2)	Object was pulled because original artifact tag listed association with human bone.

1433	Charcoal (4)	Object was pulled because other objects from the same provenience (NE1/4 F9, 98-106 cm) were associated with human bone.
1434	Charcoal (4)	Object was pulled because original artifact tag listed association with human bone.
1437	Charcoal (3)	Object was pulled because other objects from the same provenience (NW1/4 F9, 98-120 cm) were associated with human bone.
1438	Charcoal	Object was pulled because original artifact tag listed association with human bone.
1439	Charcoal	Object was pulled because original artifact tag listed association with human bone.
1440	Charcoal	Object was pulled because original artifact tag listed association with human bone.
1441	Charcoal (2)	Object was pulled because original artifact tag listed association with human bone.
1442	Flake (4)	Object was pulled because original artifact tag listed association with human bone.
1443	Bone (3)	These three bone fragments were pulled because they are most likely human remains.
1444	Debitage	Object was pulled because original artifact tag listed association with human bone.
1445	Debitage	Object was pulled because original artifact tag listed association with human bone.
1446	Bead, Olivella	Object was pulled because original artifact tag listed association with human bone.
1447	Flake	Object was pulled because original artifact tag listed association with human bone.

SDI-11075

No items were set aside from this site number for NAGPRA review. Without documentation, we have no way of knowing if any of the artifacts presently in the collection may have been associated with the Human Remains.

SDI-151

No items were set aside from this site number for NAGPRA review. Without documentation, we have no way of knowing if any of the artifacts presently in the collection may have been associated with the Human Remains.

SDI-4990

No items were set aside from this site number for NAGPRA review, and this would not appear to be UCSD's responsibility as the site is not on their property.

SDI-10940

No items were set aside from this site number for NAGPRA review, and this would not appear to be UCSD's responsibility as the site is not on their property. However, the potential for NAGPRA eligibility appears to be present.

Site Unknown

No items were set aside from this site number for NAGPRA review. Without documentation, we have no way of knowing if any of the artifacts presently in the collection may have been associated with the Human Remains.

Summary of Recommendations

SDI-4670, SDI-525, SDI-4669, SDI-11075, W-151 and Unknown
It is SDAC's recommendation that further analysis of the artifacts be undertaken by archaeologists qualified to assess the value of these artifacts in adding to the body of knowledge for this cultural period. Emphasis should be placed on locating any original documentation from the excavations, as well as determining the provenance of the artifacts within each site.

Further curation of these collections would allow researchers the opportunity to study these collections. Curation fees would be $50 per box for 34-1/4 boxes of artifacts and 1 box of documents or $1,750 per year. A curation contract may be a five-year renewable contract.

SDI-4990
Return the collection to the landowner if possible.

SDI-10940
Return the collection to the City of Del Mar, and advise them of potential for NAGPRA eligibility.

Attachments

Receipt of Collections, dated March 7, 2000
Incoming Loan Agreement, dated March 7, 2000
Initial Inventory of Collections
Email from John Hildebrand, dated April 6, 2000
Letter of authorization from Charles Kennel, dated June 8, 2000
Letter proposal to Charles Kennel, dated July 17, 2000
Letter acknowledging proposal, dated October 16, 2000
Letter to Charles Kennel, dated October 2, 2001
Email from Dave Hanna, dated October 23, 2001
Archaeological Site Report for SDI-11075
Archaeological Site Report for SDI-4990
Archaeological Site Report for SDI-10940
SDAC Collection Executive Summary
Catalogue for SDI-4670
Catalogue for SDI-525(S)
Catalogue for SDI-4669
Catalogue for SDI-11075
Catalogue for W-151
Catalogue for Unknown Sites
Catalogue for SDI-4990 (informational purposes)
Catalogue for SDI-10940 (informational purposes)

End of Report

ATTACHMENT 5

Diana Drake Wilson. Report on Kumeyaay Cultural Affiliation. October, 2001.

REPORT ON KUMEYAAY CULTURAL AFFILIATION

Prepared by Diana Drake Wilson, PhD

Submitted by the UCLA NAGPRA Coordinating Committee

October 2001

Summary of consultation:

In February 2001, Steve Banegas, Spokesman for the Kumeyaay Coalition Repatriation Committee (KCRC), and Barona Councilmember; Bernice Paipa, Vice Spokeswoman for KCRC and Santa Ysabel Tribal Vice-Chairwoman; Eleanor Miller, Tribal Member, Jamul; George Prietto, Tribal Member, Sycuan; and Harry Paul Cuero, Jr., Campo Tribal Member, visited the Fowler Museum of Cultural History to consult with Diana Wilson and Wendy Teeter on the coalition's repatriation claim and to review archaeological collections and documentation. In April 2001, Diana Wilson traveled to Barona Reservation to consult with Steve Banegas, Bernice Paipa, and Harry Paul Cuero, Jr. Consultation by telephone took place between Diana Wilson and Steve Banegas and Carmen Lucas, Elder and member of KCRC between March 2000 and July 2001.

The claim:

Early in 2000, the KCRC requested repatriation of human remains and associated funerary objects from two sites, held by the Fowler Museum of Cultural History: SDi-525 (Scripps Estate, located on the Pacific coast just north of the Scripps Institute in the community of La Jolla), and SDi-603 (Batiquitos Lagoon, also on the Pacific coast north of La Jolla and south of the San Luis Rey River).

SDi-525 includes bone fragments of three individuals (present in our collection) and two burials (presently missing from our collection). These remains are dated to 5,500 - 7,500 BP, calculated by 3 C-14 dates. SDi-603 includes one incomplete sub-adult female skeleton (present in our collection). These remains are dated to 3950 (+-200) BP to 7340 (+- 200) BP based on three C-14 dates (two on shell, one on carbon).

The 1996 UCLA Inventory listed these remains as culturally affiliated with the Viejas Tribal Council (one of twelve Federally recognized Kumeyaay Reservations now represented by the KCRC). We subsequently revised that determination, affiliating the collections with these twelve Reservations, all of whom joined in presenting their repatriation claim through the KCRC.

Analysis and Conclusions:

Below are listed relevant lines of evidence for continuity between earlier groups clearly associated with the remains in question and the present day Kumeyaay. In this document, earlier groups are referred as the *Archaic* (referring to a *time period* extending from 8,000 B.P. to 700 A.D.), and as *La Jolla* (referring to a *cultural tradition* geographically identified with the Pacific coast of San Diego County). Based on archaeological evidence for a consistent material culture, we take as given that a "shared group identity" for the La Jolla cultural tradition existed continuously during the Archaic period. We also take as given that a shared group identity exists

between groups living in southern San Diego and western Imperial Counties in the Late Prehistoric period (Yuman cultural tradition), 1000 A.D. to 1542 A.D., and the ethnographic period (1542 A.D. to the present). This is based on Kumeyaay Tribal knowledge and archaeological, anthropological, ethnographic, and historical evidence.

This report examines the potential for a shared group identity between the people of the La Jolla cultural tradition during the Archaic period and the people of the Late Prehistoric and ethnographic periods, which we refer to as the *Kumeyaay*.

Our revised determination of cultural affiliation is based on published sources and on discussion with Kumeyaay consultants and with scholars knowledgeable about San Diego area archaeology and physical anthropology, and also about Kumeyaay language and culture. (The scholars are listed at the conclusion of this report). The consensus among the scholars was that neither continuity nor discontinuity could be conclusively established between earlier, Archaic groups with Late Prehistoric period, ethnohistorical, and present-day Kumeyaay. We have concluded, however, that cultural affiliation has been shown to exist by a preponderance of the evidence, the standard of proof required under NAGPRA. Immediately below is a summary of our reasoning. Detailed supporting evidence follows at pages 4-18.

Six possible relationships exist between earlier, Archaic populations and those of the Late Prehistoric period and the present-day:

1) Abandonment of the coastal area by earlier groups.

2) Replacement of earlier groups by later groups.

3) Assimilation of earlier grouped by later groups.

4) Transformation of earlier groups into the later groups (adoption of new cultural ideas).

5) Independent cultural traditions co-existing in the same area.

6) Earlier and later groups represent different resource specializations of the same groups through time.

Geographical evidence: Both sites are within the ethnohistoric territory of the Northern Diegueno (Ipai), linguistic/cultural region, and within the historic Kumeyaay (Tipai-Ipai), territory that extends across San Diego County and half of Imperial County and from just north of Batiquitos Lagoon to below Ensenada in Baja California (Luomala 1978:593). Kumeyaay oral tradition has it that the Kumeyaay ceded their northernmost territory to the Luisenos. Material evidence exists in the form of a traditional, ceremonial ground painting (described below) for a Kumeyaay world boundary that encompassed both the historic Kumeyaay geographic territory *and* present-day Luiseno/ Juaneno Tribal territories. The details of this evidence suggest a shared group identity for present-day Kumeyaay groups extending to a time before the Late Period by supporting the third, fourth, and sixth hypotheses listed above.

Archaeological: We have found no archaeological evidence for the first two possibilities, some archaeological evidence for third and fourth possibilities, some archaeological and ethnographic evidence for the fifth, and none for the last.

Biological: The skeletal remains which have been found in Kumeyaay territory and which date from 8,000 to 2000 BP are distinct from those of the ethnohistoric Kumeyaay people. The biological evidence for or against biological continuity is not conclusive, but it may point to a coastal rather than inland origin for these early populations. It should be noted that all but the first possibility listed above -- abandonment -- suggest various degrees of biological relationship between earlier and later groups.

Linguistic: Late Prehistoric period and ethnohistorical Kumeyaay communities spoke/speak dialects of the Yuman family of language, belonging to a proposed Hokan language stock, which is presumed to be among the earliest in California. Yuman languages include: Diegueno, Cocopa, Kiliwa, Mojave, Quechan, Maricopa, Paipai, Yavapai, Hualapai and Havasupai. In the ethnographic period, these languages were spoken in areas across San Diego County, western Arizona, central Arizona, northern Sonora, Mexico, and northern Baja California. Proposed Hokan language groups are located in Northern California, on the coast of Southern California, Baja California, and in the Southwestern cultural area. Because of conflicting views about the existence of a Hokan language stock, the linguistic data is inconclusive, but there is no trace of a previous different language group in the area, evidence that would support the possibility of abandonment.

Ethnographic: In pre-contact time, as in most of the California cultural area, social identity among the Ipai-Tipai was primarily with clan and village. There were also important economic and ceremonial networks among village communities across a large geographic regions. Such a Kumeyaay social interaction sphere in Archaic period may have extended from Enemata to Catalina Island and inland to the Colorado River, as described below under the detailed discussion of *Geographic* evidence, pages 4 –9. The present-day Kumeyaay recognize that other groups from across southern California formerly married into Kumeyaay society and may have lived within the Kumeyaay territory/world, and vice versa.

Kroeber describes the ocean origin traditions of the Yuman cultures, which include the Diegueno or present-day Kumeyaay, as distinct from those of Takic language groups (Gabrielino, Cahuilla, Luiseno) because the Yuman speakers (including the Kumeyaay):

...add the fact that the two brothers, the creator and his death-instituting opponent, are born at the bottom of the sea, and that the younger emerges blinded by the salt water. In most Yuman accounts this concept of water origin is somewhat hesitatingly blended with earth-sky parentage (1925:789).

Ethnographic evidence supports a coastal origin of the Kumeyaay (and Yuman) cultural traditions, and thus supports the fourth hypothesis, transformation of earlier groups into present-day groups.

Oral tradition: Kumeyaay Elders say that it is common knowledge among Kumeyaay people that they have been here "since the beginning of time", and that that knowledge is emphasized in their numerous ceremonial song cycles and legends about features of the landscape. Oral tradition strongly supports the fourth hypothesis, transformation of earlier groups into present-day groups.

Conclusions: The geographical, archaeological, ethnographic, and oral traditional evidence point toward some cultural, social, and probably biological continuity between earlier groups in the San Diego coastal area and the present-day Kumeyaay. The linguistic evidence is inconclusive, but together with the ethnographic and biological data, it may point toward very early populations

originating on the coast rather than migrating there from inland areas. The biological evidence shows considerable differences in skeletal types between earlier and present-day groups but is also inconclusive.

Weighing all the lines of evidence together, we conclude that a preponderance of the evidence supports the Kumeyaay claim of shared group identity with these ancestral remains. This conclusion rests primarily on the geographical evidence of Kumeyaay oral traditions, songs, and ceremonial ground paintings, and the *probability* of at least some biological relationship of earlier and present-day groups, but it does not rest on the biological /skeletal evidence. Our interpretation of the probability of biological continuity rests on the assumption that the present-day Kumeyaay are descended from the Late Prehistoric and Archaic populations residing on the coast. We acknowledge the archaeological evidence that some, perhaps many, Yuman-speaking people came from the California Delta and other inland areas to the San Diego coastal region at the beginning of the Late Prehistoric period. We reason that if Archaic and Late Period in-migrating populations are completely unrelated, and if a considerable number of Yuman people came to the coast, then some present-day Kumeyaay may not have ancestors that were members of the coastal Archaic population.

However, it is probable that at least some members of the Archaic coastal population have descendents alive today, and that those descendents are counted among the present-day Kumeyaay. There is no evidence that the Archaic populations moved out of the area or became extinct as a population without leaving any biological descendents.

Another hypothesis is that during the Archaic period, members of the earliest coastal groups may have moved inland, eventually coming into contact with Southwestern and Mexican area Yuman groups. At the beginning of the Late Period members of inland Yuman-speaking groups may have returned to live with their biological and social relations on the coast, bringing new cultural traditions as well as an expanded gene pool. The Kumeyaay Tribal representatives claim that there has always been communication and social and cultural exchange between coastal groups and Desert and Colorado River groups to the east.

"Shared group identity" as defined by NAGPRA acknowledges an emic component of group identity and is thus substantially different from the terms used in most anthropological and archaeological research. We acknowledge the evidence for substantial cultural and biological changes in Kumeyaay territory over the last 8000 years, and we note that the greatest changes have occurred during the last two centuries. We do not find in the evidence continuity of whole cultural traditions as defined by archaeologists, or of significant biological relationships as defined by physical and biological anthropologists, but neither do we presume that biological or cultural changes preclude a shared group identity.

Detailed lines of evidence:

Geographical: The human remains in question were recovered from Archaic indigenous residential areas on the Pacific Ocean coast north of the community of La Jolla, and at Batiquitos Lagoon, between La Jolla and the San Luis Rey River.

Both sites are within the ethnohistoric territory of the Northern Diegueno (Ipai), linguistic/cultural region, and within the historic Kumeyaay (Tipai-Ipai), territory that extends across San Diego County and half of Imperial County and from just north of Batiquitos Lagoon to below Ensenada in Baja California (Luomala 1978:593). The KCRC represents twelve reservations within this area. The reservations are located in the foothills, mountains, and desert

areas of San Diego and Imperial Counties. None of the reservations are located on the coast, although some present-day Kumeyaay families have ancestors that lived at the coast at the time of contact and into the ethnohistoric period, as documented in Mission records and by oral history.

The socio-political boundaries of earlier groups in this territory are not known, but Kroeber notes a Diegueno (Kumeyaay) propensity for creating maps of the visible universe, the surface of the earth and the celestial sphere (Kroeber: 662-664). One Kumeyaay ground painting was shown and explained to Waterman by Manuel Lachuso, an Elder at San Isabel Reservation, and is reproduced in Waterman (1910:350) and in Kroeber (1923:663). According to Waterman: "The painting, which is some fifteen or eighteen feet in diameter, is a map or diagram of the world as known to the Diegueno" (Waterman: 300).

The ground painting has four geographical locations marked on or outside its circular boundary (see attached map illustration.) The two upper locations are clearly associated with identifiable places: San Bernardino Mountains, and Catalina Island. The lower left hand corner was a "witch mountain on an island, identified with Coronado Island, and the lower right hand "corner" of the ground painting was identified as the "Mountain of creation", but not associated with a specific location.

When the two known locations of this ground painting are superimposed on a map of southern Californian and Northern Baja California and aligned with Catalina Island and the San Bernadino Mountains, the territory within the circle corresponds to present-day Kumeyaay Tribal territory (San Diego County and Baja California south to approximately Ensenada), *together with* present-day Luiseno and Juaneno territory (from northern San Diego County to the Santa Ana River basin to eastern Riverside County).

(In regard to the following consultation, the Kumeyaay Tribal representatives emphasized that other groups have their own points of view on geographical boundaries, that different groups' spheres of influence traditionally overlapped and were flexible through time, and that other groups may have had influence in the same areas at the same time as the Kumeyaay.)

This map is significant because, according to Steve Banegas, Kumeyaay oral tradition states that the Kumeyaay withdrew from present-day Luiseno territory, ceding Kumeyaay territory to the Luiseno because of increasing tensions between the two groups. Thus this map may represent the Kumeyaay world boundary before the social consolidation by Luiseno and Juaneno people of their present-day territories.

The determination of cultural affiliation between the ancestral remains claimed by the present-day Kumeyaay turns on the connection between the Late Period (which we assume is affiliated with the present-day Tribe) and the earlier Archaic or La Jolla period (assumed in the literature to have existed continuously from 8,000 years ago to at least 700 A.D., and also likely to have continued into the Late and ethnohistorical periods (Warren 1964:228-229). If this map substantiates the existence of a Kumeyaay association with this northern territory before the social and cultural consolidation of the Luiseno and Juaneno people in their present day territories (which is assumed by anthropologists and archaeologists to have taken place near the beginning of the Late Period), it would be significant evidence of a continuously shared group identity based on a specific geographical territory linking at least late Archaic Period groups with the present-day Kumeyaay. If the map does suggest an early and continuing association of Kumeyaay people with a northern territory now occupied solely by Juaneno and Luiseno people, this does not necessarily assume that the people ancestral to the present-day Luiseno were not also in the same area at an earlier time together with people ancestral to the Kumeyaay. It may be that a single group common to

both present day Kumeyaay and Luiseno people was present, or that two distinct ancestral groups shared the same geographical territory.

According to Kumeyaay Tribal representatives with whom we consulted, the ground painting would have been used in their traditional puberty ceremony. They said that the circle boundary indicates the Kumeyaay world, that area for which a young man or woman would be held responsible in their adult lives. They noted that the ground painting represents five constellations, which may be linked with specific seasons and associated with the timing of the ceremonies. They did not associate the "Mountain of creation" with a specific location. They did not attribute any specific significance to the Coronado Islands, but they do regard Catalina Island as the origin of certain Chinigchinich traditions that are represented in the ground painting. They also regard the San Bernadino Mountains as a significant location mentioned in their oral traditions and as associated with the Cahuilla people.

This particular ground painting is not the only representation of a Kumeyaay world known in the ethnographic record:

Principle mountains on earth are...represented in the painting.... The identity of these mountains seems to vary for the different villages which at various times have made the painting. That is, the local topography around each village was reflected in the painting. At Santa Ysable they drew Mountain San Jacinto, the islands of Santa Catalina and San Clemente, which are considered to be mountains out on the ocean, and a mountain call nyapunxaua, whose location is vaguely indicated as southward on the desert... the people at Mesa Grande also drew four mountains. These were San Bernadino, represented in the northern part of the circle, and the three Cuyamaca peaks in the southern part. San Bernadino is easily identified, since it is called "white-top". It is the only mountain in southern California with a snow cap....At Los Conejos rancheria the people seem to have represented six mountains, which could not be identified by the present writer in terms of the modern geography of the region (Waterman: 302-303).

The social, and cultural significance of this ground painting for a Kumeyaay geographical territory predating the beginning of the Late Period is linked with the existence of a cycle of songs that describe the same circle boundary. According to Harry Paul Cuero, Jr., Kumeyaay speaker and traditional singer, the circle corresponds with both creation narratives and a major cycle of traditional songs they called the Lightning Songs (possibly the songs of *Chaup*, a supernatural being associated with ball-lightning and who travels above the ground (Waterman: 342)). Paul Cuero, Jr. knows two Elders who sing the Lightning Songs. He has himself on occasion helped out in their singing. The Lightning Songs record the social and cultural relationships with Tribes on the other side of the circle/boundary, such as the Mojave, Cocopa, and Cahuilla.

Harry Paul Cuero, Jr. said that the Lightning Songs describe geographical locations as seen from the perspective of the air, beginning in the northeastern desert area (to the right of the San Bernadino Mountains), and moving south, following the circle boundary. He recalled that one site the songs described was the well-known tidal plume near Ensenada, Mexico. Other coastal locations are mentioned, including Catalina Island. The songs also describe social interactions with different groups. Unnamed tribes living on the other side of the northern boundary are described in the songs, and the Cahuilla are mentioned as living near to the San Bernardino Mountains. Describing various kinds of interactions with the Cahuilla, the songs' descriptions ultimately return to the northeastern desert area where they began, describing relationships with other desert Tribes near the former Lake Cahuilla. Luiseno groups are not mentioned in the

Lightning Songs, and both San Jacinto and San Bernadino Mountain are north of present-day Luiseno territory.

The first songs in the Lightning cycle are in the Mojave language, then in Cocopa, and finally in the Kumeyaay language. Other song cycles describe how the Mojave and Cocopa nations were placed on earth at the time of creation, and their social and cultural relationship to one another: the Mojave are younger than the Cocopa, and both are younger than the Kumeyaay who are culturally mature and responsible for instructing the other Tribes in ceremonial practices given to the Kumeyaay at the area called in English "Big House" in Pine Valley, near Viejas and El Captain Reservations. Non-Kumeyaay people do not understand the exact ceremonial purposes of the Lightning Songs. However, it is evident from the Tribal representatives' description that the songs convey important geographical, cultural, and historical information describing a specific cultural sphere of interaction and strongly implying a shared group identity predating the advent of the Late Period.

Waterman describes the ground paintings as "representing the visible limits of the earth – in other words the horizon" (Waterman: 301). The Tribal representatives thought that Catalina and San Bernadino Mountain could be seen from Mt. Tejate. However, the circle boundary may not only be the representation of a view scape for the following reasons:

1) The circle corresponds with a specific cycle of songs associated with a creation narrative of Lightning, describing the same geographical boundary, and relating social interactions of Kumeyaay groups with neighboring groups outside the boundary.

2) The circle may be purposefully constructed by the determination of three points to encompass and describe a shared social sphere; the lower two corners of the map may be mythological locations. At the time the ground painting was interpreted for Waterman, there was no specific location given of the "Mountain of creation", and Kroeber questions the identification of the lower left-hand corner (1923: 662). However, the upper two locations are actual places, together with a center point located possibly as far north as the village of San Isabel or possibly as far south as Mt. Tejate, determine a circle of a specific size that corresponds remarkably well with the Ipai Tipai geographic territory and linguistic and social sphere of interaction.

Taken together, the above reasons suggest that the circle boundary is not only a viewscape, but is purposefully constructed.

The Tribal representatives were interested in determining the locations corresponding to the center position marked on the ground painting and suggested two possibilities: Pine Valley and the site of the "Big House", the cultural center of the Kumeyaay world and the place at which ceremonial knowledge was given to the Kumeyaay people; and Mt. Tecate, very close to the Mexican/US border, from which they said that possibly two of the geographical locations marked on the ground painting could be seen (the distance to Santa Catalina Island is over 100 miles, and further to San Bernadino Mountain). They said it was significant that the circle encompasses a large amount of ocean because Kumeyaay territory extended as far as one could see from the coast. The center could also be located San Isabel Reservation, where the ground painting was done.

Another point relevant to shared group identity of the present day Kumeyaay with the indigenous groups in San Diego County more than 1200 years ago is the idea of a Kumeyaay group identity inclusive of three ecological zones: coastal, foothill/mountains, and desert. The Kumeyaay emphasize the importance of all the regions to their cultural practices, and they point out that

major ceremonies require materials from each. They also emphasize that they have always had to depend on more than one ecological niche in order to survive. In his study of the indigenous groups in southern California and Northern Baja California, Hicks concluded:

Among all the non-agricultural people included in this study, local group territory was not limited to single altitude, rainfall, vegetation, or land use zones, but cross-cut them.... In our area at least, there were no desert people or mountain people, and as we have seen, it would have been extremely difficult for any sizeable number of individuals to have existed as such (Hicks 1963:322-324).

The recognition of the La Jolla cultural tradition as an ethnic group inclusive of three ecological zones in the Archaic Period time is not the standard archaeological view, but neither is it contradicted by archaeological evidence. An important research question for San Diego County archaeologists is how the research adaptations of the coast, foothill/mountain area interacted with one another through time. Seed grinding, dependent on the use of foothill areas, began in the late Archaic (Warren 1964:194) at "La Jolla" sites. Thus,

it must be stressed that cultural ecological factors are not a part of the definition of cultural traditions, but that a cultural tradition is the mechanism by which prehistoric populations adapted to their environments. A single cultural tradition is logically capable of adapting to several environments through time and/or space (Warren 1968:1).

The Kumeyaay understand their society, culture, and ecological adaptation as heterogeneous and diverse, and in doing so they are more accurate than those who would define a cultural tradition as based solely on material culture. Archaeologists have recognized that the fallacy of using a sole determinate of cultural tradition applies to San Diego archaeology (Byrd and Reddy: 26), but it persists in the name "La Jolla". A shared group identity can include a heterogeneous population within a defined geographical area, and does not depend on a perceived homogeneity of material cultures, physical types, ecological zones, or even language. The stated heterogeneity of their Tribal territory -- coastal, foothills/mountains and desert zones -- together with the representation of a bounded territory apparently predating the beginning of the Late Period by its association with a time before the Luiseno and Kumeyaay territories may have been socially differentiated, strongly suggests a shared group identity based on a specific geographical region that has continued from at least the later Archaic Period until the present-day.

Shared group identity based on this geographical evidence is consistent with the anthropological view that the Kumeyaay have close cultural relations with the Colorado River Tribes to the east. The Lightning Songs and other song cycles acknowledge the common cultural heritage of the Kumeyaay and these Tribes, but at the same time distinguish among them in terms of ethnicity, territory, and language. This is consistent with the linguistic evidence that the Kumeyaay and the Colorado River Tribes speak closely related Yuman languages (Shipley 1978).

A hypothesis of long term cultural interaction between the coast and foothill/mountains in the west and the Colorado River /desert area in the east, including the rapid changes and abrupt advent of new traditions at the beginning of the Late Period, is more explanatory and seems more probable than the hypothesis that the present-day Kumeyaay are descended entirely from people who came to the coast from the river/desert areas about 1200 years ago, completely displacing the population who had lived on the coast for at least 8000 years.

The determination of shared group identity can be made on many levels -- material culture, spiritual traditions, language, biological populations -- but one used consistently by California

Tribes is geographical area. European nations also use geographical territory to establish their own cultural affiliation to the earliest people living in their own countries, as do many Euro-Americans. Therefore, the Kumeyaay ground painting together with related oral history and tradition is evidence for their shared group identity based on a bounded geographical Kumeyaay world beginning sometime in the Archaic period and continuing to the present day.

Archaeological: A general review of the archaeology of San Diego County in the context of the entire state is available in Moratto (1984). The following discussion focuses only on archaeological evidence relevant to two questions concerning the biological continuity of earlier groups with present-day Kumeyaay communities: a hypothesized collapse of population on the southern San Diego Coast at about 3500 BP, and an apparent cultural shift, and possible population replacement, between 1000 and 1300 AD, the transition between the Archaic and Late Prehistoric periods.

There is now a consensus among archaeologists for the continuity of the La Jolla cultural tradition and populations on the south San Diego County coast during the Archaic Period, from about 8000 BP until 1300 BP. Archaic coastal sites are characterized by flaked cobble tools, basin metates, manos, discoids, and flexed burials. For our purposes we designate the following periods within the Archaic Period: (Warren, Siegler, Dittmer 1998):

Transitional: 8200 BP to 7200 BP.

Middle Archaic: 7200 BP to 4000 BP. Coastal populations appear to have declined and many sites apparently abandoned.

Final Archaic: 4000 BP - 1300 BP (beginning of the Late Prehistoric period).

These chronological periods are units of time defined by radiocarbon dates and what appear to be significant changes in cultural assemblages and/or ecological relationships (Warren, Siegler, Dittmer 1998: II - 3).

Warren proposes two different ecological adaptations for the La Jollan coastal populations during the final Archaic Period: Land Resource Collecting and Incipient Maritime. The latter is the subsistence strategy of the Middle Archaic that continues at the San Diego and Mission Bays in the Final Archaic (Warren 1964:187).

- Possibility #1 and 2: Abandonment of the area by earlier groups or replacement of earlier groups by later groups.

According to Claude Warren (personal communication), Batiquitos Lagoon (the origin of one set of human remains being claimed by the KCRC) was a large population center in the middle Archaic Period, with over 40 residential sites surrounding the entire lagoon dated to this period. The Batiquitos area was apparently abandoned after 3500 BP when the lagoon filled in with silt and marine food resources became much less plentiful (Miller 1966). However, it was re-occupied at around 1500 BP, during the Final Archaic. An early focus of San Diego coastal archaeological excavation and research at Batiquitos led to the hypothesis that the population of the entire coastal area may have collapsed for a period during the Final Archaic (Warren 1964, Gallegos 1992).

Also, the names of different time periods may give the impression that "La Jollans" were replaced, or as Rose Tyson of the San Diego Museum of Man suggested, "pushed out" by

"Yumans". Pat Masters, a consulting archaeologist in San Diego County, also said she believes it possible that the coast was entirely abandoned during the final years of the Late Archaic Period. This is because of the lack of radiocarbon dates for that time, and because of apparent stratigraphic breaks between La Jollan Period and Late Period middens in many sites. However, she had not yet seen the data from Byrd and Reddy's unpublished paper cited below (personal communication).

Based on recent archaeological data for the San Diego Bay area, Gallegos and Masters (1997) conclude that the collapse of the Batiquitos Lagoon population is probably not representative of the entire coastal region:

The cultural response to declining coastal productivity at the end of the Middle Holocene remains an issue for continuing research. Did coastal populations intensify use of inland resources to replace lagoon resources? Or did they migrate out of the region or suffer population collapse? Datable stream valley sites indicate occupation continues there into the Late Prehistoric period with no hiatus circa 3500 RYBP.... With the collapse of the north county lagoon ecosystems about 3500 RYBP, the San Diego Maritime tradition survived and continued into the Late Holocene in two very different localities, San Diego Bay and Los Penasquitos Lagoon, both remaining tidally flushed lagoons with access to offshore fisheries (Masters and Gallegos 1997: 20-21).

Byrd and Reddy similarly conclude against abandonment, based on their presentation of new radiocarbon dates:

The proposed chronological gap from 3500 RYBP to 1500/800 RYBP is exacerbated by classification procedures. Often if lagoon species dominate the shellfish at an archaeological site, it is assumed to be of Archaic age. Many excavations at sites with lagoon shellfish...have not obtained absolute dates, perpetuating hypotheses instead of critically evaluating them. ...Overall it is clear that Late Holocene settlement and subsistence in the San Diego area were dynamic, locally innovative, non-environmentally deterministic, and certainly did not entail coastal abandonment (Ibid, n.d. pp. 26-27).

Recent radiocarbon dating at several sites suggests that coastal occupation continued elsewhere after the collapse of the Batiquitos population. Twenty-seven radiocarbon dates from the Los Penasquitos area span 7140 RYBP to 2355 RYBP. At the nearby Sorento Valley site 30 dates span from 3000 RYBP into the ethnohistoric period (Sorento Valley site is the location of the ethnohistorical Kumeyaay community of *Yastagua*). Los Penasquitos lagoon is located on the coast between Batiquitos lagoon and the community of La Jolla and the Scripps Estate site. San Elijo Lagoon, directly south of Batiquitos Lagoon, has yielded 20 radiocarbon dates from 5 sites spanning 8000 RYBP to 2500 RYBP. At Mission Bay, 10 kilometers south of the community of La Jolla, the Rinconada de Jamo midden of maritime resources yielded a suite of dates from 2570 RYBP to 650 RYBP (all dates cited in Byrd and Reddy, n.d.: 18-19). These dates strongly suggest that the San Diego coast was not abandoned at any time during the Archaic Period.

The collapse of the Batiquitos population center at around 3500 BP suggests shifts of residential/resource utilization locations occur between 3000 BP -- 2300 BP in San Diego County settlement locations, including an increased presence in the more southerly coastal areas. This could be interpreted as the establishment of separate population groups and the subsequent decline of Archaic populations, but no archaeologist known to us has put forward this hypothesis. Moriarty suggests that distinct cultural traits begin to appear around 3000 BP (1966), but he does not suggest these appear as isolated from existing cultural traditions or groups. (These shifts may

have to do with changing environments and/or changing methods of resource utilization, but neither is relevant to our discussion.)

Continuity of occupation suggests, but does not prove, biological continuity. However, based on the ethnographically documented association of regional trade and marriage alliances in the Late period, it is more probable that any new groups or individuals in the area intermarried with existing groups rather than remaining genetically isolated.

Also, both material cultural evidence and biological evidence (see below) suggest that groups occupying both lagoon and river valley sites were related. The particular Archaic lithic traditions associated with maritime and lagoon resources are coextensive with the addition of ceramics and new lithic traditions such as arrowheads (Brian Byrd, personal communication, Tim Gross, personal communication). This suggests the assimilation of new ideas and/or new people from the California Delta and Colorado River area.

Yuman (Rogers 1945) refers to a cultural area dispersed from the western coast of San Diego County and upper Baja California to the Colorado River and south to the California Delta in Mexico, and further east and north into the Arizona desert. Groups within this area share related languages and similar cultural traits, including ceramic styles, mythological and religious traditions, and the practice of cremation.

Rogers is often referred to as the primary source for Late Prehistoric period San Diego archaeology. His three Yuman periods are based primarily on ceramic vessel styles, and on the presumed spread and increase of Yuman cultural traits and/or population from a homeland in the Colorado River area. Based on refinements of ceramic analyses, subsequent scholars have criticized Rogers' chronology (Van Camp 1973). Also, McDonald and Eighmey note:

[Roger's] *chronology was developed primarily for the Colorado River Valley sub-area, not the other sub-areas which Rogers (1945:180) recognized as being archaeologically and ecologically diversified. In spite of these shortcomings, this chronology has been taken all too often as the gospel concerning the prehistory of the Kumeyaay region* (1998:III-9-10).

Beginning with the Late Prehistoric period there is a substantial increase in population across southern California, including southern San Diego County. There is no published hypothesis for the collapse or replacement of the Archaic population in southern San Diego County at the time of the transition to the Late Prehistoric Period.

Reasons given by archaeologists for the increase in population in southern San Diego County and accompanying cultural changes include environmental changes (O'Connell 1971); the final desiccation of Lake Cahuilla and subsequent "emigration" (Jefferson 1974:7; Rogers 1945), (Wilke 1974:28-29, 1978:10); improved hunting and storage technologies; and an increased dependence on acorns as a food resource (McDonald and Eighmey 1998:III-1).

- Possibility #3 and 4: Assimilation and/or Transformation of earlier groups by later groups.

In determining a preponderance of evidence for or against cultural and biological continuity we must consider what accounts for the sudden population increase and appearance of a distinct Yuman cultural tradition beginning with the Late Prehistoric period, 1000 A.D. This period is characterized by the appearance of small projectile points, ceramics, and the replacement of inhumation with cremation. None of the San Diego archaeologists interviewed (listed below) thought there was any conclusive evidence that these changes were a result solely of either in-

migration of people from the Colorado River area or of an influx of new ideas. Many said they thought it was probably both. The preponderance of opinion is that new people came to the area rather abruptly.

Similar cultural and social changes occurred around the same time in Orange and Los Angeles Counties, some of which are attributed to an immigration of Takic/Shoshone speakers from the Great Basin area to the coast.

The following observations drawn from archaeological evidence are relevant to our consideration of the biological and kinship continuity of earlier and present-day groups:

Based on evidence from the Spindrift site (located in the community of La Jolla), Moriarty (1966) suggests the merging of Archaic populations with Pre-Yuman people from the desert as early as 3000 BP, continuing until 2,000 BP. He notes an increase in exotic lithic material and the diversification of pressure flaked lithic artifacts at around 3000 BP and the beginning of cremation at around 2,500 BP. However, Warren has questioned Moriarty's radiocarbon data (1964:143) and no other San Diego archaeologists that were consulted were aware of these data.

While some cultural traditions and material artifacts changed, many, especially those associated with marine resources, remained the same. Brian Byrd (personal communication) suggested that ceramics were a novelty item on the San Diego coast, and that tar-pitched basketry continued to serve basic utilitarian needs as it had for millennia. The presence of material continuity as well as change suggest that cultural and material changes occurred as a process of assimilation and transformation, not replacement, despite the appearance of completely new traditions such as ceramics and cremation.

- Possibility #5: Independent cultural traditions co-existing in the same area.

Cultural change did not happen at the same rate throughout the San Diego County area. Cultural and social distinctions probably existed among earlier groups in present-day territory, as is also true today. D. L. True proposed two separate cultural traditions developed in San Diego County which at contact were represented by the Ipai and Kumeyaay dialects/languages:

[T]he continuation of the basic milling stone base, modified by the introduction of an acorn economy, modified by the introduction of cremation disposal of the dead and by a continuous series of influences from the areas to the southeast. Not all of this area responded to the exterior influences in a like manner, however, and some regions retained a measure of the original coastal flavor and maritime oriented interests. Thus the area in and around San Diego bay proper, although greatly influenced by the developments taking place with the area later, were measurably different than their mountain neighbors to the east. At the time of contact these people were recognized as a separate subcategory of the Diegueno speaking population (True 1966:291-292).

Warren noted that Wallace's Intermediate Horizon [immediately preceding the Late Prehistoric], appeared to be a period of increasing regional variation in artifact assemblages. San Diego County shows the least variation, adding only the mortar and pestle and showing only a slight increase in the number
of projectile points.... Warren (1964:8) believed that the "The La Jolla Complex was geographically and culturally marginal and essentially isolated during most of its development" (McDonald and Eighmey 1998:III-11).

In the San Diego and Mission bays area, the economy of the Incipient Maritime stage probably persisted. Unfortunately, information for the critical period of 3,000 B.C. to A.D 500 is lacking. The description of the historic groups inhabiting the San Diego Bay region seems to support the conclusion that the Incipient Maritime stage persisted until historic times (Warren 1964:228-229). [We now have some data for the period 3,000 B.C. to A.D 500.]

Synthesis of technological trends for coastal sites are lacking. The available evidence, albeit not quantitative, indicate lower frequencies of arrow points, ceramics, and imported obsidian at coastal sites than inland sites, and possibly the later introduction (or widespread use) of ceramics along the coast (Byrd and Reddy n.d.: 24).

Thus according to Byrd and Reddy, True, and Warren, a coastal population associated with a maritime tradition continued in the San Diego Bay and Mission Bay areas (the latter being about 15 kilometers south of La Jolla and the Scripps Estate) as a distinctive cultural and linguistic group until the ethnographic period. This strongly suggests, but does not prove, the biological continuation of some members of the Final Archaic population into the Late Prehistoric period.

Unfortunately, we have little written ethnographic information about the groups who occupied the coastal area at contact. Most of the ethnohistoric reconstructions of Kumeyaay society are from the inland communities whose cultural traditions better survived missionization and colonization. However, based on the geographical evidence, inland and coastal groups are related.

Biological anthropology: The skeletal remains from 8,000 BP to 2000 BP are distinct from those of the ethnohistoric Kumeyaay people. Dave Hunt, Collections Manager for Physical Anthropology at the Smithsonian Institution, has studied Archaic remains from Coastal San Diego County; he is creating a database for ancient human remains from North America. He said the Archaic skeletons from San Diego County are similar to the skeletons of the individual from Spirit Cave (Nevada), Minnesota woman, and Kennewick man (Washington), all of which are older than the Archaic Period human remains at UCLA's Fowler Museum of Cultural History.

According to Hunt's non-technical description (personal communication), the earliest Archaic Period skeletons are long-headed, shorter, and heavier-boned than human skeletons from the ethnohistorical period. Hunt said that he "recollected" that slightly rounder skulls begin to appear in the skeletal record for San Diego County at about 3000 BP. Hunt said that the cumulative changes over the 6000 - 7000 year Archaic Period are not as drastic as those between the Late Archaic Period and the Ethnohistoric period when skulls became much rounder and facial features changed considerably.

Hunt offered to send us the craniometric data on the Late Archaic period that he recalled showed the beginning of a shift toward more rounded skulls from 3000 B.P to 1300 B.P. However, after talking with Doug Owsley, also of the Smithsonian Institution, and Professor Richard Jantz, of the University of Tennessee (both physical anthropologists), Hunt referred us to a recent paper by Jantz and Owsley which analyzes the available data for the Early Archaic Period in San Diego County as well as from several other early sites in North America and in China. Unfortunately, Jantz and Owsley do not consider the data for the Final Archaic Period in San Diego, the population between our earlier and later groups, which are most critical for our purpose.

In their paper, Jantz and Owsley hypothesize early population movements around the Pacific Rim. Based on data from Middle Archaic skulls from San Diego County and other early skulls from California and the west, and on mtDNA and Y chromosome evidence for the Southeast Asia origins of Polynesians, they conclude:

a convincing argument can... be made that the early populations of the Western Pacific rim contained populations with a generalized morphology, still seen in such modern groups as Polynesians and Ainu, that also characterizes early Holocene American crania from Western North America (Jantz and Owsley, n.d., page 13).

Jantz and Owsley emphasized the difference between early skulls and those of "recent" Native Americans that are much rounder and generally smaller. His data for "recent" Native Americans are from the following Tribes: Pawnee, Arikara, Sioux, Cheyenne, Blackfeet, Shoshone, Ute, and Paiute.

Archaeologist Claude Warren (personal communication) believes the La Jollans represent one of the earliest migrations to North America, although not necessarily earlier than Clovis. He believes they came by boat or by a coastal land route, and that the La Jollan cultural tradition was a very old and distinctive coastal adaptation that did not include big game hunting. However he emphasized that there is no conclusive archaeological evidence for his hypothesis.

Hunt (personal communication) said that the oldest skulls in North America tend to be long, with a general shift continent-wide to more rounded skulls over time. Jantz (personal communication) said that the Athabaskans are thought by some to be responsible for introducing rounder shaped skulls into Plains area populations, but the arrival of Athabaskans in the southwest is too late to account for the rounder shaped skulls of Yuman people (those living in the Colorado River and California Delta area and east into the Arizona desert). He said that rounder skulls begin to appear in the northern Southwest cultural area skeletal record during the "Anasazi" Period, about 2000 to 1500 B.P. This may reflect a genetic influence from the south (Mexico) at that time.

Jantz said that they did not analyze any La Jollan skulls that were not mineralized and therefore he did not consider data from the Final Archaic Period in San Diego County. However, if Hunt's recollection is correct that the skeletal record begins to change at around 3000 B.P, this change would correspond to the introduction of "pre-Yuman" material culture as reported by Moriarty (1966). Together with the ethnographic evidence for a tradition of regional intermarriage, this might suggest an integration of two or more geographically and genetically distinct populations that accelerated at the beginning of the Late Prehistoric period. However, we do not presently have access to skeletal data for the Final Archaic Period.

Anthropologist Florence Shipek, member of the KCRC, pointed out that changes in facial and skeletal features between early populations and present-day people may be due in part to changes from a diet of primarily seafood and meat to one of primarily acorns and other seeds. However, according to Hunt, biological anthropologists do not believe that environmental factors can account for all the changes in the skeletal record, and a consensus exists that genetic mixing took place between Archaic coastal populations and inland populations. However, because we do not understand very well how environmental and genetic factors interact to produce changes in physical characteristics, no one can say conclusively how much genetic mixing occurred.

According to Hunt, the biological evidence does not conclusively point to discontinuity. He said it is conceivable that there is a biological relationship between Archaic and present-day populations at the range of 35-40 generations, a degree of biological relationship he finds "insignificant" -- but which the Kumeyaay do not.

The biological information discussed here emphasizes the necessity and difficulty of understanding relationships between early and present-day groups within broad geographical and

temporal contexts of movements of populations and cultural traditions -- about which there are still many more questions than answers. If we had skeletal data from the Final Archaic Period showing changes taking place in the La Jollan populations, that would strengthen the case for assimilation and transformation of earlier groups into present-day groups. If we had skeletal data showing no change, that would strengthen the case for an abrupt replacement of an earlier population.

In conclusion, the interpretation of Jantz and Owsley for the biological data supports a coastal origin of both earlier and present-day groups, but the available biological data is inconclusive about the relationship of earlier groups to those of the present-day.

Linguistic: Late Prehistoric period and ethnohistorical Kumeyaay communities spoke/speak Digueno dialects/languages of the Yuman family of languages, Hokan language stock, which is presumed to be among the earliest in California:

The oldest language group still more or less in situ in California would seem to be Hokan.... Perhaps these languages were spoken over most of the area, very likely along with speech families of which no trace remains. A comparison of the Hokan situation with the Penutian one brings to light a dramatic contrast. The interrelationships of the Hokan language lie much deeper in time, a fact paralleled by their geographical discontinuity (Shipley 1978: 81 - 85).

In addition to Digueno, Yuman languages include Cocopa, Kiliwa, Mojave, Quechan, Maricopa, Paipai, Yavapai, Hualapai and Havasupai. In the ethnographic period these languages were spoken in areas across western Arizona, central Arizona, northern Sonora, Mexico, and northern Baja California. All these languages are presumed to be derived from Proto-Yuman. The Yuman languages geographical proximity suggests a shared sphere of social interaction. This is supported by evidence of trade in the archaeological record and by evidence of intermarriage in the mission records (Shipek 1985).

Because of the many social factors involved in language change, glottochronology is an inexact science. Linguist Margaret Langdon declined to speculate on the age of Yuman family of languages or the time at which languages may have separated from one another. She did say that the "center of gravity" for these languages seems to be the Colorado River at the California Delta (in northern Sonora, Mexico) in the Cocopa language area, the most closely related language to Diegueno.

The Diegueno language of the Yuman family has three dialects/languages in California: Ipai (northern), Kumeyaay (southern), and Tipai (extending into Mexico) (Langdon 1990). Margaret Langdon (personal communication) said that in her opinion the three Diegueno dialects are separate languages. She said there are numerous and significant dialectical differences within these three languages, but that such differences can develop quite rapidly. Based on her observations of Native speakers, dialectical differences were used to determine the place of origin of the speakers.

There are no language isolates in the San Diego area. The linguistic data do not suggest that the Archaic groups spoke a language other than one belonging to a Diegueno dialect, the Yuman language family, or a Hokan language stock. Neither, however, does it establish that the earlier and later groups are related by language.

Florence Shipek suggested that language change is related to the alternative filling and desiccation of Lake Cahuilla. She was told by one Kumeyaay Elder that they all used to speak

the same language, but that after the Lake went up and then down again they couldn't understand one another anymore. The last filling of Lake Cahuilla occurred between 1200 and 1350 A.D. (Shipek 1985). Language differentiation may be due to the risings and desiccations of Lake Cahuilla (which have occurred for many millennia), hindering and facilitating exchange among groups. Alternatively it may suggest population movements, or the expansion of languages and cultures from a Proto-Yuman homeland.

If a Hokan language stock can be associated with the earliest groups living on the coast and which arrived via the coast, this may suggest that the proto-Yuman language originated on the coast and not inland. Proto-Yuman language could have been spread inland by the expansion of Archaic coastal groups. The presumed "Yuman" population movement to the coast at the beginning of the Late Period may have been the return of socially and linguistically related people. Inland members of a large, regional Yuman speaking population may have intermarried with genetically diverse populations from Mexico and the Southwest and adopted the Southwestern cultural traits of ceramics and cremation. When and if they returned to the coast, they brought both an expanded gene pool and new cultural traditions.

However, Shipley points out that Hokan language stock is an unverified hypothesis (1978:81). We do not know what, if any, evidence exists for the relationship between Yuman languages and the geographically closest, proposed Hokan languages: Chumash (to the north) and Seri (to the south). We do know that Chumash and Seri are regarded as more closely related to each other than to the Yuman languages. However, linguist K.A. Klar (2000) has called into question the inclusion of Chumash into the Hokan language stock.

Ethnographic: The Late Prehistoric period and ethnohistorical groups now known as Kumeyaay were formerly divided into a northern and southern groups: Ipai and Tipai. Furthermore, the Ipai were divided according to western and eastern groups: Diegueno and Kamia, with the Diegueno further divided into northern and southern groups.

In pre-contact time, as in most of the California cultural area, social identity among the Ipai-Tipai was primarily with clan and village. Important regional economic and ceremonial networks existed among village communities. Kinship ties both local and regional united these autonomous communities, and each controlled distinct territories and ecological resources (Luomala 1978). As recently as 1995, the name "Kumeyaay" had less relevance to shared group identity that smaller village and family/clan territories. This was evident when none but Viejas Reservation made a claim of cultural affiliation for the human remains we now are considering; according to Elder Clarence Brown they were found in the traditional territories of families now living at Viejas.

Present-day Kumeyaay are related to a larger regional Yuman cultural area (see Yuman languages above). The present-day Kumeyaay recognize that other groups from across southern California formerly married into families living in Kumeyaay territory, and vice versa. The San Diego Mission records document this: Franciscan fathers confirmed existing Kumeyaay marriages with individuals from Luiseno, Cupeno, and Cahuilla territory (Takic speakers) and from the other Yuman groups. These marriage patterns support the hypothesis that the Kumeyaay social sphere of interaction was formerly perceived to extend to the north, including what is now Luiseno, Cupeno and Cahuilla territories.

The social and cultural complexity of the earlier groups in Kumeyaay territory is represented today by the variety of language dialects, geographical diversity, and distinct cultural traditions of the twelve reservations represented by the Kumeyaay Coalition. Among Kumeyaay people today

there are those who identify with the inland areas and those who identify with the coast and a maritime tradition. Margaret Langdon said that some Kumeyaay Elders she has known do not identify with the ocean and "abhor fish." Luomala reports that Kumeyaay mythology is "locally and idiosyncratically variable like much of Tipai-Ipai culture" (1978: 604).

Kroeber describes the origin traditions of the Yuman cultures, which include the Diegueno or present-day Kumeyaay, as distinct from those of Takic speakers. The Yumans:

add the fact that the two brothers, the creator and his death-instituting opponent, are born at the bottom of the sea, and that the younger emerges blinded by the salt water. In most Yuman account this concept of water origin is somewhat hesitatingly blended with earth-sky parentage (1925:789).

The specific common Yuman elements in this cosmology are the rising out of the deep of the creator Tuchaipa, the blindness, opposition, and miscreations of his brother Kokomat, and the killing of Maiaveta [Sky-Rattlesnake] (ibid. 791).

The Kumeyaay Tribal representatives stressed that the present anthropological record of Kumeyaay is seriously incomplete. They pointed out that Kroeber did not himself visit the Kumeyaay area; he sent his protégé (presumably Leslie Spier), who did not speak any of the Kumeyaay languages. According to the oral tradition of Tribal representatives, the Kumeyaay Elders tried to convey their considerable astronomical knowledge to an ethnographer who was unable to fully understand them due to his own ignorance of constellations.

They Kumeyaay people have a wide range of traditional knowledge that is not documented in the ethnographic record. For example, they have song cycles describing migrations of peoples, animals and their behavior, the creation of the world, and many other kinds of knowledge, including the Lightning Songs. Each song cycle includes dozens of individual songs; no single person is responsible for knowing more than one song cycle. These songs are not only ceremonial; they contain the collective knowledge of the Kumeyaay people and are distributed among the various families and clans for safekeeping. The fact that there are no translations of these Kumeyaay song cycles, nor any comprehensive written record of these songs' scope and content, suggests how much knowledge is unrecorded and unknown to non-Kumeyaay people. Kroeber (1923) does describe some song cycles of the Mojave, and notes that his description of their content does not begin to convey the meaning of the narratives and song. These are structured on altogether other principles than those with which European are familiar.

<u>*Oral tradition*</u>: Elder Carmen Lucas, member of the Kumeyaay Repatriation Coalition, told us that it is common knowledge among her people that they have been here "since the beginning of time"; that their various ceremonial song cycles emphasize knowledge and legends about features of the landscape; and that Kumeyaay Bird Songs tell of the "creation of the people here, and their being here from the beginning".

Elder Carmen Lucas said that both her father and grandmother respected the Native cemeteries on and near their family's land for as long as she could remember. Her grandmother knew the identity of many of those buried, but she made no distinction between named and unnamed ancestors, and all were accorded the same respect. In the 1950s, Ms. Lucas's father was distraught at the desecration of a family cemetery by developers. Many other family histories concerning Kumeyaay people demonstrate the concern and respect accorded to deceased ancestors by their traditional religious practices.

According to Shipek, Kumeyaay creation stories tell of the people emerging from the ocean, and oral tradition tells of the people moving inland from the sea because "that is the best place to plant and grow acorns." Shipek believes this oral tradition reflects the gradual shift in the archaeological record from a marine-based diet to an acorn and plant-based diet.

If La Jollans first arrived on the San Diego Coast by way of boats nine or more thousand years ago, this would corroborate Shipek's report of some Kumeyaay persons' interpretations of their origin: "We came from the ocean." The Tribal view is that there is no break in continuity between present-day Kumeyaay and the earliest inhabitants of the coastal area. Steve Banegas, Chair of the KCRC, said: "The 'La Jolla man' is a ruse by archaeologists so they don't have to go through all these hoops. There is no difference; we consider them our people, it's still our traditional territory, and we have a history of at least 10,000 years".

In addition to Tribal experts, Diana Wilson consulted the following scholars between April 2000 and July 2001:

Brian Byrd, ASM Affiliates, consulting/contract archaeologist at Camp Pendleton

Lynne Christenson, Director of the South Coast Archaeological Information Center in San Diego

Dennis Gallegos, consulting /contract archaeologist

Lynn Gamble, Assistant Professor of Anthropology, San Diego State University

Tim Gross, consulting /contract archaeologist

John Hildebrandt, Scripps Institute of Oceanography

Dave Hunt, Collections Manager for Physical Anthropology at the Smithsonian Institution

Richard Jantz, Professor of Physical Anthropology, University of Tennessee

Margaret Langdon, linguist, Emeritus, San Diego State University

Anna Noah, archaeologist

Meg McDonald, consulting /contract archaeologist

Pat Masters, archaeologist, Inman and Masters Consultants, La Jolla

Glenn Russell, Environmental Management Specialist/Archaeologist, San Diego County Planning Department

Florence Shipek, Professsor of Anthropology, emeritus, University of Wisconsin, member of the Kumeyaay Repatriation Coalition

Del True, archaeologist, Emeritus, UC Davis

Rose Tyson, Curator of Physical Anthropology, Museum of Man, San Diego

Claude Warren, Professor of Archaeology, Emeritus, University of Nevada

References consulted:

Byrd, Brian F. and Seetha N. Reddy
n.d. Late Holocene Adaptations of the San Diego Region: New Perspectives on Old Paradigms. Forthcoming in Late Holocene volume

Carrico, Richard
1990 *Strangers in a Stolen Land.* Sierra Oaks Press, Sacramento.

1998 Ethnohistoric Period. In Screencheck Draft, *Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study*. ASM Affiliates, Prepared for Municipal Wastewater Management Division, City of San Diego. Pp. V-1 – V-25.

Crabtree, R.H., C.N. Warren, and D. L. True
1963 Archaeological Investigations at Batiquitos Lagoon, San Diego County, California. *University of California Archaeological Survey Annual Report 1962-1963*, pp. 243-278. Los Angeles.

Cuero, Delfina
1991 *Delfina Cuero: Her Autobiography, an Account of her Last Years and Her Ethnobotanic Contributions (as told to Florence C. Shipek)*. Ballena Press Anthropological papers No. 37.

Flenniken, J. Jeffrey, James D. Eighmey, and Meg Macdonald
1998 Comparative Technological Lithic Analysis of Selected Temporal Diagnosis of San Diego Sites. In Screencheck Draft, *Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study*. ASM Affiliates, Prepared for Municipal Wastewater Management Division, City of San Diego. Pp. IV-1-42.

Kroeber, Alfred
1925 *Handbook of the Indians of California*. American Bureau of Ethnology Bulletin 78, Washington D.C.

Langdon, Margaret
1975 Kamia and Kumeyaay: A Linguistic Perspective. *Journal of California Anthropology,* 2(1):64-70).

1990 Diegueno: How Many Languages? In *Proceedings of the 1990 Hokan-Penutian Languages Workshop*. Edited by James Redden. Occasional Papers on Linguistics 15. Department of Linguistics. Southern Illinois University, Carbondale.

Jantz, Richard L. and Douglas W. Owsley

2000 Circumpacific Populations and the Peopling of the New World: Evidence from Cranial Morphometrics. Paper presented at Clovis and Beyond Conference, Santa Fe, New Mexico..

Jefferson, G. T.
1974 A Research Strategy for Interior Southern California Archaeology. In *Perris Reservoir Archaeology: Late Prehistoric Demographic Change in southeastern California.* Edited by James F. O'Connell, et al,., pp. 5-9. California Department of Parks and Recreation Archaeological Reports 14.

K.A. Klar
2000 The Island Chumash Language: Implications for Interdisciplinary Work. In *Proceedings of the Fifth California Islands Symposium*, edited by D. Browne, K. Mitchell, and H. Chaney, pp. 654-658. US Department of the Interior, Minerals Management Service, Washington, D.C.

Luomala, Katherine
1978 Tipai-Ipai. *Handbook of North American Indians.* Vol. 8, California. Edited by Robert F. Heizer. Smithsonian Institution, Washington, D.C.

McDonald, Meg, and James D. Eighmey
1998 Late Prehistoric period Prehistory in San Diego. In Screencheck Draft, *Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study.* ASM Affiliates, Prepared for Municipal Wastewater Management Division, City of San Diego. Pp. III-1to III- 63.

Masters, and Dennis Gallegos
1997 Environmental Change and Coastal Adaptations in San Diego County during the Middle Holocene. In *Archaeology of the California Coast during the Middle Holocene,* Erlandson and Glassow, eds. Pp. 20 – 21.

Miller, J.
1966 The present and past molluscan faunas and environments of four southern California coastal lagoons. Master's thesis, Scripps Institution of Oceanography, University of California, San Diego.

Moratto, Michael J.
1984 *California Archaeology*. Academic Press, Orlando.

Moriarty, James R., III
1962 La Jolla Natural Radiocarbon Measurements: La Jollan II. *Radiocarbon,* Vol. 4, pp. 204-238 .

1966 Culture Phase Division Suggested by Typological Change Coordinated with Statrigraphically Controlled Radiocarbon Dating at San Diego. *Canadian Journal of Anthropology* 4(4):20:-30.

Moriarty, James R., and George Shumway
1959 Excavation: Shumway Property. In *Scripps Estate Site 1 (SDI-525): A Preliminary Report on an Early Site on the San Diego Coast,* by J. Moriarity, G. Shumway, and C. Warren, *University of California Archaeological Survey Annual Report 1958-1959*, pp. 185-216. Los Angeles.

Moriarty, James R. III, George Shumway and Claude N. Warren
1959 Scripps Estates Site I (SDI-525): A Preliminary Report on an Early Site on the San Diego Coast. *University of California Archaeological Survey Annual Report* 1958-1959, pp. 185-216. Los Angeles.

O'Connell, J. F.
1971 Recent Prehistoric Environments in Interior Southern California. *University of California Archaeological Survey Annual Report* 1971, pp. 173-184.

Rogers, Malcolm J.
1945 An Outline of Yuman Prehistory. *Southwestern Journal of Anthropology*, Vol. 1, No. 2, pp. 157-198.

Rogers, Spencer L.
1963 The Physical Characteristics of the Aboriginal La Jollan Population of Southern California. *San Diego Museum Papers,* No. 4.

1977 The Stature of Early Southern California Indian Populations. *San Diego Museum Papers,* No. 11.

Shipek
1985 Myth and Reality: The Antiquity of the Kumeyaay. In *Proceedings of the 1983, 1984 and 1985 Hokan-Penutian Languages Workshop*. Edited by James Redden. Occasional Papers on Linguistics 13. Department of Linguistics. Southern Illinois University, Carbondale.

Shipley, William
1978 Native Languages of California *Handbook of North American Indians*. Vol. 8, California. Edited by Robert F. Heizer. Smithsonian Institution, Washington, D.C. Pp. 81- XX..

Spier, Leslie
1923 Southern Diegueno Customs. *Publications in American Archaeology and Ethnology 20.* University of California Press, Berkeley.

True, D.L.
1966 *Archaeological Differentiation of Shoshsonean and Yuman Speaking Groups in Southern California.* Unpublished Ph.D. dissertation, University of California, Los Angeles.

Van Camp, Gene R.
1973 *Kumeyaay Pottery*. Ballena Press Anthropological Papers, No. 15. Ballena Press: Soccoro, NM.

Wallace, William J.
1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11:214-230.

Warren, Claude N.
1966 *Cultural Change and Continuity on the San Diego Coast.* Ph.D. dissertation, University of California, Los Angeles.

Warren, Claude N, Gretchen Siegler, and Frank Dittmer

1998 Paleo-Indian And Early Archaic Periods. In Screencheck Draft, *Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study*. ASM Affiliates, Prepared for Municipal Wastewater Management Division, City of San Diego. Pp. II-1-II-90.

Waterman, T. T.
1910 The Religious Practices of the Diegueno Indians. University of California Publications in American Archaeology and Ethnology Vol. 8(6): 271-358.

Wilke, Philip J.
1974 Settlements and Substance at Perris Reservoir: A Summary of Archaeological Investigations. In *Perris Reservoir Archaeology: Late Prehistoric Demographic Change in Southeastern California*. Edited by James F. O'Connell, et al., pp. 20-29. California Department of Parks and Recreation Archaeological Reports 14.

1978 Late Prehistoric Human Ecology at Lake Cahuilla, Coachella Valley, California. *Contributions of the University of California Archaeological Research Facility* No. 38.