

## 3.9 CULTURAL RESOURCES

### 3.9.1 Introduction

#### 3.9.1.1 Definition of Resource

Cultural resources are defined as any prehistoric or historic sites, buildings, districts, structures, traditional use areas, or objects considered to be important to a culture, subculture, or community for scientific, traditional, religious, or any other reasons. Cultural resources are generally divided into three groups: archaeological resources (both historic and prehistoric), architectural resources, and traditional cultural resources.

#### A - Archaeological Resources

Prehistoric and historic archaeological resources are locations (sites) where human activity measurably altered the earth or left deposits of physical remains. Prehistoric sites consist of various forms of evidence indicative of human activities that spanned the time from about 9,000 years ago until the time of the first European contact in 1635. Prehistoric artifacts frequently include utilitarian and non-utilitarian objects, such as flaked and ground stone tools (e.g., spear points, arrowpoints, and scrapers) as well as bone and shellfish ornaments and tools (e.g., abalone pries, fishhooks, and beads). Occasionally remnants of basketry or cordage, remains of a housefloor or living surface, fire hearth, bedrock milling stations, mortuary remains, or rock art panels exist as parts of prehistoric sites. Prehistoric sites can be manifested as only a scatter of surface material, or can include a subsurface component or midden deposit. Most frequently, such sites contain both surface and subsurface elements. Historic archaeological sites can be subsurface remains that contain buried foundations, wells, cisterns, privies, etc., or surface remains such as historic walkways, roads, or structural remnants. Archaeological resources can be identified and evaluated for significance according to each site's cultural importance, integrity, and ability to yield information to stated research questions.

Underwater archaeological resources are defined as submerged sites having some cultural affiliation. These can take the form of submerged prehistoric sites or isolated prehistoric artifacts; or can be submerged historic shipwrecks, or pieces of ship components, such as cannons or guns.

#### B - Architectural Resources

Architectural resources are standing buildings, dams, canals, bridges, and other structures of historic or aesthetic significance. Architectural resources generally must be more than 50 years old to be considered for protection under existing cultural laws. However, more recent structures, such as Cold War military buildings, may warrant protection if they manifest the potential to gain significance in the future. Buildings, structures, and other facilities can be of historic significance, depending on their time frame, degree of integrity, and their possible association with known historical events or persons.

#### C - Traditional Cultural Resources

Traditional cultural resources are resources associated with cultural practices and beliefs of a living community that are rooted in its history and are important in maintaining the continuing cultural identity of the community. Traditional cultural resources may include archaeological sites; locations of historic events; sacred areas; sources of raw materials used to produce tools and sacred objects; and traditional hunting or gathering areas. The community may consider these resources essential for the persistence of their traditional culture.



### 3.9.1.2 Regional Setting

Southern California's offshore islands within the Sea Range include San Nicolas, Anacapa, Santa Cruz, Santa Rosa, and San Miguel. These islands and the nearby mainland show archaeological evidence of some of the most politically complex hunter-gatherers in the world. Beginning at least 15,000 years ago, Native Americans hunted, fished, and gathered shellfish on the islands. They also participated in an elaborate trading network between islands and the mainland through the use of canoes.

Spanish explorers arrived in the 1600s with a devastating effect on mainland native groups. Decimated by disease, the remaining groups were relocated to villages next to Catholic missions. Island groups were most affected by seal and other hunting in the early 19<sup>th</sup> century. On San Nicolas Island, all native inhabitants were moved to the mainland by the mid-1800s. Ranching and fishing in the late 19<sup>th</sup> and 20<sup>th</sup> centuries were the major subsistence activities on the islands. Remains of Anglo and Chinese occupations can be found in abalone gathering camps, fishing camps, or ranch houses and outbuildings.

Military activities in the Sea Range began during World War II and increased dramatically during the Cold War. Point Mugu and its related testing range facilities were critical to the research and development efforts required to test surface-to-surface, surface-to-air, and air-to-surface missiles. Several structures at Point Mugu associated with early missile development and testing have been determined eligible for the National Register of Historic Places (National Register).

### 3.9.1.3 Region of Influence

The region of influence (ROI) for cultural resources encompasses the Sea Range and associated facilities at NAS Point Mugu and San Nicolas Island. For purposes of the cultural resources analysis, the region has been divided into the Sea Range proper, Point Mugu, and San Nicolas Island. The Sea Range includes all offshore areas under the Special Use Airspace, a total of 36,000 square miles (93,200 km<sup>2</sup>); cultural resource issues are primarily related to potential effects to underwater archaeological resources. The Point Mugu area consists of the main base and the nearshore area to the extent that alternatives addressed in this EIS/OEIS may affect archaeological, architectural, and historic resources. The areas of analysis for San Nicolas Island consist of the island proper and the immediate nearshore areas. Resources of concern for San Nicolas Island include archaeological, architectural, and historic resources. Since the alternatives analyzed in this EIS/OEIS (including the No Action Alternative) would not affect onshore cultural resources at San Miguel, Santa Rosa, Santa Cruz, Anacapa, or Santa Barbara islands, they are not specifically addressed; however, they are included in discussions pertaining to the Sea Range to the extent that underwater resources in proximity to these islands might be affected.

### 3.9.1.4 Research Methodology

Under federal laws and regulations, only significant cultural resources warrant consideration with regard to adverse impacts resulting from federal activities. Significant archaeological and architectural resources include those that are eligible or are recommended as eligible for inclusion in the National Register. The significance of cultural resources is evaluated according to the National Register eligibility criteria (36 C.F.R. 60.4), in consultation with the State Historic Preservation Officer (SHPO). According to these criteria, "significance" is present in districts, sites, buildings, structures, and objects that:

- (a) are associated with events that have made a significant contribution to the broad patterns of history; or
- (b) are associated with the lives of persons significant in the past; or

- (c) embody the distinctive characteristics of a type, period, or method of construction, represent the work of a master, possess high artistic value or represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) have yielded, or may be likely to yield, information important in prehistory or history.

There are no legally established criteria for assessing the importance of a traditional cultural resource. These criteria must be established primarily through consultation with Native Americans. When applicable, consultation with other affected groups provides the means to establish the importance of their traditional resources. They may also be derived from 36 C.F.R. 60.4 and from the Advisory Council on Historic Preservation guidelines.

The methodology for determining the presence of significant cultural resources within the ROI was based on a combination of existing data and special research studies. Extensive data searches on known cultural resources within the Point Mugu Sea Range, NAS Point Mugu, San Nicolas Island, and other Channel Islands provided information on the number, types, locations, and significance of archaeological and architectural resources within the ROI. Specific databases on known underwater cultural resources were combined with bathymetric information and data on ocean currents and sea level changes to model areas with the potential to contain submerged cultural resources. Ongoing discussions with Native American groups and a detailed ethnohistoric study to identify direct lineal descendants of prehistoric populations provided information on Native American issues and traditional cultural resources.

### 3.9.2 Point Mugu Sea Range

#### 3.9.2.1 Background

Existing information on submerged resources is based on review of the *Channel Islands National Park and Channel Islands National Marine Sanctuary: Submerged Cultural Resources Assessment* (Morris and Lima 1996). Their study indicates that more than 100 shipwrecks are recorded within the northern portion of the Sea Range. Another existing database provided by the Environmental Project Office indicates that as many as 500 shipwrecks have been recorded throughout the Sea Range, although precise locational and descriptive information is lacking. Within the outer portion of the Sea Range, major data gaps exist regarding the presence of submerged cultural resources; virtually nothing is known of this area.

#### 3.9.2.2 Underwater Resources

Archaeological resources within the Sea Range are limited to shipwrecks and an occasional isolated artifact that was lost from Native American watercraft during a prehistoric or historic voyage.

#### A - Prehistoric Archaeological Resources

No prehistoric archaeological resources are recorded within the Sea Range. Amateur deep sea dives have reported the sitings of isolated artifacts, such as stone bowls or mortars; however, none has been officially recorded within this area. Since prehistoric Native Americans frequently sailed the waters between the offshore islands and the mainland, it is likely that a number of isolated artifacts may exist on the sea floor.



## B - Historic Archaeological Resources

No historic resources, other than submerged shipwrecks and one plane, are known to exist in the Sea Range. Over 500 sunken vessels have been reported within the coastal waters of southern California. Precise locations are infrequent, with vague descriptive narratives of the area in which the ship was last known, or thought to have sunk, being provided. Generally, weather conditions (e.g., high wind, dense fog), geographical features (e.g., submerged rocks or reefs), and human error are all factors that may influence vessel failures. Morris and Lima (1996) have compiled a database of known shipwrecks and their locations in the Sea Range. The underwater resources dating prior to 1947 are considered important for the purposes of this study and are summarized in [Table 3.9-1](#). Note that in many cases, although a shipwreck is known to have occurred, no wreckage has been located.

The listed shipwrecks include fishing boats, barges, yachts, cargo carriers, passenger ships, freighters, and target ships. Reasons for their demise include mechanical failure, fire, collision, grounding, or capsizing. The most common reasons for shipwrecks were either running aground on natural hazards such as prominent rocks or colliding in harbors during stormy weather. A predictive model based on the locations of lost ships and ships found within the Sea Range constructed for the EIS/OEIS suggests that shipwrecks are most likely to be found less than 0.5 NM (0.9 km) from shore in relatively shallow water (less than 33 feet [10 m] in depth). Few ships are lost more than 10 NM (19 km) from shore and, if lost, are unlikely to be found given the depth to the ocean floor.

The other cultural resource found submerged is the Grumman Avenger, a government plane that was possibly ditched off Santa Cruz Island due to mechanical problems. All of the submerged resources are protected by the State of California Penal Code (Sec. 622.5), the Archaeological Resources Protection Act (ARPA) of 1979 (16 U.S.C. § 470aa et seq.); and National Park Regulations (36 C.F.R. 2.1), and, if located within the sanctuary boundaries, the CINMS regulations (15 C.F.R. 935.7).

The largest number of shipwrecks found within the Sea Range are near Santa Rosa Island. These shipwrecks have occurred in the vicinity of Talcott Shoal, Sandy Point, Bee Rock, East Point, and Becher's Bay. Two shipwrecks are currently known to be located in Becher's Bay (the site currently used for simulated mine drops): the *Ella G* and the *Blue Fin*. While wreckage from the *Ella G* has been located, nothing has been found of the *Blue Fin*. Portions of Becher's Bay between the pier and Carrington Point were surveyed by the National Park Service in 1985 using a side-scan sonar and magnetometer (Morris and Lima 1996). Although the results of the survey were negative, remains of a wooden frame ship, probably the *Ella G*, were discovered on the beach near the pier in 1992. The frame had been covered in sand and was temporarily exposed during winter storms. It is likely that other submerged and buried remains are located in Becher's Bay along with the remains of the *Ella G*.

### **3.9.3 Point Mugu**

#### **3.9.3.1 Background**

The Environmental Project Office provided existing cultural resources information for NAS Point Mugu. Previous cultural resource investigations conducted for the NAS Point Mugu mainland property include: six inventories and National Register evaluations; three historical overviews; and two cultural resource management studies ([Table 3.9-2](#)).

**Table 3.9-1. Ships and Aircraft Built Prior to 1947 Lost within the Sea Range**

<b>SAN NICOLAS ISLAND</b>			
<b>Ship Name</b>	<b>Official Number</b>	<b>Year</b>	<b>Wreckage Found</b>
<i>John Begg</i>		1825	
<i>La Gironde</i>		1902	
<i>Intruder</i>		1905	
<i>Coney Island</i>		1926	
<i>Nora II</i>		1937	
<i>SS Steel Chemist</i>		1949	
<i>LCI</i>		1951	
<i>Standard No. 1</i>		1951	
<i>Dixie Lee</i>		1960	
<i>CVE-91</i>		1962	X
<i>Margie A</i>		1970	
<i>Agerholm</i>		1974	
<i>Savage</i>		1979	
<i>Baussell</i>		1982	
<i>Vance</i>		1982	
<i>Higbee</i>		1986	
<i>LSD (Kabildo)</i>		1986	X
<i>Deperm</i>		1987	
<i>YFU-5</i>		Unknown	X
<i>Unknown</i>	4413	Unknown	X
<b>ANACAPA ISLAND</b>			
<b>Ship Name</b>	<b>Official Number</b>	<b>Year</b>	<b>Wreckage Found</b>
<i>Windfield Scott</i>		1853	X
<i>Pearl</i>		1891	
<i>Dawn</i>		1901	
<i>Lotus</i>	141723	1921	
<i>Beulah</i>		1933	
<i>Nancy B</i>		1946	
<i>Bar-Bee</i>		Unknown	
<b>SANTA ROSA ISLAND</b>			
<b>Ship Name</b>	<b>Official Number</b>	<b>Year</b>	<b>Wreckage Found</b>
<i>Yankee Blade</i>		1854	X
<i>Convoy</i>		1884	
<i>Goldenhorn</i>		1892	X
<i>Crown of England</i>		1894	X
<i>Magic</i>		1899	
<i>Ella G<sup>1</sup></i>		1908	X
<i>Dora Bluhm</i>		1910	
<i>Aggi</i>		1915	X
<i>Jane L Stanford</i>		1929	X
<i>Blue Fin<sup>2</sup></i>		1944	

<sup>1</sup> Found at Becher's Bay

<sup>2</sup> Lost at Becher's Bay



**Table 3.9-1. Ships and Aircraft Built Prior to 1947 Lost within the Sea Range (continued)**

<b>SANTA CRUZ ISLAND</b>			
<b>Ship Name</b>	<b>Official Number</b>	<b>Year</b>	<b>Wreckage Found</b>
<i>San Buenaventura</i>		1858	
<i>Chappo</i>	127191	1897	
<i>Helene</i>	96325	1898	
<i>Bell</i>		1901	
<i>Francine</i>	120988	1901	
<i>Sea Lion</i>		1906	
<i>Irene</i>		1908	
<i>Nellie</i>	130865	1912	
<i>International I</i>	167316	1918	
<i>Unity</i>	218553	1922	
<i>Eagle</i>		1923	
<i>OK</i>		1923	
<i>Wampas (aka Grey Ghost)</i>		1926	
<i>Maryland</i>	214495	1927	
<i>Kinkajou</i>		1930s	
<i>Swan</i>	230938	1932	
<i>Imperial</i>	212356	1936	
<i>Yukon</i>	219965	1938	
<i>City of Sausalito</i>	235380	1941	
<i>Lion</i>	215807	1924	
<i>Grumman Avenger (plane)</i>		1940s	
<i>Billcona</i>		1952	
<i>Golden Gate</i>		1952	
<i>Corsair</i>		1953	
<i>Ruth E.</i>		1955	
<i>Santa Cruz</i>		1960	
<i>Vineth</i>		1961	
<i>Cinnamon Bear</i>		1966	
<i>Joan</i>		1974	
<i>Glady I</i>			
<b>SAN MIGUEL ISLAND</b>			
<b>Ship Name</b>	<b>Official Number</b>	<b>Year</b>	<b>Wreckage Found</b>
<i>Leader</i>		1876	X
<i>G.W. Prescott</i>	85329	1879	
<i>N.B.</i>		1879	
<i>Isabella</i>		1885	
<i>Surprise</i>		1888	
<i>Liberty</i>		1895	
<i>Santa Rosa</i>		1895	
<i>Kate &amp; Anna</i>		1902	
<i>J. M. Colman</i>		1905	X
<i>Comet</i>		1911	X
<i>Cuba</i>		1923	X
<i>Watson A West</i>		1923	X
<i>W.T. Co. No. 3</i>		1935	
<b>SANTA BARBARA ISLAND</b>			
<b>Ship Name</b>	<b>Official Number</b>	<b>Year</b>	<b>Wreckage Found</b>
<i>Dante Alighieri II</i>	236704	1938	X

Source: Morris and Lima 1996.

**Table 3.9-2. Summary of Recent NAS Point Mugu Cultural Resource Studies**

Reference	Type of Study	Associated Site
<b><u>Prehistoric Resources</u></b>		
Schwartz 1992	Inventory and National Register Evaluation	CA-VEN-187/256
Martz et al. 1995	Paleoenvironmental and Cultural Ecology Study (Cultural Resource Management Study)	CA-VEN-11* CA-VEN-26* CA-VEN-110*
ACOE 1995	Curation Assessment (Cultural Resource Management Study)	NAS Point Mugu
<b><u>Historic Resources</u></b>		
Swanson 1984	Historical Overview	Spanish occupation through WW II
Mikesell 1994	Inventory and National Register Evaluation	Building 5-2
Mikesell 1995a	Inventory and National Register Evaluation	Building 2-8 Building 6-1 Building 75
Mikesell 1995b	Inventory and National Register Evaluation	Building 5-3 Building 7010 Building 7011 Building 7012 Building 7013
Mikesell 1996	Inventory and National Register Evaluation	Building 55
Schaefer 1996	Inventory and National Register Evaluation	CA-VEN-1239
Newland & Van Wormer 1996	Historical Overview	WW II era
JRP 1997	Inventory and National Register Evaluation	Buildings 865-878
Wee & Byrd 1997	Historical Overview	Cold War era
JRP 1998	Inventory and National Register Evaluation	All structures

\*Onshore sites located adjacent to NAS Point Mugu.

### 3.9.3.2 Archaeological Resources

As part of the archaeological resources assessment of NAS Point Mugu, two inventories and National Register evaluations were conducted (Schwartz 1992; Schaefer 1996). In addition, a cultural resource management study was conducted to synthesize existing ethnographic, historic, and environmental data to produce a cultural ecology of Mugu Lagoon (Martz et al. 1995).

#### A - Prehistoric Archaeological Resources

Site CA-VEN-187/256 is a prehistoric site recorded on the east end of Runway 27. A 1968 backhoe excavation revealed the presence of human remains; however, no official investigation was conducted and no report was produced. A 1992 surface survey of the area found no evidence of the site (Schwartz 1992). Today the site CA-VEN-187/256 is capped with a fill deposit; however, the presence of human burials from the 1968 backhoe excavation suggests the possibility of a buried deposit. Testing in 1997 (NAWS Point Mugu 1998g) confirmed that the site is primarily buried. A formal determination of eligibility of VEN-187/256 has not been completed at this time.

The presence of two known villages (*Mu'wu* [CA-VEN-11] and *Simo'mo* [CA-VEN-24 and -26]), a cemetery, and a midden site (CA-VEN-110) along Calleguas Creek, adjacent to NAS Point Mugu but



outside of Navy lands, suggest that Mugu Lagoon supported a large prehistoric complex (Martz et al. 1995).

### B - Historic Archaeological Resources

Historic site CA-VEN-1239 is an early 20<sup>th</sup> century fishing compound. The site is located on the sand spit on the southern edge of Mugu Lagoon and was investigated as part of an inventory and a National Register evaluation for a seawall repair project (Schaefer 1996). Data recovery investigations were conducted to mitigate impacts to a level of no adverse effects in compliance with Section 106 of the National Historic Preservation Act (NHPA), as amended (§ 106, 16 U.S.C. 470 et seq.). Final results of Schaefer's investigation are still pending.

### C - Underwater Resources

Submerged lands off Point Mugu include the area that extends to the mean high-tide line. Records do not indicate the presence of any underwater cultural resources within the immediate subsurface tidal zone off Point Mugu.

#### 3.9.3.3 Architectural Resources

Six inventories and National Register evaluation projects and three historical overviews were conducted for NAS Point Mugu. These studies resulted in the evaluation of all World War II- and Cold War-era buildings (Mikesell 1994, 1995a,b, and 1996; JRP 1997 and 1998), and historical overviews of the Spanish occupation through the World War II-era (Swanson 1984; Newland and Van Wormer 1996) and the Cold War era (Wee and Byrd 1997).

The inventories and evaluations were for Building 5-2 (Mikesell 1994); Buildings 2-8, 6-1, and 75 (Mikesell 1995a); Buildings 5-3, 7010, 7011, 7012, and 7013 (Mikesell 1995b); and Building 55 (Mikesell 1996). Only Building 55 was determined eligible for inclusion in the National Register. The building relates to the Cold War context of Navy guided missile testing and evaluation, and is an exceptionally significant example of launching structure design (Mikesell 1996). Recent inventories of Cold War structures have identified six additional facilities that meet the criteria for National Register eligibility: Bravo Launch Complex (formerly known as the Baker Launch Complex) (Buildings 727, 728, and 729), ground support (Buildings 354 and 354A), Buildings 97 and 98, Buildings 375 and 390, and headquarters for testing (Building 36).

#### 3.9.3.4 Traditional Resources and Native American Issues

Native American concerns regarding Point Mugu are currently being addressed through the ethnohistoric study being conducted by Dr. John Johnson of the Santa Barbara Museum of Natural History. This ongoing investigation has identified some direct lineal descendants from the *Mu'wu* village site. In compliance with the Native American Graves Protection and Repatriation Act (NAGPRA) and EO 13084 (*Consultation and Coordination with Indian Tribal Governments*), and as part of the NAS Point Mugu Historic and Archaeological Resources Protection (HARP) Plan, NAS Point Mugu will hold consultations with recognized tribes and/or direct lineal descendants as appropriate. Future consultation regarding Native American issues could include both the identified direct lineal descendants and members of the federally recognized Santa Ynez Band of Mission Indians. Additional coordination can be made with the Oak Brook Park Interpretive Center.

### 3.9.4 San Nicolas Island

#### 3.9.4.1 Background

The Environmental Project Office supplied information on San Nicolas Island's cultural resources. Previous research conducted on San Nicolas Island's cultural resources include inventories, evaluations, data recovery or mitigation programs, management studies, and research-oriented investigations. Over 530 prehistoric archaeological sites and 48 historic sites have been recorded on the island (Reinman and Lauter 1984; Schwartz and Rossbach 1993; Schwartz 1995).

Archaeological investigations on San Nicolas Island began approximately 100 years ago and have continued to the present. Early collectors include Paul Schumacher, Leon de Cessac, and Stephen Bowers who were responsible for the removal of countless San Nicolas Island specimens for museum displays during the late 1870s through the early 1900s. The first scientific exploration of the island occurred during the 1930s when Malcom Rogers recorded more than 30 sites and conducted several test excavations in a project sponsored by the San Diego Museum of Man (Schwartz 1993). During the 1950s, the University of California, Los Angeles (UCLA) initiated a program in which scientific methods of research were applied to the archaeology of San Nicolas Island. The Environmental Project Office has continued to explore the scientific research objectives and has supported numerous systematic studies of the island resulting in the development of a comprehensive research design. Recent investigations have included three inventories, four National Register evaluations, eight prehistoric research investigations, three historic research investigations, and one cultural resource management study (Table 3.9-3). Based on this research, San Nicolas Island is in the process of being nominated as a Historic District to the National Register due to its numerous prehistoric archaeological sites of intense research value and significant historic interest.

#### 3.9.4.2 Archaeological Resources

Cultural resource sites on San Nicolas Island were of great importance to the now extinct Native American group known as the *Nicoleño* (Kroeber 1925). Most prehistoric sites discovered on the island are large stabilized dune sites in which the debris and artifacts exemplify the early inhabitants' reliance on marine resources. Referred to as "shell middens," these prehistoric sites contain an abundance of fish, marine mammal, and shellfish remains and the tools and utilitarian objects that were used to obtain and prepare the marine resources. Over 530 prehistoric sites, dating from 7,000 years ago, have been recorded for San Nicolas Island. The majority are concentrated within the island's coastal zone, where these marine resources were easily obtained (Schwartz and Martz 1992).

Several of the more well known cultural resource sites on San Nicolas Island include whale-bone houses, carved rock art (petroglyphs) and rock art paintings (pictographs) in the Cave of the Whales, and a prehistoric water-collection site in which the natural spring area was channeled into a catch basin by the prehistoric inhabitants. Also of renown is the story of the "Lone Woman" of San Nicolas Island, that describes how a single surviving woman was found on the island 18 years after all other natives had been removed to the mainland.



**Table 3.9-3. Summary of Recent San Nicolas Island Cultural Resource Studies**

Reference	Type of Study	Associated Site
<b><i>Prehistoric Resource Studies</i></b>		
Reinman & Lauter 1984	Inventory and National Register Eligibility	All San Nicolas Island sites
Schwartz 1991	Research-Oriented Investigation	CA-SNI-11 CA-SNI-14 CA-SNI-15 CA-SNI-16 CA-SNI-18 CA-SNI-38 CA-SNI-40 CA-SNI-51 CA-SNI-51 CA-SNI-56 CA-SNI-79
Howard & Raab 1993	Research-Oriented Investigation	Shell beads from San Nicolas Island
Mitchell 1993	Research-Oriented Investigation	CA-SNI-351
Rogers 1993	Research-Oriented Investigation	1930s San Nicolas Island excavations
Schwartz 1993a	Research-Oriented Investigation	1930 Rogers excavation
Schwartz 1993b	Inventory	26 Chinese abalone processing sites
Schwartz 1993c	Research-Oriented Investigation	Historic overview of San Nicolas Island
Schwartz & Martz 1993	Research-Oriented Investigation	CA-SNI-38 CA-SNI-161 CA-SNI-168 CA-SNI-351
Vellanoweth 1993	Research-Oriented Investigation	CA-SNI-161
Rosenthal & Padon 1994	National Register Eligibility; Archaeological Testing	CA-SNI-18
Schwartz 1994	Research-Oriented Investigation	Historic occupation of San Nicolas Island
Alschul & Grenda 1995	Research-Oriented Investigation	Research design overview
Rosenthal & Padon 1995	National Register Eligibility; Archaeological Testing	CA-SNI-168
Thomas 1995	Research-Oriented Investigation	Paleobotanical research
USACE, St. Louis District 1995	Curation Needs Assessment (Cultural Resource Management Study)	NAS Point Mugu and San Nicolas Island
<b><i>Historic Resource Studies</i></b>		
Swanson 1994	Research-Oriented Investigation	Sheep ranching at San Nicolas Island
Mikesell 1995	Inventory and National Register Eligibility	Building 74
Lima 1995	Research-Oriented Investigation	Navigation aids at San Nicolas Island
JRP 1997	Inventory	World War II Historic Context of San Nicolas Island
Swanson 1997	Research-Oriented Investigation	Fishing on San Nicolas Island
Wee & Byrd 1997	Inventory	Cold War Context of NAS Point Mugu and San Nicolas Island
JRP (in preparation)	Evaluation	World War II and Cold War structures

A number of cultural resources investigations have been conducted on San Nicolas Island, although most of these have been research-oriented studies (see [Table 3.9-3](#)). These studies have included a complete inventory of prehistoric sites; an inventory of Chinese abalone sites; testing of prehistoric sites; analysis of shell beads; paleobotanical research into plant processing; analysis of human burials; a curation assessment of existing collections; historic context descriptions of fishing, ranching, and military activities; and architectural inventories.

#### A - Prehistoric Archaeological Resources

Survey and testing investigations on San Nicolas Island include a survey of the entire island (Reinman and Lauter 1984) and eligibility testing at a number of sites (see [Table 3.9-3](#)). However, previous prehistoric archaeological investigations conducted on San Nicolas Island have focused on only a small portion of the more than 530 sites on the island. Sites considered eligible for inclusion on the National Register include CA-SNI 11, CA-SNI-16, CA-SNI-18, CA-SNI-38, CA-SNI-40, CA-SNI-51, CA-SNI-56, CA-SNI-79, CA-SNI-160, CA-SNI-168, CA-SNI-169, CA-SNI-351, and CA-SNI-144. The National Register status of the numerous undescribed sites on San Nicolas Island is unknown at present; however, the entire island is in the process of being nominated as the San Nicolas Island Historic District. Once a National Register eligibility evaluation is completed, all sites within the Island Historic District would be afforded protection and preservation subject to the NHPA.

#### B - Historic Archaeological Resources

From the mid-1850s through 1943, San Nicolas Island became an important fishing and ranching center. Evidence of early sheep ranching, fishing camps, and abalone collecting stations is present in areas scattered throughout the island. A recent investigation provides an overview of historic sites on San Nicolas Island and includes descriptions of the early (late 1880s) sheep ranching activities and discusses possible site locations (Schwartz and Rossback 1993). Evidence relating to past sheep ranching activities exists on the terraces above NAVFAC Beach where remnants of wooden structures, a root cellar, and portions of old fence lines can be found.

A preliminary survey of Chinese abalone collecting sites has identified approximately 26 sites at several locations on the northwest and southern coastline of the island (Schwartz 1995). Some of these sites retain evidence of circular rock-walled structures, isolated hearths with rectangular stone alignments, and other areas paved with sandstone slabs speculated to have been used in conjunction with early Chinese abalone processing camps. Several instances of Chinese ceramics and vessels have been reported from San Nicolas Island giving credence to the theory of Chinese abalone exploitation activities on the island. To date, evaluation of these sites for inclusion in the National Register has not been undertaken. Evidence of early Euro-American fishing camps exist on the island along the northwestern and southeastern tips (Schwartz 1993). An historic overview of the San Nicolas Island fishing industry (Swanson 1997) from the 1500s through the mid-20<sup>th</sup> century (recently completed) will provide the historic context to evaluate fishing sites on the island.

#### C - Underwater Resources

Underwater prehistoric sites and/or isolated objects may be located in the waters around San Nicolas Island, but none is recorded officially. It is known from ethnographic literature that prehistoric peoples navigated the channel and traveled between the mainland and the Channel Islands, including San Nicolas Island (Hudson et al. 1977). Treacherous waters and changing weather conditions most likely resulted in disaster for some of these prehistoric voyages, thus, items aboard their plank canoes may have been lost to the ocean currents. Precise locations of these isolated artifacts from failed canoe trips are unknown



because no systematic underwater survey has been undertaken to date. Occasionally, isolated prehistoric artifacts, including stone mortars and bowls, are reported by divers, but these events are relatively rare. Sea levels have risen substantially during the past 18,000 years and it has been postulated that site locations beyond the existing shoreline may now be covered with water (Bloom 1983). An investigation is currently in progress to study this hypothesis by assuming a settlement similar to that known for the island would be found in submerged areas surrounding the island. The preliminary results of this study suggest that the areas most likely to contain submerged archaeological sites are within 1,640 feet (500 m) of the rocky shore habitat and near a water source. Given the shoreline at 8,500 years ago, these resources would most likely occur on the western end of the island at less than 1 NM (1.9 km) from the present shore. The predictive model, although based on the best information to date, still must be tested through a sample survey program.

Underwater historic resources related to shipwrecks are known to occur in a number of areas within the waters surrounding San Nicolas Island (see [Table 3.9-1](#)). Twenty shipwrecks are known to have been lost or sunk off the coast of San Nicolas Island. A predictive model based on the locations of lost ships and ships found within the Sea Range constructed for this EIS/OEIS suggests that ships are most likely to be found less than 0.5 NM (0.9 km) from shore in relatively shallow water (less than 33 feet [10 m]) in depth. Shipwrecks are most likely to occur at harbors and hazards on the western and eastern ends of San Nicolas Island.

#### 3.9.4.3 Architectural Resources

San Nicolas Island contains a number of buildings and structures related to the various types of military activities that previously took place on the island. Recent investigations have inventoried those facilities and made preliminary eligibility determinations based on National Register criteria. Building 74 was evaluated and is considered to be ineligible for listing on the National Register (Mikesell 1995). Investigations into the historic context of World War II-era and Cold War-era facilities on San Nicolas Island (JRP 1997; Wee and Byrd 1997) and examinations of these structures have recommended that one facility be considered eligible, the Permanent Radar Tower (Building 138).

#### 3.9.4.4 Traditional Resources and Native American Issues

Although numerous cultural items have been collected from San Nicolas Island, no cultural affiliation can be assigned with certainty. No federally recognized Native American tribes or groups have been identified, and there is not clear information as to who the prehistoric inhabitants of the island were. In previous studies, they have been described as *Gabrielino*; however, an ethnolinguistic study (Munro 1994) on the few recorded words spoken by the Lone Women of San Nicolas Island suggests that the *Nicoleño* language may be older than *Gabrielino* and the island may have been settled prior to the establishment of *Gabrielino* speakers on the coast. An on-going ethnohistoric study by Dr. John Johnson of the Santa Barbara Natural History Museum has failed to locate any living descendants from the island. The Environmental Project Office has recently attempted to involve local Native Americans in San Nicolas Island cultural resource work by inviting members to take part in projects and in consultation relating to the development of the San Nicolas Island HARP Plan. In addition, NAGPRA studies are in progress for San Nicolas Island archaeological collections. Upon completion, the final version of the NAGPRA inventory will be submitted to the National Park Service per NAGPRA regulations. All remains discussed in this inventory are classified as “culturally unaffiliated.”