

JALAMA RANCH PROPERTY DESCRIPTION

LOCATIONAL AND REGIONAL SETTING

The Jalama Ranch is located in western Santa Barbara County approximately five miles southwest of Lompoc, 40 miles west of the City of Santa Barbara, and 125 miles northwest of Los Angeles. The Jalama Ranch is composed of a portion of the 48,221 acre historical Rancho San Julian and comprises approximately 15,813.7 acres (21.68 square miles). The Jalama Ranch is located approximately five miles from Highway 1 (Cabrillo Highway) on Jalama Road. It is bounded on the north and west by Vandenberg Air Force Base and Jalama Beach County Park, on the north and east by several smaller ranch properties, and on the south by the Cojo Ranch.

LOCAL SETTING

The Jalama Ranch is located to the north of the San Julian Ridge. Adjacent to the Jalama Ranch, to the west, are the Jalama Beach County Park and Vandenberg Air Force Base (VAFB). Jalama Beach County Park occupies 28 acres along the Pacific Ocean at the terminus of Jalama Road. Jalama Beach Park is primarily used for camping, picnicking, fishing, surfing, and other beach related activities. Located within the 98,400 acre Vandenberg AFB complex is the Western Space and Missile Center. In addition to military testing and training activities, there are several active space launch complexes that launch unmanned space vehicles. The Cojo Ranch, owned by Bixby Ranch Company, is located to the south of the Jalama Ranch. The Cojo Ranch is comprised of 8,580 acres.

HISTORICAL/ARCHAEOLOGICAL/CULTURAL SETTING

The Jalama Ranch occupies an important place in local, state, and national history. Its key geographic location has made it a place of human activity for 9,000 years. From Paleo-Indians through the Chumash; Spanish exploration and the Mission and Rancho periods; to American settlement and ownership by the Bixby Family, the Jalama Ranch holds a rich history of each of these periods. There are artifacts and sites on the property representing of this long time span.

There is evidence of Paleo-Indian habitation in the north Santa Barbara County area dating to between 9,000 and 8,600 years ago (about 6950 to 6550 B.C.). No carbon dating has been done of artifacts from the Jalama Ranch property, but the dates are supported by information from nearby sites.

Archaeologists recognize three periods of Paleo-Indian cultural development: the Early (6000 - 1400 B.C.), the Middle (1400 B.C. - 900 AD.), and the Late (900 - 1542 A.D.). Early activities consisted of general hunting and gathering, while later activities focused on land and sea mammal hunting, fishing, and acorn gathering. Social, political, and ritual organization became more complex, and the Late Period inhabitants concentrated on the exploitation of the sea. This permitted large populations to be supported on the Santa Barbara coast and Channel Islands. The area was one of the most heavily populated by Native Americans in California at the time of European contact.

The first European contact by the Chumash in the area was with Juan Rodriguez Cabrillo's voyage of exploration in 1542. There are two villages nearby, one at the mouth of Jalama Creek, and the other on Salsipuedes Creek just northeast of the Jalama Ranch.

There were periodic contacts between Europeans and Chumash near Jalama Ranch until 1769, when Gaspar de Portola led the first Spanish land expedition through the area. Spanish friars and the establishment of missions followed in the next 35 years. Many local Chumash were converted to Christianity by the missionaries and moved to the missions at Santa Barbara, Santa Ynez, La Purisima, Conception, and San Luis Obispo. The La Purisima Mission padres grew crops and cultivated vineyards and orchards in the Jalama Valley. The Rancho San Julian (48,221 acres) was established to raise cattle to provide food to the garrison at the Santa Barbara Presidio.

After Mexico's independence from Spain, the government secularized the land holdings of the missions and made grants for ranchos, many of which went to soldiers. Rancho Punta de la Concepcion (29,992 acres) was granted to Anastasio Carrillo of the Santa Barbara Presidio in 1837. It included the Rancho El Cojo in its southeast corner (about 10,000 acres) and a portion of the Jalama Ranch. In the same year, Rancho San Julian was granted by Governor Alvarado to Jose de la Guerra y Noriega, the commander of the garrison at the presidio.

When California was admitted to the Union in 1850, owners of rancho grants were obliged to have their titles confirmed by the U.S. Lands Commission. Anastasio Carrillo's title to Punta de la Concepcion was confirmed in 1873; after a Supreme Court case, Noriega's title to San Julian was upheld in 1880.

The Jalama Ranch (15,813 acres) was formed from part of the San Julian Ranch in 1914, and was bought by Fred H. Bixby in 1939. Jalama Ranch is no longer associated with Rancho San Julian. Cattle ranching and dry farming have been the agricultural activities on the Jalama Ranch for over 150 years. The Bixby Family has been the caretakers of this unique land and valuable environmental resources for more than half a century.

EXISTING CONDITIONS

Agricultural Operations

The Jalama Ranch is a working cattle operation. Approximately 750 head of cattle are usually run on the Jalama Ranch. There is some dry farming at the Ramajal Field, located at the upper end of Jalama Valley near the east end of the Ranch. Approximately 13,734 acres of the Jalama Ranch are in Williamson Act agricultural preserves; non-preserve areas are approximately 2,080 acres.

Ranch Compound

The Jalama headquarters compound includes a main residence, housing for the ranch personnel, barns, outbuildings, and corrals. The headquarters are linked to the historic operations of the ranch.

The Jalama Ranch compound hugs a south-facing hillside overlooking the Jalama Valley. The buildings are arranged to conform to the topography, spaced comfortably among large oaks. The site has been occupied since the time of the missions, and was associated with La Purisima Mission.

Circulation Features

Jalama Road provides the only public road to the Jalama Ranch. It begins at State Highway 1 (Cabrillo Highway), and enters the Jalama Ranch property about five miles further south at the Jalachichi Summit, the natural gateway to the coastal area. From that point to Jalama Beach County Park (about nine miles), the property on both sides of the road is part of the Jalama Ranch; only the road right-of-way easement is owned by the County. The Jalama Ranch headquarters is located about four miles from where the road enters the Ranch.

There are other jeep trails and graded dirt roads which give access to various parts of the Jalama Ranch property, primarily for agricultural operations. These serve the wells and watering tanks for the cattle, parallel perimeter and pasture fences, and provide access to the lighthouse and petroleum facilities.

ENVIRONMENTAL SETTING

The Jalama Ranch occupies a unique place along the California coast as one of the last remaining, large (21.68 square miles), undeveloped, contiguous properties. The north-south orientation of the mountains and coastline changes to east-west in this area, resulting in a mingling of different plant and animal species. As a relatively undisturbed place, it contains environmentally sensitive habitats which are home to several sensitive plants and animal species and their habitats.

Geographical and Geological Setting

The dominant topographic features of the Jalama Ranch are the Santa Ynez Mountains and San Julian Ridge. Slopes range between zero and six percent in the Jalama Valley. Slopes are between five and twenty percent in the foothills, and are thirty percent and more in the mountains.

The Jalama Ranch contains most of the 25 square mile Jalama Creek watershed except for the limited area draining from the Sudden Peak area and the last approximately 3,000 foot length of Jalama Creek before it enters the Pacific Ocean. Within the Jalama Creek watershed, many tributaries carry runoff from precipitation and spring flow to Jalama Creek. Some of these major tributaries include Espada Creek, Gasper Creek, and Escondido Creek.

Underlying rock formations on the Jalama Ranch include siltstone, sandstone, and shale. The most significant fault on the site is the Pacifico Fault, running east from Jalama Beach and roughly following Jalama Creek.

Botanical Setting

The Jalama Ranch contains six major plant communities: coastal sage scrub (located along the upland areas of on-site drainages), non-native grasslands (located throughout the ranch), southern Bishop Pine forest¹ (located in the south-central portion of the ranch), riparian habitats (located along the on-site drainages), chaparral (located on upland areas), and oak woodlands (scattered throughout the ranch). There are extensive stands of mature coastal live oaks, some of which have trunks up to four feet in diameter and as high as forty feet tall. These groups represent a wide diversity of plant life occurring in a variety of soil topographic and climate conditions found on the Jalama Ranch. Many northern species reach the southern end of their range, and vice-versa. The plant types within the communities include characteristics of both northern and southern varieties.

There are eight sensitive plants which occur in the vicinity of the Jalama Ranch area². These are species or varieties which are of special interest, rare, or endangered, and so designated or recognized by the State of California or the Federal government. These sensitive plants include: Refugio manzanita, Shagbark manzanita, Plummer's baccharis, Seaside bird's beak, Lompoc sticky monkey-flower, Lompoc yerba santa, Gaviota tarplant, and Checkerbloom.

¹ Bishop Pine trees grow to 45-75 feet high and contain stiff dark yellow-green needles that last 2-3 years

² Known to exist on the Jalama Ranch or on the adjacent Cojo Ranch.

Wildlife Setting

There are several wildlife habitats represented on the Jalama Ranch from scrub and grasslands, to oak woodlands and riparian habitats. Many of these habitats are abundant and widespread in the region; others on the Jalama Ranch are limited in the region or support threatened or endangered species. The variety of habitats and diversity of animals they support are themselves valuable resources. The threatened or endangered bird and other animal species which are known to frequent some of the habitats make their protection important.

There are four species of vertebrates (exclusive of birds) that are considered to be regionally rare or declining which occur in the vicinity of the Jalama Ranch area³. These include: the California red-legged frog, Southwestern pond turtle; badger, and mountain lion. There are also a number of birds that are considered to be regionally rare or declining which occur in the vicinity of the Jalama Ranch area⁴. These include: Northern harrier; Cooper hawk; Merlin; Prairie falcon; Burrowing owl; Short-eared owl; Warbling vireo; Yellow warbler; Wilson warbler; Blue grosbeak, and Grasshopper sparrow.

There is a large population of feral (wild) pigs on the Jalama Ranch which has a noticeable effect on native habitats and wildlife. Of particular significance is their rooting and foraging for acorns, which has reduced the number of young oak trees available to replace older ones. The pigs also compete for forage with native mule deer, limiting the population.

Climate

The Jalama Ranch is located in a region of the central California coast which is classified by climatologists as "Mediterranean" with moderately warm, dry summers and mild, rainy winters. Climatic patterns in this coastal region are governed to a large extent by movements of global-scale high-pressure systems over the Pacific Ocean which causes prevailing regional air movement to flow onshore from the northwest. Climate data at Point Arguello to the west typifies this condition. The general on-shore flow pattern is modified in coastal localities such as the Jalama Ranch area by alternating sea and land breezes which occur as a result of day/night temperature differentials between the ocean and land masses. The influence of these large-scale air movements is modified by both the ocean and terrain which interact to ease variations in localized air movement and hence climatic patterns.

There are two distinct climates on the Jalama Ranch, determined by the San Julian Ridge. To the north, the Jalama Valley (coastal transition zone) is generally warmer and subject to inland fog as compared to the areas south of the ridge which are cooler, windier, and sunnier (maritime zone).

³ Ibid

⁴ Ibid

The maritime zone, which includes most areas up to the 400-foot elevation (possibly higher on westerly exposures above Jalama Beach), is characterized by consistently cool temperatures and high humidity. The elevation limit designation of the maritime zone is defined by the height of an atmospheric temperature inversion that, along this part of the California coast, is very frequent and occurs at a very low elevation. This land level inversion phenomenon along this section of coast is considered by meteorologists to be one of the most persistent in the State. The coastal transition zone extends inland from the maritime zone and in the interior of the Jalama Valley which exhibits generally warmer temperatures, a much wider range of daily temperature extremes, and a generally more moderate living environment.

Precipitation in the Jalama Ranch area is generally a result of frontal storm activity which occurs during the winter months. During normal periods, frontal systems move through the area around every seven to ten days. While the frontal systems normally move in from the northwest, most of the precipitation usually occurs during periods when wind flow is from the south. Thus, precipitation levels can be greater at higher elevations on the windward (southerly) exposure of the mountains.

Rainfall on the Jalama Ranch averages 19.5 inches annually; more rain falls closer to the ocean and at higher elevations, and less at lower elevations and inland locations. Two-thirds of the rainfall occurs from December to February; summers are warm and dry.

Climate at the Jalama Ranch is typical of coastal and inland valley areas of Santa Barbara County. The average temperature is about 55 degrees along the coast and 60 degrees inland. Daily temperature variation is about 17 degrees (Fahrenheit) on the coast and as much as 30 degrees further inland.

SURROUNDING LAND USES

Jalama Beach County Park

Santa Barbara County owns the 28 acre Jalama Beach County Park located at the beach at the mouth of Jalama Creek on the west side of the Bixby Ranch. It is operated for the benefit and enjoyment of the public. There are 105 overnight camping spaces and approximately 30 day-use parking spaces. The Park is full on summer weekends, and has more than 300,000 visitors annually.

Vandenberg Air Force Base (VAFB)

Located west of and adjacent to the Jalama Ranch is the 98,400 acre Vandenberg Air Force Base which extends along the coastline for approximately 37 miles from Jalama Beach to Point Sal. Vandenberg is home to the Western Space and Missile Center.

Other Ranches

The Jalama Ranch has been relatively unchanged over time due to its isolated location and inaccessibility, and mainly due to the efforts of the Bixby Family to protect the environment and preserve the agricultural heritage of the Ranch. Surrounding the Jalama Ranch are a number of other ranch properties. Agricultural uses are primarily cattle ranching, with some dry and irrigated farming near Salsipuedes Creek.

East of Jalama Ranch is the 8,580-acre Cojo Ranch. The Cojo Ranch is utilized largely for cattle operations. Further east is the Hollister Ranch, which is divided into 135 separate parcels, none of which are smaller than 100 acres. Also to the east are the large Hoyt and Poet Ranches. All of these ranches graze cattle. To the north are a number of smaller private ranches in Miguelito Canyon and to the east of the canyon. All of these ranches have several hundred acres and primarily graze cattle.

BIBLIOGRAPHY OF ENVIRONMENTAL AND PLANNING WORK AND DOCUMENTS
PREPARED BY DUDEK AND OTHERS ON THE JALAMA PROPERTY

DOCUMENTS (IN BINDERS)	DATE
Specific Plan / Environmental Assessment - Volume III	October 24, 1990
Specific Plan / Supporting Documents – Volume IV	October 24, 1990
Specific Plan / Drawings – Volume A - Setting	July 1991
Specific Plan / Drawings – Volume C - Resource Conservation Plans - Community Image Plans - Landscape Architecture Plans - Fuel Modification Plans	July 1991
<i>Miscellaneous Documents</i>	
Agricultural Operations, 1913-1989, Draft & Revised Draft (prepared by: PHR Associates / Rebecca Conard)	July 16, 1990 August 21, 1990
Agricultural Data: - Bixby Ranch Agricultural Background Report - Agricultural Resources Summary - Excerpts from 1979 Cojo-Jalama Summary of Issues document; other documents from 1978-1981 LCP files	1990
Archeological Data	1990
“Revised” Archeology Report (prepared by: Larry Wilcoxon)	January 21, 1991
“Revised” Archeology Report (prepared by: Larry Wilcoxon)	January 8, 1991
Bixby Ranch Noise Analysis (prepared by: McClelland Consultants)	June 27, 1990
Environmental Evaluation - Draft for the Cojo and Jalama Ranches (Santa Barbara, CA) (prepared by: The SWA Group)	April 1978
Land Study Report Point Conception Property, Being a portion of Rancho El Cojo, (Santa Barbara, CA) (prepared by: Martin & Northart, Inc.)	July 1973
Prime Agricultural Soils Areas (Class I or II)	
Preliminary Coastal Geologic Process Investigation Lompoc Supply Base Project (Damsite Canyon Area) Sea Cliff Retreat Study (prepared by: Rick Hoffman)	May 17, 1986
Revised Traffic & Transportation Analysis (prepared by: Penfield & Smith)	September 13, 1990

DOCUMENTS (IN BINDERS)	DATE
Traffic & Transportation Analysis (prepared by: Penfield & Smith)	May 23, 1990
Documents prepared by: PAUL W. COLLINS	
Monarch Butterfly data (prepared by: Paul Collins)	January 19, 1991
Phase 2 Bio Report -Baseline Evaluation of Wildlife Resources of the Cojo-Jalama Specific Plan Study Area (prepared by: Paul Collins)	June 26, 1989
Preliminary Phase 2 results (prepared by: Paul Collins)	February 15, 1990
Phase 2 Bio Report (Revised) -Baseline Evaluation of Wildlife Resources of the Cojo-Jalama Specific Plan Study Area (prepared by: Paul Collins)	March 13, 1990
Reformatted Creek Report (prepared by: Paul Collins)	
Preliminary Phase 2 – Bio Maps (prepared by: Paul W. Collins)	1990
Documents prepared by: JACKIE BOWLAND	
Phase 2 Botanical Resources Report (prepared by: Jackie Bowland)	February 1990
Preliminary Phase 2 – Bio Maps (prepared by: Jackie Bowland)	1990
Snowy Plover Letter (prepared by: Jackie Bowland)	October 1, 1991

MAPS / PLANS	DATE
Agricultural Management Plans (11x17) Suitability Map / Enhancement Map	Various
Environmental Constraints Maps (11x17)	May 15, 1990
Miscellaneous Maps & Plans	Various