National Park Service
Cultural Landscapes Inventory
1998

Revised 2002

Quitobaquito
Organ Pipe Cactus National Monument

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Inventory Summary

The Cultural Landscapes Inventory Overview:

CLI General Information:

Cultural Landscapes Inventory – General Information

The Cultural Landscapes Inventory (CLI) is a database containing information on the historically significant landscapes within the National Park System. This evaluated inventory identifies and documents each landscape's location, size, physical development, condition, landscape characteristics, character-defining features, as well as other valuable information useful to park management. Cultural landscapes become approved inventory records when all required data fields are entered, the park superintendent concurs with the information, and the landscape is determined eligible for the National Register of Historic Places through a consultation process or is otherwise managed as a cultural resource through a public planning process.

The CLI, like the List of Classified Structures (LCS), assists the National Park Service (NPS) in its efforts to fulfill the identification and management requirements associated with Section 110(a) of the National Historic Preservation Act, National Park Service Management Policies (2001), and Director's Order #28: Cultural Resource Management. Since launching the CLI nationwide, the NPS, in response to the Government Performance and Results Act (GPRA), is required to report information that respond to NPS strategic plan accomplishments. Two goals are associated with the CLI: 1) increasing the number of certified cultural landscapes (1b2B); and 2) bringing certified cultural landscapes into good condition (1a7). The CLI maintained by Park Historic Structures and Cultural Landscapes Program, WASO, is the official source of cultural landscape information.

Implementation of the CLI is coordinated and approved at the regional level. Each region annually updates a strategic plan that prioritizes work based on a variety of park and regional needs that include planning and construction projects or associated compliance requirements that lack cultural landscape documentation. When the inventory unit record is complete and concurrence with the findings is obtained from the superintendent and the State Historic Preservation Office, the regional CLI coordinator certifies the record and transmits it to the national CLI Coordinator for approval. Only records approved by the national CLI coordinator are included on the CLI for official reporting purposes.

Relationship between the CLI and a Cultural Landscape Report (CLR)

The CLI and the CLR are related efforts in the sense that both document the history,

significance, and integrity of park cultural landscapes. However, the scope of the CLI is limited by the need to achieve concurrence with the park superintendent resolve eligibility questions when a National Register nomination does not exist or the nomination inadequately addresses the eligibility of the landscape characteristics. Ideally, a park's CLI work (which many include multiple inventory units) precedes a CLR because the baseline information in the CLI not only assists with priority setting when more than one CLR is needed it also assists with determining more accurate scopes of work.

In contrast, the CLR is the primary treatment document for significant park landscapes. It, therefore, requires an additional level of research and documentation both to evaluate the historic and the existing condition of the landscape in order to recommend preservation treatment that meets the Secretary of Interior's Standards for the treatment of historic properties.

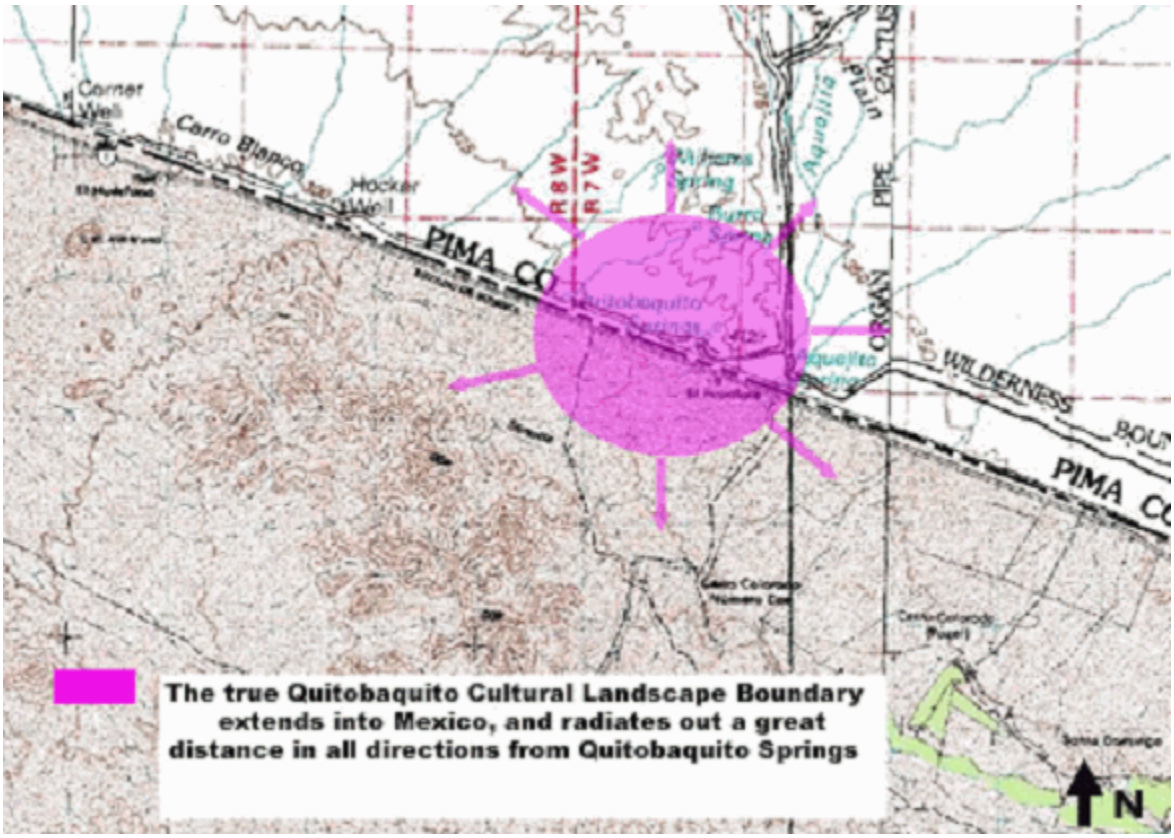
The scope of work for a CLR, when the CLI has not been done, should include production of the CLI record. Depending on its age and scope, existing CLR's are considered the primary source for the history, statement of significance, and descriptions of contributing resources that are necessary to complete a CLI record.

Inventory Unit Description:

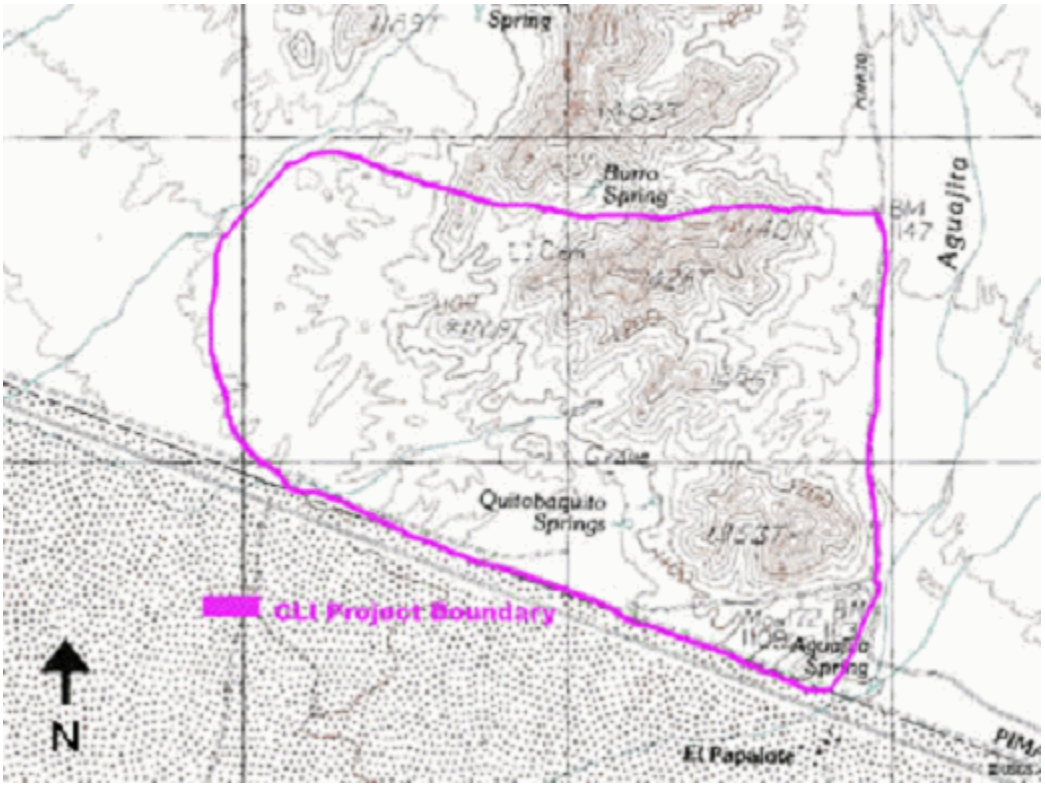
Organ Pipe Cactus National Monument is a globally significant Sonoran Desert ecosystem that has provided habitat for a diverse variety of plants and animals, including many threatened and endangered species. In addition to plants and animals, Native American, Mexican, Spanish, and Anglo cultures have made a home within this ecosystem over the course of thousands of years. The character of the monument is one of isolated wilderness, where visitors today enjoy solitude, sunshine, the opportunity for recreation, and dramatic views of mountains, alluvial plains, and columnar cacti.

Quitobaquito is a unique desert oasis that has provided a constant source of water for desert travelers and residents for thousands of years. As a crossroads of international travel, Quitobaquito has also been the site of recurrent cross-cultural interactions. A former village and agricultural site, this oasis is now home to a diverse range of plants and animals, including rare species such as the Quitobaquito pupfish.

Site Plan



Theoretical boundary of the Quitobaquito cultural landscape (map adapted from USGS, 1994)



Project boundary for Quitobquito Cultural Landscape Inventory (map adapted from USGS, 1994)

Property Level and CLI Numbers

Inventory Unit Name:	Quitobaquito
Property Level:	Component Landscape
CLI Identification Number:	850023
Parent Landscape:	850022

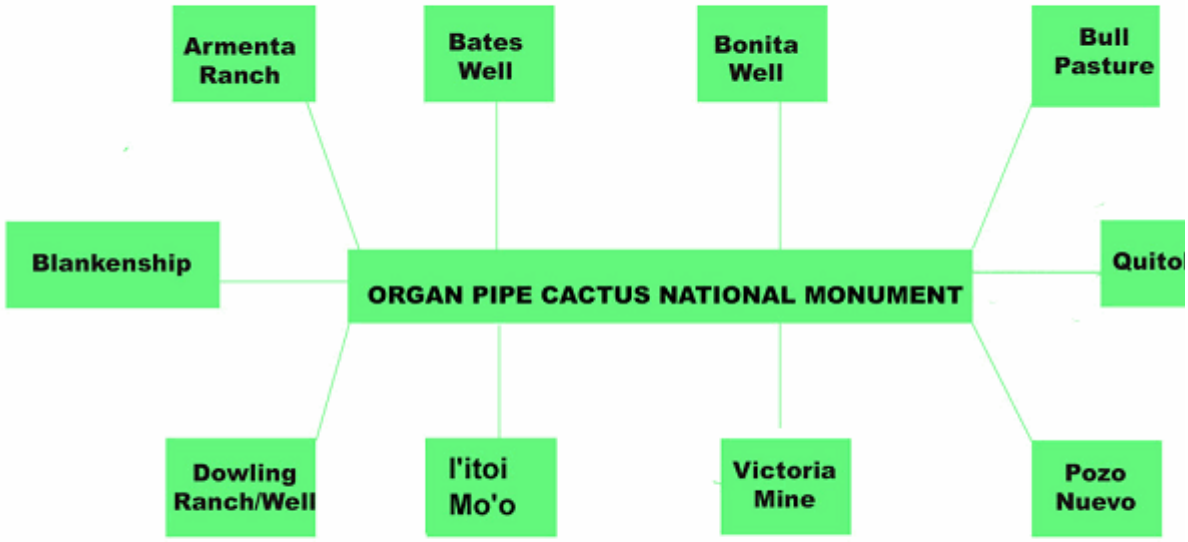
Park Information

Park Name and Alpha Code:	Organ Pipe Cactus National Monument -ORPI
Park Organization Code:	8660
Park Administrative Unit:	Organ Pipe Cactus National Monument

CLI Hierarchy Description

Quitobaquito is a component landscape within Organ Pipe Cactus National Monument. Other

component landscapes within the Monument include Armenta Ranch, Bates Well Ranch, Bonita Well, Bull Pasture, Dowling Well/Ranch, I'itoi Mo'o (also known as Montezuma's Head and 'Oks Daha---Old Woman Sitting), Victoria Mine, Pozo Nuevo, and Blankenship/Dos Lomitas Ranch.



Hierarchy of Cultural Landscapes within Organ Pipe Cactus National Monument

Concurrence Status

Inventory Status: Incomplete

Completion Status Explanatory Narrative:

SHPO concurrence pending
Superintendent concurrence received 8/19/2002 (this does not show under Completion Status because this IU was changed from Level II (complete) back to Level I (incomplete), pending SHPO concurrence) jc 4/04

Organ Pipe Cactus National Monument is a globally significant Sonoran Desert ecosystem that provides habitat for a diverse variety of plants and animals, including many threatened and endangered species. In addition to plants and animals, Native American, Mexican, Spanish, and Anglo cultures have made a home within this ecosystem over the course of thousands of years. The character of the monument is one of isolated wilderness, where visitors today enjoy solitude, sunshine, the opportunity for recreation, and dramatic views of mountains, alluvial plains, and columnar cacti.

Quitobaquito, the location of several springs and seeps, is a unique desert oasis that has provided a constant source of water for desert travelers and residents for thousands of years. Earliest documented habitation at Quitobaquito took place around 10,000 BC. As a crossroads of international travel, Quitobaquito has also been the site of recurrent cross-cultural interactions from prehistoric times to modern day. Prehistoric Paleo-Indian, Archaic, and Hohokam groups, as well as historic Tohono O'odham, Hia C'ed O'odham, Spanish, Mexican and Anglo groups all interacted with this environment, and in some cases, with each other. A former village, camp, and agricultural site, human habitation ended at Quitobaquito in 1957. This oasis is now home to a diverse range of plants and animals, including many rare species such as the Quitobaquito pupfish. Quitobaquito is also the site of ongoing use by traditionally associated groups.

A Level 0 inventory was conducted in 1998 by Jill Cowley from the Intermountain Support Office in Santa Fe, NM. The Level I and II inventory was completed by Julie Galbraith from the Intermountain Support Office in Santa Fe, NM. The Level I and II inventory consisted of site visits in March and July 2002, review of available literature, and interviews with available park staff and others. Park staff were given the opportunity to comment on the draft inventory, and these comments were incorporated into the document when possible. Data was entered into the CLAIMS database in June and July 2002.

The Period of Significance for this Inventory is 10,000 BC to 1957.

The overall integrity rating for Quitobaquito which includes the categories of location, setting, design/community, organization, materials/species composition, workmanship/management techniques, feeling, and association is Medium.

The condition of the cultural landscape is classified as Fair.

Existing threats to the integrity of Quitobaquito include theft and vandalism, deferred maintenance, development on adjacent lands, erosion, invasive plant species, and loss of opportunity to collect additional oral histories and historic photographs.

Park Superintendent concurrence for all CLI information was received 08-19-2002.

SHPO concurrence was requested through the Santa Fe Office on 9/17/2002-awaiting response.

Concurrence Status:

Park Superintendent Concurrence: Yes

Park Superintendent Date of Concurrence: 08/19/2002

National Register Concurrence: Undetermined

National Register Concurrence Narrative:

This CLI has determined that the Quitobaquito Cultural Landscape is eligible for listing on the National Register of Historic Places. Park Superintendent concurrence was received on 8-19-2002. SHPO concurrence regarding the eligibility of listing Quitobaquito as a district is pending. SHPO concurrence was requested by the Santa Fe Office in 9/2002.

Determination of eligibility is undetermined pending SHPO concurrence

Data Collection Date: 07/15/2002 **Recorder:** J. Galbraith

Data Entry Date: 07/20/2002 **Recorder:** J. Galbraith

Geographic Information & Location Map

Inventory Unit Boundary Description:

The history of the Quitobaquito cultural landscape illustrates that the true cultural landscape radiated out a great distance in all directions from the Quitobaquito Springs, including lands that are now a part of Mexico. However, because the CLI program only covers areas within National Park units, this specific document will be limited to the landscape within the boundaries of the Organ Pipe Cactus National Monument. Recognizing the extensive lands (within the Mounument boundaries) that potentially could be included in the Quitobaquito cultural landscape, this Inventory will document only those features located within the boundaries of the project site plan (see map-Part 1, page 11). This limited area, which includes the key concentration of extant elements related to the cultural landscape's integrity and significance as a historic site (using National Register criteria), has been selected in order to create a more feasible area for management in light of limitations regarding program funding, staffing, time-related restrictions, and compliance issues.

The geographic boundary for this report is therefore somewhat artificial, having been reduced from the genuine larger scale described above. In determining this project boundary, numerous issues were considered that relate to the integrity of the cultural landscape: archeological sites, circulation patterns, water features, vegetation, natural systems, cultural traditions, land use, topography, spatial organization, views and vistas, and buildings and structures. The project boundary was drawn to include land-related features such as relevant watersheds, known archeological sites, important historical circulation patterns, constructed water features that affected the landscape, and broad vegetation patterns. Project boundary UTM coordinates are located at Part 4, page 1. Park Superintendent concurrence for CLI boundary received 8-19-2002.

State and County:

State: AZ

County: Pima County

Size (Acres): 300.00

Boundary UTMS:

Source	Type of Point	Datum	UTM Zone	UTM Easting	UTM Northing
USGS Map 1:62,500	Point	NAD 27	13	309,858	3,535,396
USGS Map 1:62,500	Point	NAD 27	13	308,050	3,536,777
USGS Map 1:62,500	Point	NAD 27	13	309,970	3,536,686
USGS Map 1:62,500	Point	NAD 27	13	308,040	3,535,964

Location Map:

Regional location map for Organ Pipe Cactus National Monument (adapted from Rand McNally, 2002)

Regional Context:

Type of Context: Cultural

Description:

Quitobaquito has a long-standing and rich cultural history. The earliest documented habitation at Quitobaquito took place around 10,000 BC. As a crossroads of international travel, Quitobaquito has also been the site of recurrent cross-cultural interactions from prehistoric times to modern day. Prehistoric Paleoindian, Archaic, Prehistoric Ceramic groups, Protohistoric, as well as historic Tohono O'odham, Hia C'ed O'odham, Spanish, Mexican, and Anglo groups all interacted with this environment, and in some cases, with each other (Rankin;1995). As a traditionally sacred site, the Tohono O'odham and Hia C'ed O'odham continue to use Quitobaquito for ceremonies and other activities. Residents of Mexico continue their historic use of Quitobaquito as a crossing point into the United States.

Type of Context: Physiographic

Description:

Quitobaquito is located within the Sonoran Desert ecosystem, known as one of the world's most biologically diverse deserts. Most precipitation in the Monument occurs on a seasonal basis only (July to September & January to March). Rainfall averages about 5 inches annually at Quitobaquito. Daily average maximum temperatures often exceed 100 F in the summer months and range from 68 to 71 F during the winter.

The Quitobaquito Hills run north/northwest from the international border, and are approximately 5 miles long and 2 miles wide (at the widest). They rise about 500 feet above the surrounding flatlands. The Quitobaquito springs and seeps (historically as many as 5 springs, today there are two) provide a constant water source resulting in a diverse range of habitat that attracts a wide variety of plant and animal species, including several rare and endangered species (GMP;1995).

Type of Context: Political

Description:

Known prehistoric and historic political structures in this area were created by the Tohono O'odham, Hia C'ed O'odham, Hohokam, Piman, and other users of this region. Historically, Spain exerted control over these lands, followed by Mexico, and finally, the United States of America. The National Park Service gained control of the area in 1937 when Organ Pipe Cactus National Monument was formed. The following decades were filled with political strife between the government, indiginous people, and incumbent ranchers regarding land and water rights. Organ Pipe Cactus National Monument is located within Pima County, Arizona (GMP;1995 & Statement for Management;1994).

Current political issues stem from the U. S. government establishment of the Papago Indian Reservation (now known as the Tohono O'odham Nation) in 1916 for the displaced Native Americans. Many members of the Tohono O'odham Nation, which is located adjacent to the Monument, are in a quandry due to political boundary issues. Some members were born in Mexico and still reside in Mexico. Some were born in Mexico and now live in the United States (about 1400 people fall into these categories).

About 7000 people were born in the United States but lack relevant documentation (passports, birth certificates, etc.). Without proof of U.S. citizenship they continue to have problems crossing the border in an effort to see family, or engage in cultural and religious activities. Legislation has been introduced (2001) to make tribal membership cards equivilent to US passports to ease border crossing (Rozemberg;2002).

GIS File Name: To be completed by Park

Management Information

General Management Information

Management Category: Must Be Preserved And Maintained

Management Category Date: 08/19/2002

Management Category Explanatory Narrative:

This CLI recommends that the Management Category for the Quitobaquito Cultural Landscape be categorized as "Must be Preserved and Maintained". Park Superintendent concurrence received 8-19-2002.

Park concurrence is necessary for this category.

Agreements, Legal Interest, and Access

Management Agreement:

Type of Agreement: Other Agreement

Other Agreement: Presidential Proclamation No. 2232, 1937

Expiration Date: NOT APPLICABLE

Management Agreement Explanatory Narrative:

Rights of Indians of the Papago Reservation (now known as the Tohono O'odham Nation) to collect cactus fruit on Monument lands

Type of Agreement: Other Agreement

Other Agreement: Presidential Proclamation of May 23, 1907

Expiration Date: NOT APPLICABLE

Management Agreement Explanatory Narrative:

60 foot wide strip of land along international boundary reserved for highway use only. NPS has administrative control over this land

Type of Agreement: Other Agreement

Other Agreement: Executive Order of November 21, 1923

Expiration Date: NOT APPLICABLE

Management Agreement Explanatory Narrative:

Reserving 40 acres of Quitobaquito landscape as public water reserve

Type of Agreement: Other Agreement

Other Agreement: UNESCO designation

Expiration Date: NOT APPLICABLE

Management Agreement Explanatory Narrative:

October 26, 1976-designation as International Biosphere Reserve

Type of Agreement: Other Agreement

Other Agreement: Scenic Easement

Expiration Date: UNKNOWN

Management Agreement Explanatory Narrative:

Between Charles Luke and NPS regarding scenic development of lands located in Lukeville.

Type of Agreement: Special Use Permit

Expiration Date: UNKNOWN

Management Agreement Explanatory Narrative:

Various agreements with Moutain Bell Telephone, Cabeza Parieta Wildlife Refuge (sharing research data), Arizona Radiation Regulatory Agency (air sampler), United Mexican States (protection of border environment).

Type of Agreement: Lease

Expiration Date: UNKNOWN

Management Agreement Explanatory Narrative:

Arizona Public Service (locating and maintaing electrical power transmission line)

NPS Legal Interest:

Type of Interest: Fee Simple

Explanatory Narrative:

(With associated easements and management agreements)

Public Access:

Type of Access: Unrestricted

Adjacent Lands Information

Do Adjacent Lands Contribute? Yes

Adjacent Lands Description:

Federal land borders Organ Pipe Cactus National Monument to the north, west, and east. The 860,000-acre Cabeza Prieta National Wildlife Refuge, administered by the US Fish and Wildlife Reserve, borders the Monument for 26 miles to the west. The Refuge is the home of desert bighorn sheep and the endangered Sonoran Pronghorn. Portions of El Camino del Diablo, (themselves on National Register of Historic Places) run through the Refuge. Ninety five percent of Refuge is located within the Barry M. Goldwater Air Force Range. This airspace is used to practice aerial gunnery, therefore many low flying aircraft and are in the near vicinity of the Monument (Barnett; 1994, 4-10 & Statement for Management;1994).

The 2.8 million acre Tohono O'odham Nation (Sells Reservation) is located adjacent to the eastern boundary and borders the Monument for 33 miles. Approximately 8,000 members reside within the Nation. Nation residents graze cattle and horses near the Monument boundary (Statement for Management;1994).

The Bureau of Land Management manages land along 12 miles of the northern border of the Monument and it is used mainly for recreation purposes and as pasture for livestock.

Adjacent to the southern border of the Monument is Sonora, Mexico. This area has seen rapid

urbanization in recent history. Agricultural development along the Mexican border in Sonora has also rapidly intensified since the late 1970s. This intensification was fueled by the installation of hydroelectric transmission lines in 1984 that vastly increased the amount of water that could be pumped from the aquifer and used for irrigation. Between 1983 and 1989 the water table dropped .4 meters. The receding water table, spread of agricultural exotics, and pesticide/herbicide drift are consequences of this development that pose a threat to the Monument. Agricultural pests, chemical drift, increasing truck traffic, and an increase in vandalism, assualts, and larcenies to visitors and employees has resulted in part because of this development (GWR;1990, Table E & Barnett;1994 & Statement for Management;1994).

Located just 20 yards south of the pond, Mexican Highway 2 features a great deal of truck and bus traffic that generates noise and pollution. El Papalote, a truck stop located just east of Quitobaquito along Mexican Highway 2 experiences heavy traffic and is known as a drop off spot for undocumented border crossers. This foot traffic has led to unauthorized trails, illegal campfires, woodcutting, and trash around the Quitobaquito area (Young; 2002).

Lukeville, located 5 miles south of Monument's Visitor Center consists of approximately 65 acres of private commercial use (motel, apartments, RV campground, store, restaurant, gas station, landfill, and airstrip) and about 8 acres for use by U.S. Customs and Immigration (GMP; 1995, 96).

Map showing lands adjacent to Organ Pipe Cactus National Monument, 2002 (adapted from Rand McNally, 2002)

National Register Information

Existing National Register Status

National Register Landscape Documentation:

Undocumented

National Register Explanatory Narrative:

A nomination was drafted by Dr. Lawrence Van Horn, Cultural Anthropologist, Denver Service Center, National Park Service, in 1994 (while the nomination does introduce the idea of Quitobaquito as a cultural landscape, the nomination officially listed Quitobaquito in the category of a historic district with archeological components, and did not focus on issues related to the cultural landscape). The nomination is on file with the Arizona SHPO. The Arizona SHPO did find Quitobaquito eligible, in 1994, for listing on the National Register as a historic district with archeological components. Again, this site is not actually listed on the National Register, and the project boundaries used in this CLI cover a broader geographical area than the 1994 nomination, as well as additional information/features. (See Van Horn; 1994 for further information).

National Register Eligibility

National Register Concurrence:	Undetermined
Contributing/Individual:	Individual
National Register Classification:	District
Significance Level:	International
Significance Criteria:	D - Has yielded, or is likely to yield, information important to prehistory or history B - Associated with lives of persons significant in our past A - Associated with events significant to broad patterns of our history

Period of Significance:

Time Period:	AD 0 - 1957
Historic Context Theme:	Developing the American Economy
Subtheme:	Native American Economy (pre-1776)
Facet:	Trade/Barter
Other Facet:	None
Time Period:	AD 0 - 1957
Historic Context Theme:	Peopling Places
Subtheme:	Ethnohistory of Indigenous American Populations
Facet:	Native Contributions To The Development Of The Nation's Cultures
Other Facet:	None
Time Period:	AD 0 - 1957
Historic Context Theme:	Peopling Places
Subtheme:	Prehistoric Archeology: Topical Facets
Facet:	Prehistoric Agricultural Innovations
Other Facet:	None
Time Period:	AD 0 - 1957
Historic Context Theme:	Peopling Places
Subtheme:	Prehistoric Archeology: Topical Facets
Facet:	Prehistoric Architecture/Shelter/Housing
Other Facet:	None
Time Period:	AD 0 - 1957
Historic Context Theme:	Transforming the Environment
Subtheme:	Indigenous Peoples Use Of and Response To the Environment
Facet:	Indigenous Peoples Use Of and Response To the Environment
Other Facet:	None

Time Period:	AD 1937 - 1957
Historic Context Theme:	Changing Role of the U.S. in the World
Subtheme:	Immigration and Emigration Policies
Facet:	Immigration And Emigration Policies
Other Facet:	None
Time Period:	AD 1937 - 1957
Historic Context Theme:	Transforming the Environment
Subtheme:	Conservation of Natural Resources
Facet:	Origin And Development Of The National Park Service
Other Facet:	None
Time Period:	AD 1500 - 1920
Historic Context Theme:	Changing Role of the U.S. in the World
Subtheme:	Expansionism and Imperialism
Facet:	Expansionism And Imperialism
Other Facet:	None
Time Period:	AD 1500 - 1920
Historic Context Theme:	Peopling Places
Subtheme:	Colonial Exploration and Settlement
Facet:	American Exploration and Settlement
Other Facet:	None
Time Period:	AD 1500 - 1920
Historic Context Theme:	Peopling Places
Subtheme:	Colonial Exploration and Settlement
Facet:	Other European Exploration And Settlement
Other Facet:	None

Area of Significance:

Area of Significance Category	Area of Significance Subcategory
Agriculture	None
Archeology	Prehistoric
Commerce	None
Ethnic Heritage	Native American
Ethnic Heritage	Hispanic
Exploration - Settlement	None
Social History	None
Science	None
Politics - Government	None

Statement of Significance:

Period of Significance 10,000 BC to 1957

Organ Pipe Cactus National Monument is part of a globally significant Sonoran Desert ecosystem that has long provided habitat for a diverse variety of plants and animals, including many threatened and endangered species. In addition to plants and animals, Native American, Mexican, Spanish, and Anglo cultures have made a home within this ecosystem over the course of thousands of years. The character of the monument is one of isolated wilderness, where visitors today enjoy solitude, sunshine, the opportunity for recreation, and dramatic views of mountains, alluvial plains, and columnar cacti.

Quitobaquito is a unique desert oasis that has provided a constant source of water for desert travelers and residents for thousands of years. The earliest documented habitation at Quitobaquito took place around 10,000 BC. As a crossroads of international travel, Quitobaquito has also been the site of recurrent cross-cultural interactions from prehistoric times to modern day. Prehistoric Paleoindian, Archaic, Prehistoric Ceramic, Protohistoric, and Historic cultures (including Tohono O'odham, Hia C'ed O'odham, Spanish, Mexican, and Anglo) have all interacted with this physical environment and in some cases, with each other. A former village, camp, mining area, and agricultural site, human habitation ended at Quitobaquito in 1957. This oasis is now home to a diverse range of plants and animals, including many rare species such as the Quitobaquito pupfish. It is also the site of ongoing ceremonial use by traditionally associated groups.

The period of significance for this Cultural Landscape Inventory is 10,000 BC to 1957. 10,000 BC is the date of the first known human habitation of Quitobaquito, and 1957 marks the last year of human habitation at Quitobaquito.

The Quitobaquito Cultural Landscape is eligible for National Register listing under criteria A, B, and D.

Criterion A: broad patterns of history

Quitobaquito is representative of several critical periods in the prehistory and history of what is now the Southwestern United States and Mexico. Prehistoric and historic circulation routes, many of which passed through Quitobaquito, centered around the trade of shells, salt, obsidian, and other goods between numerous indigenous tribes. Boundary surveyors, scientists, missionaries, explorers, gold seekers, smugglers, and indigenous tribes subsequently used these established routes and also forged new routes during the 1800s and 1900s. Quitobaquito served as a crossroads for many different ethnic groups who interacted along these trade routes.

Patterns showing the development of cultivated agriculture, cattle grazing, vernacular architecture, mining, and milling are also demonstrated at Quitobaquito. The broad pattern of displacement of indigenous people is also demonstrated within this cultural landscape.

Criterion B: association with persons significant in our past.

As a rare oasis within the Sonoran desert, Quitobaquito, historically, has been associated with many significant persons. Quitobaquito was a popular stop for missionaries, scientists, ethnographers, explorers, boundary survey party members, and others. Father Eusebio Kino, Lt. William H. Emory, William Hornaday, Carl Lumholtz, W.J. McGee, Dr. Daniel MacDougal, Kirk Bryan, and others left significant documentation regarding scientific and ethnographic discoveries on their journeys through Quitobaquito. The legendary Pancho Villa, elders of many traditionally associated tribes, the Gray family, the Thomas Childs family, and the Orozco family have all been associated with this site and are known regionally. Each of these persons has had a significant impact on Quitobaquito and the cultural landscape.

Criterion D: information potential

The archeological features of Quitobaquito illustrate regional movements and cultural patterns dating from prehistoric through modern times. These sites provide information on the occupation and interaction of the many different cultures associated with this area. Quitobaquito has the potential to reveal further information regarding: prehistoric and historic settlements and trade routes, Spanish exploration and missionization, the Gold Rush of 1849, historic scientific expeditions, cattle ranching, dry land farming, environmental practices, unauthorized border crossing patterns, mining, buriel practices, diet, architecture, flora and fauna, assaying and ore smelting activities, political alliances, environmental changes, and other cultural practices.
Quitobaquito has the potential to provide information dating from the Pre-Paleoindian period to modern times.

National Historic Landmark Information

National Historic Landmark Status: No

World Heritage Site Information

World Heritage Site Status: No

Chronology & Physical History

Cultural Landscape Type and Use

Cultural Landscape Type: Historic Site
Vernacular
Ethnographic/Traditional

Current and Historic Use/Function:

Primary Historic Function: Agriculture/Subsistence-Other

Other Use/Function	Other Type of Use or Function
Trade	Historic
Village Site	Historic
Cemetery	Both Current And Historic
Mine	Historic
Wetland	Both Current And Historic
Outdoor Recreation	Both Current And Historic
Ceremonial Site	Both Current And Historic
Pedestrian-Related-Other	Both Current And Historic
Livestock	Historic

Current and Historic Names:

Name	Type of Name
Quitobaquito Springs	Both Current And Historic
Quitovaquito or Quitovaquita	Historic
San Serguio	Historic
Quitobaquito	Both Current And Historic
Fremont	Historic
'A'al Waippia	Both Current And Historic

Ethnographic Study Conducted: No Survey Conducted

Associated Group:

Name of Group:	Tohono O'odham
Type of Association:	Both Current And Historic
Name of Group:	Hia C'ed O'odham
Type of Association:	Both Current And Historic
Name of Group:	Anglo-American/European
Type of Association:	Both Current And Historic
Name of Group:	Mexican
Type of Association:	Both Current And Historic

Ethnographic Significance Description:

Organ Pipe Cactus provides evidence of prehistoric Paleoindian, Archaic, Prehistoric Ceramic groups, Protohistoric, and Historic presence and cultural adaptation. The two major ethnographical groups historically associated with the Monument are the Tohono O'odham (formerly called the Papago) and the Hia C'ed O'odham (formerly called Sand Papago or Arenenos). The Tohono O'odham generally used a duel village residence with winter rancherias located near springs (usually near the mountains), and summer villages along the alluvial plains where floodwaters could be used to raise crops. The Tohono O'odham also had a cactus camp, utilized during the saguaro harvest (Rankin;1995, 64-65 & Nabhan;1986).

Traditional houses were dome shaped circular structures, constructed of mesquite, cactus, grasses, and other local materials. The Tohono O'odham were skilled in basketry and pottery. Other uses of the Monument included hunting, travel routes for the salt pilgrimage, and ceremonial use (Rankin;1995, 65 & Clotts;1925 & Lumholtz;1990).

Less documentation is available regarding the Hia C'ed O'odham, however they generally occupied the Sierra Pinacate area and the sand dunes along the Gulf of California. They too made use of temporary camps to assist with their hunting and gathering lifestyle. Traditional houses were constructed of several courses of boulders, sometimes insulated with grasses. Baskets and seashells were used as trade currency with other tribes for cultivated vegetables (Rankin;1995, 65-66).

Other cultures such as the Yuma (Quechan), Hopi, Yavapai, Zuni, and others, probably occassionally used the Monument lands for trade and/or raiding, however this area was not their traditional territory (they did not directly occupy and control the land) (Van Horn;2002).

While usually ignored as a culturally unique group, undocumented border crossers have formed strong historical ties to the monument. Established patterns, paths, artifacts, graves, crossing points, rest stops, use of vegetation, and rondevouz points are all a part of this groups history and connection to the land (Young; 2002).

This section is considered incomplete as an Ethnographic Survey has not been completed by the Park.

Chronology:

Year	Event	Annotation
AD 2002	Preserved	Cultural Landscape Inventory completed by National Park Service
AD 1974	Altered	Pondside parking was moved east to present location. Bulldozers disturbed the site of a former Hia C'ed O'odham encampment. Pit toilets added near parking lot.
AD 1969	Preserved	Pupfish removed from pond, pond drained and poisoned to eliminated golden shiner, pond refilled, pupfish reintroduced.
AD 1963 - 1966	Altered	Pit toilets added in mesquite bosque on south side of pond. Parking area enlarged, interpretive exhibits installed. New pupfish observation pool built.
AD 1961 - 1962	Altered	Pond drained and excavated. Dam height increased. Shelf on northeast portion of pond left as pupfish habitat. Overflow pipe and concrete spillway added. Structures around the pond are razed and site is bladed. Pond area is fenced, cattleguards added.
AD 1961 - 1962	Altered	Walking trails and parking lot constructed
AD 1698	Explored	Father Eusebio Francisco Kino visits Quitobaquito, naming it San Serguio and introducing cattle
AD 1774 - 1885	Explored	1774: de Anza expedition, 1781: Fages expedition, 1854: Grey's Railroad survey, 1855: Lt. Michler/Emory boundary survey, and others visit Quitobaquito during various expeditions and missions.
AD 1840 - 1860	Explored	Heavy traffic on the El Camino del Diablo, or Devil's Highway, by gold seekers, survey parties, water seekers, and smugglers.
AD 1860	Settled	In the 1860s Andrew Dorsey establishes small community he names Fremont at Quitobaquito. He builds a store, and is credited with digging a pond, building a dam, digging irrigation ditches, planting crops, figs, and pomegranates.

AD 1870	Settled	In the 1870s, Albert Steinfeld and J.C. Watermen open a mill and store at Quitobaquito- they leave within 10 years. Lopez family settles near Quitobaquito and raises goats
AD 1885	Settled	Around 1885, Luis Orozco and family settle at Quitobaquito raising crops and cattle. Dates are conflicting: Tom Childs has reported that the Orozco family was at Quitobaquito in 1860 when Dorsey arrived)
AD 1888	Settled	Mikul (Mika) G. Levy opens a store just east of the pond
AD 1890	Mined	Cipriano Ortega operates an arrastre (used for the grinding of gold and silver ore) at Quitobaquito
AD 1900	Memorialized	Jose Lorenzo Sestier who took over operation of Dorsey's store, dies and is buried northwest of the pond
AD 1903 - 1907	Farmed/Harvested	Thomas Childs lives at Quitobaquito-he rebuilds irrigation ditches and raises crops
AD 1946	Memorialized	Jose Juan Orozco, who was born at Quitobaquito, dies and is buried in the Quitobaquito O'odham cemetery
AD 1949	Established	U.S. Bureau of Animal Industry establishes station at Quitobquito: tent frames, concrete spills for two springs, installation of pipe.
AD 1957	Land Transfer	After threatening to fence off the Orozco property to prevent grazing and filing a Complaint for Condemnation, Jim Orozco is forced to transfer title of his Quitobaquito land to the government for $13,000.
AD 1957	Altered	Use of road north of pond is discontinued. Irrigation canals no longer maintained. Cattle continue grazing in area
10000 BC	Inhabited	Indigenous cultures inhabit Quitobaquito area as early as 10,000 BC
AD 1821	Land Transfer	Rule of Spain ends and the Republic of Mexico is established
AD 1853	Land Transfer	The United States, interested in the westward expansion of the railroad, acquires from Mexico through the "Gadsen Purchase", land that now includes the National Monument.

AD 1854 - 1855	Established	International boundary is located by Lt. Michler and his Mexican counterpart Captain Francisco Jimenez in the Emory/Salazar survey. Sketches are made documenting the surrounding landscape
AD 1860	Established	Homestead Act is passed allowing homesteaders to settle on 160 acres of land in the public domain
AD 1880	Settled	Population in the area increases as Civil War ends and the U.S. Army is available to quell Apache raids and Mexican bandits.
AD 1907	Established	President Theodore Roosevelt establishes a 60' strip of land adjacent to the U.S. international boundary for use by customs personnel.
AD 1916	Established	Papago Indian Reservation (later renamed Tohono O'odham Nation) established by the U.S. government
AD 1937	Established	Organ Pipe Cactus National Monument is established
AD 1937 - 1941	Conserved	Mining is disallowed within the Monument borders
AD 1934	Established	Taylor Grazing Act is passed in an attempt to prevent overgrazing
AD 1933	Removed	18th Amendment is repealed
AD 1925	Established	U.S. Border Patrol is established- goal in Arizona is to stop flow of Chinese and European immigrants illegally crossing the border.
AD 1917	Altered	Arizona becomes a dry state even before the 18th Amendment is passed increasing the presence of illegal stills in the current day Monument and increasing traffic across the Mexican border
AD 1917	Military Operation	Heavy military presence in area due to border unrest and raids by Pancho Villa and other alleged bandits
AD 1939	Preserved	Cabeza Prieta Game Refuge established

AD 1941 - 1976	Mined	Mining re-allowed in Monument due to War needs
AD 1978	Removed	All cattle removed from Monument lands
AD 1976	Established	Monument is established as a Biosphere Reserve
AD 1984	Built	Hydroelectric transmission line is completed across the border which increases the capacity of Mexican farmers to pump from the acquifer
AD 1997	Preserved	Desert Botanical Garden takes cuttings of historic figs and pomegranates
AD 1989	Altered	New concrete channel is developed to transport water from springs to pond, and create habitat for Sonoran mud turtles, pupfish, and aquatic plants
AD 1830 - 1843	Military Operation	Papago-Mexican War
AD 1986	Preserved	Quitobaquito pupfish are federally listed as endangered species
AD 1995	Planned	General Management Plan is developed for the Park
AD 1892 - 1894	Established	International Boundary Marker 172 is erected during the Bartow-Blanco Boundary Survey
AD 1900 - 1920	Explored	Quitobaquito explored by W.J. McGee, William Hornaday, Dr. Daniel MacDougal, Carl Lumholtz, Kirk Bryan, and others. They document scientific and ethnographic information about the area.
AD 1894 - 1938	Mined	Various mining claims are recorded in the Quitobaquito area
AD 1985	Preserved	Copper smelter in Ajo is closed leading to improved air quality in the Monument

AD 1915	Explored	H.V. Clotts documents that 4 houses, 25 people, 3 wells, 50 cattle, 8 hourses, and 8 acres of cultivated fields exist at Quitobaquito
AD 1956	Land Transfer	The U.S. government files a Complaint in Condemnation in federal court against the Orozco's in an attempt to gain control of Quitobaquito
AD 1894	Established	A.M. Dorsey records his milling operation as the "Quitovaquito Mill Site"

Physical History:

10,000 BC to 1698 AD

PRECONTACT YEARS

PRE-PALEOINDIAN PERIOD
While no artifacts have yet been discovered at Quitobaquito from the Pre-Paleoindian period (40,000 BC-10,000 BC), Mammoth remains and Clovis points have been found near the Monument lands indicating such evidence may be found at Quitobaquito.

PALEOINDIAN PERIOD
The earliest documented occupation at Quitobaquito dates to approximately 10,000 BC. At this time (10,000 BC-5,500 BC), Paleoindian groups (Clovis, San Dieguito, Ventana Complex) occupied the land, which at that time supported a pine-juniper forest and grasslands, as well as a colder and wetter climate. San Dieguito artifacts were found at an extinct spring at Quitobauito by Julian Hayden.

ARCHAIC PERIOD
The Archaic period (8,500 BC-300 AD) includes the Amargosa, Cochise, and Southwestern Archaic traditions. By 8,000 BC, the Sonoran desert vegetation had been established (similar to vegetation patterns today), and supported use by hunter-gatherers. Evidence of cultural use at Quitobaquito during this period has been documented by archeologists.

PREHISTORIC CERAMIC PERIOD
Use of Quitobaquito during this period (300 AD-1450 AD) by the Hohokam, Patayan, and Tricheras traditions is evidenced by roasting pits, shells, ceramics, sherds and other artifacts. Sedentary agricultural was practiced during this time period, and Quitobaquito was known also as a hunting, gathering, and trading nexus.

PROTOHISTORIC PERIOD
Little is known about the use of Quitobaquito during this period (1450 AD-1700 AD), however scholars predict that use of this area was made by the O'odham and Sobaipuri during this time.

HISTORIC PERIOD
From 1700 on, Quitobaquito was used by the Quechan(Yuma), O'odham, and Euro-Americans

(Rankin;1995)

1698 to 1937

POST CONTACT

The first documented Anglo/European contact with Quitobaquito occurred in 1698 when Father Eusebio Francisco Kino traveled through the region, making a stop at Quitobaquito. Father

Kino rested and grazed his cattle, leaving some cattle for the Hia C'ed O'odham living at Quitobaquito when he left. Various other missionaries and government officials visited Quitobaquito over time. In the fall of 1775, a Sonoran official/soldier, Bernardo de Urrea, visited Quitobaquito and counted a total of 75 people residing there. The following years were accompanied by a great deal of political turmoil and change. In 1821 Mexico was freed from the rule of Spain, and in the 1840s a war was fought between Mexico and the O'odham groups. The mid 1800s also saw increased traffic by adventurers and gold seekers along the route that eventually became known as El Camino del Diablo. This route led through Sonora to Yuma, and on to the west coast via Quitobaquito. Travel routes also ran north and south through the region, utilized by indiginous people for the salt and shell trade (Greene; 1977 & Hoy;1994).

The struggle over control of the region continued with The Treaty of Guadalupe Hidalgo in 1848, and the Gadsden Purchase in 1853. By 1854, boundary survey parties marked the international border, and were followed in the early 1900s by scientific and survey expeditions led by men like William Hornaday and Dr. Daniel MacDougal, W.J. McGee, , Carl Lumholtz, Kirk Bryan, Andrew Gray, and others. Many of these men documented their scientific and ethnographic discoveries on their visits to Quitobaquito (Greene;1977).

The first documented Anglo settler at Quitobaquito was Andrew Dorsey who arrived in the early 1860s and established a small community he named Fremont. He built a store, and is also credited with digging the pond, building the dam, digging irrigation ditches, and planting crops, figs, and pomegranates (archeological evidence suggests that a cienega or marsh already existed at the site and this was merely manipulated to create the pond-Rankin;1995). Various other Mexican and Anglo/Europeans arrived and lived at Quitobaquito for various time periods including Albert Steinfeld, J.C. Watermen, Mikul Levy, and the Lopez family. The Orozco family probably arrived in the late 1880's, though the exact date is unknown (Tom Childs reports that the Orozco family was living at Quitobaquito when Dorsey arrived-see Hoy;1970 appendix). Tom Childs arrived in 1903 and also made use of the pond and opportunity for irrigation. Various mining claims were established at Quitobaquito, but none were considered prosperous. Many indigenous people were displaced by the arrival of Anglo American ranchers and homesteaders in the late 1800s and early 1900s. Their fate is often undocumented. In 1937, Organ Pipe Cactus National Monument was established by a proclamation by President Franklin D. Roosevelt, and Quitobaquito was included within its boundary.
(Greene;1977& Hoy;1970 & Bennett; 1989).

(Note: irrigation canals, and cultivated fields historically extended from the Quitobaquito pond across the International border, and into the land belonging to Mexico. This tradition continued until 1957 when the National Park Service threatened to put up a fence along the boundary to prevent Jim Orozco from using the land for cultivation and cattle grazing)

Quitobaquito landscape as illustrated by Arthur Schott, a member of the 1854 Boundary Survey Party (Copied from Emory;1987)

Members of the Carnegie scientific expedition at Papago Tanks, near Quitobaquito, ca 1907 (Photo by Godfrey Sykes, copied from Camp Fires on Desert and Lava, by William Hornaday)

1937 to 1957

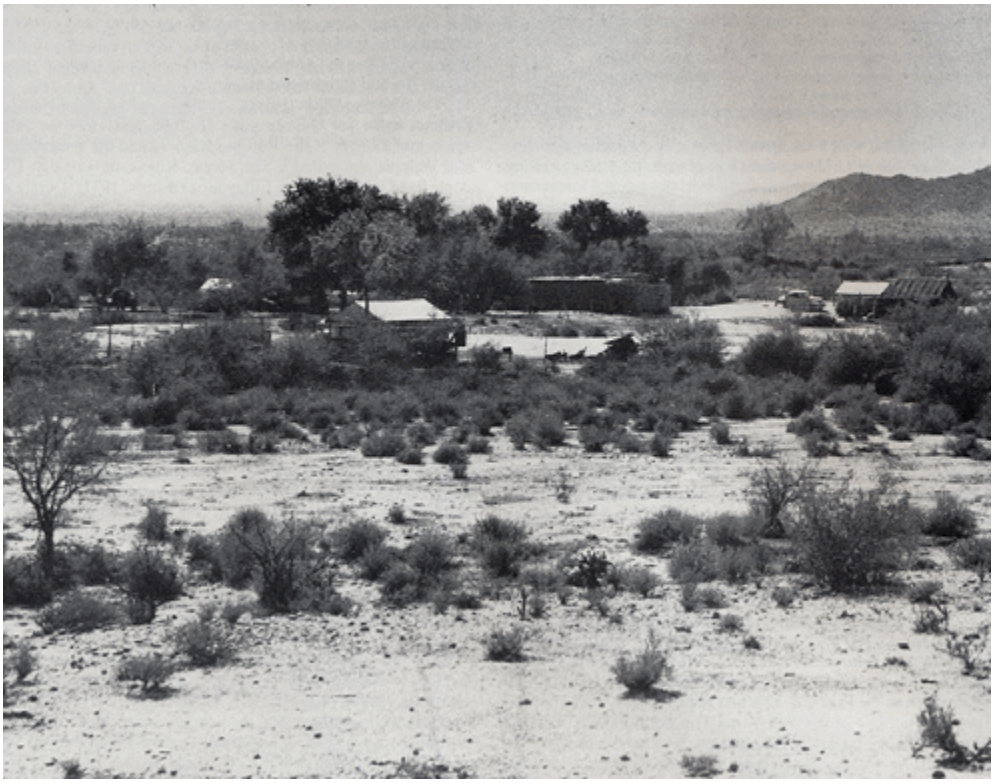
Organ Pipe Cactus National Monument was established in 1937. Quitobaquito was included within the Monument's boundary and the National Park Service immediately took issue with Jose Juan Orozco for killing deer and cutting wood. They also accused him of harboring smugglers and deportees (Letter from Superintendent William Supernaugh;1941 taken from Hoy;1970). Automobile travel through the Monument fluctuated greatly during the following years due to the World War II. The shortage of rubber tires initially decreased the amount of automobile traffic. However, just prior to gas rationing, travel increased as people sought one last vacation at the coast before the rationing began. Later, traffic increased as people traveled to Mexico to acquire the gasoline they could not find in the United States (Superintendent's Reports).

Around 1946, Jose Juan Orozco died, and his son Jim took over the family cattle and structures at Quitobaquito. The National Park Service told Jim he could irrigate land in Mexico, but not in the United States, and that all of his cattle would have to be kept in Mexico. Jim believed he had the right to irrigate and graze his family's land and continued to do so. Around this time, the development at Quitobaquito consisted of the pond (about 2 feet deep), 2 adobes, one outhouse,

one jacal, a tin shack, 2 corrals, 4, 000 feet if irrgation ditches (some in Mexico), 8 fig trees, and 22 pomegranate trees. An additional adobe and a few cultivated acres of land were also located in Mexico (it is unclear whether the Orozco's owned this adobe). In 1949, the U.S. Bureau of Animal Industry set up a station at Quitobaquito to try and stop hoof and mouth disease from spreading into the United States from Mexico. They built two tent frame structures north of the pond, concrete spillways at the two springs, and one thousand feet of pipe from the springs to the tent frame structures. This development took place despite Jim Orozco's protest that he held the rights to the land and water (Bennett; 1983 & Hoy;1970 & Superintendent's Reports).

The National Park Service eventually told Jim of their plans to build a fence along the international border that would divide his cultivated fields. This fence would not have a gate, and furthermore, they reinforced the idea that Jim did not hold a valid grazing permit, that his permit expired with the death of his father. The United States government filed a Complaint in Condemnation against Jim Orozco in federal court in 1956. Faced with the reality of hauling water over a fence and into Mexico to water his cattle and crops, Jim signed a property condemnation agreement and received $13,000 for 160 acres of land and his water rights. Jim and his family left Quitobaquito in late 1957 (Bennett; 1983 & Hoy; 1970 & Misc Sources file-ORPI).

Jim Orozco making a rawhide lariat near his home in Quitobaquito (Photo by Ida Smith, undated, ORPI files)



Quitobaquito in 1950. Photo is looking towards the southeast. (Photo by William Supernaugh, Dec. 1950, ORPI file 51-A)

1957 to 2002

Upon taking possession and control of Quitobaquito, the National Park Service took action to 'restore' the area to a natural oasis, and in the process, destroyed many significant prehistoric and historic sites. Between 1957 and 1962, bulldozers were used to remove all the buildings, corrals, and other structures, and to scrape the land around the pond (Greene;1977).

Superintendent Supernaugh claimed: "By simple expedient of beginning to tear down all of the shack and clean up the area around Quitobaquito the departure of Jim Orozco was hastened. The small amount of work we were able to do has immeasurably enhanced the appearance of this beauty spot and opened up photographic possibilities hitherto unavailable during the present century. We fell [sic] that the acquisition of Orosco's interest is one of our major accomplishments of the past three years" (Superintendent's Reports;Dec.2, 1957).

The National Park Service discontinued use of the road that circulated north of the pond, and fenced the area to keep cattle out. The pond was deepened (which threatened the habitat of the Quitobaquito pupfish), and the earthen ditches leading from the springs to the pond were eliminated by installing underground pipe. A parking lot was constructed adjacent to the pond to facilitate visitation. This parking lot was constructed on an archeological site. In 1974, this

parking lot was moved east to its current location. While blading the former parking lot in preparation for revegetating, the archeological site was destroyed. The site of the new (and current) parking lot is also constructed on an archeologcal site (Rankin;1995 & Bennett;1989). In 1975, all cattle were removed from the Monument and the fencing around Quitobaquito was removed (Superintendent's Reports).

Today Quitobaquito is used by tourists, bird watchers, hikers, traditionally associated communities, scientists, and undocumented border crossers.

The National Park Service deepened the pond in 1962. This created an unfavorable environment for the Quitobaquito pupfish (Photo by Waren Steenbergh, Jan, 1962, ORPI file W-34C).

The National Park Service constructed a parking lot adjacent to the pond in the early 1960s. (Photo by Richard Begeman, 1968, ORPI file W-46).

Analysis & Evaluation of Integrity

Analysis and Evaluation of Integrity Narrative Summary:

The cultural landscape of Quitobaquito tells the story of thousands of years of human interaction with the land. This CLI covers the Quitobaquito region (within Monument lands only) from the period 10,000 BC to 1957 AD. Out of respect to associated traditional communities, information considered culturally sensitive will not be included in this CLI. After studying the natural systems and features, cluster and spatial arrangement, land use, cultural traditions, topography, vegetation, circulation, buildings and structures, views and vistas, constructed water features, small-scale features, and archeological sites within the project boundaries, it has been determined that the integrity of the Quitobaquito cultural landscape is Medium. The integrity of Quitobaquito is currently under constant severe threat of degradation due to development on adjacent lands, erosion, introduction of non-native species, deferred maintenance, and unauthorized use.

Integrity Evaluation
“Integrity refers to the authenticity of the historic identity of a cultural resource, which is evidenced by the survival of physical characteristics from a historic period. This concept, applied in the preservation of historic buildings and structures, should also be applied in the preservation of biotic cultural resources" (Firth; 1985). In other words, integrity is the ability of a landscape to covey its significance, and can be determined by comparing historic (and prehistoric) and contemporary conditions, and by evaluating contemporary and ethnographic values.

Overall Rating-
Medium

Location: The place where the historic and/or prehistoric property was constructed, or the place where the historic and/or prehistoric event took place

Integrity of location is medium.
All historic buildings, fences, and corrals have been razed from the site. Some roads, trails, irrigation channels, ceremonial sites, and orchard remnants are still in their historic sites as is the pond and springs.

Setting: the physical environment of the historic landscape; the character of the place in which the property played its historical role.

Integrity of setting is medium.
Vegetation patterns have continually changed from precontact times to the present due to introduced species, human manipulation, and agricultural use (especially overgrazing). Loss of vegetation cover, lack of historic structures, changes in plant communities, and soil erosion are all visible changes to the physical environment that have taken place since 1957, the end of the period of significance. The sense of isolation and remoteness likely felt by prehistoric and historic users has been altered somewhat by the nearby parking lot, the noise of traffic and development in the viewshed of nearby Mexico, as well

as increased numbers of visitors to the Monument. The lack of buildings and agricultural fields makes it more difficult to imagine human settlement. However, one still feels a sense of remoteness and isolation when exploring the site and has a sense of what the character of the site was probably like in historical and prehistoric times.

Design/Community Organization: Design is the combination of elements that create the form, plan, space, structure, and style of the property. Community organization is the arrangement of an ecological community in terms of the size, structure, and distribution of each of its plant and animal populations, plus the cyclical patterns in these characteristics.

The integrity of the Design/Community Organization is low.
Changes to the pedestrian and vehicular circulation system, water delivery system, removal of all buildings and corrals, and lack of maintenance of remaining orchard trees and irrigation canals has diminished the historical design qualities of the landscape since 1957 (the end of the period of significance). The ecological community has also changed a great deal since 1957. While significant changes also occurred throughout the prehistoric/historic period, it is the changes that have occurred since 1957 that have reduced the integrity of the community organization. Vegetation patterns have changed since 1957 (replicating neither historic nor prehistoric conditions), and there has also been change in wildlife patterns.

Materials/Species Composition: Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property. Species composition focuses on the dominant native and introduced plant and animal species.

Integrity of materials integrity is low.
Materials integrity is classified as low as the original materials used to create the infrastructure of the village settlement have been removed.

Integrity of species composition integrity is medium.
Species composition integrity is medium as significant changes in vegetation patterns have occurred since 1957 (the end of the period of significance), and several key animal species no longer populate the area.

Workmanship/Management Techniques: Workmanship is the physical evidence of the crafts of a particular culture or historic period. A management technique describes treatment to the landscape to maintain, preserve or change conditions.

Integrity of workmanship is medium.
The buildings, corrals, original channel leading from the springs to the pond, and some of the agricultural fields constructed by the historic residents of Quitobaquito have been destroyed. Existing historic structures such as the earthen dam, irrigation canals, international boundary marker, and ceremonial sites provide some representation of historic workmanship.

Integrity of Management Techniques is medium.
The residents of Quitobaquito managed the springs and topography in such a way that water was easily utilized for irrigating crops, watering livestock, and providing water for human use. Signs of overgrazing indicate that those who grazed their cattle in this area exceeded the carrying capacity of the land. This eventually led to problems with soil erosion, and long-term damage to Quitobaquito's ecosystem. Quitobaquito is now managed by the Monument as a Wilderness Area. Vegetation regrowth has occurred since the removal of cattle, though vegetation patterns have changed significantly since 1957. Monitoring of the pupfish and water quality are high priorities.

Feeling: refers to a landscape's expression of the aesthetic or historic sense of a particular period of time. Feeling results from the on-site presence of physical features, and from continuing values and meanings of the place alive in contemporary communities; these, taken together, convey the landscape's historic character.

Integrity of feeling is medium.
Because of increased development in surrounding areasas well as noise from the adjacent highway, the feeling of quiet isolation that historic users of Quitobaquito must have felt has been somewhat diminished. The lack of cattle, buildings, cultivated fields, and corrals also makes it difficult to get a sense of the historical residential and agricultural activity.

Association: the direct link between an important historic event or person and a historic landscape.

Integrity of association is medium.
The remnants of the irrigation canals, the earthen dam and pond, the recreated channel leading from the springs to the pond, the current landscape which shows the visual aftermath of cattle grazing, the regional legacy of the Orozco and Childs family and other long-time residents of Quitobaquito, the ceremonial sites, the International boundary markers, oral histories, as well as the continued use of the area by those with ancestral ties to the previous inhabitants all provide a direct link between people, events, and the landscape.

Characteristic features of the cultural landscape are described in detail in the following pages. Each of these features is identified as contributing, non-contributing, or supporting. This notation refers to each feature's contribution to the historic significance of the cultural landscape and whether the landscape as a whole lends support for the site's eligibility for listing on the National Register of Historic Places. Some of the following sections also include a list of features that appear on the List of Classified Structures. On that list, the designation "contributing" refers to the feature's association with the existing National Register nomination as it appears on the LCS data base.

CONTRIBUTING FEATURES
Evidence of prehistoric vegetation
Native vegetation (including rare and endangered species)
Historically introduced plants (orchard trees)
Leaning cottonwood tree

Cactus fruit harvest
Evidence of construction techniques
Evidence of farming techniques
Oral histories of Salt Pilgrimage, bootlegging, and other cultural traditions
Undocumented border crossings
Cemetery visitation
Other historic and ongoing ceremonies of Tohono O'odham and Hia C'ed O'odham
Foundations of historic buildings and structures
International Boundary Monument No. 172
Jose Lorenzo Sestier Grave Marker
Shrines and ceremonial sites
Pond
BAI concrete spillway
Earthen dam
Remnants of irrigation canals
Circulation system
Remnants of prehistoric foot trails
Remnants of historic foot, wagon, and vehicular roads and trails
Trails by undocumented border crossers
Dirt entrance road
Clusters related to cultivated fields, springs, pond, historic village, and the circulation system
Continuing use by traditionally associated communities
Oral histories of historic land use
Remnants of cultivated fields
Remnants of historic mines
Remnants of mining, assaying, and ore smelting activities
Management of land as a Wilderness Area
Quitobaquito springs and seeps
Climate, geography, geology
Views of undeveloped landscape
Alluvial plains
North/northwest mountain ranges
All archeological sites

NONCONTRIBUTING FEATURES
Invasive exotics
Native vegetation in non-historic distributions
Metal interpretive signs, benches
Piles of dredge from Quitobaquito pond and canal
Evidence of scraping by bulldozers
Views of modern, developed landscapes
Parking lot

UNDETERMINED FEATURES
Modern concrete channel transporting water from springs to pond
Overflow pipe and concrete spillway on pond (constructed in the 1960s)

Park Superintendent concurrence for contributing resource elements received 8-19-2002.

Landscape Characteristic:

Vegetation

Organ Pipe Cactus National Monument is currently located at the nexus of 3 subdivisions of the Sonoran Desert resulting in a diverse ecotone of desert scrub vegetation. There are a total of 29 vegetation associations within the Monument and all but 5 are desertscrub. These associations represent 5 habitat types; mixed Sonoran desertscrub, creosotebush-bursage, evergreen woodland/mesic evergreen scrubland, marsh and open water, and riparian communities (GMP;1995, 76-78 & Turner; 1982). Archeological evidence suggests that Monument lands consisted of a pine-juniper forest around 10,000 BC and a yucca-juniper woodland with grasslands around 9500 BC. Prehistoric and historic vegetation around Quitobaquito springs would have been a wet boggy or marshy area, a cienega environment. (Rankin;1995, 654).

Despite an average annual rainfall of only about 9 inches per year (at Monument Headquarters-Quitobaquito receives around 5 inches), the vegetative resources of the Monument include 574 different species of vascular plants. Variations in topography and geography, as well as a frost-free environment provide a wide range of microclimates that allow a diverse community of species to thrive. Only 12% of the total flora within the Monument are non-native plants (Statement for Management;1994, 7).

Quitobaquito, due to is constant supply of fresh spring water, has created a unique microclimate and ecosystem within the Monument. Quitobaquito is home to the marsh and open water as well as riparian habitat. Quitobaquito provides habitat for 271 vascular plant species, supporting approximately 45% of the total flora of the Monument (Statement for Management;1994, 9). These include the rare Desert Caper (Atamisquea) and Yerba Mansa (Anemopsis californica), and several unique cactus species (Pearson & Connor;2000, 385). Unfortunately, due to the rare and unique plant species that are found in the Monument, poaching has been a significant problem. A thriving black market exists for species such as saguaro, organ pipe, senita, acuna, barrel, and dahlia-rooted cereus. Collectors are willing to pay a high price for these plants, thus fueling the poaching problem (GMP;1995, 79 & Supernaugh;1975).

The historic diversity of vegetation is illustrated by the fact that indigenous peoples in this area have used over 200 species of edible and medicinal plants as well as many others for fuel, shelter, tools, basketry. Pods and seeds of mesquite, paloverde, and ironwood were a

historically popular sources of food (Rankin;1995, 20). Much less visible members of the Quitobaquito plant community such as lichens, mosses, algae, and cyanbacteria gradually form a microphytic soil crust across the soil surface. This crust prevents erosion and provides a source of fixed nitrogen. Susceptible to disturbance, foot traffic breaks this crust exposing the soil to erosion (Bennett;1983 & GMP;1995, 67).

Despite the historic and existing diversity, significant changes in vegetation have occurred since the late 1800s due to overgrazing and human impact (Statement for Management;1994, 7). Overgrazing, especially in times of drought, has led to a change in species diversity and distribution. Susceptible plants have been replaced with unpalatable, fast growing plants such as seepweed, marsh fleabane, tarweed, saltgrass, saltbrush, triangle leaf bursage, and alkali bulrush. While saltbrush and seepweed are natives, the lack of grazing pressure has allowed them to form very dense stands at the expense of saltgrass (Distichlis). Cholla cactus has come down from the hillsides and is abundant, especially to the west of the pond where the cattle corrals once stood. Mesquite has formed very dense stands to the south of the pond, crowding out other plants and even many animals (Bennett;1983). Non-natives in the area include bermuda grass, tumbleweed, tamarisk, yellow star thistle, and annual grasses (Bennett;1989, 40). Other problem invasives include foxtail brome (Bromus rubens), lehmann lovegrass (Eragrostis lehmanniana), buffelgrass (Pennisetum ciliare), wild turnip (Brassica tournefortii), salt cedar (Tamarix ramosissima) and fountain grass (Pennisetum setaceum). Indicative of the continuous human impact at this particular site, over half of all non native species in the Monument have been found at Quitobaquito (GMP;1995, 78 & Bennett;1983).

Quitobaquito has been cultivated as an agricultural area for centuries. A plant list developed from oral histories and other sources documents the following crops have been grown at Quitobaquito; alfalfa, red pinto beans, black eyed peas, cane sorghum, cantaloupes, green chilies, figs, grapes, maize, onions, pear, peach pomegranate, squash, pumpkins, tepary beans, water cress, watermelon, wheat, barley (Nabhan;1986, 50 & Felger;1992, 926 & Zepeda;1985). While none of these crops have been planted since 1957 (when the Park Service took possession of this area), historic pomegranates and figs, while not maintained or irrigated, still exist south of the pond. Lands surrounding Quitobaquito have also been heavily cultivated. In 1850, approximately 250 acres of Sonoyta valley were under cultivation (Felger;1992, 5).

Other changes to plant habitat occurred in the 1960s when the pond was drained and reformed. It is very likely that some aquatic plant species were lost during this process (Bennett;1989, 35). The Quitobaquito area was fenced in 1961, in an attempt to prevent cattle from further damaging vegetation in the area (Superintendent's Reports 1961-1962). In 1966, water was no longer transported to the pond via open air ditches, but was transported through underground pipes. While this change was instituted to eliminate the need for constant ditch maintenance (livestock pressure no longer kept the ditches clear of vegetation), the marshy, riparian habitat that previously thrived along these ditches was lost (Superintendent’s Reports; 1966 & Pearson & Connor;2000, 393). The ‘clean-up’ of Quitobaquito (utilizing a bulldozer) that took place in

the 1960s resulted in large unvegetated areas left without topsoil. Plants in the Chenopodiaceae family that tend to colonize in disturbed saline areas, are now found at the former building sites and the 1962 parking area (Bennett;1989, 36). In 1974, the parking lot was moved to its current location. Bulldozers with rippers scarified the site for revegetation purposes. Unfortunately, this disturbed an archeological site and valuable information was lost . A loss of topsoil and the dry climate have resulted in a slow to recovery for the former parking lot site. Some cholla and saltbush was planted, and seepweed is developing in the area (Bennett;1989, 39).

Historically, bacterial necrosis has threatened several cactus species across the Monument. Throughout the 1940s and 1960s, this disease killed and disfigured many saguaro, organ pipe, and senita cacti. Scientists were brought in to study the problem, which seemed to lessen in severity over time- (Superintendent's Reports; Feb/March 1941, Sept 1961). The O'odham people utilized the bacterial necrosis to their advantage. The bacteria would rot away the fleshy parts of the cactus and expose the woody skeletal ribs which could be used for construction. This rotting process also allowed the callous "boots" of the cactus to separate out, and these were subsequently used as containers (Crosswhite;1980, 11). In the early 1900s, Hornaday noted that mesquite was being killed by mistletoe (Hornaday;1909, 48-52). This problem is still evident in the Park today.

Changes in vegetation resulting from human habitation, livestock, and National Park Service management over the years are outlined in a series of chronological photos taken from the location of Sestier's grave, located northwest of the pond (see Part 3a, pages 5-7). In 1950, cottonwoods delineate the pond and the Orozco's house. Various government buildings are still standing. In 1964, the buildings have been removed and grazing pressure has decreased allowing mesquites to form distinct stands. In 1982, Suaeda, which has a high tolerance for salt and disturbance has filled in the barren soil were the Orozco home stood (to left of trucks) In 2002, conditions appear very similar to those in 1982.

Another graphics that illustrates historic vegetation includes a sketch of the general Quitobaquito area by Arthur Schott, a member of the 1854 United States and Mexican Boundary Survey party (see Part 2a, page 3).

Changes to vegetation patterns have also occurred due to the impact of illegal woodcutting. A premium is placed on wood for construction and fuel in this region, and evidence of illegal woodcutting is constant. Unfortunately, this has led to the destruction of many nurse plants. Many species in this environment need a nurse plant to shade and protect them during their early years. For example, young saguaros often use the palo-verde tree to protect them from frost and the intense sun. With the loss of the nurse plant population, many other species are affected (Crosswhite;1980, 12-13).

The famous "leaning cottonwood tree" growing out of the earthen dam has been a popular subject for photographers for many years.

CONTRIBUTING FEATURES
Evidence of prehistoric vegetation
Native vegetation (including rare and endangered species)
Historically introduced plants (pomegranates)
Leaning cottonwood tree

NONCONTRIBUTING FEATURES
Invasive exotics
Native vegetation in non-historic distributions

Character-defining Features:

Feature Identification Number: 102363

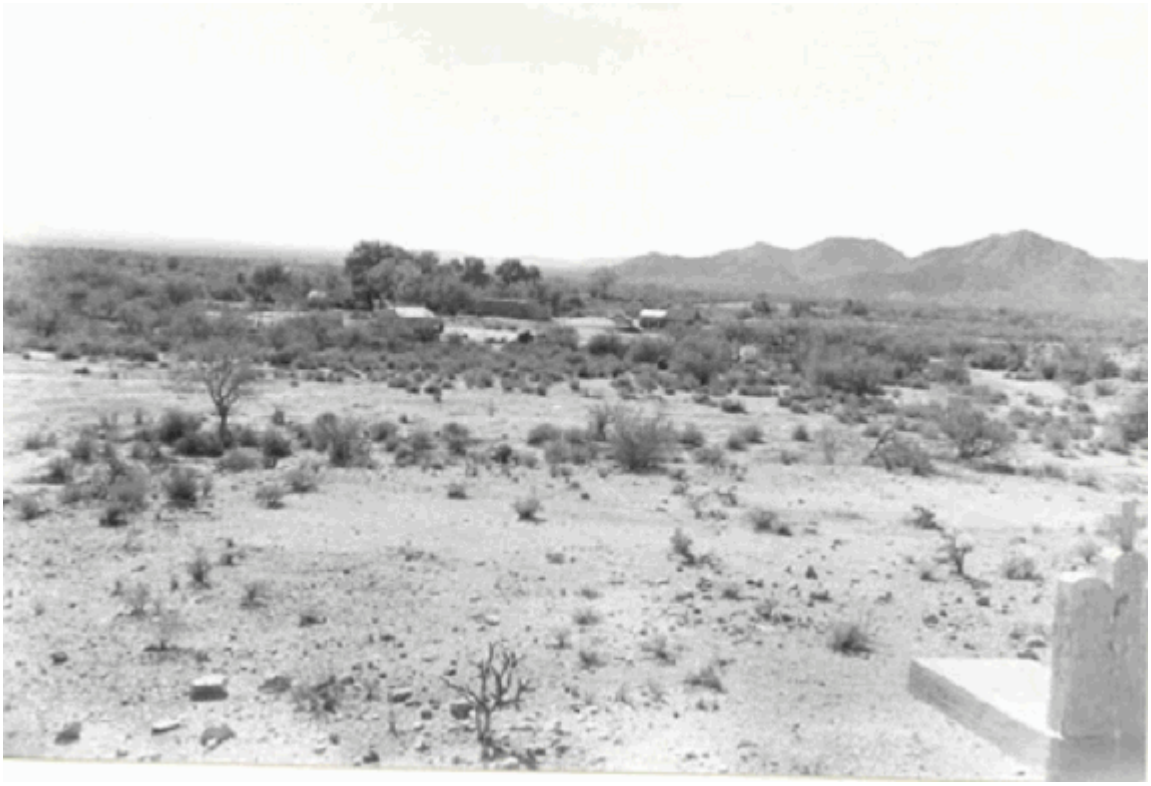
Type of Feature Contribution: Undetermined

Landscape Characteristic Graphics:

Historic pomegranates are dying off due to neglect (Photo by J. Galbraith, 2002)

Quitobaquito in 1939. The larger trees are cottonwood, the smaller are mesquite. The pond is at the left of the picture (Photo by F. Pinkley, J. Miller, N. Dodge, May, 1939, ORPI file 2644 and WACC 2695).

Same view as previous photo, 49 years later. The cotton woods are visible at the rear of the photo, mesquite, Lycium fremonti, alkali saltgrass, and goldenbush fill in the foreground (Photo by Willow Bubul-Bennett, Dec. 1988. Copied from Felger;1992).



View of Quitobaquito from Sestier's grave in 1950 (Photo by Supernaugh, Dec. 1950, OPC-51)

View from Sestier's grave in 1964 (Photo by Jackson, Sept. 1964, W-38)

View from Sestier's grave in 1982 (Photographer unknown, June 1982, copied from Quitobaquito Interim Management Plan, 1983)

View from Sestier's Grave in 2002, looks much the same as the 1982 photograph (Photo by J. Galbraith, 2002)

Cultural Traditions

Salt Pilgrimage
Since prehistoric times, trade with other tribes has been an active tradition of the Tohono O'odham and Hia C'ed O'odham. Artifacts such as obsidian, turquiose, shells, and ceramics indicate an extensive trade network within the region (Rankin;1995, 652).

Salt was one of the resources traded; however, the traditional salt pilgrimages were not conducted merely for practical or economic purposes. These pilgrimages, which often passed through Quitobaquito, were highly ritualized and spiritual events. A great deal of spiritual significance was attached to the pilgrimage, this knowledge remaining, for the most part, with the tribe. Large salt deposits along the Gulf known as Salina Grande and Salina del Pinacate, were left by evaporated seawater when high tides receded in spring or summer. This salt was collected during the pilgrimage, and brought north during the return trip (Stewart;1965, 84). The Tohono O'odham and Hia C'ed O'odham supplied the Tuscon Mining Company with salt, and traded with the Pimas for wheat and other crops (Lumholtz; 1990, 269-272). What remains of these cultural activities is quite secretive as the pilgrimages have been prohibited by US

Customs Service since 1930 (Stewart;1965, 85).

Dryland Farming

William Emory wrote in his 1857 Boundary Survey Report that the land west of the 112th meridian was " a hopeless desert—destitute alike of both water and vegetation" (Emory;1987, 94). A 1852 map of the region describes the area as uninhabited, without grass, weed, or water (Historic Maps/Bartlett;1852).

Contrary to the viewpoints of some early Anglo-American explorers, farming was an active and productive cultural tradition in this area, and had been for many, many years. The indigenous culture adapted to desert conditions by developing seasonal homes, fruit harvest and storage techniques, growing desert adapted races of corn and beans with rapid life cycles (for example, the tepary bean, Phaseolus acutifoluis, var. latifolius and corn, Zea mays), and using flood water for irrigation (Crosswhite;1980, 5 & Nabhan;1986 & Zepeda;1985).

Summer villages were located in response to the lay of the land in order to facilitate cultivation. Agricultural fields were created at the mouth of washes, on flat land where organic silt accumulated from floodwaters. Floodwaters were channeled to allow the waters to flow over the fields. As many as ten fields would be laid out continuously along one watercourse to utilize the same floodwaters. Tribal social organization ensured that the watercourse and ditches were kept clean from brush, and repairs were made to erosive damage (Nabhan;1986, 44-49).

A surveyor soldier on an international boundary survey in 1894 reported: "At many places on the desert where fertile land can be found near water holes, or convenient to their artificially constructed dams, they establish 'Temporales' and fence in with mesquite brush small fields, to which they promptly repair when the first summer rain falls. Where silence reigned before, all is now full of activity. Houses and fences are repaired; irrigation ditches are put in order; new dams built or old ones repaired; and often within 24 hours after the first drop of rain falls, the entire crop of melons, pumpkins, squashes, beans and Indian corn are planted". "[T]hey plant crops of corn, pumpkins, melons, squashes, etc., which they irrigate by means of water drawn from natural or artificial dams (charcos and represos) respectively. These crops mature rapidly and are generally harvested before the water entirely disappears".
(Nabhan;1986, 48-51-quoting Galliard).

W.J. McGee documented that the indigenous people cultivated arroyo deltas called 'ak-cin', located where the floodwaters spread at the mouth of a wash. He also noticed sheet flooding and gullying (arroyo downcutting). He also wrote about how the flood basins were fertilized by the twigs, branches and silt that accumulates after a flood. McGee wrote: "sometimes the fields are open, when the watchers rely on their won vigilance for the protection of the growing crops; usually they are enclosed by flimsy fences of mesquite and cactus. There may be but a single field in a temporale, and that may be cropped but a single season, though usually there are half a dozen or more fields in a locality, and these may be used during several successive

season; but the Papago husbandman is constrained by an intuitive geometry; and usually saves fencing by making his field elliptical or circular rather than rectangular; and in most villages line fences are unknown. Lumholtz made some of these observations as well in the early 1900s. (Nabhan;1986, 49-51-quoting McGee).

H.V. Clotts who studied the area for the Bureau of Indian Affairs, noted in 1915-1917 that earthen dikes, several miles long, diverted water to fields. Also, brush dikes were used to divert water and check the rush of water through the fields and levees were built to hold water until it could soak into the ground. Rainfall from hundreds of acres was diverted onto a field (Nabhan;1986, 53-54). Prehistoric canals have been found in the Monument (Rankin;1995, 651).

These patterns gradually changed when European crops were introduced and the government dug wells. After the Civil War, Anglos arrived and began using water for their own fields. Mesquite wood was harvested to supply mining camps and towns, reducing the traditional supply of beans (Nabhan;1986, 47-49). It is estimated that less than 4% of non-riverine acreage farmed by the Tohono O'odham at turn of century continues to be farmed today, and that most of the desert adapted germ plasm has been lost (Nabhan; 1986, 43).

Cactus Fruit Harvest

The Tohono O'odham traditionally had a winter home, summer home, and cactus camp. The cactus camp was utilized during the summer harvest of the saguaro fruit (Crosswhite;1980, 16-17). These camps have been described as follows: "in the midst of the family's territory is a simple camp; an open walled sunshade . . . a fireplace, and little more. These, however, are somebody's place just as surely as a house is." (Crosswhite;1980, 20- quoting another researcher). The summer harvest of the saguaro fruit is a traditional historical practice of the Tohono O'odham. Products made from the fruit include syrup, jam, dehydrated pulp, chicken feed, seed flour, oil, pinole, atole, snack foods, soft drinks, wine, and vinegar. The fruit harvest involved a wine feast (nawait), undertaken to call the rains needed for summer crops. Outsider governments and religious groups attempted to suppress this ceremony. The Spaniards made it illegal to make cactus wine during the 1700s. In 1925, the United States federal court ruled that making wine was illegal, despite the fact that the ceremony was a traditional religious ceremony. Ironically, some non-O'odham groups are now trying to revive the ceremony (Nabhan;1986 & Crosswhite;1980 & Zepeda;1985).

In order to take advantage of the cactus fruit, the Tohono O'odham would temporarily leave their cultivated fields for their cactus camps during the fruit harvest. Explorers in late 1700s did not understand that this practice allowed for seasonal harvest of saguaro, mesquite, etc. (Nabhan;1986, 46)

Construction Techniques

The traditional construction of the Tohono O'odham house consisted of a hemispherical structure made of grass thatch, with a frame of mesquite and ocotillo stems, creosote, or saguaro ribs (McGee;1901,104 & Zepeda;1985). Pit houses were also constructed at Quitobaquito.

Undocumented border crossings
As the United States gained economic power and prestige in the early 1900s, Mexican residents seeking employment and a higher standard of living began undocumented border crossings into the United States at increasing rates. At various times in history, this traffic has spiked, such as during the political unrest in Central American during the 1980s. A high level of Chinese immigration occurred in the 1920s, and various periods of economic downfall in Mexico have increased traffic as well. Many Mexican residents habitually cross the border without documentation to work in the United Sates, and return home to Mexico regularly to visit with their families (Young;2002).

Bootlegging
During the 1900s, Mr. Williams made bootleg whiskey at Williams Springs (north of Quitobaquito), according to the Gray Family. Bootlegging was quite popular in the Monument, and some of the Gray brothers, (who lived and ranched within the Monument lands) even helped out on a few ventures (Gray Oral Histories). (See Blankenship CLI for more information on the Gray Family). The first superintendent of the Monument, Supernaugh, recalled that the Tohono O'odham were also involved in transporting bootleg liquer (Supernaugh;1975).

Other Cultural Traditions
The historic Tohono O'odham and Hia C'ed O'odham cemeteries are still visited by traditionally associated groups. The water of the Quitobaquito Springs is considered sacred by the Tohono O'odham (GMP;1995).

CONTRIBUTING FEATURES
Cactus fruit harvest
Evidence of construction techniques
Evidence of farming techniques
Oral histories of Salt Pilgrimage, bootlegging, and other cultural traditions
Undocumented border crossings
Cemetery visitation
Other historic and ongoing ceremonies of Tohono O'odham and Hia C'ed O'odham

Character-defining Features:

Feature Identification Number: 102355

Type of Feature Contribution: Undetermined

Landscape Characteristic Graphics:

Sketch by 1854 Boundary Survey Party member illustrating traditional fruit harvesting (Illustrator, Arthur Schott; copied from Emory;1987)

Small Scale Features

There are a variety of significant small-scale features within the Quitobaquito landscape. Approximately 150 yards northwest of pond lies the grave of Jose Lorenzo Sestier who died in 1900. Jose was a shopkeeper for Mikul Levy at Quitobaquito.

A trinchera has been reported near Quitobaquito, but recent efforts to locate the site have failed (Rankin;1995, 105 & Ives; 1936). Trincheras (not related to the Trincheras culture) are rock constructions on hillsides that could be agricultural terraces, rooms, check dams, pits, or serve other similar purposes.

Also located near Quitobaquito are several traditionally associated tribal shrines and commemorative sites. The remnants of the foundation of several structures (former home and store sites) can be seen around the pond. International border monument 172 also lies within the cultural landscape.

Several metal interpretive signs and benches of varying condition exist around the site.

CONTRIBUTING FEATURES
Foundations of historic buildings and structures

International Boundary Monument No. 172
Jose Lorenzo Sestier Grave Marker
Shrines and ceremonial sites

NON CONTRIBUTING FEATURES
Metal interpretive signs, benches

Character-defining Features:

Feature: International Boundary Monument No. 172

Feature Identification Number: 102359

Type of Feature Contribution: Contributing

IDLCS Number: 056748

LCS Structure Name: International Boundary Monument No. 172

LCS Structure Number: MKR172

Feature: Jose Lorenzo Sestier Grave Marker

Feature Identification Number: 102360

Type of Feature Contribution: Contributing

IDLCS Number: 056752

LCS Structure Name: Jose Lorenzo Sestier Grave Marker

LCS Structure Number: HS13A

Feature Identification Number: 102358

Type of Feature Contribution: Undetermined

Landscape Characteristic Graphics:

Sestier's Grave (LCS file photo #60285 by Anthony Veerkamp, 1993)

International Boundary Marker 172 (Photo by J. Galbraith, 2002)

Constructed Water Features

Currently, the most prominent constructed water feature at Quitobaquito is the earthen dam that creates the existing pond. Historians have often credited Dorsey with building the dam and pond as well as agricultural fields and water diversions. However, as Native Americans had inhabited this site for centuries, it is probable that Dorsey improved on existing water diversions and fields, or small pools, created by earlier inhabitants (Felger;1992, 5). Archeologists have documented that this area, prior to 1860 was a cienega or marsh, and that this area was most likely simply deepened to create the pond (Rankin;June, 1995). Furthermore, oral histories of several former Quitobaquito residents describe that it was Native Americans who built the original canals and dam (Bell et al; 1980, 60-61, 69, 83). Also, the Quitobaquito pupfish have diverged significantly from the neighboring Rio Sonoyta pupfish suggesting the pond habitat has been in existence for a much longer period of time (Nabhan et al; 1982; 126). Without further credible documentation, the exact date of the pond construction will remain unknown. The earthen dam currently is threatened by the famous 'leaning cottonwood tree' growing out of its bank. The potential collapse of the tree could damage the integrity of the dam.

In an effort to stop the spread of Hoof and Mouth disease, the U.S. Bureau of Animal Industry established a station at Quitobaquito around 1949. They built a low concrete dam/spillway across the spring channel to form a pool and laid 1000 feet of pipe to create a water supply to

their tent frame structures (Bennett;1989, 24). This action was taken despite the protests of Jim Orozco who claimed water rights to this area.

In the 1960s the National Park Service drained and dredged the pond and increased the height of the dam in an effort to deepen the pond. (The deepening of the pond and the steep sides of the pond created an unfavorable habitat for the Quitobaquito pupfish and the Sonoran mud turtle. A shallow shelf was subsequently created at the east end of the pond to restore their favorable habitat). In the 1960s, an overflow pipe and concrete spillway were also constructed. The dredging undermined the large cottonwood on the southwest part of the dam and required the construction of a large concrete brace to prevent its collapse. After experimenting with several different delivery systems (for example, transporting water from the springs to the pond via buried plastic pipe in 1974), a concrete lined channel was constructed in 1989. This colored concrete channel is approximately 700 feet long, complete with rock overhangs, islands, and a meandering course to simulate a natural looking appearance. The channel requires weekly maintenance to clear out aquatic vegetation (Pearson and Connor;2000, 393-394 & Bennett;1989).

The pond is currently approximately 200 feet wide, 260 feet wide, and 5 feet deep . The pond currently provides habitat for the endangered Quitobaquito Desert Pupfish and the Sonoran Mud Turtle, as well as other unique species (GMP;195, 69).

Remnants of historical irrigation canals are still visible at the site, however they are not being maintained and are heavily overgrown with mesquite.

CONTRIBUTING FEATURES
Pond
BAI concrete spillway
Earthen dam
Remnants of irrigation canals

UNDETERMINED FEATURES
Modern concrete channel transporting water from springs to pond
Overflow pipe and concrete spillway on pond (constructed in the 1960s)

Character-defining Features:

Feature: Quitobaquito Earthen Dam

Feature Identification Number: 105940

Type of Feature Contribution: Contributing

IDLCS Number: 056750

LCS Structure Name: Quitobaquito Earthen Dam

LCS Structure Number: HS13B

Feature: Quitobaquito Irrigation Canals

Feature Identification Number: 101732

Type of Feature Contribution: Contributing

IDLCS Number: 056751

LCS Structure Name: Quitobaquito Irrigation Canals

LCS Structure Number: HS13C

Feature Identification Number: 105939

Type of Feature Contribution: Undetermined

Landscape Characteristic Graphics:

Quitobaquito 'south spring' in 1961. This photo shows the concrete spillway built in 1949 by Bureau of Animal Industry to impound Jim Orozco's water supply for their own use (Photo by Budge, 1961, W-25)

Concrete channel constructed in 1989 to direct water from springs to pond (Photo by J. Galbraith, 2002)

Quitobaquito Pond in 1974. The earthen dam is located along the lower left edge of the pond in this photo (parking lot is no longer adjacent to the pond-Photo by Fred Mang, negative series 74-1467)

Circulation

Due to its reliable source of fresh water, Quitobaquito has served as a major circulation node for travelers throughout the Sonoran desert for thousands of years. A network of trails has consistently led through Quitobaquito from essentially every direction. Archeological artifacts dating as far back as 8500 BC have been found along a trail from Bates Well to Quitobaquito indicating use by the Hohokam on their shell, salt, and obsidian collecting trips to and from the Gulf of Mexico. Other artifacts along this trail such as ceramics and chipped stone indicate prehistoric use by the Tohono O'odham during their salt pilgrimage (Rankin:1995, 93-105). The Tohono O'odham salt pilgrimage followed trails from various northern locations south to the rock salt deposits around Puerto Penasco, and Pinacate (Stewart; 1965, 84). As one of the few reliable sources of water in the region, many of these trails presumably passed through Quitobaquito.

In the late 1600s, European missionaries arrived in the area, and gold seekers, scientists, and boundary surveyors soon followed. While the exact routes of these travelers' was not always documented, many of them did report that their route led through Quitobaquito where they found water, grass for their horses, and often the company of local residents (Hornaday;1909 & Bennett; 1989, 4 & Lumholtz;1912 & McGee;1901, & Clotts; 1917).

A major thoroughfare named "The Old Yuma Trail" linked Sonora with California and other western locations. It roughly paralleled the present day International Border and was also known as El Camino del Diablo (The Devil's Highway) due to the hundreds of lives that were lost along the route during the gold rush era in the 1840s and 1850s. Adventurers and treasure seekers headed west in droves, but ill equipped to deal with the temperature and availability of water along the trail, hundreds died along the way. While the discovery or establishment of this route is often attributed to Father Kino who documented his travel along this route several times in the late 1600s, it is also likely that he was simply following a trade route established in prehistoric times. As an area that facilitated a vast regional trade network utilized by many different tribes of Native Americans, trails had been established long before Father Kino arrived. The collection of artifacts found around Quitobaquito (obsidian, marine shells, ceramics, etc.) indicate trade occurred with tribes that resided a significant distance away. Topography and the scarcity of water sources left few logical placements for trails in this region. Therefore, El Camino del Diablo was most probably a segment of the prehistoric trade route. Oral histories by Jose Juan Orozco's relatives describe a trail from Quitobaquito to Yuma used by themselves as well as their elders (Bell et al; 1980, 52-53 & McGee; 1901).

Conflicting reports regarding the exact location of prehistoric and historic trails in this region continue to exist. For example, Kirk Bryan, who mapped the area in the early 1900s for the United States Geological Survey stated that "the main traffic on the Camino del Diablo in past time apparently followed the river bed on the south, and most of the early travelers passed

Quitobaquito without stopping" (Bryan;1925, 427). However, the accompanying map shows El Camino del Diablo passing directly through Quitobaquito (Bryan; 1925, Plate XIII: the author of this map is not clearly specified and it is noted that the map was created from a compilation of Bryan's maps and several other sources). There are scholars who insist that El Camino del Diablo did not pass near Quitobaquito, however, as one of the few water sources in the area, and due to reports of historic travelors and oral histories, it is likely that a spur from the 'official' El Camino del Diablo, did provide a detour to Quitobaquito (Historic Maps & McGee;1901 & Zepeda;1985). Further archeological studies may reveal new information about the location and users of the various circulation routes around Quitobaquito, however, again, as one of the few sources of water in the region, it is probable that most of these routes passed through the springs, or developed spurs that allowed a detour to the springs.

In 1900, W.J. McGee led an expedition for the National Geographic Society along the Old Yuma Trail/Camino del Diablo. He mentions crossing the Rio Sonoyta near Quitobaquito (the river was completely dry), passing boundary marker 172, and swinging north to Quitobaquito. Beyond Quitobaquito to the west, McGee observed prehistoric sites and relics, graves, and wagon ruts (McGee; April 1901, 131). (Note: prior to the establishment of boundary marker 172, boundary marker 7 and 8, placed by the Emory expedition, were located next to Quitobaquito: Emory;1987 & Historic Maps/ Map of Mines by the Arizona Smelting Company, 1907).

Additional reports by Kirk Bryan document a road (in poor condition) running from Blankenship Well to Quitobaquito, via Dowling. He also details a route from Bates Well to Quitobaquito, via Cipriano Well (most likely following the prehistoric route described above). Bryan directs travelers to head south from Bates Well, along the eastern flank of the Quitobaquito Hills. When the road reached Aguajita it then headed west and paralleled the border (on the Mexican side of the border) until it reached Quitobaquito. Alternatively, about 1/10 of a mile north of Aguajita, a road in poor condition veered west directly to the springs. Bryan pointed out this detour "enables the traveler to avoid going into Mexican territory. It is, however, badly washed" (Bryan;1925, 426) (In documenting this route Bryan also stated that the Quitobaquito springs were in the United States, but the pond and most of the houses were in Mexico-this conflicts with most other documentation found regarding the location of the pond; Bryan; 1925, 427). Historic use of the trail from Bates Well to Quitobaquito continued as the Tohono O'odham traveled between the two villages to exchange resources. Fresh vegetables were obtained at Quitobaquito, and a large supply of saguaro cactus fruit was found at Bates Well (Juni Ka:ck) (Bell et al.; 1980; 86-87 & Zepeda; 1985).

Other routes described by Bryan that linked Quitobaquito to the surrounding areas included a road about 3 miles north of Quitobaquito, that connected the Bates Well Road with the Dripping Springs area, and thereafter the Ajo Sonoyta Road (Bryan;1922, 410-413 and Plate XIII). He also documented that rough roads connected Quitobaquito with Sonoyta and with Agua Dulce (Bryan; 1925, 427).

A 1934 AAA road map indicates an unimproved road ran from Ajo to Quitobaquito, from Quitobaquito to Santo Domingo, and from Quitobaquito to Gray Ranch/Blankenship Well (Historic Maps/Arizona AAA;1934) Some historic maps locate Quitobaquito just south of the International Border, in Mexico (Historic Mpas/Map of Mines by Arizona Smelting Company, 1907/Map of Arizona by W.W. Elliott, 1893/ Territory of Arizona, +1902) and at least one historic map shows Sonoyta located in the United States (Historic Maps/Territory map by Hodge, 1877).

Many historic maps locate a road running somewhat parallel to the international boundary from Sonoyta to Quitobaquito (or with a spur linking Quitobaquito), and further westward (see maps cited above).

By 1956, an established dirt road approached Quitobaquito from the east, paralleling the international border. This road veered north/northwest at Boundary marker 172, and went around the north side of the pond, turned south/southwest again, and once again carried along parallel to the border (Detail Map of Quitobaquito by W.G.S., 1956, ORPI Map file B.1).

After Jim Orozco was forced out of Quitobaquito in 1957, the road around the north of the pond was abandoned, and visitor vehicular traffic stopped at a parking lot adjacent to the east side of the pond (See photo). In 1962, walking trails were established around the pond and between 1963 and 1966, the parking area was enlarged. In 1974, the parking lot was moved east to its current location (Bennett;1983 and 1989).

Presently, a service road connects the visitor parking lot to the area southwest of the pond, and continues on along the international border to the western edge of the Monument. A lack of marked, established walking trails around the pond has led to a confusing repetition of social trails. Furthermore, heavy foot traffic by undocumented border crossers has resulted in a vast web of unsightly footpaths that damage the habitat (See aerial photo). Several unsanctioned roads have also been cut into the fragile landscape by vehicles making unauthorized border crossings, often times related to drug trafficking (Young; 2002)

Localized historic circulation around the pond and springs themselves consisted of a network of trails, and rustic roads to accommodate vehicles.

Major additions to the regional circulation system included the completion of Highway 85, which consists of 22 miles of paved road from the north boundary of the Monument to the International Border at Lukeville. Mexico Highway 2 parallels the international border from Sonoyta to the Yuma area.

Note: Historical literature and maps often use both the following spellings interchangeably: Sonoita & Sonoyta.

CONTRIBUTING FEATURES
Remnants of prehistoric foot trails
Remnants of historic foot, wagon, and vehicular roads and trails
Trails by undocumented border crossers
Dirt entrance road

NONCONTRIBUTING FEATURE
Parking lot

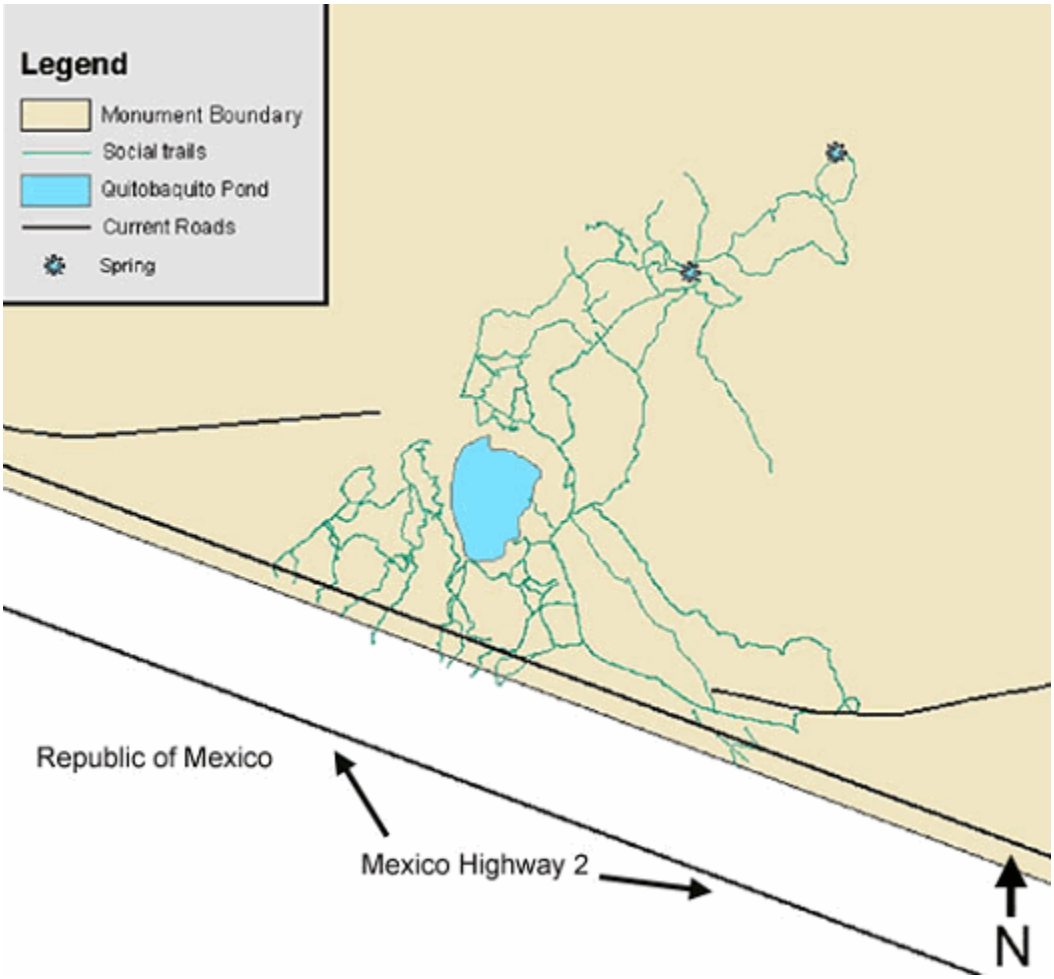
Character-defining Features:

Feature Identification Number: 105938

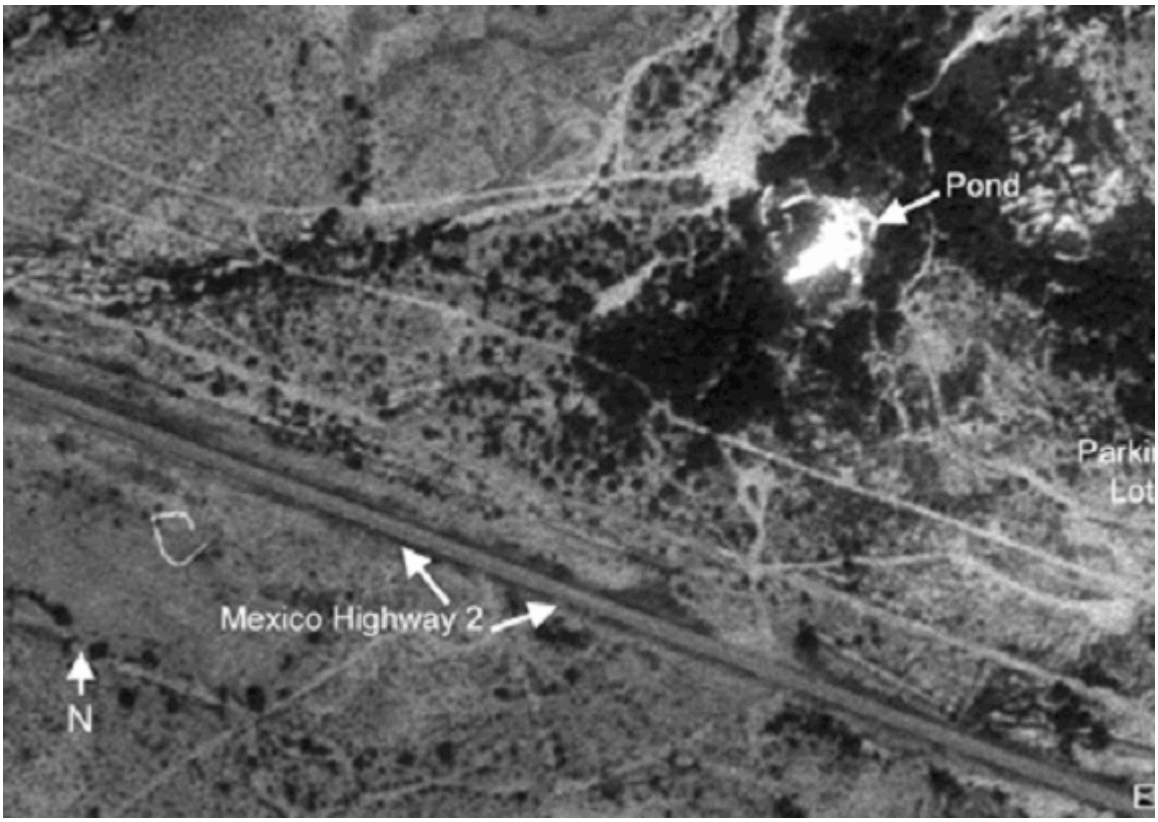
Type of Feature Contribution: Undetermined

Landscape Characteristic Graphics:

Major circulation routes around Quitobaquito in 2002 (undated GIS data from ORPI Park Files)



A variety of overlapping and redundant social trails have been created at Quitobaquito (undated GIS data from ORPI Park files)



Numerous social trails criss-crossing the border at Quitobaquito can be seen in this aerial photograph (Photo by USGS, 1992)

Natural Systems And Features

The Sonoran Desert ecosystem is known as one of the worlds most biologically diverse deserts. Most surface water in the desert is available on a seasonal basis only. Most rainfall occurs from July to September, and from January to March. Evapotranspiration is six times greater than precipitation (precipitation averages about 9 inches annually at Monument Headquarters and around 5 inches at Quitobaquito), therefore, the springs and pond at Quitobaquito have created a unique oasis within the desert. Daily average maximum temperatures often exceed 100 F in the summer months. Temperatures range from 68 to 71 F during the winter months(GMP;1995 & Nabhan;1986, 43).

Quitobaquito can be divided into six habitat areas: 1) rocky slopes-shallow rocky soil with rock outcroppings 2) gravelly bajadas-coarse, well-drained soil a the foot of mountain slopes 3) wetlands-marshy soil with wetland plants 4) washes-broad floodplains with lots of perennial vegetation 5) alkaline flats-seasonally wet soil occurring near springs 6) old fields-remnants of agricultural fields and orchards (Felger;1992, 3-4). This diverse range of habitat attracts a wide variety of plant and animal species.

Organ Pipe Cactus National Monument is home to 64 mammals, 5 amphibians, 43 reptiles, 277

birds, 600 plants and 1 fish (GMP;1995). Due to the availability of water and the diverse physical habitat, many of these species inhabit the Quitobaquito area. Species of concern finding habitat at Quitobaquito include Howarth's White (Ascia howarthi), Sonoran Mud Turtle (Sonoriense longi femorale), and Quitobaquito Spring Snail (Tryonia quitobaquitae). Quitobaquito is also an important watering site for Underwood's mastiff bat (Eumops underwoodi) (Pearson and Connor; 2000, 385). Surface water and the proximity to migration routes draws thousands of birds daily. 277 different species have been reported (GMP;1995, 71). The Africanized bee (Apis mellifera) has been found colonizing at Quitobaquito.

The Monument is home to 11 springs, 3 are perennial. Tinajas, natural bedrock depressions or rock catchments also provide seasonal water. Quitobaquito is the second largest spring fed oasis in the Sonaroan Desert, (Quitovac in Sonora, Mexico is the largest). The Quitobaquito springs are the result of a unique hydrological/geological interchange. Kirk Bryan of the United States Geological Survey reported on his 1917 investigation of these fissure springs, a report which included information related to water quality, temperature, output, etc. He noted that the springs had been excavated in an attempt to increase and concentrate the flow (Bryan;1922 &1925).

As described by Fegler: "A fault running parallel to the springs separates two different rock types: well-fissured granite to the east and dense fine-grained rock to the west. The dense impermeable material on the west side has created a dam stopping the movement of underground water. The water table intersects the surface at Quitobaquito because the unfractured rock to the south acts as an underground dam." (Fegler;1992, 2). (Historically, five or more springs existed at Quitobaquito and created a mrashy or cienega enviroment. Today, only two main springs are active. Due to the geology of the area, many small seeps also occur in the area. These seeps have been mapped by Peter Bennett (Bennett;1989).

To the east of Quitobaquito lies the La Abra Plain, a large alluvial plain consisting of ephemeral stream channels that extend from the base of the Puerto Blanco and Sonoyta Mountains, sloping southwest towards the Rio Sonoyta Valley in Mexico. This alluvial plain, and more specifically the Aguajita Wash, directs water towards the Quitobaquito Mountains, and subsequently, the springs (Bryan;1925, 199 & Rankin;1995, 5-7 & Carruth;1996).

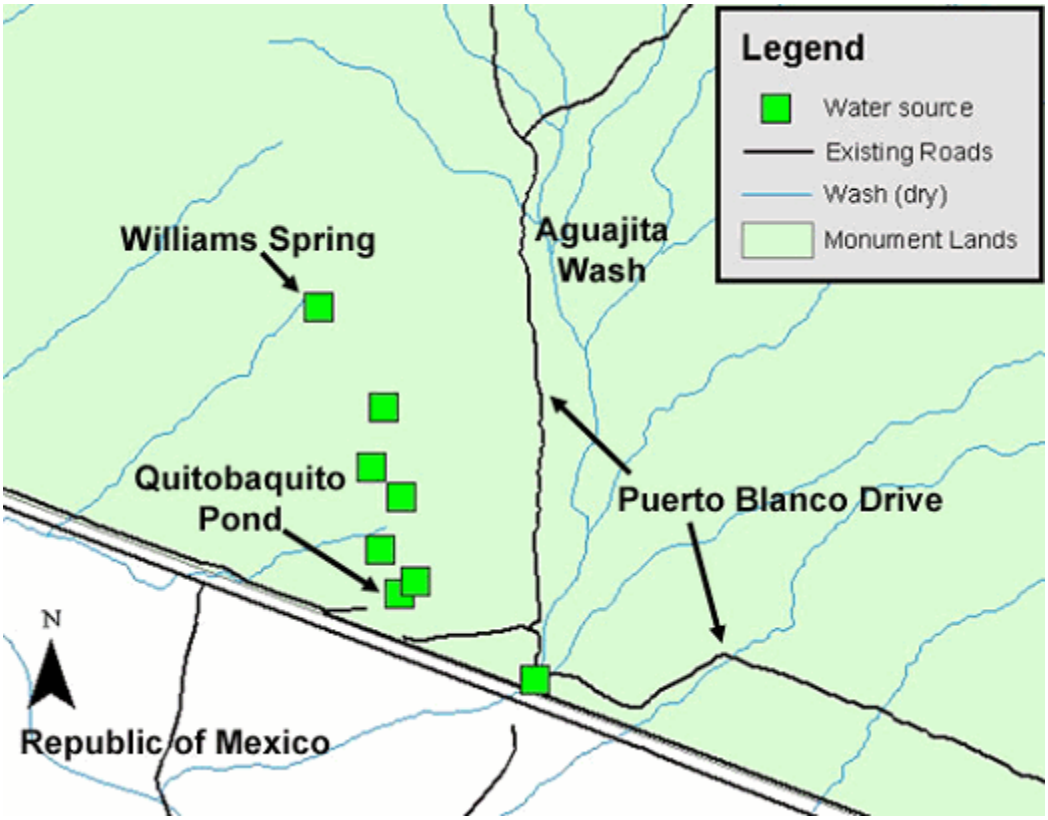
CONTRIBUTING FEATURES
Quitobaquito springs and seeps
Climate, geography, geology

Character-defining Features:

Feature Identification Number: 102357

Type of Feature Contribution: Undetermined

Landscape Characteristic Graphics:



Water sources in the Quitobaquito area (undated GIS data provided by ORPI, 2002)

Spatial Organization

The Quitobaquito Pond forms the center cluster with remnants of farm fields and irrigation canals to the south/southwest, the cluster of springs to the north, a modern developed area to the east, and historic residential areas to the east, west and north. This historical spatial organization has been divided artifically by the placement of the international border.

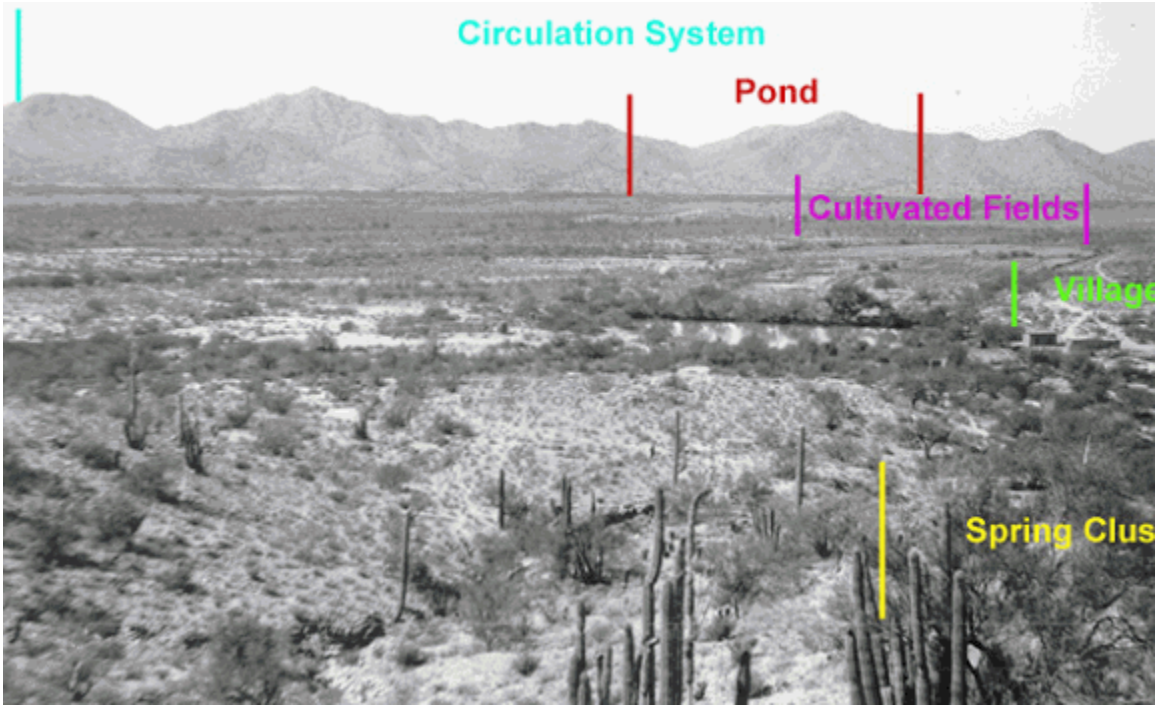
CONTRIBUTING FEATURES
Clusters related to cultivated fields, springs, pond, historic village, and the circulation system

Character-defining Features:

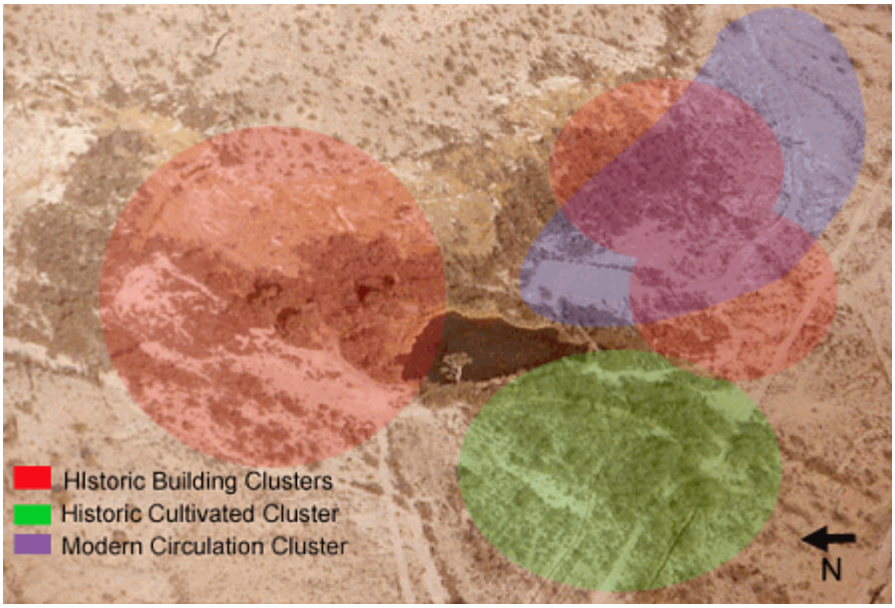
Feature Identification Number: 102361

Type of Feature Contribution: Undetermined

Landscape Characteristic Graphics:



Historical spatial organization of Quitobaquito in 1917-looking south (Photograph by Kirk Bryan, 1917, U.S. Geological Survey #32)



Cluster/spatial arrangement at Quitobaquito (Aerial photo by Fred Mang, 1974, negative series 74-1467)

Land Use

As a rare desert oasis, Quitobaquito has received heavy use as a water and food source by

humans, domestic animals, and wildlife throughout history. This area has also served as a temporary resting spot, circulation node, farmland, hunting and collecting ground, seasonal home, burial ground, ceremonial site, as well as long term settlement for Native Americans, Mexicans, Europeans, and Anglos. Archeological evidence confirms Native American use began at least as far back as 10,000 BC (Felger;1992, 5).

Aside from short term visits, the first documented land use by an Anglo at Quitobaquito was by Andrew Dorsey. Dorsey arrived at Quitobaquito around 1860, and around that time, 250 Native Americans lived in the area (Bennett;1983, 67). Little documentation exists about the historic Native American settlements at Quitobaquito, however, Father Kino documented that "natives" were living at Quitobaquito when he visited the area in 1698. The Juan Jose Garcia and Juan Jose Orozco families lived at Quitobaquito starting in the mid to late 1800's, along with several other families including the Velascos (Anderson et. al;1982). Reports as to when the Orozco's began living at Quitobaquito vary. Regardless, the land at Quitobaquito was being used for residential and subsistence purposes long before Anglo-European contact.

Andrew Dorsey, who arrived around 1860 used Quitobaquito as a site for his store, a grain mill, and did some mining and irrigated farming. (Bennett; 1989, 15).

In 1870 Albert Steinfeld and J.C. Watermen opened a mill and a store (it closed in the 1880's), and in 1887, Jeff Milton was hired to establish a U.S. Customs and Immigration Station at Quitobaquito (Bennett;1983, 20-24). Around 1888, these men were joined by Mikul Levy who built a store east of the pond (Hoy;1970, 35 & Felger; 1992, 5-6 & Bennett; 1989, 16---note: Bennett misquotes Hoy and states store is to west of pond).

Though not very productive, mining was another historic land use in and around Quitobaquito. A.N. Dorsey and John Gaudolfo recorded a claim for the 'Quitovaquito Mine' in 1984. M.G. Levy, Tom Childs, and John Merrill also recorded claims at Quitobaquito in 1896, and 1909. A recordation by Dorsey has also been found documenting that he used Quitobaquito as a milling site (Greene;1977, 116). Archeological evidence suggests that assaying and ore smelting activities also took place at Quitobaquito (Rankin;June, 1995).

Other land uses at Quitobaquito included serving as a headquarters for the Bureau of Animal Industry between 1949 and 1952. This headquarters consisted of two tent frame buildings, water pipes, and corrals. Nearby, just north of Quitobaquito, the Williams Springs area was farmed by Williams, and he also made use of the site to make whiskey (Felger;1992, 6).

The land at Quitobaquito had been heavily grazed and farmed by many people over the years, but by the mid 1900s, only the Orozco family remained. They continued farming and grazing the land, and residing at the site until 1957.

Presently, Quitobaquito is managed as a Wilderness Area, and land use consists of birdwatching, picnicing, and hiking by visitors, scientific study by Park staff and other parties, a

habitat for endangered species, a crossing point for undocumented border crossers, and ceremonial use by the Tohono O'odham.

CONTRIBUTING FEATURES/USES
Circulation system
Continuing use by traditionally associated communities
Oral histories of historic land use
Remnants of building foundations
Remnants of cultivated fields and irrigation canals
Remnants of historic mines
Remnants of mining, assaying, and ore smelting activities
Management of land as a Wilderness Area

Character-defining Features:

Feature Identification Number: 102356

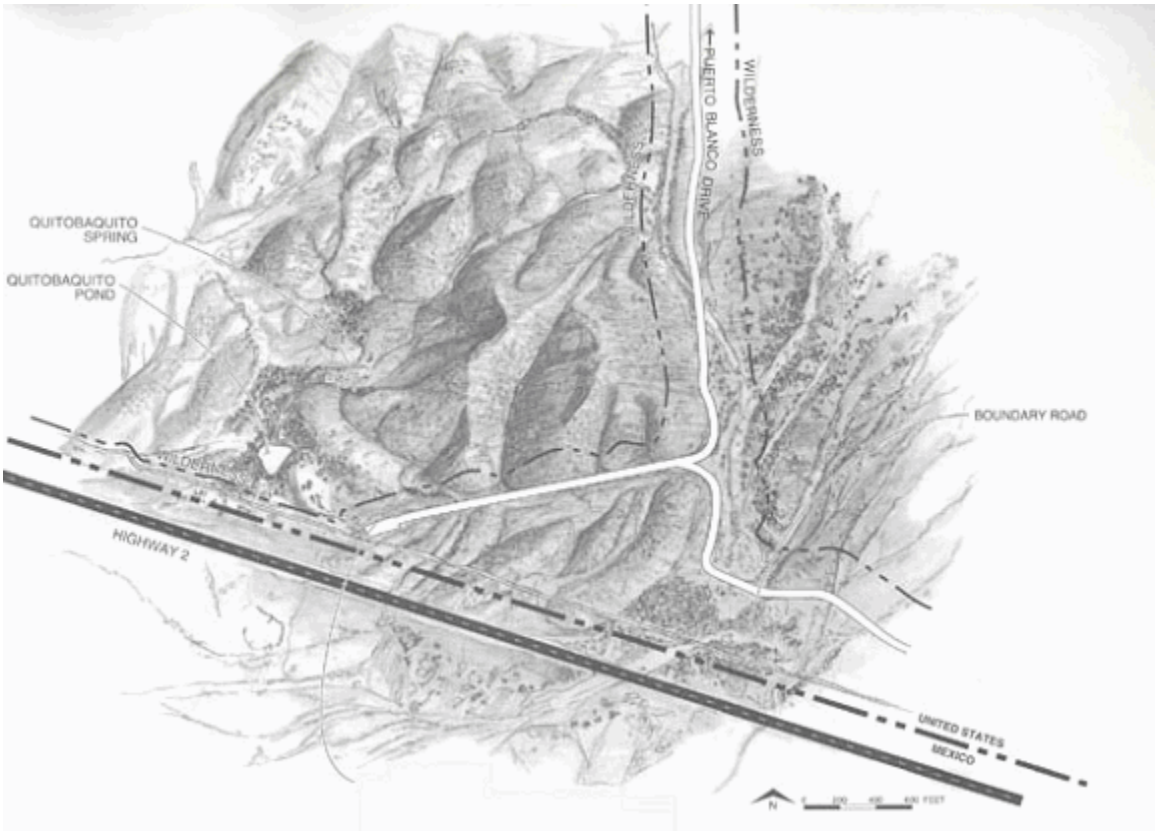
Type of Feature Contribution: Undetermined

Landscape Characteristic Graphics:

The Orozco family used these corrals at Quitobaquito to raise cattle (Photographer unknown, ca 1939, WACC 7133)

The Orozco's cultivated the land southwest of the pond. The international border runs through the lower portion of this field (Photo by Supernaugh, Dunn, and Barton, 1950-taken in Mexico looking north into the U.S. ORPI #422)

The stone mill (molina de piedra) turned by a burro to grind grain used by the Orozco's at Quitobaquito (Photo undated, no author. ORPI #818)



Map depicting boundaries of Wildnerness Management Area (Map copied from ORPI GMP;1995)

Topography

The topography of Organ Pipe Cactus National Monument consists of long, narrow, parallel northwest mountain ranges divided by broad alluvial valleys. Elevations within the Monument range from 4,808 feet at the top of Mt. Ajo, to less than 1000 feet at the south and northwest boundaries of the Monument. To the east of Quitobaquito is La Abra Plain, a large alluvial plain consisting of ephemeral stream channels that extend from the base of the Puerto Blanco and Sonoyta Mountains, sloping southwest towards the Rio Sonoyta Valley in Mexico. The Quitobaquito Hills, the western border of La Abra Plain, run north/northwest from the international border, and are approximately 5 miles long and 2 miles wide at the widest, rising about 500 feet above the surrounding flatlands. These hills are composed mainly of Mesozoic crystalline rocks exposed during the late Cretaceous and early Tertiary periods. The northern portions of the Quitobquito Hills are made up mainly of schist and fine-grained intrusive rocks, while the southern end consists mainly of granite and quartz diorite. When intact, granite has very low hydraulic conductivity; however, the granite in the southern portion of the Quitobaquito Hills is highly fractured and consequently allows the seepage of ground water from the La Abra Plains, specifically the Aguajita Wash. This seepage supplies the Quitobaquito springs (Bryan;1925, 199 and Rankin;1995, 5-7).

Soils throughout the Monument are classified as aridosols (hot arid soils), more specifically, the Quitobaquito Hills area is composed largely of four categories of soil: Lomitas very stony loam, Gunsight very gravelly loam, Growler-Antho complex, and Torrifluvents (QMP;1983). Due to the climate, soils throughout the Monument typically have very little organic matter. Parent material decomposes very slowly without precipitation, and the organic matter that is present in the soil oxidizes quickly due to the high air temperatures (GMP;1995, 64- 67 and Carruth;1996, 3-8).

Erosion in the Quitobaquito area consists mostly of sheet and gully erosion. A great deal of this erosion is attributed to historic grazing practices, and some to human trampling. Culverts constructed along Mexico Highway 2 have stopped most of the downcutting of the Rio Sonoyta from reaching Quitobaquito (QMP;1983).

Human changes to the topography over time include the construction of the earthen dam at Quitobaquito, terracing/leveling of ground for construction and farming, and grading for the development of the parking lot and road. Piles of gravel and sand dredged from the pond are piled around the northwest of the springs and elsewhere around the site. These piles are slow to revegetate (QMP;1983).

CONTRIBUTING FEATURES
Alluvial plains
North/northwest mountain ranges

NONCONTRIBUTING FEATURES
Piles of dredge from Quitobaquito pond and canal
Evidence of scraping by bulldozers

Character-defining Features:

Feature Identification Number: 102362

Type of Feature Contribution: Undetermined

Views And Vistas

Organ Pipe Cactus National Monument provides spectacular views from many points throughout the Monument. A distinctive pattern of undeveloped, rugged mountain ranges separated by broad alluvial valleys provides views similar to those that in all probability existed in historic and prehistoric times. The oasis of Quitobaquito currently provides a local view of a body of water surrounded by lush vegetation, as well as broad, expansive views of surrounding lands.

The undeveloped, rural view is broken by the development of the parking lot and road to the east, as well as Mexico Highway 2 and its resultant traffic and urbanization to the south.

CONTRIBUTING FEATURES
Views of undeveloped landscape

NONCONTRIBUTING FEATURES
Views of modern, developed landscapes

Character-defining Features:

Feature Identification Number: 102364

Type of Feature Contribution: Undetermined

Buildings And Structures

Prior to 1957, Quitobaquito, over time, was the site of several adobes, corrals, a pit house, stores, and government field stations. When the National Park Service took possession of this land in 1957, they razed the existing buildings. All that remains are historic photos, historic literature, oral histories, and remnants of a few foundations. Structures on the List of Classified Structures are discussed under small scale features, and constructed water features.

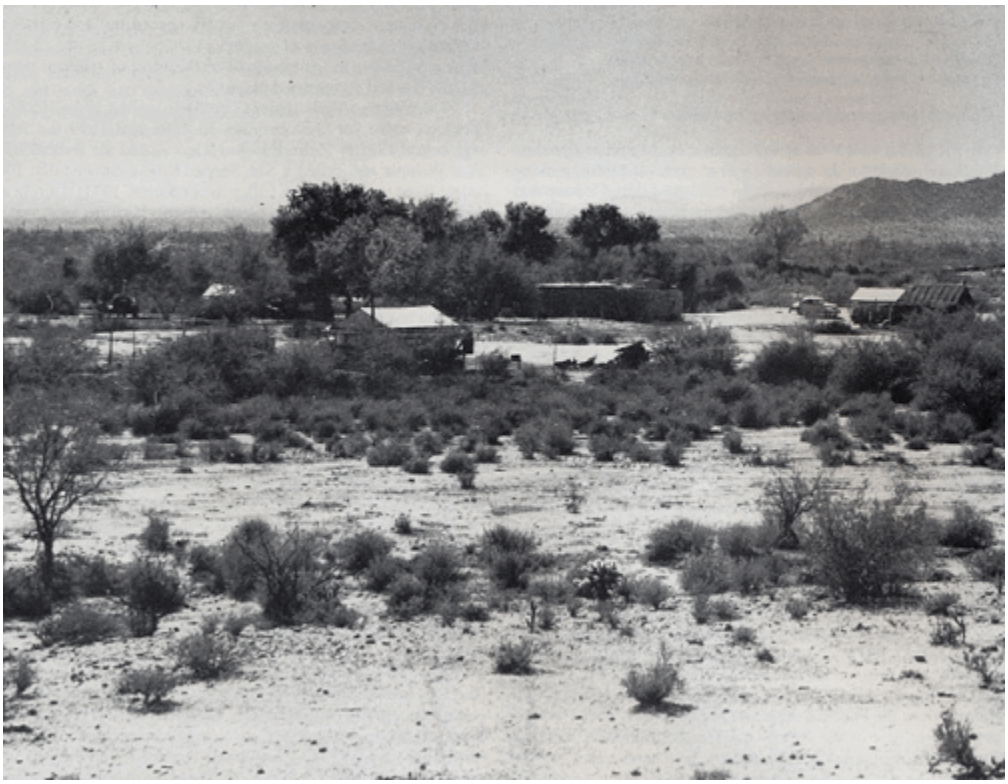
CONTRIBUTING FEATURES
Remnants of building foundations

Character-defining Features:

Feature Identification Number: 105937

Type of Feature Contribution: Undetermined

Landscape Characteristic Graphics:



Prior to 1957, buildings at Quitobaquito included the Orozco home and a U.S. Bureau of Animal Industries field station (Photograph by W.R. Supernaugh, Dec. 1950; ORPI photo file 51A)

"Pithouse" owned by the Orozco family at Quitobaquito. This structure was razed after 1957 (Photo by N. Dodge, F. Pinkley, and J. Miller, May, 1939, ORPI #1924/WACC #3542)

Corrals and buildings used by the Orozco family at Quitobaquito. Structures were razed after 1957 (Photo by N. Dodge, F. Pinkley, J. Miller, May, 1939) ORPI#507)

Archeological Sites

The lands around Organ Pipe Cactus Monument have been occupied for at least 12,000 years. Located along a major for the trading of salt, shells, and obsidian, artifacts from geographically distant cultures and from many different time periods have been found, despite the fact that less than 5% of the Monument has been surveyed. Stone tools representing the San Dieguito I complex dated 9,000 BC were found in the Quiotobaquito area by Julian Hayden (Rankin;1995). Other archeological finds include fire-cracked rock, traditionally associated tribal shrines, extinct springs, prehistoric trails, historic wagon roads, bedrock mortars, sleeping circles, irrigation canals, roasting pits, and remnants of former residential areas (Rankin;1995 & VanHorn;1994).

Archeology section is incomplete. Access to studies of the Quitobaquito by Teague and Rankin is needed to complete this section (ca 1979, 1993)

CONTRIBUTING FEATURES
All archeological sites

Character-defining Features:

Feature Identification Number: 105936

Type of Feature Contribution: Undetermined

Condition

Condition Assessment and Impacts

Condition Assessment: Fair

Assessment Date: 05/05/2002

Condition Assessment Explanatory Narrative:

The condition of the Quitobaquito cultural landscape is categorized as Fair. Corrective action is needed within 3-5 years in the areas of erosion control, vegetation management, historic orchard and irrigation channel maintenance, trail deliniation, and unauthorized access in order to prevent further harm to the cultural and natural values of the landscape.

Park Superintendent concurrence received 8-19-2002.

Condition Assessment: Undetermined

Stabilization Measures:

In order to stabilize the cultural landscape, general measures are necessary such as: removal of invasives, decreasing social trails, irrigation and maintenance of historic figs and pomegranates, vegetation maintenance, erosion control, monitoring for illegal wood and speciman removal, continual monitoring for pesticide and herbicide drift. See 'Stabilization Costs' section of this report for more information.

Park Superintendent concurrence received 8-19-2002.

Impacts

Type of Impact: Pests/Diseases

External or Internal: External

Impact Description: Potential for introduction of non-native fish and turtle species into pond threaten pupfish habitat

Type of Impact: Removal/Replacement

External or Internal: External

Impact Description: Illegal removal of cactus, wood collection, and artifact collection threaten the integrity of the site.
Illegal planting of exotic species and placing exotic species in the pond threatens the integrity of the site

Type of Impact: Agriculture

External or Internal:	External
Impact Description:	Pumping of aquifer and drift of pesticides, herbicides, fertilizers, and seeds from agricultural fields in adjacent Mexico threaten the habitat at Quitobaquito
Type of Impact:	Visitation
Impact Description:	Threat to habitat of Gila monster (Heloderma suspectum), Desert pupfish (Cyprinodon macularius), mudturtles (Kinosternon), Quitobaquito snail. Trampling of lichen (Tortula) by heavy foot traffic leads to erosion
Type of Impact:	Vegetation/Invasive Plants
External or Internal:	Both Internal and External
Impact Description:	Non native Bermuda grass (Cynodon dactylon) and other invasive exotics are growing in the area.
Type of Impact:	Pollution
External or Internal:	Both Internal and External
Impact Description:	Noise and automobile pollution from Mexico Highway 2. Trash and trampling from visitors and undocumented border crossers. A tire dump exists several yards across the border in Mexico adjacent to Quitobaquito pond.
Type of Impact:	Erosion
External or Internal:	Both Internal and External
Impact Description:	Gully and sheet erosion is occuring on the hillsides in Quitobaquito-caused in part by overgrazing and human trampling.
Type of Impact:	Neglect
External or Internal:	Internal
Impact Description:	Historic fig and pomegranate trees have not been irrigated or maintained and their health is deteriorating. Some specimans have died. Historic irrigation channels have not been maintained. Vegetation cleared from channel transporting water from springs to pond is piled at sides of channel disturbing existing vegetation.

Type of Impact:	Vandalism/Theft/Arson
External or Internal:	External
Impact Description:	Visitors and employees have been subject to vandalism and theft in the Quitobaquito area
Type of Impact:	Soil Compaction
External or Internal:	Both Internal and External
Impact Description:	Lack of indentifiable trail system is leading to soil compaction and destruction of habitat
Type of Impact:	Adjacent Lands
External or Internal:	External
Impact Description:	Low flying aircraft from the adjacent Air Force range threatens the Quitobaquito habitat
Type of Impact:	Operations On Site
External or Internal:	Both Internal and External
Impact Description:	Historic grazing and agricultural use, and subsequent management efforts by the National Park Service have altered original vegetation patterns, and have led to the creation of unnatural placement and density of some plant species
Type of Impact:	Vandalism/Theft/Arson
External or Internal:	External
Impact Description:	Illegal roads and trails created by drug smugglers criss-cross the cultural landscape. The portable toilet located at the site has been spraypainted with grafitti. Signs of small (illegal) campfires are evident around the landscape.

Stabilization Costs

Landscape Stabilization Cost:	987,094.00
Cost Date:	06/15/2002
Level of Estimate:	C - Similar Facilities
Cost Estimator:	Regional Office

Landscape Stabilization Cost Explanatory Description:

No stabilization costs are listed in the LCS database

Landscape stabilization costs are an approximate Class C estimate, per year. Costs do not include pond and ditch maintenance or security measures. Costs are very rough and additional information is needed from the Park to develop a more accurate estimate.
Stabilization costs include fence repair, foot trail construction and maintenance, land reclamation, orchard maintenance, and conducting oral histories.

Treatment

Treatment

Approved Treatment: Preservation

Approved Treatment Document: General Management Plan

Document Date: 12/01/1994

Approved Treatment Document Explanatory Narrative:

Approved Treatment is for structures listed on the LCS only. None of the treatments are listed as approved, yet treatments for the cemetery and Sestier's grave are listed as completed. LCS database needs to be updated with corrected information. LCS does not include treatment costs for the landscape

Approved Treatment Completed: No

Approved Treatment Costs

Landscape Treatment Cost: 0.00

Cost Date: 12/01/1994

Level of Estimate: C - Similar Facilities

Cost Estimator: Denver Service Center

Landscape Approved Treatment Cost Explanatory Description:

Cost Estimates for LCS structures were completed by the Denver Service Center and taken from the LCS data base. Costs were estimated in 1995:
Earthen dam treatment costs-$3,000: No stabilization costs listed
Irrigation canals treatment costs-$2500:No stabilization costs listed
Jose Lorenzo Sestier Grave Marker-no costs listed
International Boundary Marker 172-no costs listed (Marker is maintained by the International Boundary and Water Commission)
Tohono O'odham cemetery-no costs listed

Costs have not been adjusted for inflation, and do not indicate if they are a one-time treatment costs, or an annual cost.

No landscape treatment costs have been approved through a Cultural Landscape Report or similar document as of 2002.

Bibliography and Supplemental Information

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Citation Publisher:	NPS
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Citation Author:	Bell, Fillman; Anderson, Keith M; Stewart, Yvonne G
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Year of Publication:	1980
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Citation Number:	011496
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Year of Publication:	1983
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Year of Publication:	1989
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Citation Author:	Gray Family
Citation Title:	Gray Oral History Collection
Year of Publication:	0
Citation Publisher:	N/A
Source Name:	Other
Citation Type:	Narrative
Citation Location:	Oral History collection from Gray family members, various years and interviewers. ORPI Park Files

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Citation Publisher:	NPS
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Citation Type:	Narrative
Citation Location:	ORPI Park Files

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Citation Type:	Both Graphic And Narrative
Citation Location:	ORPI Park Files

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Citation Title:	Historic Maps, various years and authors
Citation Publisher:	Unknown
Source Name:	Other
Citation Type:	Graphic
Citation Location:	Copies of maps found in ORPI Park File- Transportation Law Suit files-documentation by Bob Spude. Map by Bryan;1922 & 1925, Bartlett;1854, Hodge;1877, Pima County;1893, Anderson;1864, Map of Mines; 1907, AAA Map; 1934. See also ORPI map file B-1; 1956

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Year of Publication:	0
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Citation Type:	Narrative
Citation Location:	Natural Resources Journal, Spring 2000, Volume 40, No. 2 ORPI Park Files

Citation Author:	Rankin, Adrianne G.
Citation Title:	Archeological Survey at Organ Pipe Cactus National Monument, Southwestern Arizona: 1989-1991
Year of Publication:	1995
Citation Publisher:	National Park Service
Source Name:	Other
Citation Type:	Both Graphic And Narrative
Citation Location:	Intermountain Regional Support Office, Santa Fe, CLI Files. See also Rankin's comments on Quitobaqutio National Register Nomination on file with Arizona SHPO which provide further archeolgical information related to this 1995 publication.

Citation Author:	Rozemberg, Hernan
Citation Title:	Tohono O'odham push for hearing on citizenship bill
Year of Publication:	2002
Citation Publisher:	Arizona Republic
Source Name:	Other
Citation Type:	Narrative
Citation Location:	Arizona Republic newspaper, April 7, 2002, "Valley and State" section

Citation Author:	Statement for Management-National Park Service
Citation Title:	Statement for Management
Year of Publication:	1994
Citation Publisher:	NPS
Source Name:	Other
Citation Type:	Both Graphic And Narrative
Citation Location:	Copy in ORPI Park Files

Citation Author:	Stewart, Kenneth, M.
Citation Title:	Southern Papago Salt Pilgrimages
Year of Publication:	1965
Citation Publisher:	The MasterKey-for Indian Lore and History
Source Name:	Library Of Congress/Dewey Decimal
Citation Type:	Narrative
Citation Location:	The MasterKey, Volume 39, No. 3, July-Sept. 1965. Pages 84-91

Citation Author:	Superintendents of ORPI--Various authors
Citation Title:	Superintendent's Reports
Year of Publication:	1937
Citation Publisher:	N/A
Source Name:	Other
Citation Type:	Narrative
Citation Location:	ORPI Archived Park Files-1937 onward

Citation Author:	Supernaugh, William
Citation Title:	Interview with Mr. William Supernaugh
Year of Publication:	1975
Source Name:	Other
Citation Type:	Narrative
Citation Location:	Transcription of interview between W. Supernaugh and Mr. William Serrell, May 3, 1975 on file in ORPI archives

Citation Author:	Turner, Raymond & Brown, David
Citation Title:	Desert Plants
Year of Publication:	1982
Citation Publisher:	University of Arizona Press
Source Name:	Library Of Congress/Dewey Decimal

Citation Author:	Van Horn, Dr. Lawrence
Citation Title:	Interoffice Memo regarding associated groups
Year of Publication:	2002
Citation Publisher:	N/A
Source Name:	Other
Citation Type:	Narrative
Citation Location:	June, 2002 memo on file in CLI Backfile, Intermountain Support Office, Santa Fe

Citation Author:	Van Horn, Dr. Lawrence
Citation Title:	Draft National Register Nomination: Quitobaquito
Year of Publication:	1994
Citation Publisher:	Denver Service Center, NPS
Source Name:	Other
Citation Type:	Narrative
Citation Location:	On file with Arizona SHPO

Citation Author:	Young, Jon
Citation Title:	Personal Interview
Year of Publication:	2002
Citation Publisher:	N/A
Source Name:	Other
Citation Type:	Narrative
Citation Location:	Personal interview between Jon Young and J. Galbraith. Notes on file at Intermountain Support Office, Santa Fe, CLI file

Citation Author:	Zepeda, Ofelia
Citation Title:	The Sand Papago Oral History Project
Year of Publication:	1985
Citation Publisher:	NPS
Source Name:	CRBIB
Citation Number:	013107
Citation Type:	Narrative
Citation Location:	ORPI Park Files

Documentation Assessment

Documentation Assessment: Fair

Documentation Checklist

Documentation

Document: Statement for Management
Year of Document: 1994
Amplifying Details: Brief description of cultural resources and potential threats
Adequate Documentation: Yes

Document: Development Concept Plan
Year of Document: 1997
Adequate Documentation: Yes

Document: General Management Plan
Year of Document: 1995
Adequate Documentation: Yes

Document: Resource Management Plan
Year of Document: 1994
Amplifying Details: Natural and Cultural Resource Management Plan

Document: Historical Base Map
Year of Document: 1950
Amplifying Details: Not all base maps could be accessed at the Park
Adequate Documentation: No

Document: Cultural Landscape Report
Year of Document: 0
Amplifying Details: No cultural landscape report has been completed
Adequate Documentation: No

Document: Historic Resource Study
Year of Document: 1988

Amplifying Details: Needs accurate citations for facts in contention