4.4. Cultural and Paleontological Resources

This section identifies cultural resources present within the Project area, evaluates potential Project-related impacts on those resources, and provides mitigation measures, as applicable. Paleontological resources are also discussed in this section because both cultural and paleontological resources are treated as cultural resources under the California Environmental Quality Act (CEQA). Historical built environment and archaeological resources are discussed and analyzed first, followed by the discussion and analysis of paleontological resources.

The information contained in this section was compiled from survey results as well as recommendations contained in the Historical and Archaeological Resources Technical Report for the Malibu Civic Center Wastewater Treatment Facility Project, which was prepared in March 2014 for the City of Malibu by ICF International. The survey of cultural resources was conducted under the provisions of Section 15064.5 of the State CEQA Guidelines and Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended.

The Project would be constructed in three phases and has four main elements that could result in cultural and paleontological resources impacts: 1) wastewater treatment facility; 2) pump stations; 3) wastewater collection and recycled water distribution system pipelines; and 4) percolation ponds and groundwater injection wells. For the purposes of this section, "Project area" refers to the area that encompasses the extents of the four main elements described above and the area that would be served by these proposed Project facilities, and "Project site" refers specifically to those areas that would be disturbed by construction activities associated with these four main elements. The Project would include a Local Coastal Program Amendment and modification of zoning for the wastewater treatment facility to include an Institutional District Overlay.

4.4.1. Environmental Setting

Regulatory Setting

Historical and Archaeological Resources

This section discusses the applicable federal, state and local regulations that 1) define historical resources and 2) provide thresholds for determining impacts on historical resources under CEQA.

Federal Regulations

Section 106 of the National Historic Preservation Act

Section 106 of the NHPA requires federal agencies, or those they fund or permit, to consider the effects of their actions on historic properties. The proposed Project would use funds issued from the Clean Water State Revolving Fund (CWSRF) program, which represents an operating agreement between the U.S. Environmental Protection Agency (EPA) and the State Water Resources Control Board (SWRCB). Funds issued from the CWSRF program are considered part of an undertaking (36 CFR 800.16[y]) and therefore are subject to Section 106 regulations.

Under Section 106, a historic property is defined as

> … any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places [NRHP] maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization that meet the NRHP criteria (36 CFR 800.16(l)).

The implementing regulations for Section 106 set forth a four-step process for compliance. Initiation of the Section 106 process includes the establishment of an undertaking, identification of the appropriate State Historic Preservation Officer (SHPO), and coordination with other reviews, such as those under the National Environmental Policy Act (NEPA) (36 CFR 800.3). In the second step, the Area of Potential Effects (APE) is established and historic properties are identified. During this step, information from interested parties is sought and the SHPO is consulted regarding the eligibility of historic properties in the APE (36 CFR 800.4). The Criteria of Adverse Effect is then applied to those properties that have been identified as NRHP-listed or -eligible properties and SHPO concurrence is obtained (36 CFR 800.5). In the fourth step, adverse effects identified in step three are resolved through avoidance, minimization, or mitigation, resulting in either a change to the proposed Project or execution of a Memorandum of Agreement (MOA) (36 CFR 800.6).

To determine whether an undertaking could affect NRHP-listed or -eligible properties, cultural resources (including archaeological, historical, and architectural properties) must be inventoried and evaluated for listing in the NRHP. For projects involving a federal agency, cultural resource significance is evaluated in terms of eligibility for listing in the NRHP. For a property to be considered for inclusion in the NRHP, it must meet the criteria for evaluation set forth in 36 CFR Part 60.4, as follows:

> The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of design, setting, materials, workmanship, feeling, and association and
>
> (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> (b) that are associated with the lives of persons significant in our past; or
>
> (c) that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master or that possess high artistic values or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> (d) that have yielded, or may be likely to yield, information important in prehistory or history.

Among other criteria considerations, a property that has achieved significance within the last 50 years is not considered eligible for inclusion in the NRHP unless certain exceptional conditions are met.

The following sections provide the prehistoric, ethnographic, and historic context for the Project area; the methodology for identifying and evaluating properties in the Project area for NRHP eligibility; and a discussion of the application of the Criteria of Adverse Effects.

State Regulations

California Environmental Quality Act

In accordance with Section 21084.1 of CEQA, the proposed Project would have a significant adverse environmental impact if it "causes a substantial or potentially substantial adverse change in the significance of a historical resource."

According to CEQA (Public Resources Code [PRC] Section 21084.1), historical resources include any resource listed or determined eligible for listing in the California Register of Historical Resources (CRHR). Properties listed or determined eligible for listing in the NRHP, such as those identified in the Section 106 process, are automatically listed in the CRHR. Therefore, all historic properties under federal preservation law are automatically historical resources under state preservation law. Historical resources are also presumed to be significant if they are included in a local register of historical resources or identified as significant in a qualified historical resource survey.

State law, as found in Title 14, California Code of Regulations (CCR) Section 4850, defines historical resource as follows:

> Any object, building, structure, site, area, place, record, or manuscript that is historically or archaeologically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural history of California.

For the purposes of CEQA, historical resource is further defined under PRC Section 15064.5 as a "resource listed, or determined eligible for listing, in the California Register." The cited statutes and guidelines specify how historical resources are to be managed in the context of projects such as the proposed Project. Briefly, archival and field surveys must be conducted, and identified historical resources must be inventoried and evaluated in prescribed ways.

California Register of Historical Resources

The NHPA mandated the selection and appointment of a SHPO in each state. Each SHPO is tasked with, among other duties, maintaining an inventory of historic properties. In California, the state legislature established additional duties for the SHPO. These include maintenance of the CRHR. Established by California PRC Section 5024.1(a) in 1992, the CRHR serves as "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent feasible, from substantial adverse change." According to California PRC Section 5024.1(c), the CRHR criteria broadly mirror those of the NRHP. The CRHR criteria found at California PRC Section 5024.1(c) are as follows:

> A historical resource must be significant at the local, state, or national level under one or more of the following four criteria:
>
> 1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States; or
>
> 2) It is associated with the lives of persons important to local, California, or national history; or
>
> 3) It embodies the distinctive characteristics of a type, period, region, or method or construction or represents the work of a master or possesses high artistic values; or
>
> 4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

The minimum age criterion for the CRHR, as with the NRHP, is 50 years. Properties that are less than 50 years of age may be eligible for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand their historical importance. In addition to meeting one or more of the historical significance criteria, the resource must possess integrity. Integrity is defined as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance."

There are several ways for resources to be included in the CRHR. A resource can be listed in the CRHR through a nomination and public consideration process. Additionally, a resource that is subject to a discretionary action by a governmental entity will be evaluated for eligibility for the CRHR. As previously stated, properties listed in or formally determined eligible for listing in the NRHP are automatically listed in the CRHR.

Local Regulations

The City of Malibu Zoning Ordinance Mission Statement (Section 17.02.030 of the Malibu Municipal Code [M.M.C.]) mentions that the City plans to preserve its natural and cultural resources. The City, however, does not maintain a local register of historic structures or sites.

City of Malibu General Plan

The City's General Plan was adopted in 1996 and last revised in 2013 with the adoption of the Housing Element Update (City of Malibu 1996c). The general plan is primarily a policy document that sets goals concerning the community and gives direction to growth and development. In addition, it outlines programs that were developed to accomplish the goals and policies of the general plan.

Conservation Element

The Conservation Element of the general plan serves as a guide for the conservation, protection, restoration, management, development, and appropriate and responsible utilization of the City's existing natural resources. The CON Element has the following goals and policies as well as implementation measures pertaining to cultural resources:

- CON Goal 2: Cultural Resources Preserved and Protected
    - CON Policy 2.1.1. The City shall identify, designate, protect, and preserve areas, sites, or structures of historic, cultural, paleontological, and/or archeological significance.
        - CON Implementation Measure 79. Require site surveys to be performed by qualified technical personnel for projects located in areas identified as archaeologically/ paleontologically sensitive. Data derived from such surveys shall be used to formulate mitigation measures for the project, and all such feasible mitigation measures shall be applied to the project.
        - CON Implementation Measure 83. Support the establishment of a museum/study center in the study area to display archeological/paleontological artifacts and present continuing programs to acquaint the public with the cultural and historic value of these resources.

City of Malibu Local Coastal Program

The City lies entirely within with the California Coastal Zone, as defined by the California Coastal Act. The act requires its goals and policies to be implemented by local government through the Local Coastal Program process. The Local Coastal Program is composed of two parts: a Land Use Plan (LUP) and a Local Implementation Plan (LIP); both were certified by the California Coastal Commission on September 13, 2002.

The LUP provides for the protection of cultural resources and contains a variety of policies that support cultural resource protection. LUP policies related to cultural resources are listed below.

- Policy 5.60: New development shall protect and preserve archaeological, historical, and paleontological resources from destruction and avoid and minimize impacts on such resources.
- Policy 5.61: Where development would adversely affect archaeological or paleontological resources, as identified by the SHPO, reasonable mitigation measures shall be required.
- Policy 5.65: The establishment of a museum/visitor center to display local archaeological and or paleontological artifacts and provide public educational information on the cultural and historic value of these resources shall be encouraged.
- Chapter 11, Archaeological/Cultural Resources, of the LIP contains provisions to avoid damage to or destruction of important cultural resources within the City.
- LIP Section 11.3 provides various steps for the evaluation of cultural resources and mitigation programs to reduce impacts. The section provides a detailed procedure for dealing with cultural resources if encountered during development activities.

City of Malibu Zoning Ordinance (M.M.C. Title 17)

M.M.C. Chapter 17.54 provides regulations and requirements for avoiding damage to or destruction of important cultural resources within the City. As required under 17.54.030, a cultural resource review is required for all projects prior to the issuance of planning approval and most development permits.

Paleontological Resources

Federal and State Regulations

Paleontology is the study of life in past geologic time as evidenced by fossil plants and animals. A number of federal statutes specifically address issues related to paleontological resources, their treatment, and funding for mitigation as a part of federally authorized or funded projects (e.g., the Antiquities Act of 1906 [16 USC 431–433], Federal-Aid Highway Act of 1935 [20 USC 78]). However, there is no federal legislation designed specifically for the management and protection of paleontological resources on nonfederal lands.

Under California law, paleontological resources are protected by CEQA; CCR Title 14, Division 3, Chapter 1, Sections 4307 and 4309; and PRC Section 5097.5. PRC Section 5097.5 prohibits excavation or removal of any "vertebrate paleontological site or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands." Section 30244 requires reasonable mitigation of adverse impacts on paleontological resources from development on public land.

Local Regulations

Please see the Historical and Archaeological Resources Local Regulatory Setting section for a discussion of local paleontological resources regulations, policies, and guidelines.

Existing Conditions

The Project area is located in a central section of the City of Malibu that encompasses the Malibu Civic Center area, including Malibu Lagoon and east to Surfrider Beach and west to the boundary of Pepperdine University. The build out area for the Project largely consists of single-family residences but also includes a small number of multi-family residential complexes, commercial buildings near Pacific Coast Highway (PCH), Cross Creek and Malibu Road, City and county government buildings near Civic Center Way, and educational institutions near Malibu Canyon Road.

Much of the Project area is geographically bound by the Santa Monica Mountains to the north and the Pacific Ocean to the south. Properties located at the northern end of the Project boundary are located mainly on hilly terrain, while properties to the south, especially near the Pacific Ocean, are located on mostly flat terrain. A number of the southernmost residential properties located on Malibu Road and Malibu Colony Road front directly onto the ocean.

PCH cuts through the southern end of the Project area with an east/west orientation.

Geologic and Paleontological Setting

The Project area is located on an old marine terrace at the base of the Santa Monica Mountains. The majority of the Project area is situated on surficial deposits of younger Quaternary alluvium, derived from either fan deposits from the mountains to the north or fluvial deposits from Malibu Creek to the east. The uppermost layers of these deposits typically do not contain significant fossil vertebrate remains, and there are no nearby vertebrate fossil localities from such deposits. However, there are some nearby exposures of older Quaternary deposits. These deposits may occur in the Project area at depths as shallow as 5 feet below the surface. Pipeline routes that traverse the mountains above Malibu also have the potential of encountering bedrock at shallow depths. These sediments are known to encompass paleontological resources.

The closest vertebrate fossil locality with similar older Quaternary deposits is Natural History Museum of Los Angeles County (LACM) site 1754, which is located well to the southwest of the Civic Center area on the east side of Zuma Creek, south of PCH, in the community of Malibu Riviera. This locality produced extensive fossil faunal specimens of late Pleistocene vertebrates (McLeod pers. comm.). Because paleontological resources are best preserved in fine sedimentary rocks such as limestone and terrestrial sediments such as Quaternary alluvium, the paleontological sensitivity of the Project area is considered high.

Prehistoric Context

The prehistoric occupation of Southern California is divided chronologically into four temporal phases or horizons (Moratto 1984).

- Horizon I, or the Early Man Horizon, began at the first appearance of people in the region (approximately 12,000 years ago) and continued until about 5000 B.C. Although little is known about these people, it is assumed that they were semi-nomadic, subsisting primarily on game.

- Horizon II, also known as the Millingstone Horizon or Encinitas Tradition, began around 5000 B.C. and continued until about 1500 B.C. The Millingstone Horizon is characterized by widespread use of milling stones (manos and metates), core tools, and few projectile points or bone and shell artifacts. This horizon appears to represent a diversification of subsistence activities and a more sedentary settlement pattern. Archaeological evidence suggests that hunting became less important and that reliance on collecting shellfish and vegetal resources increased (Moratto 1984).
- Horizon III, the Intermediate Horizon or Campbell Tradition, began around 1500 B.C. and continued until about A.D. 600–800. Horizon III is defined by a shift from the use of milling stones to increased use of mortar and pestle, possibly indicating a greater reliance on acorns as a food source. Projectile points become more abundant and, together with faunal remains, indicate increased use of both land and sea mammals (Moratto 1984).
- Horizon IV, the Late Horizon, which began around A.D. 600–800 and terminated with the arrival of Europeans, is characterized by dense populations; diversified hunting and gathering subsistence strategies, including intensive fishing and sea mammal hunting; extensive trade networks; use of the bow and arrow; and a general cultural elaboration (Moratto 1984).

Ethnographic Setting

The Project area is in the vicinity of Malibu Lagoon, which is within the territory of the Chumash Native American group (Grant 1978). The Chumash occupied the region from San Luis Obispo to Malibu Canyon on the coast, the four northern Channel Islands, and inland regions as far as the western edge of the San Joaquin Valley (Grant 1978). The Chumash were very advanced in their culture, social organization, religious beliefs, and art and material object production (Moratto 1984). Class differentiation, inherited chieftainship, and inter-village alliances were all components of Chumash society. The Chumash were one of the most advanced Indian groups in California. They were excellent craftsmen and known for well-made tools, bowls, and baskets. Of note are bowls and carvings of killer whales and other forms of sea life and effigies made from steatite. Sometimes the bowls were inlaid with colorful abalone shells. Other implements were made of sandstone, including large bowls. Flint, chert, and obsidian were used to make projectile points, drills, scrapers, choppers, and knives.

Baskets made by the Chumash were outstanding in workmanship and design. Baskets were used for gathering seeds, bulbs, and roots. Water was stored and carried in baskets that were waterproofed on the inside with naturally occurring tar, called asphaltum. Asphaltum was used extensively by the Chumash to caulk canoes, seal water baskets, attach shell inlay to bowls, and fasten arrow and spear points to shafts.

Fishhooks were made of abalone shell. The major use for the shell, however, was for decoration. It was lavishly inlaid on stone, bone, and wood. The surface to be decorated received a coating of asphaltum onto which was pressed the shell inlay. Giant Pismo clams were used for beads and money. Many tiny drilled shell beads were manufactured for use as decoration and a means of exchange.

Bone was used by the Chumash in creating many artifacts. It was used extensively for necklaces, especially when long tubular beads were required. Flutes and whistles were also made of bone, usually deer tibia. Whalebone was used for many tasks. A notable technological achievement of the Chumash was the planked canoe, or “tomol.” These were made of several planks that were sewn together at the seams with very strong twine, and the joints were sealed with asphaltum.

Humaliwo village, which roughly translates to "where the surf sounds loudly," was located at Malibu Lagoon.[1] This was one of the most important Chumash villages along the coast.

Historic Setting

The first European contact with the area occurred in 1542 when Spanish explorer Juan Rodriguez Cabrillo traveled northward during his voyage along the California coast. He briefly anchored near Malibu Lagoon at the mouth of Malibu Creek to replenish his water supply. After a number of Chumash in canoes greeted his ship's arrival, he named the coastal stretch of land Pueblo de las Canoas (Village of the Canoes).[2]

In 1776, more than two centuries after Cabrillo's voyage, Juan Bautista de Anza explored the inland portion of Malibu Creek and followed it westward toward the lagoon and beach. A young member of his crew, Jose Bartolome Tapia, would be rewarded years later, in 1805, for his distinguished military service with Rancho Topanga Malibu Sequit (Rancho Malibu), a Spanish land grant that encompassed 13,316 acres and much of present-day Malibu. Leon Victor Prudhomme, who married Tapia's granddaughter, acquired Rancho Malibu in 1848. When California achieved statehood in 1850, Prudhomme had difficulty verifying his land claim to the U.S. government and sold the property at a discounted price to Irishman Don Matteo Keller in 1857.[3]

After Keller's death in 1881, his son, Henry Keller, assumed ownership of the property. He sold it in 1892 to Frederick Hastings Rindge, son of a prominent Boston family. Rindge's significance in Southern California was distinguished by his founding of the Conservative Life Insurance Company (later Pacific Life Insurance) and his tenure as vice president of Union Oil and director of the Los Angeles Edison Electric Company (later Southern California Edison). He purchased Rancho Malibu, in part, to fulfill his desire for a farm near the sea. He would use the vast property of coastal land as a working cattle ranch where he also grew crops such as citrus, barley, and lima beans.[4]

When Rindge died unexpectedly in 1905, his wife, Rhoda "May" Knight Rindge, became the beneficiary of his $22 million estate, which included the Rancho Malibu property. During the time of her ownership, Malibu transitioned from a private enclave to a fashionable beachfront community. In addition, the State of California and local jurisdictions sought to build a road through Rancho Malibu to connect Los Angeles and Ventura Counties. However, Rindge spent considerable time fighting off eminent domain court cases regarding her exclusive ownership of the property. The U.S. Supreme Court eventually sided with the State of California in 1923, and after years of legal battles, construction began on the Roosevelt Highway (now the Pacific Coast Highway, or PCH) in 1926. Despite the court ruling, Rindge refused to sell the property and instead began to lease lots west of Malibu Lagoon to the burgeoning Hollywood elite. Swedish silent film star Anna Q. Nielson was the first of a string of film stars who would build beachfront retreats along the Malibu coast in the 1920s and 1930s.[5] Rhoda Agatha Rindge Adamson, daughter of May Rindge, commissioned the construction of the now-historic Adamson House in 1929. The house is noted for its decorative tiles, which were produced locally at Malibu Potteries, a ceramic

[1] Pitt, Leonard and Dale. 1997. *Los Angeles A to Z.* Berkeley, CA: University of California Press, p. 313.
[2] Willman, Minor. 1968. "Indian Paths Become Highways of History." *Los Angeles Times.* August 11.
[3] Marcus, Ben, and Wanamaker, Marc. 2011. *Malibu*. Charleston, SC: Arcadia Publishing, pp. 7–8.
[4] Ibid., pp. 8–9.
[5] Finke, Nikki. 1989. "Malibu Metamorphosis." *Los Angeles Times*. September 3.

tile manufacturing firm started by May Rindge in 1926 that employed 125 workers at its height.[6] In 1934, the Malibu Pier was opened to the public and became an important attraction for the area.[7]

Even with the increase in land values in Malibu, the onset of the Great Depression almost completely wiped out the fortunes of the Rindge estate. May Rindge's 1935 bankruptcy allowed residents to purchase lots that they previously leased while developers acquired other portions of the former rancho. With May Rindge's death in 1941, the era of Malibu as a vast, privately owned rancho had officially come to an end.[8]

As the original Malibu Rancho continued to be subdivided and sold through the 1940s, both homes and commercial buildings began to dot the rural landscape. Commercial enterprises prospered along the Roosevelt Highway with the ever-increasing auto traffic. With the completion of Malibu Canyon Road in 1953, the area became more accessible to the numerous visitors from the growing San Fernando Valley.[9] During the 1950s and 1960s, Malibu became synonymous with Southern California beach culture, which was popularized, in part, by the 1957 novel Gidget, written by Malibu resident Frederick Kohner. Hollywood produced numerous beach-oriented films in Malibu to tap into the popularity of surfing, which was a pop culture phenomenon by the 1960s.[10] This was also an era of constant growth as Malibu increased its population from 2,328 in 1950 to 7,376 by 1960. Modern style typified the architecture of Malibu during the 1960s and early 1970s. Malibu gained a major educational institution in 1972 when Pepperdine College (now Pepperdine University) relocated from its former location on Vermont Avenue in Los Angeles to an 830-acre campus off of Malibu Canyon Road.[11]

Through the 1970s and 1980s, the area between PCH and the beach was developed with large-scale homes and condominiums. Prompted by growth and environmental issues, the City of Malibu finally incorporated in 1991 to gain more local control over development.[12] The City currently extends 22 miles, from the city of Los Angeles, northward to the Ventura county line.[13] In 2011, Malibu moved its city hall into a building that had previously served as the Malibu Performing Arts Center.[14]

Methodology

In accordance with established practice, ICF International staff members consulted national, state, and local inventories of archaeological, architectural, and historic resources to determine the location of previously documented archaeological, historic, and architectural resources proximate to the Project area.

An area of potential effect (APE) was developed in accordance with 36 CFR 800.15(d). The APE is the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE, which

[6] Kaufman Koenig, Gloria. 1985. "Malibu's House of Living History." *Los Angeles Times*. August 25.
[7] Russell, Ron. 1989. "Malibu Pier May Get the Attention It Needs to Match Surroundings." Los Angeles Times. November 26.
[8] Willman, Minor. 1968. "Indian Paths Become Highways of History." *Los Angeles Times.* August 11.
[9] Johns, Al. 1960. "Malibu Area on Threshold of Real Estate Boom." *Los Angeles Times.* August 14.
[10] Champlin, Charles. 1986. "The Novel Origins of Gidget." *Los Angeles Times.* September 13.
[11] Marcus, Ben, and Wanamaker, Marc. 2011. *Malibu*. Charleston, SC: Arcadia Publishing, p. 117.
[12] Gebhard, David, and Robert Winter. 2003. *An Architectural Guidebook to Los Angeles.* Layton, UT: Gibbs Smith, p. 39.
[13] Pitt, Leonard and Dale. 1997. *Los Angeles A to Z.* Berkeley, CA: University of California Press, p. 313.
[14] Santa Cruz, Nicole. 2009. "Malibu Buys Center Where Streisand, Dylan Once Performed." *Los Angeles Times*. June 25.

is influenced by the scale and nature of an undertaking, may be different for different kinds of effects caused by the undertaking. The APE for all phases of the Project was drawn as the area within a 0.25-mile diameter around the proposed wastewater treatment facility and conveyance system. Once the APE was established, properties that were within a 1 mile radius of Project facilities and were more than 45 years of age were surveyed and photographed, and additional research was conducted, if necessary.

Records Search and Survey Results

Records Search Results

On May 8, 2013, a records search for resources within 1 mile of the proposed wastewater treatment facility was conducted at the South Central Coastal Information Center in Fullerton, California. A second records search for resources within 1 mile of the collection system pipeline for all three phases was conducted on October 29, 2013. This records search included historical site inventories, archaeological site records and reports, and historic U.S. Geological Survey topographic maps. National, state, and local inventories of architectural and historical resources were reviewed to determine the location of previously documented historical and architectural resources proximate to the Project area. These included standard sources of information, such as the NRHP, CRHR, California Historic Landmarks, and California Points of Historical Interest.

This records search determined that 148 studies were conducted within a 1-mile radius of the proposed wastewater treatment facility and collection and distribution systems. Of these, 28 studies were conducted within portions of the proposed wastewater treatment facility and conveyance system APE.

Previously Identified Cultural Resources

The results of the records search indicate that two NRHP-listed buildings are located within the APE (see Table 4.4-1). These are the Adamson House, located at 23200 Pacific Coast Highway, and the Stevens House, located at 23524 Malibu Colony Road. Properties that are listed in the NRHP are automatically listed in the CRHR. In addition, Malibu Pier is listed as a California Point of Historical Interest, which results in its automatic listing in the CRHR.

Table 4.4-1. Properties Listed in the NRHP or the CRHR

Name	Address/Location	Status
Adamson House	23200 W. Pacific Coast Hwy	Listed in the NRHP (10/28/1977 – ID #77000298) and as a California Historical Landmark (Plaque #966)
Stevens House	23524 Malibu Colony Road	Listed in the NRHP (1/9/2009 – ID #09000802)
Malibu Pier	23000 Pacific Coast Highway	Listed as a California Historical Landmark (Plaque #654)
Humaliwo Village CA-LAN-264	23000 Pacific Coast Highway	Listed in the NRHP (1/9/1976 – ID #76000492)
Source: ICF, 2013.		

The results of the records search indicate that 24 previously recorded prehistoric archaeological resources are located within the 1-mile record search area. This high density of prehistoric

resources is not surprising because coastal Malibu is well known as an area of high archaeological sensitivity. Three of these archaeological resources are known to be within the APE. Two previously recorded prehistoric archaeological resources, CA-LAN-266 and CA LAN-12715,[15] are located fewer than 300 feet west of the proposed location for the wastewater treatment facility. CA-LAN-266 is a sparse lithic scatter of chert flakes, while CA-LAN-12715 is a more substantial site, encompassing ground and flaked stone artifacts but no midden. A third site, CA-LAN-264, the Chumash village of Humaliwo, is located at Malibu Beach State Park, in an area surrounding the Adamson House. The site is adjacent to proposed pipeline routes in PCH and listed in the NRHP (see Table 4.4-1). However, it must be noted that the main bulk of the site is south of the proposed pipeline routes along PCH, and resources are probably already disturbed within the highway route proposed for pipeline installation.

CA-LAN-264, is one of the largest, deepest, and best-studied archaeological deposits in Southern California. It contains both a prehistoric cemetery, dating back 1,000 years, and a historic-era cemetery that was in use from 1775 to 1825. The Malibu site has been excavated several times in the past, particularly by UCLA teams in the 1960s and 1970s. The site lies on the east side of Malibu Lagoon and encompasses the Adamson House location, part of the Surfrider Beach parking lot, and an area north of PCH. Within the grounds of the Adamson House, archaeological deposits are more than 15 feet thick, consisting primarily of shell midden. Within the parking lot area of Surfrider Beach and the south shoulder of PCH, a prehistoric cemetery has been found; north of PCH, a proto-historic cemetery was located. More than 200 burials have been removed from the site (Dillon 1987:44). The portions of the site adjacent to PCH have probably been disturbed by grading and road construction, but it is possible that prehistoric deposits remain intact.

Public Participation

In accordance with 36 CFR 800.4(a)(3), on August 1, 2013, letters were sent to consulting and interested parties who may have knowledge of or concerns regarding historic properties in the area. These consulting and interested parties included the Los Angeles Conservancy, the Historical Society of Southern California, the California Coastal Commission, and the Adamson House and Malibu Lagoon Museum. As of November 20, 2013, no responses have been received (see Appendix F).

Please refer to the Historical and Archaeological Resources Technical Report for the Malibu Civic Center Wastewater Treatment Facility Project (March 2014) for more detailed information regarding public participation.

Sacred Lands Files Search and Native American Contact

A search of the Native American Heritage Commission's (NAHC's) Sacred Lands Files was requested on March 8, 2013. The NAHC sent a letter to ICF on September 30, 2013, indicating that there are Native American sacred places and/or sites in the vicinity of the APE. As part of the consultation process, the NAHC recommends that local governments and Project developers contact tribal governments and individuals to determine if any cultural places might be affected by the proposed action. Responses were received from Mr. Freddie Romero of the Santa Ynez Elders Council and Mr. Patrick Tumamait. Monitoring was recommended for the proposed Project by the Native American representatives (see Appendix F).

[15] CA-LAN 266 and CA-LAN-12715 are not listed in the NRHP or the CRHR.

Field Survey Results

A Phase 1 archaeological survey was conducted within the Civic Center Wastewater Treatment Facility footprint by Michelle Long, who meets the Secretary of the Interior's Professional Qualifications Standards. The field survey was conducted on May 17, 2013, by walking parallel transacts across the property at 15-meter intervals. Ground surface levels varied throughout the site, indicating disturbances from past modifications. Ground cover was sparse; ground surface visibility was good. No archaeological resources were found. The routes for the collection and distribution systems for each phase of the proposed Project were not surveyed because those elements would be built in existing paved streets, easements, or rights-of-way where the ground surface cannot be observed.

The built environment cultural resources survey process undertaken for the proposed Project was conducted per SHPO instructions. All properties that are more than 45 years of age in the APE were surveyed and photographed, where possible, and additional research was conducted, if necessary. Those properties under 45 years of age were not documented unless they exhibited potentially "exceptional" importance. According to Los Angeles County Assessor's data, 261 properties in the APE are more than 45 years old. Only 175 of the properties were recorded in the field; 86 were not visible from the public right-of-way. Of the 175 properties that were recorded, five appear eligible for the CRHR: the Webster School, the Pepperdine campus, the Malibu Coast Animal Hospital building, the Malibu Urgent Care Center building (formerly the Malibu Post Office), and the Hunt House.

The results of the survey and evaluation of resources within the APE can be found in Table 4.4-2, below. For a more detailed analysis of resources that are potentially eligible for the NRHP or the CRHR, please refer to the Historical and Archaeological Resources Technical Report for the Malibu Civic Center Wastewater Treatment Facility Project (March 2014) (see Appendix F).

Table 4.4-2. Properties Potentially Eligible for the CRHR

Name	Address/Location	Status
Webster School	3602 Winter Canyon Road	Potentially eligible for the CRHR (not the NRHP)
Pepperdine Campus	24255 Pacific Coast Hwy	Potentially eligible for the CRHR (not the NRHP)
Malibu Coast Animal Hospital	23431 Pacific Coast Hwy	Potentially eligible for the CRHR (not the NRHP)
Malibu Urgent Care Center (formerly the Malibu Post Office)	53656 Pacific Coast Hwy	Potentially eligible for the CRHR (not the NRHP)
Hunt House	24514 Malibu Road	Potentially eligible for the CRHR (not the NRHP)
Source: ICF 2013.		

4.4.2. Environmental Impact Analysis

Historical and Archaeological Resources

This section discusses the methodology, evaluation, and impacts related to historical, archaeological, and paleontological resources.

Thresholds of Significance

For the purposes of this EIR and in accordance with Appendix G of the State CEQA Guidelines, the proposed Project would have a significant environmental impact under CEQA related to historical resources if it would:

1) Cause substantial adverse change in the significance of a historical resource, as defined in Section 15064.5.

Section 15064.5(b) goes on to define "substantial adverse change," in relevant part, as follows:

1) Substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.

2) The significance of a historical resource is materially impaired when a project:

   A. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the CRHR; or

   B. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register or historic resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in a historic resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically significant; or

   C. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR, as determined by a lead agency for the purposes of CEQA.

3) Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of historic Properties with Guidelines of Preserving, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Stands for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource.

4) A lead agency shall identify potentially feasible measures to mitigate significant adverse changes in the significance of a historical resource. The lead agency shall ensure that any adopted measures to mitigate or avoid significant adverse changes are fully enforceable through permit conditions, agreements, and other measures.

For the purposes of this analysis, in accordance with Appendix G of the State CEQA Guidelines, the proposed Project would have a significant environmental impact on archaeological resources if it would:

1) Cause a substantial adverse change in the significance of an archaeological resource, as defined in Section 15064.5; or

2) Disturb human remains, including those interred outside of formal cemeteries.

In accordance with Appendix G of the State CEQA Guidelines, the proposed Project would have a significant environmental impact under CEQA related to paleontological resources if it would directly or indirectly destroy a unique paleontological resource.

Impacts – Historical Resources

Impact HR-1 – Would the Project Demolish or Materially Alter in an Adverse Manner those Physical Characteristics of a Historical Resource that Convey Its Historical Significance and Justify Its Inclusion in, or Eligibility for, Inclusion in the CRHR?

The majority of the Project components, including the wastewater treatment facility, would be constructed in street rights-of-way, easements, or disturbed areas. No historical resource listed or determined eligible for listing in the CRHR would be demolished or materially altered in an adverse manner such that the physical characteristics of the historical resource would no longer convey its historical significance.

Impact HR-2 – Would the Project Demolish or Materially Alter in an Adverse Manner those Physical Characteristics that Account for Its Inclusion in a Local Register of Historical Resources Pursuant to Section 5020.1(k) of the Public Resources Code or Its Identification in a Historical Resources Survey Meeting the Requirements of Section 5024.1(g) of the Public Resources Code, unless the Public Agency Reviewing the Effects of the Project Establishes by a Preponderance of Evidence that the Resource Is Not Historically or Culturally Significant?

The majority of the Project components, including the wastewater treatment facility, would be constructed in street rights-of-way, easements, or disturbed areas. No historical resource listed in a local register of historical resources or identified during a historical resource survey would be demolished or materially altered in an adverse manner such that the physical characteristics of the historic resource would no longer convey its historical significance. No impacts would occur.

Impact HR-3 – Would the Project Demolish or Materially Alter in an Adverse Manner those Physical Characteristics of a Historical Resource that Convey Its Historical Significance and that Justify Its Eligibility for Inclusion in the CRHR, as Determined by a Lead Agency for Purposes of CEQA?

The majority of Project components, including the wastewater treatment facility, would be constructed in street rights-of-way, easements, or disturbed areas. No historical resource determined eligible for listing in the CRHR by a lead agency for the purposes of CEQA would be demolished or materially altered in an adverse manner such that the physical characteristics of the historical resource would no longer convey its historical significance. There would no impacts on historical resources.

Impacts - Archaeological Resources

Impact AR-1 – Would the Project Cause a Substantial Adverse Change in the Significance of an Archaeological Resource, as Defined in Section 15064.5?

Two previously recorded prehistoric archaeological resources are located fewer than 300 feet west of the proposed location of the wastewater treatment facility. Although the field survey indicated that the ground surface in this area is highly disturbed, the proximity to previously recorded archaeological sites and the location in the Malibu coastal area suggest a high probability of encountering subsurface archaeological resources in this area. Additionally, the Humaliwo site is adjacent to a portion of the proposed pipeline route along PCH and a fourth archaeological site identified adjacent to the pipeline location on Malibu Road, just west of the intersection with Webb Way. The area of the Humaliwo site along PCH is particularly sensitive because of the known presence of human remains in the past, although these remains may have been removed.

Project construction in areas near known sites would have a moderate to high level of potential for encountering and inadvertently demolishing or materially altering in an adverse manner physical characteristics of archaeological resources that may be a eligible for inclusion in the CRHR and NRHP. This would be a potentially significant impact under CEQA and an adverse effect under Section 106 of the NHPA.

Additionally, there is a potential to encounter unknown subsurface resources in areas where excavations are required to install the collection and distribution system pipelines. Inadvertent destruction or alteration of significant resources would be a significant impact under CEQA and an adverse effect under Section 106 of the NHPA.

Impact AR-2 – Would the Project Disturb Human Remains, Including those Interred outside of Formal Cemeteries?

Prehistoric burials have been found adjacent to the Project site, including the presence of a former Humaliwo Village adjacent to the Phase 2 pipeline on the east side of PCH and a prehistoric village adjacent to the Phase 3 pipeline along Sweetwater Mesa Road. The area of the Humaliwo site along PCH is particularly sensitive because of the known presence of human remains in the past, although these remains may have been removed.

Project construction near known sites would have a moderate to high level of potential for encountering and inadvertently disturbing human remains, including those interred outside of formal cemeteries. This would be a significant impact under CEQA and an adverse effect under Section 106 of the NHPA. Upon completion of the wastewater treatment facility, property owners (*not the City)* would be required to excavate within their respective properties to provide sewer connections to the wastewater treatment system. These activities would have a similar (moderate to high) level of potential for encountering and inadvertently disturbing human remains. Although not addressed under this analysis, these potential impacts on undiscovered human remains would be addressed on a case-by-case basis as part of the City's permitting process. All property owners's excavations would be required to comply with the LCP and the City Municipal Code governing excavation activities.

Impacts – Paleontological Resources

Impact PR-1 – Would the Project Directly or Indirectly Destroy a Unique Paleontological Resource?

Project construction has a moderate to high level of potential for encountering and inadvertently damaging or destroying paleontological resources. The paleontological sensitivity of the Project area, including the older Quaternary alluvium and, in places, marine sediments, is considered high. Excavations in the undisturbed older Quaternary deposits that are present throughout the Project area, or the marine sediments in the mountains, have a good chance of uncovering significant vertebrate fossils. The destruction of any unique fossil resources would be a significant impact under CEQA.

4.4.3. Mitigation Measures

Historical Resources

No potential impacts on historical resources were identified; therefore, no mitigation measures are required.

Archaeological Resources

Mitigation Measure AR-1 below is proposed to mitigate impacts AR-1 and AR-2 identified above. Implementation of Mitigation Measure AR-1, archaeological and cultural resources monitoring, would be required for all ground-disturbing activity in the area of the proposed wastewater treatment facility. Additionally, monitoring would be required for excavations for pipeline construction, or other impacts, that take place adjacent to the Humaliwo site and along Malibu Road to the west of its intersection with Webb Way. Monitoring would not be required for the installation of underground pipelines installed in previously disturbed soils in or adjacent to existing roadways and easements, except at specified areas.

MM AR-1: A certified archaeologist and a culturally-affiliated Native American, with knowledge of cultural resources, shall monitor all initial Project-related ground-disturbing activities in the area of the proposed wastewater treatment facility as well as excavations or other impacts, should they take place, from pipeline construction adjacent to CA-LAN-266, CA-LAN-12715, CA-LAN-1417, or the Humaliwo site, CA-LAN-264. Monitoring should take place on both sides of Malibu Lagoon, specifically from Cross Creek Road east to a point on the other side of the Lagoon opposite the western end of the parking lot at Malibu State Beach, west beyond the Adamson House. This area may need to be extended, if significant materials are discovered during monitoring. In those areas that are not monitored by a certified archaeologist and a culturally-affiliated Native American, if buried cultural resources are uncovered during construction, all work shall be halted in the vicinity of the archaeological discovery until a qualified archaeologist can visit the site of discovery and assess the significance of the archaeological resource. Provisions for the disposition of recovered prehistoric artifacts shall be made in consultation with culturally affiliated Native Americans. The Native American Heritage Commission shall be the final arbiter should disagreement arise over the disposition of the recovered artifacts.

In the event of an accidental discovery of human remains in a location other than a dedicated cemetery, the steps and procedures specified in Health and Safety Code Section 7050.5, State CEQA Guidelines Section 15064.5(e), and PRC Section 5097.98 shall be implemented.

MM AR-2: Pre-excavation probings and/or borings ~~will~~shall be conducted along the proposed pipeline location in Malibu Road adjacent to CA-LAN-1417 to determine the extent of a potential midden identified during a past adjacent project. A certified archaeologist and a culturally-affiliated Native American, with knowledge of cultural resources, shall monitor the pre-construction investigation and determine if archaeologically significant artifacts are located in the proposed pipeline location and have the potential to be impacted by project construction.

Should archaeologically significant artifacts be discovered, all work in the area shall be halted until a treatment plan can be developed and implemented, following which construction ~~will~~would continue.

Paleontological Resources

The following measure would be implemented to ensure that potential impacts on unique paleontological resources that may be present would be reduced to a less-than-significant level.

MM PR-1: A qualified paleontologic monitor shall be required in any areas where excavation will occur below a depth of 5 feet. The qualified paleontologic monitor shall retain the option to reduce monitoring if, in his or her professional opinion, the sediments being monitored were previously disturbed. Monitoring may also be reduced if the potentially fossiliferous units, previously described, are not present or, if present, are determined by qualified paleontologic personnel to have a low potential for containing fossil resources.

The monitor shall be equipped to salvage fossils and samples of sediments as they are unearthed to avoid construction delays and be empowered to halt or divert equipment temporarily to allow removal of abundant or large specimens. Recovered specimens shall be prepared to a point of identification and permanent preservation, including washing to recover small invertebrates and vertebrates.

Specimens shall be curated into a professional, accredited museum repository with permanent retrievable storage. A report of findings, with an appended itemized inventory of specimens, shall be prepared and submitted to the City. The report and inventory, when submitted to the City, will signify completion of the program to mitigate impacts on paleontological resources.

4.4.4. Unavoidable Significant Adverse Impacts

No significant unavoidable adverse impacts on historical, archaeological, or paleontological resources are anticipated after implementation of the mitigation measures identified above.

Cultural resources are known to be present in the Project area, and although the potential for their discovery is moderate to high, implementation of the Mitigation Measures AR-1 and PR-1 identified above would reduce impacts on these resources, as well as previously undiscovered resources, to a less-than-significant level.

4.4.5. Cumulative Impacts

Historical Resources

Since the proposed project would not result in any adverse historical resources impacts, it would not contribute to any cumulative impacts on historical resources.

Archaeological Resources

The study area for cumulative impacts on archaeological resources is defined for the proposed Project as the City of Malibu area and surrounding foothills. In this area, construction activities associated with the proposed Project could disturb or destroy archaeological resources that may exist in the Project area and thereby contribute to the progressive loss of such resources. Several projects within the Prohibition ~~Area~~ Zone and, in particular, the vicinity of the proposed Rancho Malibu Hotel, are in areas that are known to contain sensitive cultural resources. The Rancho Malibu Hotel has incorporated the known portions of site CA-LAN-266 into the Project design to avoid as much of the site as possible, although the proposed hotel would be developed within a site that has high potential for physical alteration, damage, or destruction of cultural resources. If, during development of the proposed Project, cultural resources associated with CA-LAN-266 are discovered, the potential exists for the Project to contribute to a cumulatively considerable significant impact on this archaeological resource. Cumulative growth and development in the City of Malibu may also result in impacts if significant prehistoric or historical archaeological resources are found during construction activities.

It should be noted that a great deal of historic-period debris can be found during construction—items such as bricks, bottles, broken cups, and plates. However, this material is seldom a significant resource that would be eligible for the CRHR. Therefore, the potential for other individual projects to affect significant cultural resources is unknown, but given the number of projects in Malibu, it is probable that cumulative growth and development could have impacts on significant prehistoric or historical archaeological resources. If archaeological resources are encountered during development of the proposed Project, it could contribute to potentially significant cumulative impacts to these resources. However, with implementation of Mitigation Measure AR-1 and AR-2, potential Project-related impacts would be reduced to a less than significant level under CEQA. In addition, LIP Chapter 11 and M.M.C. Section 17.54 require Phase 1 archaeological studies to be conducted on any new development in undisturbed or known sensitive areas prior to any new development. Standard conditions of approval for all projects within the City include measures that require halting construction work if any cultural resources or human remains are discovered and having a qualified archaeological professional evaluate any discovered resources. Therefore, the incremental effects of the proposed Project, after mitigation, would not contribute to a significant adverse cumulative impact on archaeological resources, i.e., the proposed Project's contribution to significant cumulative impacts would be rendered less than cumulatively considerable under CEQA.

Paleontological Resources

The study area for cumulative impacts on paleontological resources is defined for the proposed Project as the City of Malibu area and surrounding foothills. In this area, construction activities associated with the Project could disturb or destroy paleontological resources that may exist in the Project area, thereby contributing to the progressive loss of such resources. Cumulative growth and

development in the City could have impacts if important paleontological resources are found during construction activities. Although the potential for other individual projects to affect important paleontological resources is unknown, given the number of projects in Malibu, it is probable that cumulative growth and development could have impacts on important paleontological resources. However, Mitigation Measure PR-1 would reduce potential Project-related impacts to a less-than-significant level. Therefore, the incremental effects of the proposed Project, after mitigation, would not contribute to a significant adverse cumulative impact on paleontological resources, i.e., the proposed Project's contribution to significant cumulative impacts would be rendered less than cumulatively considerable.