

Chapter 6. Cultural Resources, Social, and Economic Environment

6.1 Refuge Cultural Resources

The Service defines cultural resources as archaeological sites, historic places, objects of antiquity, cultural items, or traditional/religious values. This section provides a summary of the cultural and historic resources at Kakahai‘a NWR and the surrounding Kawela ahupua‘a. A discussion of the Native Hawaiian and Euro-American cultural history of the area is provided within the context of the broader history of Moloka‘i and the State of Hawai‘i.

6.1.1 Native Hawaiian Cultural History

The early settlement history of the island is a subject of some debate. Some believe that the first Polynesians arrived in Hawai‘i around 100-300 BCE from the Marquesas and were followed by Tahitian settlers around 1100-1300 CE who conquered the original inhabitants. Others believe that there was only a single, extended period of settlement. Polynesians developed a new Hawaiian culture while maintaining much of the social and political structure of their homeland.

Moloka‘i was first settled around 450-650 CE and was divided into two main districts – Ko‘olau, which comprised the northeastern side, and Kona, which made up the remainder of the island. These districts were further divided into ahupua‘a, a wedge-shaped Hawaiian land unit that traditionally subdivided resources from the uplands to the shore. Summers (1971) states that the “surviving traditional history of Moloka‘i is fragmentary” since the island’s smaller size rendered it “not of major political importance.” In ancient times, Moloka‘i was also referred to as Pule-o‘o (effective prayer). This name was acquired because the small population could not compete with larger islands during war periods and therefore the ali‘i of Moloka‘i largely relied on prayer for safety (Handy and Handy 1972).

The Kawela ahupua‘a, which means “the heat,” is an arid region on the southeastern portion of the island. Prehistoric use of Kawela is dated to approximately 1500 CE. During the 16th and 17th centuries, people used the coastal area for fishing and aquaculture (Weisler 1983). The broad fringing reef offshore contained abundant shellfish, seaweed, and fish. A low sand dune midden located west of Kakahai‘a Pond contains cultural remains of these groups including small scoop hearths with associated fishbone, marine and brackish-water mollusks, and crustaceans (Weisler 1983). In addition, Weisler and Kirch (1982) observed bone in the stratified layer from several bird species, including nēnē (Hawaiian goose), koloa mapū, pueo (Hawaiian short-eared owl), and ‘alae ke‘oke‘o. The presence of these particular species implies that marshlands were present in the area at that time.

Permanent, large-scale occupation of the Kawela area began in the 18th century. Residences were mostly concentrated along the ridgelines below the 115-foot contour. This elevation offered safety from flooding, exposure to the tradewinds, and allowed for high agricultural productivity along the Kawela Gulch and on the adjacent coastal flats (Weisler and Kirch 1982). Individual kauhale (housing complexes) within the community contained from 6-35 architectural features constructed of

stacked, dry-laid unmodified stone. A residential complex consisted of several structures ranging from pole-and-thatch houses to cooking shelters and craft areas. Despite limited water supply, Hawaiians used the well-drained soil of the Kawela Stream delta to cultivate sweet potatoes. Weisler and Kirch (1985) suggest that the two water ditches in the Kawela floodplain did not have continuous discharge and therefore the irrigation system probably only intermittently supported sweet potato plantings, but not wetland taro. Slash-and-burn agriculture for sweet potato cultivation was also conducted on land above the residences (Weisler 1983).

Early Hawaiians constructed one inland fishpond (Kakahai‘a) as well as four coastal fishponds (Kanoa, Kaoaini, and two unnamed ponds) in the Kawela region (Weisler and Kirch 1985). Fishponds, which were considered sacred due to their spiritual power, were an important element of Hawaiian social and cultural life (Farber 1997). The Kakahai‘a fishpond is located in the southeastern corner of the Kawela ahupua‘a. This small inland fishpond, or loko pu‘uone, is a brackish pond connected to the sea by a ditch and fed by several flowing inland streams (Weisler 1983, Estioko-Griffin 1987). Radiocarbon dating suggests that the pond area was initially used by Hawaiians as early as 1500 CE; however, stana analysis shows that the area was probably not utilized as a fishpond until the early 1700s when more permanent settlement occurred in the adjacent uplands (Weisler 1983).

In 1736, the final battle of a failed takeover by Kapi‘ioho o Kalani, son of Kualii, the chief of O‘ahu, and Alapainui from Hawai‘i Island, was fought on the plains of Kawela. Fornander (1880) wrote:

‘This famous battlefield may still be seen in the place described, where the bones of the slain are the sports of the winds that sweep over the sandy plain, and cover or uncover them, as the case may be. The numerical strength of the two opposing armies is not mentioned in the legends; but to judge from the multitude of bones and the number of skulls that are bleaching in the sun when a strong north wind has removed their sand covering, the numbers engaged on each side must have been reckoned by thousands.’

Weisler (1983) theorizes that use of the fishpond ceased in the early 1800s. This idea is supported by the presence of nonmarine mollusks in the upper stratigraphic layer. Although the species were not positively identified, two species (*Thiara granifera* and *T. tuberculata*) “not proven to be native in Hawai‘i” are present at Kakahai‘a and also found in other southern fishponds along the coast of Moloka‘i (Weisler 1983). By 1851, the traditional system of fishponds throughout the Hawaiian Islands was largely abandoned (Farber 1997).

6.1.2 Euro-American Cultural History

British explorer Captain James Cook is credited with being the first European to visit Hawai‘i in 1778 on the *H.M.S. Resolution*. There is some evidence that Spaniards, who first crossed the Pacific Ocean in 1522, also made landfall in Hawai‘i but they never correctly mapped or claimed credit for their accomplishment. The first interaction between residents of Moloka‘i and Europeans occurred in 1786 when Captain George Dixon anchored off the coast. The island was rarely visited by foreigners until the establishment of a Protestant mission in 1832 (Spalding 1983).

Contact with Europeans irrevocably changed the lives of Native Hawaiians. These contacts began a series of serious plagues for which they had no immunities. In time, the Native Hawaiian population would plummet from 300-500,000 in 1778 to only 30,000 by 1900. Moloka‘i experienced a smaller population decline after western contact compared to other Hawaiian islands which can be attributed to the minimal interaction with westerners and subsequent smaller percentage of disease transferral. Summers (1964) argued that the population decrease may have been attributed to natives leaving to larger islands in the archipelago.

As trade and shipping brought Hawai‘i into contact with a wider world, it also enabled the acquisition of Western goods, including arms and ammunition. In 1795, Kamehameha I from the Island of Hawai‘i assembled the largest army the Hawaiian Islands had ever seen, with over 10,000 men and 1,200 war canoes, equipping them with European muskets and cannon. He established the Kingdom of Hawai‘i with the subjugation of the smaller independent chiefdoms of O‘ahu, Maui, Moloka‘i, Lāna‘i, Kaua‘i, and Ni‘ihau into one unified government over the period 1795-1810. On Moloka‘i, Kamehameha I landed his invading force near Kawela. It is estimated that his canoes stretched for over four miles. Local legends tell of ghost warriors (known as night marchers) still walking the ancient paths with their torches, talking and making noises on their way to battle (Crowe 2002). The defeated warriors took refuge at the pu‘uhonua (place of refuge) in Kawela. A burial mound of the warriors killed in this battle is located in the eastern portion of the Kawela ahupua‘a (Summer 1971).

Kamehameha made Lahaina, Maui, the new capital of the Kingdom of Hawai‘i. For nearly 5 decades, Lahaina served as the center of government. Although salt was an early island export, ‘iliahi (sandalwood) was the first major item of external trade. By 1805, ‘iliahi had begun to reach China, and by 1809 it was a regular trade commodity. In 1810 American merchants reached an agreement with Kamehameha for a monopoly on the ‘iliahi trade in exchange for a quarter of the profits. These merchants took a convoy of ‘iliahi ships to China in 1812, making a good profit on their sales. This agreement stood for only one shipment, though, and shortly thereafter the War of 1812 resulted in a British blockade of Hawai‘i for 2 years (Daws 1989).

When trade resumed in 1814, King Kamehameha claimed the trees as his own in a near-monopoly and organized the cutting and transport of ‘iliahi under his public works program. A 75-foot long boat-shaped “lua na moku ‘iliahi” (sandalwood measuring pit) still remains in central Moloka‘i. A boat of foreign goods was bought by exchanging the amount of ‘iliahi that would fill the pit. The ‘iliahi trade had serious consequences on Hawaiian culture. The income encouraged the transition to a cash economy, the purchase of luxury goods, and became the main source of revenue for the ali‘i. (Gast and Conrad 1973).

Kamehameha I's death in 1819 triggered a dramatic change in the social, political, and religious systems of the country. Members of the ali‘i had acquired many of the outward manners and dress of European civilization during the final years of Kamehameha's reign. His successor Liholiho (Kamehameha II) ended the kapu system and ordered the destruction of images and heiau throughout the Kingdom (Gast and Conrad 1973, Judd 1966).

Kamehameha II fell into debt with ‘iliahi traders and by 1826, a general tax on the Hawaiian people was imposed to pay off some of the collective debt of the king and ali‘i. As logging continued, stands of ‘iliahi were harder to find. Fires were set in forested areas to detect the ‘iliahi trees by their sweet

scent. While mature trees could withstand the fire, the flames wiped out new seedlings. By 1830, the ‘iliahi trade had completely collapsed (Judd 1966).

6.1.3 The Mahele, 1848-1851

Among other things, foreigners speculating in Hawaiian commodities demanded private ownership of land to insure their investments. Influenced by these foreign investors, King Kamehameha III instigated the Great Mahele of 1848 and drastically altered the Hawaiian land system by redistributing land ownership between the kings, ali‘i, foreigners, and maka‘ainana (common people who were fishermen, craftsmen, and farmers). Once lands were made available and private ownership was instituted, the maka‘ainana were able to claim the plots on which they had been cultivating and living, if they had been made aware of the foreign procedures for Land Commission Awards (LCA). These claims could not include any previously cultivated or presently fallow land, stream fisheries or many other resources necessary for traditional survival (Kelly 1983, Kame‘eleihiwa 1992, Kirch and Sahlins 1992).

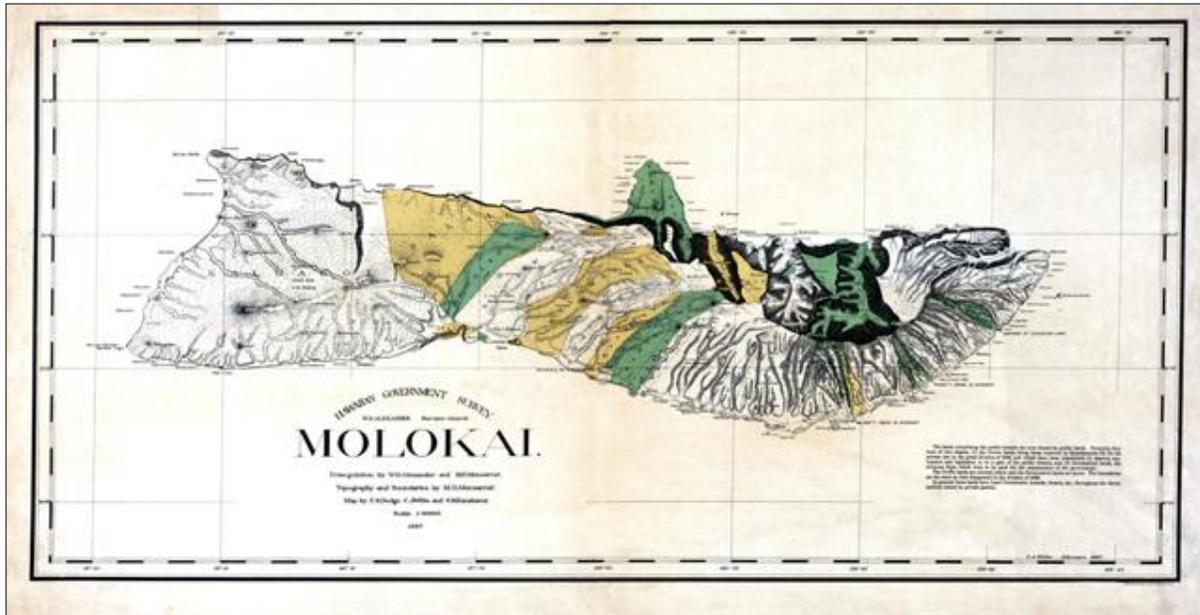
This division transformed a vast majority of Moloka‘i into pastureland grazed by sheep and cattle (Spalding 1983). Furthermore, the division affected the social and cultural environment since individuals were allowed to own private property for the first time (Weisler and Kirch 1985, Farber 1997). Land claims to the Board of Commissioners in the Kawela ahupua‘a offer written records and insight into the historic land use during the mid-1800s. Claims were concentrated on the immediate area of the floodplain and delta (Weisler and Kirch 1985). In 1859, the two districts were abolished and the entire island was classified as the Moloka‘i district (Greene 1985).

6.1.4 Post-1850s History

Moloka‘i achieved notoriety in 1865 when King Kamehameha V approved *An Act to Prevent the Spread of Leprosy*, instituting a century-long policy of forced segregation of persons afflicted with Hansen’s disease to a remote, fairly inaccessible finger of land on the north side of the Island. To the south, the Kalaupapa Peninsula was cut off from the rest of Moloka‘i by a sheer cliff about 2,000 feet high. Once the law passed, the government proceeded to purchase lands in the isolated Kalaupapa area and move the residents to other homes. The village of Kalawao became home to thousands of Hansen’s disease victims forcibly moved there from throughout the Kingdom. Father Damien deVeuster, a Catholic missionary priest from Belgium, arrived at Kalaupapa in 1873 and served the patients until his death in 1889 (he was canonized as a saint in 2009). The forced segregation policy continued until 1969 (NPS 2010).

In the 1880s, George Trimble owned a parcel adjacent to Kakahai‘a Pond, and leased 50 acres nearby in the alluvial plain for the cultivation of sugarcane (Cooke 1949) for the Kamalo Sugar Mill (Judd 1936:10). Trimble would load his sugarcane onto a small flatbed barge and tow the cargo by draft animals along the shallow shoreline to the mill 5 miles east at Kamalo (Cooke 1949). In 1897, the remaining Moloka‘i holdings of the Bernice P. Bishop Estate were purchased by the newly formed Moloka‘i Ranch and immediately its headquarters were built on the Kawela flats. A year later, the ranch formed the American Sugar Company, and leased all of its lands to the new corporation with the intent to establish a sugar plantation. The venture failed within a year, and efforts shifted towards the raising of cattle and sheep.

The Kingdom of Hawai'i lasted throughout most of the 19th century, when the expansion of the sugar industry meant increasing U.S. business and political involvement. Through the *Reciprocity Treaty between the United States of America and the Hawaiian Kingdom of 1875*, the United States obtained exclusive rights to Pearl Harbor in exchange for allowing Hawaiian sugar to enter the United States duty-free. In 1893, Queen Lili'uokalani was deposed in a coup d'état led by American citizens supported by U.S. Marines. The sovereignty of the Kingdom of Hawai'i was lost to a Provisional Government led by the conspirators, later briefly becoming the Republic of Hawaii [sic], before eventual annexation in 1898 as a U.S. territory (Greene 1985).



Moloka'i 1897, surveyed by W.D. Alexander and M.D. Monsarrat

The introduction of horses and cattle at the end of the 19th century spurred new ranching operations. Cattle hides, tallow, and meat became important commodities of local and international trade. In 1897, a group of businessmen purchased 70,000 acres on the western half of Moloka'i and leased another 30,000 acres from the government to raise cattle, horses, mules, and sheep. They leased some of their property to Libby and Del Monte for pineapple cultivation between 1923 and 1985 (Cowan-Smith and Stone 1988).

Beginning in the mid to late 1800s, changing land uses in the region resulted in significant landscape alterations. Vegetation removal by cattle, sheep, goats, and deer caused extensive erosion from upland areas, shoreline accretion, extension of the alluvial plain, and infilling the pond. Weisler and Kirch (1982) estimated that since 1880, the Kawela shoreline increased by 1 foot per year. Although some farmers remained on traditional land east and west of Kawela Stream, upland residences gave way to Western-style habitation along the coast. In 1901, Kakahai'a pond was utilized to produce rice and several residences were established along the pond edges to facilitate cultivation (Shallenberger 1977). During this time, the pond was much larger, with surface water areas estimated at 31 acres. Rice production in Kawela ceased in the late 1940s, although the pond is still referred to as "rice patch" by local island residents (Weisler 1983).

The Moloka‘i District was incorporated into the County of Maui in 1909 (with the exception of the Kalaupapa Peninsula which became the Kalawao District). Inter-island steamers began carrying freight, produce and passengers to and from Moloka‘i in the early 1900s. Ship travel became less popular with the opening of Ho‘olehua airport in 1928; and in 1929, the Inter-Island Airways inaugurated their first regular air service to other islands (Maui County Planning Department (MCPD) 2001). In 1959, Hawai‘i became the 50th state of the United States.

The Kawela area was used to raise pigs and produce kiawe charcoal until 1975. In 1980, the Kawela Plantation Development Associates began construction of a 6,000-acre farming community on the upland ridges of the watershed, further increasing siltation to the pond (Shallenberger 1977, Greene 1985).

6.1.5 Archaeological/ Cultural Surveys

Few archaeological and cultural investigations had been conducted on the southeastern portion of Moloka‘i and throughout the entire island prior to the 1980s (Weisler and Kirch 1982). An early study by Stokes (1909) surveyed the heiau and ko‘a of Moloka‘i. Phelps (1937) conducted a study of regional settlement patterns on the island during the early 1800s. This study noted the remains of Kawela Pu‘uhonua, which was used by defeated warriors from the nearby battlegrounds. Summers (1971) recorded many cultural sites throughout Moloka‘i, including nine sites in the Kawela ahupua‘a. Among those listed were the Kawela battlefield, a heiau, petroglyphs, a family residence and shrine, a burial mound, a pu‘uhonua and/or pu‘ukaua (a fortification), three coastal fishponds, and Kakahai‘a fishpond.



Residence site near Kakahai‘a Pond © Arleone Dikken-Young

Six archaeological studies have been conducted in the Kawela area. Environmental Impact Study Corp. (1979) conducted both surface and subsurface testing near the Kanoa fishpond for the development of the Kanoa Beach lots. No cultural material was encountered during this study, besides the known fishpond.

Weisler and Kirch (1982, 1980) conducted an extensive survey of the Kawela and Makakupa‘ia Iki ahupua‘a for the Kawela Plantation Development Associates. Identifying 499 late prehistoric Hawaiian features and recording 182 sites, the “Kawela Archaeological Project” documents an exceptionally high density of archaeological remains in the dry upland ridge environment. Archaeological features in the immediate vicinity of Kakahai‘a Pond NWR include petroglyphs, stone platforms (structures and burials), shelters for temporary and permanent habitation, natural cave shelters, agriculture terraces, a holua slide, and numerous religious shrines. The Kawela Complex is listed on both the National and Hawai‘i State Register of Historic Places (MCPD 1984).

Weisler (1983, 1981a) also conducted a pedestrian surface survey and excavated 11 subsurface auger holes in two transects specifically for Kakahai‘a NWR. Besides the fishpond, no prehistoric sites were documented within the Refuge boundaries. Sedimentation from upland habitats and seasonal flooding of the pond area is suspected to have buried any potential resources (Weisler 1983).

However, archaeologists at the State Historical Preservation Division stated that because Weisler’s (1983) report was drafted prior to current State standards, restoration work conducted on the Refuge property may require an additional archaeological inventory survey (Kirckendall pers. com.).

Estioko-Griffin (1987) conducted an islandwide inventory of fishponds, listing Kakahai‘a as a loko pu‘uone (fishpond isolated from the ocean by a mound of sand). DHM Planning Inc. et al. (1990) conducted an extensive Hawaiian fishpond study for the DLNR Historic Preservation Division. While this inventory also listed Kakahai‘a as a loko pu‘uone, it did not provide an in-depth study of the fishpond.

Three recent sites, dated post-1940, were recorded during a Refuge boundary survey in 1975 and 1976 by R.M. Towill Corporation. Weisler (1983) revisited these locations and suggested they be avoided during any land modification on the Refuge. The historical sites include the following:

Abandoned Residence: An abandoned residence was found immediately east of the pond. The site includes a small, wood-frame house, a separate cookhouse, and a small shack; however, because the structures were demolished around 1976, only the foundation of a barbeque remains.

Piggery and Charcoal Production: North of the abandoned house and east of the pond, is a piggery and charcoal manufacturing site. The 10 portable ovens noted during the 1976 boundary survey were removed prior to the 1983 survey, leaving only piles of small kiawe charcoal fragments. The ovens mostly likely burned kiawe into charcoal for export to Honolulu markets. The site also includes a 40 foot by 20 foot concrete foundation that has a pair of parallel troughs for feeding and watering pigs.

Residence and Piggery: In the northwest corner of Refuge, a residence, piggery, and well were documented. A narrow dirt road separates the well from the property and an earthen berm which probably created a pond for rice cultivation. The berm is bisected by a ditch from the well to the residence. Also observed at the site was a hand-carved wooden net float, as well as cans and bottles dated between 1943-1983.

6.1.6 Paleontological Resources

Unless found in an archaeological context, “nonfossilized and fossilized paleontological specimens, or any portion or piece thereof,” are not considered archaeological resources (16 U.S.C. 470bb(1)). Paleontology resources include life forms that existed in prehistoric or geologic times, as represented by the fossils of plants, animals, and other organisms. Ziegler (2002) defines fossils as “biological remains, whether permineralized or not,” that were “deposited in the islands before the time of European Contact (1778 CE) *and* are not definitely components of prehistoric archaeological midden (human food refuse and other cultural debris).” Paleontological fossils have been uncovered in a variety of sites throughout Hawai‘i, including sand dunes, sinkholes, lava tubes, and pond deposits (Ziegler 2002).

Ziegler (2002) states that the only fossiliferous sites on the island of Moloka‘i are coastal sand dunes. The remains of several bird bone species dating back to 1500 CE were uncovered by Weisler (1983) at a low sand dune west of Kakahai‘a pond. Avifaunal species identified from prehistoric deposits within the dune include the koloa mapū and ‘alae ke‘oke‘o, which were probably confined to the

marsh habitat, as well as nēnē and pueo, which may have utilized the surrounding grassy area. Because Rallidae birds prefer marshes, ponds, and lakes, Weisler (1983) believed that the presence of these bones implied that the area contained marshlands during and prior to 1500 CE. Prehistoric deposits within the dune also contained evidence of other bird species; however, Weisler (1983) concluded that these birds were not associated with the pond area. Although Weisler (1983) does not provide a thorough analysis of whether the avifaunal remains uncovered in the Kawela were considered cultural debris, his later critical review (1989) stated that nēnē bones found in the dune “may have been culturally deposited.”

Auger holes excavated by Weisler (1983) showed that the pond layer (Stratum II), although predominantly composed of sand and silt, also consisted of nonmarine mollusks and seeds of the genus *Spirpus*. The nonmarine mollusks identified include *Theodoxus neglectus*, *Tryonia protea*, *Thiara granifera*, and *Thiara tuberculata*. The thickness of the nonmarine mollusk layer increases toward the pond area. In addition, the marine layer (Stratum III) of the most inland auger hole contained two chunks of coral (*Porites* sp.) at 10 feet below the surface dating between 1560-1875 BCE (Weisler 1983).

6.2 Social and Economic Setting

This section discusses the social and economic environment surrounding the Kakahai‘a NWR, within the context of the island of Moloka‘i, the County of Maui, and the State of Hawai‘i. Kaunakakai, the island’s major population and commercial center, is located about midway along the south coast. A major tourist destination area is located at Kaluakoi, on the western end of the island. There are small plantation communities of Maunaloa and Kualapu‘u in the central plain, as well as rural Hawaiian homestead settlements of Ho‘olehua and Kalamaula. There is also a settlement pattern along the southeast coast which becomes more rural and dispersed as it extends from Kaunakakai to Halawa Valley (MCPD 2001).

6.2.1 Population

The 2010 Census data shows the population of Moloka‘i has decreased over the past decade with a decline from 7,404 to 7,345 since 2000. Much of the decline is attributed to Kalaupapa, where only about 18 patients remain in the Hansen’s disease settlement. Because Kalaupapa is located in Kalawao County, its census figures are not part of Maui County. Kaunakakai, which is located 5 miles east of the Refuge, is the main population and commercial center of Moloka‘i. Approximately 2,726 people resided in the 2.03 square miles of Kaunakakai in 2000. Data for 2010 shows a decrease to 2,603 (U.S. Census Bureau 2010).

Table 6.1. Population figures for selected areas.

Area	Population (1990)	Population (2000)	Population (2010)
Moloka'i Island	6,587	7,404	7,345
Kaunakakai	2,658	2,726	2,603
Maui County	100,374	128,094	154,834
Hawai'i State	1,108,229	1,211,537	1,360,301

Source: U.S. Census Bureau 2010

6.2.2 Housing

In Kaunakakai, the estimated median house or condo value in 2009 was \$298,765 (it was \$148,500 in 2000). The median family income for the Island of Moloka'i in 2009 was \$41,528. At 12 percent in January of 2011, Moloka'i has the highest unemployment rate of all the Hawaiian Islands. The most recent income figures around the region of the Refuge are shown below in Table 6.2 (DBEDT 2010, Census 2010).

Table 6.2. Census Bureau estimated median and per capita income figures, 2009.

Area	Median Family Income	Per Capita Income
Kaunakakai	\$47,863	\$20,112
Island of Moloka'i	\$41,528	\$20,126
Maui County	\$72,367	\$29,121

Source: U.S. Census Bureau 2010

The Census Bureau estimated that Maui County residents paid an average of \$24,204 per year in mortgage costs, consuming 42.04 percent of their income. The generally accepted definition of affordability is for a household to pay no more than 30 percent of its annual income on housing. Families who pay more than 30 percent of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care. The majority of Maui County residents are paying an unsustainably high percentage of their income toward housing (MCPD 2006, 2010).

6.2.3 Education

The following schools are located on the island of Moloka'i: one preschool, four public elementary schools, one private school grades K-8, one public intermediate school, one public high school, and one private school with preschool to high school students (Maui County Office of Economic Development 2005).

In 2005, the Census Bureau estimated that 86.6 percent of County residents age 25 or older have graduated high school and 23.8 percent have a bachelor's degree or higher. While the high school graduation rate of Maui County is slightly higher than that of the remainder of the United States, the percentage of residents with higher-level degrees is lower.

The University of Hawai‘i (UH) Maui College, Moloka‘i education center in Kaunakakai offers courses leading towards certificates and associate degrees in five primary majors: Liberal Arts, Agriculture and Natural Resources, Business Careers, Human Services, and Allied Health/Nurse Aide Training. It also serves as a receive site for selected bachelors and masters degree programs from UH Mānoa, UH West O‘ahu, and UH Hilo via interactive television classes. Of the 225 students, 75 percent are of Native Hawaiian ancestry – the highest percentage of any campus in the UH system.

6.2.4 Economics

Moloka‘i has Hawai‘i’s highest rate of residents – estimated at 30 percent – who rely at least in part on subsistence practices to feed themselves through farming, fishing, and hunting. Cattle ranching and farming, mostly on the central and western portions of the island, are currently the central components of the Island’s economy. Small-scale agricultural patches growing coffee beans, papaya, macadamia nuts, vegetables, and melons can be found scattered throughout Moloka‘i (Moloka‘i Community 2008).

Since its collapse in the early 1980s, no large-scale agriculture has been able to replace the pineapple industry on Moloka‘i, which was historically the central element of the island’s economy. More recently, the agricultural industry, especially vegetable and melon farms, has been have adversely impacted by farming developments on O‘ahu. However, the MCPD reported that some growth in the sector has occurred from seed corn farming, aquaculture, and forestry. The Moloka‘i Ranch closure in 2008 devastated the community when it laid off more than 120 people, representing nearly the entire labor force of the island’s largest private employer at the time (MCPD 2010).

Tourism does not generate significant income to the Moloka‘i economy as it does on the other Hawaiian Islands, the Hawai‘i Department of Business, Economic Development, and Tourism estimated that the number of visitors to the island in 2009, including domestic and international guests, was 48,339, down 29.8 percent compared to the previous year. The average daily census fell 22.2 percent to 647 visitors per day in 2009. Total visitor expenditures for the island in 2010 were estimated at only \$2.5 million (DBEDT 2010).