

Kaelepulu Wetland

Background Information

Hugo de Vries and Cindy Turner de Vries own the 16.605 acre fee simple property that contains the Kaelepulu Wetland, which they purchased in 2004. The property is located at the Diamond Head/Mauka end of Enchanted Lake in Kailua. Approximately 5.8 acres of the property is designated wetlands. Approximately 7.9 acres are under water and contiguous with Enchanted Lake, and approximately 3 acres are dry land with elevations of 10 to 14 feet. The owners built a single family home on a small portion of the dry land that fronts Kiukee Place.

The 5.8 acre portion of the property that is designated wetlands was created as mitigation for fill activity that occurred without the necessary federal permits many years ago. The Army Corps of Engineers has oversight of maintenance activities in the wetland. The U.S. Department of the Interior, Fish and Wildlife Service, oversees the wildlife aspect of the wetland.

Low islands interspersed with waterways are a primary feature of the wet lands. The wetland provides habitat for several species of waterbirds, including Hawaiian Stilts, Gallinules, Coots and Herons.

The property is located in State of Hawaii, DLNR, Conservation District, General Subzone. The property is not located in a City and County of Honolulu Special Management Area.

Existing Permits

Department of the Army Permit No. PODCO 2151, issued June 1991.

Approximately 5.78 acres of the parcel are designated in perpetuity as wetland as mitigation for illegal fill activity by the previous owner. The low islands in the mitigation area were created in 1995. Continuing maintenance of the wetland is a part of the requirements.

Existing Land Use

5.78 acres of the parcel are designated wetland.

An area of approximately 2.9 acres is fast land where the owner's home is located.

The remaining 7.925 acres of the parcel is lake, stream, or fast land covered with scrub vegetation on the east side of the stream.

Title 33 Requirements

Title 33 Code of Federal Regulation, Part 322 Permits for Structures or Work in or Affecting Navigable Waters of the United States and Part 323, Permits for Discharges of Dredged or Fill Material into Water of the United States do not apply as, although Kaelepulu Pond (Enchanted Lake) is a navigable water, there will not be discharges of dredged material into the pond.

Historical and Cultural Resources

Legends and History

The subject parcel is located in what was once Kaelepulu fishpond, which was formerly a very important fresh-water pond located about 2/3rds of a mile from the shore.

Ka'elepulu Pond once covered nearly 190 acres with an additional marsh area of 90 acres.

Records from 1846 list 31 parcels of land in cultivation. Taro, and later rice, was grown in the marsh lands around the pond. By the 1920s, the entire area had become part of a dairy farm.

Based on Oral histories, Kailua means "Two seas," probably referring to Kawai Nui and Kaelepulu, which were both once bays. Kawai Nui Marsh was considered male and Kaelepulu Pond was female. They mated at Kawailoa giving the area great mana. The ponds joined beneath the lookout point of Pu'u o 'Ehu.

At the time of the Mahele, Kailua, Kaneohe and Waimanalo were considered prime lands and were awarded to royalty. In 1858, Princess Victoria Kamamalu was awarded title to the ili of Kaelepulu. She died without a will in 1866 and the land passed to her father and then to Princess Ruth.

In 1880, Princess Ruth began to lease lands around the Kaelepulu Pond to dozens of Chinese farmers. Many of the former taro fields were replanted with rice. Some planted sugar cane around the pond.

Princess Ruth named her cousin Princess Bernice Pauahi Bishop as heir to her lands, and when she died in 1884, the Kaelepulu ili became a part of the Bishop estate.

The Alexander map of 1884 shows a water area of 190 acres and an additional marsh area of 90 acres for Kaelepulu pond. There was an outlet on the sea side and the pond was limited by natural contours and earth embankments. There were taro patches between the pond and the stream from the Kawainui marsh. The stream was diverted into patches and from the taro terraces ran into Kaelepulu. When the taro land was being dried, there was a ditch which could be used to bring water from the Kawainui stream to the pond.

In a 1911 document, it was referred to as "the famous pond of Kaelepulu where Makalei, the fish attracting stick stood."

In 1939, Mrs. Charles Alona described the fishpond as once being much larger and very clean. According to Mrs. Alona, the people of that locality always saw to it that the ponds were kept clean in the olden days. Fat mullet, awa, ahole and oopu fish were found there and much limu kala-wai. This limu was eaten with fat fish and much liked with awa fish. Bullrushes (akaakai) grew around the edge of the ponds and Mrs. Alona remembered going with her grandmother to gather the leaves.

In 1947 the Waimanalo Sugar Plantation shut down. When it was operating, 2 million gallons of water were pumped daily from Kaelepulu pond to water the sugar. The stream was dammed each winter so that there would be enough water for Waimanalo sugar.

In 1954, developer Joe Pao formed a joint venture with Bishop Estate to develop the 700 acres surrounding Kaelepulu pond. Pao renamed the area "Enchanted Lake."

Building around Enchanted Lake started in 1960. The first area that Pao developed was Keolu Hills, consisting of 105 lots, followed by another development called Kailua Heights. Eventually Pao's developments in Enchanted Lake numbered 3,000 home sites. Pao used earth from the two hill projects to fill the shores of the pond. He also set up pumps that drained the water table through a newly dredged channel and canals of Kaelepulu Stream as well as pipes that ran to Waimanalo. Lone Star dredged the lake to a depth of about 15 feet and it was initially quite clear, supporting prolific

fisheries and oyster beds. Subsequent housing development of the surrounding hills and non-point source pollution from the urban neighborhoods has progressively silted in the pond (maximum depth presently around 9 feet), lowered biological diversity, increased turbidity of the water, threatened already endangered waterbirds and turned the pond into more of a liability than an amenity for the surrounding community.

It was Joe Pao's Lone Star Development company that deposited the 20,000 cy of fill into the waters and wetlands of Kaelepulu Pond, adjacent to Keolu Drive, that later precipitated the wetland mitigation. Lone Star had obtained the necessary City and County permits for the fill, but unbeknownst to them, Federal laws regulating the filling of wetlands and lakes were passed before the fill activity occurred.

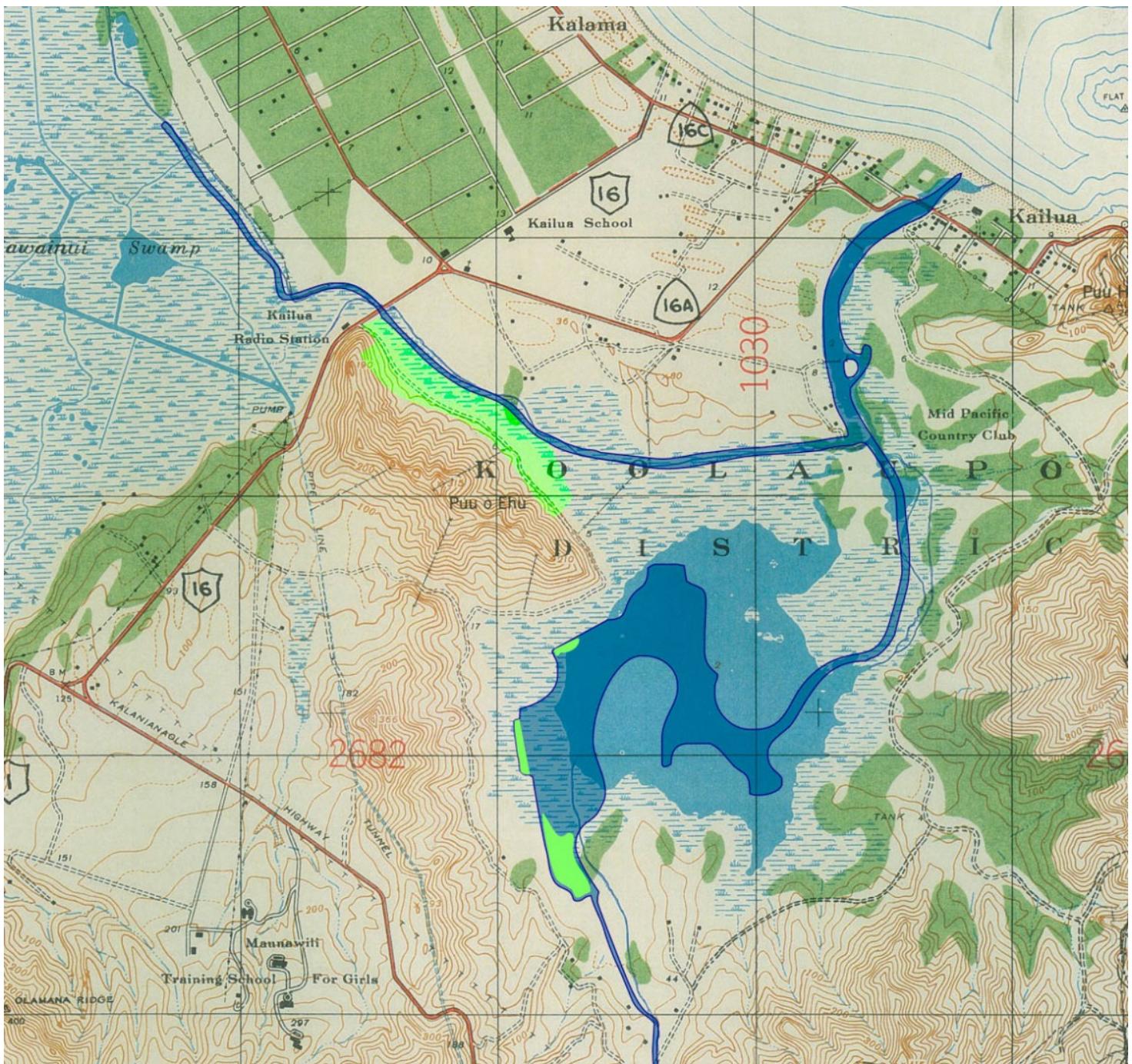
Developer Jimmy Lee's LECI Properties purchased a large tract in Enchanted Lake that included the subject parcel in 1989 and the area that had been filled. As mitigation for the placement of 20,000 cy of fill material done years earlier by Lone Star, an agreement was reached in 1991 with U.S. Army Corps of Engineers that required LECI Properties to create a wetland easement of approximately 5.8 acres, and to create a trust to fund maintenance of the wetlands in perpetuity. The agreement, permit no. PODCO 2151, also allowed for an additional placement of 20,000 cy of fill. In 1995, after meeting the agreement to create the wetland islands and surrounding moats, LECI Properties was allowed to sell the lots they developed along Keolu Drive.

The subject parcel is Lot 24 of the LECI development called Kailua Lakeview Villas. Lot 24 contains the 5.8 acre wetland easement area as well as additional 7.9 acres of water and approximately 3 acres of dryland. This lot was owned by LECI Properties until it was purchased in 2004 by the present owners.

Some conflicts developed between LECI and neighbors over the somewhat sporadic maintenance of the wetland under LECI's ownership. United States Department of the Interior, Fish and Wildlife Service also became involved due to the lack of maintenance. A Wetland Management Guidance document was drawn up in late 2001 which defined monthly maintenance activities. Subsequently some maintenance work was done by LECI, but still not on a reliable basis.

In 1966, a flood control project permanently diverted the thousands of gallons of fresh water that once flowed daily into Ka'elepulu Pond from Kawainui Marsh. A demonstration project to pump some of the Kawainui Marsh water into the Ka'elepulu waterways was conducted in 2015. The additional water flowing into the lake appeared to make a big difference to the health of the lake and wetland, and we are hoping that this restoration of some of the natural waterflow will become permanent.

Pollution from storm drains that flows into the lake from exposed dirt at construction sites and dirty streets continues to take its toll on the health of the lake and wetland.



This 1943 map shows the natural extent of the pond and wetlands. The overlay in darker blue shows current pond size, and the bright green shows current wetlands. The light-green nearest the bottom of the map is the Kaelepulu Wetland area.

Sources:

- McAllister's Archaeology of Oahu
- Sites of Oahu, Sterling and Summers
- History of Kailua, 1998, W. Thomas Hall
- Army Corps of Engineers documents

Additional information and photos: <http://www.kaelepuluwetland.com/>