

Kanehili Cultural Hui, PO Box 75578, Kapolei, Hawaii 96707

SUBJECT: Opposition to the Proposed Kalaeloa Home Lands Solar Renewable Project

Kanehili Cultural Hui is in STRONG OPPOSITION to Kalaeloa Home Lands Solar, LLC, AKA Arion Energy LLC, a 29.84 acre parcel of land owned by the Department of Hawaiian Home Lands (DHHL), on TMK parcel (1) 9-1-013:029.

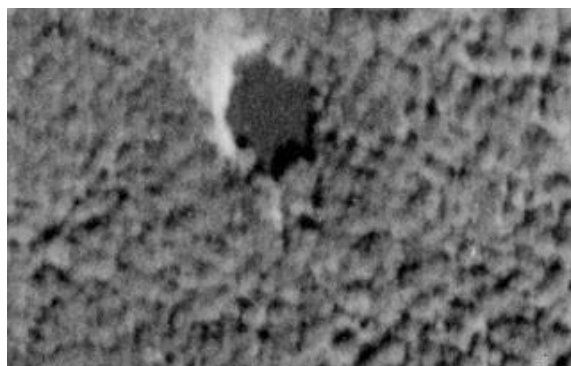
The reason is not against solar farms or creating some revenue for DHHL and profits for HECO and solar PV farm developers, the reason is sloppy archeology and destruction of a Hawaiian cultural site that legally is eligible to be placed on the National Historic Register as a known Hawaiian Traditional Cultural Place. This pond meets all of the criteria and it should be the subject of a professional archeology study for ancient bones, artifacts that would be found there.

Instead the ancient pond site is the very first place the solar farm project will begin bulldozing.

This entire project should be stopped until an accurate historical and cultural assessment is done that is in accordance with Hawaii Preservation Laws and Statutes. The project makes very bad assumptions that because this area was historically used a threshold Runway Protection Zone (RPZ) of the 1942-43 construction of the Naval Air Station Barbers Point runway that therefore it must have all been bulldozed flat.

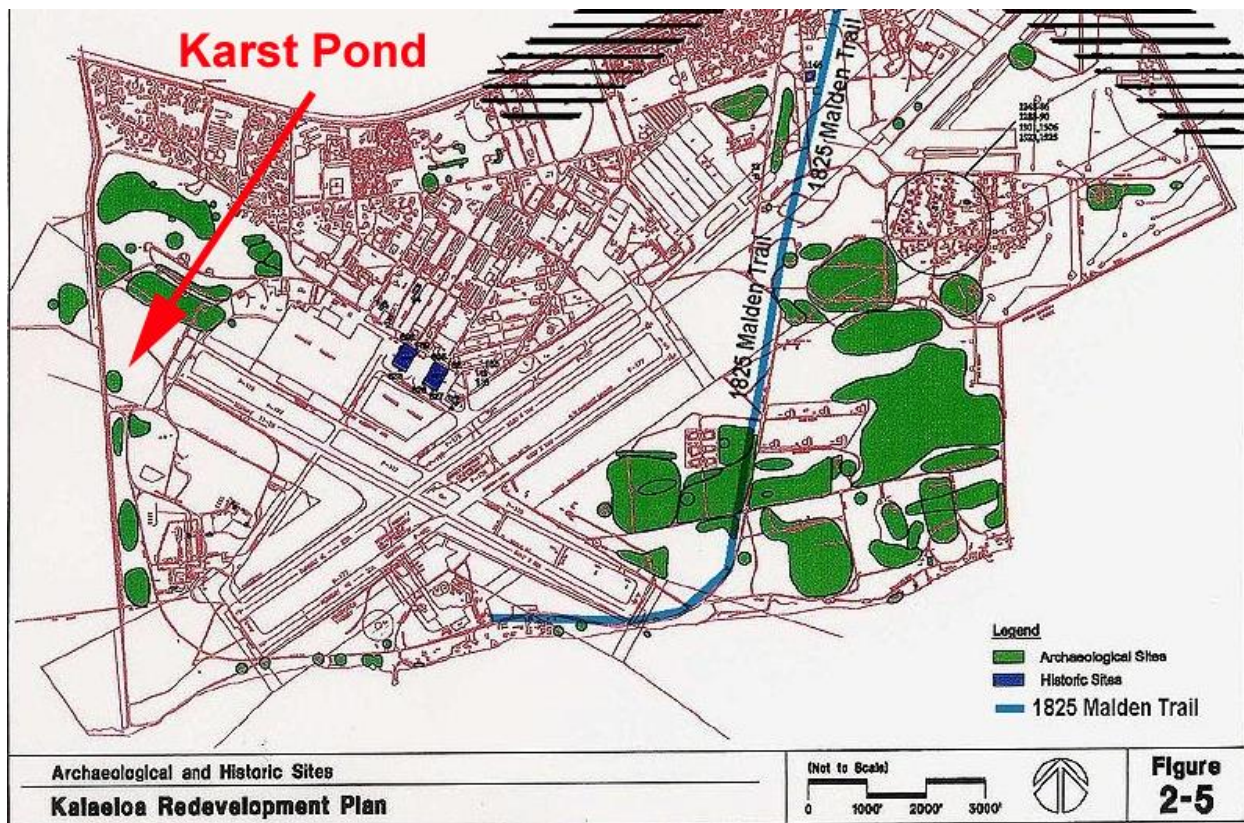
However extensive research in John Bond's massive archive of air photos of the base shows that this area was never extensively cleared other than directly in the threshold of the crosswind runway. John Bond of Kanehili Cultural Hui has many times found that these Kalaeloa project studies are extremely poor and what are often called "windshield surveys" to push a development assuming that no one has any information about a significant historic or cultural site. Yet ironically this site is shown in HCDA's own map as a recognized archeological site.

However, that isn't all, as finding that the Hawaiian karst pond is shown in a 1928 Army map, a 1936 Army map, a 1938 USGS map and a 1943 map of the naval air station airbase conclusively proves there was never any reason to bulldoze it because it never was an obstruction or safety issue for Navy aircraft or later general aviation. The pond was well away and to the side of the RPZ. *So how or why did it disappear?*



The solar project says that "nothing" was ever there. 1927-28 Army Air Corps photo of the pond.

Especially notable is that the karst pond is highlighted in GREEN in Hawaii Community Development Authority Kalaeloa Redevelopment Plan map of Archeological and Historic Sites!



The Synthesis of Cultural Resource Studies of the 'Ewa Plain by Dave and Myra Tuggle

Dave and Myra Tomonari-Tuggle of IARII, under a contract with Belt Collins Hawaii, published a Synthesis *identifies much of the former Barbers Point NAS (including MCAS Ewa) as Kanehili.*

The project makes a very sloppy assumption based upon apparently no research into air photos or map archives, particularly military, USGS or territorial maps. Most EA environmental assessments I have seen, and I have read many over 12 years, do a pretty good job of researching these types of document archives before just putting out something very sloppy.

The project archeology really raises red flags for me when it repeatedly states *"The inspection revealed that the entire parcel had been graded significantly in the past and that no archaeological resources were observed; given the extensive grading, no such resources are expected to remain intact if any were ever present."*

For me this shows no honest attempt was made, no understanding of the Ewa Plain cultural history. This area was an identified wetlands and Hawaiian habitation area by Navy BRAC 1997-99 Tuggles archeology surveys. The solar project claims "nothing" was ever there before.

Yet even HCDA's own map shows this as an archeological site. How did the DHHL solar project determine that there are no archaeological resources known to exist on the parcel. Because they did NO RESEARCH and just made assumptions.

“Historically, without all these roads and impervious surfaces, you had a system of underground rivers that actually drained from the mountains to the sea,” he added. “They had function as a source of water for agriculture.”

*Quote from interview with (former) HCDA director Tony Ching, about Kalaeloa cultural history
William Cole, Honolulu Star-Advertiser*

These ponds are/were important because they were major places for Hawaiians to habitat near due to abundant fresh water that flowed underground from the Waianae volcano. Why it dried up is most likely due to the carving of a huge long straight waterway drainage ditch nearby that lowered the ground water table significantly. Exactly who and when this project was done is another mystery but likely in the early 1970's when Campbell Estate was planning their Ewa Plain land developments. The Ewa Plain karst landscape held huge amounts of fresh water which is why the sugar plantation was the most profitable in the Hawaiian Islands.

The justification for opposition is also based upon very insufficient site archelogy documentation and not following required Hawaii State Preservation Statutes. There is a process that is supposed to be followed but the fact is, Hawaii SHPD allows project developers to just make up their own site histories and submit them for SHPD approval. Hawaii SHPD never has enough staff, most are not well paid, and it seems that the powers that control Hawaii want it to be that way. Only when vigilant citizens, kapuna and konohikists see something bad happening is the legal process required to be followed.

BELOW: This is the legal process that is supposed to be followed but often isn't: <https://dlnr.hawaii.gov/shpd/hrs-6e-8-6e-42-review-process/>

The solar PV farm submitted documents are actually extremely old and based upon a proposed project in 2010. Subsequent documents for SHPD and OEQC which issued approvals are all based upon very erroneous, incomplete and one could call “sloppy” and a “windshield survey.”

This entire project archology is based upon continuously recycled BAD RESEARCH that is resubmitted in 2012 and then again in 2020 with no difference other than the project plans are much bigger PV development areas based upon newer solar tracking panels. The archeology and site history itself is extremely poorly researched and the cultural history presented is one of the worst Kanehili Cultural Hui has ever seen anywhere.

THE FOSSILS OF 'EWA

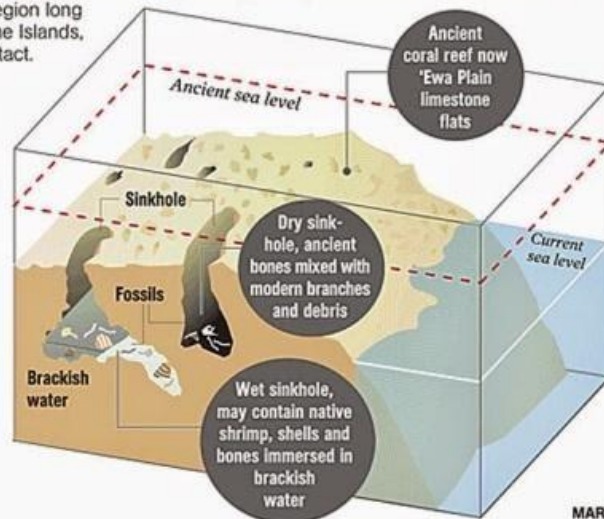
The ancient reef that now forms the 'Ewa Plain grew when the sea levels were higher. The limestone contains numerous vertical caves, commonly called sinkholes. Over thousands of years, birds in the region became trapped in the caves, leaving an unparalleled record of the kinds of wildlife that inhabited the region long before humans arrived in the Islands, as well as after human contact.



Smithsonian Institution photo

The skull of an extinct crow, known to science as *Corvus impluviatus*, was found in one of the sinkholes on the ancient reef that now makes up the 'Ewa Plain.

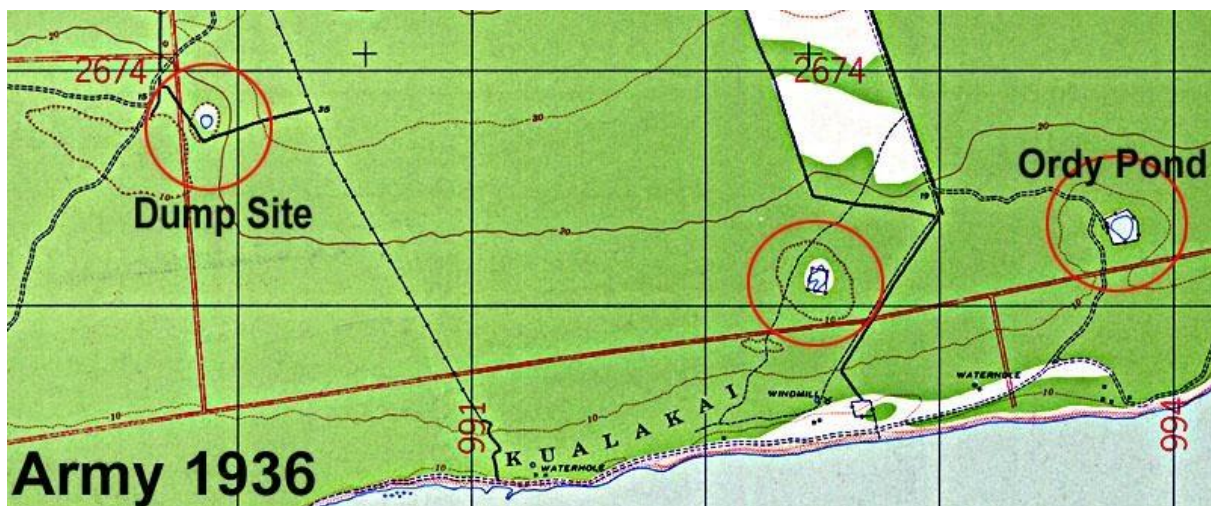
Source: Advertiser research



JULIAN PENDER HUME
© Smithsonian Institution

An artist's conception of the moa nalo, a 3-foot-tall bird that was the largest in prehistoric Hawai'i, shows a lumbering grazing animal that had lost its ability to fly.

MARTHA P. HERNANDEZ | The Honolulu Advertiser



The karst pond shows up in a 1936 Army map and also in a 1938 USGS Map. Below the pond site is a Navy dump site. More maps and pictures can be seen in my original comments sent to HCDA on this link:

<http://dbedt.hawaii.gov/hcda/files/2021/07/KHLS-JB-Email-Pics-08302021.pdf>

Today this site is still an important archeological site that would likely reveal ancient bird bones, Hawaiian habitation artifacts, ranching artifacts and likely WW-I and WW-II military artifacts (as did the other nearby DHHL solar site.) The inside and perimeter of the pond should be carefully studied for what is likely still there as it has seen very little modern development over hundreds of years.



US Fish and Wildlife scientist on karst sinkhole tour, close to where the karst pond was, points towards mountains to show where the water comes from in Kalaheo that mixes with the ocean tide at the shoreline. This feeds the limu which feeds the entire Ewa shoreline ecosystem.

The project seems to want to make it sound like the entire parcel is a RPZ threshold but in fact only a portion of it is as attached shows.



The pond was never a safety issue during the operation of NASBP or Kalaheo airport

Again, the Kanehili Cultural Hui issue in all of this is that the pond site represents a rare view into the ancient cultural history of Kalaeloa and the Ewa Plain. Dr. Steve Athens PhD UH did an important study on Kalaeloa's Ordy Pond and described it as a major "jewel" of an archeological resource of 12,000 years of history. Further down the road from this parcel pond site is a USFWS refuge parcel where they have made a major effort out of restoring karst sinkholes with rare Hawaiian Opae Ula shrimp so that school kids could have an idea of what the Ewa Plain really looked like hundreds of years ago. Because of the karst landscape, Kalaeloa was actually a water rich place and supported a large Hawaiian population over a thousand years.

I would hope that instead of a sloppy archaeological study and complete denial that the pond was there, it is an opportunity to have it studied by competent archeologists and scientists where it would likely reveal more resources below the surface such as ancient bird bones, Hawaiian artifacts, etc. Places like ancient ponds have proven to modern researchers to be a gold mine of cultural histories because people and animals all gather around them over centuries.

"There are no known sink holes, caves, sacred sites or traditional cultural resources currently in proximity to the site (Rechtman 2012)." This is the archeological review stated in the EA of the project in 2012. After reading the Rechtman survey report it sounds pretty sloppy to me and some pretty bad assumptions are made with no research.

http://oeqc2.doh.hawaii.gov/EA_EIS_Library/2012-09-08-OA-FEA-Kalaeloa-Home-Lands-5-MW-Solar-Photovoltaic-Park.pdf

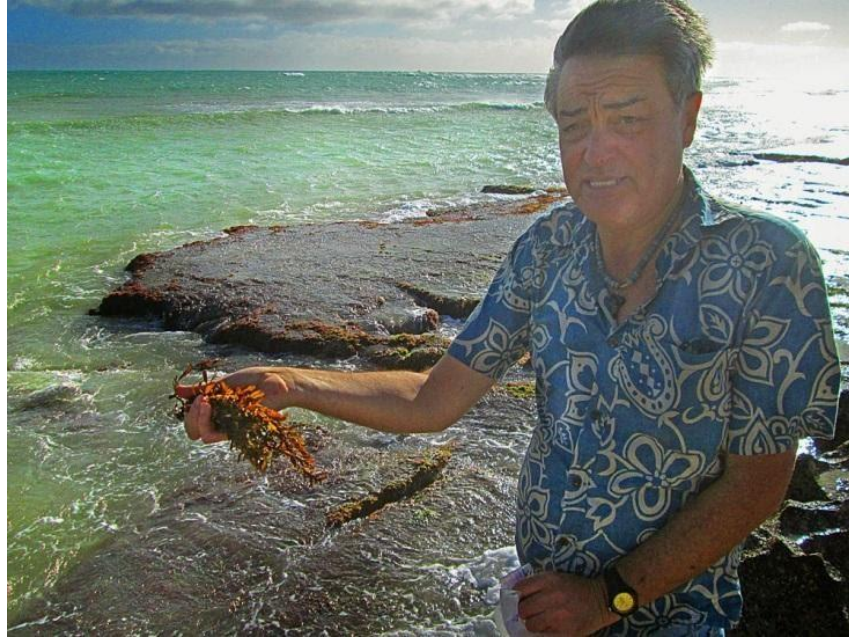
The Tuggles for the Navy BRAC did a really good job for the Kalaeloa overview and reported that these areas were extensively populated by early Hawaiians. Pacific Legacy for the Ka Makana Alii mall shopping center stated that a lot of Hawaiian archeology remains, including ancient trails, that are just below the soil surface. A huge karst water cave was discovered during the construction of Kalaeloa harbor. Many other studies indicate extensive Hawaiian use and habitation of the area. The series of karst water ponds across the former Navy and Marine bases indicate extensive subsurface waterways and caves (which were found at MCAS Ewa during construction.)

It should also be a reminder that sloppy archaeology should not be permitted to be a standard of doing public business projects or any projects.

Aloha,

A handwritten signature in black ink, appearing to read "John M. Bond". The signature is fluid and cursive, with a large initial "J" and a stylized "B".

John Bond Kanehili Cultural Hui



Kanehili Cultural Hui was founded by native Hawaiian cultural practitioner Michael Kumukauoha Lee, a cultural descendant of Honouliuli ahupua'a and the Ewa Plain. Mike Lee, now deceased, was especially passionate about Ewa cultural resources and the water system that flows through the karst and into the sea, which is the foundation of the entire offshore ecosystem—limu, turtles, seals, reef fish to the larger pelagic fisheries.

Treasures From an Ancient Past

The restoration of anchialine pools at Kalaeloa uncovered some hidden treasures that are just beginning to open a window to the area's ancient past. While removing the debris, Service personnel found fossilized bird bones, some from species never before seen. To date, scientists have uncovered fossilized bones of an extinct hawk (first time reported as a fossil on O'ahu), a long-legged owl, Hawaiian sea eagle, petrel, two species of crow, Hawaiian finches, Hawaiian honeyeaters, and the moa nalo (a turkey-sized, flightless goose-like duck—the largest native Hawaiian bird). Further work is needed to confirm the identification and

A photograph showing approximately 12 fossilized bird bones of various shapes and sizes, including long, thin bones and shorter, thicker ones. They are arranged on a dark, reflective surface. A white ruler with black markings is placed horizontally below the bones for scale.

age of each species. The Service is working with representatives from the Smithsonian Institution and Bernice P. Bishop Museum to properly clean, store, preserve, and identify the bones.

J. Hironaka/USFWS

Likely Discovery of New Sinkholes, Caves, Hawaiian burials or Disassociated Iwi Remains

The Ewa Kalaeloa Cultural Context, from a larger International Archeological Research Institute Cultural Resource Inventory of NASBP, MCAS Ewa, by the (Tuggles, Denfeld, Yoklavich, MAI,

1997) states: (Native Hawaiian) Burials- High potential for discovery of additional remains in dunes, habitation and untested sinkholes that may have been covered by base construction.

Cultural Deposits - High potential for discovery of cultural deposits in dunes, habitation and untested sinkholes in areas with demolished surface features.

KANEHILI CULTURAL AND ARCHEOLOGICAL REFERENCES

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