

Aloha Daniel Orondenker,

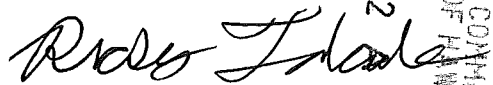
We would like to raise some concerns regarding the Environmental Impact Statement for the proposed Kaloko Makai in the North Kona District of Hawai'i Island. Specifically with respect to the sampling methods, water quality outcomes, and proposed biotic management.

Regarding water quality outcomes, we are skeptical of the accuracy of the conclusions drawn from a study done by Dollar and Atkinson in 1992. The study focused on the effects of fertilizer input to Keauhou Bay, showing that, while both nitrate and phosphate levels were significantly higher due to the fertilizer input the benthos was unaffected due to the stratification of the water keeping it in the surface layer of the water column. Phytoplankton blooms were also avoided due to high circulation in the bay. At Kaloko Makai, the protected fishponds down slope from the proposed build site are known to have low circulation and the circulation in the bay was not measured or mentioned. Data was only collected at the surface does not tell us whether the water is a stratified as in Keauhou.

When assessing the sampling methods of the statements specifically regarding the marine ecologic surveys. Our first concern is the sampling months. The nutrient and water quality parameters were only sampled on three surveys. We believe that these surveys performed in an inadequate format and at irregular formats to characterize this site, and as such are a poor representation to draw conclusions from. The second section of the methods is in regards to where these water samples were collected. The lack of benthic samples that would indicate the quality of the water directly affecting the benthos is of great concern. The necessity of benthic samples can be seen in the results of salinity of the site. The survey states that there is a higher influence of fresh water farther out from the shore, indicating the effect of ground water seepage. This ground water may carry a segment of the available nutrients for this system and not having a metric to assess this input is something to be considered.

When discussing about biotic surveys for fauna, there is a large background on the fish that were observed during the month of February, but there weren't any physical observations of humpback whales or Hawaiian Monk Seals during that time period. How can there be the assumption that taking just one months worth of data and use it as the basis for the entire survey acceptable? Hawaiian Monk Seals are known to come and go randomly through out the year unless they have a common birthing ground (and even that is difficult to pin-point at times), and humpback whales vacate the Hawaiian waters during the springtime, showing up more frequently near the end of December and through out May. It would be beneficial if a full year survey were conducted in order to have a better understanding of when these creatures would appear.

Sincerely,
Ricky Tabandara, Dustin Chin and Kayleigh Flynn



2013 DEC 12 7:17
LAND USE COMMISSION
STATE OF HAWAII

Mr. Daniel Orodener,

After reviewing the marine section of the Environmental Impact Statement for the Kaloko Makai development we have come across some issues that were not properly addressed.

1. The comparison of sewage output to that of Hilo Bay was not comforting and the information seemed to be portrayed inaccurately. The reference to coral growing next to the sewage output was skimmed as the health of the coral was not addressed. Also Hilo has to close beaches periodically due to hazardous conditions caused by the sewage output. This could become a potential problem if a sewage plant is constructed in the proposed area. In addition to the sewage problem, injecting into the underground water source could lead to a similar problem that Maui has with macro algae blooms. This would be a detriment to the recreational and aesthetic appeal of the area as well as economically and ecologically devastating.

2. On the impending housing development, we would like to know what the baseline estimate is for "affordable" housing being proposed. Knowing the median income for families in the area would be beneficial in determining what is affordable. If the housing in the area is not affordable for the people that would work in the area, then commuter traffic would increase. Additional roads or widening of the highway would be needed to accommodate the influx of traffic. In addition to commuting traffic, visitor traffic could also be expected to increase as visitors from the mainland are attracted to newer developments and convenient location (close proximity to COSTCO). This increase in mainland or international visitors would lead to an increase in trash waste that has a greater potential to make its way to the ocean- polluting beaches and endangering marine life.

3. The endangered species mentioned appeared to be only the "big" ones- sea turtles, whales and monk seals. In the ponds that were sampled, no endangered species were mentioned. Biota sampling seemed to be skipped completely in the anchialine ponds. Preferably this could be expanded upon in the next or final draft.

In conclusion the EIS gives the impression that there will be little to no detrimental outcome on the coastal ecosystem. We feel that more considerations need to be taken into account before the construction of the Kaloko Makai project site is finalized.

Sincerely,

Cindy, Erica, and Rebecca

University of Hawaii at Hilo- Marine Science

Erica Wang *Cindy A. S.*
Rebecca

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University Hawaii Hilo Marine Science



MARE 350 • Coastal Methods and Analysis • KC Scofield • Jessica Muniz
Mike Madrigal Mike Newcomb

Date: Dec 4, 2013

Mr. Daniel Orodenerker
Director
State Land Use Commission
P.O. Box 2359
Honolulu, Hawaii
96804

LAND USE COMMISSION
STATE OF HAWAII
2013 DEC 12 A 7:17

Dear Mr. Orodenerker:

During a class project we were introduced to the EIS report on Kaloko Makai. While reading this report we noticed some areas in the paper that have cause for concern. We took issue with the sections pertaining to general sampling methods, references used and, information pertaining to pond biota.

In reference to the general sampling methods used in this this study, we found that they were lacking in consistency, accuracy, and replication. Samples were taken at illogical times; February and November, months found in the same season and offer little variety in sampling. For the data that was collected, it was collected only twice and the sampling was inconsistent due to the fact there was only one sample taken from the ocean, which was in February, while there were samples taken from the ponds during both sampling times. Sample sizes were too small to offer adequate data. We suggest a yearlong monitoring program to asses potential impact of this permanent establishment.

We found that the references used in this study were heavily biased. The researchers hired for the EIS project wrote most papers cited. Citing themselves and papers from 21 years ago, which are no longer relevant. By not citing other papers and authors, this causes this study to have less of an impact and creditability.

We also found that the complete lack of information on the biota inhabiting these ponds. The study included the main endangered species; Humpbacks, Sea Turtles, and Monk Seals, but completely left out any other smaller endangered species in the ponds themselves. When looking at the ponds researchers only took water quality samples instead of looking at the ponds as a whole ecosystem.

These are only a few things we found concerning throughout this paper and would like to urge you to reconsider this project and the impact it will have on all ecosystems around it. We feel that more research should be done before this project should be seriously considered due to the lack of important information on this area.

Sincerely,

[KC Scofield, Jessica Muniz, Mike Madrigal, and Mike Newcomb]
[University of Hawaii Marine Science]