



United States Department of the Interior

NATIONAL PARK SERVICE
Kaloko-Honokōhau National Historical Park
73-4786 Kanalani Street, # 14
Kailua-Kona, Hawai'i 96740



IN REPLY REFER TO:

1.A.1 (2018-2)

January 19, 2018

Mr. Arnold Wong, Chair
State of Hawai'i Land Use Commission
Department of Business, Economic Development & Tourism
P.O. Box 2359
Honolulu, Hawai'i 96804-2359



Subject: National Park Service (NPS) Testimony Re: Status Update for Docket No. A00-730

Aloha Chair and Commissioners,

Attached is the testimony of the NPS to the Status Update for Docket No. A00-730 on the Agenda for the next Land Use Commission (LUC) meeting on January 24, 2018. Because the National Park Service is a party to this matter, the NPS is providing copies of the NPS testimony to the current owner (as opposed to the original Petitioner), the County of Hawai'i and the Office of Planning.

In the past, the NPS has submitted multiple copies to the LUC for distribution to the Commissioners but were informed that one hard copy was sufficient. Although I am sure that he has set up procedures to address this, I would like to remind you that Commissioner Dr. Jonathan Likeke Scheuer is currently a consultant to the NPS for issues related to the protection of resources within Kaloko-Honokōhau National Historical Park. Therefore, Dr. Scheuer should not receive anything submitted to the LUC related to above referenced matter (including anything submitted by the NPS) and should not participate in any proceedings related to that matter.

Sincerely,

Rhonda Loh
Superintendent (Acting), Kaloko-Honokōhau National Historical Park



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January 19, 2018

STATE LAND USE COMMISSION DOCKET A00-730; Lanihau Properties, LLC
(North Kona, Island of Hawai'i)

STATEMENT OF THE NATIONAL PARK SERVICE

Environmental Protection Specialist, Jeff Zimpfer, Kaloko-Honokōhau National Historical Park

Aloha Chair and Commissioners,

The National Park Service submits the following information related to the status of compliance with the 2003 Findings of Fact Conclusion of Law and Decision and Order (“2003 D&O”) (Docket No. A00-730) for a parcel – TMK (3) 7-4-08:30 (“Parcel 30”) – that is subject to the conditions in the 2003 D&O.

Based on available information, Parcel 30 was transferred out of ownership in January 2007 from the original Petitioner in this matter – Lanihau Properties, LLC – and Kaiser Permanente (“Kaiser”) has owned the parcel since December 2008. Kaiser has built a clinic on Parcel 30, which is directly mauka and across Queen Ka’ahumanu Highway from Kaloko-Honokōhau National Historical Park.

Congress established Kaloko-Honokōhau National Historical Park (the “Park”) in 1978 to preserve, interpret, and perpetuate traditional native Hawaiian activities and culture by protecting the cultural and natural resources within the Park (16 U.S.C. § 396d(a)). The Park contains more than 450 known archeological and cultural sites, among which are several heiau, networks of ancient and historic trails, seawalls, more than 180 known anchialine pools, two ancient Hawaiian fishponds with associated wetlands, and a fishtrap. The Park also provides habitat for approximately 17 federally listed species, under the Endangered Species Act. ‘Aimakapā Fishpond and wetland is “core habitat” for the recovery of two endangered waterbird species, the Hawaiian stilt (*Himantopus mexicanus knudseni*) and the Hawaiian coot (*Fulica americana alai*),

and is an important habitat for migratory waterfowl.¹ In addition to the fishponds and pools, the Park encompasses 596 acres of marine waters and coral reef habitat. All of the water resources within the Park are dependent upon groundwater inputs to maintain these ecosystems, especially as habitat for culturally important and rare native aquatic species.

Approximately 150,000 visitors per year visit the Park.² Local residents, cultural practitioners, and visitors from around the world come to experience Kaloko-Honokōhau's unique sense of place, cultural and natural history, and to understand and carry on Hawaiian traditions.

To ensure that the outstanding, nationally significant cultural and natural resources within the Park are protected for the enjoyment of future generations, the National Park Service intervened in proceedings for the petition to amend the conservation land use district into the urban land use district covering Parcel 30 and other lands filed in 2000. The D&O was issued in 2003. Based largely on the information submitted by the National Park Service, the LUC imposed conditions that would help protect the resources within the Park and the other public trust resources along the Kona coast.

The National Park Service believes that the wisdom from the Land Use Commission's 2003 D&O applicable to this land is still relevant:

This Commission is acutely aware that continuous development is planned for this coastline. Although each developer might claim that only a "small amount" of pollution will result from their development and that the area's ecosystem will show "little" effects, these developments and their impacts are cumulative and, absent strong mitigation measures, have the potential to devastate the fragile resources of the coastal and marine aquatic environments of the entire Kona coastal region.

Absent adequate, effective and enforceable conditions of approval, including removal of wastewater nutrients and surface runoff contaminants, Petitioner's

¹ US Fish and Wildlife Service. 2011. Recovery Plan for Hawaiian Waterbirds, Second Revision.

² <https://irma.nps.gov/Stats/>

Project has the potential to cause unacceptable adverse impacts to coastal resources, particularly the natural and cultural resources of the adjacent Park and the traditional and customary native Hawaiian practices that depend on the sensitive nature of such resources.

Based upon the findings of fact and conclusions of law stated herein, it is hereby determined that the customary and traditional native Hawaiian practices, the cultural resources, and the important natural systems and habitats of the Park that have been identified herein shall be adequately protected by the conditions of this decision and order.

To protect the exercise of customary and traditional native practices; to protect the historical and cultural resources of the coastal area including KAHO (i.e. the Park); to ensure the health and preservation of the natural systems and habitats of KAHO, including the endangered, threatened, and endemic species and their habitat, the reclassification of the Property shall be subject to the following conditions. (2003 D&O; A00-730, pg. 81)

Relevant pages from the 2003 D&O are attached as Exhibit 1. Of importance for today's status update is Condition 1.c (p. 82) which states:

Except for the existing quarry operations and the construction of the roads and utilities as provided for below, the Petitioner and/or any future owners(s) of the Petition Area shall refrain from constructing upon or occupying any portion of the Petition Area until such time as the portion (e.g., lot) to be constructed upon or occupied is connected to the WWTP, unless in the interim, the portion to be constructed upon or occupied has installed a septic tank system or other Individual Wastewater System (IWS) designed to remove no less than 60% Total Nitrogen from the treatment system (e.g., septic tank with FAST, Biofilter, Recirculation Filters, Sequential Batch Reactor, or comparable technology) and an absorption field of import material which is constructed in a manner to achieve no less than 80% reduction of nitrogen and 90% reduction in

phosphorous; featuring adequate percolation rate. The existing quarry operation shall have in place an IWS as described above within one year of the date of issuance of boundary reclassification. Installation is subject to conditions of approval imposed by the Director of the Hawai'i State Department of Health and Hawai'i Administrative Rules (HAR) Title 11 Chapter 62. When connection to the WWTP becomes available, all portions of the Petition Area, including all individual lots therein, shall connect to the WWTP, whether or not an interim wastewater treatment system has been installed.

In the summer of 2012, representatives from the National Park Service met with Kaiser representatives including a consultant—Lauren Carter-Roth Venu of Roth Ecological Design Int. LLC. Kaiser informed the National Park Service that it was planning on installing a wastewater treatment system for the clinic on Parcel 30 that was not one of the potential system types listed in the condition in the D&O “(e.g., septic tank with FAST, Biofilter, Recirculation Filters, Sequential Batch Reactor, or comparable technology)”.

Kaiser and the National Park Service had follow-up conversations in person, over the phone and via email. Throughout these conversations the National Park Service expressed concerns that Kaiser's system would not meet the requirements of Condition 1.c of the 2003 D&O. On November 4, 2013, via email (Exhibit 2) Kaiser's consultant, Ms. Venu, presented the proposed monitoring plan which included a phosphorus filter to physically bind the phosphorus and remove it from the system.

On November 26, 2013, Ms. Venu specifically asked the National Park Service not to comment on the nitrogen removal in any reply as she would seek input on the nitrogen removal at a later date (Exhibit 3). On December 2, 2013 (Exhibit 4), The National Park Service replied, stating it was not in a position to approve or disapprove the alternative wastewater treatment system Kaiser was proposing because only the LUC can determine whether or not Kaiser was (or is) in compliance.

Based on the information provided by Kaiser's consultant, the National Park Service stated that it believed the system, as described and including appropriate monitoring, was an acceptable

method of meeting the nutrient removal requirements of D&O Condition 1.c for phosphorus. In an email on December 19, 2013, Ms. Venu sought the National Park Service's comments on Kaiser's proposed system to remove nitrogen from its wastewater (Exhibit 5).

On January 14, 2014, the National Park Service, after reiterating that only the LUC can determine whether or not Kaiser is in compliance and thus the National Park Service could not "approve" the system, replied that it believed that the system proposed by Kaiser appeared to be an effective method of removing the nitrogen from the wastewater to meet the removal requirements of Condition 1.c.

The National Park Service has no information as to whether Kaiser informed the LUC of its approach or sought and obtained approval from the LUC for its different wastewater treatment system. As set out below, the system that Kaiser built is not in compliance with Condition 1.c. of the 2003 D&O.

It should be further noted that the original Petitioner – Lanihau Properties, LLC – obtained approval in January 2008 for a slightly different requirement for Condition 1.c. through an amendment to the 2003 D&O (Amendment attached as Exhibit 6). Since Lanihau Properties LLC transferred Parcel 30 prior to the LUC's approval of the amended condition, it is unclear if that amendment applies to Parcel 30. Kaiser's system, however, as currently designed, constructed and installed, does not meet the amended condition either.

Although the system was in place in 2014, it was not until August of 2017, that the National Park Service received the first water quality monitoring report for this project from Kaiser (Exhibit 7) in August 2017.

Kaiser's report shows the wastewater treatment system is not effective in meeting the LUC condition for nitrogen and phosphorous removal (readings highlighted on page 4 of the June 2017 are of the report). The reading for June 14, 2017, shows that the concentration of nitrogen in the wastewater when it enters their treatment system (influent) is 45.0 (their report does not have units) but that the concentration of nitrogen when it leaves their system (effluent) is 55.5, or an increase of approximately 20%. Clearly their system did not reduce the nitrogen concentration.

The situation is similar for phosphorous on for June 14, 2017, as well. There is more nitrogen and phosphorous in the wastewater when it comes out of their treatment system than when it goes into their system. Condition 1.c. of the 2003 D&O calls for a reduction in the concentration of both nitrogen and phosphorous.

The 2003 D&O calls for a septic tank system or Individual Wastewater System (IWS) designed to remove no less than 60% total nitrogen from the septic system or IWS, and an absorption field that is constructed to achieve no less than 80% reduction of nitrogen and 90% reduction in phosphorous. It is our understanding the Kaiser system does not have an absorption field of any kind installed.

Due to the lack of an absorption field in the Kaiser system, by the time the wastewater exists the treatment system, the effluent fails to meet the nutrient removal requirements of Condition 1.c.

Kaiser provided the NPS with a water quality report containing monitoring data for six sampling dates from April 30, 2015, to June 14, 2017. For all but one of the sample dates, November 18, 2016, the Kaiser system appears to be out of compliance because their system is not decreasing the nitrogen and phosphorus concentration by the percentages stated in Condition 1.c.

In the tables below the National Park Service has taken the water quality data from Kaiser and calculated the percentage of increase or decrease in the concentration of nitrogen and phosphorous between the wastewater influent and effluent.

Total nitrogen

Date	Influent	Effluent	% increase or % decrease
4/30/2015	76.0	71.0	6.6 % decrease
6/6/2016	65.8	16.7	16.7 % decrease
11/18/2016	49.6	96.4	96.4 % decrease
6/14/2017	45.0	55.0	22.2 % increase

Total phosphorous

Date	Influent	Effluent	% increase or % decrease
4/30/2015	1.6	6.3	293.8 % increase
6/6/2016	9.21	5.4	41.4 % decrease
11/18/2016	10.9	0.1	99.1 % decrease
6/14/2017	15.0	19.9	32.7 % increase

Referring to the water quality monitoring data from Kaiser (Exhibit 7, page 4), the National Park Service remains quite concerned that the lack of nitrogen and phosphorous removal by Kaiser's treatment system is leading to an increase in the concentration of nitrogen and phosphorous in groundwater. For nutrient testing on June 14, 2017, there is a higher nitrogen and phosphorous concentration in the lower well (nitrogen 17.0 and phosphorous 1.0) than in the upper well on the same date (nitrogen 14.0 and phosphorous 0.8). A likely explanation for this increase in the nitrogen and phosphorus concentration between the upper well and lower well is an influx of nitrogen and phosphorous from Kaiser's wastewater.

Additionally, the monitoring report seems to indicate some serious issues with both the effectiveness of the monitoring and the data that has been collected. For example, for the nutrient testing, there are no units of measure. Also, the high concentration of nitrogen in the upper well on May 30, 2016, gives us concern. The nitrogen concentration is considerably higher than the readings for any other collection date at the upper or lower wells. While the nitrogen concentration in the lower well on May 30, 2016, is the lowest concentration for any of the dates of collection. The National Park Service cannot think of a logical explanation for this large difference in the concentration of nitrogen between the upper and lower wells and therefore question the accuracy of the sample collection and analysis. Lastly, the water quality report does not state where in the treatment system the influent and effluent samples were collected and any SOP utilized to do so.

Meeting the requirements of Condition 1.c. is not impossible. The wastewater treatment system at Hawai'i County's Kaloko Housing Project, which is less than a mile mauka from the Park, is meeting the 80% nitrogen removal and 90% phosphorous removal standard. The County sends its monitoring reports (signed by the County's Wastewater Division Chief) to the National Park Service each month (the most recent report is attached as Exhibit 8).

In addition to operating the system or re-designing the system to meet the removal requirements, the National Park Service suggests that Kaiser follow the process used by Hawai'i County's Kaloko Housing Project: monitoring the wastewater influent and effluent as well as the monitoring wells on a monthly basis until the wastewater treatment is in compliance with Condition 1.c. Once the facility is in compliance, bi-annual sampling and analysis would be acceptable. The National Park Service also requests that the water quality reports are signed by an engineer.

The Land Use Commission and the National Park Service share a commitment to protect Hawaii's unique and fragile natural and cultural resources. Therefore, the National Park Service respectfully requests that the Land Use Commission require that Kaiser demonstrate how its current wastewater treatment system can meet the requirements of Condition 1.c. of the D&O or, if that is not possible, that Kaiser design and install a new system that can meet the terms of that Condition.



Environmental Protection Specialist, Jeff Zimpfer

DATED: January 19, 2018, Kailua Kona, Hawaii