February 22nd, 2014

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Comments to be considered in preparation of an Environmental Impact statement for:
Project Name: Hawai'i Dairy Farms
Island: Kaua'i
District: Poipu
TMK: (4) 2-9-003:001 (portion); 006 (portion)
(4) 2-9-001:001 (portion)

To whom it may concern:

Waters of the State and United States:

The scope of the EIS must include a thorough consideration of the Public Trust Doctrine as articulated by Article XI of the Constitution of the State of Hawaii. The Hawaii State Supreme Court has authored at least four major Decisions enforcing the Public Trust Doctrine and its constitutionally intended protection for the waters of the State: Waiahole I (1994), Waiahole II (2000), Na Wai 'Eha (2012), and Kaua'i Springs (2014). Each of these cases dealt with situations in which water on agricultural land was either being diverted or taken for use by an agricultural operation or bottling company. In all cases the Court found that such uses constituted a violation of the Public Trust Doctrine. There is no reference to this doctrine in HDF's EIS. Hawaii Dairy Farm's Waste Management Plan also fails to refer to or consider this doctrine. It needs to be addressed by both HDF's Plan and the EIS.

Hawaii Dairy Farms (HDF) plans to irrigate the pastures at the Maha'ulepu site with 2.93 million gallons of water daily (MGD) from the Waita Reservoir according to HDF Waste Management Plan (WMP), pages 31, 37 and 44. Per HDF, their lease with Grove Farm entitles them to 3 MGD (million gallons daily) as a term of their lease contract. It may not be uncommon to have an agricultural lease include the use of water that is available on the agricultural site. In this case, however, the water that is available from the Waita Reservoir, an off-site reservoir that happens to be on other Grove Farm property, is water that collects from the Huleia Stream diversion which now feeds the Waita since the cessation of cane cultivation in 1996. The volume of water HDF plans to consume with irrigation of its 517 acres of grazing pasture (2.93 MGD) is substantial. But for the 100% diversion of the Hulia Stream, the Puna District

used to receive water from the Hulei Stream, previously a major water resource for the natural watershed of the Niamalu River, the Alekoko Fishponds and several native Hawaiian taro farms. The farmers of the Puna District (covering the area where the Hulei waters flowed prior to the construction of the 100% diverter in 1957) are currently involved with the Department of Land and Natural Resources (DLNR), Commission on Water Resource Management (CWRM) seeking restoration of the natural watershed and revision/take down of the Huleia Stream diversion. HDF's planned water consumption from the Waita (2.93 MGD) far exceeds the Kaua'i Springs 1000 (5 Gallon) containers of water per day that Kaua'i Springs planned to draw from the stream flow. Kaua'I Springs, Hawaii Supreme Court, SCWC-29440, 28-FEB-2014, pages 3-4. If the Public Trust Doctrine applied in Kaua'I Springs it should certainly be a compelling consideration with the planned use of 2.93 MGD. Not only is the intended daily volume of water an issue, but of equal concern is the proposed new use of the water, the liquification of massive amounts of waste (3 million gallons of wet manure and 200,000 gallons of urine monthly from the start-up herd of 699 and 8.5 million gallons of wet manure and at least 600,000 gallons of urine monthly if the herd reaches 2,000 as planned). Clearly, a thorough evaluation of HDF' proposed new use for the waters of the Waita is warranted as well as a detailed analysis of the impact to "instream" and "out of stream" or "nonstream" flow standards.

Grove Farm acquired the Koloa Sugar Plantation which, like most sugar plantations, relied on an extensive ditch system to irrigate its crop. The Hulei Stream diversion, (a lengthy concrete diverter, covered by a steel grate that was is designed to divert 100% of the instream flow of the Huleia Stream, located mauka of the Kaumuali'i Highway/Route 50) provided the great majority of the waters relied on by Grove Farm for cultivation of the Koloa Sugar Company's cane. When Koloa Sugar ceased operation in 1996, the extensive irrigation system was no longer in use. The 100% diversion of the Huleia Stream was never revised despite the substantial decrease in need once the Koloa Sugar Company ceased its operations. Thereafter the diverted waters continued flowing from the Huleia and flowed to the Waita Reservoir. The Waita has since become the largest reservoir in the State of Hawaii. There is little question that these waters are waters of the State coming from the South slope of the Kilohana crater in Kahili Mountain. The water runs from the 100% stream diversion into a concrete catchment and then flows through a tunnel in the Haupu Mountain range, ending in the Waita Reservoir. The EIS needs to include HDF's proposed new use and its probable impacts as well as an analysis and evaluation of the degree of impact from the proposed use on the existing downstream users, instream flow, instream habitats, and dependent wildlife species. Although generally accepted that water use is included in the leases for agricultural parcels, the daily quantity of water needed for the proposed HDF operation (2.93 million gallons per day from the Waita) plus the potable water to be drawn daily from the Maha'ulepu wells far exceeds the typical agricultural use on Kaua'i.

In Re 'Iao Ground Water Management Area High-Level Source Water Use Permit Applications and Petition to Amend Interim Instream Flow Standards of Waihe'e River and Waihu, 'Iao, Waikapu Streams Contested Case Hearing Hawaii Supreme Court, No. SCAP-30603 August 15, 2012, the Court concluded that the Water Commission (WRM) erred in balancing instream and noninstream uses, and therefore, the Interim Instream Flow Standards (IIFS) do not properly protect traditional and customary native Hawaiian rights, appurtenant water rights or the public trust. p. 3. Based on the cultural practices as well as the historic and archeologic sites of Maha'ulepu, there is an equal if not greater risk at Maha'ulepu. The EIS needs to consider, environmental concerns,
native Hawaiian practices, outdoor and recreational activities,and aesthetic and scenic values, as required by the water code. p. 12-13 Those considerations are equally important the analysis of "offstream public trust uses, such as the public water supply." p. 16. "…the water code and our
case law interpreting the code have affirmed the Commission's duty to establish IIFS that 'protect instream values to the extent practicable' and 'protect the public interest' ." In re
Water Use Permit Applications "Waiâhole II", 105 Hawaii 1, 11,

93 P.3d 643, 653 (2004); HRS § 174C-71(2)(A). Clearly this must be addressed and study in full by the EIS.

In Kaua'i Springs the Court concluded that the water Kauai Springs uses for its operations originates from an underground spring located several miles from the Property, 1,000 feet up Kahili Mountain.1 Kauai Springs apparently "purchases" or "licenses" its water from EAK Knudsen Trust (Knudsen Trust), the owner of the land where the spring is located. The water is transmitted to the Property by a private, gravity-fed system dating back to the 1890s, which is owned by Knudsen Trust and operated by Grove Farm Company (Grove Farm).2 Hawaii Supreme Court, SCWC-29440, 28-FEB-2014, pages 3-4.

fn1.) Contrary to the findings of the circuit court, the EAK Knudsen Trust does not "own the spring [or] the water." See, e.g., In re Water Use Permit Applications, 94 Hawaii 97, 129, 9 P.3d 409, 441 (2000) ("a public trust was imposed upon all the waters of the kingdom. That is, . . . not ownership in the corporeal sense . . . rather, . . . a retention of such authority to assure the continued existence and beneficial application of the resource for the common good."

fn2.) According to the State Public Utilities Commission (PUC), "[t]he Grove Farm water system originates at one of two tunnels located on the land owned by the [Knudsen Trust] at the foot of Mount Kahili . . . . The water line delivers water to Kahili Mountain Park and a number of domestic and agricultural users on various Knudsen Trust-owned and other parcels on its way to Koloa Town, where it supplies at least eleven residential lots on Wailaau Road."

In Kauai Springs, the State Department of Health offered "[t]here may be the potential for ground or surface water degradation/contamination," and therefore "recommend[ed] that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality."6 The Water Commission further commented that "[g]round-water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment." Finally, the Water Commission stated that although a water use permit was not required because the island of Kaua'i was not a designated ground-water management area, other permits from the Water Commission may be required if the source of Kauai Springs' water was modified:

> The Island of Kauai has not been designated as a ground-water management area; therefore a water use permit from the Commission is not required to use the existing source(s) or to change the type of water use. However, if the source needs to be modified in any way, a well modification permit from the Commission may be required. In addition, if a pump is to be installed to induce additional water flow, a pump installation permit from the Commission would be required. If the source is modified to induce additional water flow, and the modification results in impacts to surface waters, a petition to amend the interim instream flow standard for affected surface waters must be made and approved prior to use of the water.

Kaua'i Springs, Supreme Court, SCWC-29440, 28-FEB-2014, page 10.

fn6.) The State Department of Health (DOH) offered several "environmental health concerns" for the Planning Commission to consider, regarding: 1) sanitary facilities and disposal of wastewater; 2) the water bottling facility's compliance with applicable ventilating requirements; and3) air pollution control measures. The DOH concluded that "[d]ue to the general nature of the application submitted," it "reserve[d] the right to implement future environmental health restrictions when more detailed information is provided."

fn8.) A "public utility" is defined as "every person who may own, control, operate, or manage as owner, lessee, trustee, receiver, or otherwise, whether under a franchise, charter, license, articles of association, or otherwise, any plant or equipment, of any part thereof, directly or indirectly for public use . . . for the production, conveyance, transmission, delivery, or furnishing of . . . water[.]" HRS § 269-1 (Supp. 2012). Supreme Court, SCWC-29440, 28-FEB-2014, page 14

"because it involves the use of an important public trust resource - fresh water - for personal financial gain," Supreme Court, SCWC-29440, 28-FEB-2014, page 17. This is all relevant to the HDF proposed industrial dairy as HDF's impact is certain to be of much greater consequence to the Hulei Stream flow standards than Kaua'i Springs ever intended to be.

In fact, in Kaua'i Springs, the Office of Hawaiian Affairs (OHA) argued that the Commission "uphold its public trust responsibilities by denying Kauai Springs' permit applications without prejudice, until the applicant can show, and the appropriate agencies can concur, that Kauai Springs' proposed use is reasonable-beneficial and will not interfere with public trust purposes." Supreme Court, SCWC-29440, 28-FEB-2014, page 18. Shouldn't Maha'ulepu deserve the same if not greater protection for its rich sites, cave reserve, habitats, delicate ecosystem when a much greater environmental impact is threatened by the proposed industrial dairy than that posed by Kaua'i Springs.

fn49.) For example, the public trust doctrine requires an applicant to demonstrate the feasibility of alternative sources of water. The findings do not indicate whether Applicant complied with this requirement. "[P]ermit applicants must . . . demonstrate the absence . . . of alternative water sources. Such a requirement is intrinsic to the public trust[.]" Waiahole I, 94 Hawai'i at 161, 9 P.3d at 473; see also Kukui (Molokai), Inc., 116 Hawai'i at 496, 174 P.3d at 335 ("The [agency] cannot fairly balance competing interests in a scarce public trust resource if it renders its decision prior to evaluating the availability of alternative sources of water.

Supreme Court, SCWC-29440, 28-FEB-2014, page 105
The Court held: "f. To assist agencies in the application of the public trust doctrine, we distill from our prior cases the following principles: 25
a. The agency's duty and authority is to maintain the purity and flow of our waters for future generations and to assure that the waters of our land are put to reasonable and beneficial use.26
b. The agency must determine whether the proposed use is consistent with the trust purposes:

fn25.) We provide this framework for assistance and do not indicate that it is mandatory or that it precludes other analytical approaches that are consistent with the public trust doctrine.
fn26.) Waiahole I, 94 Hawai'i at 138, 9 P.3d at 450.

i. the maintenance of waters in their natural state;
ii. the protection of domestic water use;
iii. the protection of water in the exercise of Native Hawaiian and traditional and customary rights; and
iv. the reservation of water enumerated by the State Water Code.

c. The agency is to apply a presumption in favor of public use, access, enjoyment, and resource protection.27

d. The agency should evaluate each proposal for use on a case-by-case basis, recognizing that there can be no vested rights in the use of public water.28

e. If the requested use is private or commercial, the agency should apply a high level of scrutiny.29

f. The agency should evaluate the proposed use under a "reasonable and beneficial use" standard, which requires examination of the proposed use in relation to other public and private uses.30 Applicants have the burden to justify the proposed water use in light of the trust purposes.31
fn27.) Id. at 142, 154 n.59, 9 P.3d at 454, 466 n.59.
fn28.) Id. at 141, 9 P.3d at 453; Kukui (Molokai), Inc., 116 Hawai#i at 490, 174 P.3d at 329.
fn29.)29 Wai~hole I, 94 Hawai#i at 142, 9 P.3d at 454.
fn30.) Id. at 161, 9 P.3d at 473.
fn31.) Kukui (Molokai), Inc., 116 Hawai#i at 490, 174 P.3d at 329.

a. Permit applicants must demonstrate their actual needs and the propriety of draining water from public streams to satisfy those needs.32

b. The applicant must demonstrate the absence of a practicable alternative water source.33

c. If there is a reasonable allegation of harm to public trust purposes, then the applicant must demonstrate that there is no harm in fact or that the requested use is nevertheless reasonable and beneficial.34

d. If the impact is found to be reasonable and beneficial, the applicant must implement reasonable measures to mitigate the cumulative impact of existing and proposed diversions on trust purposes, if the proposed use is to be approved.[35]

fn32.) Wai~hole I, 94 Hawai'i at 162, 9 P.3d at 474.
fn33.) Id. at 161, 9 P.3d at 473.
fn34.) Kukui (Molokai), Inc., 116 Hawai'i at 499, 174 P.3d at 338.
fn35.) Wai~hole I, at 143, 161, 9 P.3d at 455, 473.
fn36.) The ICA held that the circuit court's COLs ¶ 63 (record was "devoid of any evidence that Kauai Springs['] existing or proposed uses might affect water resources subject to the public trust"), ¶ 71 and ¶ 72 (suggesting that Planning Commission "may" have public trust duties in this case) were "incorrect in that they do not recognize the Planning Commission's public trust duty to consider and review Kauai Springs' water usage in its water bottling operation." Kauai Springs, 130 Hawai'i at 423, 312 P.3d at 299. In its Application, Kauai Springs does not challenge the ICA's conclusion that the Planning Commission had a duty to consider Kauai Springs' water usage in reviewing its permit application. Rather, Kauai Springs argues that the ICA erred in vacating the circuit court's COLs because the circuit court recognized the Planning Commission's public trust duties and correctly found that the Planning Commission fulfilled these duties.

Supreme Court, SCWC-29440, 28-FEB-2014, pages 85-88

Alternatives:

In the EISPN, the discussion of alternatives, offering only one other location to be considered, fails to satisfy a real alternative evaluation for an operation that is well known for its significant adverse environmental impacts. Clearly, the EIS should explore at least three other locations at a minimum.

In its discussion of a Confined Dairy Operation Alternative, HDF proposes a "Confined Dairy Operation". Assuming the public trust water rights are adequately protected and preserved, if HDF chooses to proceed with a true CAFO, the EISPN offers only that "the Mähä'ulepü location would require additional manure management as nutrients would not be returned to pastures. Additional grain and forages would be imported to sustain dairy cows. The Confined Dairy Operation Alternative would utilize large barns to house and feed the cows. Animals would be confined within the barns and milking parlor; no pasture area would be required. No manure would be deposited on pasture grasses and grass would not be utilized as a locally available feed source." The EIS must address why feed cannot be cultivated on the property, why a methane digester cannot be implemented saving electricity consumption from the Grid that would also help to collect manure, lowering the odor, fly and other pest problems to potentially feasible levels. To address alternatives, the scope of the EIS must be expanded to include these and other related considerations.

Important Agricultural Land (IAL), Hawaii State Constitution, Article XI, Section 3.

The EIS must consider HDF's website boast that it intends to be "the first commercial use of IAL land". Is that what the State intended when the provisions of the IAL enactments were adopted? Is IAL land even appropriate for a commercial agricultural operation? This must be addressed by the.

HDF's claim that their proposed industrial dairy will lead to agricultural self-sufficiency must be substantiated in the EIS, especially when the WMP calls for shipping the milk off island, selling the milk wholesale to another company who would then process, bottle and distribute for sale at locations they select.

Sugar cane cultivation has left the proposed farm soils "depleted of essential nutrients" pg 56 HDF WMP, Section 8.1. The EIS needs to substantiate the scientific support for their claim that the proposed dairy would in any way improve the soil at Maha'ulepu. Hooves from 1200 pound cows are in themselves degrading to soil, contributing to erosion and nutrient loss. The addition of nutrients does not remediate soil and the EIS needs to address the claimed benefit of an industrial dairy to the soil composition at Maha'ulepu.

Table 5 - Potential Impact Categories for Liner Failure

1. Any underlying aquifer is at a shallow depth and not confined
2. The vadose zone is rock
3. The aquifer is a domestic water supply or ecologically vital water supply
4. The site is located in an area of solutionized bedrock such as limestone or gypsum.

Considerations for Minimizing the Potential of Waste Storage Pond Liner Failure.

Sites with categories listed in Table 5 should be avoided unless no reasonable alternative. 313 p 6 of 7

NRCS, PI
April 2012

Table 4 - Potential Impact Categories from Breach of Embankment or Accidental Release

1. Surface water bodies -- perennial streams, lakes, wetlands, and estuaries
2. Critical habitat for threatened and endangered species.
3. Riparian areas
4. Farmstead, or other areas of habitation
5. Off-farm property
6. Historical and/or archaeological sites or structures that meet the eligibility criteria for listing in the National Register of Historical Places.

Cultural Practices, Historical and Archeological Sites are all at risk. The foregoing considerations are from the NRCS manual stapled to the back of the WMP but were not specifically incorporated in or addressed by the WMP. The EIS needs to address these aspects of the NRCS and others as well to cover this risk which from our present evaluation, especially based on the findings of the Custom Soil Resource Report of the NRCS, dated June 5, 2014.

Respectfully,

Robert and Bridget Hammerquist

Bridget Hammerquist