SIERRA CLUB OF HAWAIʻI

MĀLAMA I KA HONUA. *Cherish the Earth.*

TO: Mr. Earl Matsukawa AICP,
1907 S. Beretania Street, Suite 400
Honolulu, HI 96826
waterleaseeis@wilsonokamoto.com
(808) 946-2277

DATE: November 7, 2019

RE: Public Comments of the Sierra Club on the Draft Environmental Impact Statement for the Proposed Lease (Water Lease) for the Nāhiku, Keʻanae, Honomanū, and Huelo License Areas (East Maui) by Alexander & Baldwin Inc./East Maui Irrigation Company

---

Thank you for the opportunity to comment on the draft environmental impact statement (DEIS) submitted by Alexander & Baldwin, Inc. and East Maui Irrigation Co. Ltd (collectively herein A&B) for the proposed leased areas of East Maui.

This DEIS is deficient. As detailed in our comments below, this document fails to meet the standards for an environmental impact statement. It does not incorporate known information about the natural and cultural resources of this area, and relies on large and misleading assumptions for its conclusions. On December 26, 2016, the Native Hawaiian Legal Corporation submitted a letter to you in which it asked that the DEIS provide answers to a number of questions. The DEIS completely avoids answering them. The DEIS fails to disclose the amount of water taken from **each** stream, omits essential maps, and glosses over impacts that have long been raised by those who know this watershed. **We ask that these deficiencies be corrected immediately and a new DEIS be re-released for another full DEIS public comment period.**

I. Diversion structures

EMI built many diversion structures on public land. If EMI no longer has the right to use public land (the no action alternative), then it will have to remove the structures it placed on public land. These diversion structures cause significant impacts. These impacts include: (a) interference with native aquatic species (blocking migration upstream as well as entrainment of larvae); (b) facilitation of mosquito breeding; (c) taking water temporarily from streams (even if the water is not removed from the ahupuaʻa); (d) threatening the safety of recreational users of public land; and (f) are inappropriate aesthetic impacts in a natural environment. The DEIS fails to discuss the impact that these structures cause. Perhaps most importantly, it must assess which

of EMI's structures cause the greatest harm to native aquatic species and which ones create mosquito breeding grounds.

The DEIS acknowledges on page 4-58 that "entrainment of larvae at the diversions remains an issue and contributes to the loss of HU. Additional HU may be gained for the native stream species by decreasing entrainment at the diversion locations. Any action or modification of the diversion to decrease entrainment would increase the total restored HU without any additional water released to the stream." The DEIS fails to identify which diversion locations are causing the greatest threat to native species and fails to quantify their impact.

DLNR's 2005 Hawaii's Comprehensive Wildlife Conservation Strategy identified stream diversions and insufficient in-stream flows as a key threat to species on Maui. DLNR identified stream diversion as a threat to ʻoʻopu nākea, ʻoʻopu ʻalamoʻo, ʻoʻopu nōpili and opaʻē kalaʻole. In a May 17, 2010 letter to then-BLNR Chair Laura Thielen, Robert Nishimoto, the environmental program manager for the division of aquatic resources, wrote that "native animals are missing from a number of stream sections where they should naturally exist." He also concluded: **"The removal of stream diversions and the complete restoration of stream flow would be the best possible condition for native aquatic animals."**

The DEIS fails to sufficiently acknowledge these widely accepted facts. It fails to discuss how both diversion structures themselves and the taking of water from streams creates mosquito breeding grounds. Because A&B has no legal right to take any water from public streams without a lease (or a revocable permit), the DEIS must compare the impacts created by granting the lease to not granting the lease. (Thus, for example, the comparison on page 4-102 should compare mosquito populations without diversions – and diversion structures removed – with the conditions that would exist if a lease were granted.)

It would be helpful if the DEIS included the Barrier Assessment report referenced in the Appendix A, HSHEP model report for East Maui Streams. In fact, the June 8, 2019 Assessment of the Environmental Impact of Stream Diversions on 33 East Maui Streams using the Hawaiian Stream Habitat Evaluation Procedure (HSHEP) Model is missing its Appendix 1(results of field surveys) referenced on pages 14, 42 and 62, and Appendix 2 (node and basin values) referenced on pages 45 and 56. Appendix 3 is missing as well. The information in these appendices is very important and must be included in the final EIS.

II. Streams Unaddressed by CWRM's 2018 Decision

In 1988, CWRM adopted interim in-stream flow standards for all streams within east Maui. HAR §13-169-44. The standard was whatever was flowing on June 15, 1988. In response to petitions to establish in-stream flow standards for more than two dozen streams, in June 2018, CWRM finally established substantive standards for 24 streams. That proceeding, however, did not address the water flowing in thirteen other streams that flow within the area covered by the revocable permits: Puakea Stream, Kōlea Stream, Punaluʻu Stream, Kaʻaiea Stream, Oʻopuola

Stream (Makanali tributary), Puehu Stream, Naili‘iliha‘ele Stream, Kailua Stream, Hanahana Stream (Ohanui tributary),[1] Hoalua Stream, Waipio Stream, Mokupapa Stream, and Ho‘olawa Stream (Ho‘olawa ili and Ho‘olawa nui tributaries). BLNR has no idea how much water was flowing in these thirteen streams as of June 15, 1988. Thus, the thirteen streams have no meaningful in-stream flow standards.

The DEIS fails to discuss in any detail the impact of continuing to de-water thirteen streams unaddressed by CWRM's 2018 decision. The DEIS must do a much better job of discussing these 13 streams.

The DEIS should include the High Definition Stream Survey and the High Definition Fish Surveys referenced in the Appendix A, HSHEP model report for East Maui Streams.

To its credit, Appendix A on page 62 mentions that the lease reduces the habitat units on those streams from 588,000 square meters to 88,386 square meters. That is a huge reduction of 85%. It is unfortunate – and misleading – that this fact is not included in the discussion on pages 4-56 and 4-57 of the DEIS.

According to CWRM's Ayron Strauch, "the diversions are generally designed to take up to about the Q40 flow, so they were probably taking, if they needed it, 100% of the Q70 flow . . ." That suggests that the ditch system completely dewaters the thirteen streams 60% of the time, leaving no water at all directly below the diversions on these 13 streams. Taking all the water from a stream 60% of the time has profound ecological consequences that the DEIS brushes over.

One of those streams, ironically, has seen too much water. For the last few years, A&B has been diverting water from Waipio and Hanehoi streams and dumping that water into Ho‘olawa stream. Excessive dumping has caused stream banks to erode and caused a hazardous condition to recreational users of the stream.

III. Water Available west of Honopou

The DEIS performs mathematical hocus pocus. Simple math from page 2-5 shows that historically 11.06 mgd of water was taken from streams west of state land (west of Honpou Stream) (135.58 mgd at Honopou Stream and 146.64 mgd at Maliko Gulch). On page 2-8, however, the DEIS suggests that only 4.37 mgd are available from the streams west of state land. That is simply not true. The figure provided on page 2-8 is premised on not taking more water because "when rainfall is high in East Maui, the ditches are fuller and there is little needed to supplement the flow." Yet, in the same way, if BLNR limits the amount of water taken from east Maui, then A&B/EMI/Mahi Pono have 11.06 mgd of water available from the streams west of state land.

[1] Please note that in Findings of Fact 58 and 60 of the June 2018 CWRM decision, CWRM refers to the stream as "Hanahana Stream." The Hawai‘i Board on Geographic Names, however, refers to the stream as Hanawana. http://files.hawaii.gov/dbedt/op/gis/bgn/placenames/HBGN%20-%20Maui%20-%20Official%20May%202018.pdf.

IV. Marine Life

Kumupono Assoc. study of East Maui: "Wai o ke Ola – He Wahi Moʻolelo no Maui Hikina" was prepared for A&B / EMI in 2001. It provides much historic and contemporary discussion of the robust presence of marine life along east Maui coasts and longtime dependence of east Maui communities on the sea for food supplies. The connection between fresh water stream flows and algae that feeds marine life is well established.

In contrast, Appendix B and the DEIS concludes that East maui streams flows do not affect conditions for marine life in east Maui, and that east Maui has the wrong ocean conditions to have substantial fish populations. Appendix B offers these conclusions although it includes no survey of ocean fish and measures water chemistry at just seven of 36 streams in the lease area. The conclusions of Appendix B are used throughout the DEIS to justify the "lack of impacts" from EMI's proposed Alternative 1: diverting all the East Maui streams to the extent permitted by the 2018 CWRM D&O. The EIS needs to acknowledge that there are impacts to ocean fisheries and propose mitigation.

The EIS does not include recent studies of marine fish populations in east Maui or recent interviews with east Maui residents. Residents inform us that they have observed that the recent increase in East Maui flows has started to stimulate increased fish populations in East Maui. The EIS needs to include studies on current fish populations discuss how this trend of increasing fish populations that support traditional Hawaiian gathering practices can continue, rather than not mention that it is happening.

In addition, the EIS should specifically identify the all the projects for which Steve Dollar, Marine Research Consultants, Inc. and Sea Engineering have predicted that a project would have an adverse environmental impact. It should also list all the projects that they predicted would not not have an adverse environmental impact.

V. Native and Invasive Flora and Fauna (Appendix C)

Appendix C and the DEIS assume that 140 years of EMI use and management has had no impact on the substantial loss of native flora and fauna on public lands in the Lease Area. This is offensive, and also simply not true.

This brief survey (4 days covering 33,000 acres on the ground and 1 day in the air) drive-by review of flora and fauna is entirely inadequate to inform decision makers of the impacts of the proposed action. None of the Endangered damselfly populations seen by DAR surveys in 2005-06 were seen. No plant list was included in the survey report. The survey does not refer to baseline data available from the extensive 1985 mapping of the E & W Wailuaiki stream basin area that was done as part of a Proposed Hydroelectric plant EIS (Kepler, 1985.) The Flora and Fauna survey also included the 30,000 acres of potential farm lands (referred to as the "use

area”) in the 5 day visit and did a poor job of describing impacts there. It was not clear if the gulches in the “use area" were surveyed; they often serve as habitat areas. No acoustical survey for native bats was done at either survey location.

We think it is fair to say that Sierra Club hike leaders probably know more about the specific flora and fauna conditions of the Lease Area than is found in the Appendix C survey. Section 5.2.3 of the survey reported that no reptiles or amphibians were detected, but hikers regularly encounter a very small frog at Hanawi stream near the Wailoa ditch.

In section 6.1.1 of Appendix C, the consultants conclude that under the proposed action (30 year lease) "Vegetation would remain substantially the same” in the state Lease Area. Sierra Club leaders have watched invasive species such as melastomes, job’s tears, gingers, African Tulip and other pests spread substantially through the Lease Area over the past 30 years of access hikes, while the density and variety of native species diminish. The EIS does not address what mitigations would be needed to make sure that a 30 year lease would not result in the disappearance of most native species in the 1,000 to 2,000 ft elevations in the Lease Area.

The DEIS fails to acknowledge that without active management, invasive species will take over native forests. Active management is critical. Page A-2 of Appendix C documents how much invasive species are crowding out native forests in the area that Mahi Pono/EMI wants to lease. One of the primary justifications that the Land Division offers to leasing out its land is that it does not have the resources to manage public land. If someone is going to lease public land, it should only do so if it prepares and implements a management plan that reduces the threat posed by invasive species.

The EIS should have far more detailed information before declaring that a 30 year extension of the current management style will result in “no impacts."

Sierra Club leaders remove and report invasive plant introductions in the Lease Area to EMI and the state and have offered to participate in hunting for and eradicating various invasive aliens before they can get established. No one has followed up with our requests recently. In the 1980’s, Sierra Club and EMI teams worked together to remove invasive Banyan trees from the stream beds of the Lease Area. Current EMI leadership has not shown any interest in the public watersheds below 3000 elevation where most of their diverted streams are located in the Lease Area. The East Maui Watershed Partnership includes the Lease area lands on their maps, but only has active management of East Maui lands above 3000 elevation, which is above the Lease Area. The EIS needs to make this fact clear.

The public waters diverted by the EMI systems are the product of two factors: natural rainfall and the watershed lands that receive the rainfall and discharge it into springs and streams. The quantity and quality of future stream flows will depend upon the health of the surrounding watershed lands.

In section 6. of Appendix C, the consultants conclude that the proposed action will have no impacts because "no habitat removal or loss is proposed…". The EIS ignores the well-documented fact that dewatered streams over time lead to the decimation of native ecosystems and flora and fauna. The EIS proposes no mitigations to improve watershed health other than some mechanisms to prevent introduction of more invasive species on equipment or supplies.

The Appendix C survey provides no guidance for any restoration activities in the Lease Area, which is widely done in EIS documents that are involved with projects, like this one, that will, by law, trigger future management plans.

Section 6.2 of Appendix C concludes that the No Action alternative (no lease awarded) would mean that it would likely not be viable for EMI to maintain the ditch system. The EIS offers no substantial discussion or analyses of others such as County or State maintaining portions of the ditch system for much reduced level of diversion. The idea is simply dismissed as "too speculative" at this time, although the Maui Board of Water Supply has issued a report after investigating the topic.

Section 6.3 concludes that the Reduced Water alternative (alternative 2) would result in more ditch maintenance required and "more human activity in area and greater chance of potential for negative impacts." This section also concludes (with no proof offered) that increased water flows in the stream would likely have very little impact on native land based flora and fauna and that impacts on aquatic fauna (damselflies, etc) would vary by stream. The EIS offers no evidence that either of these conclusions is true, yet they are offered as a rationale to decision makers to support the Alternative 1 lease.

Appendix C refers to a future Management Plan for the Lease area that will be done by the State of Hawai‘i for the lease lands as part of any future lease agreement. The lease requirements found in HRS 171-58(e) specify that A&B/Mahi Pono need to jointly prepare a management plan with the State:

> (e) Any new lease of water rights shall contain a covenant that requires the lessee and the department of land and natural resources to jointly develop and implement a watershed management plan. The board shall not approve any new lease of water rights without the foregoing covenant or a watershed management plan.

The Appendix C - "Assessment of Terrestrial Flora and Fauna" made absolutely no reference to any need for restoration or management of the public lands in its analyses or recommendations. It seems unlikely that any DEIS considering the impacts of a longterm action can effectively evaluate and mitigate those impacts if the impacts are not clearly quantified in EIS.

Section 6.5 discusses alternative ownership/management of the ditch system and lease area- and concludes that such management "would have effects identical to those described in "proposed Action." on Terrestrial Flora-Fauna. The DEIS offers no analyses of increased investment in

watershed management that could come with a new "ownership" model.

Section 6.6 dismisses the greater public access alternative (smaller lease area) and concludes that greater access would impact flora and introduce more alien species and impact habitat of native birds. The DEIS offers no analyses of increased access permitting greater restoration / management activities in the watershed lands as has been the case in various areas on Maui that manage public access.

Section 7 offers Avoidance & Minimization measures such as:

- Biological monitor during maintenance in waterfall /cliffside areas
- Wash and inspect equipment before maintenance
- inspect any materials used for maintenance
- monitor ESA damselflies- work with USFWS
- training for onsite staff to recognize endangered species
- sensitivity to i'iwi nests during tree trimming
- use of barbless strand for top wire of fences to avoid bat injuries

While these would be a step forward from current conditions, there is no accountability for these practices actually being employed. Take the example of fencing mentioned. Thousands of acres of Mahi Pono land have recently been fenced, some of which has stands of trees that could serve as potential endangered bat habitat. All of the fencing observed has barbed wire on its top strand. Will all this be changed only if the lease is granted?

VI. <u>Hiking</u>

Why does the DEIS assume that the leaseholder should retain the right to determine who is allowed to hike on public land? It is unfortunate that the comments from the Maui Island Advisory Council to Na Ala Hele were essentially disregarded.

The EIS should include an inventory of roads and trails in the Koʻolau Forest Reserve. The Highways Act protects public right-of-way on roads and trails owned by the state. When the Koʻolau forest reserve was created, all roads and trails in the forest reserve became protected rights-of-way. The EIS needs to show the protected roads and trails in the Koʻolau Forest Reserve. HRS §171-35 requires leases to protect rights-of-way and access to other public lands. *See also Robello v. Cnty. of Maui*, 19 Haw. 168 (1908)

In its December 19, 2016 letter, the Division of Forestry and Wildlife states: "Thus the Division recommends that the areas to be conveyed for a water license be done so through a land agreement that is limited to the infrastructure required for maintenance and conveyance of water, and that any terms of any agreement established for the delivery of water ensure unrestricted public access to the reserves and any state owned roads and trails." This means that public access to the trails is not at the whim of the leaseholder. The DEIS must reflect this fact.

VII. Easement

On page 3-6 of the DEIS, there is an acknowledgement of the 1938 agreement – a copy of which should be reproduced in an appendix. That 1938 agreement allows DLNR to deliver water to the county without having to purchase the ditch system from anyone – and regardless of whether a lease is granted or not.

The EIS has no discussion of the fact that EMI controls the 4 levels of ditch system west of lease area, which are connected to the East Maui ditch system, but not affected by the lease decision.

VIII. Cultural Impact Assessment (Appendix F)

The EIS must fully acknowledge the impact that past and proposed reduced stream flows have had on the native stream life and marine life that is so directly connected with the ability of Native Hawaiians to engage in traditional cultural practice of fishing and gathering in East Maui.

Appendix F, the Cultural Impact Assessment (CIA), concludes that as long as stream flow standards are met in the east Maui streams subject to the 2018 Water Commission decision, all other streams can be diverted with no impacts to traditional Hawaiian cultural practices. It also concludes that the east Maui coasts do not have reefs and therefore do not support related marine species. The conclusion does not reflect marine life and streamlife studies from east Maui, or generational knowledge in the statements of numerous east Maui kama'āina included in Appendix F(i). Information in kama'āina interviews mentions the importance of stream flows to the abundance of ocean fisheries and related cultural practices of fishing and gathering. Hawaiian cultural users whose interviews are in the CIA agree: increased stream flows are needed to support stream and marine life in enough abundance to allow traditional gathering from both streams and ocean coastlines.

The EIS also needs to evaluate the cultural impacts of increasing the amount of water diverted from many streams compared to the amount diverted the past two years.

IX. Hawaiian Home Lands

HAR §11-200-16 provides:

> The environmental impact statement shall contain an explanation of the environmental consequences of the proposed action. The contents shall fully declare the environmental implications of the proposed action and shall discuss all relevant and feasible consequences of the action. In order that the public can be fully informed and that the agency can make a sound decision based upon the full range of responsible opinion on environmental effects, a statement shall include responsible opposing views, if any, on

significant environmental issues raised by the proposal.

The current DEIS contains no specific information regarding the water reservation amounts from the East Maui lease area needed by DHHL. **This information is now available and was publicly offered by DHHL staff at the Oct 9, 2019 BLNR meeting.** These specific legally protected water reservations should be included in the EIS, and Mahi Pono's water use plans must be adjusted accordingly to reflect this amount, in order for the public and agency comment process to be based upon accurate information. The DEIS also assumes in the Executive Summary that Mahi Pono can use the east Maui water until the time that DHHL needs its reservation. A discussion of whether it is legal for A&B /Mahi Pono to assume that the DHHL "water reservation" can be utilized by Mahi Pono until it is "needed by DHHL" should also be included in the EIS. There is no indication in the DEIS how the MP Farm Plan will be adjusted to accommodate for the 11.5 mgd of east Maui Water that DHHL is reserving. The EIS should plainly discuss this. If this would be based upon a need for more water over the first few years of planting and less water when crops are established, using regenerative agricultural methods, as was envisioned in the 2018 CWRM D&O:

> 115. The estimated water requirements will change not only because some potential partners and lessees are expected to rotate multiple crops that could potentially have different crop coefficients but also because water requirements could change significantly through the use of regenerative agricultural methods.

If Mahi Pono Water demand is expected to decrease over the years, as suggested by the CWRM 2018 review, a timetable for restoration of non-IIIF streams in the Huelo Lease area should also be discussed in the EIS.

X. Agricultural and Related Economic Impacts (Appendix I)

The EIS should acknowledge that Mahi Pono has no track record of successful farming under Maui conditions.

A&B's SEC filings inform their shareholders of the risk that plans for diversified farming on their Maui lands may not work out, even given the company's long history of farming. A&B's 2015 SEC filing states:

> The Company is currently evaluating several categories of replacement agricultural activities in the transition to the diversified model, including but not limited to energy crops, agroforestry, grass finished livestock operations, diversified food crops/ agricultural park, and orchard crops. **There is no assurance that the Company's replacement agricultural activities will be economically feasible or improve the Agribusiness segment's operating results.**

The EIS needs to provide the same disclaimer, and not predicate the entire success of Mahi Pono

farming operations on how much east Maui water is sent to Central Maui.

The DEIS asserts that Mahi Pono needs a long-term lease in order to make its investment in agriculture. Does Mahi Pono not understand that even with a long-term lease, CWRM could amend the in-stream flow standards and reduce the amount of water flowing to central Maui? Does Mahi Pono understand that one of the reasons for studying West and East Wailuaiki is so that CWRM can understand the impact of diversions and if necessary order more water to be restored for the health of the streams?

The EIS needs to provide accurate information about the benefits of Central Maui farming. The numbers provided for proposed Mahi Pono profits and past performances of HC&C sugar do not seem logical: "Mahi Pono farm plan is projected to generate more than 338 pounds per year of crops, generating $155.9 million per year in annual food sales and $329.5 million per year in combined direct and indirect sales." (Executive Summary, p.v.). This would mean each pound of crop brought a return of $461,242.

Table 6 in Appendix I lists "recent sugar" payroll of $68,000,000 a year. HC&S had 675 workers when they announced that sugar would shut down in 2016. Did each of those workers earn $100,740 a year ($68 mil divided by 675)? That seems highly unlikely. The potential "recent sugar profits" presented in Table 6 of Appendix I also needs additional information. A&B's SEC filings (10K reports) show a very different range of "profits" from 2009 to 2015, the most recent era of sugar growing. Only 4 of those 7 years did the sugar operations show a profit (2010-2013) The other three years showed sizable losses. Only one year (2011) had a profit of $22 mil. The average of the 4 profitable years was $14. 9 mil. The figures in the EIS should reflect accurate amounts, not cherry pick one promising year. This incorrect information must be fixed in a new DEIS.

Appendix I assumes that East Maui now has plenty of water due to the 2018 CWRM Decision. It also assumes that dry, windy central Maui is the best place for crops to insure food security for Maui's future, thereby rationalizes without information that all available east Maui stream water should be sent there to support agriculture. The EIS needs to have an updated analyses of the farming potential of the east Maui area. The current analyses in Appendix I that concludes only 44 acres is available for kalo growing and 35 acres for truck farming in all of East Maui. These figures are based only on information from the communities that Native Hawaiian Legal Corp represented during the East Maui IIFS petition. There is far more land available for both kalo and farming in east Maui in the Huelo lease area.

The EIS incorrectly concludes that no additional stream water would be needed in all of east Maui, based upon the limited information available from the CWRM contested case. That case did not address a dozen other streams. The many communities of the Huelo lease area have wide swarths of fertile lands and no public water supply, resulting in unmet water needs by both Native Hawaiian and non Hawaiian farmers.

XI. Segmentation

A&B's 2015 10K statement acknowledges that the the four state lease areas supplied "approximately 58 percent of the irrigation water used by HC&S" and "A&B also holds rights to an irrigation system in West Maui, which provided approximately 15 percent of the irrigation water used by HC&S over the last ten years." This would indicate that 27 % of irrigation water came from A&B wells.

The EIS needs to include a list and map of the A&B/Mahi Pono wells available to help irrigate the Mahi Pono fields and the latest chloride tests and pumping abilities of those wells.

The EIS states that Mahi Pono's farm plan will use less water that the HC&S sugar operations and provides elaborate tables in Appendix I. The Mahi Pono Farm Plan is one plan, which includes around 34,000 acres irrigated by both east Maui and west Maui stream waters.

The EIS content rules do not allow for segmentation of separate parts of the same project. The 4,000 acres of fields irrigated by West Maui Water should be included in the overall analyses of how much water is needed from what source to have a viable Mahi Pono Farm Plan.

A new DEIS needs to clearly state the overall Mahi Pono Farm Plan and indicate what amounts and proportions of water for the farm plan will come from (a) the four licensed area in east Maui, (b) the area west of the licensed area that feeds the EMI ditch system streams, (c) West Maui streams and (d) Mahi Pono wells.