CADES SCHUTTE LLP

DAVID SCHULMEISTER 2781-0
ELIJAH YIP 7325-0
1000 Bishop Street, Suite 1200
Honolulu, HI 96813-4212
Telephone: (808) 521-9200

Attorneys for HAWAIIAN COMMERCIAL & SUGAR COMPANY

COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII

PETITION TO AMEND INTERIM INSTREAM FLOW STANDARDS FOR HONOPOU, HUELO (PUOLUA), HANEHOI, WAIKAMOI, ALO, WAHINEPEE, PUOHOKAMOA, HAIPUAENA, PUNALAU/KOLEA, HONOMANU, NUAAILUA, PIINAAU, PALAUHULU, OHIA (WAIANU), WAIOKAMILO, KUALANI, WAILUANUI, WEST WAILUAIKI, EAST WAILUAIKI, KOPILIULA, PUAKAA, WAIOHUE, PAAKEA, WAIAAKA, KAPAULA, HANAWI, AND MAKAPIPI STREAMS	Case No. CCH-MA13-01 HAWAIIAN COMMERCIAL AND SUGAR COMPANY'S OPENING BRIEF REGARDING RE-OPENED EVIDENTIARY HEARING; CERTIFICATE OF SERVICE

HAWAIIAN COMMERCIAL AND SUGAR COMPANY'S OPENING BRIEF REGARDING RE-OPENED EVIDENTIARY HEARING

I. INTRODUCTION

Much has happened since the close of the original evidentiary hearing in April 2015. The mix of noninstream demands on East Maui surface water has changed dramatically. HC&S is in the midst of transitioning from its longtime business of cultivating sugarcane to a diversified agriculture model. The Department of Hawaiian Home Lands ("***DHHL***") has been asserting the constitutional and statutory rights of its beneficiaries to reservations of water from East Maui

streams.[1] The Maui County Department of Water Supply ("***MDWS***") has alluded to its intentions to seek accommodation for its future demands. *See* County of Maui, Memo in Support of MDWS' Motion on Scope of Re-Opened Hearing (filed herein on June 9, 2016) at 3-4. Instream values have also been impacted by recent developments such as A&B's decision to fully and permanently restore seven priority taro streams and HC&S' interim releases of significant amounts of flow due to the winding down of sugar operations while it transitions to diversified agriculture.

In this opening brief, HC&S summarizes its current and future water needs under its diversified agricultural model and explains how EMI is managing its ditch system to implement interim reductions in diversions and the impacts of such reductions on the integrity of the system.

II. PROCEDURAL HISTORY

The evidentiary portion of the contested case hearing concluded on April 2, 2015. While awaiting the recommended findings and decision of the Hearings Officer appointed by the Commission on Water Resource Management ("***CWRM***"), A&B issued a press release announcing the transition of HC&S to a diversified farm model. *See* Declaration of Rick W. Volner, Jr. attached hereto ("***Volner Decl.***") at ¶ 3; Ex. C-153. The press release explained that the economics of continuing to operate HC&S as a sugarcane plantation were recognized as being unsustainable and the decision was made to cease sugar cultivation upon completion of the

[1] *See, e.g.*, HRS § 174C-101(a) ("Decisions of the commission on water resource management relating to the planning for, regulation, management, and conservation of water resources in the State shall, to the extent applicable and consistent with other legal requirements and authority, incorporate and protect adequate reserves of water for current and foreseeable development and use of Hawaiian home lands as set forth in section 221 of the Hawaiian Homes Commission Act."). In testimony before the Board of Land and Natural Resources concerning the renewal of revocable licenses issued to A&B and EMI to use State-owned watershed lands in East Maui, DHHL deputy chairperson William Aila highlighted the duty of the State to protect DHHL's rights to water reservations. *See* Ex. C-152 at 1.

2016 harvest and transition to a diversified farm model, the goal of which is to retain as much of the plantation in agricultural use as possible with a mix of crops and agricultural activities that will be economically viable. Volner Decl. at ¶ 3; Ex. C-153.

On January 15, 2016, the Hearings Officer issued Minute Order 16 to which was attached his Proposed Findings of Fact, Conclusions of Law, & Decision and Order (the "***Proposed Decision***"). On February 29, 2016, HC&S submitted its Exceptions to the Proposed Decision acknowledging the impact of its January 6, 2016 announcement on the anticipated future needs for irrigation water from East Maui for the sugarcane fields that were in the process of undergoing their final harvest. HC&S' Exceptions stated, in pertinent part:

> The short-term impact of HC&S' decision to transition out of sugarcane cultivation will be a significant reduction in HC&S' use of East Maui surface water. HC&S will still need water to complete its final harvest in December 2016, maintain ground coverage on its acreage, and to start the transition to diversified agriculture. In the long-term, A&B's vision is to keep the former plantation lands in central Maui in agriculture through a patchwork of compatible diversified agricultural activities, some farmed by HC&S, some by others.

Hawaiian Commercial and Sugar Company's Exceptions to Hearings Officer's Proposed Findings of Fact, Conclusions of Law, & Decision and Order at 2-3.

On March 10, 2016, CWRM issued Minute Order 18 directing the Hearings Officer to "reopen the hearing to address A&B's decision of January 6, 2016 to change HC&S's business operations from farming sugar to a diversified agricultural model." Minute Order 18 at 1.

On April 1, 2016, the Hearings Officer issued Minute Order 19 in which he recommended that the scope of the re-opened hearing include the following areas:

a. HC&S/A&B's current and future use of surface waters and the impact on the groundwater sources for its central Maui fields of HC&S's cessation of sugar operations;

b. the impact of HC&S' cessation of sugar operations on MDWS' use of surface water; and

c. Maui County's position on the future use of the central Maui fields; and

d. how EMI is managing the decrease in diversions, how it would manage the interim restorations, and any issues concerning the integrity of the EMI ditch system with the current and any future changes in offstream diversions

Minute Order 19 at 3-4.

On April 20, 2016, A&B announced that it was fully and permanently restoring the following priority taro streams in East Maui: Honopou, Hanehoi (Puolua), Waiokamilo, Kualani, Pi'ina'au, Palauhulu, and Wailuanui (collectively, the "***Taro Streams***"). *See* Ex. C-154.

On August 18, 2016, CWRM issued an Order Regarding the Scope of the Re-Opened Hearing to Address the Cessation of Sugar Operations by HC&S (the ***"Scope Order"***). The Scope Order approved the above quoted listing of issues set forth in Minute Order 19.

On September 8, 2016, the Hearings Order issued Minute Order 21 setting a schedule for submissions in the re-opened hearing and setting January 9, 2017 as the opening day of the re-opened hearing.

III. DISCUSSION

A. HC&S/A&B's Current and Future Use of Surface Waters and the Impact of Cessation of HC&S' Sugar Operations on Groundwater Sources For HC&S' Central Maui Fields

1. Current water use

HC&S has harvested all but approximately 2,500 acres of its remaining sugarcane fields, and is no longer irrigating any of its remaining sugarcane. Volner Decl. at ¶ 11. While HC&S' goal is to put as much of the former cane lands into viable, sustainable diversified ag operations, at this time, HC&S's water use is limited to irrigation of diversified agricultural test crops, irrigation of cover crops to minimize soil erosion and miscellaneous uses such as industrial wash water, firefighting and dust control. *Id.* at ¶ 11.

2. Future water needs

Even while HC&S is winding down its sugar operations, it is looking ahead to the future and planning for the transition of its former sugar lands to a diversified agriculture model, as described further below. The water requirements for future agricultural uses under this new model should be taken into consideration in CWRM's balancing of instream values and noninstream uses. The Water Code expressly provides that, "[i]n considering a petition to adopt an interim instream flow standard, the commission shall weigh the importance of the present or potential instream values with the importance of the present or ***potential uses of water for noninstream purposes***, including the economic impact of restricting such uses ...." HRS § 174C-71(2)(D) (emphasis added). CWRM's instream protection rules similarly provide:

> In determining flow requirements to protect instream uses or in assessing stream channel alterations, consideration should be given to the maintenance of existing non-instream uses of economic importance and the preservation of stream waters for ***potential non-instream uses of public benefit.***

Haw. Admin. R. § 13-169-20(4) (emphasis added). Furthermore, the Hawai'i Supreme Court taught in *Waiāhole I* that absolute certainty is not a prerequisite to CWRM providing for future offstream uses of stream water in the IIFS-setting process. *See In re Water Use Permit Applications*, 94 Hawai'i 97, 158, 9 P.3d 409, 470 (2000) (holding that CWRM's "inability to designate more definitive instream flow standards neither allows the prolonged deferral of the question of instream use protection nor necessarily precludes present and future allocations for offstream purposes" and that CWRM must apply "a methodology that recognizes the preliminary and incomplete nature of existing evidence").

As HC&S has previously noted in these proceedings, 22,254 acres of land irrigated with EMI water are designated as Important Agricultural Lands ("***IAL***") pursuant to HRS Chapter 205, Part III. The designation of IAL implements the constitutional mandate in Article 11,

Section 3 of the Hawai'i State Constitution to "conserve and protect agricultural lands, promote diversified agriculture, increase agricultural self-sufficiency and assure the availability of agriculturally suitable lands." Haw. Const. art. XI, § 3; *see also* HRS § 205-41. A key component of the definition of lands designated as IAL is that they "[a]re needed to promote the expansion of agricultural activities and income for the future, even if currently not in production." HRS § 205-42(b). Moreover, one of the policies underlying IAL designation is to "[p]romote the maintenance of essential agricultural infrastructure systems, including irrigation systems." HRS § 205-43(8).

Consistent with the IAL designation, HC&S is committed to keeping its former sugar lands, a substantial portion of which are designated IAL, in agriculture. As such, HC&S is actively engaged in furthering of a plan to transition the former sugarcane lands to the cultivation of diversified agriculture by A&B and others that would be sustainable and economically viable (the "***Diversified Agricultural Plan***"). Volner Decl. at ¶ 13. As should be evident from the historical difficulties experienced by other Hawaiian plantations in transitioning large tracts of acreage freed up upon the cessation of sugar and pineapple cultivation, it is extremely challenging to immediately identify an economically viable plan to maintain the majority of the HC&S lands in an alternative agricultural use. This plan will evolve over time. HC&S has invested considerable effort in utilizing its own farming experience, consulting with industry and government organizations, and conducting research and field tests to come up with the best possible mix of uses for its Diversified Agricultural Plan. *Id.* at ¶ 14.

Exhibit C-155 is a color code map generated by HC&S that illustrates the mix of uses currently envisioned by HC&S' Diversified Agricultural Plan. The planned uses, and corresponding colors, are as follows:

Irrigated pastures for livestock	Dark Green
Unirrigated pastures for livestock	Light Yellow
Bioenergy crops	Pink
Grain / Animal feed crops	Dark Yellow
Agricultural Parks	Red
Large Diversified Farm leases	Beige
Mango / Avocado Orchards	Light Blue
Pongamia Orchards	Purple
Beverage crops (coffee/cacao)	Light Green
Dairy operations	Dark Blue

Volner Decl. at ¶ 15.

In siting the differing uses throughout the former sugar lands, HC&S considered, among other things, varying soil types, rainfall, solar radiation, and the relative tolerance of the different crops to irrigation with brackish water. Thus, in general, crops with a lower tolerance for irrigation with brackish water are sited in the higher elevations which do not have access to well water. On the other hand, grasses, bioenergy crops, and crops raised for animal feed, which have a suspected relatively higher tolerance for irrigation that is supplemented with brackish water, are sited in the lower elevations where HC&S has historically used its brackish water wells to supplement surface water imported from EMI, in the east, and the Nā Wai 'Ehā streams, in the west, to meet the irrigation needs of approximately 35,000 acres of sugar cultivation. Volner Decl. at ¶ 16.

Excluding the Waihee Hopoi fields, which have never been served with water from the EMI ditch system, the Diversified Agricultural Plan envisions the use of 31,250 acres of former sugar fields that were previously irrigated with a combination of surface water delivered by EMI and brackish water pumped from HC&S' brackish water wells. Of these 31,250 acres, 4,650 acres are planned for unirrigated livestock pastures on the eastern edge of the plantation where there it is anticipated that there is sufficient rainfall to support this use. This leaves 26,600 acres that will need to be irrigated. Volner Decl. at ¶ 17.

Exhibit C-156 is a table that summarizes HC&S' forecast of the irrigation requirements for the 26,600 acres, noting for each category of use the acreage that is located above the reach of HC&S' brackish water wells and thus can be irrigated with surface water only. The irrigation requirement for each crop was determined by applying the appropriate crop co-efficient to the average daily evapotranspiration rates for the fields in question, crediting average rainfall, and expressing the remaining requirement in gallons per acre per day (***"GPAD"***). The data used to make these calculations are shown on Exhibit C-157, attached. *See* Volner Decl. at ¶ 18.

The aggregate irrigation requirement for the 26,600 acres is 3,369 GPAD, which amounts to 37,709 million gallons per year, or an average daily requirement of 90 million gallons per day (***"mgd"***). To account for seepage, evaporation and other system losses, HC&S has used the same system loss percentage of 22.7% that HC&S estimated and presented in evidence previously in Exhibit C-137, which the Hearings Officer found to be reasonable in the Proposed Decision. *See* Proposed Decision, FOF 399. The gross amount of water needed to yield the net irrigation requirement of 90 mgd, at a loss rate of 22.7%, is 116 mgd. *See* Volner Decl. at ¶ 19.

The gross irrigation requirement for acreage that is 100% dependent on surface water breaks down as follows:

Pasture- Irrigated	3440 acres @ 1992 GPAD	6.85 mgd
Agricultural Park	1025 acres @ 2566 GPAD	2.63 mgd
Diversified Ag	1950 acres @ 2630 GPAD	5.13 mgd
Orchard Crops	2250 acres @ 5279 GPAD	11.88 mgd
Beverage Crops	900 acres @ 5096 GPAD	4.59 mgd
Total irrigation requirement		31.08 mgd
Gross irrigation requirement (1.294 x 31.08 mgd)		40.21 mgd

Volner Decl. at ¶ 20.

The gross irrigation requirement for acreage with access to well water breaks down as follows:

Pasture irrigated	1150 acres @ 1314 gad	1.51 mgd
Dairy irrigated	3950 acres @ 2272 gad	8.97 mgd
Orchard crops	815 acres @ 5387 gad	4.39 mgd
Pongamia	2500 acres @ 4478 gad	11.19 mgd
Bioenergy crops	8620 acres @ 3759 gad	32.40 mgd
Total irrigation requirement		58.46 mgd
Gross irrigation requirement (1.294 x 58.51 mgd)		75.64 mgd

Volner Decl. at ¶ 21.

3. Water availability

At first blush, it might appear that the irrigation requirement for these fields could be met almost entirely with well water, since HC&S has historically pumped an average of approximately 70 mgd when in full sugar cultivation to supplement the surface waters imported from EMI. However, the transition to diversified agriculture will bring with it several key changes that will impact the utility and reliability of this brackish water resource in the future—reduced recharge from lower levels of irrigation of the overlying lands, uncertain tolerance of diversified agriculture crops to heavy reliance on brackish water, and the higher costs associated with well water versus surface water, and the higher economic hurdles related to higher levels of investment in new agricultural ventures versus ongoing sugar operations where the major investments were already made. HC&S and other farmers of HC&S lands cannot simply assume that it would be viable or prudent to rely principally on brackish well water to irrigate these fields. *See* Volner Decl. at ¶ 22.

It would be irresponsible to expect to utilize groundwater resources at historical levels while greatly reducing surface water importation into the central valley of Maui. It is unclear what the direct relationship of recharge from surface water importation to the underlying groundwater aquifer is, but historical groundwater pumping levels certainly were higher than published sustainable yields. *See* Volner Decl. at ¶ 23.

The crops conceptually planned for the area that can access groundwater are known to be tolerant to some levels of brackish water irrigation. What that level is and the impacts of prolonged uses of brackish water on these crops are unknown at this time. It is important to remember that when these fields were planted with sugarcane, well water was periodically being applied during dry periods to a crop with a twenty-four month crop cycle. It is unknown just how well the crops currently planned for those acres will tolerate brackish water, but the mere fact that they will generally have much shorter crop cycles than sugarcane means that they will have less time to recover from sustained periods of reliance upon brackish water during dry periods, and will thus be generally more vulnerable to the negative impacts on crop growth associated with prolonged exposure to brackish water. As with sugarcane cultivation, the prolonged or primary use of brackish water could have additional negative impacts on soil health with the buildup of minerals and salts without adequate surface water to flush these constituents. *See* Volner Decl. at ¶ 24.

There are also increased costs associated with utilizing well water rather than surface water as has previously been established in these proceedings. It is unknown at this time if the economics of the diversified agriculture uses envisioned for these lands can support the increased costs associated with utilizing well water. Unlike sugar, where the major investments necessary to support operations had previously been made, new diversified agriculture ventures will require

significant new investments in farming and processing equipment. The assurance of the availability of an economically feasible source of water is necessary to justify such major investments by A&B and others who will be farming on HC&S land. Additional operating costs, such as the cost to pump groundwater, could cause the return on these investments to be less attractive and difficult to justify. *See* Volner Decl. at ¶ 25.

B. HC&S' Management of Decrease in Diversions, Interim Restorations, and Structural Integrity of the EMI Ditch System

1. EMI's management of the decrease in diversions

There are primarily four ways to reduce the amount of water that is collected and transported in the EMI ditch system: 1) on streams that have controlled diversions, by closing or reducing the diversion intake gate openings; 2) on stream diversions that have sluice gates, by partially or completely opening the sluice gates; 3) on streams that have radial gates between the diversions and the ditch, by completely closing the radial gates; and 4) by partially or completely closing the gates on the main control points on the ditches themselves to limit the amount of water that can pass each control point, the effect of which is to redirect any excess water into the stream crossed by the ditch where the control point is located. *See* Declaration of Garret Hew attached hereto ("***Hew Decl.***") at ¶ 3.

The streams that have controlled diversions are Hanawi, Kapaula, Paakea, Puakea, Waiohue, East Kopiliula, East Wailua-iki, West Wailua-iki, East Wailuanui, West Wailuanui, Haipuaena and Kolea. The intake gates are openings, which are typically constructed with wooden boards or metal plates, are used to regulate the size of the opening and thus how much water can flow from the stream into the diversion structure. The controlled diversions for the above streams are all at the Koolau Ditch level of the EMI ditch system with the exception of

Haipuaena and Kolea, where the diversions are at the Spreckels Ditch, which at that point is located at a higher elevation than the Koolau Ditch. *See id.* at ¶ 4.

The streams that have diversion structures with sluice gates are Makapipi, Hanawi, Kapaula, Paakea, Puakea, Waiohue, East and West Kopiliula, East Wailua-iki, West Wailua-iki, East Wailuanui, West Wailuanui, Palauhulu, Nuaailua, Honomanu, Kolea, Alo, Waikamoi, Kaaiea, Oopuola, Nailiilihaele, Kailua, Ohanui, Hoalua, Hanehoi, Waipio, Mokupapa, Hoolawa-liili, Hoolawa-nui, and Honopou. These include diversions located on the Koolau Ditch, the Wailoa Ditch, the Spreckels Ditch, the Center/Manuel Luis Ditch, the New Hamakua Ditch, the Lowrie Ditch and the Haiku Ditch. Sluice gates are openings within the basin of the diversions that can be opened to discharge the water collected in the diversion back into the stream. Periodically opening sluice gates to flush out silt, gravel and other debris that collects in the diversion structures is one of the normal means of maintaining the proper functioning of the ditch system. The effect of opening a sluice gate is to return water to the stream after it has entered the diversion structure. It may not always cause 100% of the water that entered the diversion to be discharged back into the stream, however, because during periods of heavy rainfall, water may back up in the diversion faster than it can be discharged through the sluice gate, in which case some water will still enter the ditch. During most flow conditions, however, completely opening the sluice gate will return practically all of the water to the stream. *See id.* at ¶ 5.

The streams that have radial gates between the diversions and the ditch are Puohokamoa, Alo, Waikamoi, Kaaiea, Oopuola, Nailiilihaele, Kailua, Ohanui, Hoalua, Hoolawa-liili, Hoolawa-nui, and Honopou. These gates are located along the tunnel reaches of the ditch and were designed to automatically open or close in relation to the water level in the tunnel. The

gates are controlled by a float located in a float chamber in the tunnel that is connected to a cable that lifts or lowers the radial gate depending on the water level in the tunnel. The operation of the gates can be adjusted by piping water to the float chamber and closing the drain valve on the chamber to raise the float to maintain the gate in the closed position. *See id.* at ¶ 6.

The main ditch control points on the Koolau ditch are located near where the ditch crosses Waiaaka (the #3 gatehouse), Hanawi (Awaimakaino), Waiaaka sluice basin, Kopiliula, East Wailua-iki (# 6 gatehouse) and Piinaau Streams. The main ditch control points on the Spreckels ditch are located near where ditch crosses Uluini, Kolea, Haipuaena and Puohokamoa Streams. The main ditch control points on the Manuel Luis / Center ditch are located near where ditch crosses Haipuaena, Puohokamoa and Waikamoi Streams. The main ditch control points on the Wailoa ditch / tunnel are located near where ditch crosses Kolea and Honopou Streams. The main ditch control points on the New Hamakua ditch are located near where ditch crosses Alo, Nailiilhaele, Hoolawa and Honopou Streams. The main ditch control point on the Lowrie ditch is located near where ditch crosses Kailua, Hoalua and Hoolawa Stream. The main ditch control points on the Haiku ditch are located near where ditch crosses Hoolawa and Honopou Streams. *See id.* at ¶ 7.

EMI manages the reduction in diversions by implementing a combination of measures that involve adjusting the intake control gates on the streams with controlled diversions, opening the sluice gates at the diversion on streams that have sluice gates, adjusting the operation of radial gates on the streams that have radial gates, and partially or completely closing the gates on main ditch control points. The precise combination of measures implemented by EMI at any given point in time depends on the amount of water sought to be brought in to serve the needs of

HC&S and the County of Maui, and the amount of rainfall that is occurring among the watershed areas that span the ditch system. *See id.* at ¶ 8.

Currently, since HC&S is utilizing very little irrigation water and there has been a lot of rainfall throughout the East Maui area, EMI has closed the intakes on all of the streams with controlled diversions, has opened the sluice gates on the majority of diversions that have sluice gates, has closed the radial gates on a couple of streams with radial gates, and has closed the main ditch control points on the Koolau ditch where it crosses Waiaaka (the #3 gatehouse), Hanawi (Awaimakaino), Waiaaka sluice basin, Kopiliula, East Wailua-iki (# 6 gatehouse) and Piinaau Streams. All of the stream water that originates from the Nahiku and Keanae water license area is currently not diverted. The effect of these measures is to rely principally on water entering the ditch system west of Piinaau stream to meet the reduced needs of HC&S and the County of Maui. With these measures in place, water flows in the Wailoa ditch at Maliko Gulch have been reduced to 20 to 25 mgd, which is enough to serve the County and HC&S' reduced water needs. *See id.* at ¶ 9.

Under drought conditions, EMI would be implementing a different set of gate adjustments because it would not be possible to meet even the lowered needs of HC&S and the County without importing water from further east, in the Nahiku and Keanae area, where base flows are more reliable and there is a ground water contribution to the Koolau Ditch, in order to maintain a consistent flow in the Wailoa Ditch. *See id.* at ¶ 10.

As irrigation requirements increase, EMI expects to implement a selective opening of board gates, readjusting the opening of sluice gates, resetting of radial gates, and readjusting of main ditch control gates to increase the amount of water brought into the ditch system and

delivered to HC&S and the County. These measures will be dictated by the flow levels needed at Maliko Gulch and the rainfall patterns throughout the East Maui watersheds. *See id.* at ¶ 11.

2. EMI's management of the interim restorations

With regard to the interim implementation of the restoration of the streams that EMI has agree to fully and permanently restore, EMI has 1) closed the intakes and opened the sluice gates on the diversions on East and West Wailuanui Streams on the Koolau Ditch; 2) has opened the sluice gate on Palauhulu Stream on the Koolau Ditch; 3) has opened the sluice gates on the diversions on Hanehoi and Puolua on the Haiku Ditch; and 5) has opened the sluice gate and closed the radial gate on the Wailoa Ditch, made modifications to the intake on the New Hamakua Ditch, opened the sluice gate and closed the intake diversion on the Lowrie Ditch and modified the diversion on the Haiku Ditch on Honopou Stream. *See id.* at ¶ 12.

Further measures to achieve the full and permanent restoration of these streams cannot be taken until EMI obtains all necessary permits and government approvals. Exhibit C-158 is a table that summarizes by stream a work plan to fully and permanently abandon these diversions. On September 16, 2016, EMI submitted to CWRM its applications to abandon the following stream diversions: Honopou, Hanehoi (Puolua), Waiokamilo, Kualani, Pi'ina'au, Palauhulu and Wailuanui (East and West). *See id.* at ¶ 13.

Other pending approvals and concurrences will be needed from the County, Office of Conversation and Coastal Lands and the United States Army Corps of Engineers. *See id.* at ¶ 14.

3. The integrity of the EMI ditch system with changes in diversions

The reduction in diversion amounts does not by itself compromise the structural integrity of the EMI ditch system so long as the complete system, including the open ditches and roadways, continues to be maintained as a single, coordinated system. Consistently reduced flows will increase the amount of maintenance required of the open ditches in the system,

because it will increase the surface areas that will need to be periodically cleared of vegetation. *See id.* at ¶ 15.

DATED: Honolulu, Hawaii, October 17, 2016.

CADES SCHUTTE LLP

DAVID SCHULMEISTER
ELIJAH YIP
Attorneys for HAWAIIAN COMMERCIAL & SUGAR COMPANY

COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII

PETITION TO AMEND INTERIM INSTREAM FLOW STANDARDS FOR HONOPOU, HUELO (PUOLUA), HANEHOI, WAIKAMOI, ALO, WAHINEPEE, PUOHOKAMOA, HAIPUAENA, PUNALAU/KOLEA, HONOMANU, NUAAILUA, PIINAAU, PALAUHULU, OHIA (WAIANU), WAIOKAMILO, KUALANI, WAILUANUI, WEST WAILUAIKI, EAST WAILUAIKI, KOPILIULA, PUAKAA, WAIOHUE, PAAKEA, WAIAAKA, KAPAULA, HANAWI, AND MAKAPIPI STREAMS	Case No. CCH-MA13-01 **CERTIFICATE OF SERVICE**

CERTIFICATE OF SERVICE

The undersigned hereby certifies that, on this date, a true and correct copy of the foregoing document was duly served on the following parties as stated below:

COMMISSION ON WATER RESOURCE MANAGEMENT
1151 Punchbowl Street
Honolulu, Hawaii 96813

VIA EMAIL (kathy.s.yoda@hawaii.gov) and HAND DELIVERY

DR. LAWRENCE H. MIIKE
Hearings Officer
State of Hawaii
Department of Land and Natural Resources
Commission on Water Resource Management
1151 Punchbowl Street
Honolulu, Hawaii 96813

VIA EMAIL (lhmiike@hawaii.rr.com) and HAND DELIVERY

WILLIAM J. WYNHOFF, ESQ.
LINDA L.W. CHOW, ESQ.
Department of the Attorney General
465 South King Street, Room 300
Honolulu, Hawaii 96813

Attorney for the Tribunal

VIA EMAIL (linda.l.chow@hawaii.gov) and HAND DELIVERY

SUMMER L.H. SYLVA, ESQ.
CAMILLE K. KALAMA, ESQ.
Native Hawaiian Legal Corporation
1164 Bishop Street, Suite 1205
Honolulu, Hawaii 96813
Attorneys for Petitioners
Na Moku Aupuni Koolau Hui

VIA EMAIL

(summer.sylva@nhlchi.org) and
(camille.kalama@nhlchi.org)

ISAAC HALL, ESQ.
2087 Wells Street
Wailuku, Hawaii 96793
Attorney for Maui Tomorrow

VIA EMAIL (idhall@maui.net) and

PATRICK K. WONG, ESQ.
CALEB P. ROWE, ESQ.
KRISTIN K. TARNSTROM, ESQ.
Department of the Corporation Counsel
County of Maui
200 South High Street
Wailuku, Hawaii 96793
Attorneys for County of Maui,
Department of Water Supply

VIA EMAIL
(pat.wong@co.maui.hi.us)
(caleb.rowe@co.maui.hi.us)
(kristin.tarnstrom@co.maui.hi.us) and

ROBERT H. THOMAS, ESQ.
Damon Key Leong Kupchak Hastert
Suite 1600, Pauahi Tower
1003 Bishop Street
Honolulu, Hawaii 96813
Attorney for Hawaii Farm Bureau
Federation

VIA EMAIL (rht@hawaiilawyer.com) and

JEFFREY C. PAISNER
403 West 49th Street, #2
New York, New York 10019
Pro Se

VIA EMAIL (jeffreypaisner@mac.com) and

JOHN BLUMER-BUELL
P.O. Box 787
Hana, Hawaii 96713
Witness

VIA EMAIL (blubu@hawaii.rr.com)

NIKHILANANDA
P.O. Box 1704
Makawao, Hawaii 96767-1704
Witness

VIA EMAIL (nikhilananda@hawaiiantel.net)

DATED: Honolulu, Hawaii, October 17, 2016.

CADES SCHUTTE LLP

DAVID SCHULMEISTER
ELIJAH YIP
Attorneys for HAWAIIAN COMMERCIAL &
SUGAR COMPANY