



SIERRA CLUB OF HAWAI'I

Testimony to Board of Land and Natural Resources

December 13, 2024

9:00 AM

Conference Room 132

Agenda Item D-9

ISSUANCE OF REVOCABLE PERMIT TO ALEXANDER & BALDWIN, INC. AND EAST MAUI IRRIGATION COMPANY, LLC FOR THE DEVELOPMENT, DIVERSION, AND USE OF SURFACE WATER FOR DIVERSIFIED AGRICULTURE, CURRENTLY EXISTING HISTORICAL INDUSTRIAL AND NON-AGRICULTURAL USES, RESERVOIR, FIRE PROTECTION, HYDROELECTRIC, AND COUNTY OF MAUI DEPARTMENT OF WATER SUPPLY AND KULA AGRICULTURAL PARK PURPOSES ON THE ISLAND OF MAUI; TAX MAP KEYS: (2) 1-1-001:044 AND 050, 1-1-002:002 (POR.), 1-2-004:005 & 007, 2-9-014:001, 005, 011, 012 & 017.

Aloha Chair Chang and members of the Board of Land and Natural Resources,

While there are improvements to this year's staff submittal, it allocates far too much water to A&B/EMI, does not adequately reduce the waste of millions of gallons of water daily, and authorizes the continued degradation of our streams.¹

I. **The staff submittal allocates far too much water.**

The staff submittal provides far too much water to A&B and EMI.

First, it overlooks the availability of unused water that is allocated to the County. On average the County uses approximately 2.8 mgd.² When 6 mgd is allocated to the County, either (a) Mahi Pono is actually given on average an extra 3.2 mgd, or (b) 3.2 mgd is wasted. The County has never required 5 mgd in any month for **both** domestic purposes and for the agricultural park. See the data at the end of this testimony. There is a reasonable compromise. Condition 17 should be re-worded as follows:

¹ The first paragraph of the staff submittal continues to perpetuate the assumption that a long-term water license will be issued via a public auction, rather than providing the water to the County Water Authority.

² The staff submittal calculated that the average use was 2.56 mgd for 2024. The Sierra Club's calculation is based on four years' worth of data.

As a condition of the permit, the Permittee shall provide up to 5.0 mgd to the County of Maui daily (as averaged monthly). The Permittee can anticipate being able to use 2.2 mgd of this allocation on average, but it must provide more than 5 mgd of water to the County on those days when the County requires it. On those days, the Permittee can rely on water stored in reservoirs and groundwater to make up the difference. Once the County notifies DLNR that its improvements are completed and its capacity increased, the permit will be placed on the agenda of the next board meeting to discuss revisions to this condition.

This revised language, which the County has informed DLNR's staff is acceptable, would go a long way to reducing waste.

Second, the staff submittal discounts the availability of groundwater. Despite what the staff submittal says, the Water Commission has repeatedly and officially recognized that groundwater is available and should be used for irrigating Central Maui crops. In 2018, the Water Commission estimated that 17.84 mgd of groundwater could be used to irrigate crops in central Maui.³ It determined that “**a portion**” (**not all**) “of the water needs under the Diversified Agricultural Plan must come from surface water.” COL 120. Condition 16 of the staff submittal explicitly relies on CWRM's 2018 Decision but fails to recognize that CWRM called for the continued use of groundwater to irrigate crops. In 2022, the Water Commission adopted a staff submittal that recognized “the use of between 7.3 cfs and 9.3 cfs (4.7 and 6.0 mgd) of brackish groundwater available from the Paia aquifer system.”⁴ It noted that “there is approximately 4.5 mgd available from the Paia aquifer system, where most of Mahi Pono wells are located.”⁵ These specific determinations are far more relevant than general principles taken out of context. The Water Commission has determined that is better to use groundwater for county municipal systems than it is to use for irrigation. Its determination is basic common sense and consistent with the Hawai'i Supreme Court's conclusion that irrigation is “the least necessary use of water.” *Riemenschneider v. Wilson*, 6 Haw. 375 (1882). In this case, however, there is no evidence of any competition between domestic uses and irrigation for the groundwater. A&B's own EIS – approved by this board—revealed that groundwater can be sustainably pumped to provide some water for irrigation. In its EIS, A&B admitted that the “sustainable yield”⁶ of the aquifers from which it has pumped

³ <https://files.hawaii.gov/dlnr/cwrm/cch/cchma1301/CCHMA1301-20180620-CWRM.pdf>

at FOFs 750, 794-795, 810.

⁴ <https://files.hawaii.gov/dlnr/cwrm/submittal/2022/sb20221115B5.pdf> at 96

⁵ *Id.* at 100.

⁶ The “sustainable yield” means “the maximum rate at which water may be withdrawn from a water source without impairing the utility or quality of the water source as determined by the commission.” HRS § 174C-3. A&B's EIS concluded, “maximum pumping **exceeding** the SY of 32 mgd would **eventually** increase salinity of the water drawn from the wells. At that point, pumping rates would need to be reduced to protect the aquifers.”

groundwater is 32 mgd. A&B's EIS calls for pumping 16.47 mgd of groundwater for irrigation. The installed capacity of Mahi Pono's ten wells is well over 32 mgd. Its one well in the Ha'ikū aquifer alone can pump 10 mgd. Its quarterly reports note that Mahi Pono has been using groundwater. This year, it has pumped an average of 5.44 mgd. It pumped 4.84 mgd of groundwater in the second quarter of 2023; 8.48 mgd in the third quarter of 2023; and 9.94 mgd of groundwater in the fourth quarter. Mahi Pono has no evidence that its use of groundwater has had any adverse impacts. The staff submittal puts on blinders when it ignores the availability and continued use of this source of water. It is arbitrary and capricious to ignore the CWRM's orders which are directly applicable here.

This board should reduce the amount of water allocated by at least 7.2 mgd.⁷

Condition 18 should be reworded:

(18) Therefore, the total amount of water allocated under this revocable permit shall be:

the amount of water equal to 3263 gad multiplied by the total amount of planted acreage to be used by the Permittee for diversified agriculture and other existing uses;

5.0 mgd to the County of Maui for both the Kamaole Treatment Plant and the Maui Kula Agricultural Park;

minus 7.2 mgd (recognizing the availability and use of groundwater and unused County allocation);

All of the above allocations shall be based on a monthly average.

A cap that is low enough creates an incentive for A&B/EMI/Mahi Pono to (a) conserve water (b) line the reservoirs; and (c) use available groundwater. These measures ensure that more water remains in our streams. As CWRM noted, "There is universal agreement that more water and better connectivity in streams is a good thing for native habitat restoration."

II. The staff submittal does not adequately address system losses.

⁷ The gallons per acre per day (gad) calculation ignores this data. In the alternative, the gad should be reduced by 700 gad to 2563.

The supreme court described “nonuse” of water as “the perceived biggest waste of all.” *Waiāhole*, 94 Hawai‘i at 140, 9 P.3d at 452. The court recognized that “the policy against waste dictates that any water above the designated minimum flows and not otherwise needed for use remain in the streams in any event.” *Id.* at 156, 9 P.3d at 468. “The value of diverting water, only to lose the water due to avoidable or unreasonable circumstances is unlikely to outweigh the value of retaining the water for instream uses.” *Īao*, 128 Hawai‘i at 257, 287 P.3d at 158. The staff submittal calls on Maui County to “more efficiently use water.” But fails to similarly “incentivize” A&B/EMI to ensure that water is more efficiently used.

First, it defines “system loss” in a manner that is poorly drafted. Please read proposed condition (1) at the bottom of page 13 without scratching your head in bewilderment. The Sierra Club agrees that system loss should be defined as the water taken from the license area that is not used to irrigate crops. And the water that the County uses should be excluded from the definition of system loss. But the water that the County does not use flows into the Mahi Pono field system. That water is not used. In any case, the calculation of a percent needs to be very clear as to the numerator and denominator.

The **numerator** needs to be calculated by adding the amount of water in the last two columns in quarterly reports that A&B and EMI submit. That is the water that is not used. The staff submittal appears to suggest that the amount not used is the sum of the third to the last and the last column—omitting an average of more than 5 million gallons that is wasted daily.

The **denominator** needs to be the amount of water taken from the RP area, as measured at Honopou. The staff submittal includes water taken from outside the RP area.

Second, the RP allows for excessive system losses. CWRM required that system losses from Nā Wai ‘Ehā streams that irrigate nearby fields in Central Maui to be limited to less than five percent. There is no basis to allow system losses that are four times larger in the same general area.

Third, it is long past time for this board to order the lining of reservoirs. The RP “must include provisions that encourage system repairs and limit losses.” *Waiāhole II*, 105 Hawai‘i at 27, 93 P.3d at 669. “[T]he 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.” *Kauai Springs*, 133 Hawai‘i at 175, 324 P.3d at 985. When CWRM ordered A&B’s subsidiary, HC&S, to line a reservoir “to prevent a large portion of these losses,” the supreme court found that the Commission’s action was “commendable and shows the ‘diligence’ and ‘foresight’ expected of the

Commission in its management of the public trust.” *‘Īao*, 128 Hawai‘i at 257, 287 P.3d at 158. In its 2018 CWRM asked BLNR to “**require** improvements in the water delivery system to minimize leakage and waste.” A new condition should be added to the RP to read:

(19) The Permittee shall ensure that at least one reservoir into which water from east Maui streams flows is lined by November 30, 2025.

In addition, condition 15 should be amended to specifically refer to lining of reservoirs:

No later than August 1, 2025, Permittee shall provide an updated plan to reduce system losses including planned system upgrades, specific measures to more efficiently use water (including the future lining of reservoirs to reduce system losses), proposed implementation timeline, and estimates on the amount that system losses may be reduced.

III. The staff submittal fails to protect our streams.

CWRM ordered modifications to stream diversions in 2018 and 2022. These modifications are essential for riparian, recreational, and cultural uses of the streams as well as biological values. CWRM concluded that “there is need to ensure downstream flows” in Ho‘olawa, Waipi‘o, Hānawana, Nailiilihaele, ‘O‘opuola, and Kailua streams. “[A]dditional flow must be provided to meet recognized instream uses of water.”⁸ 31.3 mgd flows in twelve Huelo streams half the time (Q₅₀).⁹ CWRM ordered that 13.5 mgd of water remain in six of these streams. **Yet, none of the diversion structures have been modified for these six streams!** CWRM ordered their modification two years ago. Not only is the 13.5 mgd being taken out of streams that CWRM said need the water, but approximately 8 mgd of that water sits in reservoirs, unused. That’s a problem. A&B and EMI are draining these streams dry.

Long ago, our supreme court explained that to transfer water from a stream, the entity seeking a transfer must prove no harm to any potentially affected interests in a stream. *Robinson v. Ariyoshi*, 65 Haw. 641, 649 n. 8, 658 P.2d 287, 295 n. 8 (1982). CWRM has already concluded that diversions on six streams are harming others. Until that harm is stopped, BLNR cannot allow A&B, EMI or Mahi Pono take more water. Page 5 of the staff submittal says, “As more acreage is planted, the maximum amount of water allowed to be diverted would increase accordingly.” The staff submittal literally authorizes A&B/EMI to take water from streams that CWRM has ordered to remain in

⁸ <https://files.hawaii.gov/dlnr/cwrmsubmittal/2022/sb20221115B5.pdf> at 104.

⁹ *Id.* at 103

streams – and to take even more water from other streams.¹⁰ This board should not be allowing A&B/EMI to take more water out as Mahi Pono expands its agricultural operations while streams – and riparian, recreational, and cultural users – suffer.

IV. Stakeholder meetings need to be enhanced.

When parties talk in good faith, disputes can be resolved. But the current language has proven to be inadequate. It makes no sense to allow A&B to set the agenda and take minutes. Moreover, the current language is poorly drafted. There is no such thing as the Huelo Community Association. The condition should be re-worded:

(6) The Permittee shall attend meetings hosted by the County Water Authority to discuss water issues including progress on (a) implementing CWRM orders, (b) reducing water losses, (c) lining of reservoirs, (d) the Kamole Treatment Plant, (e) the Kula Ag Park expansion and delivery system, and (e) providing water to the Department of Hawaiian Home Lands. It shall also include discussions related to current uses of water and long-term planning. Invited participants shall include Mahi Pono, the Farm Bureau, the Office of Hawaiian Affairs, Nā Moku Aupuni O Koʻolau Hui, the Native Hawaiian Legal Corporation, the Haiku Community Association, the Huelo community, the Sierra Club, and the Department of Hawaiian Home Lands. Staff from the Commission on Water Resource Management and the Department of Land and Natural Resources shall also participate. These meetings shall take place at least quarterly, and more often as would be useful.

V. Contested case may be required.

The issues are complex. It will be challenging for this board to address all these issues within the compressed time of a board meeting. Unless the board demonstrates that it is going to take the issues that the Sierra Club raises seriously, the Sierra Club will be asking for a contested case hearing. Disputes over the availability of unused water allocated to the County and groundwater, for example, are the type of factual disputes that lend themselves to resolution through a contested case hearing with witnesses testifying under oath, facing cross examination.

VI. Data

¹⁰ The staff submittal finally recognizes CWRM's determination that only 56 mgd of water are available half the time. In fact, 45% of the time, only 44 mgd can be taken out of east Maui. Thirty percent of the time, only 26 mgd are available. It makes no sense to be planting more citrus trees when there is not going to be enough water available in the long-term.

Here is a table that summarizes water uses over the past four years:

Month	MGD taken from E. Maui streams	Maui County domestic use mgd	Kula Ag Park mgd	Diversified Ag in Central Maui mgd	Historic/ Industrial uses mgd	Reservoir/Fire Protection/Evaporation/Dust Control/Hydroelectric/System Losses mgd
January 2020	30.10	1.07	.39	2.45	1.1	25.09
February 2020	25.28	1.17	.37	2.46	1.1	20.19
March 2020	27.98	.95	.37	2.58	1.1	22.98
April 2020	25.70	.91	.35	3.58	1.1	19.77
May 2020	21.60	1.86	.39	3.62	1.1	14.63
June 2020	20.50	2.64	.51	3.73	1.1	12.53
July 2020	16.8	3.2	.45	2.6	1.1	9.47
August 2020	19.7	2.5	.46	2.5	1.1	13.20
Sept. 2020	20.1	3.4	.69	2.4	1.1	12.49
October 2020	11.51	3.81	.56	2.51	1.1	3.53
Nov. 2020	25.34	2.16	.53	3.44	1.1	18.11
Dec. 2020	28.13	2.19	.50	4.43	1.1	19.91
January 2021	28.09	1.4	.36	3.91	1.1	21.33
February 2021	25.90	.88	.38	3.93	1.1	19.61
March 2021	23.55	.61	.40	3.01	1.1	18.44
April 2021	23.59	2.0	.59	3.98	1.1	15.91
May 2021	24.95	2.41	.60	4.48	1.1	16.37
June 2021	14.78	3.82	1.01	4.55	1.1	4.31
July 2021	18.57	2.6	.36	5.01	1.1	9.49
August 2021	18.12	2.21	1.08	5.62	1.1	8.11
Sept. 2021	16.7	3.15	.49	9.08	1.1	2.87
October 2021	18.87	2.36	.54	11.26	1.1	10.14
Nov. 2021	16.41	3.93	.69	10.69	1.1	7.31
Dec. 2021	8.65	.69	.30	2.80	1.1	6.51
January 2022	14.14	2.6	.44	5.11	1.1	5.85
February 2022	12.31	4.02	.55	5.93	1.1	6.33
March 2022	12.2	3.79	.56	5.97	1.1	5.5
April 2022	15	1.87	.64	7.73	.03	6.42
May 2022	14.42	2.56	.63	7.63	.12	5.81
June 2022	14.78	3.32	.52	11.62	.12	7.31
July 2022	16.60	1.91	.58	10.96	.06	7.54
August 2022	15.06	3.37	.64	10.89	.06	6.86
Sept. 2022	12.85	2.79	.60	11.82	.03	4.51
October 2022	19.14	2.23	.59	18.48	.05	6.59
Nov. 2022	26.48	1.49	.51	20.36	.05	7.8
Dec. 2022	23.27	1.26	.65	11.29	.03	10.91
January 2023	15.57	2.57	.46	9.72	.03	6.38
February 2023	10.6	1.22	.29	3.59	.03	6.44
March 2023	12.24	1.50	.39	6.92	.04	5.19
April 2023	14.55	2.57	.31	13.11	.05	6.36
May 2023	21.04	2.16	.62	18.55	.05	5.25
June 2023	19.21	3.31	.61	18.48	.05	4.99

July 2023	18.66	3.23	.67	16.82	.04	6.35
August 2023	18.50	4.20	.77	23.76	.05	2.98
Sept. 2023	25.16	3.82	.65	24.61	.04	9
October 2023	14.74	4.08	.57	17.55	.04	7.82
Nov. 2023	21.28	3.04	.65	22.64	.05	6.94
Dec. 2023	25.51	.5	.51	23.60	.04	9.47
January 2024	29.95	.32	.44	22.32	.04	9.93
February 2024	32.31	1.03	.42	29.93	.04	9.51
March 2024	39.39	2.19	.40	31.36	.03	9.73
April 2024	33.47	1.38	.61	28.59	.04	8.19
May 2024	30.84	.69	.46	27.33	.04	10.32
June 2024	36.70	1.74	.53	31.08	.04	9.19
July 2024	34.97	3.49	.93	36.05	.04	2
August 2024	33.25	2.76	.62	33.19	.04	8.91
Sept. 2024	28.72	2.76	.58	27.09	.06	8.49
Month	MGD taken from E. Maui streams	Maui County domestic use mgd	Kula Ag Park mgd	Diversified Ag in Central Maui mgd	Historic/Industrial uses mgd	Reservoir/Fire Protection/Evaporation/Dust Control/Hydroelectric/System Losses mgd