



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

STAFF SUBMITTAL

for the meeting of the
COMMISSION ON WATER RESOURCE MANAGEMENT

February 18, 2020
Honolulu, Hawai'i

Issuance of Written Notice of Violation for Enforcement Against Waste, and Recommendation to Impose Fines Against Wailuku Water Company, LLC, Owner/Operator of Waihe'e Ditch, In Response to HRS §174C-13, Citizen Complaint filed by Hui o Nā Wai 'Ehā Alleging Waste by Wailuku Water Company at Pale'a'ahu Gulch, Nā Wai 'Ehā Surface Water Management Area, Maui, TMK No. (2) 3-6-004:003

SUMMARY OF REQUEST:

Staff requests that the Commission on Water Resource Management (Commission) consider resolving the waste complaint filed by Hui o Nā Wai 'Ehā alleging that Wailuku Water Company (WWC) is wasting water by releasing water from the Waihe'e Ditch into Pale'a'ahu Gulch on lands owned by Waikapu Properties, LLC, TMK No. (2) 3-6-004:003.

LOCATION: Nā Wai 'Ehā Surface Water Management Area, Maui, consisting of the surface water hydrologic units of Waihe'e, Waiehu, 'Īao, and Waikapū. The alleged waste complaint was identified as occurring at Pale'a'ahu Gulch, a relatively small drainage area that feeds the Kealia Pond National Wildlife Refuge (See Figure 1).

LEGAL AUTHORITY:

The State Water Code (Code) provides for the filing of citizen complaints pursuant to Chapter §174C-13, Hawai'i Revised Statutes (HRS) and Chapter §13-167-82, Hawai'i Administrative Rules (HAR), which, in pertinent part, reads as follows:

Citizen complaints. If any person files a complaint with the commission that any other person is wasting or polluting water or is making a diversion, withdrawal, impoundment, consumptive use of waters or any other activity occurring within or outside of a water management area, not expressly exempted under this code, without a permit where one is required, the commission shall cause an investigation to be made, take appropriate action, and notify the complainant thereof.

Furthermore, the Code specifically obligates the Commission to “cause an investigation to be made” and “take appropriate action.” In the Waiāhole contested case hearing CCH-OA95-01, the Commission recognized, and the Hawai'i Supreme Court affirmed, that water not actually used for reasonable-beneficial use must be left undiverted to avoid unlawful waste.

BACKGROUND:

In its June 10, 2010 Decision and Order in contested case hearing CCH-MA06-01, 'Āao Ground Water Management Area High-Level Source Water Use Permit Applications and Petition to Amend Interim Instream Flow Standards of Waihe'e, Waiehu, 'Āao, & Waikapū Streams Contested Case Hearing, the Commission found that “in the past that merely requiring parties to address losses has not resulted in prompt remedying of losses. Accordingly, after some discussion, the Commission has deliberately opted to place the burden and motivation to address loss squarely upon the parties in control of those systems.”

On April 17, 2014, following the Supreme Court remand in CCH-MA06-01, the Commission issued an Order adopting the following: 1) Hearings Officer's Recommendation on the Mediated Agreement Between the Parties; and 2) Stipulation re Mediator's Report of Joint Proposed Findings of Fact, Conclusions of Law, Decision and Order. In the Remand Proceeding, WWC submitted evidence that it had repaired portions of its system, removed reservoirs from service, and terminated use of the North Waiehu ditch system. These measures enabled WWC to reduce system losses to approximately 2.73 mgd, or 4.97-percent. Based on the supplemental findings, the Commission determined that WWC's reasonable system losses were 2.73 mgd.

In its Opening Brief, dated February 3, 2016, in contested case hearing CCH-MA15-01, Surface Water Use Permit Applications, Integration of Appurtenant Rights and Amendments to the Interim Instream Flow Standards, Na Wai Eha Surface Water Management Areas of Waihe'e, Waiehu, 'Āao and Waikapū Streams, Maui, WWC noted that additional efforts were taken to further reduce system losses including the following:

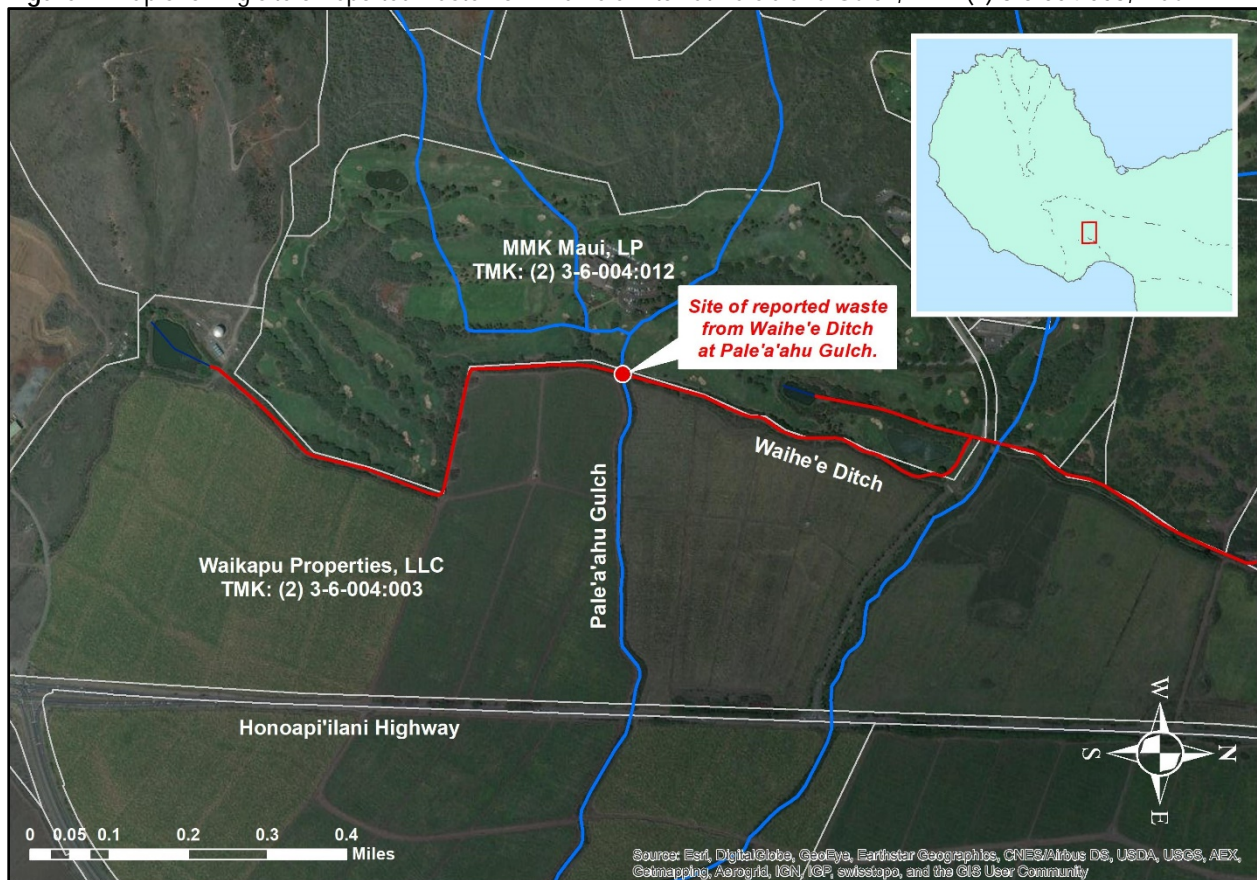
- Repair of structures on the Spreckels Ditch at Field 25, on the 'Āao-Waikapū Ditch near Kuikahi Drive, on the Waihe'e Ditch at the South Waiehu Stream, and at Reservoir 10;
- Repair of structures on the Waihe'e Ditch at Field 8;
- Shut down the intake on the North Waiehu Stream;
- Repair of structures at the Spreckels Ditch intake on Waihe'e River, the Waihe'e Ditch where water is dropped to the Spreckels Ditch, and Reservoir 45;
- Reservoir 27 intake from Waihe'e Ditch was sealed, resulting in the closure of Reservoir 27;
- Repair of structures at the Waihe'e Ditch intake on Waihe'e River, the Waihe'e Ditch at Field 97, the Waihe'e Ditch in Mā'alaea, the Spreckels Ditch intake on Waihe'e River, and the Reservoir 97 intake ditch.

WWC went on to further state that the repairs and improvements made since 2010 resulted in a reduction of system losses of about 350,000 gallons per day. Reservoirs 6, 8, 13, 14, 27 and 29 were closed resulting in a further reduction of system losses of about 790,000 gallons per day. The shutting down of the North Waiehu diversion and the North Waiehu ditch resulted in a reduction of system losses of 183,500 gallons per day.

On November 4, 2019, Commission staff met with Hui representative Lani Eckart-Dodd in the field to make an observation of Pale'a'ahu Gulch. The gulch was wetted with pools of water, but water was not actively flowing at the time.

On November 12, 2019, the Commission staff received a complete Complaint/Dispute Resolution Filing (Complaint) Form (See Exhibit 1), with exhibits (See Exhibits 2 to 4), from Mr. Hōkūao Pellegrino, on behalf of Hui o Nā Wai 'Ehā (Hui). Apparently, an earlier attempt was made to submit the Complaint form to Commission staff, via electronic mail, on October 18, 2019, but there is no record of staff having received the email in October. In its Complaint, the Hui stated that it received a call from a concerned community member that an "abundant amount of water" was flowing into Pale'a'ahu Gulch, located south of Waikapū Stream. The Hui conducted its own investigation from Thursday, September 26, to Friday, October 18, including almost daily spot checks with photo and video evidence (See Exhibits 2, 3, 4, and 8.1 to 8.16).

Figure 1: Map showing site of reported waste from Waihe'e Ditch at Pale'a'ahu Gulch, TMK (2) 3-6-004:003, Maui.



On November 13, 2019, Deputy Director Kaleo Manuel forwarded a copy of the Complaint to Mr. Avery Chumbley, of Wailuku Water Company, seeking a formal response to the Complaint, but also seeking an immediate response to the following questions:

1. Is WWC dumping water from Waihe'e Ditch into Pale'a'ahu Gulch?
2. If yes, why? If not, do you know of anyone else dumping water into the gulch?

3. If yes, WWC should cease dumping immediately and reduce the amount of water being diverted into Waihe'e Ditch. Please explain how that will be accomplished.

On November 15, 2019, Mr. Chumbley provided a response to the three questions sent on November 13 (See Exhibit 5), which are summarized below in *italics*.

1. Is WWC dumping water from Waihe'e Ditch into Pale'a'ahu Gulch?

When users who receive water deliveries from Waihe'e Ditch after Waikapū Stream do not take water, based on historical usage, WWC releases water from Waihe'e Ditch into Pale'a'ahu Gulch.

2. If yes, why? If not, do you know of anyone else dumping water into the gulch?

The Waihe'e Ditch is the longest continuous part of the WWC distribution system running approximately 11 miles from the Waihe'e River intakes to Reservoir #9, with about 8 locations where water is delivered from Waihe'e Ditch to users. After the Waihe'e Ditch intake on Waikapū Stream, there are about 6 locations where water is delivered to from Waihe'e Ditch to large users. These large users have historically received about 2 mgd of water, so WWC must have at least that amount in the Waihe'e Ditch after the Waikapū Stream intake. The distance between the Waihe'e River intake and the Waikapū Stream intake is about 9 miles, so travel time for water diverted from Waihe'e River is approximately 6 hours (dependent of flow volume and head pressure) before it reaches Waikapū Stream. Thus, adjustments to the intake on Waihe'e River cannot be made in "real time" based on current demands for water deliveries.

Several events occurred which lead to the recent releases observed. First, MMK Maui LP, a large user, decided to shut down a reservoir in order to reline the reservoir, resulting in reduced water deliveries starting on September 24. MMK Maui did not know how long relining the reservoir would initially take, but it ended up taking about four weeks. Second, Mahi Pono, which usually receives about 5 mgd from Waihe'e Ditch, reduced its delivery demand to 3 mgd starting around November 1. Lastly, WWC, at the request of the Commission and in support of the fish ladder installation project on Wailuku River, began taking additional water at its Wailuku River intake on October 28 resulting in increased flows in Waihe'e Ditch. Water was returned on October 31. Additionally, in response to demands that WWC reduce system losses, a number of storage reservoirs on the system have been removed thereby reducing flexibility in storing water when demands are low and conversely providing additional water from reservoirs when demands are high.

3. If yes, WWC should cease dumping immediately and reduce the amount of water being diverted into Waihe'e Ditch. Please explain how that will be accomplished.

WWC only releases water in Pale'a'ahu Gulch when deliveries to users after Waikapū Stream are less than the historical deliveries to those users. To decrease the number of times that a release might occur, WWC will request expected delivery requirements

from users on a more frequent basis. While the events described above are not expected to occur regularly, WWC will use its best efforts to reduce releases.

On November 19, 2019, Commission staff conducted a site visit of Pale'a'ahu Gulch. No water was observed in the gulch.

On November 27, 2019, Mr. Chumbley forwarded a complete Complaint / Dispute Resolution Response (Response) form (see Exhibit 6).

On January 10, 2020, Mr. Pellegrino notified the Commission via electronic mail that further dumping of water at Pale'a'ahu Gulch was observed, noting that "we have found WWC dumping substantial amount of water into Pale'a'ahu Gulch, more than we have ever seen in fact. The only day we saw it dry was on 1/7/2019." Additional photographic and video evidence was submitted (See Exhibits 7, 8.17, and 8.18).

ISSUES / ANALYSIS:

In contested case hearing CCH-MA15-01, as part of its Opening Brief, WWC indicated that through repairs and improvements made since 2010, a reduction of system losses of about 350,000 gallons per day was achieved. The closure of Reservoirs 6, 8, 13, 14, 27, and 29 resulted in a further reduction of system losses of approximately 790,000 gallons per day. Further reductions in system losses of approximately 183,500 gallons per day were achieved by shutting down the North Waiehu diversion and the North Waiehu Ditch

While the Commission staff is unable to quantify the amount of water released by WWC from Waihe'e Ditch into Pale'a'ahu Gulch based on the photo and video evidence submitted by the Hui, the amount of water appears sufficient to considerably negate the actions taken by WWC over the last 10 years to reduce its system losses on a single-day basis.

Based on the photographic evidence submitted by the Hui, there were 16 occurrences of water flowing in Pale'a'ahu Gulch (See Table 1). This excludes October 31, 2019, the period during which WWC was asked to divert additional water amounts in support of the fish ladder installation project on Wailuku River.

Table 1. Occurrences, date and time, of water releases from Waihe'e Ditch into Pale'a'ahu Gulch based on photographic evidence provided by Hui o Nā Wai 'Ehā (See Exhibits 2, 3, and 7).

Date	Time	Date	Time
09/29/2019	2:55 PM	10/22/2019	4:34 PM
09/30/2019	2:48 PM	11/03/2019	4:50 PM
10/01/2019	3:24 PM	11/08/2019	3:49 PM
10/02/2019	1:45 PM	11/11/2019	5:27 PM
10/04/2019	4:33 PM	01/05/2020	2:56 PM
10/07/2019	3:25 PM	01/06/2020	4:31 PM
10/09/2019	3:57 PM	01/08/2020	5:12 PM
10/16/2019	4:51 PM	01/09/2020	9:11 PM

The Commission staff recognizes WWC's assertion that releasing water from Waihe'e Ditch into Pale'a'ahu Gulch is sometimes necessary when actual deliveries to contracted users is sometimes

below anticipated deliveries based on historic demands. However, greater efforts should be taken by WWC to anticipate customer demands utilizing available resources (e.g., USGS stream gage data available online), improved monitoring of its system, particularly due to its operation within a designated surface water management area, and better communications with its contracted customers.

According to the Commission's Findings of Fact in CCH-MA06-01, the maximum delivery agreements that WWC has with 34 entities total approximately 8.288 mgd, not including Maui Department of Water Supply and previously Hawaiian Commercial & Sugar (now Mahi Pono). Additionally, as expressed in its Opening Brief in contested case hearing CCH-MA15-01, WWC provides approximately 5.1 mgd to kuleana users on its system. WWC also noted in its Response that Mahi Pono generally receives about 5 mgd from the Waihe'e Ditch.

In this matter, the Commission must also consider the condition of the ditch system and the ability of WWC to adequately control intake amounts and monitor ditch flows to make system adjustments as needed. It is the understanding of Commission staff, through numerous site visits and interactions with Mr. Chumbley, that: 1) the intake gates for Waihe'e Ditch on Waihe'e River were damaged following a 2018 storm event (See Figure 2); and 2) the intake gate for Spreckels Ditch on Waihe'e River is frozen in its current open-position and cannot be adjusted (See Figure 3).



Figure. 2. Control gate at Waihe'e Ditch Intake on Waihe'e River. August 9, 2010.



Figure 3. Spreckels Ditch Intake on Waihe'e River. March 5, 2018.

In the normal operation of the system, water can be dropped to Spreckels Ditch (See Figure 4) from Waihe'e Ditch and the Spreckels Ditch flow is controlled immediately thereafter so that water can be returned to the Waihe'e River as needed. The damaged control gate on Waihe'e Ditch results in WWC frequently diverting more water from Waihe'e River than needed, then returning the water to Waihe'e River via a drop ditch from Waihe'e Ditch to Spreckels Ditch and a subsequent control gate and return located on Spreckels Ditch (See Figure 5).



Figure 4. Water from Waihe'e Ditch Drop Ditch entering Spreckels Ditch on Waihe'e River. July 13, 2009.



Figure 5. Control gate on Spreckels Ditch allows for water to be returned to Waihe'e River. January 10, 2020.

Furthermore, the intake for Waihe'e Ditch on Waihe'e River consists of two separate intake grates (referred to as north and south intakes) across the stream channel (See Figures 6 and 7). Recent Commission staff observations indicate the intakes are partially filled with cobble and sediment and water is bypassing portions of the intakes.



Figure 6. Waihe'e Ditch South Intake on Waihe'e River. November 1, 2011.



Figure 7. Waihe'e Ditch North Intake on Waihe'e River. November 1, 2011.

PENALTY POLICY:

HRS Section §174C-15, as amended, provides for fines up to \$5,000 per day for any violation of any provision of HRS §174C. The Commission adopted an Administrative and Civil Penalty Guideline (G01-01) in 2001, and subsequently amended the Guideline in October 2014 (G14-01), to provide a logical and consistent means to assess penalties and guide the settlement of Commission enforcement cases. The Guideline includes Initial Minimum, Gravity, Mitigative, and Duration Components. Gravity and Duration Components can increase the initial minimum penalty while Mitigative Components can decrease the initial minimum penalty.

FINE CALCULATION:

Violations:

There is one (1) violation of HAR §13-167-82, as follows:

Violation 1: Wasting water (system owner/operator – Wailuku Water Company)

Administrative Fee:

An administrative fee of \$500 shall be assessed with the issuance of a written notice of violation.

Applicability to violation:

The Commission staff finds that upon issuance of a notice of violation, an administrative fee of \$500 shall be assessed.

Violation 1: \$500

Minimum Components:

The minimum fine component established by the Commission's penalty policy is \$250 minimum per violation. The initial minimum components include the following:

Component 1: Finding of violation = \$250 per day/incident

Component 2: Occurring in Water Management Area = \$250 per day/incident

Component 3: Repeat Violation = \$250 per day/incident

(A repeat violation is deemed to occur when the party has previously been found to be a violator by the Commission. A repeat violation is tied to the party involved and is irrespective of the nature of the violation.)

Applicability to violation:

The Commission staff finds that there were 16 separate incidents based upon photographic evidence provided by the Hui.

Component 1: \$250 per day/incident

Component 2: \$250 per day/incident

Component 3: Not applicable

Therefore, staff recommends a minimum penalty component of \$500 per violation, multiplied by 16 for each separate incident, for a total of \$8,000.

Gravity Component:

Gravity factors can be considered in the recommendation of any fine or alternative penalty. The gravity component can increase the minimum component up to a cap of \$1,000 per violation and initiate daily fines.

Gravity factors include but are not limited to:

G1 – Significant risk to the resource

G2 – Actual damage or harm to resource

G3 – Multiple or repeat violations of the code or regulations

G4 – Evidence that the violator should have known about the violation

G5 – Refusal to correct the violation once noticed

G6 – Failure to meet deadlines as set by the Commission or its staff

Applicability to violation:

The Commission staff finds that, as presented earlier, WWC has previously been ordered to remedy system losses in contested case hearing CCH-MA06-01 and subsequently presented information addressing system losses in contested case hearing CCH-MA15-01.

Notice was also given to WWC, by Deputy Director Manuel via electronic mail on November 13, 2019, that “WWC should cease dumping immediately and reduce the amount of water diverted into Waihe'e Ditch.” Despite this notice, observations by Hui members show that WWC continued to release water in Pale'a'ahu Gulch at least four times in January 2020.

Therefore, staff recommends that gravity factors be considered and a fine of \$500 per day/incident for multiple or repeat violations of the code or regulations (*G3*) and \$500 per day/incident for evidence that the violator should have known about the violation (*G4*) be assessed.

Mitigation Component:

Mitigative factors can be considered in the recommendation of any fine or alternative penalty. The presence of one or more mitigative factors can reduce or eliminate the minimum penalty component fine or alternative penalty recommendation.

Mitigative factors include but are not limited to:

M1 – Insignificant impact on the resource

M2 – Attempt to remedy the violation without notice

M3 – Good faith effort to remedy violation once noticed

M4 – Self reporting in a timely manner

M5 – Diligent and speedy effort to remedy the violation once noticed

[*M6*] – Emergency situations (not mentioned in the current penalty policy)

Applicability to violation:

Staff does not recommend any mitigative components

Duration Component:

If one or more of the gravity components are met, a daily fine may be imposed. The duration component has been difficult in its application by staff as specified in the penalty guideline because:

1. It does not consider emergency situations
2. It does not specify certain circumstances such as non-permit related violations of the Code (i.e., water use reporting, submission of completion reports for maintenance activities, etc.)
3. It does not consider permit holder acknowledgement of conditions through formal signing of administrative permits (i.e., well construction & pump installation)

4. It does not consider noticing aspects of violations, which allow opportunity for violator to remedy or show good faith effort in compliance
5. Strict adherence to the duration has in the past resulted in overly large sanctions. For example, repeat violation sanctions are both within the minimum penalty and gravity component calculations and start daily fines.

The circumstances surrounding each type of violation vary but the penalty guideline has proved flexible enough to consider the shortfalls mentioned above. Basically, when reasonable notice is given and the compliance is speedy and shows good faith, the policy has been to limit the duration exposure to fine to a single day minimum for many of the typical after-the-fact violations brought before the Commission.

Applicability to violation:

Staff recommends a one-day duration for each violation incident, for a total of 16 days.

Summary of Total Recommended Fines:

1. Wasting water (system owner/operator – Wailuku Water Company) on 16 separate incidents.

Administrative Fee:	\$ 500
Minimum Component:	\$ 500 per day/incident
Gravity Component:	\$ 1,000 per day/incident
Mitigative Component:	\$ 0
Duration Component:	<u>16 days</u>
Total Fine:	\$ 24,500

Alternative Penalty Settlement:

The penalty guideline allows that in lieu of the total monetary fines, the violator may be offered an alternative sanction. Considerations that guide staff in offering such an alternative are:

1. A minimum \$500 fine in addition to the alternative offered.
2. The alternative must not be something the violator was required to do anyway because of legal or other obligations.
3. The alternative must result in new information, education, or other benefit to the water resources of the state.
4. The alternative must be completed within a specified timeframe and failure to do so will result in reinstatement of total recommended fines.

Staff is not recommending an alternative settlement.

RECOMMENDATIONS

Staff recommends that the Commission:

1. Find the system owner/operator, Wailuku Water Company, in violation of HRS §174C-13 and HAR §13-167-82, for wasting water within a surface water management area.

2. Direct Wailuku Water Company to improve communications with its contracted customers, establish notification protocols when customers have reduced water delivery needs, and develop a management plan on how to properly manage diverted water in times of excess supply. The management plan shall be submitted to Commission staff within 90 days.
3. Issue a written notice of violation to Wailuku Water Company for wasting water. Wailuku Water Company shall pay a fine of \$24,500, due on or before 30 days of Commission action.
4. Find that Wailuku Water Company, as system owner/operator of Waihe'e Ditch and Spreckels Ditch, is negligent in making certain infrastructure repairs that would help to reduce waste and improve system operations, while allowing for natural streamflows to remain in the Waihe'e River undiverted. Therefore, staff recommends that the following actions be taken by WWC within 90 days:
 - a. Seal release gate at Pale'a'ahu Gulch to prevent any future dumping events.
 - b. Repair the intake control gate at the Spreckels Ditch diversion on Waihe'e River.
 - c. Repair the intake control gate at the Waihe'e Ditch diversion on Waihe'e River.
 - d. Replace current gaging stations on Waihe'e Ditch and Spreckels Ditch with real-time, continuous gaging stations to improve measurement and monitoring of diverted water amounts from Waihe'e River to improve water system management.

Respectfully submitted,



M. KALEO MANUEL
Deputy Director

- | | |
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| Exhibit 1 | Complaint/Dispute Resolution Filing Form filed by Hui o Nā Wai 'Ehā on November 12, 2019. |
| Exhibit 2 | Photo Exhibits to be Included with Hui o Nā Wai 'Ehā Waste Complaint, 9/29/2019 – 10/18/2019, filed by Hui o Nā Wai 'Ehā on November 12, 2019. |
| Exhibit 3 | Supplemental Photo Exhibits to be Included with Hui o Nā Wai 'Ehā Waste Complaint 10/22/2019 – 11/11/2019, filed by Hui o Nā Wai 'Ehā on November 12, 2019. |
| Exhibit 4 | Waste Complaint Supplemental Exhibit (Map), filed by Hui o Nā Wai 'Ehā on November 12, 2019. |
| Exhibit 5 | Wailuku Water Company Response to Immediate Questions submitted on November 15, 2019. |
| Exhibit 6 | Complaint/Dispute Resolution Response Form filed by Wailuku Water Company on November 27, 2019. |

- Exhibit 7 Supplemental Photo Exhibits 2 to be Included with Hui o Nā Wai 'Ehā Waste Complaint 1/5/2020 – 1/9/2020, filed by Hui o Nā Wai 'Ehā on January 10, 2020.
- Exhibit 8 Thumbnails of Video Clips provided by Hui o Nā Wai 'Ehā, dated September 24, 2019 to January 8, 2020.

APPROVED FOR SUBMITTAL:

Suzanne D. Case

SUZANNE D. CASE
Chairperson

4. Describe the complaint or reason for the dispute:

(Attach a sketch or photograph if that will help explain the problem.)

Hui o Nā Wai 'Ehā received a call on Tuesday 9/24/19 by a Maui community member, who wishes to remain anonymous, and shared their concerns about an abundant amount of water flowing in Pale'a'ahu Gulch. Pale'a'ahu Gulch is a dry gulch located in the ahupua'a of Waikapū, south of Waikapū Stream and concludes along the eastern portion of the Keālia Wetlands. The community member noticed the flowing water at Pale'a'ahu Gulch Bridge under Kuhihelani Highway. They submitted a photo and video to the Hui which is the first documented occurrence of water flowing in the dry gulch. Pale'a'ahu Gulch is the third of four dry gulches located south of the Waikapū Stream. These four gulches rarely ever flow unless there is a torrential rain event. The last documented flows in these four gulches was in September of 2016 during the 100 year flood that impacted both Wailuku River and Waikapū Stream.

The Hui o Nā Wai 'Ehā Board immediately investigating from Thursday, 9/26/19 through Friday, 10/18/19. Investigations included almost daily spot checks at Pale'a'ahu Gulch adjacent to Honoapi'ilani Highway and Kuihelani Highway. Due to the substantial amount of water continuously flowing in the gulch during our spot checks, it led us to further investigate the actual source of the dumping of the water which was the Waihe'e Ditch, owned and operated by Wailuku Water Co. Built in 1907 with a capacity of 45 MGD, the 10.5 mile Waihe'e Ditch which commences in Waihe'e River, distributes diverted water from all four streams/rivers and culminates at Reservoir #9 in the southern portion of Waikapū near Pōhākea Gulch.

On Sunday 9/29/19, a drone was flown mauka of Honoapi'ilani Highway along Pale'a'ahu Gulch and below the Kahili Golf Course where the Wailuku Water Co. What we found was shocking and demonstrated a purposely engineered system meant for dumping water into the dry gulch of Pale'a'ahu by Wailuku Water Co.. At the point in which the Waihe'e Ditch crosses over Pale'a'ahu Gulch (See drone photo), there is a sluice gate on the Mā'alaea side of the ditch meant to block or minimize water flowing past it towards Reservoir #9 as well as a purposely constructed opening for water to be released into Pale'a'ahu Gulch just before the sluice. We have no idea as to when the engineered opening was developed for dumping water into the dry gulch, however by the looks of it, it seems to be old and possibly constructed many years ago. The intent however, is for water to be illegally dumped purposely into the gulch. Hui o Nā Wai 'Ehā is extremely disturbed by Wailuku Water Co.'s actions, especially during one of the hottest and driest summers on record. In fact, the Nā Wai 'Ehā Contested Case that started in 2003-2004, derived from the a similar waste complaint in which the Hui filed against WWC who was doing similar illegal dumping of water into Pōhākea gulch, which is the fourth dry gulch in Waikapū just south of Pale'a'ahu Gulch. This is truly appalling and a blatant misuse of our public trust resource, let alone the fact that this dumping is occurring during an open Contested Case Hearing, extreme drought conditions and while there are discrepancies around IIFS's in multiple streams across Nā Wai 'Ehā.

Please see the attached photo exhibits and google drive with uploaded video footage of the illegal dumping of water by Wailuku Water Co. into Pale'a'ahu Gulch.

5. Describe how your water usage or water rights are specifically affected by the other party, if at all: The illegal dumping of water by Wailuku Water Co. into the dry gulch of Pale'a'ahu first and foremost negatively affects the health and wellbeing of all four streams/ivers in Nā Wai 'Ehā. Diverting streams and dumping a portion of that water elsewhere greatly affects native stream habitat and native ecosystems in a negative way, especially when Maui is experiencing one of the worst droughts on record. More so than ever, this water should be left in the streams/ivers to ensure that the IIFS is being met along with access for instream kuleana water users who cultivate lo'i kalo from Waihe'e to Waikapū. Furthermore, all four streams feed into extremely sensitive estuaries which harbor a vast amount of native aquatic, plant, bird and insect species, many of which are on the endangered and need water for their habitats. To ensure populations are sustained in times of extreme drought, such as the one we are experiencing now, our streams and rivers need to be flowing continuously mauka to makai with a sufficient amount of water. On September 27th, Hui o Nā Wai 'Ehā along with Skippy Hau of Department of Aquatic Resources, measured the streamflow of Wailuku River just above the Mahi Pono Spreckels Intake in Happy Valley. The measurement was 7.27 cfs or 4.7 mgd with a temperature of 79.7 degrees Fahrenheit. This measurement signifies that the 5 MGD at the mouth of the Wailuku River which is the IIFS is not being met. If stream flows are in fact low due to the extreme drought, then there is no justification whatsoever for Wailuku Water Co. to be dumping water into dry gulches that fan into the open plains of Kama'oma'o (Waikapū Commons / Central Plains). The temperature of Wailuku River was also extremely high and does not promote healthy native aquatic species habitat. With the additional water flowing in the streams rather than being dumped, could assist in healthier and cooler flows especially in the lower reaches of the streams where native aquatic species such as 'o'opu, 'ōpae and hīhīwai recruitment take place.

Native Hawaiian wetland kalo farmers from Waihe'e to Waikapū have also been complaining about the lack of water in the streams as well as warmer temperatures which heavily promotes root rot and other associated diseases for kalo. The dumping of water inhibits their rights to sufficient stream flows for traditional and customary practices related to lo'i kalo cultivation.

6. Date the problem was first noticed: Tuesday 9/24/19

7. If this complaint or dispute is related to a water source, was the water source previously declared with the Commission on Water Resource Management?

Yes No Don't Know

If yes, what was the name and tax map key of the source?

Nā Wai 'Ehā is a designated surface water management area. Water being diverted by Wailuku Water Co. into the Waihe'e Ditch derives from all four streams/rivers. The ditch is located on multiple parcels of lands and Wailuku Water Co. holds the easements for maintenance and management access.

8. Have you had any communication with the party/parties described in Section 3 above?

Yes No

If yes, list the communications and dates: (Attach copies if written communications were made)

9. Have you sought resolution of this matter with any other entity?

(e.g., government agency, judicial body, or private entity)

No

If so, with whom and what was the outcome?

(Please provide copies of any documentation of this process)

N/A

10. Describe what you believe a successful and fair remedy might be:
This is a clear violation and Hui o Nā Wai 'Ehā is requesting the Commission on Water Resource Management to enforce the law and act immediately to stop Wailuku Water Co. from illegally dumping stream water into Pale'a'ahu Gulch as well as any other known areas where water should not be flowing. Secondly, the Commission needs to impose fines against Wailuku Water Co. for the illegal dumping of Nā Wai 'Ehā Water into Pale'a'ahu Gulch. Based on our in-depth investigation thanks to a community member's tip, we find that the dumping of water in to Pale'a'ahu Gulch via the Waihe'e Ditch by Wailuku Water Co. is by no means an accident but rather deliberate, done over extremely long periods of time and with the intent to not return unused amounts of water back into the streams where it belongs. Dumping of stream water into dry gulches is illegal, negatively impacts instream uses and native aquatic habitat/ecosystems, defies the Water Code and is a blatant misuse of a public trust resource. There is no justification for these actions whatsoever. Hui o Nā Wai 'Ehā knows all too well about Wailuku Water Co. historical attempts to bank thousands of gallons of water and to then dump it into gulches where it doesn't belong, with the hope that the community doesn't catch them in the act. The community is more activated than ever and will no longer stand for these illegal type of actions.

The only fair remedy in this reoccurring situation, especially knowing that Wailuku Water Co. and their predecessors may have already been dumping water illegally for weeks on end, months and possibly on and off for years, is the issuance of fines for all the days formally documented by Hui o Nā Wai 'Ehā. We trust that the Commission will do the right thing and stand up against this blatant disregard for our public trust resource and to set a precedence so that these water dumping related events no longer continue into the future by any entity, especially that of Wailuku Water Co.

PLEASE SEE ATTACHED EXHIBITS WITH PICTURES & GOOGLE DRIVE FOR VIDEO'S

I request that the Commission on Water Resource Management assist in resolving the matter described herein.

Signature

September 30, 2019

Date

Photo Exhibits to be Included with Hui o Nā Wai 'Ehā Waste Complaint
9/29/2019 – 10/18/2019









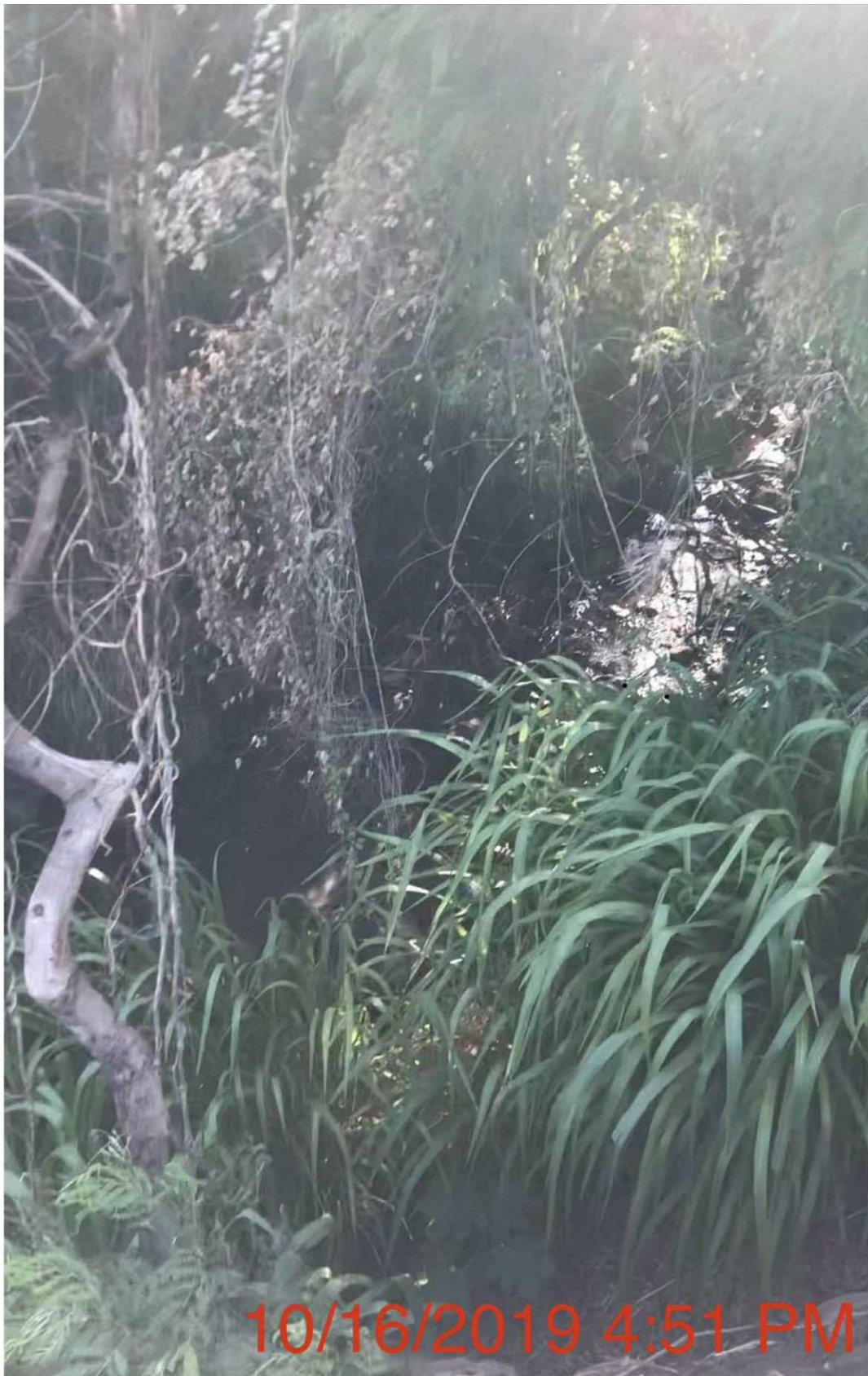












Supplemental Photo Exhibits to be Included with Hui o Nā Wai 'Ehā
Waste Complaint 10/22/2019 – 11/11/2019







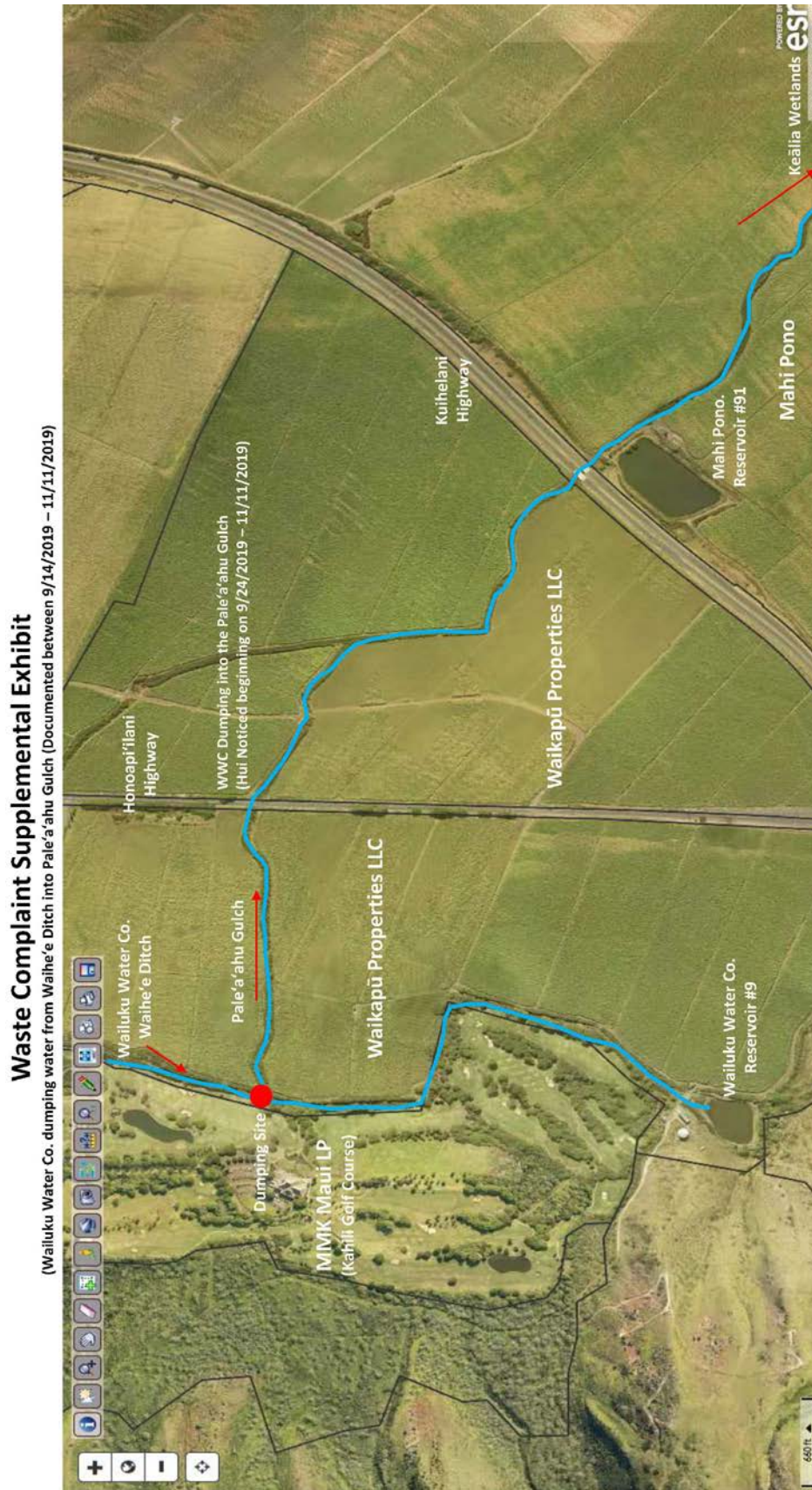












Is WWC dumping water from Waihe`e Ditch into Pale`a`ahu Gulch?

Response: When users who receive deliveries from Waihee Ditch after the Waikapu Stream Waihee Ditch intake do not take the water that is made available to those users based on historical usage, Wailuku Water Company will release the water from Waihe`e Ditch into Pale`a`ahu Gulch

If yes, why? If not, do you know of anyone else dumping water into the gulch?

Response: Wailuku Water Company must release water into Pale`a`ahu Gulch on occasion because of the limitations of the distribution system and the demands and usage of the persons who received delivery of water from the distribution system. The Waihee Ditch is the longest continuous part of the distribution system, running about 11 miles from the Waihee River intake to Reservoir # 9. Between the Waihee River intake and the Waikapu Stream Waihee Ditch intake, about 8 locations exist where water is delivered from the Waihee Ditch to users. After the Waikapu Stream Waihee Ditch intake and until Reservoir # 9, there are about 6 large user locations where water is delivered from the Waihee Ditch to users.

The large users receiving deliveries after the Waikapu Stream Waihee Ditch intake historically receive a minimum of 2 mgd. In order to have water available for delivery for those users based on their historical uses, Wailuku Water Company must have at least that amount in the Waihee Ditch at the Waikapu Stream Waihee Ditch intake.

The distance between the Waihee River intake and the Waikapu Stream Waihee Ditch intake is about 9 miles. Water that is diverted into the Waihee Ditch at the Waihee River Intake will take at least 6 hours (the time will depend on the flow volume which creates head pressure) from the time of diversion to the time of arrival at the Waikapu Stream Waihee Ditch intake. This means that adjustments in amounts diverted cannot be made in "real time" based on current demands for deliveries.

With regard to the recent releases, some unusual conditions occurred at the same time that lead to the releases. Specifically, a large user, MMK Maui LP decided to shut down a reservoir in order to reline that reservoir. MMK Maui LP receives deliveries from the Waihee Ditch after the Waikapu Stream Waihee Ditch intake; as a result of the relining of the reservoir, MMK Maui LP did not receive as much water as was delivered to it historically. The shut down, and therefore the reduced delivery demands, began on September 24. MMK Maui LP did not know how long the relining process would take. It turned out that the process took about 4 weeks.

Additionally, Mahi Pono which generally receives about 5 mgd from the Waihee Ditch, reduced its delivery demands around November 1 to 3 mgd or less, which reduction continued through the date of this response.

A third factor affecting the volume of water in the Waihee Ditch occurred during the last week of October. At that time, CWRM asked Wailuku Water Company to increase stream diversions to provide reduced flows for the safety of workers installing a fish ladder in the Iao Stream/Wailuku River. A significant portion of the additional waters diverted from Iao Stream at the request of CWRM ended up in the Waihee Ditch. The additional waters in turn increased the volumes of water in the Waihee Ditch at the Waikapu Stream Waihee Ditch intake.

Before the contested case concerning the IIFS began, the distribution system operated by Wailuku Water Company included a number of reservoirs. The reservoirs provided for storage of waters diverted from the streams that exceeded the amounts immediately needed for domestic or agricultural use. The waters stored in the reservoirs would then be used in times when the amounts needed for domestic or agricultural use was more than the amount of waters diverted.

In part in response to demands that Wailuku Water Company reduce system losses, a number of reservoirs that provided storage were removed from use. As a result, the ability of Wailuku Water Company to store waters that were diverted in excess of a daily demand and then use that water when the amounts diverted were less than the daily demand has been decreased.

The combination of unusual reduced deliveries to users after the Waikapu Stream Waihee Ditch intake, reduced storage capacity in the system resulting from the removal of reservoirs, significant delays in the time between diversion and delivery, and increased volume due to a construction project resulted in the release of waters at the Pale'a'ahu Gulch recently.

If yes, WWC should cease dumping immediately and reduce the amount of water being diverted into Waihee Ditch. Please explain how that will be accomplished.

Response: Wailuku Water Company only releases water into the Pale'a'ahu Gulch when the deliveries to users after the Waikapu Stream Waihee Ditch intake are less than the historical deliveries to those users. To decrease the number of times that a release might occur, Wailuku Water Company will request expected delivery requirements from the users on a more frequent basis. At this point, Wailuku Water Company does not anticipate that the unusual events that resulted in the recent releases will regularly occur. Nevertheless, Wailuku Water Company will use its best efforts to reduce the releases to the best of its ability.



State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

COMPLAINT / DISPUTE RESOLUTION
RESPONSE FORM

For Official Use Only:

Instructions: Please print in ink or type and send completed form with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. For further information and updates to this application form, visit <http://dlnr.hawaii.gov/cwrm/>.

Complaint File No: C

Please answer any applicable questions to the best of your knowledge. This is a standard form and some questions may not pertain to your specific situation.

1. Name: Wailuku Water Company LLC Date: November 27, 2019

Address: P. O. Box 2790

Wailuku, Hawaii 96793

Daytime Phone No.: 808/244-7079 Fax No. 808/242-7068

2. Were you aware of the problem prior to this complaint? Yes No

3. Tax Map Key: (2) 3-6-004:003

If you are not the owner, please provide the landowner's information below.

Landowner's Name: Waikapu Properties LLC

Landowner's Address: P. O. Box 1870, Manteca, California 95336

Landowner's Phone No.: _____

4. If this complaint or dispute is related to a water source on your property, was the water source previously declared with the Commission on Water Resource Management?

Yes No Don't know

If yes, what is the name and tax map key of the source?

The complaint concerns a portion of the Waihee Ditch operated by Wailuku Water Company LLC. The Waihee Ditch is about 11 miles in length and can receive surface waters that were diverted from the following sources: Waihee River; Iao Stream; and Waikapu Stream. The diversions on each of those streams are registered and located on lands owned by Wailuku Water Company LLC. The lands are identified by Tax Map Key numbers that were provided to the Commission previously.

5. **Attach a sketch or photograph that will give additional details of the situation described by the complainant.**

See attached sheet.

6. **Have you had any communication with the complainant(s)?**

Yes No

If yes, list the communications and dates: (Attach copies if written communications were made)

7. Do you know if resolution of this matter has been sought with any other entity? (e.g., government agency, judicial body, or private entity)

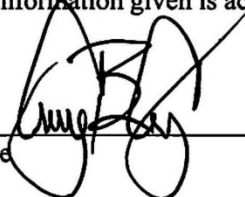
Yes No Don't Know

If so, with whom and what was the outcome? Please provide copies of any documentation of this process.

8. Describe what you believe a successful and fair remedy might be:

See attached sheet.

I attest that the information given is accurate and complete, to the best of my knowledge.


Signature Avery B. Chumbley Date 11-27-19

5. Additional Details of Situation Described by the Complainant.

Wailuku Water Company LLC operates a surface water distribution system with several major ditches, one of which is Waihee Ditch. Waihee Ditch is the longest continual part of the distribution system and runs from the Waihee River intake to Reservoir # 9, a distance of about 11 miles. There are about 8 locations along the entire length of the Waihee Ditch where water is delivered to users.

One of the locations, which is about 9 miles from the Waihee River Intake, is the Waikapu Stream Waihee Ditch Intake. In the about 2 miles of Waihee Ditch that exists between the Waikapu Stream Waihee Ditch Intake and Reservoir # 9, Wailuku Water Company delivers water to about 6 large users. The large users receiving deliveries after the Waikapu Stream Waihee Ditch Intake historically receive a minimum of 2 million gallons per day (MGD). In order to have water available for delivery to those large users, Wailuku Water Company must have at least that amount in the Waihee Ditch at the Waikapu Stream Waihee Ditch Intake.

As noted, the distance between the Waihee River and the Waikapu Stream Waihee Ditch Intake is about 9 miles. Water diverted into the Waihee Ditch at the Waihee River Intake will take at least 6 hours to reach the Waikapu Stream Waihee Ditch Intake. The time will depend on the flow volume in Waihee Stream which creates the head pressure to force the water down the Waihee Ditch. This means that adjustments in the amount diverted cannot be made in "real time" based on user demands for deliveries.

As to the releases that are described by the Complainant, some unusual conditions occurred concurrently that lead to the releases. Specifically, a large user that receives deliveries after the Waikapu Stream Waihee Ditch Intake, MMK Maui LP, decided to shut down a reservoir it operates in order to reline the reservoir. As a result of the shutdown, deliveries to MMK Maui LP were significantly less than the amounts delivered to that user on a historical basis. The shut down, and therefore the reduced delivery demands began on September 24, 2019. MMK Maui LP did not know how long the relining process would take. It turned out that the process took about 4 weeks.

Additionally, another large user that receives deliveries from the Waihee Ditch system, Mahi Pono, reduced its delivery demands recently. While previous deliveries to that user were about 5 MGD, beginning on November 1 Mahi Pono reduced its delivery demands to 3 MGD or less. The reduction continued throughout November.

A third condition facing Wailuku Water Company was the request of the Commission to assist in the efforts to install a fish ladder in Iao Stream/Wailuku River. During the last week of October, Wailuku Water Company was asked to increase stream diversions to reduce the flow of water in Iao Stream/Wailuku River for the safety of workers installing the fish ladder. A significant portion of the additional waters ended up in the Waihee Ditch. These additional waters in turn increased the volume of water in the Waihee Ditch at the Waikapu Stream Waihee Ditch intake.

These three conditions resulted in a greater flow of water in the Waihee Ditch.

In addition to the greater flows, Wailuku Water Company has a decreased ability to prevent releases due to a decrease in storage capacity within the system. In part in response to demands by Complainant and others to reduce system losses, Wailuku Water Company removed reservoirs that provided storage capacity from use. As a result, the ability of Wailuku Water Company to store waters that were diverted in excess of a daily demand and then deliver that water when the amounts diverted was less than the daily demand has been decreased.

The combination of these conditions resulted in the release of waters at the Paleaahu Gulch recently. However, just as the conditions resulted in the release, conditions that more closely resemble the normal operating conditions also occurred. Attached are photographs of the Waihee Ditch in the area of the Paleaahu Gulch taken on various dates in November. These photographs show that no releases were occurring at the time of the photographs on those dates.

8. What is a successful and fair remedy?

Wailuku Water Company in the past has, and in the future will, take steps to limit releases in the Paleaahu Gulch when the deliveries to users from the Waihee Ditch after the Waikapu Stream Waihee Ditch Intake are less than the historical deliveries to those users. To decrease the number of times that a release might happen, Wailuku Water Company will request expected delivery requirements from the large users on that part of the Waihee Ditch on a more frequent basis. At this point, Wailuku Water Company does not anticipate that the conditions that resulted in the releases will regularly occur. Nevertheless, Wailuku Water Company will use its best efforts to reduce the releases to the best of its ability.



WEDNESDAY NOVEMBER 26, 2019 @ 8:30 am



TUESDAY NOVEMBER 26, 2019 @ 8:59 am



MONDAY NOVEMBER 25, 2019 @ 9:23 am



FRIDAY NOVEMBER 15, 2019 @ 12:40 pm



THURSDAY NOVEMBER 14, 2019 @ 2:17 pm

Supplemental Photo Exhibits 2 to be Included with Hui o Nā Wai 'Ehā
Waste Complaint 1/5/2020 – 1/9/2020





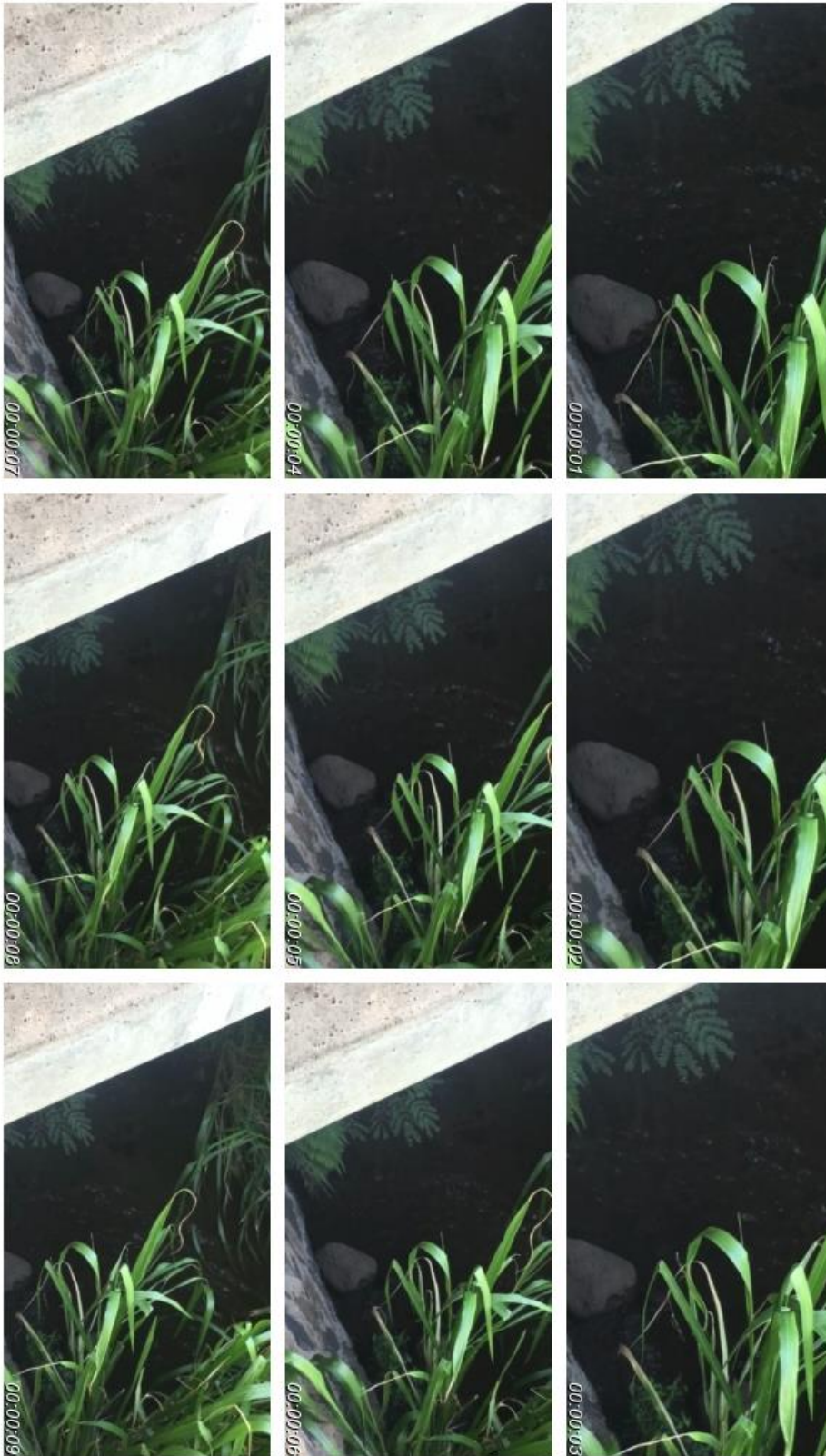








Exhibit 8.1: Thumbnails of 19-second video clip submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on September 24, 2019.



File: 9-24-19 (Community Member).mov
Size: 5483183 bytes (5.23 MB), duration: 00:00:19, avg.bitrate: 2309 kb/s
Audio: aac, 44100 Hz, 1 channels, s16, 95 kb/s (und)
Video: h264, yuv420p, 1280x720, 2112 kb/s, 29.97 fps(r) (und)
Generated by Thumbnail me

Exhibit 8.2: Thumbnails of 17-second video clip submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on September 29, 2019.



File: 9-29-19 (Hui 1).mov
Size: 33918108 bytes (32.35 MiB), duration: 00:00:22, avg.bitrate: 12334 kb/s
Audio: aac, 44100 Hz, 1 channels, s16, 93 kb/s (und)
Video: h264, yuv420p, 1920x1080, 15677 kb/s, 29.97 fps(i) (und)
Generated by Thumbnail me

Exhibit 8.3: Thumbnails of 28-second video clip submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on September 29, 2019.



File: 9-29-19 (Hui 2).mov
Size: 55835773 bytes (53.25 MiB), duration: 00:00:28, avg.bitrate: 15953 kb/s
Audio: aac, 44100 Hz, 1 channels, s16, 94 kb/s (und)
Video: h264, yuv420p, 1920x1080, 15725 kb/s, 30.00 fps(i) (und)
Generated by Thumbnail me

Exhibit 8.4: Thumbnails of 25-second video clip (drone footage) submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on September 29, 2019.

File: 9-29-19 (Hui 3 - Drone).MOV
Size: 143821214 bytes (137.16 MiB), duration: 00:00:25, avg.bitrate: 46023 kb/s
Video: h264, yuv420p, 2720x1536, 45145 kb/s, 23.98 fps(r) (eng)
Generated by Thumbnail me



Exhibit 8.5: Thumbnails of 41-second video clip (drone footage) submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on September 29, 2019.

File: 9-29-19 (Hui 4 - Drone).MOV
Size: 235905224 bytes (224.98 MiB), duration: 00:00:41, avg.bitrate: 46030 kb/s
Video: h264, yuv420p, 2720x1536, 45064 kb/s, 23.98 fps(r) (eng)
Generated by Thumbnail me



Exhibit 8.6: Thumbnails of 25-second video clip submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on September 30, 2019.



File: 9-30-19 (Hui 1).mov
Size: 48203569 bytes (45.97 MiB), duration: 00:00:25, avg.bitrate: 15425 kb/s
Audio: aac, 44100 Hz, 1 channels, s16, 96 kb/s (und)
Video: h264, yuv420p, 1920x1080, 15061 kb/s, 30.00 fps(i) (und)
Generated by Thumbnail me

Exhibit 8.7: Thumbnails of 13-second video clip submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on October 1, 2019.



File: 10-1-19 (Hui 1).MOV
Size: 27983062 bytes (26.69 MiB), duration: 00:00:13, avg.bitrate: 17220 kb/s
Audio: aac, 44100 Hz, 1 channels, s16, 95 kb/s (und)
Video: h264, yuv420p, 1920x1080, 16162 kb/s, 30.00 fps(i) (und)
Generated by Thumbnail me

Exhibit 8.8: Thumbnails of 14-second video clip submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on October 2, 2019.



File: 10-2-19 (Hui).mov
Size: 27305596 bytes (26.04 MB), duration: 00:00:14, avg.bitrate: 15603 kb/s
Audio: aac, 44100 Hz, 1 channels, s16, 96 kb/s (und)
Video: h264, yuv420p, 1920x1080, 15213 kb/s, 30.00 fps(i) (und)
Generated by Thumbnail me

Exhibit 8.9: Thumbnails of 16-second video clip submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on October 4, 2019.



File: 10-4-19 (Hui).MOV
Size: 32287937 bytes (30.79 MiB), duration: 00:00:16, avg.bitrate: 16144 kb/s
Audio: aac, 44100 Hz, 1 channels, s16, 95 kb/s (und)
Video: h264, yuv420p, 1920x1080, 15181 kb/s, 30.00 fps(i) (und)
Generated by Thumbnail me

Exhibit 8.10: Thumbnails of 6-second video clip submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on October 22, 2019.



File: 10-22-19 (Hui).MOV
Size: 12238434 bytes (11.67 MiB), duration: 00:00:06, avg.bitrate: 16318 kb/s
Audio: aac, 44100 Hz, 1 channels, s16, 97 kb/s (und)
Video: h264, yuv420p, 1920x1080, 15190 kb/s, 30.00 fps(i) (und)
Generated by Thumbnail me

Exhibit 8.11: Thumbnails of 33-second video clip (drone footage) submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on November 3, 2019.

*File: 11-3-19 (Hui Drone).mov.mp4
Size: 204063118 bytes (194.61 MiB), duration: 00:00:33, avg.bitrate: 49470 kb/s
Video: h264, yuv420p, 2720x1536, 49418 kb/s, 30.00 fps(r) (und)
Generated by Thumbnail me*



Exhibit 8.12: Thumbnails of 34-second video clip submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on November 3, 2019.



File: 20191103 IMG_2671 MOV
Size: 64961777 bytes (61.95 MiB), duration: 00:00:34, avg.bitrate: 15285 kb/s
Audio: aac, 44100 Hz, 1 channels, s16, 94 kb/s (und)
Video: h264, yuv420p, 1920x1080, 14876 kb/s, 30.00 fps(i) (und)
Generated by Thumbnail me

Exhibit 8.13: Thumbnails of 2-minute, 10-second video clip submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on November 3, 2019.

File: 20191103_155331.mp4
Size: 279420195 bytes (266.48 MiB), duration: 00:02:10, avg.bitrate: 17195 kb/s
Audio: aac, 48000 Hz, stereo, s16, 256 kb/s (eng)
Video: h264, yuv420p, 1920x1080, 16885 kb/s, 90000.00 fps(r) (eng)
Generated by Thumbnail me

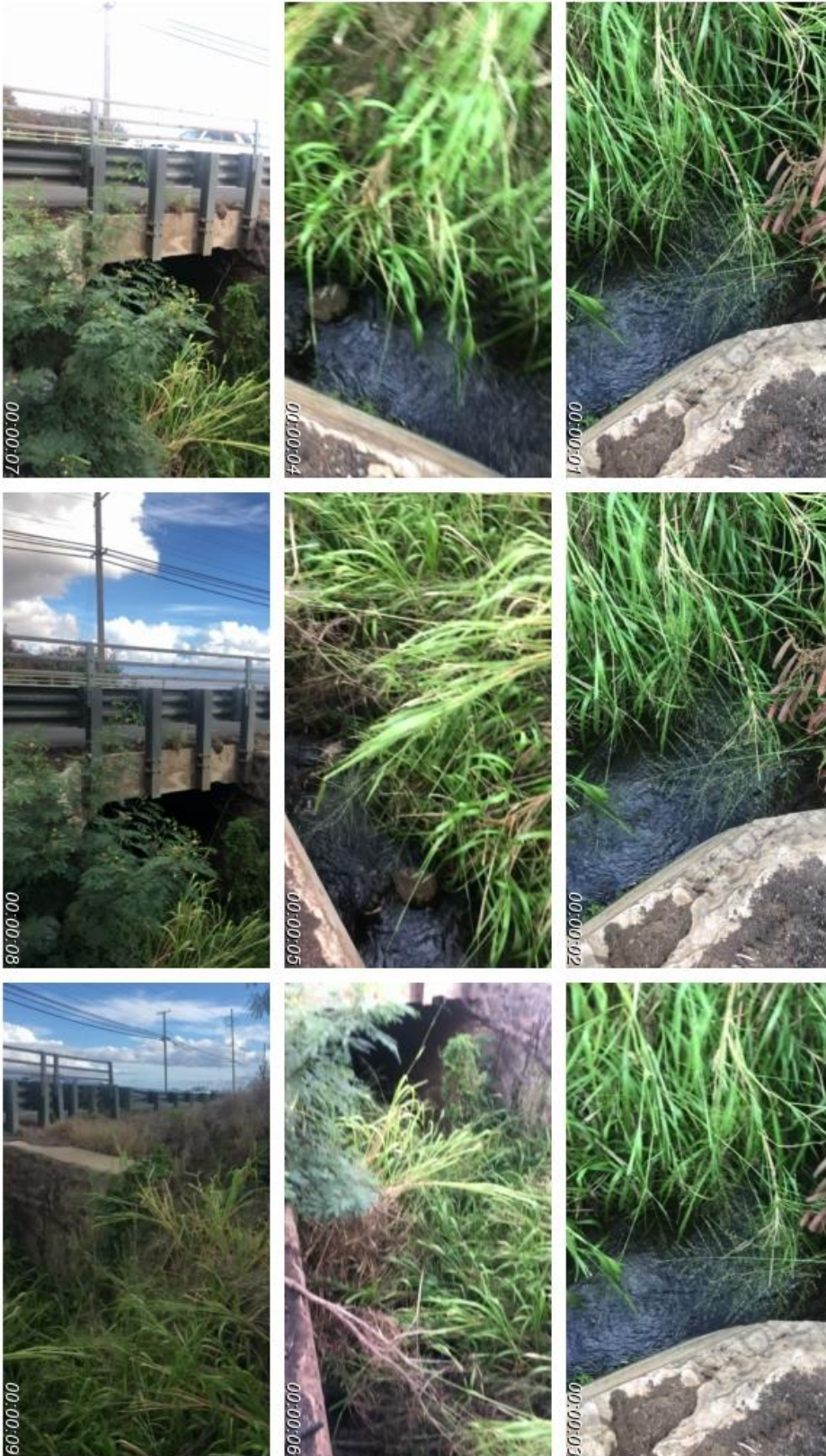


Exhibit 8.14: Thumbnails of 14-second video clip submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on November 8, 2019.



File: 11-8-19 (Hui 1).MOV
Size: 27889741 bytes (26.60 MiB), duration: 00:00:14, avg.bitrate: 15937 kb/s
Audio: aac, 44100 Hz, 1 channels, s16, 96 kb/s (und)
Video: h264, yuv420p, 1920x1080, 15687 kb/s, 30.00 fps(i) (und)
Generated by Thumbnail me

Exhibit 8.15: Thumbnails of 13-second video clip submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on November 8, 2019.



File: 11-8-19 (Hui 2).MOV
Size: 26735358 bytes (25.50 MiB), duration: 00:00:13, avg.bitrate: 16453 kb/s
Audio: aac, 44100 Hz, 1 channels, s16, 94 kb/s (und)
Video: h264, yuv420p, 1920x1080, 15514 kb/s, 30.00 fps(i) (und)
Generated by Thumbnail me

Exhibit 8.16: Thumbnails of 25-second video clip (drone footage) submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on November 11, 2019.

File: 11-11-19 (Hui Drone).MOV
Size: 145489762 bytes (138.75 MiB), duration: 00:00:25, avg.bitrate: 46557 kb/s
Video: h264, yuv420p, 2720x1536, 45078 kb/s, 23.98 fps(r) (eng)
Generated by Thumbnail me

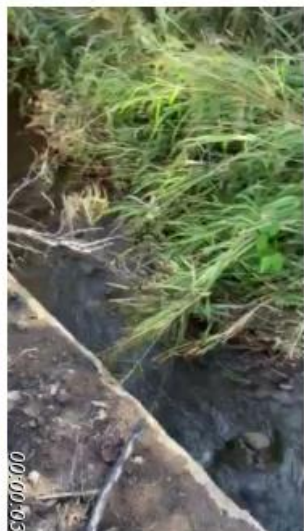


Exhibit 8.17: Thumbnails of 14-second video clip submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on January 5, 2020.



File: 1-5-2020 (Hui Supplemental Complaint).MOV
Size: 1658250 bytes (1.58 MB), duration: 00:00:14, avg. bitrate: 948 kb/s
Audio: aac, 44100 Hz, 2 channels, s16, 165 kb/s (und)
Video: h264, yuv420p, 568x320, 740 kb/s, 29.97 fps(r) (und)
Generated by Thumbnail me

Exhibit 8.18: Thumbnails of 9-second video clip submitted by Hui o Nā Wai 'Ehā of water flowing at Pale'a'ahu Gulch on January 8, 2020.



File: 1-8-2020 (Hui Supplemental Complaint).MOV
Size: 1051752 bytes (1.00 MB), duration: 00:00:09, avg.bitrate: 935 kb/s
Audio: aac, 44100 Hz, 2 channels, s16, 125 kb/s (und)
Video: h264, yuv420p, 568x320, 752 kb/s, 29.97 fps(i) (und)
Generated by Thumbnail me