

Status of Waikapū Interim Instream Flow Standard Compliance and Water Availability Issues on the South Waikapū Kuleana ‘Auwai, Waikapū Surface Water Hydrologic Unit, Nā Wai ‘Ehā, Maui



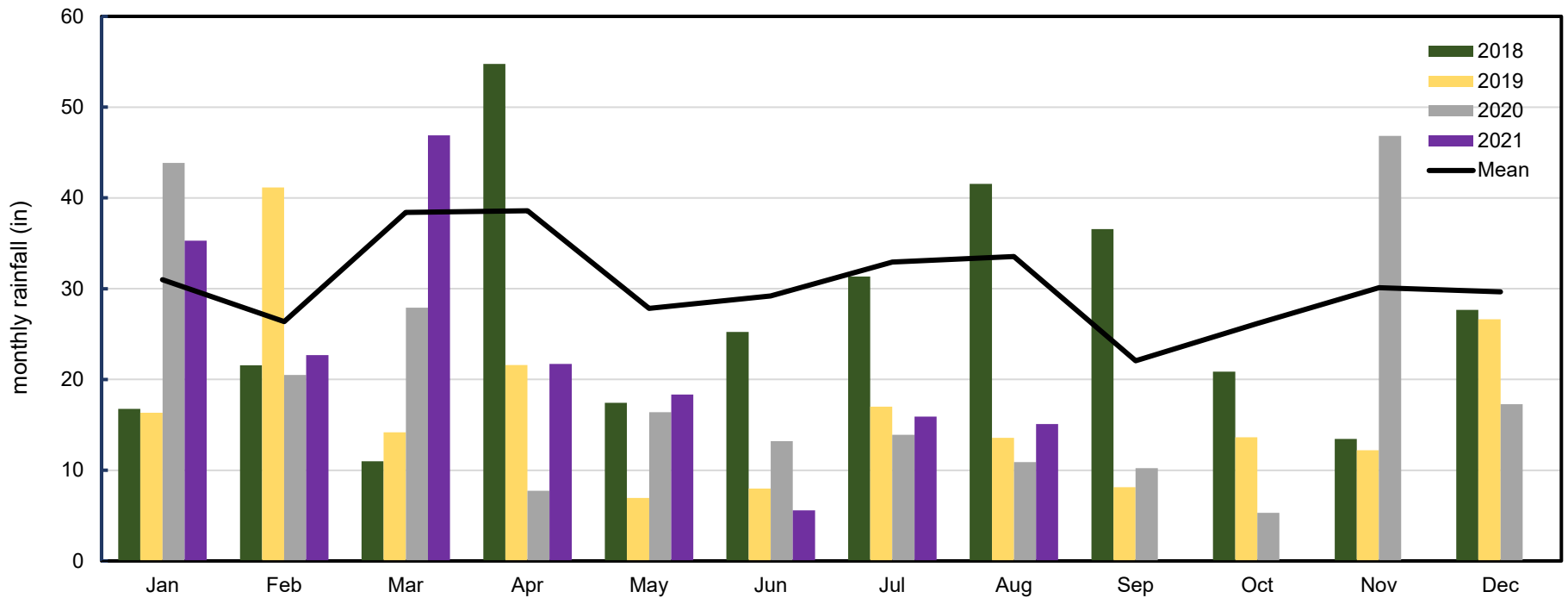
**Commission Meeting
Honolulu, Hawai‘i
September 21, 2021**

Chronology

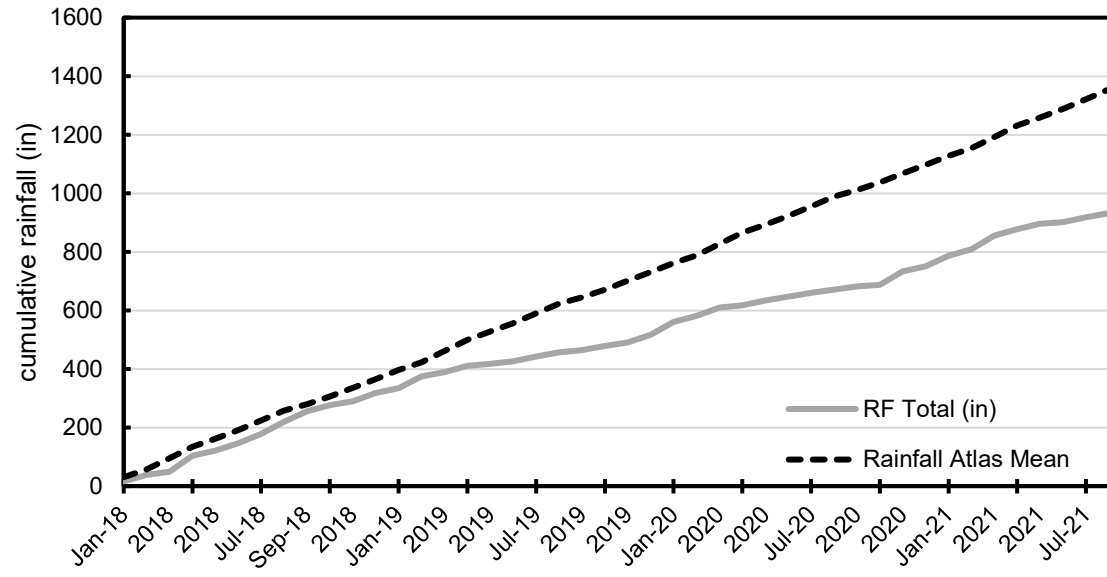
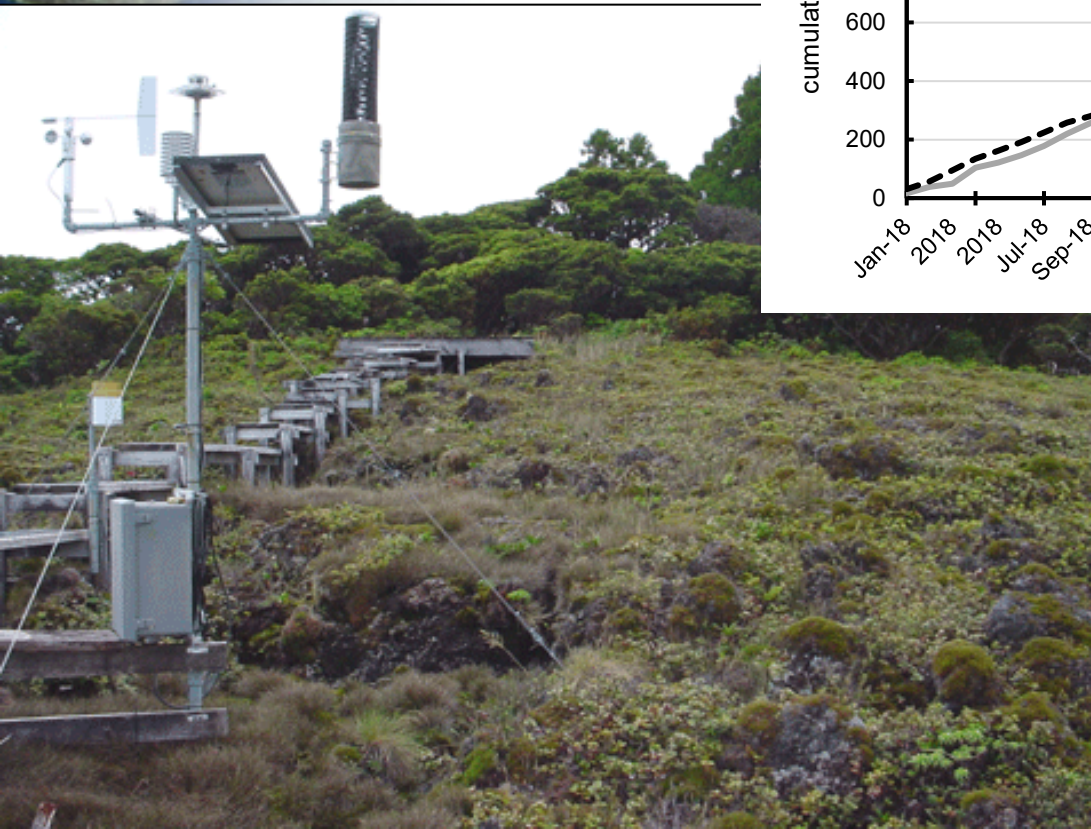
- **April 2014: Waikapū Stream interim instream flow standard of 2.9 mgd established through mediation.**
- **December 2017: Commission staff install continuous Waikapū Stream gage at 915 ft. elev. Upgraded to real-time in January 2018.**
- **October 2020: Received Complaint from Hui o Nā Wai ‘Ehā (Hui) for violating interim instream flow standard (IIFS) for Waikapū Stream, Wailuku and Waihe‘e Rivers.**
- **December 2020: Received Response to Complaint from Wailuku Water Company**

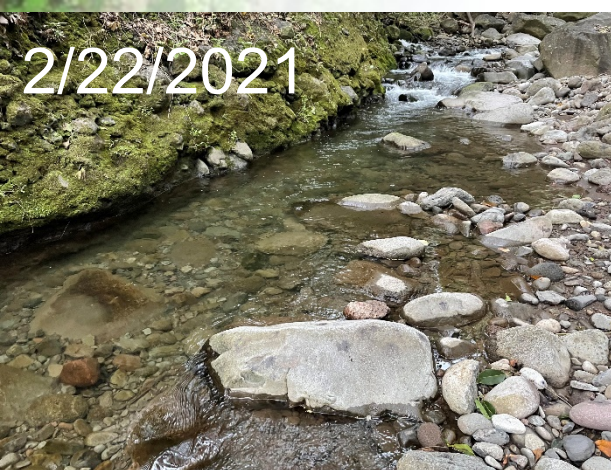


Total monthly rainfall (inches, in) from January 2018 to September 2021 (bars) with long-term mean monthly rainfall (black line) measured at Pu'u Kukui at 5,771 feet, Maui.

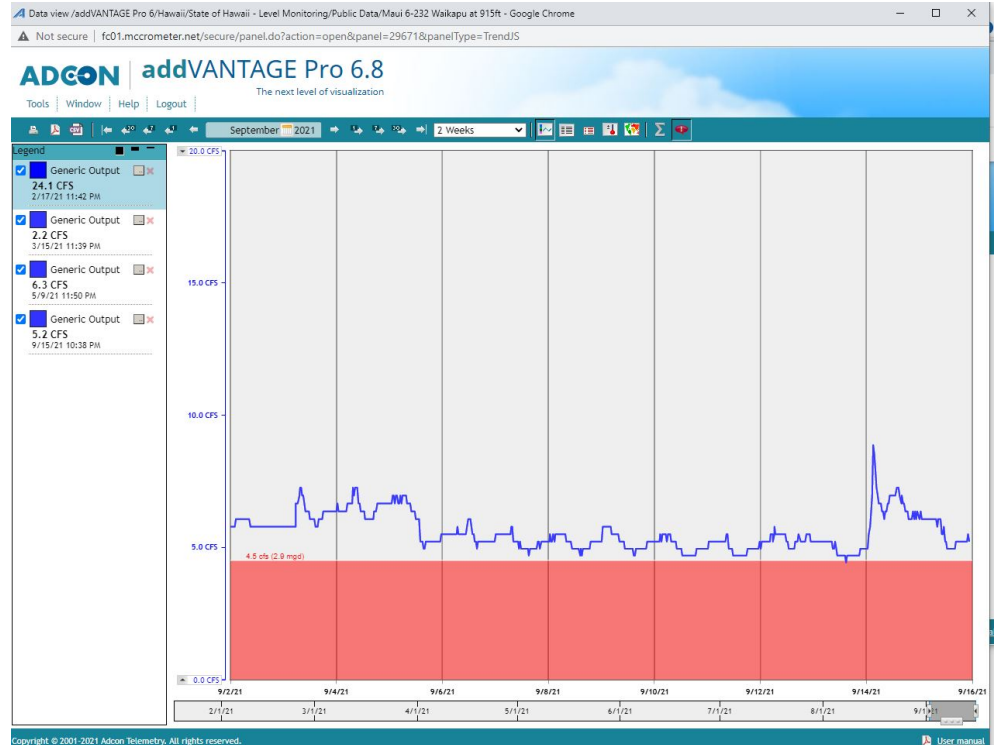


Cumulative rainfall measured at USGS station
Pu'u Kukui (SKN 380) relative to the 1978-2007
base period mean monthly rainfall 2018-2021





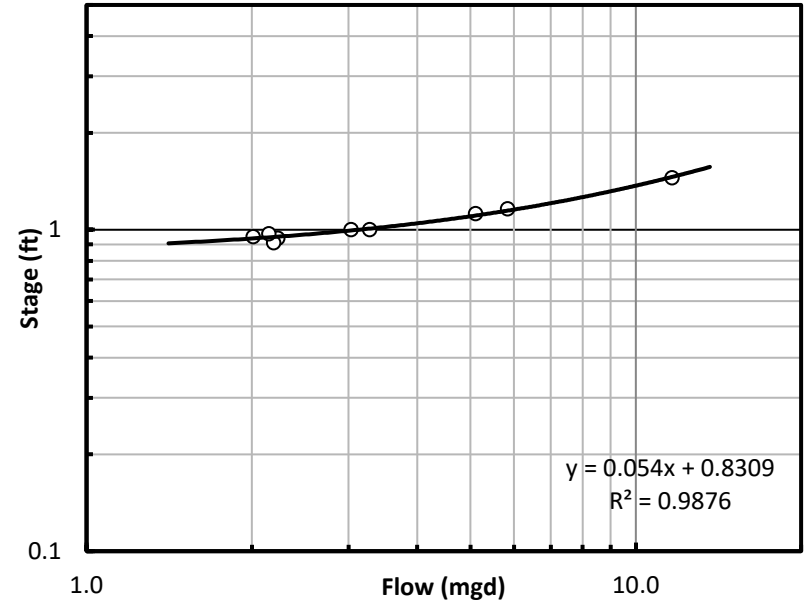
IIFS Monitoring



IIFS Measurements

2019-2021

Date	Time	Gage (ft)	stage shift (ft)	stage final (ft)	flow (cfs)	flow (mgd)
1/18/2019	11:53	0.87	0.30	1.17	7.37	4.76
3/7/2019	10:19	1.24	0.30	1.54	22.99	14.86
6/4/2019	15:06	0.92	0.30	1.22	10.55	6.82
9/19/2019	8:45	0.73	0.30	1.03	5.37	3.47
12/16/2019	13:52	0.94	0.30	1.24	8.12	5.25
1/10/2020	10:12	1.25	0.20	1.45	18.00	11.63
2/10/2020	12:25	0.92	0.20	1.12	7.90	5.11
6/22/2020		0.82	0.12	0.94	3.45	2.23
7/13/2020	16:51	0.79	0.12	0.91	3.39	2.19
8/3/2020	17:45	0.88	0.12	1.00	5.07	3.28
8/10/2020	16:20	1.04	0.12	1.16	9.04	5.84
10/27/2020	12:20	0.85	0.12	0.97	3.32	2.15
10/30/2020	11:36	0.83	0.12	0.95	3.11	2.01
12/4/2020	16:40	0.88	0.12	1.00	4.69	3.03
1/4/2021	16:16	0.92	0.12	1.04	5.60	3.62
2/22/2021	17:30	0.9	0.12	1.02	5.17	3.34
3/19/2021	17:40	1.3	0.12	1.42	17.09	11.05
5/7/2021	14:35	0.72	0.32	1.04	6.64	4.29
6/18/2021	17:20	0.68	0.32	1.00	4.68	3.02



Flow into Reservoir 1 Monitoring





Proposed location of South
Waikapu Auwai monitoring station
Old concrete flume before auwai



Chronology

- **October 2020: Reports that Wailuku Water Company (WWC) installed new valve on pipe release to South Waikapū ‘auwai from Reservoir 1.**

Reports of South Waikapū kuleana users not receiving water.

- **June 2021: WWC contacts staff regarding drought conditions seeking emergency relief to increase diversion of Waikapū Stream. Request is denied.**
- **July 2021: WWC reports vandalism of emergency control gate from Reservoir 1 to release more water into the South Waikapū ‘auwai.**



Chronology

- **August 2021: WWC reports that vandalism is continuing and will shut down ditch flow to install a hollow-tile wall to seal off additional releases to South Waikapū ‘auwai.**

Letters sent to WWC and South Waikapū ‘auwai users informing and emphasizing conditions of the Decision and Order.

Complaint received from the Hui regarding lack of water in the South Waikapū ‘auwai.

Complaint forward to WWC for response.

Complaint forwarded to Clayton Suzuki and asking for details on gaging water use, sharing with other ‘auwai users, and allegations of water quality issues related to use of sand filters.



Chronology

- **September 2021: Complaint forwarded to Waikapu Properties and asking for details on the current status of:**
 - **Organic crop certification of Kumu Farms so that water allocation can be reduced;**
 - **Supplying water to cattle for drinking water only at a rate of 250 gad; and**
 - **Relocation of all farming operations to areas makai of Waihe'e Ditch.**
- **September 2021: Response to Complaint received from WWC.**

Information response received from Clayton Suzuki.

Pending response from Waikapū Properties.



Reservoir No. 1



February 22, 2021



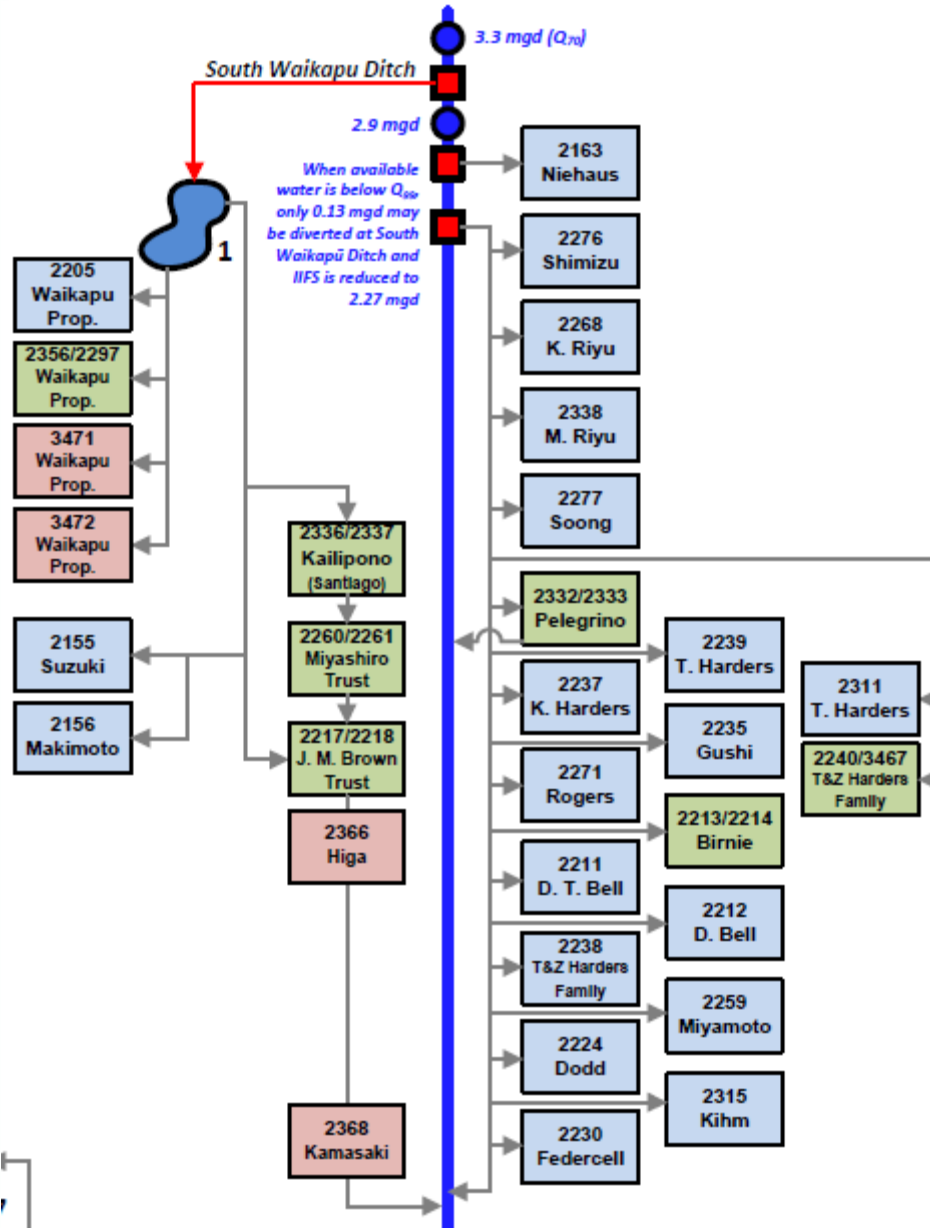
June 1, 2021



June 1, 2021



South Waikapū 'Auwai



South Waikapū 'Auwai

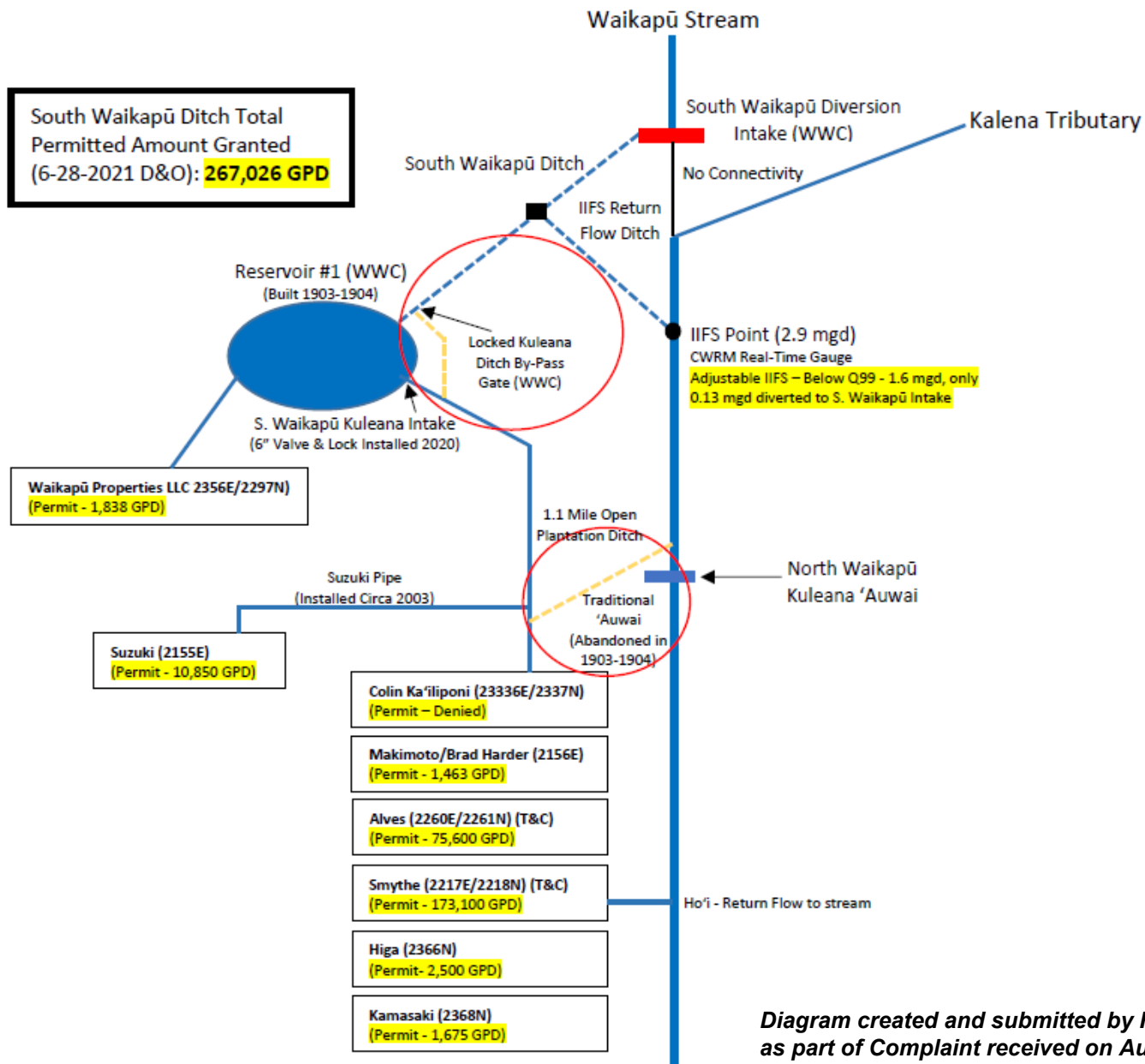


Diagram created and submitted by Hui o Nā Wai 'Ehā as part of Complaint received on August 11, 2021.



South Waikapū ‘Auwai (August 10, 2021)

D&O, pp. 305-307, Line 39:

B. Appurtenant Rights and Surface Water Use Permits (SWUPs)

39. SWUPA 2157 – Wailuku Water Company

- b. As a condition of this permit, WWC is required to gage and continuously monitor with the installation of a parshall flume or a Commission staff approved water meter, at the following locations:
 - 1. Diversions:
 - i. South Waikapu Ditch at Reservoir 1 (CWRM gage 6-1)
 - 2. Distribution Points:
 - vi. South Waikapū ‘Auwai
- c. WWC shall ensure that the following quantity of water is delivered to the following distribution points in the indicated amounts based on SWUPs that will be issued as a result of this decision. The amounts to be delivered shall be provided at all times unless identified in Tables 1-3, supra, or determined by the Commission to be an emergency:
 - vi. South Waikapū ‘Auwai – 0.265 mgd



South Waikapū ‘Auwai (August 10, 2021)

D&O, p. 360, Lines 207-208:

F. Management of Kuleana Systems, Lines 207 thru 208:

207. WWC and Mahi Pono are responsible to maintain their ditches to the point of delivery of water into the kuleana ditch or pipe system, with maintenance of the kuleana ditches and pipes the responsibility of the users.

208. Monitoring of the amount of water diverted into kuleana systems shall be done by WWC and Mahi Pono, as set forth herein, except where the water is diverted directly from the stream. Where the kuleana system diverts directly from a stream, it shall be the collective responsibility of the kuleana system users to monitor and report the amount of water diverted from the stream. The quantity of water that may be collectively diverted is based on the SWUPs issued pursuant to this decision. The amounts to be delivered shall be provided at all times unless determined by the Commission to be an emergency.



South Waikapū ‘Auwai (August 10, 2021)

D&O, pp. 305, Lines 35-36:

B. Appurtenant Rights and Surface Water Use Permits (SWUPs)

35. In awarding water for traditional and customary practices, and especially providing water for lo‘i kalo, the users of traditional ‘auwai will be responsible to ensure that the ‘auwai are sufficient to handle the flow for the initial users and all down ‘auwai users as well.

36. The Commission also encourages the ‘auwai users to engage in collective stewardship of the ‘auwai systems to use the allocated water responsibly, both in times of abundance and more importantly during times of scarcity.



South Waikapū ‘Auwai (August 10, 2021)

D&O, p. 361, Lines 209-213:

F. Management of Kuleana Systems

209. The Commission advises kuleana users on unlined ‘auwai systems to consider improving system efficiencies and reducing loss by lining or piping, including but not limited to South Waikapū ‘Auwai, South Waihe‘e ‘Auwai, and ‘Īao-Maniania Ditch.

210. In the pre-Māhele period, kuleana lands frequently contained pō‘alima which the occupants worked for the konohiki, chief, or king, and maintenance of the ditches was a collective responsibility. Present-day kuleana owners/users retain mutual responsibility for the maintenance of the kuleana ditches and pipes and to share the waters that flow in mutually used kuleana ditches and pipes.

211. The resuscitation of kuleana lands for lo‘i kalo is not only to allow individual kuleana to grow kalo through traditional practices but to do so in mutual cooperation and labor with neighboring kuleana, and a regulatory approach only solidifies the present focus on one’s own kuleana irrigation needs.



South Waikapū ‘Auwai (August 10, 2021)

D&O, p. 361, Lines 209-213: (cont’d)

F. Management of Kuleana Systems

212. The modern-day “konohiki” must have the skills to shepherd kuleana occupants toward agreed mutual sharing of both water and the improvement and maintenance of the kuleana ditches and pipes. Such an endeavor is a long-term activity, entailing “konohiki” that are both knowledgeable of lo’i kalo irrigation practices and efficient sharing of water. The Commission acknowledges the work kuleana permittees have put in to develop the social bonds that in pre-Māhele days resulted in extensive lo’i kalo that these occupants are attempting to revive.

213. The Commission encourages the kuleana permittees, community groups, and agencies to assist in the development of a community or hui style of management for these kuleana ‘auwai to develop the community-sharing system that is needed to revive Nā Wai ‘Ehā as the premier wetland kalo producer not only on Maui, but throughout the State (See FOF 264, 269, 271-272, 275, 285-286).



South Waikapū 'Auwai Complaint

CWRM June 28, 2021 D&O Table (Not in User Order):

#	User	WUPA	Appurtenant	Domestic	T&C	Priority	Amount (GPD)
1	Waikapū Properties LLC	2356E/2297N	No	No	No	3	1,838
2	Colin Ka'iliponi	2336E/2337N	Denied	Denied	Denied	N/A	0
3	Alves (Miyashiro)	2260E/2261N	Yes	Yes	Yes	1	75,600
4	J. Minamina Brown (Smythe)	2217E/2218N	Yes	Yes	Yes	1	173,100
5	George & Yoneko Higa	2366N	Yes	Yes	No	1	2,500
6	Robyn Garner (Kamasaki)	2368N	Yes	Yes	No	1	1,675
7	Clayton Suzuki	2155E	Extinguished	Yes	No	1 or 2	10,850
8	Brad Harger (Makimoto)	2156E	Yes	Yes	No	1	1,463
TOTAL							267,026 GPD

Table created and submitted by Hui o Nā Wai 'Ehā as part of Complaint received on August 11, 2021.



South Waikapū 'Auwai Complaint

- Lack of flow in South Waikapū kuleana 'auwai.



12-9-2019 (No WWC Valve and lock)



10-23-2020 (WWC Installed Valve & Lock)



7-28-2021 (WWC Installed Valve & Lock)

Photos submitted by Hui o Nā Wai 'Ehā as part of Complaint received on August 11, 2021.

South Waikapū 'Auwai Complaint

- **Waikapu Properties has the lowest priority, yet receives water before any other kuleanas users.**
- **Receives water directly from Reservoir 1.**
- **Surface water use permit award of 1,638 gpd to Waikapu Properties does not justify filling the entire reservoir for cattle use.**



South Waikapū ‘Auwai Complaint

- **Clayton Suzuki's intake is located about 0.45 miles above all other kuleana users.**
- **Suzuki is able to take more water than his permit allows.**
- **Concerns about residue/sediment from backwash of sand filters back into the ‘auwai.**



South Waikapū 'Auwai: Proposed Solutions

- **Modify emergency release gate from Reservoir 1 to allow for 265,188 gpd to flow directly into kuleana 'auwai.**

Reduce take of water into unlined Reservoir 1, and provide water directly to Waikapu Properties.

Address take of water by Clayton Suzuki, and backwash by sand filters back into the 'auwai.



August 24, 2021

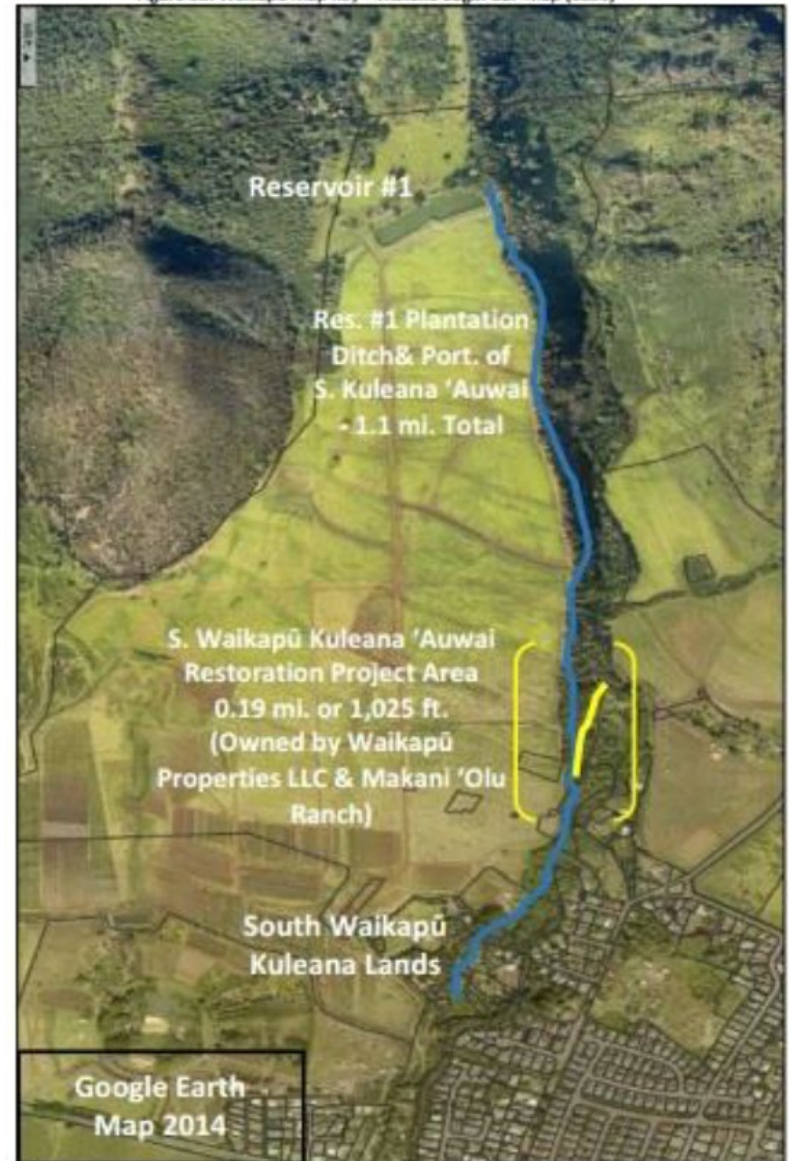


South Waikapū 'Auwai: Proposed Solutions

- Allow kuleana users to restore the original kuleana 'auwai which connects directly to Waikapū Stream

Original 'auwai is located on land owned by Waikapu Properties and Makani Olu Ranch (Avery Chumbley).

Figure 32: Waikapū Map Key • Wailuku Sugar Co. Map (1899)



Map prepared and submitted by Hui o Nā Wai 'Ehā as part of Complaint received on August 11, 2021.



Questions / Discussion

