



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

APPLICATION FOR SURFACE WATER USE PERMIT
FOR EXISTING USE IN THE LAHAINA AQUIFER SECTOR
AREA, WEST MAUI, SURFACE WATER MANAGEMENT AREAS

FORM SWUPA-E

For Official Use Only:

For detailed instructions on filling out this application, refer to the attached instructions. Incomplete applications will not be accepted for processing. The following must be attached before this application is accepted as complete:

- Portion of 7.5-Minute Series USGS topographic map (scale 1:24,000) labeled with stream and diversion location and the quad map name
- Property tax map showing the stream or diversion location and location of water use referenced to established property boundaries.
- Photograph(s) of the surface water source, diversion and end use, if applicable.

APPLICANT INFORMATION: Note: In accordance with §174C-51(1)(B), HRS, in the event a lessee, licensee, developer, or any other person with a terminable interest or estate in the land, which is the water source of the permitted water, applies for a water permit, the landowner shall also be stated as a joint applicant for the water permit.

1. APPLICANT'S NAME John Stufflebean		Applicant's Contact Eva Blumenstein	2. SOURCE LANDOWNER'S NAME Maui Land & Pineapple Company		Source Landowner's Contact Race Randle
Applicant's Mailing Address, or Principal Place of Business 200 S High Street Wailuku HI 96793			Source Landowner's Mailing Address, or Principal Place of Business 200 Village Road Lahaina HI 96761		
Applicant's Phone 808 2707816	Applicant's Fax	Applicant's E-mail	Source Landowner's Phone 808 349 9364	Source Landowner's Fax	Source Landowner's E-mail

EXISTING SOURCE INFORMATION

3. SURFACE WATER HYDROLOGIC UNIT AND CODE: ☐ Ukumehame (6004) ☐ Olowalu (6005) ☐ Launiupoko (6006)
☐ Kaua'ula (6007) ☐ Kahoma (6008) ☐ Wahikuli (6009) ☐ Honokōwai (6010)
☐ Kahana (6011) ☐ Honokahua (6012) ☐ Honolua (6013) ☒ Honokōhau (6014)

4a. TMK OF STREAM DIVERSION LOCATION: 4 - 1 - 001 017
Zone Sector Plat Parcel

4b. TMK OF DITCH DIVERSION LOCATION: 4 - 1 - 001 017
Zone Sector Plat Parcel

5a. STREAM DIVERSION: How is water diverted from the stream to your property? Check all that apply.
☐ Pipe ☐ Pump ☒ Ditch/Auwai ☐ Other Describe: Via Honokohau ditch to pipe at Mahinahina water treatment plant

5b. IS THE DIVERTED WATER RETURNED TO THE STREAM OR DITCH?
☒ Yes. How much water is returned? 1,938,950 gallons per day TMK of Returned Water Location: 4-1-001 009
☐ No.

6. FLOW MEASUREMENT INFORMATION:
Does the stream diversion have a flowmeter with totalizer or other device to measure diverted amounts?
☐ Yes. Enter the installation date: Enter measured amounts in Table 1
List the manufacturer and describe the device:
☒ No. Explain how you are measuring flow to justify amounts shown in Table 1 in the space below

EXISTING USE INFORMATION

7. TOTAL QUANTITY OF WATER REQUESTED: 1,410,000 gallons per day. See Table 2, Item 14

8. EXISTING USE: ☐ Agriculture ☐ Domestic ☐ Industrial ☐ Irrigation
Check all that apply ☐ Military ☒ Municipal ☐ Traditional & Customary Practice

9. LOCATION OF EXISTING WATER USE: Show the location of the existing use on the same USGS and TMK maps as the existing source location. Otherwise, attach similar maps. See Table 2, Item 2.

EXISTING USER INFORMATION

10. APPURTENANT RIGHT: Do you claim an appurtenant right for your water use? ☐ Yes ☒ No
If yes, has the appurtenant right been established by the courts or the Commission? ☐ Yes ☐ No

11. END USER INFORMATION: Are you an end user on an existing water system? ☐ Yes ☒ No
If yes, who is the operator of the water system?

12. REGISTRATION AND DECLARATION OF WATER USE: Do you have a Registration and Declaration of Water Use with the Commission?
☐ Yes. List the file reference name(s): ☒ No

13. STREAM DIVERSION WORKS PERMIT (SDWP):
Have you ever been issued a SDWP by the Commission?
☐ Yes. List the permit number(s): ☒ No

NOTE: Signing below indicates that the signatories understand and affirm that the information provided on this application is accurate and true to the best of their knowledge. Furthermore, the signatories understand that: 1) if necessary, further information may be required before the application is considered complete; 2) if a water use permit is granted by the Commission, this permit will be subject, but not limited, to any existing legal uses, changes in sustainable yields and instream flow standards, Hawaiian Home Lands uses, and any other conditions imposed by the Commission; and 3) the applicant is responsible for paying the required public notice fees associated with this application.

14. APPLICANT James A. Landgraf Digitally signed by James A. Landgraf Date: 2023.07.19 11:32:09 -10'00' Signature for John Stufflebean Print Date	15. SOURCE LANDOWNER Signature Race Randle 7/31/23 Print Date
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SURFACE WATER USE PERMIT APPLICATION - EXISTING USE (LAHAINA AQUIFER SECTOR AREA, WEST MAUI)

12-MONTH AVERAGE DAILY USE

18. TABLE 1: MEASURED OR CALCULATED USE OF WATER AT THE SOURCE OR END USE (As of the Effective Date of Designation, August 6, 2022)

A	B	C	D	E	F	G
A. MONTH / YEAR	B. AVERAGE DAILY USE FOR THE MONTH IN GALLONS PER DAY (GPD)	Check one item per box				OTHER Please describe
		METERED	ESTIMATED	ACTIVE BUT UNKNOWN	INACTIVE	
August 2021	94,855	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
September 2021	1,192,583	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
October 2021	1,353,574	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
November 2021	1,228,717	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
December 2021	1,377,965	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
January 2022	748,581	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
February 2022	1,417,439	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
March 2022	548,561	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
April 2022	1,614,423	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
May 2022	1,333,710	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
June 2022	1,943,227	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
July 2022	1,647,152	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
H. SUM OF AVERAGE DAILY USE FOR THE MONTH	14,500,786	GPD				
I. AVERAGE DAILY USE (Average of the above)	1,208,399					

SURFACE WATER USE PERMIT APPLICATION - EXISTING USE (LAHAINA AQUIFER SECTOR AREA, WEST MAUI)

EXISTING USE INFORMATION

17. TABLE 2: LAND USE CONSISTENCY / EFFICIENCY OF USE (Attach additional copies of Table 1 if necessary.)

LAND USE CONSISTENCY						EFFICIENCY OF USE				
A	B	C	D	E	F	G	H	I	J	K
PURPOSE / WATER USE CATEGORY	TMK FOR LOCATION OF USE ATTACH THE FOLLOWING: • Property tax map, showing existing location of use referenced to established property boundaries • Photograph of the area of existing use	STATE LAND USE DISTRICT	CDUP REQ'D Check the appropriate box, and write in the date approved, if applicable.	COUNTY ZONING CODE	SMAP REQ'D Check the appropriate box, and write in the date approved, if applicable	UNITS OR NET ACREAGE	GPD/UNIT or GPD/ACRE (Gallons per Day)	REQUESTED QUANTITY OF USE (GPD)	SUB-METERED? Check Yes or No	APPLICANT'S JUSTIFICATION FOR REQUESTED QUANTITY OF USE. If applicable, attach sheets to show how this number was calculated. For irrigation uses, fill in Table 2.
Uses that require potable (drinking) water										
			<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired <input type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired <input type="checkbox"/> No				<input type="checkbox"/> Yes <input type="checkbox"/> No	PLEASE REFER TO APPENDIX E and Cover Letter
Zone	Sec	Plat	Parcel							
			<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired <input type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired <input type="checkbox"/> No				<input type="checkbox"/> Yes <input type="checkbox"/> No	
Zone	Sec	Plat	Parcel							
			<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired <input type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired <input type="checkbox"/> No				<input type="checkbox"/> Yes <input type="checkbox"/> No	
Zone	Sec	Plat	Parcel							
			<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired <input type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired <input type="checkbox"/> No				<input type="checkbox"/> Yes <input type="checkbox"/> No	
Zone	Sec	Plat	Parcel							
TOTAL POTABLE USE (L)									GPD	
Uses that do not require potable water										
			<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired <input type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired <input type="checkbox"/> No				<input type="checkbox"/> Yes <input type="checkbox"/> No	
Zone	Sec	Plat	Parcel							
			<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired <input type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired <input type="checkbox"/> No				<input type="checkbox"/> Yes <input type="checkbox"/> No	
Zone	Sec	Plat	Parcel							
			<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired <input type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired <input type="checkbox"/> No				<input type="checkbox"/> Yes <input type="checkbox"/> No	
Zone	Sec	Plat	Parcel							
			<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired <input type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not acquired <input type="checkbox"/> No				<input type="checkbox"/> Yes <input type="checkbox"/> No	
Zone	Sec	Plat	Parcel							
TOTAL NON POTABLE USE (M)									GPD	
TOTAL QUANTITY OF WATER REQUESTED (Sum of Total Potable Use and Total Non-Potable Use above) (N) =								1,410,000	GPD	
<p>O. LIMITATIONS: Please explain if there are any limitations (legal, contractual, etc.) on the use(s) of water described above. §174C-51(5) HRS</p> <p>The Maui County Department of Water Supply (MDWS) purchases delivery of surface water in Honokohau Ditch from the Maui Land & Pineapple Company (MLP) by agreement. The current agreement, effective March 29, 2021 entitles MDWS up to 2,500,000 gpd for the County's use in serving its West Maui district customers. The seller, MLP will deliver water to MDWS to the extent water is available. The agreement does not entitle MDWS to any minimum water allocation.</p>										

SURFACE WATER USE PERMIT APPLICATION - EXISTING USE (LAHAINA AQUIFER SECTOR AREA, WEST MAUI)

EXISTING USE INFORMATION (continued)

18. TABLE 3: IRRIGATION INFORMATION (List all crops as separate line items, including landscape and golf course irrigation uses, grown in the 12 months prior to August 6, 2022. Attach additional copies of Table 3 if necessary.)

A TMK OF EXISTING LOCATION OF USE (Attach TMK map outlining area and photos for each existing use.)						B CROP	C TOTAL ACREAGE	D NET IRRIGATED ACREAGE	E BEGIN GROWTH PERIOD (Month)	F END GROWTH PERIOD (Month)	G IRRIGATION SYSTEM (Refer to instructions.)	H IRRIGATION PRACTICE (Refer to instructions.)
4	-	3	-	0	0	4	0	1	7	unknown	unknown	unknown
4	-	3	-	0	0	4	0	2	0	horse pasture, citrus, timber.	unknown	unknown
4	-	3	-	0	0	4	0	2	2	flowers, citrus, coconut	unknown	unknown
4	-	3	-	0	1	0	0	1	7	pumpkin, pomelo, bittermelon,	unknown	unknown
4	-	3	-	0	1	0	0	1	8	vegetables	unknown	unknown
4	-	3	-	0	1	0	0	1	9	landscape plants	unknown	unknown
4	-	3	-	0	1	0	0	2	2	coffee, fruit trees, coco palms	unknown	unknown
4	-	3	-	0	1	0	0	2	7	sod, star fruit, sour sop, avocado,	unknown	unknown
4	-	3	-	0	0	9	0	5	2	landscaping	unknown	unknown
	-		-									
	-		-									
	-		-									

Comments:
The MDWS does not provide non-potable water for commercial agricultural, landscape or golf course irrigation purposes. The services listed in Table 3 include the service accounts with an agricultural irrigation component for which MDWS has approved agricultural water rate. For billing purposes, these services are categorized as Single Family and include water for domestic household uses as well. MDWS does not solicit information on growth periods, irrigation systems and irrigation practices for customer accounts. The last service listed in Table 3 is the only service account on this sub-system that is dedicated to irrigation only. However, all water services, such as commercial, hotel, multi-family and government uses may include an irrigation component. Map is attached as Appendix G.

SURFACE WATER USE PERMIT APPLICATION - EXISTING USE (LAHAINA AQUIFER SECTOR AREA, WEST MAUI)

OTHER PERTINENT INFORMATION

19. TABLE 4: ALTERNATIVES ANALYSIS

	A. Analysis of Potable Alternatives (Attach additional sheets if necessary.)	B. Analysis of Non-Potable Alternatives (Attach additional sheets if necessary.)
Municipal sources	The application is for a municipal source. The closest alternative private municipal system, operated by the Hawaii Water Service Co (HWSC), services Kaanapali resort area. Two MDWS service accounts are in close proximity to the HWSC and could potentially be served by this system if adequate system capacity was available. The privately owned municipal water system in the Kapalua area, operated by HWSC, is within 100 ft of the northernmost terminus of the MDWS system. Four (4) existing service accounts could potentially be served by this private system, if capacity was available.	MDWS does not offer non-potable municipal supply or dual distribution mains for the service area. At the northernmost terminus of the MDWS system, the private municipal Kapalua non-potable water main is located approximately 100 ft north. Non-potable irrigation needs for four (4) existing multi-family service accounts could potentially be serviced by the Kapalua non-potable distribution system, if capacity was available.
Wastewater reuse	Wastewater is administered by the County of Maui Department of Environmental Management (DEM). RI water is currently generated at the Lahaina Wastewater Reclamation Facility (LWWRF). Conceptual ideas are being shared between the departments to determine if an interconnection between the MDWS Mahinahina Water Treatment Facility (MWTF) and the LWWRF can produce water to potable standards using direct potable reuse.	RI water is available from the LWWRF and serves the area from Kapalua to Kaanapali. The distribution system primarily benefits the resort area serviced by the HWSC. Current RI service is provided to the following MDWS customers: Hyatt Regency, Honua Kai Resort, Hyatt Timeshare Resort, and the Kaanapali Golf Resort. Expansion plans of the RI distribution system include the Kaanapali Golf Course and hotels on the HWSC system and 0.5 mgd for DHHL Honokowai development. As housing development adds sewer service and additional RI water becomes available, MDWS is committed to collaborate with DEM to offset additional potable water use for non-potable water from Honokowai ditch is diverted by MLP/HWSC for resort and golf course irrigation needs. MDWS does not provide potable water to golf courses. To offset potable water use for non-potable irrigation purposes at the commercial properties on the MDWS system at the closest points to the Honokowai ditch would require approximately 1.9 miles of transmission in addition to a dual distribution and metering system. Expansion of RI distribution system within 500 feet of MDWS commercial properties is a more feasible alternative as additional RI water becomes available.
Ditch system	The Honokowai Ditch is the source for this SWUPA.	Non-potable water from Honokowai ditch is diverted by MLP/HWSC for resort and golf course irrigation needs. MDWS does not provide potable water to golf courses. To offset potable water use for non-potable irrigation purposes at the commercial properties on the MDWS system at the closest points to the Honokowai ditch would require approximately 1.9 miles of transmission in addition to a dual distribution and metering system. Expansion of RI distribution system within 500 feet of MDWS commercial properties is a more feasible alternative as additional RI water becomes available.
Desalination	MDWS has commissioned a consultant in fiscal year 2023 to deliver a desalination feasibility study as potential potable water supply for West Maui. The study will address energy needs and residuals management and is anticipated to be completed by the end of fiscal year 2024. Desalination, if feasible, will not be available in the near future to meet current demand.	Two options exist - seawater or brackish water, low-salt RO desalination. A feasibility study will assess both options and potential solutions to meet the extensive energy needs. Non-potable uses of desalinated water will be considered. If feasible, desalinated water will not be available in the near future to meet non-potable water needs in the service area.
Ground water	MDWS existing sources within the Napili subsystem are fully utilized and serve to back up MWTF during low flows. MDWS is pursuing development of new wells in Honolua aquifer. Permitting, budget approvals, hydrologic assessment and well siting are time intensive. There is currently no additional available capacity from existing MDWS wells to offset potentially reduced surface water supply. MDWS is pursuing contingency agreements with the HWSC to increase groundwater backup in water shortages.	Non-potable and brackish groundwater is utilized for large landscaped properties served by the privately owned water purveyors. MDWS does not own or operate non-potable wells or a dual distribution and metering system.
Conservation measures	Demand side conservation measures for the system served by Honokowai ditch include incentives and outreach programs to substitute landscaping with drought tolerant and native plants to reduce irrigation needs, distribution of free low flow fixtures and ultra-low flow toilets, public outreach events to educate the public about water conservation. Supply side measures include active leak detection and repair program, installation of smart meters throughout the distribution system.	MDWS initiated a rainbarrel program to incentivize rainfall capture and runoff from roofs. Free rain barrels are distributed to MDWS customers on this system.
Other (specify)		Maui County does not maintain a stormwater reclamation program to provide non-potable supply for agriculture or irrigation. The Maui Island Water Use and Development plan includes a strategy to explore storm water from Kahoma Stream for conveyance to agricultural water users. This strategy would potentially offset water use within the MDWS Lahaina subsystem in the Kahoma stream vicinity, but is currently not available.

SURFACE WATER USE PERMIT APPLICATION - EXISTING USE

OTHER PERTINENT INFORMATION

20. PUBLIC INTEREST: Hawaii Revised Statutes §174C-2(c) states that *The state water code shall be liberally interpreted to [a] obtain maximum beneficial use of the waters of the State for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses. However, [b] adequate provision shall be made for the protection of traditional and customary Hawaiian rights, the protection and procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation. Such objectives are declared to be in the public interest.*

Explain how the existing use(s) in your application are consistent with items [a] and [b] above.

MDWS provides municipal water service for residential potable needs for the Lahaina and Napili community. Municipal uses and public water supply are declared to be in the public interest. MDWS services include potable water supply for residential, commercial, government, churches, industrial, park, school and military uses. The system also provides for fire flow throughout the community. Residential use for the primary service area for the Mahinahina Water Treatment Facility represents 57.5% of total use. Residential services throughout the entire MDWS Napili and Lahaina system represents 87% of the total number of water services. Reliable public water supply to serve homes and businesses is a reasonable and beneficial use of surface water diverted from Honokohau Stream and essential to maintain a functional economy. Beneficial use requires reduction of waste and a water conservation mindset. The MDWS conservation program has resulted in substantial water savings over the last 20 years. Overall, the MDWS number of services have increased 35% while the water use per service has decreased 22.3%.

20a. Please provide the identity and scope of cultural, historical, and natural resources in which traditional and customary Native Hawaiian rights are exercised in this area.

Please refer to the Ka Pa akai Analysis in Appendix H

20b. Identify the extent to which those resources, including traditional and customary Native Hawaiian rights, will be affected or impaired by the proposed action.

Please refer to the Ka Pa akai Analysis in Appendix H

20c. What feasible action, if any, could be taken by the Commission on Water Resource Management in regards to your application to reasonably protect Native Hawaiian rights?

Please refer to the Ka Pa akai Analysis in Appendix H

OTHER PERTINENT INFORMATION

19. TABLE 4: ALTERNATIVES ANALYSIS

Honokohau Ditch

A. Analysis of potable alternatives Attach additional sheets if necessary.

B. Analysis of non-potable alternatives Attach additional sheets if necessary.

Municipal sources	The application is for a municipal source. The closest alternative private municipal system, operated by the Hawaii Water Service Co (HWSC), services Kaanapali resort area. Two MDWS service accounts are in close proximity to the HWSC and could potentially be served by this system if adequate system capacity was available. The privately owned municipal water system in the Kapalua area, operated by HWSC, is within 100 ft of the northernmost terminus of the MDWS system. Four (4) existing service accounts could potentially be served by this private system, if capacity was available.	MDWS does not offer non-potable municipal supply or dual distribution mains for the service area. At the northernmost terminus of the MDWS system, the private municipal Kapalua non-potable water main is located approximately 100 ft north. Non-potable irrigation needs for four (4) existing multi-family service accounts could potentially be serviced by the Kapalua non potable distribution system, if capacity was available.
Wastewater reuse	Wastewater is administered by the County of Maui Department of Environmental Management (DEM). R1 water is currently generated at the Lahaina Wastewater Reclamation Facility (LWWRF). Conceptual ideas are being shared between the departments to determine if an interconnection between the MDWS Mahinahina Water Treatment Facility (MWTF) and the LWWRF can produce water to potable standards using direct potable reuse.	R1 water is available from the LWWRF and serves the area from Kapalua to Kaanapali. The distribution system primarily benefits the resort area serviced by the HWSC. Current R1 service is provided to the following MDWS customers: Hyatt Regency, Honua Kai Resort, Hyatt Timeshare Resort, and the Kaanapali Golf Resort. Expansion plans of the R1 distribution system include the Kaanapali Golf Course and hotels on the HWSC system and 0.5 mgd for DHHL Honokowai development. As housing development adds sewer service and additional R1 water becomes available, MDWS is committed to collaborate with DEM to offset additional potable water use for non potable MDWS resort and commercial customer uses to the maximum extent possible.
Ditch system	The Honokohau Ditch is the source for this SWUPA.	Non potable water from Honokohau ditch is diverted by MLP/HWSC for resort and golf course irrigation needs. MDWS does not provide potable water to golf courses. To offset potable water use for non potable irrigation purposes at the commercial properties on the MDWS system at the closest points to the Honokohau ditch would require approximately 1.9 miles of transmission in addition to a dual distribution and metering system. Expansion of R1 distribution system within 500 feet of MDWS commercial properties is a more feasible alternative as additional R1 water becomes available.
Desalination	MDWS has commissioned a consultant in fiscal year 2023 to deliver a desalination feasibility study as potential potable water supply for West Maui. The study will address energy needs and residuals management and is anticipated to be completed by the end of fiscal year 2024. Desalination, if feasible, will not be available in the near future to meet current demand.	Two options exist - seawater or brackish water, low-salt RO desalination. A feasibility study will assess both options and potential solutions to meet the extensive energy needs. Non potable uses of desalinated water will be considered. If feasible, desalinated water will not be available in the near future to meet non potable water needs in the service area.
Ground water	MDWS existing sources within the Napili subsystem are fully utilized and serve to back up MWTF during low flows. MDWS is pursuing development of new wells in Honolua aquifer. Permitting, budget approvals, hydrologic assessment and well siting are time intensive. There is currently no additional available capacity from existing MDWS wells to offset potentially reduced surface water supply. MDWS is pursuing contingency agreements with the HWSC to increase groundwater backup in water shortages.	Non potable and brackish groundwater is utilized for large landscaped properties served by the privately owned water purveyors. MDWS does not own or operate non potable wells or a dual distribution and metering system.
Conservation measures	Demand side conservation measures for the system served by Honokohau ditch include: incentives and outreach programs to substitute landscaping with drought tolerant and native plants to reduce irrigation needs; distribution of free low flow fixtures and ultra-low flow toilets, public outreach events to educate the public about water conservation. Supply side measures include active leak detection and repair program, installation of smart meters throughout the distribution system.	MDWS initiated a rainbarrel program to incentivize rainfall capture and runoff from roofs. Free rain barrels are distributed to MDWS customers on this system.
Other		Maui County does not maintain a stormwater reclamation program to provide non potable supply for agriculture or irrigation. The Maui Island Water Use and Development plan includes a strategy to explore storm water from Kahoma Stream for conveyance to agricultural water users. This strategy would potentially offset water use within the MDWS Lahaina subsystem in the Kahoma stream vicinity, but is currently not available.

SURFACE WATER USE PERMIT APPLICATION - EXISTING USE

OTHER PERTINENT INFORMATION

21. INTERFERENCE WITH THE RIGHTS OF THE DEPARTMENT OF HAWAIIAN HOME LANDS

Explain how the continued use(s) of water will not interfere with the rights of the Department of Hawaiian Home Lands, as provided in section 221 of the Hawaiian Homes Commission Act

The Department of Hawaiian Homelands (DHHL) properties within the Leialii project area is currently served by the MDWS Lahaina subsystem Mahinahina Water Treatment Facility and the Napili subsystem can provide limited backup supply to the Lahaina subsystem. There are currently no DHHL projects withdrawing surface water from Honokohau Ditch. However, DHHL holds a 2 million gallon surface water reservation that has yet to be exercised. As MDWS applies for new water use for the full 2.5 mgd from Honokohau Ditch, we believe that adequate allocation from this source can be provided for DHHL and MDWS public trust uses serviced by the MDWS water system. For new water services, MDWS prioritizes DHHL needs through an exemption from the water availability rule as set forth in Maui County Code chapter 14.12.

22. INTERFERENCE WITH ANY EXISTING LEGAL USES

Explain how the continued use(s) of water will not interfere with any other existing legal use(s) of water.

The MDWS purchases delivery of surface water in Honokohau Ditch from the Maui Land & Pineapple Company (MLP) by agreement. The current agreement, effective March 29, 2021, entitles MDWS up to 2,500,000 gpd for the County's use in serving its West Maui district customers. The seller, MLP, will deliver water to MDWS to the extent water is available. The agreement does not entitle MDWS to any minimum water allocation.

23. PUBLIC WATER SYSTEM INFORMATION

Check the appropriate box or boxes.

☐ PUC-Regulated Private System

☐ Non-PUC-Regulated Private System

☐ Not a Public Water System

☒ Intended dedication to County Water Department

**INSTRUCTIONS FOR FILLING OUT APPLICATION FOR SURFACE WATER USE PERMIT
FOR AN EXISTING USE, LAHAINA AQUIFER SECTOR AREA, WEST MAUI**

INSTRUCTIONS FOR FILLING OUT FORM SWUPA-E

This application form is to be used for actual existing uses as of the effective date of designation, August 6, 2022, for the Lahaina Aquifer Sector Area as both a Surface Water and Ground Water Management Area. Based on the State Water Code, Section 174C, Part IV Regulation of Water Use, a completed application must be filed with the Commission on Water Resource Management (CWRM) no later than August 6, 2023, to qualify as an existing use. Failure to meet the filing deadline may cause your application to be considered a new use and require you to file an Application for Surface Water Use Permit for New Use.

If you are applying for a new surface water use, which are proposed uses after the date of designation, please use the Application for Surface Water Use Permit for New Use, Form SWUPA-N.

Information about surface water management areas and the current application forms are available at our website: <https://dlnr.hawaii.gov/cwrn/>, by contacting the Stream Protection and Management Branch at (808) 587-0234, or by email at dlnr.cwrn@hawaii.gov. The current application forms are also available at <https://dlnr.hawaii.gov/cwrn/info/forms>.

REQUIREMENTS FOR A COMPLETE APPLICATION Information must be legible. Therefore, please type or clearly print all information in ink.

- a. Fill in the most recent application form.
- b. Fill in every line on the application.
- c. Enclose a check for the non-refundable filing fee of \$25 payable to Department of Land and Natural Resources.
- d. Pay for the cost of publishing any required public notices related to your application.
- e. Mark the source and end use locations on the appropriate USGS quad map and TMK map and attach to your application.
- f. Attach photos showing your existing diversion, measuring device (if applicable) and end use areas.
- g. Sign the application form. Both the applicant and the landowner of the source must sign the application form.
- h. Submit one (1) original and one (1) digital copy of the application form including all of the attachments (instructions, maps, photos and any additional attachments) and filing fee to: Commission on Water Resource Management, P.O. Box 621, Honolulu, HI 96809.

The applicant must establish that the existing use of water is a reasonable and beneficial use. According to §174C-3 of the State Water Code "Reasonable-beneficial use" means the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is both reasonable and consistent with the state and county land use plans and the public interest.

Furthermore, public interest is described in §174C-2(c) of the State Water Code which states that "(t)he state water code shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses. However, adequate provision shall be made for the protection of traditional and customary Hawaiian rights, the protection and procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation. Such objectives are declared to be in the public interest."

LINE BY LINE INSTRUCTIONS FOR COMPLETING THE APPLICATION FORM

APPLICANT INFORMATION

In accordance with the Hawaii Water Code, both the applicant and the person who owns the property where the water source is located are required to apply for a water use permit. §174C-51(1)(B), HRS, states, *In the event a lessee, licensee, developer, or any other person with a terminable interest or estate in the land, which is the water source of the permitted water, applies for a water permit, the landowner shall also be stated as a joint applicant for the water permit.*

1. **APPLICANT INFORMATION:** Fill in the information for the applicant. This should be the person who will be responsible for all conditions of the water use permit.
2. **SOURCE LANDOWNER INFORMATION:** Fill in the information for the landowner of the property where the existing surface water diversion source (e.g., stream, spring, etc.) is located.

EXISTING SOURCE INFORMATION

3. **SURFACE WATER HYDROLOGIC UNIT AND CODE:** Enter the appropriate island name, hydrologic unit name, and hydrologic code where the existing source is located. The "source" is the stream from which water is diverted to the user. For information on hydrologic unit names and unit codes please refer to the *Surface Water Hydrologic Unit: A Management Tool for Instream Flow Standards* report on the CWRM website at <https://files.hawaii.gov/dlnr/cwrn/publishedreports/PR200501.pdf> or contact CWRM staff at (808) 587-0234. You may also contact CWRM toll-free from Maui at (808) 984-2400, ext. 70234.
- 4a. **TMK OF EXISTING STREAM DIVERSION LOCATION:** Fill in the Tax Map Key (TMK) number of the tax parcel where the stream diversion is located. Each tax parcel is issued a TMK number by the county property tax office and is defined as follows: 1st digit = (Island code), 2nd digit = Zone, 3rd digit = Section, Digits 4 to 6 = Plat, Digits 7 to 9 = Parcel. e.g. (1) 1-1-001 001. To find out your TMK number, call Maui County Real Property Tax Division at (808) 270-7297, or check online at: www.mauipropertytax.com/
- 4b. **TMK OF EXISTING DITCH DIVERSION LOCATION:** Fill in the Tax Map Key (TMK) number of the parcel where the existing ditch diversion is located, if applicable.
- 5a. **STREAM DIVERSION:** How is water diverted from the stream to your property? Check all the appropriate boxes.
- 5b. **IS THE DIVERTED WATER RETURNED TO THE STREAM OR DITCH?** Check "Yes" or "No". If yes, enter the amount of water returned and the TMK location of where water is returned to the stream or ditch.
6. **FLOW MEASUREMENT INFORMATION:** Check "Yes" or "No". If yes, please describe the measuring device. A flowmeter with a totalizer will directly measure the total use for the source (similar to a car's odometer). If no, explain how stream diversion is measured or estimated to justify amounts requested.

EXISTING USE INFORMATION (Ref. §§174C-51(4), (5), (6), HRS)

7. **TOTAL QUANTITY OF WATER REQUESTED:** Enter the amount of water requested as gallons per day (GPD). Fill out Table 2 and enter the amount from Box 17-N, "Total Quantity of Water Requested."
8. **EXISTING USE:** Check all the boxes that apply for the existing use. Refer to the instructions for Table 2 Land Use Consistency/Efficiency of Use, Item 1 Purpose/Water Use Category below to determine which water use category to use.
9. **LOCATION OF EXISTING WATER USE:** Show the location of the existing use on the same USGS and TMK maps as the existing source location. Otherwise, attach similar maps and show the location of the existing use.

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EXISTING USER INFORMATION

10. **APPURTENANT RIGHT:** An appurtenant water right is a legally recognized right to a specific amount of surface freshwater – usually from a stream – on the specific property that has that right. This right traces back to the first time the land was converted to fee simple title, i.e., the Great Mahele and the issuance of either a Land Commission Award or Royal Patent. The quantity of water under the appurtenant right is the amount that was being used on the land shortly before or at the time of the Mahele.
Do you claim an appurtenant right for your existing water use? Check "Yes" or "No."
If yes, has your appurtenant right been established by the courts or the Commission? Check "Yes" or "No."
11. **END USER INFORMATION:** Will you be an end user on an existing water system? Check "Yes" or "No." If yes, please list the name of the water system operator.
12. **REGISTRATION AND DECLARATION OF WATER USE:** Do you have a Registration and Declaration of Water Use from the Commission? Check "Yes" or "No." If yes, list the name of the registrant(s).
13. **STREAM DIVERSION WORKS PERMIT (SDWP):** Have you ever been issued a SDWP by the Commission? If yes, please list the permit number(s). Otherwise, check "No."
14. **APPLICANT:** Sign and print your name, and date your application.
15. **SOURCE LANDOWNER:** Sign and print your name, and date your application. The landowner of the source shall be a joint applicant in the event the applicant is a lessee, licensee, developer, or any other person with a terminable interest or estate in the land which is the water source of the permitted water. §174C-51(1)(B)

12-MONTH AVERAGE DAILY USE

16. **12-MONTH AVERAGE DAILY USE:**
Measured or calculated use of water at the source or end use as of the effective date of designation, August 6, 2022. Please fill out Table 1 to calculate your existing use as of the effective date of the designation, August 6, 2022, of the Lahaina Aquifer Sector Area, West Maui, Surface Water Management Areas. The effective date of designation is the date of the publication of the public notice of the Commission designation action. The qualifying dates have been filled in for this application. Fill in as completely as possible.
 - A. **MONTH / YEAR:** The month and year prior to the effective date of designation
 - B. **AVERAGE DAILY USE FOR THE MONTH IN GALLONS PER DAY (GPD):** This is the average daily use for one month in gallons per day (GPD). To calculate this average, take the total use (in gallons) for the month, and divide this amount by the number of days in the month.
 - C. **METERED:** Water use data is based on an operational meter with a totalizer
 - D. **ESTIMATED:** Water use data is based on some indirect measurement technique (e.g., measured flow rate multiplied by time of operation).
 - E. **ACTIVE BUT UNKNOWN:** Water source is active, but there is no means to measure or estimate flow coming from source
 - F. **INACTIVE:** Water source was not pumped or diverted for the month.
 - G. **OTHER:** Describe other methods of how water use was measured or calculated in this box
 - H. **SUM OF AVERAGE DAILY USE FOR THE MONTH:** Add the quantities listed in Column B for a sum of the average daily use for the month, for the entire year prior to the effective date of designation
 - I. **AVERAGE DAILY USE:** Divide the sum of average daily use for the month (Line H) by 12

EXISTING USE INFORMATION

17. **TABLE 2: LAND USE CONSISTENCY / EFFICIENCY OF USE:**
Provide information on all of the existing uses you are applying for or seeking to modify. In the space provided below the table or on a separate sheet, explain whether there are any limitations (e.g., a contract or other legal agreement(s)) on your existing water use(s), as required by §174C-51(5), HRS.
 - A. **PURPOSE / WATER USE CATEGORY:** For each existing use, choose one of the categories listed below and enter the appropriate code in the space provided (e.g., AGRAQ, IRRIG, etc.).

AGRICULTURE AGRAQ Aquatic Plants & Animals AGRCP Crops & Processing AGRIL Livestock & Processing, and Pasture AGRON Ornamental & Nursery Plants AGRTA Taro AGROTH Other	DOMESTIC DOM Single & Multi Low-Rise & High Rise Household DOMN Domestic (Non-residential) DOMNCB Commercial Businesses DOMNRI Religious Institutions DOMNHOS Hospitals DOMNHOT Hotels DOMNOB Office buildings DOMNOTH Domestic Non-Residential - Other DOMNSC Schools
IRRIGATION IRRGC Golf Course IRRHM Habitat Maintenance IRRHOT Hotel IRRILA Landscape/Water Features IRROTH Other IRRPA Parks IRRSC Schools	INDUSTRIAL INDEL Geothermal, Thermoelectric Cooling, Power Development INDFP Fire Protection INDMI Mining, Dust Control INDOTH Industrial – Other
MILITARY MIL Military	MUNICIPAL MUNCO County MUNPR Privately-owned but defined as public water system by MUNST DOH State
TRADITIONAL & CUSTOMARY PRACTICE	

- B. **USE TMK:** The Tax Map Key number of the parcel over which the water will be applied. There should only be one parcel for each line. Also, attach: 1) a TMK map (or maps) showing each of the lots listed and the boundaries of the end use area(s), and 2) a photograph of the area of use.
- C. **STATE LAND USE DISTRICT:** Write in the name of the current land use district. To find out the current Land Use District, contact the

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Land Use Commission at (808) 587-3822

- D. CDUP REQUIRED:** If a Conservation District Use Permit (CDUP) is required, check "Yes" and enter the date CDUP was approved if you have a CDUP applicable to this project or check "Yes, not acquired". If a CDUP is not required, check "No." To find out if your parcel is in the Conservation District, contact the Land Use Commission at (808) 587-3822.
If your parcel is in a Conservation District, contact the Department of Land and Natural Resources Office of Conservation and Coastal Lands at (808) 587-0377 to find out if a CDUP is required.
- E. COUNTY ZONING CODE:** To find out the Zoning Code for Maui, contact the Maui County Planning Department at (808) 270-7253
- F. SMAP REQUIRED:** If a Special Management Area Permit (SMAP) is required, check "Yes" and enter the date SMAP was approved if you have a SMAP applicable to this project or check "Yes, not acquired". If a SMAP is not required, check "No." To find out if your parcel is in a Special Management Area and requires an SMAP, contact Maui County Planning Department at (808) 270-8205
- G. UNITS OR NET ACREAGE:** This is the value and category as the basis for calculating the duty. "Duty" means the amount of water requested for a "unit" over a specific time period, e.g. gallons per acre per day, or gallons/acre/day. "Unit" can mean dwelling unit, or number of people, or animals. Some examples of this category include: 400 dwelling units, 500 people, and 3.74 acres
- H. GPD/UNIT or GPD/ACRE (GPD=gallons per day):** Enter the gallons per day or gallons per acre for each water use category listed in Column A
- I. REQUESTED QUANTITY OF USE:** Enter the existing quantity of use in gallons per day (GPD) at build out after all phases of your project have been completed. The build out amount may differ from the four-year cumulative projected demand if your build out date extends beyond the cumulative projected four-year demand. Justification (Column K) for the quantity(ies) requested may depend on the information provided in Columns G and H of this table.
- J. SUBMETERED:** Is there a second measuring device or meter for another user? Check "Yes" or "No" if the specific use will be submetered or not. Submetering is specific to each line item.
- K. APPLICANT'S JUSTIFICATION FOR QUANTITY OF REQUESTED USE:** Explain how you are justifying the quantity of water requested for each use in Column I of this table. Attach additional sheets, if necessary, showing how the quantity was calculated. For all irrigation uses, you are required to also complete Item 18 (Table 3) of the application
- L. TOTAL POTABLE USE:** Add the quantities listed in Column I for potable water use(s) requested. Enter the total quantity in gallons per day (GPD) in Line L
- M. TOTAL NON-POTABLE USE:** Add the quantities listed in Column I for requested uses that do not require potable water. Enter the total quantity of non-potable water use in gallons per day (GPD) in Line M
- N. TOTAL QUANTITY OF WATER REQUESTED:** Add the totals in Lines L and M, and enter the sum in Line N. The quantity in Line N should be the same as the amount entered in Line 8 on page 1 of this application
- O. LIMITATIONS:** Please explain if there are any limitations (legal, contractual, etc.) on the use(s) of water described above. §174C-51(5), HRS

18. TABLE 3: IRRIGATION INFORMATION:

On Table 3, provide the information requested for all the crops you are growing, including landscape and golf course turf and plants. Enter only one crop and one parcel number (TMK) per line. For multiple crops, list each one as a separate line item. All existing irrigation uses you are applying for must be listed. Attach additional copies of Table 3, if necessary.

- A. TMK OF EXISTING LOCATION OF USE:** Enter the parcel number where the crop will be grown. Also attach a property tax map with an outline around the area(s) of existing use(s) and a photograph of each area of the existing use.
- B. CROP:** Enter the crop type
- C. TOTAL ACREAGE:** Enter the total acreage of the parcel listed
- D. NET IRRIGATED ACREAGE:** Enter the acreage that the specific crop will be grown
- E. BEGIN GROWTH PERIOD (MONTH):** This is the month of the start of the growth cycle
- F. END GROWTH PERIOD (MONTH):** This is the month of the end of the growth cycle
- G. IRRIGATION SYSTEM:** Enter one of the following
TRICKLE, DRIP
TRICKLE, SPRAY
MULTIPLE SPRINKLERS
SPRINKLER, CONTAINER NURSERY
SPRINKLER, LARGE GUNS
SEEPAGE, SUBIRRIGATION
CROWN FLOOD
FLOOD (TARO)
OTHER - Please describe in the space provided for Comments
- H. IRRIGATION PRACTICE:** Enter one of the following
IRRIGATE TO FIELD CAPACITY
APPLY A FIXED DEPTH PER IRRIGATION
DEFICIT IRRIGATION
OTHER - Please describe in the space provided for COMMENTS below

19. TABLE 4: ALTERNATIVES ANALYSIS AND ADDITIONAL REQUIREMENTS:

Please address every alternative and explain why each alternative is or is not available for your existing potable and non-potable needs. Other alternatives (last row of Table 3) may include stormwater reclamation, rainwater catchment, or other alternatives not already listed above

Surface water is defined in §174C-3, HRS as both contained surface water that is, water upon the surface of the earth in bounds created naturally or artificially including, but not limited to, streams, other watercourses, lakes, reservoirs, and coastal waters subject to state jurisdiction and diffused surface water that is, water occurring upon the surface of the ground other than in contained waterbodies. Water from natural springs is surface water when it exits from the spring onto the earth's surface

For Conservation Measures, please describe any conservation measures that will be used to ensure that your water use is or will be efficient. Conservation measures may include, but are not limited to, water reuse or recycling systems, monitoring the water distribution system for pressure drops that are indicative of leaks or line breaks, or use of drought-tolerant and xeriscape landscape plants.

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OTHER PERTINENT INFORMATION

20. PUBLIC INTEREST

Explain in the space provided or on a separate sheet, how the existing use(s) will maximize beneficial use(s) and how they will be deemed to be in the public interest as defined by the State Water Code below.

Hawaii Revised Statutes §174C-2(c) states that: The state water code shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses. However, adequate provision shall be made for the protection of traditional and customary Hawaiian rights, the protection and procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation. Such objectives are declared to be in the public interest.

21. INTERFERENCE WITH THE RIGHTS OF THE DEPARTMENT OF HAWAIIAN HOME LANDS

Explain in the space provided or on a separate sheet, how the existing use(s) will not interfere with the rights of the Department of Hawaiian Home Lands, as provided in Section 221 of the Hawaiian Homes Commission Act. To inquire about potential interference, you may contact the Department of Hawaiian Home Lands (DHHL) main line at (808) 620-9500, or the DHHL Planning Office at (808) 620-9480. You may also visit their website at dhhl.hawaii.gov where you can review DHHL's Island Plans, Regional Plans, and their Water Policy Plan.

The State Water Code in §174C-101(a), HRS [Native Hawaiian water rights], states: Provisions of this chapter shall not be construed to amend or modify rights or entitlements to water as provided for by the Hawaiian Homes Commission Act, 1920, as amended, and by chapters 167 and 168, relating to the Molokai irrigation system. 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.

22. INTERFERENCE WITH ANY EXISTING LEGAL USES

Explain in the space provided or on a separate sheet how the existing use(s) of water will not interfere with any other existing legal use(s).

23. PUBLIC WATER SYSTEM INFORMATION

Check the appropriate box or boxes relating to your existing water system.

