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Dawn N. S. Chang, Chair
State of Hawaii, Department of Land and Natural Resources
Commission on Water Resource Management
1151 Punchbowl Street, Board Room 132
Honolulu, Hawaii 96809

SUBJECT: Well Field Groundwater Use Permit Application (GWUPA) for Honokahua B 573 (Well #6-5938-001), Napili A 569 (Well #6-5838-001), Napili B 570 (Well #6-5838-002); and Napili C 571 (Well #6-5838-004) located in the Honolua Aquifer System, Lahaina, Maui

Dear Chair Chang,

The County of Maui Department of Water Supply (MDWS) hereby submits a GWUPA for the above-subject wells. Our existing use application includes the GWUPA Form with appendices and supporting documents. Pertinent information mentioned in our GWUPA Form includes the following supplemental information:

6. Total Quantity of Use Requested

The four wells and the Mahinahina Water Treatment Facility (MWTF) all feed into a common storage tank to serve the Napili area and other parts of the MDWS Lahaina sub-system. MDWS operates the four pumps to meet system demand while maintaining the integrity, water quality and chloride levels of each individual well. MDWS pumping operations must also consider inconsistent surface water influent flow to MWTF due to variable ditch flow and turbidity. The four wells also provide redundancy to each other. Therefore, flexible pumpage at this well field is essential to maintain reliable supply for the same closed-loop water distribution system. The requested amount of 1,992,744 gpd is the combined 12-month average pumpage for the four wells as of the date of designation.

"By Water All Things Find Life"

The volume pumped is higher than the billed consumption as summarized under Item 11. Table 1, box M, to account for water treatment, including distribution system water losses mentioned in the MDWS water audit validated by the Commission on Water Resources Management (CWRM). It should also be pointed out that the water audit only considers treated water, is not exactly within the same time period as the designation time period, unavailable data at the time of data collection, and does not reflect post metering and billing adjustments that occurs after validation.

11. Table 1 Land Use Consistency/Efficiency of Use

Please refer to Appendix B. The MDWS water system is interconnected so that the this well field along with the MWTF supplies the Napili sub-system and, in very limited supply, portions of the Lahaina sub-system when needed. Table 1 excludes system areas that would not be supplied by this source under normal operations. The MDWS applies for water use under the category MUNICIPAL. However, we identify premise types that compare to the Purpose/Water Use Categories in the GWUPA Form instructions. Please see the table below illustrating MDWS service area (Water Use Zone), premise type and total average consumption.

Water Use Zone	Premise Type	Average Consumption (GPD)	Consumption Total per Water Use Zone (GPD)
HONOKOWAI	County Government	5,717	
	Commercial	136,152	
	County Park	1,768	
	Hotel	430,143	
	Industrial	17,006	
	Low Rise Multifamily	700,337	
	Church	555	
	Single Family	195,547	
			1,487,224
ALAELOA	County Government	53,513	
	Commercial	33,355	
	County Park	23,811	
	Hotel	510,743	
	Industrial	41,625	
	Low Rise Multifamily	308,751	
	Military	4,153	
	Private School	1,308	
	Church	6,899	
	Single Family	512,211	
			1,496,369

Table 1 in Appendix B notes the Premise Type in Field "A" Purpose/Water Use Category. None of the services are located in the Conservation District but possibly within the Special Management Area (SMA). Maui DWS does not verify whether individual end uses require a SMA permit in order to issue a water meter. CDUP and SMA fields are noted as N/A.

Over 87% of MDWS services on this system consist of single family and multi-family customers. In terms of water use efficiency, the average billed water use per service of 454 gpd, is significantly lower than the system standard of 600 gpd per unit. The MDWS conservation program includes demand side and supply side measures for Maui and Molokai. Please refer to Appendix E. As stated above under item 6, the requested amount of 1,992,744 gpd is the combined 12-month average pumpage for the four wells as of the date of designation.

Due to limited flow at the Honokohau ditch and diversions by private purveyors prior to the MWTF, we have not been able to operate the treatment facility with the full allocation of 2.5 mgd as provided by the current agreement with Maui Land & Pineapple Company (MLP). This has resulted in further reliance and stress on the wells supplying the Napili and Lahaina system. Insufficient supply forced MDWS to declare a Stage 1 water shortage for the entire system on June 30, 2022, restricting water for essential use only. The drilled Kahana well in Honolua aquifer could potentially be on-line in 2025 to supplement existing sources and meet planned development of affordable housing. NEW use will be sought for the Kahana Well and two additional wells, "H1" and "H2", in the Honolua Aquifer System, pending completion of the draft Environmental Assessment (EA).

20. Chapter 343

Chapter 343, the statute requiring an EA or Environmental Impact Statements (EIS) was passed in 1974. Napili Well B was drilled in 1972 and Napili Well A in 1971, therefore no EA or EIS were required. Attached are letters of acceptance for Honokahua Well B and Napili Well C. Please see Appendix J.

21. Table 4, 12 Months Average Calculation as of the Date of Designation

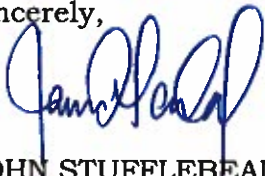
Table 4 on the GWUPA Form for 12 months pumpage calculation only contains eight rows. Please find the daily pumpage from the Honolua aquifer well field, as well as from each individual pump within the well field in Appendix G.

Dawn N. S. Chang

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We thank you for your consideration of this request.

Sincerely,



JOHN STUFFLEBEAN, P.E.

Director of Water Supply

APPENDICES

A: Item 8. Map showing location of water use

B: Item 11. Table 1

C: Item 15. Ka Pa`akai Analysis

D: Item 16. Referenced Department of Hawaiian Homelands Plans and Documents

E. Item 18. Maui County Department of Water Supply Conservation Plan

F. Level-1 validated AWWA water loss audit

G. Item 21. Table 4 12-Month Average Calculation As of the Date of Designation for Well Field and Average Daily Pumpage for Each Pump of Well Field

H. Property Tax Map with location of use and photograph of the area of use

I: Photo of well sources, flow meters and end use area

J: Letters of acceptance for Honokahua Well B and Napili Well C