

Maui County Department of Water Supply
 Maui Island Water Use & Development Plan
Community Workshop – Upcountry
 November 30, 2016 – 6:00 p.m. to 9:00 p.m.

Meeting Summary

This was the 4th workshop in the 3rd round of workshops scheduled in 2016 on the Maui Island Water Use and Development Plan (WUDP) by Department of Water Supply (DWS) staff. Approximately 30 people attended in addition to DWS staff. This set of workshops is focused on WUDP strategies to address the key issue, while two earlier set of public meetings in 2016 were focused on issues and preliminary strategies.

Written materials provided by DWS staff included the Agenda, Upcountry Region description, Strategies Matrix, and Summary of Upcountry Meetings and Surveys. All prior materials are online at www.mauewater.org – click on Water Use and Development Plan. DWS staff reviewed the Upcountry Region handout, and then reviewed the Upcountry strategies and matrix with the group as a whole. The following questions and comments were noted by DWS staff at the meeting. DWS comments are provided as indicated.

Subject	Comment	Response
Water management	Does sustainable yield include irrigation return water?	No
WUDP preparation	In the table of public water systems, the column labeled Name should say Name of Public Water System, for clarity (handout page 8).	
WUDP preparation	Why is Maui Business Park included in the list of public water systems?	It fits the criteria for a public water system.
Wells and sustainable yield	Do private wells report to CWRM?	Reporting on pumpage to CWRM is required, but some wells are not reported. Unless wells are within a groundwater management area designated by CWRM, there is no allocated limit on water use although approved pump size permitted in well construction and pump installation permit limits maximum use.
Water management	Are aquifer sectors natural or administrative boundaries?	They are defined for CWRM management purposes, but there is interaction between the sectors and systems. Some aquifers are well studied; others are not.

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Water management	Will sustainable yields in the revised State Water Resources Protection Plan be incorporated into the WUDP?	Yes; they should be available in 2017. Sustainable yields should be updated by CWRM every 5 years and incorporated into the periodic WUDP updates.
Water transport	Why doesn't place of origin equal place of discharge on the water transport table (handout page 11)	We put the table together based on various data sources, for the purpose of showing transport patterns.
WUDP preparation	What is the base year for drought scenarios?	2014 is the base year for the WUDP.
Projected demand	Why did you use only zoning for the land use based scenario (handout page 12) rather than the community plan designations?	Zoning is more specific for land use intensities; for lands zoned Interim we applied the project district uses in the community plans as applicable.
DHHL	What about a potential well to serve DHHL?	A test well was constructed, but there is no firm plan at this time.
Water quality	There are elevated chlorides in some wells in the Lahaina sector; what about in this area?	Yes, there were elevated chlorides in the 'lao aquifer. Kamaole aquifer generally has higher chlorides/more brackish conditions closer to the coast; Elevated chlorides can also be attributed to excess or over pumping, faulty well construction, etc.
Upcountry meter list	How many meter applications are within and outside the growth boundaries?	About 2/3 are outside the growth boundary (note correction to text on handout page 14).
Streamflow	Parties to the East Maui Streams contested case only requested 27 of 100 streams flow.	It is assumed that county domestic use, which is a public trust purpose, will be granted by CWRM. But ag is not a public trust use and flows are not adequate during the dry season. There is also uncertainty about EMI system management and priority of municipal ag use.
Streamflow	Is restoration of streams A&B are restoring completed now? Have diversions been removed?	We do not know the status. Some streams have been restored, others are in process. They are working with CWRM.
HC&S scenarios	The HC&S scenarios presented are confusing (handout page 19) as they do not match up to the HC&S filing	We will add clarifying information. Scenario 1 reflects HC&S's estimates for its Diversified Ag Plan by crop type. In scenario 1, lands without a water

Subject	Comment	Response
	with CWRM. Part of HC&S's plan has no water demand.	demand are termed Fallow/ nonirrigated cover crops.
HC&S scenarios	What about A&B's entitlements for development? What if there are changes to the plantation uses?	In this section of the report, we are only addressing the HC&S plantation. We use zoning per the Maui Island Plan. If there are major zoning changes from Agriculture to an Urban designation, then the WUDP would likely need to be amended. However, most of the cultivated lands are designated Important Agricultural Lands.
WUDP preparation	What is the difference tables on the handout pages 21/22?	Page 21 shows base, high and low without the meter list; page 22 shows base with and without the meter list.
Priority uses	The Community Plan for upcountry says that if water is available the priority is ag and DHHL.	Public trust uses under the Water Code still need to be addressed, this requires balancing needs by the CWRM.
Water availability	What is the annual cost of maintain the EMI system? Given uncertainties in conveyance of water for the county utility, this information is necessary to evaluate future management responsibilities. The county can ask for the info per the E. Maui contested case.	We do not have the information. The issue is being addressed in the contested case. The WUDP can explain the issue.
Water availability	Is there a plan to use HC&S's reservoirs? Some were shut down in West Maui. Consider maintaining reservoirs.	This should be addressed in the State AWUDP, but the WUDP can provide guidance.
Meter list	Does DWS have a mandate to offer meters to everyone on the meter list?	Yes, per county policy depending on source capacity.
Water availability	There will be extra surface water-sugarcane uses 200 mgd, diversified ag uses 125 mgd (handout pages 18/19).	It is not a given that the county would get additional surface water; in the dry season or drought conditions there may still be conflicts.
Meter list	Some people on the list are granted meters, subdivide and sell housing at high market costs. Restrict	

Subject	Comment	Response
	subdivisions to affordable family housing.	
Water management	Build up what we've taken from aquifers.	Use alternative sources to offset, recharge seasonally, use guidance of science, be proactive.
Conservation	Automatic sprinklers are watering when it's raining. County, parks, resorts, etc.	50-70% of outdoor use is landscape irrigation.
WUDP preparation	Provide priorities, sequence, timeframe, cost, and responsibility for strategies.	An implementation plan will be provided.
WUDP preparation	Add columns to strategy matrix: absolute cost of CIP, break out capital and O&M.	
Costs	What are the comparative costs for reservoirs (large and small) versus wells in various locations?	
WUDP preparation	Connect strategies to county CIP, tell people what a CIP is and where they can find it.	
WUDP preparation	Add the benefits of the strategies to the matrix.	
Conservation	What is the source for water for Wailea landscape, ponds, and water features? Do not use potable water.	Golf courses use brackish or reclaimed water, sprinklers use potable or brackish water.
Water availability	Do other areas of Maui Island have restrictions and shortages like Upcountry?	No
Water availability	If there is no shortage of water in south Maui why restrict them?	
Viability	How can the community help implement identified strategies?	Place strong language in the WUDP which mandates or supports code amendments and regulations, CIP, and other specific actions to implement the strategies and apply them to development.
WUDP preparation	Use language that mandates implementation of strategies: prohibit, require; not encourage.	

Review of Strategies

The Strategy matrix (handout pages 29 and 34 et seq.) was reviewed to see if participants agreed or not, and additional thoughts on solutions, as provided below. Comments on strategies generally are summarized above.

Type	Strategy
Water quality	The County should update water quality standards more consistent with other states. DOH has not kept up to date. Hawai'i allows 100 times the level of TCP as California.
Conservation	EMI should invest in increased system efficiency and lining reservoirs.
Water availability	Maintain HC&S reservoirs for future use.
Water availability	Develop a plan for long-term EMI system management for ag, municipal and other conveyance.
Watershed management	Emphasize reforestation to create rainfall (ex. fog capture Kahikinui).
Water availability	Give priority to requests on Upcountry meter list for subdivisions for affordable family housing.
Water availability	Add reservoirs to remedy shortages for Upcountry.
Water management	Build up groundwater supplies by recharging aquifers.
Conservation	Institute controls to avoid water waste, such as irrigation when raining, restrict watering times, overspray. Institute controls used by other states. Government lead by example.
Conservation	Require drought-tolerant landscaping for new development and offer incentives for existing development.
Conservation	Require Water Sense (or low flow equivalent) and similar indoor fixtures for new development and provide incentives for existing development.
Conservation	Devise a program for people who do not respond to rates as incentive for conservation. Higher tiered rates, fines, require drought-tolerant plants for market rate planned communities, etc.
Alternative water sources	Make it easier to implement grey water systems.
Water availability, equity, DHHL	County DWS prioritize getting water to the Kahikinui community.
Conservation, alternative water sources	Do not use potable water for south Maui resort outdoor uses.
Efficient, water availability	Consider connecting the DWS Central and Upcountry systems: advantages and disadvantages.

Summary prepared by DWS staff, December 2, 2016