

Maui County Department of Water Supply  
Maui Island Water Use & Development Plan  
**Public Workshop – Upcountry**  
April 23, 2016 - 10:00 a.m. to 1:00 p.m.

## **Meeting Summary**

This was the 1st of four public 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 while an earlier set of public meetings in 2016 was focused on issues.

Written materials provided by DWS staff included the Agenda, WUDP Guidelines, Planning Objectives and March 21 Upcountry Meeting Summary, along with an Upcountry Region description and Strategies Matrix. A 'Share your Thoughts' Questionnaire was provided.

The following questions and comments were recorded by DWS staff at the meeting. DWS comments are provided as indicated.

DWS staff reviewed the Upcountry Region handout.

There is a concern over what happens if the EMI system falls into disrepair given the end of sugar.

Show information on maps. Add map showing aquifers, Community Plan areas, water transport.

Where does the data on pump capacity on page 2 come from? Who is responsible for reviewing pumpage? Does everyone have to report pumpage?

DWS response: Wells and pump capacity must be approved by the Commission on Water Resource Management (CWRM). Pumpage is reported to CWRM which monitors pumpage in comparison to the approved pump capacity. Everyone is required to report pumpage to CWRM.

Why doesn't DWS use wells in the Central area to serve growth there rather than transporting water?

DWS comment: Wells are low yield and sustainable yield is inadequate; chlorides are an issue.

What do the diversions include on the table of diversions and interim instream flow standards (IIFS) on page 3 of the Handout?

DWS comment: Diversions include intakes of one form or another taking water from the stream to the ditch or below the ditch or a pipe; it does not include tunnels. On the table, IIFS HAR 13-169-44 was set in 1986 and represented the diversions status quo at that time rather than a specific numerical value.

How does the projected population based demand on page 6 relate to the potential future development of land now occupied by sugar cane?

DWS comment: The Maui Island Plan does not plan for urban development on HC&S lands which are zoned for agriculture. The population based projection does not include ag (except small ag using potable water is included in DWS consumption rates which are the basis of projected water demand). On page 8, groundwater and surface water transport totaling 39 mgd does not include ag.

The County should request CWRM to allow the WUDP to be organized by community plan area consistent with county planning. Planning by aquifer sector is not efficient from a utility standpoint.  
DWS comment: The WUDP is required to address resources and use by hydrologic units.

Development should occur where the water resource is.

DWS comment: That is a policy issue largely addressed in the Maui Island Plan. The WUDP could provide guidance on water sources and allocation.

Clarify what DWS systems would be used for the meter list. Individuals on the upcountry meter list are not getting water, but developers are. Water in the underlying aquifer is going to other areas.

Are we planning for population or upcountry uses? How are we accounting for ag demand?

DWS comment: Figures for the land use build-out projection account for ag zoned land.

On page 8, it says available groundwater is 39 mgd- does this account for recharge from water transported for sugar cane irrigation?

DWS comment: This does not account for recharge from imported surface water.

Make it clear in the WUDP how source availability relates to aquifer sectors, systems, community plan areas, etc.

The demand figures are not taking into account habitat needs.

DWS response: Population based demand only takes into account projected demand for increased population and associated economic activities excluding ag. We will look at habitat needs on the water allocation side of the analysis.

A&B's reservoirs can be lined and used for water storage. This should be addressed.

O'ahu has not increased demand while population has increased.

DWS comment: DWS is seeing similar trends.

Is there money for conservation in the DWS budget?

DWS comment: Yes.

Consider requiring catchment.

DWS comment: Since catchment is not reported we lack data on catchment; the community is asked to provide information if known.

We built a house in Ha'iku and had to sign a water use agreement in order to use catchment for potable water. 2,000 – 3,000 gallons per month for 4 people.

There is a State bill providing a \$1,000 tax credit for water storage.

The Waikamoi flume was rebuilt; what is the difference in flow?

DWS comment: We do not have that data yet.

The past WUDP looked at conservation. Is really aggressive conservation cost-effective? For example, replacement of toilets. Need to break down various levels of conservation and provide costs.

On page 2, the sustainable yield (SY) in the Kahului area is less than pump capacity. SY of Kahului is 1 mgd; HC&S is using 80-90 mgd. The contribution of transported and percolated water is not reflected in CWRM's sustainable yield. Encourage the community to consider the impact of water for ag use.

Need dual catchment and potable water systems. Cisterns should be used in dry areas.

In California customers can find out actual hourly water use which alerts customers to spikes and leaks.

DWS comment: DWS is evaluating smart meters.

Restoration by EMI of 100% streamflow to Honopou Stream would be a disaster. It's better to restore some flow to all streams. The small bridge on Honopou Stream on state land is not built to withstand streamflow and debris in a storm with 100% streamflow. There are 40 to 50 landowners along the stream. Past discussion with DNLR about ownership and responsibility for the bridge and road looked at road and bridge are private makai of the highway and the Attorney General's office researched the history of access with no definitive results. Who is the responsible agency to address the issue of water release? There are similar problems moving eastward toward Ke'anae. Kids and the public playing and recreating in and near streambeds are unaware of new potential dangers. People have built structures near streams without flow for over 100 years. No advance notice was given to people along the streams, the public generally and emergency services agencies of streamflow restoration. An environmental impact assessment should be prepared before restoration occurs. Kailua Stream had the same issue and a bridge washed out. The State, County and Public Works were going to address this. Need to go to elected officials and EMI.

DWS comment: We can look into this; CWRM staff can talk to A&B with some authority.

Halting diversion will affect springs, diversions and conveyances, and use for kalo and other small ag, with potential adverse cultural, economic and property effects. An example is Maliko Bay.

DWS staff question to participants: Once public trust uses are satisfied is it acceptable to divert water for ag?

The water is in East Maui and there are lots of kuleanas there. CWRM has to adhere to the public trust doctrine. Per the Hawai'i Supreme Court we need to document all kuleanas and streamflow needs; streamflow left over can go into the ditches.

Peahi portion of Kailua Stream- conserve forests, the stream is deeded to the County of Maui, EMI is taking water. We are going to perpetuate lawsuits until kuleana uses and water for lo'is are satisfied; then talk about the rest of the water.

East Maui Watershed Partnership operates at certain elevation. Nonnative species are a problem in Ko'olau. Revenue from A&B should go back to East Ko'olau. The rate per 1,000 gallons is antiquated- need a professional reappraisal of the value of water being drawn from Ko'olau forest.

Ag is a public trust use but low on the list. Kuleana is highest. We have three acres at the bottom of Maliko Gulch near the ocean; springs are drying up since sugar is not being irrigated. Even if streamflow is restored we don't have the right to divert it because we were not a registered user in 1986.

The EMI system should be preserved.

Reference to University of Hawai'i meeting- cannot legislate away Hawaiian rights. Lack of use does not extinguish kuleana right.

There should be an appraisal of Haleakala watershed health based on current funding over the next 20 years as a basis for determining future funding.

DWS comment: DWS funds watershed protection at about \$2M per year from DWS customer fees.

More funding is needed. Precipitation has decreased.

An issue is the priority between ag and domestic uses in Upper Kula. Ag draws from the same reservoir as domestic uses.

What is the water source for Waiohuli tank? DWS comment: Upper Kula system and Waikamoi flume. Add water treatment facility on Awalau line?

If we can't look at growth in the WUDP, and water availability is necessary to build housing and affordable housing, and specifics of water availability were not addressed in the Maui Island Plan then there is a contradiction.

There is a surplus of surface water Upcountry. Need infrastructure to collect water.

What happened to the plan to put in a 300 mg storage reservoir below Pi'iholo? Look at this as an option.

DWS comment: Kamole WTP or higher elevation is still being discussed.

The WUDP should address where water comes from, allocation – who gets the water, balance reliability and availability, and how much does it cost.

Landscaping is an irresponsible use of water.

Drought, unconnected systems, different conditions regionally, consider the island as one area in terms of funding costs.

Need costs of options so community and policy makers know whether decisions are financially feasible. Need costs now and in the future to determine priorities.

Continued surface water diversion is an incentive to keep EMI operating.

There is no way EMI is going let the ditch system degrade. Their 36,000 acres are worthless without water.

The Board of Water Supply should ask A&B to inform them what is happening.

An HC&S employee attending this meeting stated that HC&S recognizes the importance of the water resource and will need water to continue to be available.

DWS needs to announce these WUDP meetings in the legal notice section. Include notice in water bills, involve students.

In the WUDP, include maps showing the overall island picture, then zoom into regions. Include flow chart showing demand and transport by location.

A key issue is, do we link Upcountry and Central systems? Pipe is installed on Baldwin Avenue.

A key issue is to maintain EMI ditches to convey water flow for taro.

A key issue is that is not clear how cessation of sugar cane production will affect the WUDP in terms of data, maps, systems, sustainable yield, or population.

*Prepared by DWS staff, 5/12/2016*