

Maui County Department of Water Supply
Maui Island Water Use & Development Plan
Public Workshop – Central/South
April 30, 2016 - 10:00 a.m. to 1:00 p.m.

Meeting Summary

This was the 2nd 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 6 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 10 Central/South Meeting Summary, along with a Central/South Maui 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 Central Maui Region handout.

Is the Commission of Water Resources Management (CWRM) looking at the change in sustainable yield due to decreased ag in the central region and will revised numbers be used in the WUDP?

DWS comment: CWRM is revising sustainable yields and the public will have the opportunity to comment on them soon, but we use the current sustainable yield from the 2008 State Water Resource Protection Plan. On the table on page 7 of the Handout, CWRM's direction is to limit pumpage from the southern portion of Waihe'e aquifer to 4 mgd of the sustainable yield of 8 mgd; hydrology and yield is not as promising as previously thought. Reported pumpage for the Kahului aquifer exceeding sustainable yield is due to irrigation recharge. In Waikapu aquifer, while reported pumpage in 2014 was 0, several drilled wells not yet pumping represent future use; there are also drilled but not pumped wells in the Waihe'e aquifer.

CWRM is currently updating its 2008 Water Resources Protection Plan.

The table on page 4 reflecting CWRM data says there are 12 diversions from Waikapu Stream. How accurate is this data?

DWS comment: The diversions represent permitted and registered stream diversions. It is possible there could be diversions not registered and/or not active. CWRM is working to verify and update the list of diversions.

Is Wailuku water pumped upcountry?

DWS comment: No

Does Ko'olau streamflow serve Upcountry?

DWS comment: Yes

Is Hamakuapoko Well water contaminated? Is the public paying for the treatment?

DWS comment: The wells are contaminated with DBCP (dibromochloropropane) and granular activated carbon (GAC) is used to treat it to safe drinking water standards. There is a settlement with the pesticide manufacturers that pay for treatment but the public may eventually have to pay (post meeting note: the settlement agreement is here <http://www.co.maui.hi.us/DocumentCenter/Home/View/8680>)

Won't DBCP take 200 years to dissipate out of the aquifers?

DWS comment: DBCP has a half-life of 40 years, but the Hamakuapoko wells are only supposed to be used as a drought backup.

Is infrastructure in place to move Hamakuapoko Well water upcountry?

DWS comment: Yes, for use as drought backup. The East Maui consent decree is affecting the ability for DWS to study the impacts of potential wells in the Ha'iku aquifer; 8 wells were proposed and we were permitted to pursue two.

Is DBCP a concern when drilling drinking water wells? Was DBCP used in pineapple fields outside the Hamakuapoko area?

DWS comment: Yes. An issue is land uses around the wells.

In Waikapu aquifer what is the relationship of 5 wells to DBCP?

DWS comment: To our knowledge, there was no pineapple upgradient of the wells.

Does DWS have an inventory of recent and previously drilled wells?

DWS comment: We have an inventory for DWS wells; we obtain well data for other water purveyors from CWRM.

Is drought factored into the WUDP projections?

DWS comment: Daily annual averages are used and we will project high and low demand scenarios. Drought can be considered an extreme scenario. The IFS have not considered drought.

Is climate change going to be factored into projections, i.e. less fresh water and rising sea levels?

DWS comment: The DWS will incorporate data from a 2014 USGS study which address drought conditions and the effects on supply and chlorides.

Is a "Draft" WUDP plan ready?

DWS comment: No

Will the plan assume possible "corrections" such as 100% of the water back to the streams?

DWS comment: 100% restoration could be one scenario, and maintaining a percent of base streamflow consistent with other CWRM's decisions is another scenario.

The aquifers are all connected. Don't draw more than 50% of the sustainable yield to allow a 20-30% buffer in case of drought.

DWS comment: The 2008 State Water Resources Protection Plan states that sustainable yield is dependent on drought, adequate distribution of well pumpage throughout the aquifer, etc. Therefore, wells too closely spaced may have a negative impact .

The ecological function of streams and groundwater is also important. The sustainable yield does not say that the amount left is sufficient to protect the ecosystem. Need to also look at cultural and scientific information. Express sustainable yields as a range. In some areas you might be able to withdraw more if done carefully.

There is community support for scientific study of unstudied aquifers. Map the true water resources. Address the policy decisions needed to support options in the Strategy Matrix. It takes political will – in a drought government will do whatever is necessary to get water. There is a tendency for an emergency drought proclamation to become permanent policy. The “show me the water” bill is critical.

We can't afford to make an “oops” mistake with regard to finite resources on an island. Have to look at diversified strategies. Look ahead 200 years, not 20 years.

In management, maintain fundamental rights; look at climate change and drought. Objectives for a draft plan should include present resources, future scenarios, and scenarios about probabilities likely to occur incompatible with growth.

Community criteria for new wells should include: 1) is stream flow affected; 2) is there potential for saltwater intrusion; and 3) can you estimate the true economic costs, benefits and impacts? Because of droughts, sustainable yields should have a 20-30% buffer. Don't draw more than 50% of the sustainable yield to allow for a 20-30% drought buffer. Sustainable yields are rough estimates and might be better expressed as a range.

Diversions have been in place for over 100 years. Stakeholders are the Dept. of Hawaiian Home Lands beneficiaries, farmers, etc. Ensure enough water for everyone.

Take all streams on Maui and restore 100% of streamflow. Then come up with a plan. We are not comfortable with where the WUDP is going because the draft to be submitted to Council appears too growth-centric and does not address the diversity of users.

DWS comment: WUDP scenarios might include 100% streamflow restoration, potential outcome of East Maui Contested Case could be somewhere between current recommended IFS and that. A scenario could be assuming IFS at 70% of baseflow.

Even at low levels of diversion, there is an opportunity to harvest stormwater flow for wet season use.

The IFS represents more of a sufficient flow to support minimum species survival.

What is the County's policy on potable water use for ag?

DWS comment: Potable water is subsidized for ag use. Untreated surface water serves Kula Ag Park. The State DOA has not made it a priority to supply upcountry ag with well water.

Extension of the ag line as a priority would free up potable water for upcountry .

DHHL upcountry ag and residential lots are capped based on County water availability. We have residential lots that want to do subsistence gardening and don't have water, and vice versa. DHHL ag use is a public trust use. Supplying untreated water to priority farmers frees up potable water. This should be added as a strategy.

Principles DHHL wants the County to look at when considering a source: (1) if the source is very expensive then develop less expensive sources over time; (2) how many gallons savings versus cost of the measure; (3) use the most cost effective conservation, but also include conservation that engages the general public; and (4) evaluate whether we can save enough water to eliminate the need to develop more source. In summary: (1) protect source; (2) conservation; (3) nonpotable water storage including efficiency, return on investment, capital/investment; (4) potable water; (5) infrastructure. When evaluating a CIP for new source, also evaluate: why can't it be achieved through conservation; impacts on public trust uses; and impacts for non-public trust ag.

Prepared by DWS staff, 5/12/2016