

APT Committee

From: Shane Sinenci <ssinenci@yahoo.com>
Sent: Monday, June 28, 2021 9:56 PM
To: APT Committee
Subject: Fw: APT- 57 Testimony from Haiku Communittee Association
Attachments: HCA-WUDP Update 2 Amendments .doc; CorrectedPageNumbers-HCA-WUDP Amendments v6 Final changes_.doc; Koolau strategies- No Haiku-County Communication 19-162.pdf

[Sent from Yahoo Mail for iPhone](#)

Begin forwarded message:

On Monday, June 28, 2021, 8:18 PM, Lucienne de naie <laluzmaui@gmail.com> wrote:

Aloha Council members and APT committee members

The HCA water committee forwarded our suggested amend ments to the Draft WUDP last week, but had some difficultly posting them thru EComment link.

We are resending to each of you and to the APT staff in two forms.

Two versions of the DRAFT WUDP were posted on the APT agenda. They have different page numbers. We are not sure which version you are using, so we have included our comments with page numbers from "Draft WUDP march 19, 2020" and "Draft WUDP march 2020 Update 2"

We also request that the attached section on the Ko'olau aquifer section and Table 16-41 of Koolau Aquifer strategies be amended to include a mention of the Haiku-Paia Community Plan as well as the Hana Community Plan, since Ha'iku community is a big part of the Ko'olau Aquifer.

We also request that two strategies be added to the Ko'olau list in Table 16-4.

1. Fund studies and create a plan fto set Instream Flow Standards in Haiku streams to meet needs of traditional Hawaiian users and local farmers and other public trust purposes.

This is based on the policies in our Pa'ia- Haiku Community Plan that state:

- Protect the quality of surface and groundwater resources.
- Ensure that adequate water capacity is available for domestic and agricultural needs of the region.

2. Create programs to offer support to families on their kuleana lands waiting for meters on the Upcountry priority list who face expensive connection upgrades.

Current policies create insurmountable expenses for rural families who have held on to on kuleana parcels for generations and wish to build homes for other family members. This should be part of our overall affordable housing strategy.

Mahalo

Lucienne de Naie
laluzmaui@gmail.com
808 214-0147

Ha'iku Community Association

Committee on Community Water Planning

June 23, 2021

SPECIFIC WUDP DRAFT SECTIONS TO AMEND

Ramseyer formatting is used to show changes. Page numbers refer to pdf page numbers in the March 2019 WUDP (update 2)

Executive Summary. Page 105 (ES.5.3)

Current groundwater pumpage is about 0.6% of the most recent CWRM figure of 152 MGD of sustainable yield¹. Additional studies are needed to determine if projected population growth within the region can be met with available resources under normal and drought conditions. Groundwater transport from Ha'iku [of up to 9.4 mgd] to meet population growth needs in the Central Aquifer Sector (MDWS Upcountry and MDWS Central Maui Systems) [can be supported by sustainable yield, established at 27 mgd in 2008 and proposed at 24 mgd in 2019.] needs updated and accurate assessment of the sustainable yield of the Ha'iku aquifer and impacts of substantial groundwater pumping from the aquifer. Please see necessary assessment tools provided in Section 16.1.1 of WUDP.

Footnotes

(1) State Water Projects Plan Update, June 2020.

Page 270 WUDP Table 11-1 fifth Row.

The fifth row in the table should be this: Amended item is in red.

Ko'olau	152	0.916	1%
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Page 272 WUDP, Table 11-2, third Row.

The third row in the table should be the following: Amended items are in red.

KO'OLAU	152	120	0.92	151
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Page 469-70. (Section 14.8.3 strategy #5) Amend the following paragraph as noted.

Strategy #5: [Continue] Evaluate a combination of all viable strategies [exploration of East Maui well development] in consideration of reliable capacity for planned growth areas, including the MDWS Central Maui System. Initiate needed hydrologic studies, monitor wells, stream studies, and rainfall gauge stations needed to determine the reliable capacity and any negative impact on existing ground and surface water sources, streamflow, springs and dike impounded waters in any areas considered for future groundwater pumping. [influences from dikes. Potential yield is more than the needed 8.69 mgd.] Lead agencies would be CWRM and MDWS and hydrologic studies to be completed by USGS. Please see our comments on the Ha'iku aquifer in Section 16.1.1 for the specific studies and legal constraints that must be considered.

Page 604. (Section 15.8.3 strategy #4) Amend the following paragraph..

Strategy #4: Explore East Maui well development in combination with Makawao Aquifer basal groundwater to meet projected demand on the MDWS Upcountry System. Initiate a hydrologic study to determine any negative impact on existing ground and surface water sources, stream flow and influences from dikes. Take into consideration polices of the Pa'ia-Ha'iku and Upcountry Community plans that set priorities for meeting local water demand with locally sourced waters. [Potential yield is more than the needed 6.3 mgd (potentially in addition to development for the MDWS Central System)]- Lead agencies would be CWRM and MDWS and hydrologic study to be completed by USGS. See comments on the Ha'iku aquifer in Section 16.1.1 for the specific studies and legal constraints that must be considered.

Page 639. (Section 16.1.1)

The following text, in its entirety, should be added to Section 16.1.1 Key Issues, at or near page 640 (PDF page number).

2003 Consent Decree Issue

The Consent Decree of 2003 places many requirements upon the MDWS before ground water can be taken from the Ha'iku aquifer. One of those requirements is for a rigorous cost/benefit analysis; another is for consistency with the County WUDP. The Ha'iku community feels strongly that the SY that is being used to justify many of the plans involving Ha'iku aquifer ground water must be reliably and accurately determined in order to meet the requirements of the Consent Decree.

The studies and considerations that must take place in order to determine a high-confidence figure for the SY of the Ha'iku aquifer include the following:

- USGS geology and geohydrology analysis,
- recharge model specific to the conditions of the aquifer,

- ground-surface water interactions,
- Ha'iku stream flow studies and restoration plan,
- Biological studies of baseline conditions for stream life and marine life,
- ground water quality analyses and a map of areas of high pollutants,
- water needs of local residents and farmers based upon the most current data,
- water needs to satisfy native Hawai'ian traditional and customary use,
- requirements of the Ha'iku-Pa'ia Community Plan,
- requirements of the East Maui Consent decree,
- uncertainty analysis that includes effects of climate change,
- accounting for water needs of the ecosystem including outflow to the ocean.

Page 648. (section 16.2.2) Amend the final paragraph as follows, and add the additional paragraph, below. Note that we have removed footnote (22).

CWRM ranks the SY values according to the degree of confidence that CWRM places on the number, ranging from (1) most confident to (3) least confident. The degree of confidence is directly related to the type, quality and quantity of hydrologic data used in the SY determination. Other than the Ha'ikū Aquifer that was ranked as (2) moderately confident²², CWRM ranked all other aquifer systems in this sector (3) least confident, recognizing that there is significant uncertainty associated with the SY due to the lack of hydrogeologic and pumpage information.²³ However, given the 22.5% decrease in Haiku Aquifer SY projections by the CWRM between 2003 and 2014, the vagaries of climate change, and other factors discussed below, the confidence ranking of the Ha'iku aquifer may need to be reconsidered by the Water Commission and ranked the same ("least confident") along with the other aquifers in the Ko'olau ASEA.

Potential effects of groundwater development on streamflow and on the quality of water pumped from existing wells in a region can be evaluated by robust hydrologic studies and models. In addition, studies are needed regarding location of aquifer contaminants; baseline studies of marine and streamlife; and evaluation of effects of pumping on cultural practices in the region. Joint funding and collaboration between the municipal and private purveyors, CWRM and the U.S. Geological Survey would focus studies to maximize benefits and prevent conflicts in water development and designation. Aquifer systems in Ko'olau are not extensively studied, as indicated by CWRM's confidence rating in establishing sustainable yield. Ha'ikū aquifer currently has insufficient data

available to determine whether it has sufficient yield to serve regional demand and support development of planned growth areas outside Ko`olau. It is recommended that CWRM prioritize hydrological, water quality and stream life studies and groundwater modeling in Ha`ikū and Honopou regions to guide private and public well development and ensure no county water system plans are proposed which would result in potential impacts on surface water in the region, in compliance with the Pa`ia -Ha`iku Community plan.[is addressed first.]

Page 724. (Section 16.8.3)

Potential effects of groundwater development on streamflow and on the quality of water pumped from existing wells in a region can be evaluated by robust hydrologic studies and models. In addition, baseline studies of marine life and native stream life, location of pollutants in the aquifer; streamflow studies, rainfall data and cultural use of Haiku aquifer waters are needed. Joint funding and collaboration between the municipal and private purveyors, CWRM and the U.S. Geological Survey would focus studies to maximize benefits and prevent conflicts in water development and designation. Aquifer systems in Ko`olau are not extensively studied, as indicated by CWRM's confidence rating in establishing sustainable yield. Ha`ikū aquifer currently has insufficient data available [sufficient yield to] to determine its capacity to serve regional demand and support development of planned growth areas outside Ko`olau. It is recommended that CWRM and sister agencies prioritize hydrological studies, biological studies, marine ecology studies, streamflow studies, tracking of pollutant dispersion and groundwater modeling in Ha`ikū and Honopou regions to guide private and public well development, and ensure no county water system plans are proposed which would result in potential impacts on surface water in the region, in compliance with the Pa`ia -Ha`iku Community plan.[is addressed first.]

Please Amend these sections of the Draft WUDP Addendum and substitute these section for the corresponding sections in the Draft WUDP as appropriate.

Page 18. Strategy #5 in Table 14-41 (Addendum). Amend the paragraph of column 2 as follows:

[Continue] Explore[ation of] a combination of all viable strategies [East Maui well development] in consideration of reliable capacity for planned growth areas, including the MDWS Central Maui System. Initiate a range of hydrologic and other needed studies[y] to determine any negative impact on existing ground and surface water sources, springs, streamflow, fisheries and [influences from] dike[s] impounded waters.

See comments on the Ha'iku aquifer in Section 16.1.1 for the specific studies and legal constraints that must be considered.

Page 26. Figure 15 -29 Population Mid-Growth Based 20-Year Water Demand Projections and 2018 Estimated Available Water Resources, Central ASEA, Ko`olau Surface Water and Groundwater Imports (Addendum). Amend the last row as follows:

Ko`olau GW (Haiku Aquifer) Sustainable Yield	[25.0] <u>Unk¹</u>
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Foot note (1):

The SY is not accurately known. See comments on the Ha'iku aquifer in Section 16.1.1 for the specific studies and legal constraints that must be considered.

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Page 31. (Addendum). Chapter 16: Groundwater Availability

Amend the paragraph as follows:

The Commission on Water Resource Management updated statewide sustainable yields (SY) in the 2019 Water Resource Protection Plan. Honopou aquifer system SY was revised from 25 mgd to 16 mgd. Haiku aquifer system SY was revised from 27 mgd to 24 mgd. The WUDP does not propose source development within Honopou aquifer. Groundwater development in Haiku aquifer [as proposed in Chapter 14 and 15 to meet potable demand is well within revised SY] would be subject to future studies required in the East Maui Consent Decree. [No adjustment is made to proposed strategies.] 2019 SY is shown in Table A-1 of this Addendum. Haiku aquifer requires further specific studies to accurately assess reliable SY, as discussed in Section 16.1.1

Ha'iku Community Association

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systems in Ko`olau are not extensively studied, as indicated by CWRM's confidence rating in establishing sustainable yield. Ha`ikū aquifer currently has insufficient data available [sufficient yield to] to determine its capacity to serve regional demand and support development of planned growth areas outside Ko`olau. It is recommended that CWRM and sister agencies prioritize hydrological studies, biological studies, marine ecology studies, streamflow studies, tracking of pollutant dispersion and groundwater modeling in Ha`ikū and Honopou regions to guide private and public well development, and ensure no county water system plans are proposed which would result in potential impacts on surface water in the region, in compliance with the Pa'ia -Ha'iku Community plan.[is addressed first.]

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Page 30. Strategy #4 in Table 15-39 (Addendum). Amend the paragraph of column 2 as follows:

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KO`OLAU AQUIFER SECTOR AREA

The recommended strategies for the Ko`olau aquifer sector address the goals and objectives identified in the Hāna Community Plan and the WUDP public process for the region that evolve around resource protection and management; traditional uses of the region's natural resources and self-sufficiency.

Table 16-59 summarizes recommended strategies and indicates the planning objectives that each strategy supports. Estimated costs are, unless indicated otherwise, life cycle costs for the twenty-year planning period per 1,000 gallons. Life cycle costs include capital, operational and maintenance costs and include inflationary effects. The cost to develop and implement sustainability projects can be difficult to quantify per volume water supply. Lead agency, or organization to implement a strategy is proposed as a starting point. The timeframe for implementation is indicated as short term – less than 5 years, and long term 5 – 20 years. Many strategies are multi-year actions with implementation beginning within 5 years and continuing through the long term (indicated as 1, 2).

KO`OLAU AQUIFER SECTOR AREA

Table 16-41 Summary of Recommended Strategies Ko`olau ASEA

	STRATEGY	PLANNING OBJECTIVES	ESTIMATED COST	IMPLEMENTATION	
				1: Short-term 1 – 5 years	2: Long-term 5 – 20 years
				AGENCY	TIME-FRAME
RESOURCE MANAGEMENT					
1	Seek dedicated, long term and broad based core funding for maintaining and expanding watershed protection areas and providing for watershed maintenance in East Maui and Hāna watersheds for habitat protection and water security.	Maintain sustainable resources Protect water resources Protect and restore streams	\$0.8M – \$1M per year	MDWS Maui County CWRM DLNR	1
2	Support and promote community grassroots initiatives to collaborate with state and land owner partnerships to increase participation in natural resource management and to ensure adequate access and opportunities for traditional uses of the region’s natural resources. Use established moku process to consult on resource management	Maintain sustainable resources Protect water resources Protect and restore streams	N/A	Public-private partnerships Aha Moku DLNR Maui County	1
3	Support collaborative hydrogeological studies to inform impact from climate change and future well development on groundwater health for Ha`ikū and Honopou aquifers.	Maintain sustainable resources Protect water resources Protect and restore streams		CWRM USGS MDWS	2
4	Convene sector-based drought workshops to assist stakeholders in developing or improving their individual drought/water conservation plans. Focus in the Ko`olau sector should be on catchment systems and contingency supply to supplement or substitute catchment when necessary.	Provide adequate volume of water supply Maximize reliability of water service	\$50K/year	CWRM NRWA	