Kauaʻi Water Use & Development Plan Update
Second Series of Public Meetings
August 22, 2023
Kapaʻa Neighborhood Center
5 PM to 6:30 PM

ATTENDANCE:
KDOW: Joseph Tait (Manager and Chief Engineer), Michael Hinazumi (Deputy Manager), Jason Kagimoto (Engineering Division Head), Regina Flores (Engineering Division, Water Resources & Planning, WRP, Section Head), Erin Doi, Margie Mills (Engineering Division, WRP Section), Jonell Kaohelauliʻi (Public Relations, PR)
Fukunaga & Associates, Inc. (Consultant): Jon Nishimura, Amanda Waki, Amanda Miyahara
Planning: Leanora Kaiʻaokamalie

PURPOSE:
The purpose of this series of five (5) public meetings is to present the draft Kauaʻi Water Use and Development Plan (KWUDP) Update and its findings.

The intent of this series of meetings is to create an understanding of the purpose and intent of the KWUDP Update and the context in which it is being developed. The public meetings give the community an opportunity to provide feedback and express any concerns that they may have on the KWUDP Update.

The meeting started with an introduction by Jason Kagimoto and was followed by a presentation by Fukunaga & Associates. The draft KWUDP Update is posted on KauaiWater.org/KWUDP.asp.

DISCUSSION:
These notes reflect the questions and concerns voiced by attendees at the Kapaʻa meeting. (Q = question; A = answer; C = comment.)

1) Q: Is there a report that summarizes the rainfall on Kauaʻi in order to determine how much water we have?
   A: The Rainfall Atlas is a resource that summarizes the rainfall on Kauaʻi.

2) Q: Who has evaluated how much water Kauaʻi has?
   A: The Commission on Water Resource Management (CWRM) is responsible for determining the quantity of water resources (groundwater and surface water). Sustainable yield is defined as the maximum rate at which water may be withdrawn from a water source without impairing the utility or quality of the water source as

determined by CWRM. The current sustainable yield values are from the Water Resource Protection Plan (WRPP) which is prepared by CWRM.

3) C: Based on the SY, it appears that there is a large surplus of water available for Kauaʻi.
   A: For all aquifer system areas (ASYAs), SY is greater than the full build-out projections. CWRM utilized the precautionary principle when selecting the SY for each ASYA, and in general, selected the most conservative sustainable yield. Also, as noted in the presentation, full build-out projections are conservatively high. However, it is noted that SY does not consider the feasibility of developing the groundwater and should not be equated to developable groundwater.

4) Q: Does the SY take into account diverted surface water?
   A: The SY study takes the water cycle into account. SY modeling considers groundwater recharge as well as outflow that prevents seawater intrusion or maintains perennial streamflow.

5) Q: How is the SY affected by climate change? USGS just released a report that included how climate change impacted groundwater supply across the islands.
   A: The impact of climate change on water resources is something that CWRM will need to assess, and this question will be relayed to CWRM. Fukunaga & Associates will ask if CWRM is aware of the report and how they plan to use the information from the USGS report.

6) Q: It is understood that revisions to water resource quantities is the responsibility of CWRM, but will the KWUDP Update include a discussion on the potential impacts of climate change?
   A: The KWUDP Update currently has a brief discussion on climate change, but Fukunaga & Associates will see if the discussion can be expanded.

7) Q: Is there water allocation for emergency response (i.e., fire protection)?
   A: The KDOW is currently working on a Water System Investment Plan (WSIP) which is their long-range capital improvements plan and are working on updating their GIS hydraulic model. Evaluation of the KDOW water systems with the hydraulic model, including analyzing the system under emergency situations (fire flow), will help direct future investment in expanding or upgrading the water systems. Public meetings for the WSIP will be held in early 2024.

8) Q: Who regulates the wells? How do we ensure that the aquifers aren't contaminated?
   A: Public wells are regulated by the Department of Health (DOH), who have sampling and reporting requirements. CWRM is responsible to protect Hawaii's water sources, and before a well is drilled, the developer needs to apply for a Well Drilling Permit from CWRM. After the well is drilled, a Pump Installation Permit from CWRM is required to

develop the water source. The well must be drilled and developed by a licensed driller. Once the well is developed, DOH will inspect the well as part of their Wellhead Inspection Program. KDOW is also a member of the Kaua'i Watershed Alliance, whose goal is to provide for the long-term protection of Kaua'i's uppermost watershed areas.

9) Q: Is there evidence that groundwater is impacted by cesspools?
   A: New cesspools are banned, and KDOW does not have any evidence that the groundwater is impacted by the existing cesspools. KDOW also publishes an annual water quality report, called the Consumer Confidence Report.

10) Q: Does the Environmental Protection Agency (EPA) regulate CWRM?
   A: No, CWRM is a division of the Department of Land and Natural Resources (DLNR), who manages the "quantity" of water (surface water interim instream flow standards, well drilling and development permits, etc.). The quality of water is the responsibility of DOH, who is overseen by EPA.

11) Q: What is the status of the Kapahi well?
   A: KDOW needs to update the Environmental Assessment (EA) and will do so in early 2024. Once the EA is finalized, KDOW can perform a pump test as part of the Well Drilling Permit and then develop the well.

12) Q: In East Kaua'i, how are agriculture lands utilized? Specifically looking for potential agriculture uses for the East Kaua'i Community Plan (food vs. cattle, etc.).
   A: The Statewide Agriculture Land Use Baseline Study inventoried agricultural land use in the State of Hawai'i and is a good reference. In terms of agricultural water demand, this information should come from the AWUDP. For the KWUDP Update, it was not realistic to assume that all lands designated or zoned as agriculture would be cultivated and irrigated. Instead, the KWUDP Update provides a general comparison of declared surface water diversions to agricultural lands that meet all Important Agricultural Lands (IAL) criteria based on the County of Kaua'i IAL Study.

13) Q: What is the threshold that the SY/full build-out (FBO) scenarios/existing and future demands are compared against in order to determine whether the ASYA are "sensitive"?
   A: None of the ASYAs on Kaua'i are considered sensitive as the FBO scenarios and existing and future demands are less than the SY. The Hanamā'ulu ASYA has a General Plan FBO scenario that is approximately 80% of the SY, but since the SY is conservatively low and the FBO is conservatively high, it is still not considered sensitive. If the FBO scenarios were higher than the SY, the ASYA would be considered "sensitive" and the land use policies (general plan and zoning) would need to be analyzed in greater detail. CWRM has certain criteria that must be met in order to designate an area, see HAR §13-171-7 for the groundwater criteria and §13-171-8 for the surface water criteria

(https://files.hawaii.gov/dlnr/cwrm/regulations/13-171.pdf). Related to land use policies, one criterion for groundwater designation is if the water use is 90% of the SY.

14) Q: There have been reports of contamination due to king tides. Can king tides contaminate the wells?
A: The majority of KDOW wells are mauka, away from impacts due to king tides. Also, KDOW frequently monitors their wells, and any contamination would be detected and addressed.

15) C: The presentation did not mention the Wailua Wastewater Treatment Plant (WWTP) as a source of recycled water for the Wailua ASYA.
A: This is due to the delineation of the ASYA, which are based on hydrogeological boundaries. The aquifer system areas don't necessarily correspond with the towns that share the same name. The Wailua WWTP and the area that uses recycled water from the Wailua WWTP are in the Hanamāʻulu ASYA.

NEXT STEPS:
FAINC will brief the Commission on Water Resource Management (CWRM) and revise the KWUDP Update based on comments received from these public meetings and the CWRM briefing. The Pre-Final KWUDP Update will then be presented to the Kauaʻi Board of Water Supply, then to CWRM for adoption. It is noted that the CWRM adoption process also includes public hearings.