



DEPT. COMM. NO. 363

DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII

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January 4, 2024

Honorable Ronald D. Kouchi, President of the Senate
Honorable Scott K. Saiki, Speaker, House of Representatives
Honorable Glenn Wakai, Chair, Honorable Brandon Elefante, Vice-Chair, and Members of the
Committee on Public Safety, Intergovernmental, and Military Affairs
Honorable Linda Ichiyama, Chair, Honorable Mahina Poepoe, Vice-Chair, and Members of the
Committee on Water and Land
Hawai'i State Senate, Hawai'i State Capitol
Honolulu, HI 96813

Dear President Kouchi, Speaker Saiki, Chair Wakai, and Chair Ichiyama:

Subject: Senate Concurrent Resolution 35, House Draft 1, and House Resolution 56 Report

The Hawai'i Department of Water Supply (HDWS) respectfully submits, for your review, the report for Senate Concurrent Resolution 35, House Draft 1, and House Resolution 56.

Should there be any questions or concerns, please feel free to contact me at (808) 961-8050.

Sincerely yours,

Keith K. Okamoto, P.E.
Manager-Chief Engineer

KKO:klcm

Enc.

copy – Kawika Uyehara, DWS Deputy
Kurt Inaba, DWS Engineering Division Head
Leah Bremer, UHERO and Water Resources Research Center (WRRC)
Don Thomas, University of Hawai'i
Tom Nance, Tom Nance Water Resource Engineering
Alton Kimura, Lennie Okano-Kendrick, USDA
Kā'eo Duarte, Kamehameha Schools
Charles Young, Aha Moku
Zendo Kern and Jeff Darrow, County of Hawai'i Planning Director and Deputy Director

... Water, Our Most Precious Resource ... Ka Wai A Kāne ...

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Senate Concurrent Resolution 35, House Draft 1; and House Resolution 56

Report to Hawai'i State Legislature

Introduction

Hawai'i County Department of Water Supply (HDWS) is requested to convene a working group to examine opportunities for increasing water access and strengthening water infrastructure of underserved communities on Hawai'i Island.

Participants invited to take part in this working group consist of individuals with expertise in the development of water resources in barren areas; faculty at the University of Hawai'i, who conduct research into water resource management; and community members, including Native Hawaiian cultural practitioners and members of the Native Hawaiian community.

This working group shall submit a report on its efforts to increase access to water on Hawai'i Island, including findings, recommendations, and proposed legislation, to the Legislature no later than twenty (20) days prior to the convening of the Regular Session of 2024.

HDWS Background

HDWS was formed in 1949 and established as a semi-autonomous department of the County of Hawai'i. Funding for the operations of the department is generated by revenue collected from its water customers' billing. HDWS does not receive any funds from the County of Hawai'i for its operations. This financial arrangement generally does not provide for system expansion or the creation of water systems where none currently exists.

HDWS operates and maintains 23 separate water systems on Hawai'i island that collectively serves approximately 45,000 customer accounts. The estimated population that HDWS serves is approximately 121,000 people.

There is a large geographic gap between HDWS's South Kona water system, which ends at Ho'okena, and the Wai'ōhinu water system, which ends near the South Point access road. There is another system between those two, the HOVE water system. However, the HOVE system consists of only a spigot station in which individuals have access to fill personal water storage containers as well as standpipes for use by water haulers. There is no distribution system serving individual properties with separate water meters. See Figure 1.

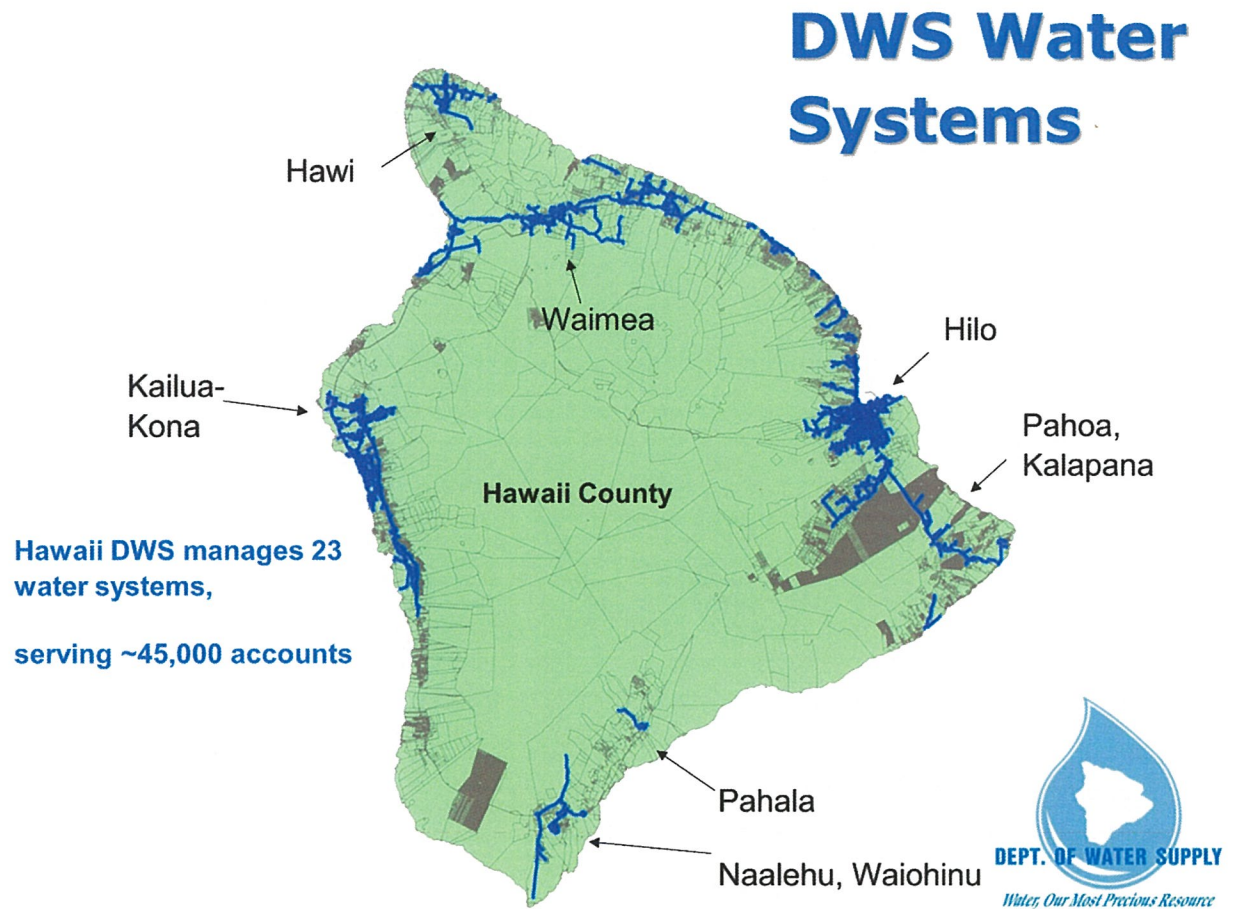


Figure 1. – HDWS water systems

Discussion

As requested by both resolutions, HDWS assembled a working group which consisted of the following participants:

- Leah Bremer, UHERO and Water Resources Research Center (WRRC)
- Don Thomas, UH
- Tom Nance, Tom Nance Water Resource Engineering
- Alton Kimura, Lennie Okano-Kendrick, USDA
- Kā'eo Duarte, Kamehameha Schools
- Charles Young, Aha Moku
- Zendo Kern and Jeff Darrow, County of Hawai'i Planning Director and Deputy Director

The working group met via web conference on 10/6/2023, 11/3/2023, and 12/1/2023. Not all members were able to attend each meeting.

Information shared and gathered during these discussions included:

HDWS provided a background of its mission and financial setup which is based on revenues from water billings. HDWS explained that its revenues are primarily to cover operating costs with a small percentage to be set aside for CIP and emergency reserves. There are currently no funding mechanisms established for expansion or addition of water systems in unserved areas. There are other mechanisms used in the past to accomplish this objective, the most common being Council initiated improvement districts.

Realization that we cannot assume that adding water infrastructure to an area is what the community wants. What is needed is a better understanding of the socio-economic and cultural wants and/or needs of the southwest portion of Hawai'i island. A survey, coupled with key informant interviews and focus groups, should be conducted to better understand the wants/needs of the various areas.

General understanding of the hydrogeology of the area indicates new well sources should be developed mauka of Highway 11 (Mamalahoa Highway).

Hawaiian Ocean View Estates.

There may be a desire for additional water infrastructure, but the natural resources are not adequate. The water quality of the existing well, and evaluation done for potential additional well development, indicates that source development in the area is not prudent. The latest recommendation is that water be "piped" from an existing DWS system in Wai'ōhinu, a distance of approximately 7.4 miles, and an outdated (2020) construction cost estimate of approximately 20 million dollars.

Summary

It cannot be assumed that communities want potable water infrastructure developed in their area. More effort is needed to determine where this infrastructure is desired.

When an area is identified, technical evaluation can then be conducted. This evaluation will include the necessary planning work including environmental assessments, cultural assessments, etc. as well as preliminary engineering and feasibility assessment.

It should be noted that if determined to be feasible, the water system would be considered a public water system as defined by the State Department of Health. The owner/operator must have the technical, managerial, and financial capacity to operate and maintain the system.

If the legislature decides to proceed with this effort, an estimate of \$1M would be needed to fund the needs survey, planning, and preliminary engineering. The details of the actual capital improvements including design and construction funding would follow as a subsequent phase of the project.