Honolulu Board of Water Supply

Kalāwahine Reservoir Project Termination
March 20, 2023

On November 17, 2022, the Manager and Chief Engineer, Ernest Y.W. Lau, P.E. terminated the Kalāwahine Reservoir Project slated to be built off of Kapahu St in Papakōlea, Honolulu, Oʻahu, Hawaii. Letter of Termination is attached.

The following points summarize the considerations and reasons resulting in the termination of the reservoir project:

Red Hill

- The Board of Water Supply (BWS) has been focusing on several spills at the Navy's Red Hill Bulk Fuel Storage Facility at Kapūkakī (Red Hill). These new spills date back to May and November 2021. Over the 80-year history of the facility, there are at least 72 documented spills totaling over 180,000 gallons of fuels of various types.
- As of today, about 104 million gallons of jet and diesel fuels are still stored in the Red Hill facility just 100 feet above the drinking water aquifer below.
- May and November 2021 spills were composed of jet fuel that leaked from pipes in the facility.
- Due to these leaks, the Manager, as a precaution shut off the Hālawa Shaft water source. This reduced water supply to Metro Honolulu (Hālawa to Hawaii Kai) by 20%.
- When probable contamination was found at the Navy's Aiea-Hālawa Shaft in the Aiea area, the Manager shut down the Aiea Wells and Hālawa Wells. This reduced water supply to the Aiea and Hālawa communities by 50%.
- Finding new replacement water sources has become a high priority for the BWS because of the Red Hill crisis
- In addition, the need to investigate to determine where the fuel contamination from the Red Hill facility might be flowing underground in the aquifer of this area is equally critical – the BWS does not wish to place new replacement wells in the path of potential contamination. The investigation will better inform us whether the three wells currently shutdown can be safely turned back on.
- With these two objectives at the forefront, BWS is prioritizing projects to address this Red Hill crisis higher, including constructing new monitoring and exploratory wells.
- New monitor and exploratory wells can cost at minimum around $1million up to $3 million each to construct. A new replacement well can take 5 to 7 years to complete.
- At this time, the construction of new water tanks for Honolulu is a lower priority than addressing the impacts of the Red Hill contamination crisis.

Meetings with Haʻalelea Place Residents

- BWS held a meeting in April 2022 to inform the Kalāwahine community about the reservoir and associated pipeline project. This meeting was held at Stevenson Middle School.
- During that meeting, some of the residents of Haʻalelea Place stated that they were experiencing moderate to severe impacts to their homes due to water running underneath their foundations as well as slippage, and poor construction. Homes were built on the slopes of Punchbowl on Department of Hawaiian Home Lands (DHHL) property.
- The proposed BWS Kalawahine reservoir would have been located in a gully that runs along Haʻalelea Place with its entrance on Kapahu Street.
- 6 duplex homes overlook this gully and the last home on the reservoir side would be only yards from the proposed reservoir.
- There are 10 homes across the street on the mauka side.

- After hearing concerns from a resident on the mauka side of Ha‘alelea Place about her home slipping with damage to sewer and water lines, the Manager put a temporary hold on the reservoir construction project to assess the situation. The water main project located outside this community would still move forward.
- BWS scheduled meetings with all 16 families on Ha‘alelea Place to share detailed information on the project as well as hear of any concerns they might have.
- While most of the families acknowledged the right of the BWS to build the reservoir as it was noted in their lease agreements they signed with the Dept. of Hawaiian Home Lands (DHHL) years prior, they still appreciated the opportunity to express any reservations they had about the project.
- Comments received were generally the following concerns: the homeless in the gully, drainage in the gully, the construction and safety of the reservoir, impacts of reservoir construction on their homes, especially those that lived on the makai side of Ha‘alelea Place closest to the reservoir, traffic impacts caused by the construction – the area is one way in and out and the streets are very narrow with cars parked on both sides, potential underground water flowing from the hillside above causing damage to their homes, and poor construction.
- 2 residents had substantial damages to their homes including support columns, foundations, and concrete slabs. Both were considering actions to sue DHHL for the way the homes were built. A 3rd owner also was noticing water coming down behind his home and expressed concerns,
- As most of these homes are duplexes, damage to one side could significantly affect the other home.
- After the Manager made the decision to terminate the project, the BWS met again with all the Ha‘alelea Place residents to inform them. All were satisfied with the decision, especially those experiencing structural and construction quality concerns.

Community Meeting

- On January 18, 2023, the BWS held another community meeting at Stevenson Middle School to state that the Kalāwahine Reservoir project had been terminated.
- Due to concerns expressed by some of the residents that evening, this memo will become part of the file on Kalāwahine Reservoir Project for future Managers so they understand our reasoning for terminating this project.
- In addition, a BWS staff member for Water Resources stated at the community meeting that the reservoir siting study many years ago needs to be redone. The Manager agreed and this will be added to the list of future projects.
- The BWS, after making the decision to terminate the project, informed the elected officials for the area as well as the Makiki and Nuuanu Neighborhood Boards.

Conclusion

After the residents’ meetings and reviewing the findings of our consultant who conducted visual inspections of 14 of the 16 homes, the Manager decided that these concerns compounded the issues BWS was already facing with Red Hill and therefore the building of the reservoir did not serve the best interests of the BWS and the immediate community. It was decided that the best course of action would be to redo the reservoir siting study. Much has changed in our city landscape that would need to be taken into account in a new study. Projects to address the crisis created by the contamination from the Navy’s Red Hill Bulk Fuel Storage Facility are a higher priority for the Honolulu and Aiea-Halawa water systems.