## STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES Engineering Division Honolulu, Hawaii 96813

April 26, 2024

Board of Land and Natural Resources State of Hawaii Honolulu, Hawaii

## Approval of Dole Food Company Inc.'s Schedule for the Removal of Wahiawa Dam (OA-0017), Wahiawa, Oahu Tax Map Keys (1) 7-1-012:014, (1) 7-3-013:003, (1) 7-3-012:002, and (1) 7-3-007:001

# Summary

The Dole Food Company Hawaii ("Dole"), owner of Wahiawa Dam (OA-0017), requests the Board of Land and Natural Resources ("Board") approve a new schedule to remove the Wahiawa Dam from service. Dole previously planned to rehabilitate the dam but is now chosing to remove the dam. Dole's new timeline (see Exhibit 1) includes milestone dates for submitting a new dam safety permit application in November 2024 and final plans in April 2025, which the Department of Land and Natural Resources ("Department") views as reasonable. The Department is recommending approval of a new schedule with accompanying penalties for missed deadlines.

#### Background

On May 13, 2022, the Board approved Dole's request to extend their schedule to rehabilitate the Wahiawa Dam to comply with dam safety standards. (see Exhibit 2). Subsequently, Act 218, Session Laws of Hawaii 2023 ("Act 218") (see Exhibit 3), was signed into law on July 5, 2023 which appropriated funds to upgrade the dam's spillway and authorized various state agencies to acquire the Wahiawa Irrigation System (WIS), which includes the Wahiawa Dam. In accordance with State law, the Board has a fiduciary responsibility to conduct its due diligence prior to approving the acquisition of private lands. Due diligence efforts by the various State agencies are on-going and estimated to be completed in 2025. Accordingly, Dole has decided to change its plans to remove the dam because they contend it is not financially feasible for them to continue on a schedule to rehabilitate the dam.

While the Department intends to fullfill its obligation under Act 218, until the State becomes the owner of the WIS, there is still a duty to continue to enforce the dam safety laws on the current dam owner to ensure the protection of life and property and to minimize the risk of a dam failure.

## Dam Features and Safety Issues

The Wahiawa Dam is classified as a High Hazard dam and currently has a Poor overall condition rating due to various deficiencies, including an undersized spillway. In a major storm event, the undersized spillway may not be able to pass the Probable Maximum

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Flood, which could potentially result in a failure from water overtopping the dam embankment. The dam embankment also exhibits signs of instability and requires modifications, which if unaddressed could progress to an internal erosion failure. The following are features for the dam:

Hazard Potential:	8
Condition:	Poor
Population at Risk:	2,492 people
Structures at Risk:	A total of 865 parcels are in the direct flow path of a dam
	failure, including two schools and a fire station
DLNR Restriction:	Reservoir water level is kept at 65 ft, since 2016
Dam Embankment:	Earthen
Dam Ht / length:	88 feet / 660 feet
Maximum Storage:	2,998 million gallons
Drainage Area:	17 square miles

### **Recommendations**

 That the Board of Land and Natural Resources authorize the Chairperson to issue Dole a new schedule and fines for missed deadlines for the removal of Wahiawa Dam (OA-0017) as follows:

Wahiawa Dam (OA-0017) Remediation Schedule

Milestone	Deliverable to Department	Due Date	Penalty for Missed Deadline
1	<ul> <li>Submit an amended dam safety permit application to remove Wahiawa Dam, which will include: <ol> <li>Prefinal (90%) construction plans, specifications, and cost estimate</li> <li>Design report</li> <li>Hydrologic and hydraulic report with an analysis of downstream affects and an erosion protection evaluation</li> <li>Geotechnical report</li> <li>All accompanying documents required in a dam safety permit application, including but not limited to supporting documents for a SHPD review, a Ka Pa'akai review, and a Ch. 343 review.</li> </ol> </li> </ul>	11/15/24	\$20,000
2	Provide final plans, specifications, and cost estimate for the permitted work.	4/15/25	\$10,000

Milestone	Deliverable to Department	Due Date	Penalty for Missed Deadline
3	Submit a copy of the following submitted DLNR application documents, if required by the below permitting agencies: A. DLNR CWRM stream channel permit (SCAP) application B. DLNR Conservation District Use application	7/1/25	\$5,000
4	Provide status of all government permit applications and approvals associated with the permitted work.	10/1/25	\$5,000
5	Start construction on the permitted work to remove Wahiawa Dam. The start of construction is defined as performing grading and excavation work on site.	Nine (9) months from the date the dam safety permit is approved or the date the final government permit is obtained, whichever is later	\$20,000

- 2. That the Board authorize the Chairperson to extend the above schedule as deemed necessary. Any revisions to fines or new fines shall be brought before the Board of Land and Natural Resources.
- 3. Dole shall pay all fines issued by the Chairperson within 60 calendar days of the fine being issued. In the event Dole fails to pay fines within the time allotted, Dole shall be fined an additional \$5,000 per day until the ordered fine amount is paid.

Respectfully submitted,

CARTY S. CHANG Chief Engineer

APPROVED FOR SUBMITTAL:

Dawn N.S. Chang, Chairperson Board of Land and Natural Resources

Exhibit 1 – Dole's letter to Chairperson Chang, dated 3/6/24. Exhibit 2 – Board's 5/13/2022 approved remediation and fine schedule Exhibit 3 – Act 218 (Session Laws of Hawaii 2023)