



DLNR Briefing for State House of Representatives

Kona Low Storms March 2026



Department of Land and Natural Resources

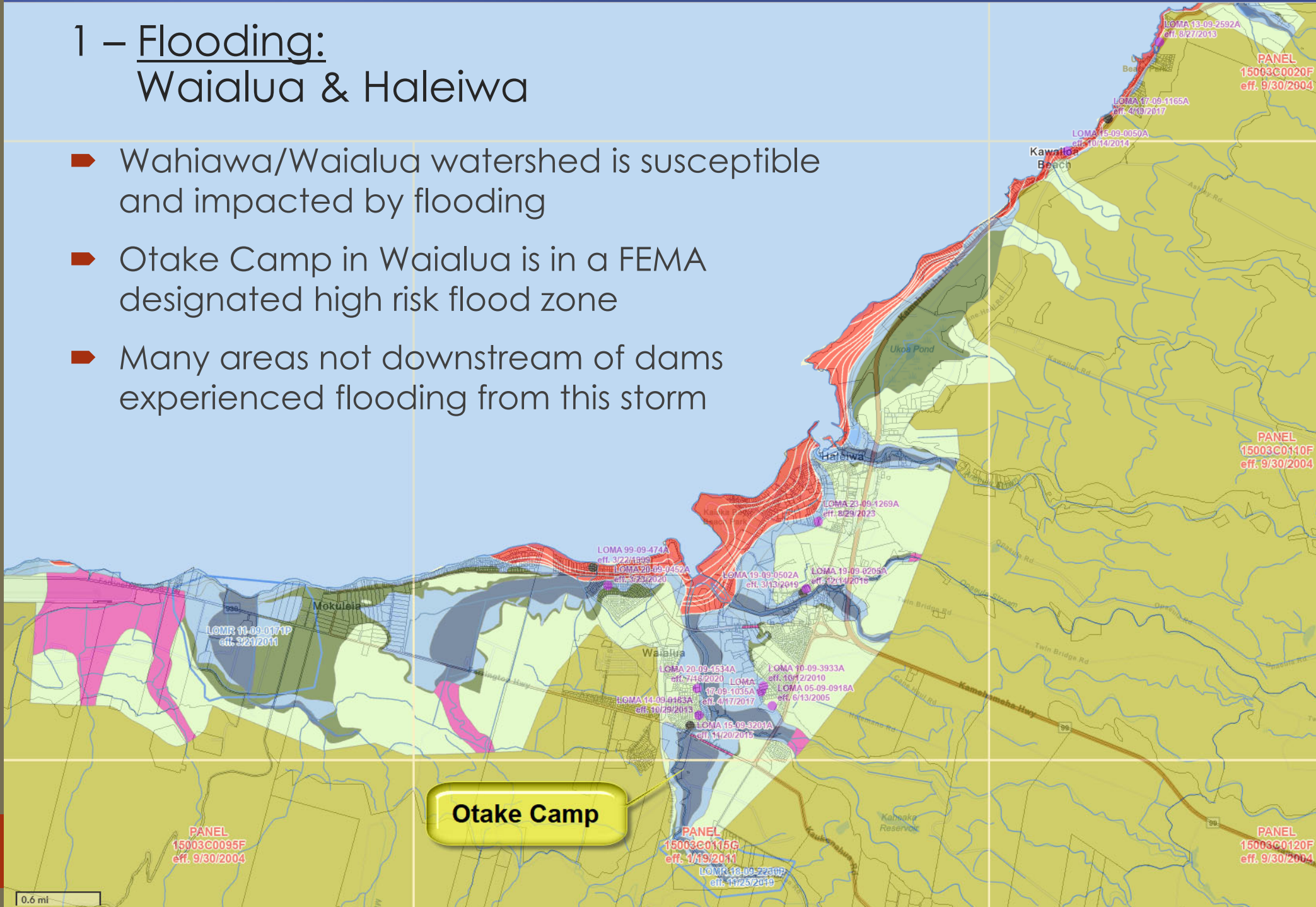
April 20, 2026

Agenda



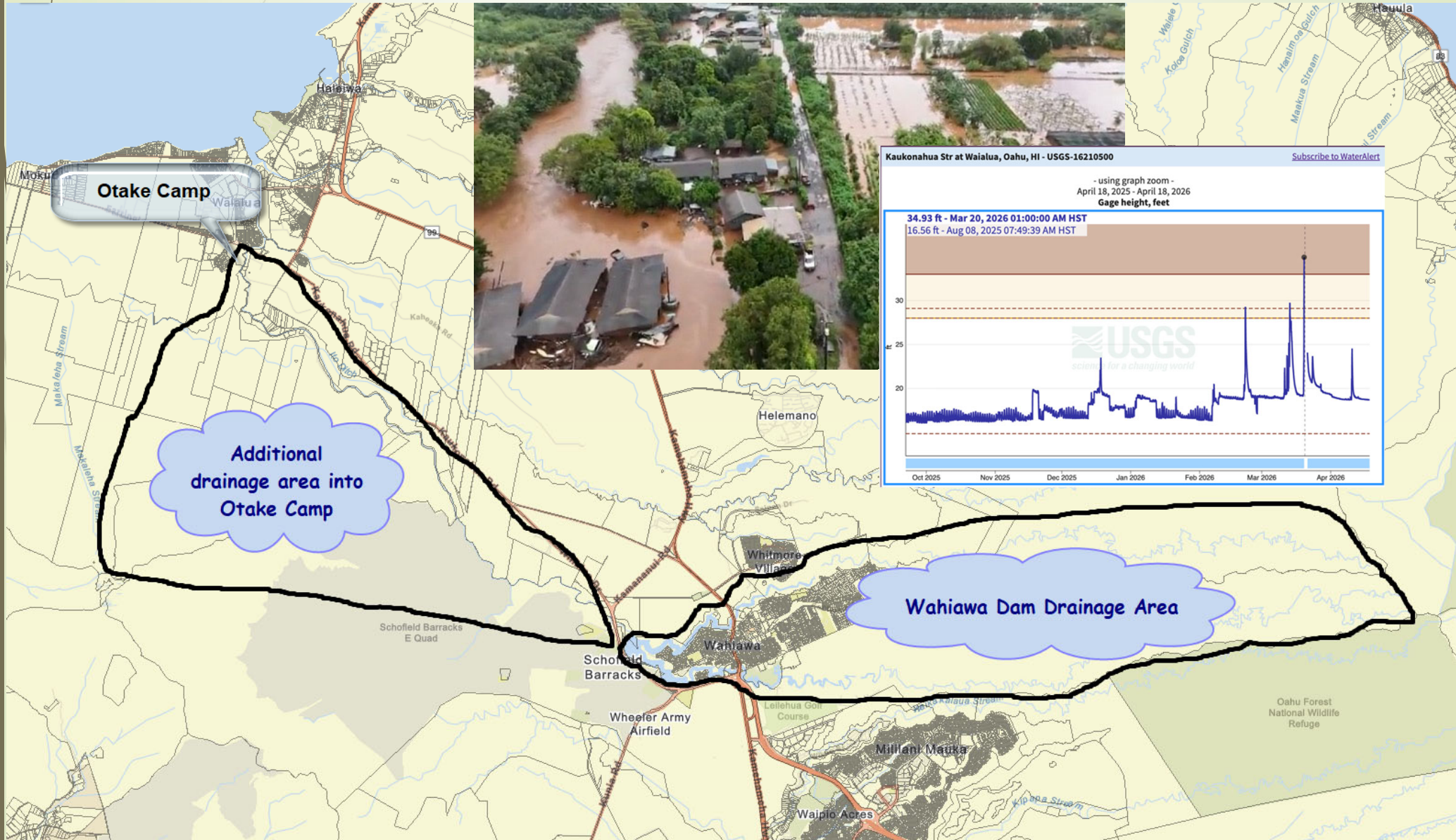
1 – Flooding: Waialua & Haleiwa

- Wahiawa/Waialua watershed is susceptible and impacted by flooding
- Otake Camp in Waialua is in a FEMA designated high risk flood zone
- Many areas not downstream of dams experienced flooding from this storm



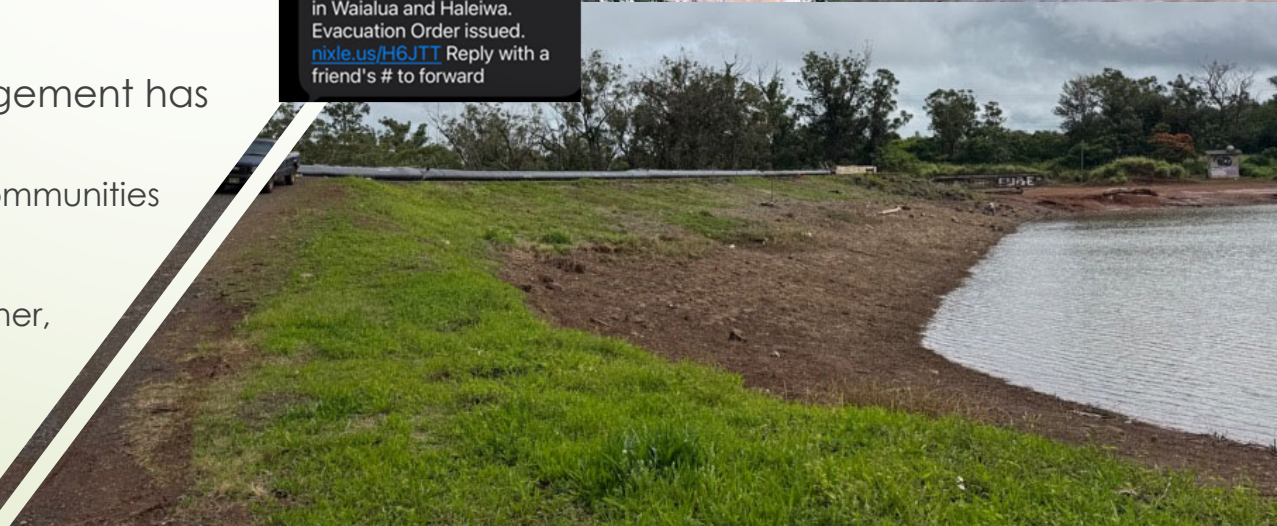
1 – Flooding & Evacuation: Waialua & Haleiwa

- Otake Camp receives runoff from a significant drainage area.
- Wahiawa Dam discharge is part of that drainage area



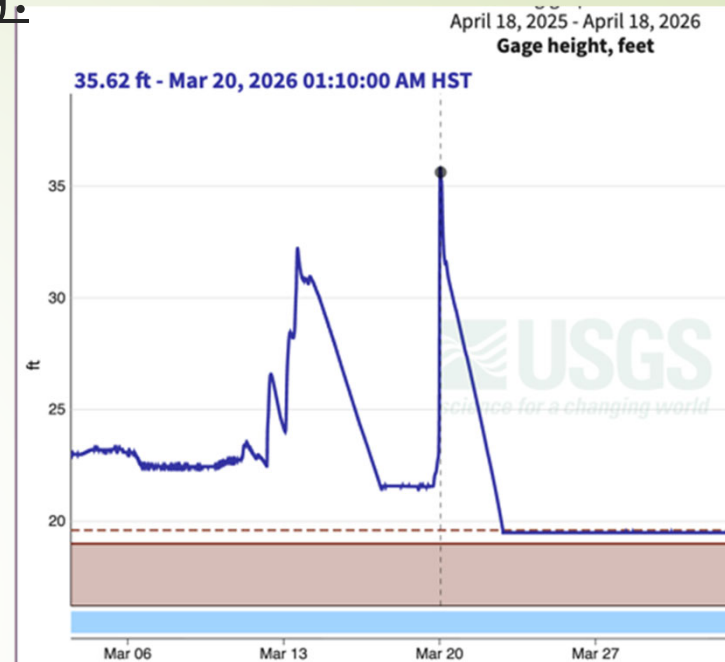
2 – Potential Overtopping: Wahiawa Dam

- Wahiawa Dam is **not** a flood control structure
 - What enters from the watershed, goes out to Kaukonahua Stream
- Its spillway is undersized
 - Storms larger than 100-year events could lead to the dam overtopping, which may lead to failure
 - Dept of Agriculture & Bio-Security initiating improvement project in 2026
- On March 20, the reservoir level reached 85-ft, County issued potential dam evacuation notice
 - Top of dam is 90-ft
 - Highest level in decade
- Honolulu Dept of Emergency Management has authority to issue evacuation
 - Needs min. 2-4 hours to evacuate communities
 - Pre-scripted notifications
 - Collaborative decision with dam owner, NWS, DLNR/Dam Safety



2 – Potential Dam Overtopping: Helemano 6 Reservoir

- At midnight on March 19, Helemano 6 Res. came within a 1-2 feet of overtopping the dam
 - Rose 15-ft in 2.5 hours
 - County ordered evacuation for a portion of Haleiwa
- Helemano 6 has serious deficiencies:
 - Undersized and deteriorated spillway
 - Embankment stability concerns
 - Defective outlet works
 - DLNR has restricted the water level
- Owner started plans to remove the dam, however this facility is anticipated to be transferred to State ADC. ADC has indicated a desire to remediate this facility

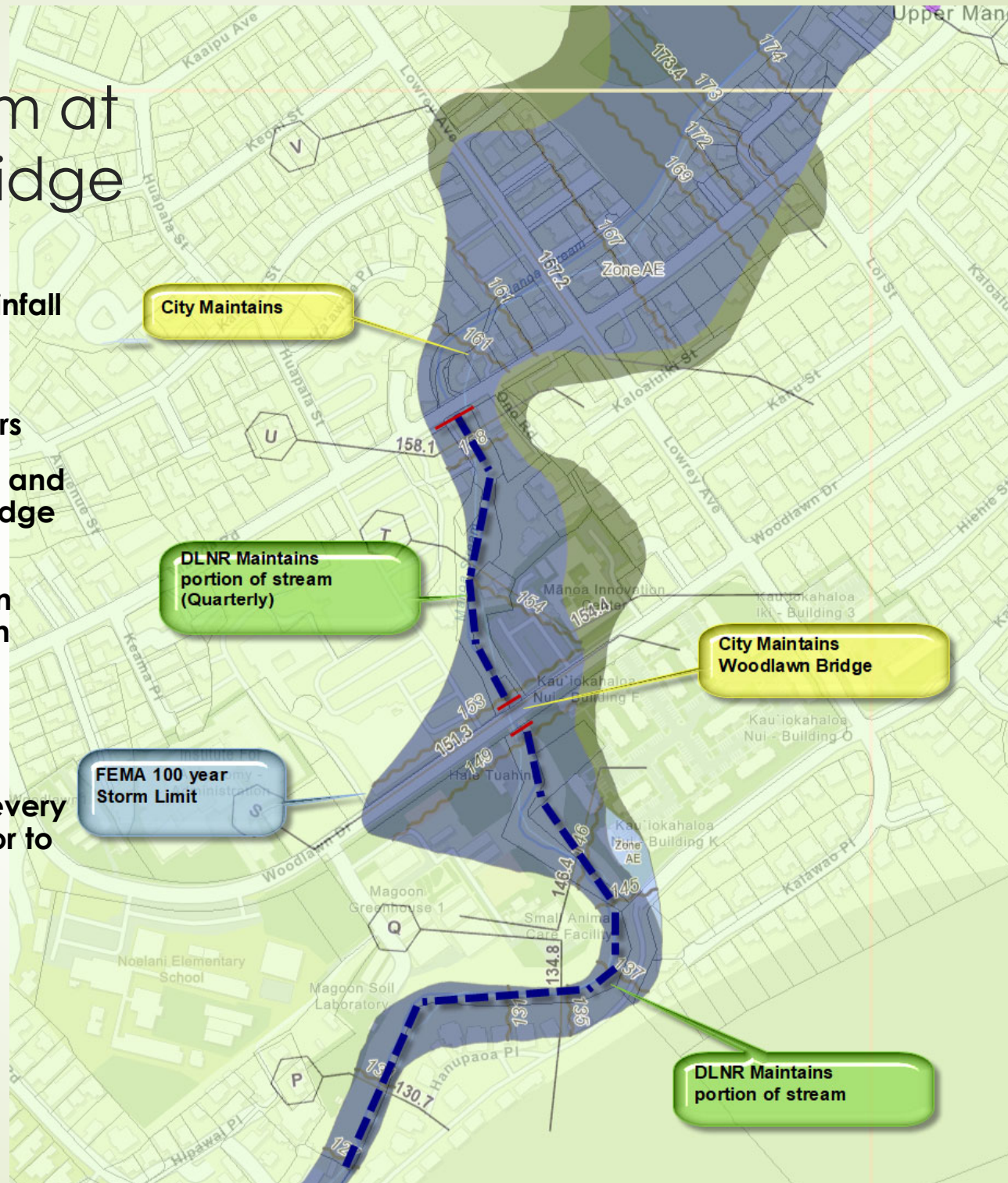


Helemano 6 Spillway,
3am on March 20



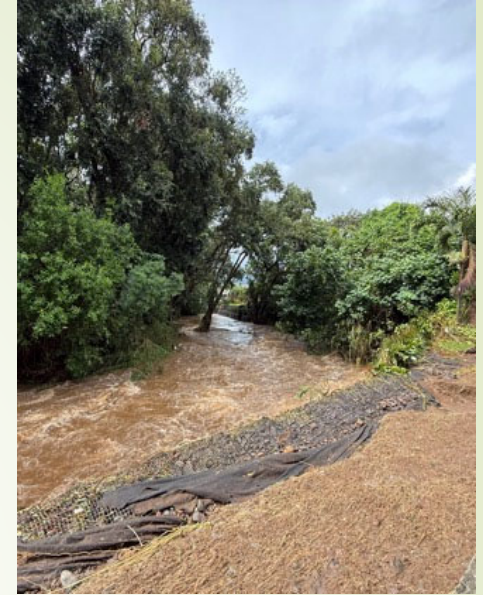
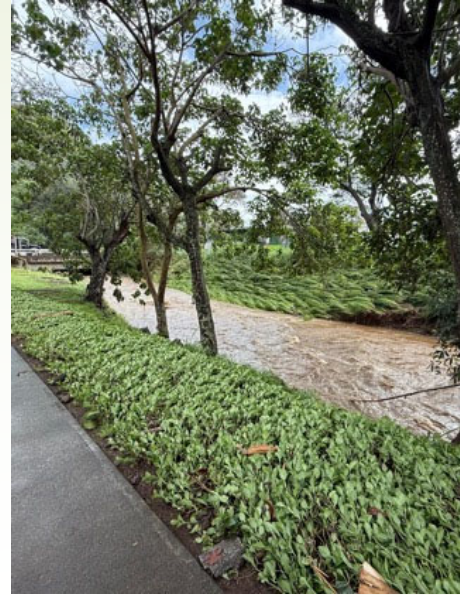
3 – Flooding: Manoa Stream at Woodlawn Bridge

- Extremely intense 3"-4" rainfall event. (1" in 15 minutes)
- Woodlawn Bridge was overtopped by flood waters
- Large debris flushed down and got stuck at Woodlawn bridge
- Stream overflows into shopping center and down Woodlawn to Noelani Elem and UH
- DLNR maintenance crew maintains DLNR's section every 3 months and inspects prior to storm events
- DLNR completed Flood Mitigation work around Woodlawn Bridge

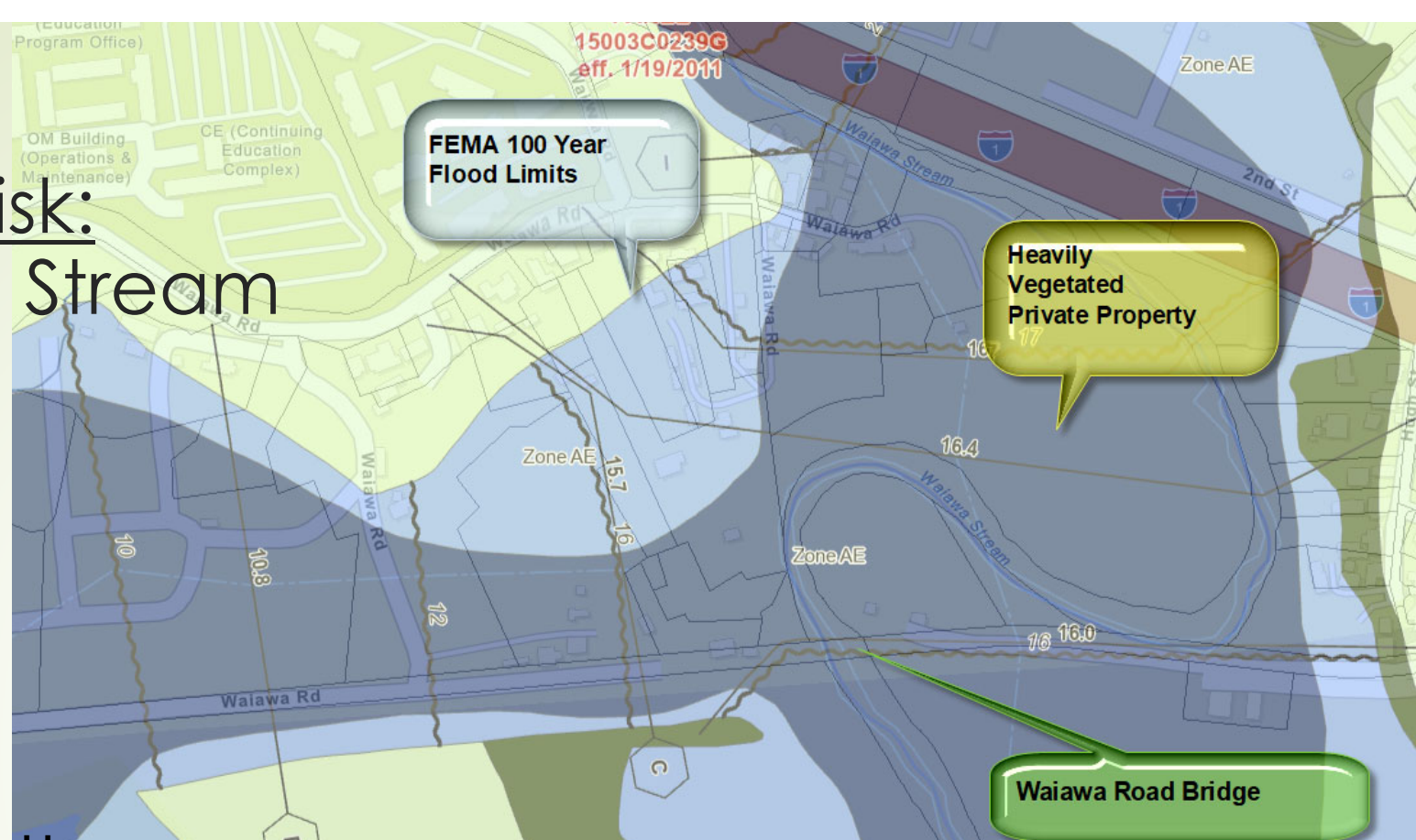


Manoa Stream at Woodlawn Bridge Findings

- ▶ Stream channel does not have capacity to handle 100 year storm event
- ▶ Woodlawn Bridge does not have capacity to handle 100 year storm and is prone to clogging.
- ▶ Large debris are transported down the channel
- ▶ DLNR will assess impact of removing trees on their portion of the stream
- ▶ Recommend Study to improve Bridge capacity and possibly debris catchment basin



4 – Flood Risk: Waiawa Stream



- Stream does not have capacity to handle 100 year storm event
- Excessive amount of debris are transported down the stream from upstream private property
- DLNR inspects bridge periodically and had contractor retained to remove debris from bridge, Contractor did not show up. Retained second contractor to clean.



4 – Flood Risk: Waiawa Stream



Findings:

- Stream does not have capacity to handle 100 year storm event
- Excessive amount of debris are transported down the stream from upstream private property
- Poor access around bridge complicate maintenance work

Actions:

- DLNR will contract Quarterly cleaning.
- DLNR will conduct survey to identify possible location of debris and work with neighbors
- CIP to undertake sitework to allow access for heavy machinery needed to remove debris at bridge
- Study for possible mitigation actions