



5. IDENTIFICATION OF HAZARDS OF CONCERN

To provide a strong foundation for mitigation actions in this LHMP, the City considered a full range of hazards that could impact O’ahu and then identified and ranked those that present the greatest concern. These hazards of concern were identified based on the following:

- Input from all HMWG representatives
- Review of the 2023 State of Hawai’i HMP
- Review of the 2020 City and County of Honolulu Multi-hazard Pre-Disaster Mitigation Plan
- Research on the frequency, magnitude, and costs associated with hazards that have previously or could feasibly impact the island
- Qualitative information regarding natural hazards and the perceived vulnerability of the City’s assets to them

Hazards of Concern are those hazards considered most likely to affect a community. These are identified by use of available data and local knowledge.

Natural Hazards are those hazards that are sources of harm or difficulty created by a meteorological, environmental, or geological event.

Human-caused Hazards are those hazards that result from human intent, error, or failed systems.

Table 5-1 documents the process of identifying the hazards of concern for further profiling and evaluation.

Table 5-1. Hazards of Concern Assessed in State and City and County of Honolulu Hazard Mitigation Plans

Hazards of Concern	Assessed in 2023 State HMP	Assessed in 2020 City and County of Honolulu LHMP	Assessed in 2025 City and County of Honolulu LHMP
Chronic Coastal Flood	●	● Floods	● Floods
Climate Change and Sea Level Rise	●	● Climate Change Effects	●
Coastal Erosion	—	●	● Climate Change and Sea Level Rise
Cyber Threat	●	—	● Deliberate Hazards
Dam Failure	●	●	● Infrastructure Failure
Drought	●	●	●
Earthquake	●	●	●



Hazards of Concern	Assessed in 2023 State HMP	Assessed in 2020 City and County of Honolulu LHMP	Assessed in 2025 City and County of Honolulu LHMP
Event-based Flood	●	● Floods	● Floods
Extreme Cold	●	—	—
Hazardous Materials	●	●	●
Health Risks	●	—	●
High Windstorms	●	● Strong Winds (Non-tropical cyclonic)	● Windstorm
Hurricane	●	● Tropical Cyclones (including Hurricanes)	●
Infrastructure Failure	●	—	●
Invasive Species	—	—	●
Landslide and Rockfall	●	●	● Landslides
Terrorism	●	—	● Deliberate Hazards
Tsunami	●	●	●
Volcanic Hazards	●	● Vog only	● Vog only
Wildfire	●	●	● Wildland Fire

During the kickoff of the planning process, representatives of the HMWG were asked to provide information on whether hazards identified in the 2020 LHMP had changed since approval of the last plan. The group also discussed opportunities to align the City’s LHMP with the State’s HMP. As a result, several hazards were renamed in order to integrate the naming conventions in the State HMP.

Participants in the HMWG noted that all 16 hazards identified in the 2020 LHMP were still relevant and should remain in the 2025 update. To ensure the hazard mitigation was more comprehensive and provided a centralized risk assessment for the City, the HMWG decided to add human-caused hazards to the 2025 LHMP update, including deliberate hazards (mass violence and cyber attacks), health risks, and invasive species. The HMWG finalized all hazards of concern during the kickoff meeting on March 18, 2024; subsequently, the HMWG identified 15 significant hazards affecting O’ahu, which are addressed in the 2025 LHMP update.



A crosswalk in Table 5-1 identifies the hazards assessed in the 2023 State HMP, 2020 City and County of Honolulu LHMP, and the 2025 City and County of Honolulu LHMP update. Additionally, changes in naming conventions are identified in the table.

Other natural and human-caused hazards of concern have occurred within the City, but have low potential to occur, are addressed by other planning mechanisms, and/or do not result in significant effects within the City. Therefore, these hazards are not addressed in this update. All hazards identified in the State's HMP, except for extreme cold, were assessed in the City's 2025 LHMP update. The minimum average temperature on O'ahu is 66.8 °F.