

The site conditions technical memorandum describes the context of Hoaloha Park on a watershed, neighborhood, and site-specific scale. The memorandum identifies external influences from neighboring areas and documents existing site features such as topography, drainage, soil, flora, fauna, and other environmental features, while evaluating and identifying major vulnerabilities of the site to climate influenced coastal hazards.

REGIONAL CONTEXT

Hoaloha Park is located in the Wailuku Ahupua'a. Wailuku Ahupua'a spans seven miles of coastline, from the Wailuku River to Kaulua Nui Gulch at Baldwin Beach Park and includes Kahului Harbor and Hoaloha Park. Two major streams, Wailuku River ('lao Stream) to the northwest and Kalialinui Gulch to the northeast, flow mauka to makai and discharge to the ocean outside of Kahului Harbor.

Before European contact, much of modern Kahului was low-lying wetlands comprised of Hawaiian villages and lo'i (taro patches) irrigated by the Wailuku River. The streams, lo'i, and wetlands carried abundant freshwater into Kahului Bay, creating an estuarine ecosystem and a healthy fish nursery habitat. Today, Kahului is a mix of urban, suburban, and rural land uses, with additional areas for open space or parks.



The area immediately surrounding the park is predominately a business and industrial center. Kahului Harbor and Airport serve as ports of entry for people and goods. The Wailuku Ahupua'a is the central location of business and commerce for Maui County.

NEIGHBORING USES



The park is located along the shoreline of Kahului Harbor, Maui's only deep draft commercial port, and adjacent to the State-owned harbor facilities. To the west of the park are three hotels, all of which are undergoing renovation or rebuild in the coming years. To the south across Ka'ahumanu Avenue is the heart of Kahului Town including Maui Mall and Queen Ka'ahumanu Center. This area of Kahului is undergoing redevelopment. The transit station at Queen Ka'ahumanu Center is moving to a new facility on Vevau Street by the end of 2024 and a library, civic center, and 300 units of affordable housing is proposed for the lot at the corner of Lono Avenue and Ka'ahumanu Avenue. Lono Avenue is also proposed for Complete Streets improvements. Further afield to the west is University of Hawai'i Maui College and to the East is Kanahā Pond.

SITE FUNCTIONS AND USERS



Hoaloha Park primarily hosts recreational uses, including gathering and launching for outrigger canoe clubs and regattas, as well as other ocean activities such as surfing, wingfoiling, paddleboarding, and fishing. The park is also used for various educational and cultural purposes, primarily by the canoe clubs. The land side areas of the park provide beach access and areas for picnicking on the grass. The Hawaiian Canoe Club (HCC) and Nā Kai 'Ewalu (NKE) Canoe Club hold leases for their canoe hales within the park. The park is also regularly used by several other paddling organizations including the Maui nterscholastic League (MIL), Maui Paddling Hui (MPH), Hawai'i Sailing Canoe Association (HSCA), and the Maui County Hawaiian Canoe Association (MCHCA).

HOALOHA PARK SITE REPORT

EXISTING SITE CONDITIONS



The site consists of three parcels owned by Maui County totaling 4.41 acres. The original park of 2.11 acres was doubled with the dedication of two parcels totaling 2.3 acres by A&B Hawai'i, Inc. in 2022.

CLIMATE & TOPOGRAPHY

Hoaloha Park is exposed to regular trade winds. Kahului town is one the windiest places in the U.S., averaging 13.7 mph per year. Site elevation ranges from 3 feet to 10 feet above mean sea level and is highest along the shoreline at the existing coastal sand dune system. There are various low spots where ponding may occur such as north of Ka'ahumanu Avenue and north of the Maui Seaside Hotel parking lot.

Soils

- > Soils have moderate to high infiltration.
- > Soil type is cobbly sandy loam.
- > Site is considered flat with slopes of 0-3%.

Flora & Fauna



- Coastal naupaka (Indigenous) is present along the shoreline dune system and is managed by the canoe clubs to mitigate shoreline erosion.
- 'Aki'aki (Indigenous) and Bermuda grass (Introduced) are present throughout the site.
- No threatened or endangered species are known to inhabit the site.
- Maintaining natural surface cover in the park will benefit resilience to flooding by allowing water to seep naturally into the soil, rather than running off concrete or other impervious surfaces.

Drainage & Water Quality



- Xahului Harbor is the only waterway at the site; no streams, gulches, or drainage channels run through the park.
- The site is mapped as a Special Flood Hazard Area (1-percent annual chance flood) by the Federal Emergency Management Agency.
- The site is in zone VE, high-risk coastal zone and is in a Tsunami Zone.
- > Brown water advisories are commonly issued for Kahului Harbor after high rain and high surf events.
- > Historically, algae blooms have been a problem in the harbor, but have improved in recent decades.



SLR Annual High Wave Flooding 3.2 ft. Scenario (State of Hawaiʻi)



HOALOHA PARK SITE REPORT

CANOE HALE, STORAGE, AND FENCING

Structures

> There are three canoe hales at Hoaloha Park located within designated easements. The two modern hale are used for canoes storage, club practices, and events, and the traditional hale is used for events and cultural practices.

There have been instances of arson damaging the Nā Kai 'Ewalu hale (1996) and the Hawaiian Canoe Club hale

(2012).

Canoe Storage

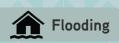
The grass area fronting the Canoe Hale (between the hale and the beach) is used for canoe storage for both clubs.

Fencing & Security

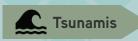
- > The site is enclosed by wood guard rails along concrete columns, except along the shoreline.
- > A lockable gate controls access to the park outside opening hours.
- The park is open to the public from 7 am to 8 pm, but canoe clubs maintain access to the park as needed.



HAZARDS & CLIMATE CHANGE



Certain areas of Kahului near the park regularly flood during heavy rains and may impact user and emergency access to the park. However, ponding does not typically occur on the park site itself. Streams are not considered a potential source of flooding for the park.



The Hawaiian Islands have experienced the effects of tsunamis at least 85 times since the early 1800s. The most recent tsunami in 2011 flooded portions of Kahului as far inland as Wākea Ave, and tsunami waves reached up to 9 feet high in sections of the Maui coast.



Landfalls from hurricanes are rare in Maui due to its geographical location and ocean currents but There is evidence that climate change is increasing the likelihood of hurricanes within the Hawaiian Islands. Tropical storm systems are common and can result in damage to buildings, infrastructure, and land.



Wildfires have become increasingly common on Maui particularly during events with significant wind speeds caused by dry hurricanes such as the devasting Lahaina fire of August 8, 2023. Maui experienced a 500% increase in the number of acres burned by wildfires from 2018-2019.

HOALOHA PARK SITE REPORT

HAZARDS & VULNERABILITIES

The park faces significant hazards and vulnerabilities, including sea level rise, flooding, and fire (including wildfire). These hazards, exacerbated by climate change, pose threats to the site's infrastructure, operations, and surrounding communities.

Ī	Hazard	Impact on Site
	Fire	 Increase runoff and erosion leading to potential flooding around the site Impaired water quality at the shoreline affecting aquatic ecosystem and park users
	SLR & Flooding	 Inundation of the site with SLR exposure of 3.2 feet, extending beyond existing structures Passive flooding and groundwater inundation around and site due to rising sea levels High wave flooding impact on park accessibility, especially in Kahului Beach Road Subject to inundation from 100-year flood events, leading to potential infrastructure damage and accessibility issues Increased potential for tsunamis reaching farther insland in SLR, posing greater destructive force

ADAPTATION CONSIDERATIONS

Adaptation considerations for the Site include:

- > Maintaining existing vegetation and planting more indigenous and endemic plants, particularly along the coastal dunes in order to limit coastal erosion.
- > Maximize permeable surfaces throughout the park by limiting future paving projects and keeping the mauka lot unpaved.
- > Add fill in strategic location, such as the mauka lot, to increase resilience against rising sea levels.
- > Add low vegetated berms further mauka in the park to limit water flow across the site.

HOW TO GET INVOLVED

Community input will be critical to shape the vision and adaptation plan for Hoaloha Park. There will be a variety of ways to get involved and make your voice heard.



Visit the Project Website

Visit www.mauicounty.gov/2787/Hoaloha-Park-Adaptation-Plan to learn more about the project and sign up for emails.



Attend Community Events

Share your mana'o at an upcoming public event or online open house.



Send Us Your Comments

Submit your comments on the draft plan or email us directly.

For more information, please contact

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