

June 22, 2023

State of Hawai'i Board of Land and Natural Resources Kalanimoku Building 1151 Punchbowl Street Honolulu, HI 96813

From: The Hawai'i Shore and Beach Preservation Association (HSBPA) – the Hawai'i Chapter of the American Shore and Beach Preservation Association (ASBPA)

Subject: Item K1 (Non-Action Item) Informational Briefing on the Programmatic Environmental Impact Statement for the Waikīkī Beach Improvement and Maintenance Program

On behalf of the Board of Directors and Members of the Hawai'i Chapter of the American Shore and Beach Preservation Association (ASBPA) we are providing this letter of support for the Waikīkī Beach Improvement and Maintenance Program as proposed by the Hawai'i Department of Land and Natural Resources (DLNR).

The DLNR proposes beach improvement and maintenance projects in the Fort DeRussy, Halekulani, Royal Hawaiian, and Kūhiō Beach Sectors of Waikīkī. These projects include the construction of new beach stabilization structures and the recovery of offshore sand and its placement on the shoreline. The objectives of the proposed actions are to restore and improve Waikiki's public beaches, increase beach stability through improvement and maintenance of shoreline structures, provide and improve safe access to and along the shoreline, and increase resilience to coastal hazards and sea level rise. The proposed actions are intended to maintain the economic, social, aesthetic, recreational, environmental, cultural, and historical qualities of Waikīkī.

Specifically, we support the tailoring of solutions for each unique beach cell at Waikīkī. Sand backpassing is proposed in the Fort DeRussy Beach Sector to move sand from one end of the cell to the other end where it is needed. T-head groins with beach fill is proposed in the Halekulani Beach Sector to stabilize the chronically eroding beach and retain sand longer. Ongoing beach nourishment is proposed in the Royal Hawaiian Beach Sector to mitigate chronic erosion. Beach nourishment with a segmented breakwater is proposed in the Kūhiō-Eva Beach Sector, while beach maintenance is proposed in the Kūhiō-Diamond Head Beach Sector. This project clearly demonstrates that there is no "One-Size-Fits-All" solution for preserving beaches.

Some public testimony and editorials on coastal improvement projects in Hawai'i improperly suggest that beach restoration does not work and that sand stabilization structures are frequently misunderstood and mislabeled as coastal armoring structures. Coastal armoring structures, such as

Hawai'i Shore & Beach Preservation Association

seawalls and revetments, are designed to harden the shoreline and prevent erosion of the land behind them, potentially limiting sand availability and the ability to laterally access the beach, which is why Hawaii's environmental laws prohibit their construction along sandy beaches. Conversely, beach restoration and sand stabilization structures do not prevent erosion, but they mitigate the hazard by placing and managing a specific volume of sand to meet project goals and objectives. Sand stabilization structures are engineered to mimic natural features found in Hawai'i and are designed to reduce sand loss and extend sand placement intervals.

ASBPA recognizes the need for, and endorses the concept of, resilient coastal systems to increase the sustainability of coastal communities. Beaches are nature's way of dividing the land from the sea. Preservation of beaches using beach management, maintenance, and stabilization methods, such as those identified within the Waikīkī Beach Improvement and Maintenance Program, replicate natural systems that attenuate wave energy and support coastal resilience. The proposed beach improvement and maintenance program serves as a great demonstration project that showcases possible solutions to the coastal erosion challenges facing much of the state's coastline; we applaud the DLNR for their involvement and look forward to the possibility of continuing this programmatic support at other beaches within the State.

The Hawai'i Shore and Beach Preservation Association (HSBPA, <u>http://asbpa.org/hawaii/</u>) is an organization of private sector, academic, and government professionals, students, and local community members dedicated to the preservation, restoration, and sustainable use of Hawaii's beaches and coastal environments. As the Hawai'i Chapter of the ASBPA, we are dedicated to preserving, protecting, and restoring Hawaii's coasts by merging science with public policy. All board and general members professionally involved with the referenced project recused themselves from developing this letter.

Sincerely,

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Andrew Wycklendt President, Hawai'i Shore and Beach Preservation Association



June 20, 2023

State of Hawaii Board of Land and Natural resources Kalanimoku Building 1151 Punchbowl St. Honolulu, HI 96813

FROM: Michael S. Takayama <u>michael.takayama@kyo-yaco.com</u> Kyo-ya Hotels & Resorts, LP 2255 Kalakaua Ave. Honolulu, HI 96815

SUBJECT: Item K-1: Informational Briefing for Final Programmatic Environmental Impact Statement (FPEIS). Waikīkī Beach Improvement and Maintenance Project. Waikīkī Beach, Oahu

Kyo-ya Hotels & Resorts, LP **strongly supports** the proposed beach improvement project by the Hawai'i Department of Land and Natural Resources (DLNR). The DLNR proposes beach improvement and maintenance projects in the Fort DeRussy, Halekulani, Royal Hawaiian, and Kūhiō Beach sectors of Waikīkī. These projects include the construction of new beach stabilization structures, and the recovery of offshore sand and its placement on the shoreline. The objectives of the proposed actions are to restore and improve Waikīkī's public beaches, increase beach stability through improvement and maintenance of shoreline structures, provide and improve safe access to and along the shoreline, and increase resilience to coastal hazards and sea level rise. The proposed actions are intended to maintain the economic, social, aesthetic, recreational, environmental, cultural, and historical qualities of Waikīkī.

As a family-owned company, Kyo-ya Hotels & Resorts, LP has been doing business in Hawaii since 1961. We are the steward of five major hotel properties in Hawaii- Sheraton Waikiki Hotel, The Royal Hawaiian Hotel, Moana Surfrider Hotel, Sheraton Princess Kaiulani Hotel, and Sheraton Maui Hotel.

Over the past several years, and as recently as this year, Waik $\bar{k}\bar{k}$ has experienced record high tides (King Tides) that have exacerbated erosion and flooding. These events have highlighted the impacts of sea level rise on the beaches of Waik $\bar{k}\bar{k}$. As sea levels continue to rise, beach loss will progressively degrade the recreational, social, cultural, environmental, aesthetic, and economic

value of Waikīkī. The Royal Hawaiian groin was rebuilt in 2020, after nearly 50 years of no new beach stabilization projects in Waikīkī. We are now at a crossroads with a clear and increasingly urgent need to implement maintenance and improvements to the Waikīkī shoreline in order to preserve and protect this unique and highly prized natural resource.

We support comprehensive, forward-thinking improvement projects like those proposed and recognize its urgency. With the combination of beach erosion and King Tides, the backshore is frequently flooded, particularly during high surf events, accelerating damage to backshore infrastructure. Without beach improvements and maintenance, sea level rise is likely to result in total beach loss in Waikīkī before the end of the century and result in an estimated economic loss of \$50 million to \$150 million per hectare. The loss of Waikīkī Beach alone would result in an annual loss of \$2.223 billion in visitor expenditures¹. Improvements and maintenance like those proposed in the DPEIS are necessary to restore and maintain the beaches of Waikīkī to continue to support Hawaii's tourism-based economy.

We offer the following summary of project-specific comments.

- 1. Over the past years, the beach fronting the Sheraton Waikiki has shifted landward approximately 3-4 feet to the point of being a chronic safety concern for guests and the general public accessing Gray's Beach from the Halekulani public access, particularly during high tide. In addition, since 2017, the staircase fronting the Sheraton Waikiki has been closed due to chronic safety concerns as a result of severe beach erosion. In recent years of extreme high tides and high summer surf has redistributed sand to behind the hau tree causing seasonal erosion of the beach fronting the Halekulani beach stairs and leading the failure of the Gray's beach groin. The proposed long term and comprehensive solution of the Waikīkī Beach Improvement and Maintenance Project will ensure the survival and resilience of Waikīkī Beach into the future.
- 2. We are also encouraged by DLNR's willingness to collaborate with the community stakeholders through the Waikīkī Beach Special Improvement District Association ("WBSIDA") and Waikīkī Beach Community Advisory Committee ("WBCAC"). Collaboration at this early stage in the planning process identifies and establishes the program's priorities and objectives and guides the development of the proposed beach improvement and maintenance actions. An example of a past beach project that DLNR collaborated with WBCAC and WBSIDA was on the Royal Hawaiian Groin Project that was completed in August 2020. The new groin successfully stabilized the beach in front of the Surfrider-Royal Hawaiian Sector for all residents and tourists to enjoy.
- 3. The proposed beach improvement projects in Waikīkī are essential for the future goal to maintain a viable beach in these areas. Several beachfront areas in Waikīkī are seeing the

¹ Tarui, N., Peng, M., Eversole, D. (2018). *Economic Impact Analysis of the Potential Erosion of Waikīkī Beach*. University of Hawai'i Sea Grant College Program. April 2018.

rapid deterioration of both public and private backshore infrastructure such as groins, seawalls and walkways. This highlights the need to make long-term investments into beach stabilizing structures throughout Waikīkī in addition to more immediate emergency repairs to damaged infrastructure.

- Climate change impacts including sea-level rise projected by the state of Hawai'i Climate Change Commission indicate significant flooding, wave overtopping and beach erosion in Waikīkī for the coming decades and suggest stakeholders and communities plan for *at least* 3.2 feet of sea-level rise now. This project has a strong climate change adaption component that is consistent with the recommendations of the State Climate Commission.
- 5. Without a stabilizing and energy-buffering beach to protect public and private coastal infrastructure, we can anticipate even larger and more expensive structural repair and improvement projects to be required soon to prevent the destruction of threatened coastal structures including critical public access walkways and beaches that serve as important recreational and lateral access amenities.
- 6. There is a need to balance and connect historical recreational beach uses with the maintenance of beach areas in the face of physical processes. This balanced management needs to account for the needs of a variety of user groups and needs and needs to consider the impacts of the effects of climate change and coastal storms.

Thank you for the opportunity to provide comments on this project.

Sincerely

Michael S. Takayama Senior Vice President Kyo-ya Hotels & Resorts, LP



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DIAMOND HEAD BREAKWATER SAFETY PROJECT

The Breakwater Safety Project proposes to relocate a breakwater structure approximately 45 feet landward of its current location such that it mimics the adjacent, natural rocky shoreline. The project will utilize the existing rock from the Diamond Head Breakwater to re-create a rocky tidepool area, similar to the adjacent natural shoreline along the existing seawall as the breakwater is no longer required for its original purpose of creating a boat basin. The proposed design can be raised or modified to address future climate change and sea level rise as required.

ENVIRONMENTAL MISPERCEPTIONS	ENVIRONMENTAL FACTS
The Environmental Assessment is outdated and does not take into consideration: i) additional concerns raised due to the project proposal by the State on State lands and submerged lands; or ii) recent science on climate change, global warming and sea level rise.	The requirements for analysis, science, alternatives analysis and impact assessment are consistent, regardless of the end "owner". The analysis considers sea level rise, and the design provides adaptation pathways to address future changes.
The Environmental Assessment uses flawed models and assumptions instead of detailed observations of waves, currents and marine environment. The analysis assumes an offshore fringing reef protecting the breakwater from wave action when, in fact, a deep-water channel funnels wave energy directly into the harbor. It falsely states typical surf conditions are not high enough to overtop this breakwater when, in fact, waves regularly overtop the existing breakwater, even at low tide and with a below-	The statistics used and models developed represent the "standard of care" for the coastal engineering industry. The analysis of waves and currents is statically and scientifically based using long term wave records. The breakwater is located "downstream" of surf breaks, and the project area will be designed to minimize reflected waves back "upstream". In fact, the new layout should reduce the production of linear reflected waves. The model contains all submerged features in the area, including channels and reefs to the extent they have been mapped. The project location is an isolated location that does not impact adjacent
average swell.	reef, surf spots or beaches.
average swell. SAFETY MISPERCEPTIONS	reef, surf spots or beaches. SAFETY FACTS
average swell. SAFETY MISPERCEPTIONS If the breakwater is removed, the swim basin would be constantly awash in turbulent waves and strong ocean currents, making the area unsafe for swimming and unusable for the public.	reef, surf spots or beaches. SAFETY FACTS Within the boat basin, the coastal modeling conducted indicates that the wave climate at the proposed rocky tidepool will be similar to the conditions that presently exist on seaward side of the Diamondhead breakwater, and nearly identical to the conditions at the existing tide pool area.
average swell. SAFETY MISPERCEPTIONS If the breakwater is removed, the swim basin would be constantly awash in turbulent waves and strong ocean currents, making the area unsafe for swimming and unusable for the public. UNVIABLE ALTERNATIVES	reef, surf spots or beaches. SAFETY FACTS Within the boat basin, the coastal modeling conducted indicates that the wave climate at the proposed rocky tidepool will be similar to the conditions that presently exist on seaward side of the Diamondhead breakwater, and nearly identical to the conditions at the existing tide pool area. ALTERNATIVES FACTS



June 20, 2023

State of Hawaii Board of Land and Natural Resources Kalanimoku Building 1151 Punchbowl St. Honolulu, HI 96813

Dear Chair and Members:

SUBJECT: Board Agenda Item K-1: Final Programmatic Environmental Impact Statement (FPEIS). In Strong Support of the Waikīkī Beach Improvement and Maintenance Project. Waikīkī Beach, Oahu.

As the state senator representing Waikīkī and a strong advocate for protecting our state's natural resources, and, in particular, our vulnerable coastlines, I submit this testimony on behalf of the residents, businesses and visitors of our Waikīkī community. I strongly support the beach improvement and maintenance project ("Project") in the Fort DeRussy, Halekulani, Royal Hawaiian, and Kūhiō Beach sectors of Waikīkī as proposed by the Hawai'i Department of Land and Natural Resources (DLNR). The Project includes the construction of new beach stabilization structures and the recovery of offshore sand and its placement on the shoreline, with the objectives of restoring and improving Waikīkī's public beaches, increasing beach stability, providing safe access to and along the shoreline, and increasing resilience to coastal hazards and sea level rise. If approved, these actions will enhance the economic, social, aesthetic, recreational, environmental, cultural, and historical strengths of Waikīkī.

Over the past several years, and as recently as this year, Waikīkī has experienced record high tides (King Tides) that have exacerbated erosion and flooding. These events have highlighted the impacts of sea level rise on Waikīkī's beaches, progressively degrading the recreational, social, cultural, environmental, aesthetic, and economic value of Waikīkī. We are now at a crossroads with a clear and increasingly urgent need to implement maintenance and improvements to the Waikīkī shoreline to preserve and protect this unique and invaluable natural resource.

Our community supports comprehensive, forward-thinking improvement projects such as those being proposed. The University of Hawaii, the Waikiki Special Improvement District Association, and the State are committed to plan and execute projects that will protect against, mitigate, adapt and sustain our coastlines and nearby communities. The legislature has continued to fund community-based adaptation and resilience planning to provide the science and community support for the Project; and, together, we can stem the estimated total loss of Waikīkī's beaches by century-end and the annual loss of \$2.2 billion in visitor expenditures. The Project will restore and maintain Waikīkī beaches to support Hawaii's tourism-based economy and, as importantly, the people who live, work and thrive here. I ask for your approval of the Project.

Aloha and mahalo for the opportunity to testify.

Sincerely,

Sharon Y. Moriwaki Senator, Senate District 12



Waikīkī Beach Services, LLC 889 Kahena St Honolulu, HI 96825 Phone: (808) 927-7441 Email: info@waikikibeachservices.com Website: www.waikikibeachservies.com

June 20, 2023

State of Hawai'i Board of Land and Natural resources Kalanimoku Building 1151 Punchbowl St. Honolulu, HI 96813

SUBJECT: (Item K-1) Informational Briefing for Final Programmatic Environmental Impact Statement (FPEIS). Waikīkī Beach Improvement and Maintenance Project. Waikīkī Beach, Oahu

Aloha,

Waikīkī Beach Services, LLC has been a beach concessionaire in Waikīkī since 1955, teaching the Hawaiian arts of surfing and canoe surfing to visitors and locals alike. We have watched many changes take place in Waikīkī over the decades, but there is one change that we do not want to see: the loss of beach in Waikīkī. We **strongly support** beach improvement and maintenance projects in the Fort DeRussy, Halekulani, Royal Hawaiian, and Kūhiō Beach sectors of Waikīkī.

These beach improvement and maintenance projects include the construction of new beach stabilization structures, the recovery of offshore sand, and placement of said sand on the shoreline. The objectives of these actions are to restore and improve Waikīkī's public beaches, increase beach stability through improvement and maintenance of shoreline structures, provide and improve safe access to and along the shoreline, and increase resilience to coastal hazards and sea level rise. The proposed actions are intended to maintain the aesthetic, recreational, economic, cultural, and historical qualities of Waikīkī.



Waikīkī has experienced record high tides (King Tides) that have exacerbated erosion and flooding making the beach either inaccesible or dangerous to beachgoers. These events have been a preview to the devastating impacts sea level rise will continue to have in Waikīkī. Sand replenishment and groin maintenance projects have shown to be integral in preserving the beach at Waikīkī.

In 2020, the Royal Hawaiian groin was rebuilt after 50 years of no new beach stabilization projects; prior to this project, the beach in front of the Royal Hawaiian and Sheraton Waikīkī hotels had become almost non-existent due to the constant battering from storms and King Tides. The beach became a minefield of exposed rock, concrete, and pipes that beachgoers had to dodge in order to access the ocean. At one point, access to this area of Waikīkī beach was even restricted due to unsafe/unstable conditions. However, after the 2020 Royal Hawaiian groin renewal and sand replenishment, beachgoers have been able to experience safer access to the beach and enjoy the ability to sunbathe, recreate and relax.

Waikīkī is wahi pana, or a celebrated and storied place, both in ancient and modern Hawai'i;



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famous surf breaks like *Kalehuawehe* were celebrated in many *mo'ōlelo* and the surrounding land was prized for it's year-round pleasant weather, leading many *ali'i* to erect their summer palaces and homes near the Waikīkī shoreline. In the 1900's, when aspects of the Hawaiian culture were near to fading away due to Missionary influence and the taboo on Hawaiian language and past-times, it was Waikīkī Beach where Hawaiians still continued to practice the arts of surfing and canoe surfing. Later, when tourism made it's way to our islands, Waikīkī furthered it's cultural significance by becoming the conduit where a group of expert watermen, known as Waikīkī Beachboys could not only hone their skills at these ancient Hawaiian watersports, but also share them with a world-wide audience. This practice of sharing our culture continues to this day. Waikīkī is known as the birthplace of modern surfing and it is still the only place in the world where a guest can experience the thrill of surfing a wave on a Hawaiian outrigger canoe.

Without our mālama and nourishment of this beach, through public and private partnerships, sea level rise will eventually lead to total beach loss. The economic impact would be devastating--\$2.23¹ billion in visitor expenditures and tens of thousands of lost jobs; but the loss of such a culturally important part of Hawaiian history is incalculable and the reverberations of this loss will be felt by residents and for many generations.

Mahalo for your time and consideration,

Traci Bush Waikīkī Beach Services, LLC

¹ 1 Tarui, N., Peng, M., Eversole, D. (2018). Economic Impact Analysis of the Potential Erosion of Waikīkī Beach. University of Hawai'i Sea Grant College Program. April 2018.



June 23, 2023

State of Hawaii Board of Land and Natural Resources Kalanimoku Building 1151 Punchbowl St. Honolulu, HI 96813

FROM:

Valerie Haney, Director, Association of Waikiki Shore Beach Condominium Owners

SUBJECT: Item K-1: Informational Briefing for Final Programmatic Environmental Impact Statement (FPEIS). Waikiki Beach Improvement and Maintenance Project. Waikiki Beach, Oahu

The Waikiki Shore Beach Condominiums owners, its managers, and tenants, have been especially interested and supportive of the efforts to improve the condition of this natural resource since the hydraulic dredging project in 2012 to restore sand between the Kuhio Beach Ewa Groin and the Royal Hawaiian Groin. It was expected that some continual beach maintenance would be accomplished regularly, as the value of Waikiki and Waikiki Beach is self-evident from long ago. However, the task is huge, involves a multitude of diverse people, and requires the type of long term management effort that is now before you.

The leadership behind the establishment of the Waikiki Beach Special Improvement District bears witness to this need:

The Waikiki Beach Special Improvement District was created on May 18th, 2015 by city ordinance to preserve and restore Waikiki Beach and to provide consistent and credible management for future beach revitalization. Special improvement districts are a proven tool used across the country to fund specific projects within the area that are supplemental to government services. SIDs are among the most effective ways of forming and funding public-private partnerships to muster resources to tackle especially complicated challenges.

Through the facilitation of the Waikiki Beach Special Improvement District Association, a comprehensive Waikiki Beach Improvements Plan was developed, <u>which included all people</u> <u>interested the process</u>. The Waikiki Beach Condominiums Association formally endorsed the project's Draft Environmental Impact Statement in June 2021 and we are doing so again in June 2023.

To assist your decision making, please see photographic evidence below of the coastal damage and beach erosion at high tides that has taken place over just the last 10 years. The photos show



areas a) in front of Waikiki Shore b) the beach ewa of Waikiki Shore, and c) in front of Outrigger Reef hotel.

The need for this project has now reached a critical level. If there is any information or data you need from us to assist in reaching a conclusion, we would be delighted to provide it.

Valerie Haney



WAIKIKI SHORE TESTIMONY PHOTOS (June 23, 2023)





































HONOLULU, HI 96815















How the Beach in front of Waikiki Shore Looked Just 10 Years Ago (2013)

Diamond Head View







Ewa View

