

Honokea Final EA Comments and Responses Matrix

Table 7.3 Summary of DEA Comments and Responses

Comments	Commenter	Responses
Construction Impacts and Best Management Practices (BMPs)		
<p>You must reasonably control the generation of all airborne, visible fugitive dust. Note that construction activities that occur near to existing residences, businesses, public areas, and major thoroughfares exacerbate potential dust concerns. It is recommended that a dust control management plan be developed which identifies and mitigates all activities that may generate airborne, visible fugitive dust. The plan, which does not require Department of Health approval, should help you recognize and minimize potential airborne, visible fugitive dust problems.</p> <ul style="list-style-type: none"> • Construction activities must comply with the provisions of Hawaii Administrative Rules, §11- 60.1-33 on Fugitive Dust. In addition, for cases involving mixed land use, we strongly recommend that buffer zones be established, wherever possible, in order to alleviate potential nuisance complaints. • You must provide reasonable measures to control airborne, visible fugitive dust from the road areas and during the various phases of construction. <p>These measures include, but are not limited to, the following:</p> <ul style="list-style-type: none"> o Planning the different phases of construction, focusing on minimizing the amount of airborne, visible fugitive dust-generating materials and activities, centralizing on-site vehicular traffic routes, and locating potential dust-generating equipment in areas of the least impact; o Providing an adequate water source at the site prior to start-up of construction activities; Landscaping and providing rapid covering of bare areas, including slopes, starting from the initial grading phase; o Minimizing airborne, visible fugitive dust from shoulders and access roads; o Providing reasonable dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and o Controlling airborne, visible fugitive dust from debris being hauled away from the project site. <ul style="list-style-type: none"> • If you have questions about fugitive dust, please contact the Enforcement Section of the Clean Air Branch 	<p>DOH Clean Air Branch / Indoor Radiological Health Branch</p>	<p>Honokea will utilize and implement a dust control management plan including standard construction notes and details requiring mitigation of phased construction dust, noise and erosion prevention during the construction period per HAR §11- 60.1-33. Please see Section 3.2 Topography, Soils and Grading and Section 3.12 Air Quality for additional dust control measures.</p> <p>A temporary meter on the existing fire hydrant will be used for dust control water, augmented by other sources if needed.</p>

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Air Quality		
<ul style="list-style-type: none"> The creation of apartment buildings, complexes, and residential communities may increase the overall population in an area. Increasing the population in an area may inadvertently lead to more air pollution via vehicle exhaust. Vehicle exhaust releases molecules in the air that negatively impact human health and air quality, as they are known lung irritants, carcinogens, and greenhouse gases. Ensure that residents keep their vehicle idling time to three (3) minutes or less. Consider providing bike racks and/or electric vehicle charging stations that can help reduce air pollution 	DOH Clean Air Branch / Indoor Radiological Health Branch	<p>Honokea will not increase the overall population in the Kalaeloa area, as no residential units are planned. However, the parking lot and overall circulation has been designed to reduce unnecessary idling and maximize parking, drop off, and traffic efficiency.</p> <p>The project will provide bike racks and electrical vehicle charging stations.</p>
Cultural and Historical Resources		
<p>Archeology sites line up with Tuggles Kualaka'i trail map. The Kualaka'i trail ran directly through the surf park site and other archeology studies have stated that remnants of the ancient trail are likely still there. This parcel is part of the extremely well documented Leina a ka uhane.</p>	Bond	<p>The project archaeologist has overlaid the Kualaka'i trail over the project region and the trail does not intersect with the project site. See Figure 3.14.</p>
<p>Conduct thorough archaeology for the project</p> <ul style="list-style-type: none"> explore sinkholes to look for natural and cultural remains investigate even small sinkholes, filled-in sinkholes and those that do not appear culturally modified conduct GPR for filled-in sinkholes prepare a preservation plan for cultural resources of the study area save a part of the natural landscape to showcase the natural beauty and sinkholes if sinkholes do not have to be destroyed, then leave them in place find a solution to lessen the impact on cultural resources if this surf park will be built, then save other parts of Barbers Point teach visitors about the cultural significance and history of surfing create a National Park in the region 	Bond	<p>The project archaeologist has documented and conducted site surveys of sinkholes on the project parcel. Sinkholes were thoroughly investigated, and animal samples found in sinkholes were sent to the laboratory for further analysis. Results of the surveys and lab analysis are forthcoming and will be incorporated into the final Archaeological Inventory Survey.</p> <p>Ground penetrating radar is not considered an industry standard or accurate tool regarding the investigation of sinkholes for purposes of archaeological preservation. Honokea's archaeologist conducted site surveys of applicable sinkholes based on indicators, experience and standard practices. An on-site monitoring program will also be considered as a part of coordination with SHPD.</p> <p>The lagoon water body will sit on grade, with water contained by a thick HDPE liner, supported by an aggregate layer and compacted soils below. The liner and bottom of the aggregate layer is not anticipated to penetrate the depth of the water table, measured at approximately 22'-0" below the existing ground surface elevation(s) on site, based on soil borings and per the project's geotechnical assessment, referenced in the PER (Appendix A). Adjacent perimeter wall structures and the center pier will be concrete wall structures, with footings that may be several feet below the liner, which are still not anticipated to be at or near groundwater elevations.</p>

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		<p>Based on the project’s geotechnical assessment, shallow spread and/or continuous footings may be used to support the relatively light structural loading of the anticipated one-story and/or two-story structures planned at the site. A probe and grouting plan and protocol to eliminate small voids in the prepared substrate below the foundations is recommended. For larger voids, and depending on actual subsurface conditions, different foundation systems (such as micropiles, etc.) may be used where necessary to avoid the need to fill large voids that may be encountered.</p> <p>Ongoing coordination with SHPD will include preservation plans, including potential preservation in place for archaeology sites as appropriate. The culture and history of the project site and region is a critical component of the Honokea program, which includes an educational historic museum on site.</p>
<p>The archaeological impacts and mitigation are not adequately discussed in this DEA for two reasons: the Archaeological Literature Review and Field Inspection (“ALRFI,” Appendix F) is incomplete, and the Archaeological Inventory Survey (“AIS”) has not been initiated or completed prior to the public comment period.</p> <p>First, despite the inclusion of the words “literature review” in ALRFI, the ALRFI does not discuss any of the previous archaeological work completed in the project area. No AIS’, no other ALRFIs, no Preservation Plans (“PP”), and no Monitoring Plans (“MP”) are included in the ALRFI. Additionally, the ALRFI states “extinct bird remains and other faunal material, human burials, historic material and agricultural deposits have been found during the excavation on the ‘Ewa Plain.” (Emphasis added.) Despite this assertion, no other archaeological documents, including AIS’, are cited to or included in the ALRFI. Presumably, prior archaeological work will be discussed in the forthcoming AIS, which leads to the second reason.</p> <p>Second, despite opening the DEA to public comment, the AIS has not been initiated, let alone completed, meaning the full impacts on archaeological sites, and the mitigation of those impacts, are not discussed.</p> <p>The ALRFI and DEA both state that prior to ground disturbing activities, an AIS must be completed, but an AIS must be completed even earlier than that for the public to be fully aware of impacts and to hold the project accountable.</p>	<p>Rivera / Burgess</p>	<p>The project archaeology team conducted an archaeological reconnaissance survey (ARS) for the project, however SHPD formally requested we change the ARS to an ALRFI with a supplemental Cultural Impact Assessment report also attached. The correct ARS has been replaced in Appendix F.</p> <p>The archaeologist has initiated and is in the process of completing an Archaeological Inventory Study (AIS). However, the Chapter 6E process is separate from the Chapter 343 EA process, and is not required to be completed at the time of a Final EA. The project team will continue to coordinate with SHPD for the AIS submittal and ongoing coordination on the Chapter 6E process.</p> <p>There is no requirement for an AIS to be completed earlier than ground disturbing activities for purposes of public information. In fact, the AIS requires discretion for potential burials and cultural sites, preventing public disclosure of locations that may be culturally sensitive.</p> <p>The project will comply with the Chapter 6E process and applicable Chapter 343 public disclosure and comment period requirements.</p>

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Development Standards		
<p>The HSV shall be consistent with my community's vision and mission set forth in the 2006 Kalaeloa Master Plan;</p> <p>The HSV shall promote the protection of cultural practices, environmental, and endemic/native species;</p> <p>The HSV shall utilize and promote sustainable best-practices and technologies;</p> <p>Clubhouse and Camp Cabins. These facilities are vital for a state-of-the-art "Waterman" training facility for federal, state, and city first responders, which may include overnight accommodations;</p> <p>The HSV shall be a facility that will work with area schools to prepare our keiki for the Olympics, collegiate-level sports, and future jobs, which may require overnight accommodations;</p> <p>Film Production. The HSV shall be a facility that will partner and take full advantage of the Hawaii Film Office and Film Industry opportunities with an emphasis on marketing Hawai'i and ensuring the film industry related job training;</p> <p>Landscaping. The design of the HSV facility shall incorporate Hawaiian motifs, ornamental work, and native landscaping; and</p> <p>I expect the HSV to explore all avenues to utilize brackish water as a primary source for the project. I also understand HSV developers have already had discussions with Hawaii Water Service (a privately-owned water and wastewater company) to provide water, which is a resource of water that is separate from the Board of Water Supply's resources.</p>	<p>Senator Fevella</p>	<p>Honokea acknowledges Senator Fevella's expectations for the project. The project is exploring alternate water sources, including brackish water wells, in addition to the Hawaii Water Service water supply discussions already taking place.</p>
<p>We have no additional comments.</p>	<p>DLNR Engineering</p>	<p>Honokea acknowledges this comment.</p>
<p>The Department of Design and Construction has no comments to offer at this time.</p>	<p>CCH DDC</p>	<p>Honokea acknowledges this comment.</p>
<p>We have no comments at this time, as we do not have any facilities or easements on the subject properties. Please note that Coral Sea Road was identified to be under the jurisdiction with the State of Hawai'i Department of Transportation.</p>	<p>CCH Department of Facility Management</p>	<p>Honokea acknowledges this comment.</p>

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Airport Impacts		
<p>The HDOT-A has opposed this development from first awareness and has communicated this opposition to the project consultants and landowner. HDOT-A continues its opposition to the inclusion of the camp cabins at the proposed location which are located within the 60-65 DNL</p>	DOT-A	<p>The project will comply with required FAA, HCDA, and DOT-A rules and policies, and will work with agencies at the time of future development permit approvals to ensure all applicable requirements are met and accounted for. The proposed camp cabins use is an alternative the project will consider as it is allowed by national FAA standards. With the insulative properties of the cabin wall construction, the cabins will provide a level of noise safety greater than camping with tents. The project will continue to coordinate with DOT-A and HCDA to ensure all proposed uses comply with State requirements and policies.</p>
<p>Due to the proximity to the airport, the Honokea Surf Village proponents, consultants, users, and landowner, have been informed of noise impacts to the surf village from aircraft operations. There is also a potential for fumes, smoke, vibrations, odors, etc., resulting from occasional aircraft flight operations over or near the project location. These impacts may increase or decrease over time and depending on airport operations.</p>	DOT-A	<p>Honokea will inform all guests and users regarding the potential for noise and air quality impacts during their time at the facilities due to the adjacent airport property, either at the time of entrance or in advance if possible. Honokea will coordinate with HDOT-A for any large-scale airport activities that may cause larger/longer than usual effects to mitigate impacts on guests in the facility by rescheduling or timing usage to avoid peak airport disruption periods.</p>
<p>The HDOT-A also has concerns about the creation of wildlife attractants at the Honokea Surf Village. Various aspects of the proposed development have the potential to create dangerous situations with an increase in wildlife visiting the property. The following parts of the proposed development are the most concerning:</p> <ul style="list-style-type: none"> a. The inclusion of terraced loi ponds and a large specimen tree that will include decorative lanterns. Loi ponds are particularly attractive to flocking birds and decorative lighting can attract seabirds. b. The camp cabin lagoon will create a wildlife attractant due to the brackish nature of the water and the multitude of vegetation within. c. Underwater lights and other illuminations have the possibility of attracting seabirds during their flight from nesting and feeding grounds. d. The grab and go snack bar and dining terrace will introduce food and trash to the area. <p>Should any of these concerns create a wildlife attractant, the developer shall immediately mitigate the hazard upon notification by the HDOT-A and/or the Federal Aviation Administration (FAA). Please review the FAA Advisory Circular (AC) 150/5200-33C, Hazardous Wildlife Attractants On Or Near Airports for guidance.</p>	DOT-A	<p>Honokea will consult with USFWS, DOWAW, and other federal and state regulatory agencies as required to coordinate on potential wildlife attractants and hazards. The project will follow agency recommendations to minimize impacts to the maximum extent practicable.</p> <ul style="list-style-type: none"> a. Decorative lighting will be coordinated with DOWAW guidelines to avoid disorienting seabirds. b. The project will consult with wildlife and endangered species lighting experts to design minimally attractant lighting fixtures. The camp cabin lagoon will be monitored and minimized for potential wildlife impacts if necessary. c. The project will consult with wildlife and endangered species lighting experts to design minimally attractant underwater lighting fixtures and colors. Underwater lights will be monitored and minimized for potential seabird impacts if necessary. d. Honokea will evaluate the option of closed trash enclosures along with potentially posting signage to inform guests not to feed birds in the park. <p>In addition, usage of landscaping that is highly desirable to birds will be avoided.</p>

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		<p>Honokea will work with USFWS and DOFAW to determine appropriate wildlife deterrents, including potential audible repellent measures or a potential incremental reduction of underwater light fixtures (as an example) as appropriate.</p> <p>Facility policies and employee handbooks and training will be implemented as a part of best management practices.</p> <p>In the unlikely event a wildlife incident occurs on the property as a part of facility Standard Operating Procedure, standard protocols will be followed in accordance with State and Federal law.</p>
<p>The FAA AC 150/5200-33C further recommends a separation distance of 10,000 feet between the airport and any hazardous wildlife attractants. The proposed surf village is anticipated to be a wildlife attractant.</p>	<p>DOT-A</p>	<p>The proposed surf village has been in coordination with DOFAW and has satisfied DOFAW's initial wildlife mitigation requirements. Per FAA Circular 150/5200-33C, most public-use airports have large tracts of open, undeveloped land that provide added margins of safety and noise mitigation. If DOT-A should find that bird incidents have increased once Honokea is operational, Honokea will work with DOT-A and a qualified airport wildlife biologist to determine appropriate wildlife deterrents including potential audible repellent measures.</p>
<p>Please correct the name to Daniel K. Inouye International Airport on the last paragraph of page 3-70 (PDF page 155) and on the second paragraph of page 5-8 (PDF page 179) that cites Honolulu International Airport.</p>	<p>DOT-A</p>	<p>Honokea has complied with this comment.</p>
<p>Page 3-74 (PDF page 159) discusses the use of photovoltaic (PV) solar panels to produce over 1.0 megawatt of electricity. The discussion includes glint and glare. PV solar energy systems located in or near the approach path of aircrafts can create a hazardous condition for pilots due to possible glint and glare reflected from the PV panel array.</p> <p>The FAA requires a glint and glare analysis for all solar energy PV systems near airports. The https://www.sandia.gov/glare-tools/ has information and guidance with the preparation of a glint and glare analysis. An FAA Form 7460-1 is also necessary for the solar energy PV system. Note that you will need latitude, longitude, ground elevation and the above ground elevation (AGL) data for the installation site in order to fully complete this form. After the FAA determination of the Form 7460-1 glint and glare analysis, a copy shall be provided to the HDOT-A by the owner of the solar energy PV system.</p> <p>If glint or glare from the PV array creates a hazardous condition for pilots, the owner of the PV system shall be prepared to immediately mitigate the hazard upon notification by the HDOT-A and/or FAA.</p>	<p>DOT-A</p>	<p>According to the FAA 14 CFR Part 77 Final Policy published in May 2021, the policy's requirement of a glint and glare study states it does not apply to solar energy systems not located on airport property, but encouraged, and should be coordinated with the airport sponsor.</p> <p>Solar PV panels will be installed on the roof of facilities and over the parking lot. The project will continue to work with DOT Airports and other agencies as required and will meet applicable FAA requirements before the time of building permits and construction to ensure that the project does not create a potential glare hazard. The PV system is not anticipated to emit appreciable RF to the extent necessary to disrupt air-to-ground communications. The PV system is anticipated to produce 3 MW of energy from solar panels and feature 4 MWH of energy storage via battery systems.</p> <p>If it is determined that further consultation with FAA is required on this issue, the applicant will be prepared to address and mitigate a direct and identifiable hazard.</p>

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Solar energy PV systems have also been known to emit radio frequency interference (RFI) to aviation-dedicated radio signals, thereby disrupting the reliability of air-to-ground communications. Again, the owner of the solar energy PV system shall be prepared to immediately mitigate the RFI hazard upon notification by the HDOT-A and/or FAA.		
Thick smoke from uncontrolled fires is a potential obstruction hazard to flight operations. Therefore, the energy or battery storage facility for the photovoltaic solar energy system shall have sufficient firefighting/fire suppressant ability to prevent potential hazardous smoke in the protected air space.	DOT-A	Photovoltaic (PV) systems will meet current HFD requirements, and the selected PV provider will be responsible for fire suppression design. A Battery Energy Storage System (BESS) will be utilized, and will be designed to NFPA 855, standard for the installation of Stationary Energy Storage Systems. While water is not used for fire protection on the BESS, generally fire hazard is mitigated through providing adequate buffers and vegetation management.
FAA regulation requires the submittal of FAA Form 7460-1 Notice of Proposed Construction or Alteration pursuant to the Code of Federal Regulations, Title 14, Part 77.9, if the construction or alteration is within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with its longest runway more than 3,200 feet. Construction equipment and staging area heights, including heights of temporary construction cranes, shall be included in the submittal. The form and criteria for submittal can be found at the following website: https://oeaaa.faa.gov/oeaaa/external/portal.jsp .	DOT-A	An FAA Form 7460-1 Notice of Proposed Construction or Alteration will be submitted to FAA as construction is within 20,000 feet of Kalaeloa Airport and exceeds a 100:1 surface from the closest point on the runway.
The Preliminary Engineering Report (page 4, PDF page 259) states that a "New perimeter security fencing will be provided where the site does not adjoin the Kalaeloa Airport security fence (makai, mauka, and Diamond Head sides)." Honokea Surf Village shall not use the Kalaeloa Airport security fence as part of the Honokea Surf Village and shall provide their own fence on all sides of their property.	DOT-A	Honokea shall not use the Kalaeloa Airport security fence, and shall provide their own fence on all sides of their property as needed and in accordance with HCDA Kalaeloa Rules.
The landowner shall grant an avigation easement to the HDOT-A to indemnify the State of Hawaii of any liability from the proposed Honokea Surf Village.	DOT-A	HCDA shall grant an avigation easement to the DOT-A as required.
Traffic Impacts		
We have reviewed the Mobility Analysis Report dated April 2022 included in the DEA. The traffic study area should encompass a broader area to include additional intersections to identify any potential traffic impacts to the nearby State highway facilities.	DOT-HWY	Honokea acknowledges this comment. The project's traffic engineers have revised the Mobility Analysis Report and enlarged the study area by one intersection in each direction to better identify potential traffic impacts to nearby State highway facilities.

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<p>Although traffic conditions for drivers are expected to remain largely the same after the completion of this project, access for individuals without cars is a concern.</p> <p>The nearest bus stop from the project's entrance is 1.3 miles north. Pedestrian facilities (e.g. sidewalks) are not located between the nearest bus stop and the project (DEA at3-51). So, people without access to cars would have to walk on the grass shoulder of the highway to reach the wave pool. Walking on grass shoulders is somewhat common on O'ahu, but with the increased traffic going to and from the wave pool it is recommended that more safety features be installed for pedestrians between the bus stop and the project site.</p>	<p>Rivera / Burgess</p>	<p>Off-site improvements are not required by HCDA at this time. Due to the project's location away from residential neighborhoods or major bus lines, it is not anticipated that guests will access the park by foot. The project team will coordinate with HCDA on future off-site pedestrian improvements. The project team will also coordinate with the Department of Transportation Services (DTS) to discuss the need for potential bus stop locations, or if any buses would need to be accommodated on site with a turnaround. Ultimately DTS makes its own decisions regarding locations of bus stops and bus routes.</p> <p>The project design provides a drop-off circle that supports the use of ride share services for those who access the site without private vehicles.</p> <p>In regards to other non-vehicular project access, a proposed Priority 2 Shared Use Path project (Project ID 2-37 in the 2019 O'ahu Bike Plan) is located on Coral Sea Road fronting the Project site. A dedicated bicycle lane is also proposed in the HCDA rules for improvements to Coral Sea Road. Driveway improvements will be designed to minimize conflicts between bicyclists and turning vehicles. Both short-term and long-term bicycle parking will be provided</p>
<p>We do not support the three access points proposed on Coral Sea Drive which may be excessive and within close proximity of each other. Alternatively, it is recommended that the Applicant should utilize the side roadway along Long Island Street for multiple access movements.</p>	<p>DOT-HWY</p>	<p>Honokea recognizes DOT-HWY's preference to consolidate access points whenever possible. The alternative third access point off of Long Island Street is located on a street that is not owned by the project, but rather is owned by the adjacent landowner. The project prefers and will negotiate access off of Long Island Street at a future point in time, but currently does not have control or access through this private road. Note that this driveway is not for public access and is for staff and service vehicles only. Until such time off-site access can be negotiated, the project will plan for 3 access points off Coral Sea Road, with one for service access and staff only. The project team will continue to coordinate with DOT-HWY on this issue throughout design and permitting.</p>
<p>The current Roosevelt Avenue and Coral Sea Road cannot support massive tourist cars and buses, as shown by the huge parking lot. The parking lot will be a huge heat sink.</p>	<p>Bond</p>	<p>Roosevelt Avenue and Coral Sea Road are designed to State and County development standards adequate to support cars and buses. The Honokea project does not propose utilization or accommodation of non-standard vehicles.</p> <p>PV panels are proposed and will provide shade over the parking areas. Where PV panels are not installed, parking lot landscaping and shade trees will be installed as required by HCDA Kalaeloa Rules. In addition, the use of high albedo concrete or other non-heat absorbing material as required by HCDA rules will be used when PV panels are not employed.</p>

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		Stormwater management Low Impact Development (LID) features, such as rain gardens and vegetated swales within the planter islands in the parking lot, will also be installed to meet the City’s LID requirements.
Transportation Demand Management (TDM) Strategies. The applicant must develop and submit a TDM Strategy to the Department of Transportation Services (DTS)	DTS	Honokea will coordinate with DTS and develop a TDM strategy for submittal at the time of building permitting. Strategies encouraging public transportation, carpooling, and ride-share travel options for both guests and employees will be considered by Honokea and HCDA.
Tourism and Economy		
Substantial adverse impacts consequent to increasing reliance on tourism via the project need to be assessed and disclosed. The DEA conclusory asserts there will be no cumulative impacts despite the construction of another surf park in the area – Wai Kai. Doubling the concentration of surf parks on O’ahu will increase surf tourism, tourism generally, and therefore the number of surfers in surrounding areas, including surf breaks. These breaks are already crowded and there is no way that the project can confine the tourists it entices to O’ahu to stay only in the surf park. Instead, it will increase O’ahu’s profile as a surf destination and therefore increase crowding at natural surf breaks. There will be more “accidents”, decline in quality of life, and traffic. These are reasonably foreseeable impacts on the economic and social welfare of the community.	Isaki	<p>Honokea’s focus is on providing sports training, including surfing, to all demographics, and is not tourist centric. The project will aim to improve Hawai’i capabilities in sports, life safety and water safety training, and other film industry opportunities. While there may be tourists that utilize the facilities, the project is not actively catering to or advertising to tourists as the basis of economic sustainability. The project’s focus is unique to the Honokea program and mission that is based on the Keaulana family legacy, separate from and unrelated to any resort or development projects in the area.</p> <p>The project will aim to reduce “accidents” as it will take less experienced surfers out of dangerous ocean surf locations to give them more training in a safe, controlled environment. The project will also provide life safety professionals with the tools to help save lives, as this project will become a physical classroom for increased training and development. Ocean safety training and first responder events are anticipated to be conducted on a monthly basis.</p> <p>The project will have a positive impact on safety in ocean environments, and will improve the economic and social welfare of the community by providing jobs and educational opportunities with local schools and youth. Increasing sports training facilities resources on the leeward side of the island will allow O’ahu and the State of Hawai’i as a whole to continue to produce world class athletes, and is a critical aspect for the project. The type of wave system selected for this project will give local surfers the opportunity to strive to be Olympians without having to travel out of state to keep up with the sport as it progresses.</p>
In regard to alternatives, even inasmuch as the purpose of the project is to train lifeguards and other ocean safety personnel, a reasonable alternative lies in consolidating efforts with the existing Wai Kai project. Another possibility is to examine the reasons for the developing need for more ocean	Isaki	Consolidation with a separate development project with separate ownership, investors, and land resources is unreasonable and near impossible. The type of waves generated by the Honokea project are

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<p>safety officials (i.e. tourism) and direct efforts towards that. Inasmuch as the purpose “is to create a place of community that allows visitors, residents, and patrons the opportunity to experience living with great connections to place, to culture, and to each other by sharing Hawaiian values, culture, and history through surf and surf culture” – consider also how promoting tourism is going to destroy the surf culture that this project is supposed to be a part of. Already the surf breaks are inundated with licensed and unlicensed surf schools, surf tours, and concierge level surf lessons – mostly by non-local operators. The Division of Boating and Ocean Recreation does little to regulate this other than to require they put stickers on the boards.</p>		<p>unique to the technology chosen for this development, which is the reason it is better suited for life safety training.</p> <p>The project’s focus is not to promote tourism. The project’s focus is to enrich and enhance the knowledge of surfing culture through education. While there are issues in the surf businesses and safety in existing beach areas, Honokea will teach and train surfers and life safety professionals in order to help improve ocean education and experience to reduce accidents and unnecessary injuries. Honokea’s President Brian Keaulana, who continues to be a pioneer in the global ocean safety community, agrees that under this project team’s guidance, wave pools can be used as tools to educate and promote Hawaii’s surf culture globally around the world. Honokea is a platform to share Hawaiian culture, with core values of sustainability, family, celebrating culture, and wellness.</p>
<p>The addition of a second wave pool in West O’ahu will increase the surfing tourism market in Hawai’i. Surf breaks all around the island are already full of licensed and unlicensed surf schools that are mostly run by non-local operators. The Division of Boating and Ocean Recreation hardly regulates these surf schools. The addition of the Honokea Surf Village will induce more out-of-state visitors to come with the intention of learning to surf not only at the wave pools, but also at already crowded ocean surf breaks. Surfers coming to try out the wave pool will inevitably venture out to our already crowded ocean breaks.</p>	<p>Rivera / Burgess</p>	<p>Although Wai Kai is not yet open, there is already a similar standing wave pool system at Wet ‘n’ Wild Hawaii in Kapolei, which does not appear to have increased surfing activity at surf breaks around the island. Honokea is not speculating on the status or goals of a separate, resort driven development. The purpose of Honokea is to educate and train local athletes, including surfers and life safety professionals, in order to create a safer, culturally and technically educated ocean community in West O’ahu and O’ahu as a whole. The project will also provide a safe environment for surfing when ocean waves are small or non-existent.</p> <p>Honokea, similar to a gym, is not targeting out of state visitors as a main demographic for any programs or services. Honokea will serve all users, especially the local community of Kalaeloa and West O’ahu. If surfers who utilize the wave pool end up going out to the ocean, they will be better prepared to make better informed decisions, and will help keep the ocean community safe through education and training.</p>
<p>Sea Level Rise</p>		
<p>10 feet SLR according to the top Greenland, Arctic and Antarctic scientists. 5-6 feet of SLR will likely make HNL unusable. Thwaites alone could cause sea levels to rise about 10 feet, the scientists say.</p> <p>When HNL is closed due to SLR and ‘Ewa flooded tourists will not be coming to ‘Ewa. Kalaeloa will be the only ‘Ewa major airport and will be saturated with military aircraft and cargo aircraft to support Crumbling ‘Ewa</p>	<p>Bond</p>	<p>The project parcel is located over 3,000 feet from the shoreline. The project is not located within the State Special Management Area, the standard tsunami inundation zone, any high-risk flood zones, or the predicted 3.2 ft sea level rise exposure area. Existing minimum ground elevations on the property are approximately 22 feet MSL, far above SLR predicted by any current model. See Figure 1.7 for additional information.</p>

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Comments	Commenter	Responses
<p>infrastructure, loss of major harbors, container facilities, escaping residents.</p>		
<p>Given sea level rise projections how is a development this close to the shoreline even allowed?</p> <p>It will be underwater in a matter of years. Or ripped apart by the next cat 5 hurricane almost assured to hit us with climate change pushing stronger tropical storms ever closer to our island chain.</p>	<p>McDermott</p>	<p>The project parcel is located over 3,000 feet from the shoreline. The project is not located with the State Special Management Area, the standard tsunami inundation zone, any high-risk flood zones, or the predicted 3.2 ft sea level rise exposure area. Existing minimum ground elevations on the property are approximately 22 feet MSL, far above SLR predicted by any current model.</p> <p>See Figure 1.7 for additional information.</p> <p>The project will comply with City and County building code standards applicable for wind and hurricane design requirements.</p>
<p>Flora and Fauna</p>		
<p>DOFAW concurs with the mitigation measures included in the DEA intended to avoid construction and operational impacts to State-listed species including the Hawaiian Short-eared owl or pueo (<i>Asio flammeus sandwichensis</i>), Hawaiian Duck (<i>Anas wyvilliana</i>), Hawaiian Stilt (<i>Himantopus mexicanus knudseni</i>), Hawaiian Coot (<i>Fulica alai</i>), Hawaiian Common Gallinule (<i>Gallinula chloropus sandvicensis</i>), and seabirds. For illustrations and guidance related to seabird-friendly light styles that also protect the dark, starry skies of Hawai'i, please visit https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf.</p> <p>DOFAW provides the following additional comments regarding the potential for the proposed work to affect other listed species in the vicinity of the project.</p> <p>We concur with mitigation proposed in the DEA for the Hawaiian Hoary bat or 'Ōpe'ape'a (<i>Lasiurus cinereus semotus</i>), which could potentially occur in the vicinity of the project area. We would also recommend, however, that the use of barbed wire be avoided because bats can become ensnared and killed by such fencing during flight.</p> <p>We additionally concur with mitigation proposed in the DEA to reduce the risk of wildfires. We also recommend coordinating with the Hawai'i Wildfire Management Organization at (808) 850-900 or admin@hawaiiwildfire.org, on how wildfire prevention can be addressed in the project area.</p> <p>DOFAW recommends minimizing the movement of plant or soil material between worksites. Soil and plant material may contain pathogens, pests, or invasive plant parts that could harm our native species and ecosystems. We recommend consulting the O'ahu Invasive Species Committee (OISC) at</p>	<p>DLNR – DOFAW</p>	<p>Honokea acknowledges DOFAW's review and concurrence with the mitigation proposed in the DEA for the various aforementioned species. Honokea will coordinate with the Hawai'i Wildfire Management Organization (HWMO) to reduce the risk of wildfires.</p> <p>Honokea agrees with DOFAW's recommendation and will minimize the movement of plant or soil material between worksites where possible.</p> <p>Honokea will coordinate with DOFAW to create a wildlife education program for project staff.</p> <p>Honokea will incorporate DOFAW's mitigation recommendations to minimize predator presence on the project site.</p> <p>Honokea acknowledges any State-endangered plant species in the project landscaping palette should only be used in a landscaped garden, and must have a plant tag issued by DOFAW to confirm they have been legally sold.</p> <p>Honokea also acknowledges any work with threatened or endangered species, including collections and propagation by KHP, must be conducted under the conditions of an Endangered Plant Research and Collecting Permit.</p> <p>Honokea acknowledges DOFAW's concerns regarding the effect of the project on groundwater flow in the area, which could ultimately impact adjacent critical habitat for listed plants. The project is anticipated to have very little, if any, impacts on the State's groundwater resources. While the addition of the lagoon area will add a sizable increase in impervious area, all rain runoff will still enter the ground at the perimeter</p>

Table 7.3 Summary of DEA Comments and Responses

Comments	Commenter	Responses
<p>(808) 266-7994 to help plan, design, and construct the project, learn of any high-risk invasive species in the area, and ways to mitigate their spread. All equipment, materials, and personnel should be cleaned of excess soil and debris to minimize the risk of spreading invasive species.</p> <p>The invasive Coconut Rhinoceros Beetle (CRB) or <i>Oryctes rhinoceros</i> is known to occur in the vicinity of the project area. When such material or these specific plants are moved there is a risk of spreading CRB because they may contain CRB in any life stage. For more information regarding CRB, please visit https://dlnr.hawaii.gov/hisc/info/invasive-species-profiles/coconut-rhinoceros-beetle/.</p> <p>It is also recommended to avoid importing soil or other plant material to O’ahu from off-island. Soil and plant material may contain fungi (e.g., Rapid ‘Ōhi’a Death) and other pathogens that could harm our native species and ecosystems. We recommend consulting the Hawai’i Interagency Biosecurity Plan at http://dlnr.hawaii.gov/hisc/plans/hibp/ in planning, design, and construction of the project.</p> <p>DOFAW recommends a wildlife education program that informs site personnel of species that may occur in the vicinity of the project and that could potentially be harmed by project activities and operations. Site personnel should document sightings of threatened or endangered species, as well as immediately report any mortality or injury of these species to DOFAW so we may assist in avoiding and minimizing impacts.</p> <p>DOFAW is concerned about attracting vulnerable birds to areas that may host nonnative predators such as cats, rodents, and mongooses. We recommend taking action to minimize predator presence; remove cats, place bait stations for rodents and mongoose, and provide covered trash receptacles.</p> <p>DOFAW has reviewed and verified Table 2.1 Proposed Plant Palette (p.g. 2-39 and 2-40) included in the DEA. The proposed plant palette contains several State-endangered species: <i>Pritchardia remota</i>, <i>Sesbania tomentosa</i>, <i>Hibiscus brackenridgei</i>, <i>Gardenia brighamii</i>, <i>Abutilon menziesii</i>, <i>Achyranthes splendens</i> var. <i>rotundata</i>, <i>Scaevola coriacea</i>, and <i>Brighamia insignis</i>. These species are sometimes available from permitted local commercial nurseries but should only be used in a landscaped garden. If used in a garden setting, these species must have a plant tag issued by DOFAW to confirm they have been legally sold. Additionally, the State-endangered loulu palm, <i>Pritchardia remota</i> is native to the Northwest Hawaiian Islands but is considered a non-native species to O’ahu. It should be noted that the species <i>Brighamia insignis</i>, <i>Acacia koaia</i>, and <i>Portulaca molokiniensis</i>, which are included in Table 2.1, are not native to O’ahu.</p>		<p>of the lagoon, and the amount of recharge will remain close to equal amount as before the project was constructed (see below for calculations). The foundation supports for the facilities will not obstruct groundwater movement, as foundation depth is not anticipated to reach the water table down at roughly 22 feet below grade, and if there are instances of subgrade fill with less pervious materials, it is not significant enough to obstruct or redirect water flow down slope and eventually out to the ocean. Additionally, because there are no existing groundwater users in the Kalaeloa Airport area, groundwater users in the area will not be impacted.</p> <p>The proposed surf lagoon will be 5.5 acres in area. Direct groundwater recharge on the 5.5-acre area will be redistributed by the lagoon. However, groundwater recharge in the project area was estimated using the Ike Wai Groundwater Recharge Tool (https://recharge.ikewai.org).</p> <p>The recharge estimate was 7.97 in/year, or roughly 3,300 gallons per day. This is 0.1% of the estimated sustainable yield of the Kapolei Aquifer System and 0.7% of the current pumpage. During operation and maintenance of the surf lagoon, an average of 10,000 gallons per day will be injected into the upper caprock, which will compensate for the loss of groundwater recharge from lagoon construction and result in a net increase of groundwater recharge for the project site as a whole.</p> <p>On-site injection waters could provide benefits by mitigating groundwater withdrawals from the irrigation wells and introducing water of comparable water quality into the upper ‘Ewa Caprock Aquifer. To provide further protection, the injection wells are regulated by the Underground Injection Control (UIC) Program of the State Department of Health Safe Drinking Water Branch. The injectate and the groundwater underlying the project site will be monitored on a routine basis as a component of permitting requirements under HAR §11-23.</p> <p>The water treatment system for the surf lagoon is also designed on a “no failure” basis, that guarantees the disinfection of the water and elimination of pathogen microorganisms using a combination of fine filtration, ozone and ultra-violate disinfection and chemical chlorination. The lagoon water will be dechlorinated before injection. This further ensures that the injectate is of suitable quality for beneficial groundwater recharge.</p> <p>In addition to a Well Construction and Pump Installation Permit, a CWRM Water Use Permit will be required. The CWRM regulates water use in the ‘Ewa Caprock based on the salinity of withdrawals. Irrigation water users are only able to pump when well salinity is below 1000 mg/L chloride. If</p>

Table 7.3 Summary of DEA Comments and Responses

Comments	Commenter	Responses
<p>The DEA, under Section 3.5 Biological Resources (p.g. 3-26) and Section 3.6 Historical and Cultural Resources (p.g. 3-29), indicates that Kalaeloa Heritage Park (KHP) intends to provide plantings for native flora to populate the landscaping at Honokea and will also provide seedlings for a native cultural garden on site. Please note that any work with threatened or endangered species, including collections and propagation by KHP, must be conducted under the conditions of an Endangered Plant Research and Collecting Permit. For more information regarding DOFAW-issued permits, please visit https://dlnr.hawaii.gov/dofaw/permits/.</p> <p>Lastly, DOFAW feels that all development projects in this area could impact critical habitat for 'Ewa plain plant species by potentially disrupting or altering groundwater dynamics. It is believed that previous smaller projects in the area may have affected the natural flow of groundwater in the 'Ewa plain. The resulting desiccated soils have been witnessed to cause detrimental effects to threatened and endangered plants in the area by producing unsuitable environmental conditions for them. DOFAW is therefore very concerned that the size or extent of this construction project may negatively affect groundwater flow in the area, which could ultimately impact adjacent critical habitat for listed plants.</p>		<p>concentrations exceed the 1,000 mg/L requirement, pumping will need to cease and hence reduce any potential adverse impacts to the underlying groundwater quality.</p> <p>Typical DOH monitoring includes:</p> <ul style="list-style-type: none"> - Well log (geologic profile) by geologist for each injection well drilled - Injection testing: Minimum 12 hours of continuous injection testing for all wells - Groundwater characteristics (if encountered) - Initial water level, and subsequent water level as fluctuations occur - Water sample collected from the water table. Analyze water samples for chloride, conductivity, dissolved oxygen, field pH, field temperature, nitrate+nitrite and total dissolved solids. - Records of daily injection quantities - Periodic water sampling from the well. The DOH will prepare the list of parameters. - Periodic field inspections for the well for foul odor, sediment buildup, oily sheen, standing water, overflowing well, poor drainage, prohibited discharge, safety concerns, collapsed well, broken/leaky parts and losing well depth - Well Status Report. Periodic report prepared by a qualified engineer or geologist to provide the owner, operator and regulatory agency with information regarding the performance of the injection well and to prevent adverse public health effects from the well. <p>Monitoring will protect and ensure protection and preservation of groundwater dependent ecosystems including springs and seeps, submarine groundwater discharge, anchialine ponds, caves and karst systems, and deep-rooted plant communities including limu along with traditional and customary rights along the coastline that rely on protection of groundwater resources.</p>
<p>Pueo owl are seen in this area, all the way up to the foothills and down to coastal areas. The surf condo site is not ideal for nesting but it is for mouse and rat foraging</p>	<p>Bond</p>	<p>Honokea is committed to protecting flora and fauna in the area. For our full description of mitigation and protective measures for the Hawaiian endemic sub-species of the Short-eared Owl or pueo (<i>Asio flammeus sandwichensis</i>), see Section 3.5. Honokea has on-going coordination with the Department of Forestry and Wildlife and has obtained a list of</p>

Table 7.3 Summary of DEA Comments and Responses

Comments	Commenter	Responses
		species in the area along with their recommended mitigation measures, which will be implemented as a part of construction and project operations.
Electricity Use		
The surf park and the Haseko surf park competitor do NOT address the massive use of electricity and fresh water. Oahu residents have skyrocketing electric bills. The fun tourist toy surf park will soak up massive solar farm and battery electricity.	Bond	The project will pay the going rate for electrical power, and is planning to generate approximately 3.0 MW of its own power through a PV panel and 4.0 MWH storage via a BESS.
Potable and Non-potable Water		
The Honolulu Board of Water Supply does not have a water system serving the project area. All water services shall be provided by the private system. The proposed injection wells for stormwater disposal shall be consulted with the Commission for Water Resource Management and the State Department of Health.	BWS	Honokea acknowledges BWS comment regarding private water service. Design and construction of injection wells, if used, will be coordinated with CWRM and DOH as required. Site design for management of storm runoff will be in accordance with City DPP “Rules Relating to Storm Water Quality”.
<p>The DEA states that the Surf Lagoon will require an initial potable water demand of 6,870,000 gallons for filling, with periodic filling to occur biennially. Additional daily water demand will include 60,000 gpd for domestic use, 56,000 gpd for water features, and 20,000 gpd for landscaping. Based on these estimated demands, two connections to the existing 12-inch water main along Coral Sea Road will be needed. Hawai'i Water Service (HWS), a private utility company, operates the area water system under regulation of the Department of Health (DOH) and pursuant to standards established by the Board of Water Supply (BWS).</p> <p>It is OHA's understanding that the HWS system draws water from the Barbers Point Shaft, which taps into the Pearl Harbor Aquifer and its three subsequent subaquifers (Ewa-Kunia, Waipahu-Waiawa, and Waimanalo). While it is assumed that HWS is likely drawing from the Ewa-Kunia subaquifer, a specific subaquifer and respective sustainable yield is not actually stated within the DEA. OHA believes that this information should be disclosed to ensure that Honokea's daily water demand and initial filling is within the sustainable yield. Further, estimates should be provided for the biennial refilling events. The DEA also appears to be absent of any information with existing water allocations; thus, these allocations should be provided in a manner that addresses the sustainable yield for the aquifer and any possible impacts to existing allocations from the proposed Honokea project.</p>	OHA	<p>You are correct, the HWS system draws water from the Barbers Point Shaft. The Barber's Point Shaft, source of water for the pre-BRAC US Navy system at Kalaeloa, now operated by HWS, is within the Ewa-Kunia subaquifer of the Pearl Harbor Aquifer Hydrologic Unit. The subaquifer has a sustainable yield (SY) of 16 MGD, with a total of 15.545 MGD allocated through water use permits. Currently, 8.052 MGD is being reported in totality as pumped from the Ewa Kunia subaquifer region.</p> <p>As of January 2022, the water allocation at the Barbers Point Shaft for Hawaii Water Service was identified as 2.337 MGD by CWRM. Total usage reported is 1.788 MGD indicating that Hawaii Water Service is pumping less than it is allocated or permitted over the last 12 month's average. However, it provides a snapshot in time of the current uses. Future uses may be impacted by the usage of water allocated to the HWS and Barber's Point Shaft that may be now utilized by Honokea.</p> <p>The extent of the fuel contamination at Red Hill is hard to estimate or model. There are models that show contaminant plumes moving into the Pearl Harbor hydrologic unit, meaning Honokea may be drawing water from the same overall aquifer. However, Honokea's 0.136 MGD / 49.64 MG annual water usage reflects a low percentage or fraction of the water used within the Pearl Harbor hydrologic unit and the 16 MGD SY of the Ewa Kunia subaquifer. As a comparison, a typical water park is estimated to use 0.170 to 0.200 MGD and a typical wave lagoon park about 0.180 MGD. Water allocations for any use, including residential and agricultural use, is monitored and protected by CWRM. Honokea will</p>

Table 7.3 Summary of DEA Comments and Responses

Comments	Commenter	Responses
<p>The applicant should be well aware that west O’ahu is currently experiencing a drought and that some water sources have been shut down due to the recent Navy Red Hill fuel leak. As of June 7, 2022, the Hawai’i Drought Monitor shows zero drought to severe drought conditions moving westward across O’ahu. The National Weather Service is forecasting enhanced probabilities for below-normal precipitation through November 2022. OHA notes that the DEA section on water demand does not address current drought conditions, but is quick to point out that the HWS system is not connected to the Navy’s water system at Red Hill. However, given the greater impact that the leak has had, there are still concerns regarding island-wide water usage and the strain placed on other aquifers that merit discussion in the DEA. While the applicant mentions consultation with HWS, we believe consultation should occur with BWS as well given their knowledge of O’ahu’s water system and greater impacts incurred by the Navy Red Hill fuel leak.</p> <p>Admittedly, the idea of another massive water park in the ‘Ewa plain area seems counter-intuitive in light of current realities and the fact that this historically dry region relies on imported water from wetter portions of the island; thus, the DEA must strive to rationalize these concerns if even at all possible to do so. Further, it is arguably morally questionable to plan a massive water park on an island during a time of drought and when BWS is requesting that customers conserve water. Fortunately, while water restrictions were contemplated in 2022, BWS did not move to implement them.</p>		<p>coordinate with HWS and BWS to evaluate water supply conditions as appropriate.</p> <p>Honokea acknowledges that drought conditions persist on the ‘Ewa plain of O’ahu. However, CWRM reports that the SY of the Ewa Kunia aquifer remains at 16 MGD, as of Jan. 2022, meaning that the recharge of the aquifer can manage the pumping and use of water. Honokea’s usage is anticipated to fall within the water use permit of Hawaii Water Service, and within the SY of the Ewa Kunia subaquifer. Per HRS §174C-62, the State water code mandates that CWRM formulate a plan to be implemented during periods of water shortage within a water management area. The water shortage plan must set forth provisions and guidelines for imposing use restrictions on different classes of permits as may be necessary to protect the resource. As a water permit holder, HWS was required to prepare a Water Shortage Plan to meet this requirement, which has been incorporated into their budget and sustainable yield. Honokea will coordinate with HWS to comply with their water shortage plan as necessary.</p> <p>Honokea will be utilizing conservation measures and sustainable strategies and practices to minimize water usage throughout the park, including:</p> <ul style="list-style-type: none"> - Use of native and drought tolerant trees and landscaping - Use of low flow fixtures on all water dispensing appliances - Capture and recycling of rainfall runoff - Capture, recycling and onsite storage of graywater for irrigation - Use of onsite brackish water wells for landscaping/irrigation water. <p>Implementation of water conservation measures may result in a 30% reduction of domestic, pool and irrigation water demand and 50% re-use of wastewater.</p> <p>Over time, past and current development of houses and streets cover the majority of the ‘Ewa Plain. Rainwater hits their hard surfaces and is directed into storm drains which lead to the ocean. Given the increasing shortage of rainfall expected over the next fifty years replenishing the ‘Ewa caprock aquifer is extremely important. If it is not replenished, the water will eventually become so saline that it cannot be used.</p> <p>The proposed surf lagoon will be 5.5 acres in area. Direct groundwater recharge on the 5.5-acre area will be redistributed by the lagoon. However, groundwater recharge in the project area was estimated using the Ike Wai Groundwater Recharge Tool (https://recharge.ikewai.org).</p>

Table 7.3 Summary of DEA Comments and Responses

Comments	Commenter	Responses
		<p>The recharge estimate was 7.97 in/year, or roughly 3,300 gallons per day. This is 0.1% of the estimated sustainable yield of the Kapolei Aquifer System and 0.7% of the current pumpage. During operation and maintenance of the surf lagoon, an average of 10,000 gallons per day will be injected into the upper caprock, which will compensate for the loss of groundwater recharge from lagoon construction and result in a net increase of groundwater recharge for the project site as a whole.</p> <p>The project's injection wells will treat drained lagoon water and will recharge the upper Caprock aquifer. Upper Caprock recharge has two benefits:</p> <ol style="list-style-type: none"> 1. Potentially provide relatively low salinity recharge water for the proposed irrigation wells and possible other groundwater users; 2. Recharge the aquifer to provide potential benefits to groundwater dependent ecosystems and traditional and customary uses along the coast.
<p>The DEA does not consider water use impacts consequent to shut downs of City and County Board of Water supply sources in light of Navy fuel spill leaks. The project's water usage is significant in any case. The project's use of an old Navy water system for potable water should entail higher levels of scrutiny given the Navy's dismal oversight over its water systems in Red Hill.</p>	<p>Isaki</p>	<p>The water system from which the project intends to draw water is not part of the Waimalu subaquifer system underlying the Red Hill fuel storage facility, and to the extent of current knowledge is not affected by spills from that facility. However, Honokea's 0.136 MGD / 49.64 MG annual water usage reflects a low percentage or fraction of the water used within the Pearl Harbor hydrologic unit and the 16 MGD SY of the Ewa Kunia subaquifer. It would have relatively little effect, as compared to other water uses in the Ewa, Kapolei areas. As a comparison, a typical water park is estimated to use 0.170 to 0.200 MGD and a typical wave lagoon park about 0.180 MGD. Water allocations for any use, including residential and agricultural use, is monitored and protected by CWRM.</p> <p>In 2020, Hawaii Water Service purchased the Kalaeloa Water Company, who maintained the water infrastructure of the former Barbers Point Naval Air Station since its closure in 1999. Hawaii Water will continue to invest in local system infrastructure to keep service reliable for customers' everyday and emergency needs, and will work to provide customers with continued access to safe, high-quality water. Water quality will comply with applicable regulations at the Federal and State levels.</p>
<p>Even if the project uses its own well source, the nearshore areas are famous for limu that area sustained by underground flows that may likely be intercepted by the project well. The DEA does not address the large energy</p>	<p>Isaki</p>	<p>Honokea will obtain potable water for initial filling, operation and periodic refilling of water features from an existing private water purveyor who has indicated it can provide the amounts forecast. Honokea will</p>

Table 7.3 Summary of DEA Comments and Responses

Comments	Commenter	Responses
<p>requirements for such a project – and under foreseeable circumstances consequent to climate change impacts such as drought and salt water inundation of freshwater resources. To the extent the project represents it will be self-sustaining, please also disclose all other associated infrastructural improvements the project will necessitate in regard to road expansion, grid improvements, etc.</p>		<p>draw water from an existing main in Coral Sea Road, immediately fronting the project, and no expansion to the water service infrastructure will be required. The wave technology selected for the project is the most energy-efficient technology in the industry, using 10 times less energy than the pneumatic systems used by most other surf park developers. In addition, the power consumption will be continuously monitored and analyzed to identify opportunities for additional energy savings. The wave engines become energy generators when they have to brake the generated hydrodynamic force, thus recovering up to 15% of the energy.</p> <p>Honokea is anticipating electrical demand loads of 600 kVA for front of house areas and 2,500 kVA for back of house loads, including the wave pool equipment. HECO has 12 kV distribution facilities that could be used to feed the project, with HECO approval, but is also in the process of building a 46 kV transmission line that could also feed the project if HECO determines loads need to be serviced from the higher voltage transmission line with a step-down transformer at the distribution point to the project. In this case, an on-site transformer substation may be required.</p> <p>Final determination on service voltage will be made by HECO once the service request and engineering drawings are submitted, anticipated to be made early in the project design to secure the project’s electrical service point of connection.</p> <p>Shoreline limu is not anticipated to be affected as construction of the project will occur at elevations which will not affect subsurface water flows. The lagoon water body will sit on grade, with water contained by a thick HDPE liner, supported by an aggregate layer and compacted soils below. The liner and bottom of the aggregate layer is not anticipated to penetrate the depth of the water table, measured at approximately 22’-0” below the existing ground surface elevation(s) on site, based on soil borings and per the project’s geotechnical assessment, referenced in the PER (Appendix A). Adjacent perimeter wall structures and the center pier will be concrete wall structures, with footings that may be several feet below the liner, which are still not anticipated to be at or near groundwater elevations.</p> <p>Based on the project’s geotechnical assessment, shallow spread and/or continuous footings may be used to support the relatively light structural loading of the anticipated one-story and/or two-story structures planned at the site. A probe and grouting plan and protocol to eliminate small voids in the prepared substrate below the foundations is recommended.</p>

Table 7.3 Summary of DEA Comments and Responses

Comments	Commenter	Responses
		<p>For larger voids, and depending on actual subsurface conditions, different foundation systems (such as micropiles, etc.) may be used where necessary to avoid the need to fill large voids that may be encountered.</p> <p>Area roadways comply with HCDA rules as mentioned in the DEA.</p> <p>Power grid improvements to serve Honokea will be made by Hawaiian Electric which will recover costs and perform system capacity improvements through usage fees. Current solar projects in the area are already improving HECO's grid system and this project will connect to HECO's improved system. To reduce the demand for electrical services and as part of the Honokea Surf Village's sustainable design strategies, PV panels are proposed on buildings, walkways, and over parking areas, potentially producing over 3.0 MW of energy. Additional sustainable design strategies include building orientation to capture wind, orienting major facades away from the path of the sun, natural ventilation, large overhangs and landscaping for solar shading, and vegetated cooling, to reduce energy consumption throughout the project.</p>
<p>There is already one wave pool being constructed in Ewa, the Haseko Wai Kai Lagoon, and it would be redundant to build another wave pool just a few miles down the road in Kalaeloa.</p> <p>We are simply against having a whole new facility built when there is another wave pool being constructed at the Haseko/Wai Kai wave pool in Ewa that will also enormous amounts of water. We understand that the types of waves at each wave pool are different, but we are concerned with the reasons justifying constructing two different wave pools that will each use an enormous amount of water.</p> <p>The DEA expects the Honokea Surf Village to use 6,870,000 gallons of potable water every two years to fill the wave pool. That is about 9,400 gallons of potable water per day throughout the 2 year period. In Hawai'i the average person uses about 164 gallons of water every day, so the 9,400 gallons/day that would be used to supply potable water for the wave pool could supply about fifty-seven individuals with water instead. Additionally, the Red Hill water crisis, in which 93,000 residents are without drinking water after Navy jet fuel leaked into the underlying aquifer, is only worsening.</p>	<p>Rivera / Burgess</p>	<p>The fill water is a large initial volume, but the project consists of a closed water loop system, with water provided only to refill for evaporation and water losses (makeup water), making the pool water efficient compared to its size and function.</p> <p>However, Honokea's 0.136 MGD / 49.64 MG annual water usage reflects a low percentage or fraction of the water used within the Pearl Harbor hydrologic unit and the 16 MGD SY of the Ewa Kunia subaquifer. As a comparison, a typical water park is estimated to use 0.170 to 0.200 MGD and a typical wave lagoon park about 0.180 MGD. Water allocations for any use, including residential and agricultural use, is monitored and protected by CWRM.</p> <p>Per HRS §174C-62, the State water code mandates that CWRM formulate a plan to be implemented during periods of water shortage within a water management area. The water shortage plan must set forth provisions and guidelines for imposing use restrictions on different classes of permits as may be necessary to protect the resource. As a water permit holder, HWS was required to prepare a Water Shortage Plan to meet this requirement, which has been incorporated into their budget and sustainable yield. Honokea will coordinate with HWS to comply with their water shortage plan as necessary.</p>
<p>This is an absolutely obscene and unnecessary waste of water. From their EIS: "The Surf Lagoon will use potable water. Wave lagoon initial or periodic</p>	<p>McDermott</p>	<p>Honokea has requested water from the private water purveyor operating within applicable statutes and under the Public Utilities Commission to</p>

Table 7.3 Summary of DEA Comments and Responses

Comments	Commenter	Responses
<p>filling is estimated at 6,870,000 gallons. Draining and refilling water features is anticipated to occur every two years”</p> <p>Given the precarious situation with Red Hill, and existing and projected worsening drought conditions for Oahu, there is no way anyone should be giving a thumbs up on this pool, “Periodic” refilling? How many times do they expect to empty and refill this massive pool?</p> <p>Residents need water to live. Farmers need water to grow our food. This is an object of amusement we don’t even need with the ocean right there! Residents surf because the ocean is free, and a place to get away and connect with nature. They won’t pay to jump on a factory generated wave for a couple of seconds, surrounded by onlookers.</p>		<p>service the park. The fill water is a large initial volume but the project consists of a closed water loop system, with water provided only to refill for evaporation and water losses (makeup water), making the pool water efficient compared to its size and function. Water usage is expected; the values and benefits of use of that water is expressed through the services and amenities provided by this park.</p> <p>As stated in the DEA, wave pool filling/refilling is forecast to occur every two years. Actual operations and maintenance requirements may allow or require this time frame to be revised. However, Honokea’s 0.136 MGD / 49.64 MG annual water usage reflects a low percentage or fraction of the water used within the Pearl Harbor hydrologic unit and the 16 MGD SY of the Ewa Kunia subaquifer. It would have relatively little effect. As a comparison, a typical water park is estimated to use 0.170 to 0.200 MGD and a typical wave lagoon park about 0.180 MGD. Water allocations for any use, including residential and agricultural use, is monitored and protected by CWRM.</p> <p>Wave pools exist worldwide and provide reliable waves of extremely high quality that can be utilized consistently regardless of most weather and wave conditions. The addition of a wave pool to Hawaii attractions will result in partnerships with various schools and surf communities (such as Access Surf Hawai’i) will benefit the community and the region as a whole.</p>
<p>Justify taking almost 7 million gallons of potable water on a regular basis for recreation and profit, instead of preserving it for drinking and cleaning, despite reduced water availability from the the Kapūkakī (Red Hill) contamination and reduced aquifer refill as climate change causes less rainfall.</p>	<p>Harden</p>	<p>Honokea has requested water from the private water purveyor operating within applicable statutes and under the Public Utilities Commission to service the park. Honokea’s requested annual total water usage of approximately 0.136 MGD, while significant, falls within Hawaii Water Service’s Water Use Permit of 2.337 MGD and within unused and already allocated pumping within the Ewa Kunia subaquifer.</p> <p>Per HRS §174C-62, the State water code mandates that CWRM formulate a plan to be implemented during periods of water shortage within a water management area. The water shortage plan must set forth provisions and guidelines for imposing use restrictions on different classes of permits as may be necessary to protect the resource. As a water permit holder, HWS was required to prepare a Water Shortage Plan to meet this requirement, which has been incorporated into their budget and sustainable yield. Honokea will coordinate with HWS to comply with their water shortage plan as necessary.</p>

Table 7.3 Summary of DEA Comments and Responses

Comments	Commenter	Responses
<p>We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.</p>	<p>DLNR CWRM</p>	<p>Honokea will coordinate with HCDA and County agencies as applicable to incorporate the project into the County's Water Use and Development Plan.</p>
<p>We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area's freshwater resources. Reducing the water usage of a home or building may earn credit towards Leadership in Energy and Environmental Design (LEED) certification. More information on LEED certification is available at http://www.usgbc.org/leed. A listing of fixtures certified by the EAP as having high water efficiency can be found at http://www.epa.gov/watersense.</p> <p>We recommend the use of alternative water sources, wherever practicable.</p> <p>The Hawaii Water Plan is directed toward the achievement of the utilization of reclaimed water for uses other than drinking and for potable water needs in one hundred per cent of State and County facilities by December 31, 2045 (§174C-31(g)(6), Hawaii Revised Statutes). We strongly recommend that this project consider using reclaimed water for its non-potable water needs, such as irrigation. Reclaimed water may include, but is not limited to, recycled wastewater, gray water, and captured rainwater/stormwater.</p> <p>Please contact the Hawai'i Department of Health, Wastewater Branch, for more information on their reuse guidelines and the availability of reclaimed water in the project area.</p>	<p>DLNR CWRM</p>	<p>Sustainable design strategies will be implemented to reduce the increased demand on the area's freshwater resources, including drought tolerant landscaping; low flow fixtures; capture and recycling of rainwater; capturing, recycling, and storage of graywater for irrigation purposes; and drilling and use of on-site brackish water wells for irrigation purposes. Honokea will coordinate with the DOH Wastewater regarding compliance with their reuse guidelines.</p>
<p>We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at http://planning.hawaii.gov/czm/initiatives/low-impact-development/</p> <p>We recommend adopting landscape irrigation conservation best management practices endorsed by the Landscape Industry Council of Hawaii. These practices can be found online at</p>	<p>DLNR CWRM</p>	<p>Honokea has reviewed the stormwater BMPs provided by CWRM and will consider landscape irrigation conservation practices provided from the Landscape Industry Council. Landscape irrigation conservation BMPs endorsed by the Landscape Industry Council of Hawai'i include designing irrigation systems with sprinklers spaced with head to head coverage or better; using water conservation irrigation components such as rotary nozzles, pressure regulated spray heads and valves, rain switches and high efficiency nozzles; installing check valves; incorporating compost; and using non-potable water.</p> <p>Construction Best Management Practices (BMPs) will be implemented to mitigate potential environmental impacts that may occur as a result of the buildout of the Honokea Surf Village. During construction,</p>

Table 7.3 Summary of DEA Comments and Responses

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<p>http://www.hawaiiscape.com/wp-content/uploads/2013/04/LICH_Irrigation_Conservation_BMPs.pdf</p>		<p>contractors will utilize erosion control and land-based sources of pollution barrier measures such as sediment traps, silt fences, dust fences, stabilized construction entrances, and truck wash-down areas on-site, as appropriate to manage sediment discharge into nearby waters.</p> <p>In adherence to City and County Rules Relating to Water Quality for a Priority “A” project, a landscape plan for the Honokea Surf Village has been prepared, identifying a variety of native and other drought tolerant species throughout the site. Sustainable design strategies include the capture and recycling of rainwater; capturing, recycling, and storage of graywater for irrigation purposes; and potential drilling and use of on-site brackish water wells for irrigation purposes.</p>
<p>We recommend participating in the Hawaii Green Business Program, that assists and recognizes businesses that strive to operate in an environmentally and socially responsible manner. The program description can be found online at http://energy.hawaii.gov/green-business-program.</p>	<p>DLNR CWRM</p>	<p>Honokea acknowledges this comment and will coordinate with the Hawai'i Green Business Program for potential partnerships and participation.</p>
<p>There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.</p>	<p>DLNR CWRM</p>	<p>Honokea acknowledges CWRM’s concerns regarding the effect of the project on groundwater flow in the area. The project is anticipated to have very little, if any, impacts on the State’s groundwater resources. While the addition of the lagoon area will add a sizable increase in impervious area, all rain runoff will still enter the ground at the perimeter of the lagoon, and the amount of recharge will remain close to equal amount as before the project was constructed. The foundation supports for the facilities will not obstruct groundwater movement, as foundation depth is not anticipated to reach the water table down at roughly 22 feet below grade, and if there are instances of subgrade fill with less pervious materials, it is not significant enough to obstruct or redirect water flow down slope and eventually out to the ocean.</p> <p>Honokea will coordinate with, and obtain necessary approvals from, the State Department of Health as it pertains to water quality impacts and requirements.</p>
<p>The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit is required prior to use of water. The Water Use Permit may be conditioned on the requirement to use dual line water supply systems for new industrial and commercial developments.</p>	<p>DLNR CWRM</p>	<p>Honokea will coordinate with HWS prior to use of water to ensure proper Water Use Permit approvals have been confirmed.</p>

Table 7.3 Summary of DEA Comments and Responses

Comments	Commenter	Responses
<p>A Well Construction Permit(s) is (are) are required before the commencement of any well construction work. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.</p>	<p>DLNR CWRM</p>	<p>Honokea will apply for Well Construction Permits and/or Pump Installation Permits as necessary for irrigation wells.</p>
<p>The proposed project is located near the Kalaeloa Airport on Coral Sea Road in Kapolei and is part of the Kapolei aquifer system groundwater management area. The Sustainable Yield is around 1000 mg/l Cl limit for any well. A well must stop pumping immediately if it reaches this Cl limit. The project should provide a detailed discussion in regards to the reasonable and beneficial uses of water and how this project relates to that. An analysis of alternative sources of water, including R-1 and saltwater, should be included as part of the alternatives analysis for CH 343 HRS. Also, since this project is in a water management area, and if the water will be provided by the Board of Water Supply, coordination is required with the Commission to determine any potential impacts that this project will have on the BWS's allocations.</p> <p>The proposed water source(s) and projected water demands for the project, both potable and non-potable, should be identified and the calculations used to estimate demands should be provided in greater detail. A discussion of the potential impacts on water resources and other public trust uses of water should be included, and any proposed mitigation measures described. Water conservation and efficiency measures to be implemented should also be discussed.</p> <p>Furthermore, the report should disclose the specific aquifer system area, along with its sustainable yield, current pumpage from all existing uses on the aquifer, and potential impacts related to the withdrawal of both potable and non-potable quantities on the aquifer system area's available sustainable yield as well as on any public trust uses of water.</p> <p>Upper caprock recharge for the Kapolei aquifer has been discussed as being beneficial on pages 3-11 and 3-12. Please discuss in further detail in regards to the reasonable and beneficial uses of water and the two proposed wells that are to be part of the project. As part of your explanation, impacts to ground water dependent ecosystems are becoming an emerging issue as impacts to these are related to impacts to traditional & customary practices of sustenance from these ecosystems. We recommend consultation with the region's (moku) Aha Moku Council on</p>	<p>DLNR CWRM</p>	<p>The HWS system draws water from the Barbers Point Shaft. The Barber's Point Shaft, source of water for the pre-BRAC US Navy system at Kalaeloa, now operated by HWS, is within the Ewa-Kunia subaquifer of the Pearl Harbor Aquifer Hydrologic Unit. The subaquifer has a sustainable yield (SY) of 16 MGD, with a total of 15.545 MGD allocated through water use permits. Currently, 8.052 MGD is being reported in totality as pumped from the Ewa Kunia subaquifer region.</p> <p>Alternative water sources for the wave lagoon were considered for the project and discussed including installing new groundwater wells to utilize the shallow caprock aquifer underlying the region, or pumping in ocean water. Due to the distance of the project parcel from the ocean, as well as potential nearshore environmental impacts from the pipelines, utilizing water from the ocean was considered to be impractical and infeasible.</p> <p>Utilizing brackish water pumped from new groundwater wells on-site for lagoon filling purposes, sourced from the shallow caprock aquifer, would require supplemental analysis, including potential effects on the specialized wave lagoon machinery's operations and estimated useful life from exposure to the higher salinity brackish water, as well as analysis of regulatory effects of using non-potable water. The yield of the shallow aquifer must also be evaluated to meet DLNR CWRM requirements before the water could be utilized for lagoon purposes. Initial discussions with the DOH have indicated that use of non-potable water for a swimming lagoon would be subject to much more stringent requirements for health and safety reasons. However, if new rules and regulations are introduced during the design and permitting process which simplify and justify the use of brackish water, the project team will discuss those requirements with DOH at that time.</p> <p>As of January 2022, the water allocation at the Barbers Point Shaft for Hawaii Water Service was identified as 2.337 MGD by CWRM. Total usage reported is 1.788 MGD indicating that Hawaii Water Service is pumping less than it is allocated or permitted over the last 12 month's average. However, it provides a snapshot in time of the current uses. Future uses may be impacted by the usage of water allocated to the HWS and Barber's Point Shaft that may be now utilized by Honokea.</p>

Table 7.3 Summary of DEA Comments and Responses

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<p>whether a land use conversion or project that uses water will impact any traditional & customary practices.</p>		<p>Honokea’s 0.136 MGD / 49.64 MG annual water usage reflects a low percentage or fraction of the water used within the Pearl Harbor hydrologic unit and the 16 MGD SY of the Ewa Kunia subaquifer. As a comparison, a typical water park is estimated to use 0.170 to 0.200 MGD and a typical wave lagoon park about 0.180 MGD. Water allocations for any use, including residential and agricultural use, is monitored and protected by CWRM. Honokea will coordinate with HWS and BWS to evaluate water supply conditions as appropriate.</p> <p>According to Hawaii’s state constitution, water resources are held in trust by the state for the benefit of the people. The following four public trusts are recognized:</p> <ol style="list-style-type: none"> 1) maintenance of waters in their natural state; 2) domestic water use of the general public, particularly drinking water; 3) the exercise of Native Hawaiian traditional and customary (T&C) rights; and 4) reservations of water for Hawaiian Home Lands. <p>According to the Commission on Water Resource Management, production wells in Kapolei are classified as the following usages: Industrial and Golf Course Irrigation. These uses are not protected by the Public Trust, therefore there are no public trust uses of well water.</p> <p>Over time, past and current development of houses and streets cover the majority of the ‘Ewa Plain. Rainwater hits impervious surfaces and is directed into storm drains which lead to the ocean. Given the increasing shortage of rainfall expected over the next fifty years, replenishing the ‘Ewa caprock aquifer is extremely important. If it is not replenished, the water will eventually become so high in salinity content that it will become unusable.</p> <p>The project’s injection wells will treat drained lagoon water and will recharge the upper Caprock aquifer with treated water. Upper Caprock recharge has two benefits:</p> <ol style="list-style-type: none"> 1. Potentially provide relatively low salinity recharge water for the proposed irrigation wells and possible other groundwater users; 2. Recharge the aquifer to provide potential benefits to groundwater dependent ecosystems and traditional and customary uses along the coast. <p>The water treatment system for the surf lagoon is also designed on a “no failure” basis, that guarantees the disinfection of the water and elimination of pathogen microorganisms using a combination of fine</p>

Table 7.3 Summary of DEA Comments and Responses

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		<p>filtration, ozone and ultra-violet disinfection and chemical chlorination. The lagoon water will be dechlorinated before injection. This further ensures that the injectate is of suitable quality for beneficial groundwater recharge.</p> <p>In addition to a Well Construction and Pump Installation Permit, a CWRM Water Use Permit will be required. The CWRM regulates water use in the 'Ewa Caprock based on the salinity of withdrawals. Irrigation water users are only able to pump when well salinity is below 1000 mg/L chloride. If concentrations exceed the 1,000 mg/L requirement, pumping will need to cease and hence reduce any potential adverse impacts to the underlying groundwater quality.</p> <p>Typical DOH monitoring includes:</p> <ul style="list-style-type: none"> - Well log (geologic profile) by geologist for each injection well drilled: - Injection testing: Minimum 12 hours of continuous injection testing for all wells: - Groundwater characteristics: (if encountered) - Initial water level, and subsequent water level as fluctuations occur - Water sample collected from the water table. Analyze water samples for chloride, conductivity, dissolved oxygen, field pH, field temperature, nitrate+nitrite and total dissolved solids. - Records of daily injection quantities - Periodic water sampling from the well. The DOH will prepare the list of parameters. - Periodic field inspections for the well for foul odor, sediment buildup, oily sheen, standing water, overflowing well, poor drainage, prohibited discharge, safety concerns, collapsed well, broken/leaky parts and losing well depth. - Well Status Report. Periodic report prepared by a qualified engineer or geologist to provide the owner, operator and regulatory agency with information regarding the performance of the injection well and to prevent adverse public health effects from the well. <p>Honokea will work with various community groups to ensure the project is a good steward of the land and natural resources, including the region's Aha Moku Council if possible.</p>

Table 7.3 Summary of DEA Comments and Responses

Comments	Commenter	Responses
Soil and Karst, Nearshore		
Chemicals in groundwater around surf pools	Bond	<p>The Project is not anticipating the disturbance of ground water during construction, nor anticipating any interaction with ground water during pool operations. A UIC Permit will be sought and the injection wells will be compliant with the DOH, Safe Drinking Water Branch, Underground Injection Control Program's policy and permit conditions and rules for injection wells under Hawai'i Administrative Rules (HAR) §11-23. With proper treatment, the injectate fluid is projected to be non-polluting drainage water classified as Class V, Subclass B injection wells, under HAR §11-23-06. A CWRM Water Use Permit will be acquired prior to construction. Additionally, a NPDES Construction Stormwater permit will be acquired. Construction, grading and drainage plans for the Honokea Surf Village will be submitted to appropriate agencies for review and approval. The requirements of the approved CWRM permit and NPDES permits will be adhered to during construction.</p> <p>A Phase II Environmental Site Assessment should be completed for all areas of the subject property where soils and/or groundwater may be disturbed/removed during future site redevelopment activities. The Phase II ESA should investigate the presence/absence of contamination in soil and groundwater and if present, to characterize the nature, magnitude, and extent of contamination. All work must be completed in accordance with DOH Hazard Evaluation and Emergency Response Office guidance.</p>
Ancient trails ran by sink hole water holes, karst caves, subsurface water channels that carry water from Waianae volcano (Waianae Mountains) to the sea which spawns limu which feeds shoreline and reef creatures (small fish, turtles, seals, lobster, etc.) which make up the larger ecosystem and pelagic fishery.	Bond	<p>Honokea is not anticipated to have any significant impacts on sink holes, karst caves, and subsurface groundwater flows. On-site injection waters could provide benefits by mitigating groundwater withdrawals from the irrigation wells and introducing water of comparable water quality into the upper 'Ewa Caprock Aquifer. The injectate and the groundwater underlying the project site will be monitored on a routine basis as a component of permitting requirements under HAR §11-23. Monitoring will protect and ensure groundwater dependent ecosystems including springs and seeps, submarine groundwater discharge, anchialine ponds, caves and karst systems, and deep-rooted plant communities including limu along with traditional and customary rights along the coastline that rely on protection of groundwater resources.</p>
The long-term effects are not discussed, however, mainly the manner in which Honokea Surf Village will be stabilized against the underlying karst geology. Honokea Surf Village proposes to detect near surface cavities, open them, clean them out, and backfill with compacted fill or concrete,	Rivera / Burgess	<p>Foundation work, including backfill, will not take place at the level of depth necessary to significantly impact mauka to makai groundwater flows. Foundations will reach maximum depths of approximately 17 feet, which is above the 22 foot estimated water table depth. Foundation</p>

Table 7.3 Summary of DEA Comments and Responses

Comments	Commenter	Responses
<p>essentially filling what may be massive cavities with impervious plugs. These plugs not only prevent rainwater from infiltrating through the once porous surface and geology, placing a strain on the recharge of groundwater resources, but they also prevent mauka to makai flow that feeds limu, a once abundant and now seriously threatened traditional and customary staple for Kanaka 'Ōiwi</p>		<p>sizing will only use the minimal amount to adequately support the facility pilings by code, and sinkholes and/or caves will not be filled to capacity. If any potential foundation or backfill reaches groundwater depth, it would not be large enough to significantly alter or obstruct groundwater flows in the underlying karst geology, and mauka to makai flows will continue generally unimpeded.</p>
<p>I note mention of an injection well on the EIS also. Has no one paid attention to how that went over on Maui? Supreme Court of the United States ruled against.</p>	<p>McDermott</p>	<p><i>Hawai'i Wildlife Fund v. County of Maui</i> addressed daily injection of millions of gallons treated sanitary wastewater, which is not comparable to proposed Honokea subsurface disposal. Honokea will conduct disposal of used pool water through a treatment and dichlorination process in accordance with applicable laws and regulations. Discharge of sanitary wastewater is anticipated to occur through Hawaii Water System's sewer services that convey wastewater to the City's Honouliuli Treatment Plant.</p> <p>The project's alternate plan would be to collect and treat wastewater on-site (Figure 3.18) and dispose wastewater to infiltration beds or injection wells. On-site wastewater treatment and re-use of graywater or treated recycled water will meet applicable Department of Health requirements and guidelines under HAR, Section 11-62. The maximum re-use and recycling of water must be considered to reduce the treatment and disposal of quantities. Disposal of wastewater on-site would likely occur through shallow infiltration beds for the wastewater treatment works. The design of injection wells to treat wastewater on-site is located in Appendix A.</p>
<p>Disabled Access / People with Disabilities</p>		
<p>People with disabilities, specifically those with visual impairments, are being used as pawns to secure a permit for this project, but the inclusion of blind surfers in the Draft Environmental Assessment ("DEA") is lip service. Blind surfers are only mentioned twice in the nearly 1,000 page document (Pg. 1-3, 2-12) in identical sentences.</p> <p>Access Surf Hawai'i, however, is listed as an "other partnership and opportunity" in Appendix 1, Project Description, and teaches people with disabilities how to surf without a massive wave pool. As of the drafting of these comments, Access Surf Hawai'i has hosted 77 events for 407 participants, counting 778 volunteers in their ranks, and has done so by utilizing natural surf breaks on O'ahu that have proven to be consistent, controlled, and safe environment.</p>	<p>Rivera / Burgess</p>	<p>Honokea is fully committed to providing services to adaptive surfers, including those with visual impediments, to offer safer conditions to experience the sport of surfing. While Access Surf Hawai'i has events in the ocean once a month for around 55 adaptive surfers requiring 120+ volunteers and cooperation from weather conditions, it is extremely difficult for those surfers to surf the rest of the month. O'ahu currently has approximately four beaches with access for adaptive surfers, which all require the right conditions and safety for events. Honokea has worked closely with Access Surf to design facilities that adaptive surfers can use every day without needing volunteers to help them, as well as other sports besides surfing.</p> <p>Surfing, beyond being an empowering activity, has also been identified as a medical treatment for patients diagnosed with cystic fibrosis, and</p>

Table 7.3 Summary of DEA Comments and Responses

Comments	Commenter	Responses
<p>Additionally, beyond the redundancy of purpose posed by the one sentence identified above, the DEA does not address how the Kalaeloa Surf Village will incorporate surf lessons for people with disabilities into the programming of the wave pool, how it plans to keep people with disabilities safe despite the assertion that “blind surfers can now surf unassisted,” or what the partnership and opportunity with Access Surf Hawai‘i would entail.</p> <p>For this DEA, people with disabilities are to be used as a righteous reason for the construction of the Kalaeloa Surf Village only to be cast aside and ignored once permits are granted.</p>		<p>Honokea has been educated by the Cystic Fibrosis Foundation on protocol to support those patients on O‘ahu. Events at Honokea would be safe, with a controlled environment that removes many dangerous elements due to weather and ocean conditions, and can very quickly be turned into a static water situation with the push of a button which is not an option in the ocean.</p> <p>Honokea is currently active in discussions with Access Surf Hawai‘i to not only help in the design, planning and programming of the project, but also to host the World Adaptive Surfing Championships, of which Hawai‘i has multiple world champions.</p>
Cumulative Impacts		
<p>The cumulative impact section of the DEA does bring up additional anticipated projects (i.e., Wai Kai Lagoon with wave park) in the Kalaeloa area. However, the DEA concludes that the addition of the Honokea Village is not anticipated to contribute to additional cumulative effects. OHA would advise that any anticipated projects, especially other large water parks, in the area should have respective water allocation projections to compare against the aquifers sustainable yield. Currently, there is no data provided to assure readers that the conclusions reached in the cumulative impacts discussion are reliable.</p>	OHA	<p>Honokea has requested water from the private water purveyor operating within applicable statutes and under the Public Utilities Commission to service the park. Honokea’s requested annual total water usage of approximately 0.136 MGD, while significant, falls within Hawaii Water Service’s Water Use Permit of 2.337 MGD and within unused and already allocated pumping within the Ewa Kunia subaquifer.</p> <p>Honokea assumes other permitted projects in the area have applied for and received water use permits with their respective utility providers, which have integrated the requested demand into their annual budget within their allowed sustainable yield.</p> <p>In terms of cumulative impacts regarding water use, under the assumption the Wai Kai project uses over twice as much water as Honokea (0.272 MGD annually), the two projects would have an estimated combined 0.408 MGD annual total water usage, significantly less than the HWS use permit of 2.337 MGD and the BWS use permits for the wells at Makakilo (1.5 MGD), Honouliuli I-1 (2.24 MGD), and Honouliuli II-1 (4.48 MGD).</p> <p>Per HRS §174C-62, the State water code mandates that CWRM formulate a plan to be implemented during periods of water shortage within a water management area. The water shortage plan must set forth provisions and guidelines for imposing use restrictions on different classes of permits as may be necessary to protect the resource. As a water permit holder, HWS was required to prepare a Water Shortage Plan to meet this requirement, which has been incorporated into their budget and sustainable yield. Honokea will coordinate with HWS to comply with their water shortage plan as necessary.</p>

Table 7.3 Summary of DEA Comments and Responses

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<p>The cumulative impacts section of the DEA is inadequate and incomplete. This section is just under a page long and does not scratch the surface of all the potential cumulative impacts between this project, others in the area, and prevailing circumstances. As mentioned earlier, Honokea Surf Village will utilize approximately 9,400 gallons per day over the two year period between refills of the wave pool, but this water usage does not take into account the Wai Kai wave pool just a few short miles away. The Wai Kai wave pool is touted to be the world’s first 100-foot wide standing wave pool and will also utilize millions of gallons of water, but the cumulative impacts between the two projects are only mentioned in this section and not discussed in detail.</p> <p>These two projects will divert millions of gallons of water from O’ahu residents who are facing the Red Hill crisis which has significantly diminished the amount of water available to the entire island, placing a strain on a water system that is already under immense stress.</p> <p>Additionally, these two massive luxury resorts dedicated to surfing tourism only minutes away from each other will not only increase flight traffic dramatically, clogging transit to and from the island and increasing associated burning of fossil fuels, but will also increase ground traffic. Increasing ground traffic to accommodate thousands of new tourists will strain transportation infrastructure, increase tourist overcrowding, exacerbate the rental car issue, and also lead to the burning of more fossil fuels.</p> <p>There must be a discussion of how this project will interface with others in the area instead of only identifying the projects and saying nothing more of substance.</p>	<p>Rivera / Burgess</p>	<p>Honokea will practice water conservation and operate within applicable laws and regulations, which practices will mitigate water consumption to the extent practicable.</p> <p>Cumulative Potable Water Demand Impacts</p> <p>In reviewing potable water related cumulative impacts, the project team evaluated the ‘Ewa Development Plan 2020 Update (EDP) for a regional level overview of anticipated impacts, as well as the Hoakalei Master Plan (2014) for a localized review of the frequently mentioned Wai Kai project, and the proposed 2022 HCDA Kalaeloa Master Plan update for future projections based upon HCDA evaluation and analysis. See Section 3.16.</p> <p>Draft HCDA Kalaeloa Master Plan Update (2022)</p> <p>RM Towill Corporation (RMTC) prepared the Draft Kalaeloa Potable Master Plan (DKPMP) in September 2016 for the Draft HCDA Master Plan update. The DKMPM identified the need for Kalaeloa’s water system to be improved and expanded, with improvements to storage, transmission, and distributions systems, to accommodate anticipated future water demands which are expected to triple over current usage to 3.266 mgd. This increase is predicated mainly due to new housing units being built in Kalaeloa. The 3.266 mgd is higher than the current 2.337 mgd water allocation for Barbers Point Wells, which means an additional water source totaling 0.930 mgd must be requested from BWS. Alternatively, HCDA and Hawaii Water Service would have to petition CWRM to increase the permitted water allocation to HWS at a future point in time as determined by the progress of residential development build out in the area.</p> <p>The DKPMP also notes that 24-inch line along Roosevelt and Enterprise and the 18-inch line along Roosevelt and Coral Sea are the only two existing water lines in Kalaeloa that have sufficient capacity to meet existing and projected fire flow requirements. The DKPMP also notes the full buildout of the Master Plan to be realized, water will need to be obtained from the Hawaii Water Service, who will only provide service to portions of the water system where water lines are known to meet BWS standards. HWS references BWS standards (with modification) for its own system requirements.</p> <p>Per the DKPMP, Honokea is served by one of the only existing water lines that have sufficient capacity to meet existing and projected flow requirements, and the project is proactively obtaining service and water capacity reservations from HWS in advance of the rest of the Master Plan</p>

Table 7.3 Summary of DEA Comments and Responses

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		<p>area, where much of the area still needs to be upgraded to BWS standards in order for HWS to provide service.</p> <p>Based upon the publicly available EDP, HMPU, and draft HCDA master plan documents, the Board of Water Supply potable water infrastructure in the area has been designed to accommodate anticipated residential and commercial growth and development, including projects such as Honokea. However, at this time, it is anticipated Honokea will not contribute or impede demand to BWS supply as it will be pulling its potable water demand from HWS.</p> <p>With regard to water use, Honokea assumes other permitted projects in the area have applied for and received water service requests from their respective utility providers, which have integrated the requested demand into their annual budget within their allowed sustainable yield. Application for a water service request relates to future water service and does not take away potable water from any current residents.</p> <p>It is noted that Honokea will be drawing from HWS, a water utility separate from BWS. Honokea's requested annual total water usage of approximately 0.136 MGD, while significant, falls within Hawaii Water Service's Water Use Permit of 2.337 MGD and is able to be accommodated within unused but already allocated pumping amounts permitted by CWRM to HWS within the Ewa Kunia subaquifer. Honokea has obtained a will serve letter from HWS for future water service for this project.</p> <p>In terms of cumulative impacts regarding water use, under the assumption the Wai Kai project uses over twice as much water as Honokea (0.272 MGD annually), the two projects would have an estimated annual total water usage significantly less than each of their respective water service systems, as Honokea's source, HWS, has a use permit of 2.337 MGD and BWS, Wai Kai's source, has use permits for the wells at Makakilo (1.5 MGD), Honouliuli I-1 (2.24 MGD), and Honouliuli II-1 (4.48 MGD), and would be a small fraction of the forecasted 27 mgd demand required by 2035.</p> <p>During periods of drought, per HRS §174C-62, the State water code mandates that CWRM formulate a plan to be implemented during periods of water shortage within a water management area. The water shortage plan must set forth provisions and guidelines for imposing use restrictions on different classes of permits as may be necessary to protect the resource. As a water permit holder, HWS was required to prepare a Water Shortage Plan to meet this requirement, which has been incorporated into their budget and sustainable yield. Honokea will</p>

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		<p>coordinate with HWS to comply with their water shortage plan as necessary.</p> <p>The Mobility Analysis Report (Appendix G) first forecasts baseline 2024 traffic volumes without the development of the Honokea Surf Village, and then forecasts volumes with the development of the proposed project uses. It documents estimated traffic movements at the analyzed intersections and then determines average delay times and the resulting level of service (LOS) ratings.</p> <p>While the background traffic growth is expected to increase delays in 2024, the existing study intersections are expected to continue operating at a desirable LOS D during both the weekday AM and PM peak hours. For the baseline (2024) plus project conditions, the Honokea Surf Village is not expected to result in any significant vehicular impacts at any of the study intersections.</p>
Alternatives		
<p>The No-Action alternative is “not considered a viable alternative” because if this wave pool were not constructed, Honokea Surf Village would not make money and that seems to be the only reason that Honokea Surf Village deems the No-Action alternative not viable. The Honokea Surf Village identifies the true purposes of this project in this section, making money off the global surf and film industry. There is only the discussion of the economic impact that this project will have and this section leaves out discussion of virtually all other impacts of this project, including the environmental and cultural impact.</p> <p>The several other alternatives discussed in Section 4 do not adequately analyze the impacts of constructing a 6.8 million gallon wave pool. The alternatives discuss alternative uses for the property such as designating the area for camp sites or a new film studio. The alternatives, however, fail to mention alternatives to using non-potable water. Pumping and filtering water from the ocean would preserve more than 9,000 gallons per day of potable water that can be used by the residents of West O’ahu.</p> <p>The preferred alternative to build the surf lagoon fails to adequately address the legality of the proposed overnight cabins. The preferred alternative seeks to build up to fifty overnight cabins that do not conform to the T2 Zoning regulations of the property.</p> <p>The DEA expects the project to be granted a waiver under the new Kalaeloa District Development rules that will be approved in spring 2023, but the DEA states that the new rules will only allow for recreational land uses like camping. Allowing cabins on the property is very different from allowing</p>	<p>Rivera / Burgess</p>	<p>Economic viability is one of the potential losses of the no-action alternative, as a vacant lot provides no jobs, value, or economic benefit for the community. However, the no-action alternative would run counter to HCDA’s mission for Kalaeloa per their Kalaeloa Strategic Plan:</p> <p>“...to lead a sustained, long-term public/private commitment for the realization of Kalaeloa as a Center for Excellence through partnerships, planning, advocacy, and stewardship.”</p> <p>This alternative would result in the continued lack of recreational and economic opportunities in Kalaeloa, and would result in the historically Hawaiian sport of surfing ceding more of its influence to the continental United States and abroad.</p> <p>The no-action alternative would not properly address the current needs for recreational opportunities, film industry resources, or potential visitor awareness to the Kalaeloa area. No artificial surf facility would be built in Hawai’i to serve as a training and meet venue for local and national Olympians and elite athletes, including the use of the facility for future Olympic training, and no opportunities would be provided for surfboard and fin design testing facilities.</p> <p>For all the reasons outside of economic benefits omitted in this comment letter, as well as the lost economic benefits of the project, the “No-Action” alternative was not considered a viable alternative.</p> <p>Brackish water wells are an alternative that is now being considered due to the passing of Bill 1743 which occurred after the submittal of the Draft</p>

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<p>camping. Moreover, the DEA does not state the anticipated occupants of the cabins. It is unclear whether the residents in the cabins will be locals who are training in the wave pool or tourists who want to stay close to the wave pool during their visit. There is no indication that the cabins will even be allowed at all; the DEA is banking on the new rules to allow for the cabins to be viewed the same as campsites, and that is a big assumption to make.</p>		<p>EA. Additional factors including impacts on cost, energy demand, equipment and maintenance due to additional salinity of the water source are being evaluated. Pumping water from the ocean, over 3,000 feet away, is economically unfeasible and would require an incredible amount of easements and entitlements.</p> <p>The proposed cabins site plan is the preferred alternative, as it would provide a safer environment from weather and noise elements than tent camping. Cabin occupants are not anticipated to be from one demographic alone, as disabled guests, local residents, and other users of the facility would add to a wide range of potential users that could benefit from such accommodations. New HCDA rules are in flux, and will not be finalized until 2023 at the earliest, which is why alternatives are proposed in this environmental assessment to accommodate a variety of potential outcomes of the rules development process.</p>
<p>Public Safety</p>		
<p>The Honolulu Police Department has reviewed the Draft EA and does not have any comments or concerns at this time.</p>	<p>HPD</p>	<p>Honokea acknowledges this comment.</p>