

HCP Committee

From: David Yamashita <David.Yamashita@co.maui.hi.us>
Sent: Monday, August 30, 2021 1:08 PM
To: HCP Committee
Cc: Karla Peters
Subject: Baldwin Beach Park Master Plan - presentation and report attached
Attachments: Adaptation Plan - August 2021-V3-compressed.pdf; Baldwin Park MP_Executive Summary-V10.pdf

You don't often get email from david.yamashita@co.maui.hi.us. [Learn why this is important](#)

PDFs of the presentation and the report are attached. Please let me know if you have any questions. Thanks.

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INTERIM

BALDWIN BEACH PARK Master Plan

Pā'ia, Maui
May 2021

Project Team

Prime Consultant
DTL, Inc.

Landscape Architecture
PBR Hawaii

Archeology
'Āina Archaeology

Cost Estimating
J. Uno

*Special thanks to Tara Owens, UH
Sea Grant Program and to the Rinzai
Zen Temple and Rev. Yamaguchi for
the use of their facility for PAC
meetings.*





Kanaha Beach Park

Baldwin Beach Park

Hookipa Beach Park

Kahului

Sprecklesville

Pā'ia

Haiku

0 1 2 3 miles

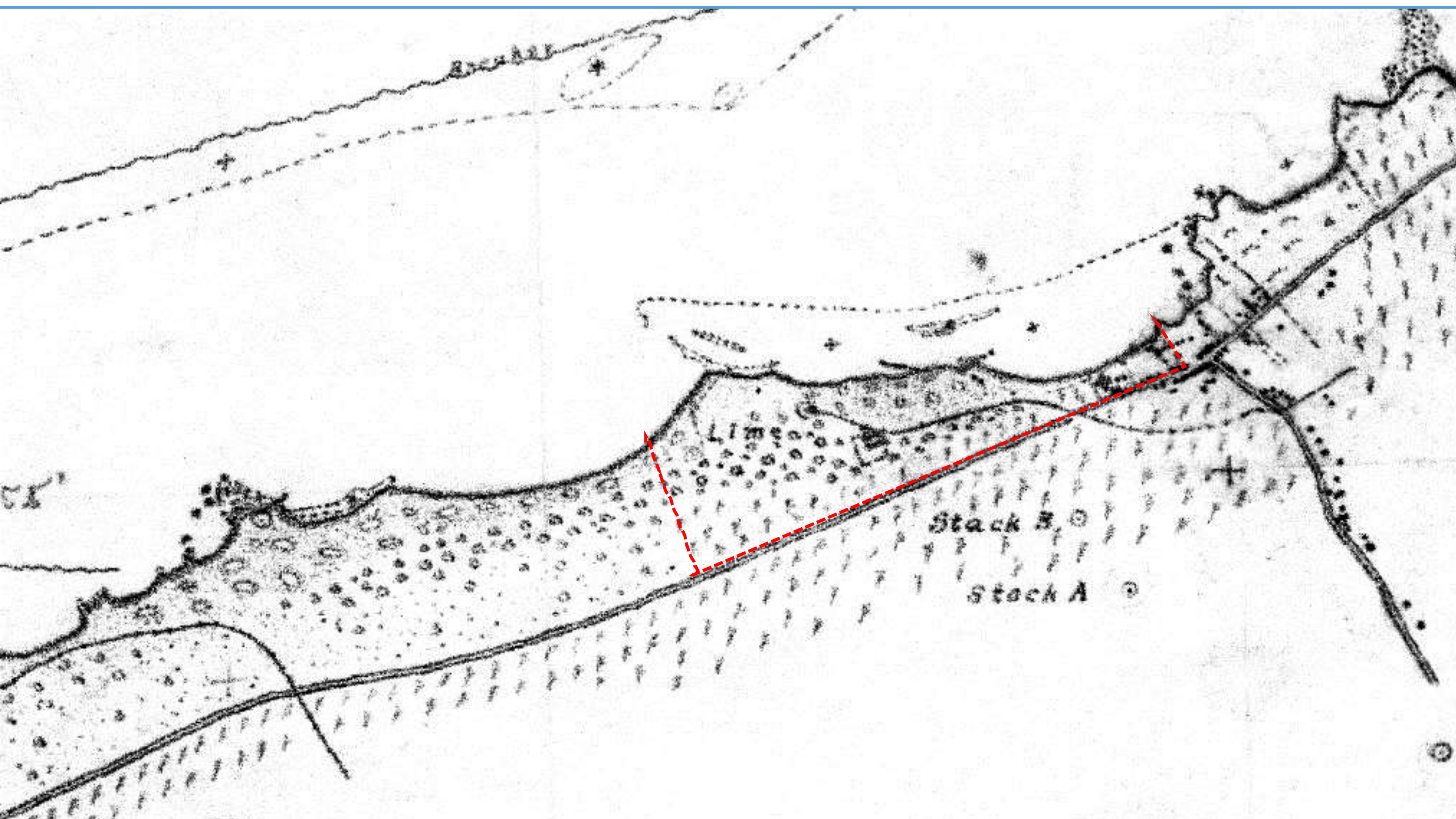




Photo courtesy Brian McCafferty



Paia Youth & Cultural Ctr.

Graveyard (A&B)
Rinzai Zen Temple

Kailua Ditch

Hana Highway

Project Advisory Committee

Kaleo Amadeo

Keola Brown

Pulama Collier

Jeff Chong

Cindy Nagata

Alan Nago

Michele Nishiki

Howard Rodrigues

Noelani Sugata

Bruce U'u

Ben Wallin

Susun White



Public Open Houses



What would you like to see more or less of at Baldwin Beach Park? Are there any issues or concerns?

FIX PARKING LOT - SO IT CAN BE USED

*How will you address the illegal campers at both Baldwin & Baby Beach *

What will we do to keep drug + illegal access out?
How can the turtles receive more protection?
We would love the walking path to extend all the way to Sprecks.

In flooding of Baldwin Parking lot Gate closed so people flock to Baby Beach. They sleep in cars and in woods around baby beach! They defecate in woods, Police have been called but don't kick the illegals out.

more: Paving, Walkways, Trails, Better Parking

We need a gate at Baby Beach! Baldwin & baby beach are connected what is a beach access status & responsibility? Need police to enforce the laws.

The bum situation is out of control. It makes

Stable, 120 (4th ramp area) and former parking area. REPAIR LANE RAMP. REPAIRMENT IF CAUSING PROBLEMS.

EXISTING CONDITIONS

BALDWIN BEACH PARK | PĀ'IA, MAUI





August-September



October - April



Issues and Challenges





SLRXA 3.2

**Baldwin
Beach
Park**

**Lower
Paia Park**

Hana Hwy.

HI-36

HI-36

HI-36

Ae Ln

30







Key Strategies

- Restore the park's coastal ecology.
- Preserve the natural character of the shoreline.

Key Strategies

- Expand recreational opportunities.
- Improve pedestrian, bicycle, and vehicular circulation and parking.

Key Strategies

- Create a safe and secure environment.
- Upgrade infrastructure and facilities.
- Enhance landscape plantings, grounds, and facilities maintenance.

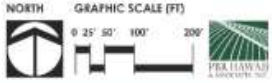
MASTER PLAN CONCEPT DIAGRAM

BALDWIN BEACH PARK | PĀ'IA, MAUI

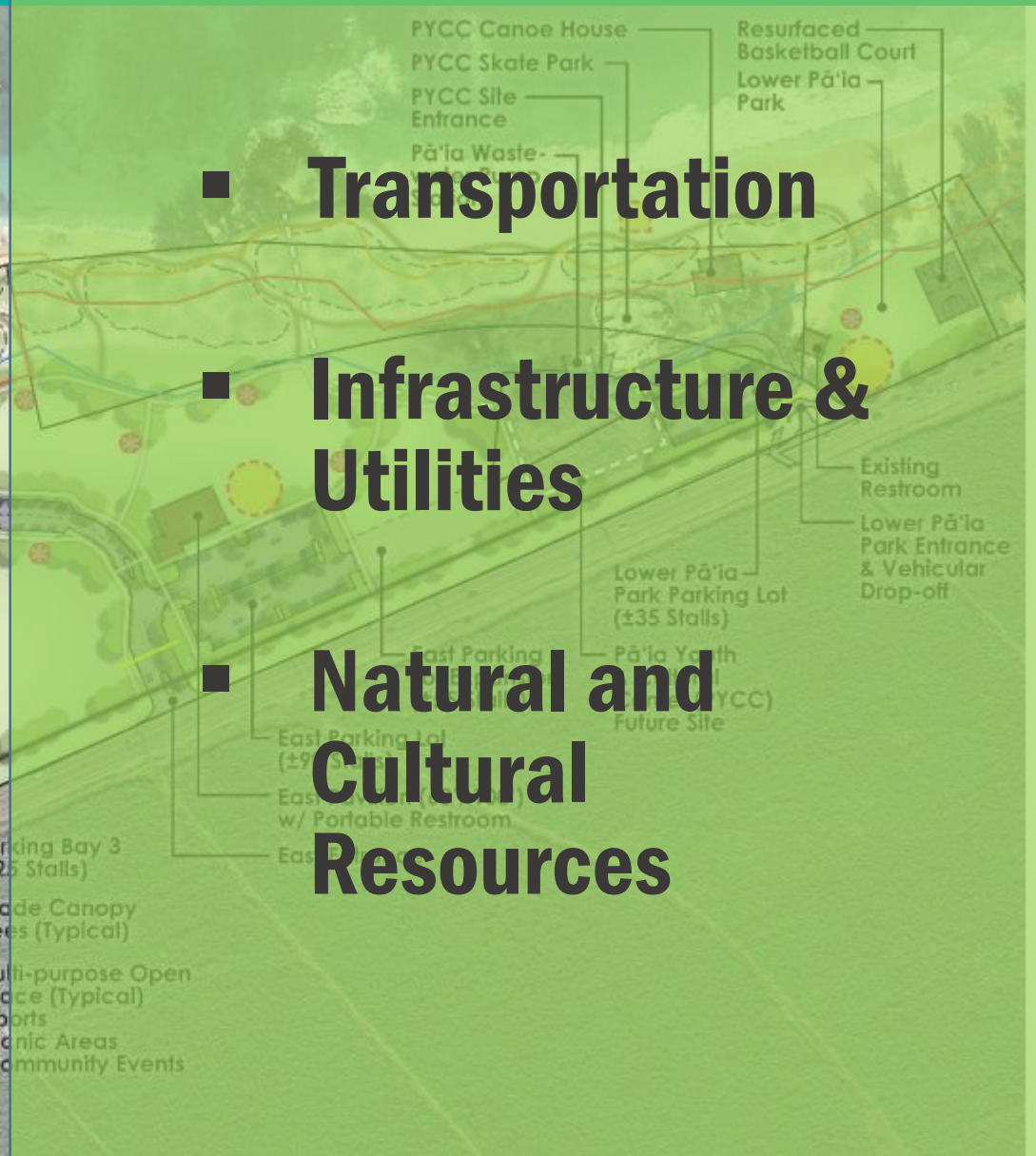


CONCEPTUAL MASTER PLAN

BALDWIN BEACH PARK | PĀ'IA, MAUI



Technical Studies Project



■ Transportation

■ Infrastructure & Utilities

■ Natural and Cultural Resources

Restore the dune ecosystem while protecting beach access and enhancing recreational uses and habitat for wildlife in phases aligned with implementation of park master plan.



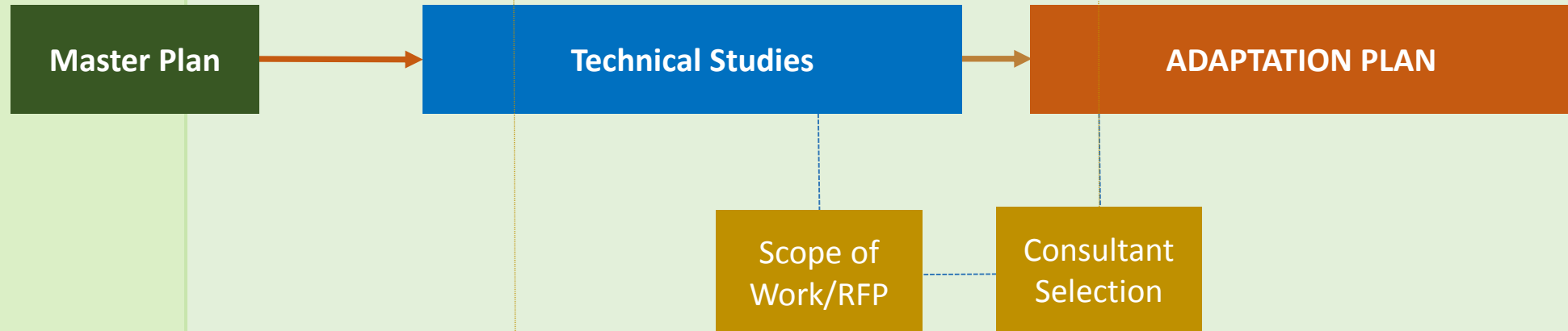
ZONE 4

Project Schedule

2021

2022

2023



Mahalo



INTERIM

BALDWIN BEACH PARK Master Plan

Pā'ia, Maui
May 2021

County of Maui - Department of Parks and Recreation



BALDWIN BEACH PARK Master Plan

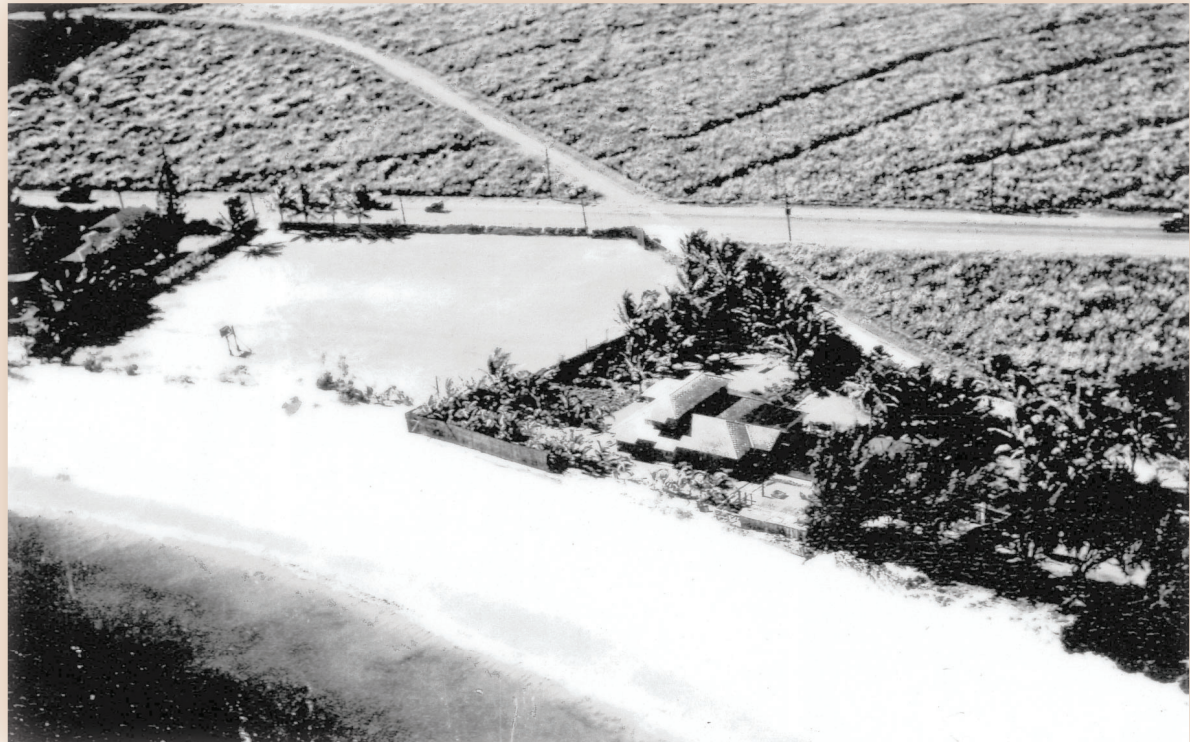
Prepared by:

DTL, Inc. - Prime Consultant
PBR Hawaii - Landscape Architecture
J. Uno - Cost Estimating
'Āina Archaeology
Department of Parks and Recreation
County of Maui

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*Special thanks to Tara Owens, UH Sea Grant
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and Rev.Yamaguchi for the use of their facility.*



*Baldwin Beach Park around 1940. The structure in
the foreground is the building that now houses the
Paia Youth and Cultural Center.*

Photo courtesy of Brian McCafferty

Project Background and Purpose

In 2014, the county acquired 30 acres of former A&B land between the existing Baldwin Beach Park and Pā‘ia Bay Park. With this acquisition, the park doubled in size to about 54 acres. But the acquisition did more than increase its acreage; it also created a contiguous open space that stretches over half a mile from the Maui Country Club to the outer edges of Pā‘ia town. With this new opportunity came an obligation to articulate a long-term vision based on protecting this resource while providing recreational opportunities for the area’s residents, many of whom remember a period when the park was a place where the community relaxed, played, and celebrated important milestones in their family’s lives.

Purpose of the Plan	Key Ideas	Refining the Plan & Implementation
<p>The Baldwin Beach Park Master Plan proposes a new vision for the improvement of one of the county’s most popular parks on the north shore of Maui. The purpose of the master plan is to create a long-term concept that guides future planning, projects, and specific actions.</p> <p>The plan is not a detailed design document – rather, it provides an initial vision that will be refined as additional technical studies are completed and as new information is found. Once this revised concept is completed, it will guide the design of specific projects as the implementation phase begins.</p>	<p>This broad vision is based on a few key ideas.</p> <p>The first is that <i>the park has and should continue to be an important part of the local community</i> – a place to enjoy the beach, the ocean, to get together with friends and family, and to participate in a variety of outdoor activities.</p> <p>These are basic needs and consequently, another key idea is to <i>keep the plan simple with a handful of key elements</i> -- open space, paths, parking, and basic facilities for people to get together.</p> <p>Finally, the plan responds to the current knowledge of sea level rise by <i>proposing improvements that are further mauka than existing facilities</i>. As new information is generated, the location of specific features may have to be adjusted.</p>	<p>Over the next few years, additional studies will be conducted to address specific technical aspects such as transportation and traffic, drainage and flooding, and infrastructure.</p> <p>Once these studies are done, this interim master plan will be refined and updated. In addition, the plan will not be built out in one phase; it will instead be implemented over many years as funding is available.</p> <p>Also, conditions and circumstances may change over the life of the plan. It is expected that when this happens, the plan’s underlying concept will be reviewed and refined as needed.</p>

Location and Context

Baldwin Beach Park is located on the north shore of Maui, just east of Kahului between the Maui Country Club and Paia town. The park is bordered by the Maui Country Club on the west, Hana Highway on the south, residential development on the east, and the ocean to the north.

As shown in the photo at right, the east and west edges of the park have been improved with a variety of recreational facilities and open areas. A large undeveloped section of 30 acres in the middle of the site was acquired in 2014 from Alexander & Baldwin

(A&B) as part of a larger negotiated sale with the County of Maui.

Lower Paia Park functions as a separate park but is considered part of the study area for the master plan. The park also includes several uses and facilities not affiliated with the Department of Parks and Recreation. These include the Rinzaï Zen Mission, Pā'ia Youth and Cultural Center (PYCC), a small graveyard (owned by A&B) and a small pump station mauka of PYCC owned by the county's Department of Environmental Management.

Baldwin Beach Park is one of three county parks in central Maui along the north shore (see photo below). Each of the sites provides a different recreational experience because of their setting, character, and facilities. With easy access from Hana Hwy, and a large area of open space, most of which is undeveloped, Baldwin Beach Park has the potential to offer recreational experiences and activities that complement those of Kanaha Beach Park and Hookipa Beach Park.

Baldwin Beach Park is one of three County-owned oceanfront parks on the north shore. All are popular though each has its own distinctive profile of park visitors.





Baldwin Beach Park History

Baldwin Beach Park was named after Harry A. Baldwin, son of Henry P. Baldwin, the co-founder of Alexander & Baldwin, Inc. It was originally developed as a company recreation facility by Hawaiian Commercial & Sugar Company, a division of Alexander & Baldwin, Inc.

According to the review of cultural studies for this project¹, there is evidence of “settlement along the Hāmākuapoko coastline, with dates indicating use of the shoreline as early as A.D. 1235-1420 as well as burial practices in the Sprecklesville area...”

In addition, previous studies found a minimum of 12 sites and features along the coastline and within a minimum of 0.5 miles inland of the park “that have been interpreted as being of Hawaiian origin prior to Western contact.” The study notes also that large portions of the park site “had been developed or previously affected by sand mining and vehicular disturbances”.

Maui Agriculture Co., run by Alexander and Baldwin, constructed the Pā’ia Lime Kiln in 1907 at the park site and over much of the next seven decades, sand and coral were excavated from the beach to manufacture hydrated lime for plantation use, building roads and airstrips and producing cement during wartime.

1 Review of Historic Preservation Documentation and Known Cultural Concerns for the Baldwin Beach Park Master Plan by DTL Hawai’i, prepared by Tanya Lee-Greig, M.A., Aina Archeology, 2019.

A report² cited in the cultural study notes that “large volumes of sand, roughly 4,000 cubic yards per year or 150,000 cubic yards between 1910 and 1949, was mined from the immediate area of the kiln”. After 1949, “production of the kiln tripled thus indicating that sand, likely from the Puuone dune system that extends across the central isthmus of Maui, had been imported to the site for lime production thus indicating the possibility that some of the sand deposits

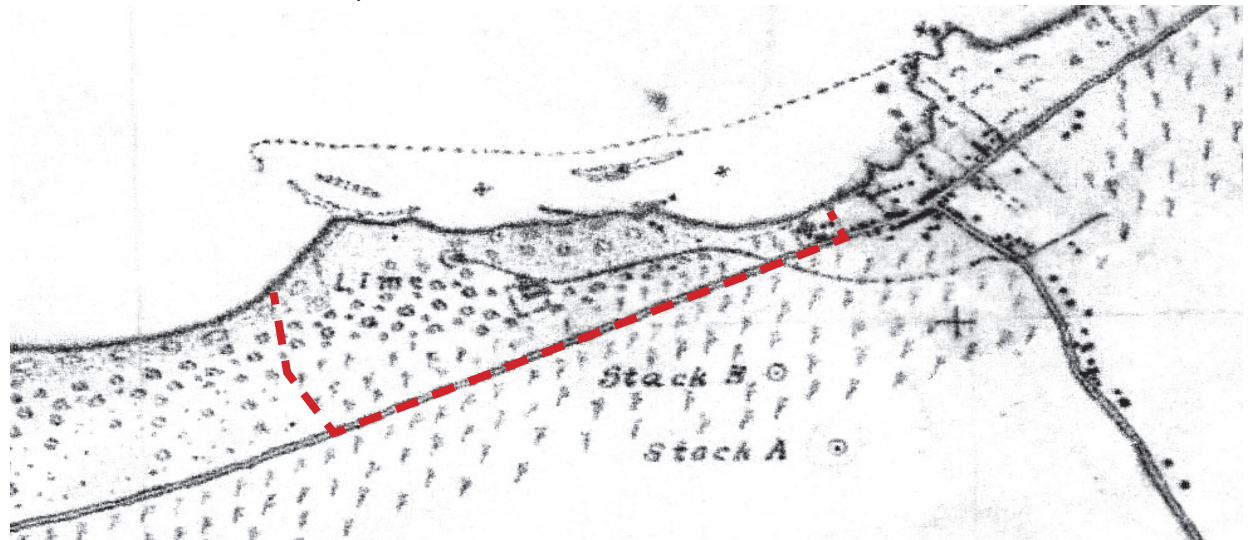
2 An Archeological Inventory Survey of a 9.36 Acre Parcel Near Paia hamakuapoko, Makawao, Maui (TMK 2-5-05:16) prepared by Paul Titchenal.

encountered within their project area were secondary deposits from central Maui.”

Most significantly, the project’s cultural study notes that “The Pu’uone Sand Dunes of Central Maui are known to have concentrations of traditional human burials and the possibility of transport of human skeletal remains in imported sand to the area is highly possible”.

The Baldwin Beach Park site (outlined in red), from a 1911-12 map by the Department of Commerce and Labor, Coast and Geodetic Survey.

Note the shoreline in the area of the lime kiln and how it compares to existing conditions (photo on page 5).



The Planning Process

Phase 1: Site Analysis and Technical Studies

The project started in October 2018 when a few technical studies were prepared, including a site analysis, a coastal engineering study by Sea Engineering, Inc., and an archaeological literature review by 'Āina Archaeology. These provided a basic description of site conditions but more detailed studies are needed as the master plan is refined.

Phase 2: Community Engagement

Several techniques were used to involve the community in the planning process. The first step was to conduct a series of personal interviews with ten

community members. A twelve person Project Advisory Committee (PAC) was also established to work with the consultant team and DPR staff. Four meetings with the PAC were held with throughout the planning process.

In addition, a series of public open houses were held with the general public and agency staff. The events attracted a cross section of the park's users along with representatives from public agencies. Three open houses were held, in March, May, and August 2019. Each was held for 2.5 hours from 4:30- 7:00 pm. One was held at the Kaunoa Senior Center in Sprecklesville and two were held at the Paia Community Center.

Phase 3: Preparation and Review of Draft Plan

A draft plan was prepared by the consultant team using information generated through the first three phases. Public open houses also were held to review the draft plan. After the draft plan was revised, another meeting was held with the PAC to discuss and refine the concept as it was being developed.



The Project Advisory Committee at one of its four meetings.



The three open houses were set up to be interactive with project staff scattered throughout the room and information presented on large boards. Participants also were encouraged to write comments and post them on boards for others to see.



Existing Conditions

PARK FEATURES

The project area consists of three distinct zones: Baldwin Beach Park, the Baldwin Beach Park Extension/ Middle Park, and the Lower Pā‘ia Park. An image of three zones are shown in the map on page 9. Existing beach park structures and facilities are listed below.

Restrooms

There are two existing restrooms in the park, one at the western end of the park near the existing pavilion and one in the Lower Pā‘ia Park portion of the project. One outdoor shower is included at each restroom.

Picnic Facilities

One covered picnic pavilion with 18 tables and a concessions kitchenette is located in the western portion of the park. Due to ocean flooding, the kitchenette is no longer in use.

Water Safety

One lifeguard station is located at the western end of the park. A Matson container for lifeguard supplies and equipment is also in the area.

Other Facilities and Improvements

Baldwin Beach Park also features an open lawn area that accommodates organized and pick-up soccer, rugby, Frisbee, and other activities. The area also includes a softball backstop at the western end of the park. An outdoor basketball court is located in the Lower Pā‘ia Park portion of the site. Water fountains and spigots are provided at each barbeque.

Parking and Access

Three driveways provide access to the park. The main paved access at the western end of the park is accessed from Alawai Road off Hāna Highway.

An unpaved gated driveway provides access to the middle portion of the park off an interior circulation road adjacent to the highway. Direct access to Lower Pā‘ia Park is provided via a driveway off the highway. The existing parking areas are unpaved, and the existing parking stall count is listed in the table below.

The Lower Pā‘ia Park parking lot is scheduled for reconstruction in ____.

PARK USE

Baldwin Beach is a popular destination on Maui for community events, family gatherings, beach activities, and recreational sports. The area between Baldwin Beach Park and Lower Pā‘ia Park, adjacent to “Secret Beach,” appears to be visited less frequently than the rest of the shoreline, due to its isolation and less convenient public access.

Located in Lower Pā‘ia Park, Pā‘ia Bay is a popular destination for bodyboarders and bodysurfers and is home to the Pā‘ia Youth and Cultural Center (PYCC), a nonprofit center that provides educational and recreational opportunities for youth.

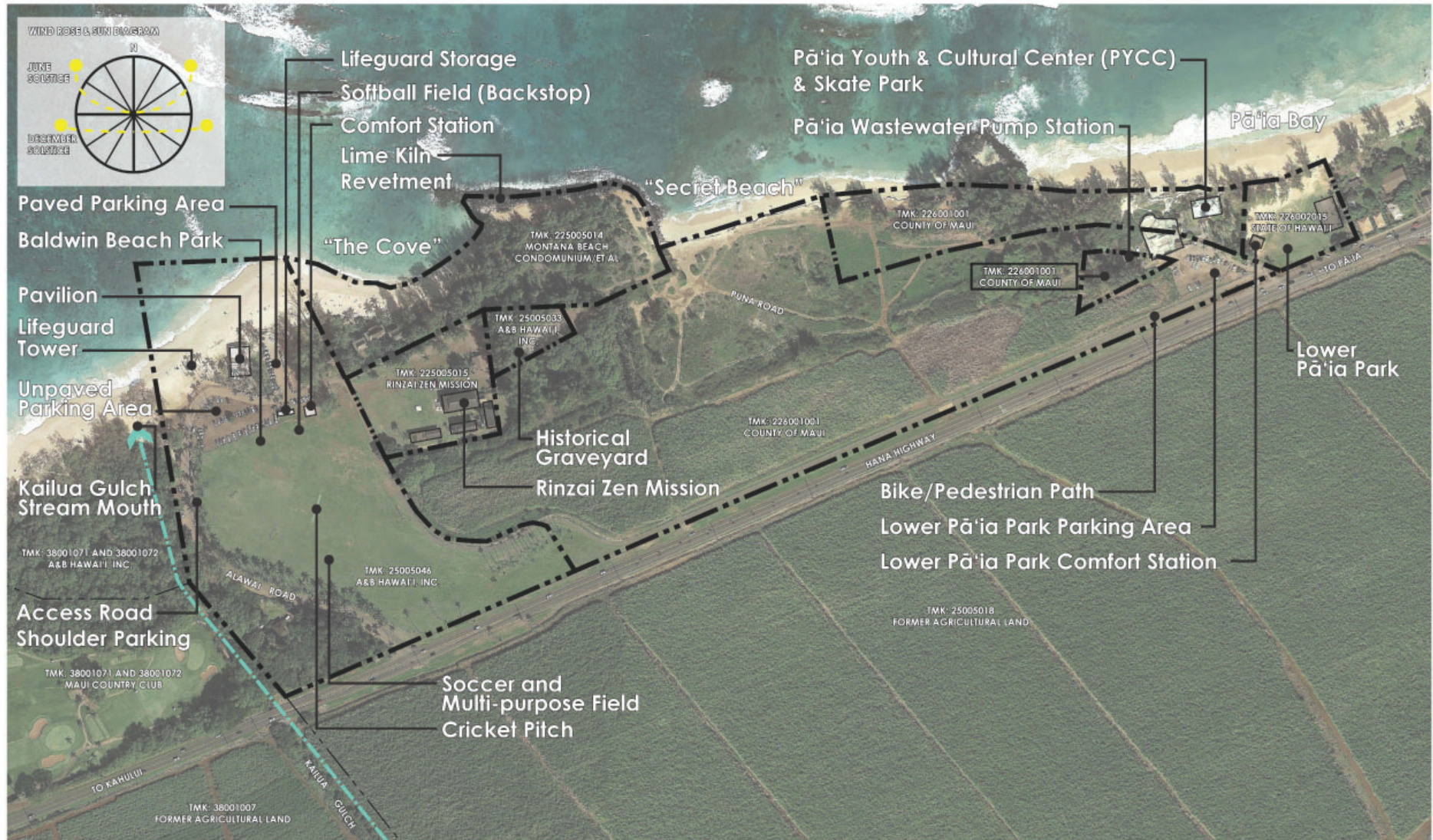
The beach shoreline trail, which runs from Lower Pā‘ia Park to Baldwin Beach Park is frequently used for daily recreation.

EXISTING PARKING

BALDWIN BEACH PARK	90 formal (Gravel parking lot: 64) (Paved parking lot: 26)	87 informal (road shoulder parking)
MIDDLE PARK	0 formal	0 informal
LOWER PĀ‘IA PARK	43 formal	0 informal
HIGHWAY SHOULDER	0 formal	0 (parking not allowed on shoulder)

EXISTING CONDITIONS

BALDWIN BEACH PARK | PĀ'IA, MAUI



OTHER USES

Rinzai Zen Mission

The Rinzai Zen Mission was established in 1932 by Reverend Nanshin Okamoto from Okinawa. The temple is the only one of its kind from the immigration era in the U.S.

After Reverend Okamoto left Maui to establish temples elsewhere in the country, Reverend Kiyoshi Oshiro succeeded him and further developed the Paia temple until his death 50 years later.

After Reverend Oshiro's death, Reverend Seido Chisaka of Japan took care of the temple until Reverend Ryoza Yamaguchi was assigned as the temple's resident minister. Shortly after Reverend Yamaguchi and his family settled in, a suspicious fire destroyed the temple and resident building in 1987.

After strong financial support from Japan's Miyoshinji and Toenji Temples and much support from local resi-



The Rinzai Zen Temple

dents, the temple was rebuilt and reopened in 1990. Rinzai Zen Mission is well known for having the only Okinawan O-Bon Festival on Maui with live Okinawan entertainment and Okinawan food. It also held monthly temple services and sponsored Zen Meditation weekly gatherings.

Pa`ia Youth & Cultural Center

The Pa`ia Youth Council, Inc. dba Pa`ia Youth & Cultural Center (PYCC) was formed in October 1993 by 26 youth to provide social, educational, cultural, vocational, and recreational experiences for youth aged 9-18 years old for Pa`ia and surrounding communities. It has been a fixture in Maui's North Shore for youth and community related programs. Current annual membership averages 400 members.

A Drop-in Center hosts many programs and activities such as the Pa`ia Bay Cafe, The Hekili Multimedia Lab, Art, ESports, a variety of recreation activities, ocean sports, hiking, community service projects and paid youth internships.

Other programs include:

- The only exclusive bodyboard competition statewide since 1997. This competition is organized and run by the PYCC original alumni members.
- StoneWave SkatePark is a state of the art concrete bowl skate park that placed Pa`ia on the map internationally in the skateboarding world.

- RadiOpio (KOPO), their youth directed low power FM radio station, has been on the air since 2006 and was rated by Paste Magazine one of the 40 best little radio stations in the United States.

- In September 2017 the PYCC began another evidenced program, The Maui Hero Project. The original "Maui Hero Project" (MHP) began in 2000. The program ran uninterrupted for 10 years until the recession in 2008.

The PYCC's biggest achievement is that it has remained youth-directed and community based. Many of its original members are still active at PYCC. These alumni members still come to hang out, skate, surf, and provide advice and direction. Many of their children are now members of PYCC.

The center is planning to develop a new facility mauka of the existing structure and closer to the highway. This expansion project was not part of the master plan process.



Paia Youth and Cultural Center

OWNERSHIP

BALDWIN BEACH PARK | PĀ'IA, MAUI



Natural Conditions

Topography and Vegetation

The park's topography varies from flat zones of grass-land and trees to rolling sand dunes along the shoreline covered in coastal trees and shrubs. The sports field sits at about 8.0-11.0 feet above sea level, while the highest points of grassy dunes range between 20.0-27.0 feet above sea level.

Geology and Soils

The geology of the project area is a combination of Holocene and Pleistocene beach and dune deposits along the shoreline, Holocene alluvium mauka of or underlying the beach deposits and rock outcrops of the

The alluvium layer is clearly visible when erosion removes the top layer of sand. This alluvium washes into the ocean, creating muddy waters offshore.



Pleistocene Kula lava series. The Holocene epoch extends from the present to approximately 10,000 years ago, and the Pleistocene epoch extends from approximately 10,000 to 2 million years ago.

The Pā'ia coastline is lined by beachrock awash at the waterline and as much as 800 feet offshore showing the historical record of beach erosion is merely the latest stage in an ongoing process.

The shoreline is characterized by an extensive fringing reef complex associated with a broad and shallow reef flat that parallels most of the coastline and also contains the widespread presence of dunes in the project area.

The Baldwin Beach Park pavilion around 2016. The covered portion of the shelter was undermined in 2019 and subsequently removed (see photo on page 13)



Shoreline Conditions

Historically, a considerable loss of sand along the shoreline occurred between 1912 and 1960. This loss may be attributable to sand mining operations at the Pā'ia lime kiln, although there may also be other factors. When the lime kiln was active, a revetment was constructed between Pā'ia "Secret Beach" and Baldwin Beach and has been an effective protection for the shoreline. The structure provides a good access pathway between beach cells and is heavily used by fishermen.

Baldwin Beach has highly seasonal longshore sand migration patterns caused by the winter and summer wave climate. Winter waves from the northwest tend to push sand to the east side of the beach, while trade wind waves that dominate in the summer tend to push sand to the west side of the beach. See photos on page 14.

Sand volume changes are more dynamic at both the east and west ends of the beach (i.e. each end of the beach cell) but are more extreme at the east end. The total sand volume on Baldwin Beach since April 2012 appears to be approximately the same from year to year.

On the eastern end of Baldwin Beach, a sand headland previously extended from the beach to offshore beach rock outcrops providing general beach stability. Over time, likely due to a combination of sand mining, sea

level rise, and erosion of the offshore beach rock, the headland was reduced to a tombolo and later to a mild salient.

Between the salient and the lime kiln revetment is the popular cove that is enjoyed today. Since the disappearance of the tombolo, seasonal sediment transport volumes along Baldwin Beach have increased and may be eroding the soils landward of the beach in the fall when the shoreline position reaches the seasonal landward maximum. Shoreline recession

along Pā'ia "Secret Beach" and the cove has caused the exposure of a large number of tree stumps.

Coastal Hazards

The U.S. Geological Survey has given the project area a high tsunami, stream flooding, highwaves, and erosion hazard ratings. These designations suggest that the area is highly vulnerable to these environmental issues.

Episodic flooding is a major problem at the park and occurs when both the Kailua Gulch-- a narrow 11.8

square mile watershed-- overflows during heavy rains due to the build-up of the beach sand berm and into the parking lot and when large waves overtop the berms and water floods the pavilion.

Global sea level rise is also projected to increase sea level by 8.2 feet by the year 2100 in an extreme scenario which will affect beaches and shorelines in Hawai'i including beach loss, beach narrowing, loss of land due to erosion and infrastructure damage.

The Baldwin Beach Park pavilion in winter 2016. Note the large expanse of beach on the makai side of the structure.



The makai side of the pavilion was undermined by high waves in September 2019, an action that will likely be more common in the future.





Typical Winter Conditions (Oct - Apr)



Peak Summer Erosion Condition (Aug - Sept)

Kailua Gulch

Kailua Gulch is a stream located on the west end of the park. The stream is the outflow point of the larger Kailua Gulch watershed, which is a 11.8 square mile land area, extending up towards Halekalā, and channels rainfall to the ocean (Hawaii Watersheds Atlas, 2008). As the stream nears its outlet at the ocean, it passes through the former sugar cane land, under Hāna Highway via culvert, and through the west border of the park.

The stream is densely vegetated with large hau trees and is filled with vegetative debris. Just before the mouth of the stream is a small culvert which is no longer in use. The culvert is severely undersized and restricts the flow of water to the stream mouth, contributing to stream overflow into the park.

Additionally, the mouth of the stream is often blocked by a sand beach berm due to wave action pushing sand towards the mouth. Due to the decreased water velocity of the stream from the dense vegetation and abandoned culvert, there is not

Aerial photos showing how the shoreline changes through the year. The top photo depicts typical winter conditions (October - April) and the bottom photo shows peak summer erosion conditions (August - September).

enough force for the water to push through the berm and naturally outflow to the ocean. As a result, the water backs up into the stream and overflows into the park as far as the playfield and Rinzai Zen Mission.

Archaeological and Cultural Review

Roughly 29 formal archaeological studies that include cursory reconnaissance, intensive archaeological inventory survey, and archaeological monitoring studies; as well as, individual site visits and field inspections have been completed within a one-mile radius of the current project area.

An onsite review of the shoreline by the project's archaeological consultant was conducted for this

project to determine if there was evidence of potentially significant and culturally sensitive historic properties.

While no intact cultural deposits culturally sensitive properties were noted within the exposed cliff faces, two potentially significant historic sites (Field Nos AA1818-001 and AA1818-002) were noted within the project area.

Within the current project area, two potentially significant historic properties were observed along the shoreline extent. AA1818-001 consists of one intact and one remnant World War II era pill-box located at the easternmost extent of the project area (see also Section 4.1) while AA1818-002 consists of the rem-

nants of the lime kiln that began operations around 1909 (see also Section 4.2).

Though Titchenal (2000:37) notes the presence and potential historic significance of the remnant lime kiln features, it does not appear that the features were formally recorded or assigned an SIHP number.

Other studies have identified shoreline resource gathering, fishing artifacts, petroglyphs and stones as well as sand that may have been imported from Pu'uone Sand Dunes which is known to have concentrations of traditional Hawaiian burials and human skeletal remains.

In February 2019 during an intense rain, Kailua Ditch overflowed across the large open space, flowed into the grassy area and the parking lot, then carved a channel in the beach sand to the ocean.



Overflow at Kailua Ditch



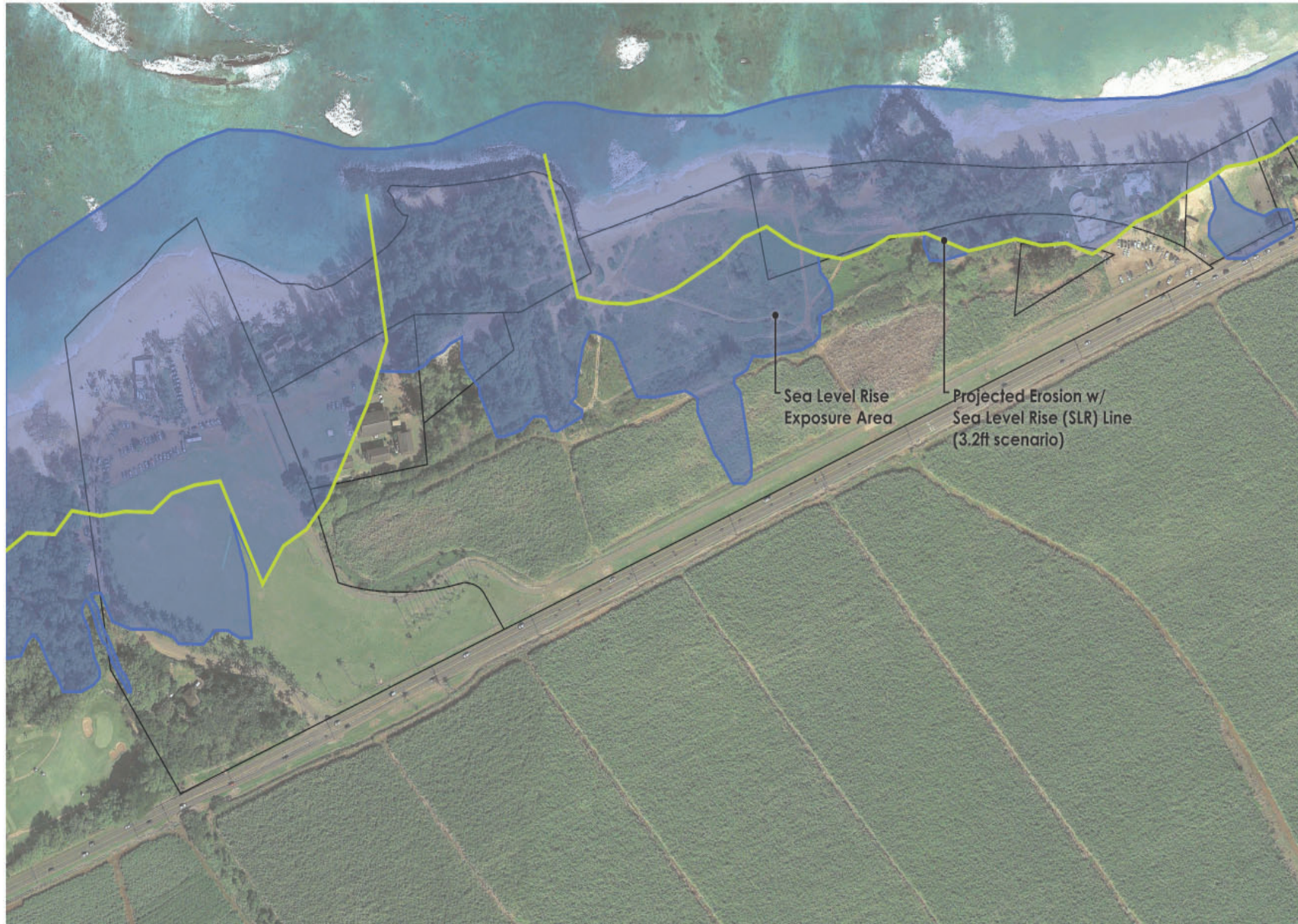
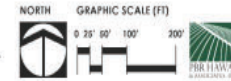
Flooded parking lot



Channel leading to the ocean

SEA LEVEL RISE EXPOSURE AREA (3.2FT SCENARIO)

BALDWIN BEACH PARK | PĀ'IA, MAUI



Issues and Challenges

Baldwin Beach Park faces a number of challenges such as erosion issues, flooding issues, security concerns, lack of trails and access, and facility demand due to its popularity. Among the most important issues are the following:

Coastal Erosion and Flooding

Baldwin Beach Park faces both coastal erosion issues (including erosion due to sand migration patterns caused by the winter and summer wave climate), as well as flooding due to wave overtopping (caused by loss of berms over time and blockage of Kailua Gulch), and stream overflow into parking lots. According to climate scientists, the rate of sea level rise is likely to increase dramatically in the coming decades.

Lack of infrastructure and basic park improvements

The park lacks many of the basic features needed to accommodate recreational use such as basic infrastructure, roads, parking, and lighting. This is especially true for the newly acquired middle section of the park. An additional lifeguard station may also be needed at Lower Pā'ia Park.

Limited Opportunities for Recreation Activities

Recreation facilities are now limited at the park. As visitation at the park increases in the future, there will be an increasing need for basic park features such as accessible paths, parking, access roads, picnic shelters, trees, restrooms, and multi-purpose open spaces.

Managing Recreational Use

Beach parks are among the county's most popular recreational sites and Baldwin Beach Park is one of three in central Maui. Of those, only two -- Baldwin and Kanaha -- have spaces and facilities that can accommodate a range of activities. Baldwin's proximity to Paia town generates another issue - the demand for parking, which can sometimes spill over into the park.

Safety and Security

Like many parks, there have been reports of chronic on-going safety and security issues at the park such as illegal parking, squatting, substance abuse, violence, and destruction to infrastructure. The presence of park visitors and active recreational opportunities can help to mitigate these issues.

The pavilion was severely damaged in 2019, requiring that a portion of the structure be removed.



The dirt and gravel lot, which is flooded during heavy rains and high surf.



In addition to the pavilion, the bike path (North Shore Greenway) is one of the few improvements for park visitors.



KEY STRATEGIES

MAJOR ACTIONS

CONTINUE TO RESTORE THE PARK'S COASTAL ECOLOGY AND SUPPORT COASTAL RESILIENCE

- Relocate parking and new development behind shoreline setback
- Strengthen and protect sand berm system
- Improve Kailua Gulch drainage to minimize impacts of flooding

EXPAND RECREATIONAL OPPORTUNITIES

- Expand multipurpose field for activities such as pick-up games and picnics
- Provide campground with management program
- Provide small covered picnic shelters for informal use by 2-4 people
- Improve the undeveloped areas in the center of the park

IMPROVE PEDESTRIAN, BICYCLE, AND VEHICULAR CIRCULATION AND PARKING

- Create a network of walkways and trails throughout park
- Provide vehicular drop-offs near the shoreline for unloading
- Provide reserved stalls for ADA and cultural practitioners
- Improve parking lot organization
- Provide road to connect different areas of park

CREATE A SAFER AND MORE SECURE ENVIRONMENT

- Provide additional lifeguard stations and storage at "Secret Beach" and Pā'ia Bay
- Use a variety of ways to improve security throughout the park
- Provide separate entrance access to Rinzai Zen Mission

UPGRADE INFRASTRUCTURE AND FACILITIES

- Improve drainage throughout park
- Provide additional large and small pavilions
- Provide new portable restroom for park expansion area
- Repave basketball court at Lower Pā'ia Park

ENHANCE LANDSCAPE PLANTING AND GROUNDS AND FACILITY MAINTENANCE

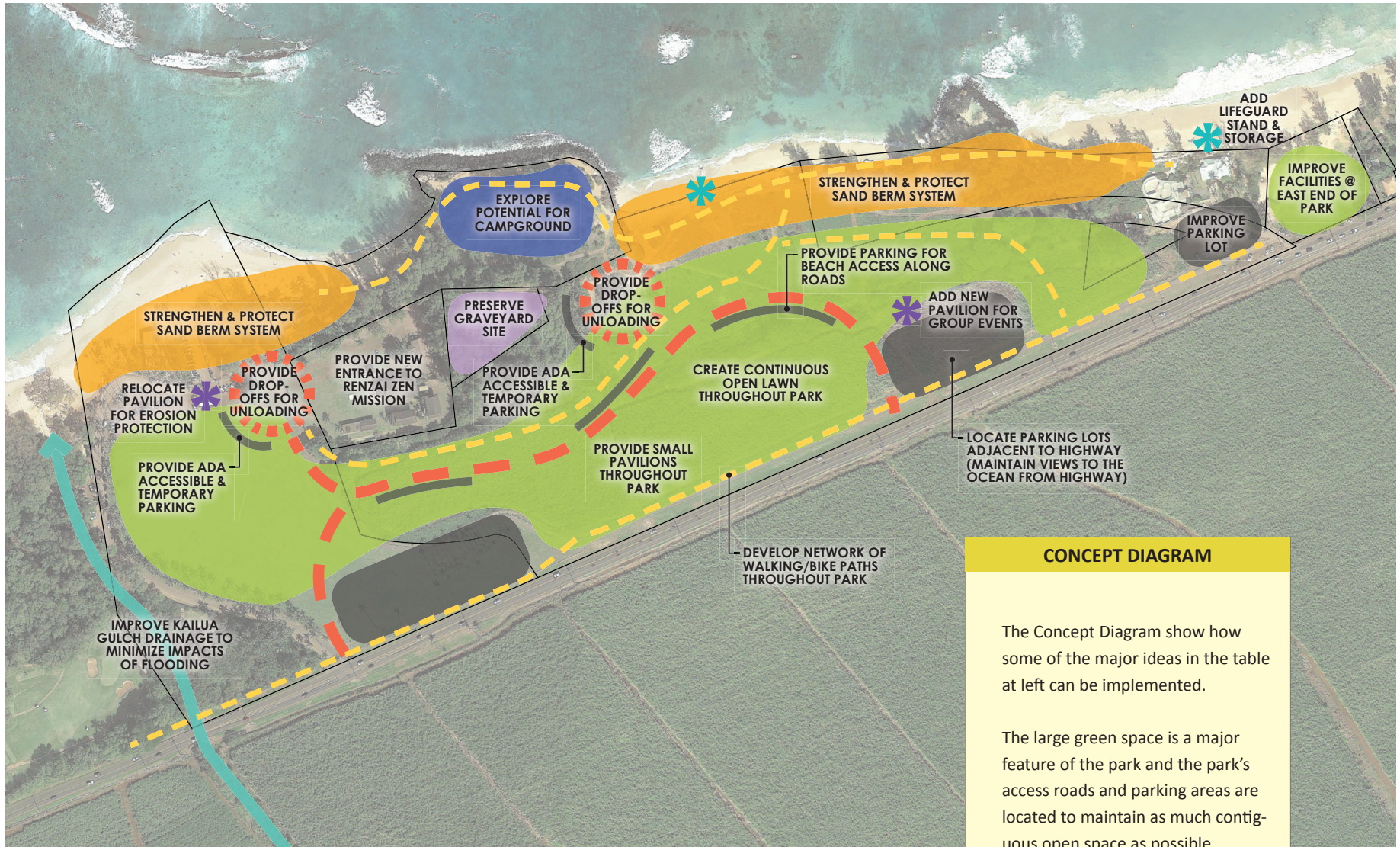
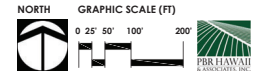
- Provide shade trees throughout park
- Restore native vegetation along shoreline and throughout park
- Remove or thin ironwood trees and replant with native species
- Additional and more frequent maintenance to overgrown vegetation

PRESERVE THE NATURAL CHARACTER OF THE SHORELINE

- Initiate shoreline restoration projects and programs
- Open views to shoreline from Hāna Highway

MASTER PLAN CONCEPT DIAGRAM

BALDWIN BEACH PARK | PĀ'IA, MAUI



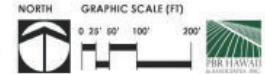
CONCEPT DIAGRAM

The Concept Diagram show how some of the major ideas in the table at left can be implemented.

The large green space is a major feature of the park and the park's access roads and parking areas are located to maintain as much contiguous open space as possible.

CONCEPTUAL MASTER PLAN

BALDWIN BEACH PARK | PĀ'IA, MAUI



MASTER PLAN CONCEPT

The Concept Diagram show how some of the major ideas in the table at left are implemented.

The large green space is a major feature of the park and the park's access roads and parking areas are located to maintain as much contiguous open space as possible.

Baldwin Beach Park and Shoreline Zone

The Baldwin Beach Park and Shoreline Zone is the the most heavily used and most popular part of the park, in part because it is the largest and most accessible.

It includes most of the park's shoreline areas and the facilities most in need of repair and/or renovation. It also is an area that has seen and will continue to see major impacts from sea level rise and other coastal threats.

Some of the critical issues in this zone include responding to threats from sea level rise and coastal flooding, improving drainage in Kailua Gulch, providing facilities (some in new locations) to meet current and future recreation needs, and improving connectivity to other parts of the park.

APPROACH

The focus for this area is to:

Address sea-level rise along the shoreline,

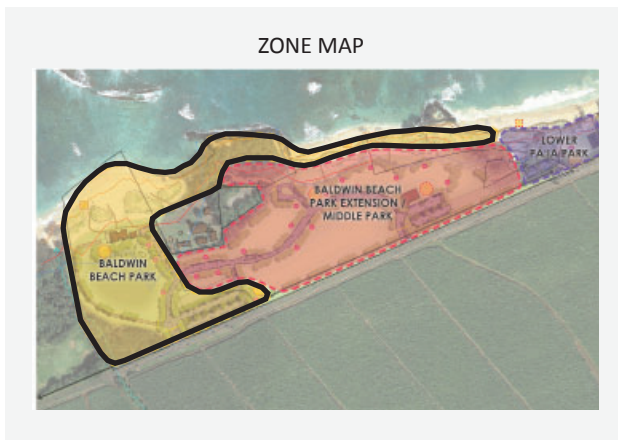
Replace and provide facilities to expand recreation opportunities, and

Improve pedestrian connections between this part of the park and other sections to the east.

KEY ACTIONS

- Initiate dune restoration along shoreline.
- Explore options to address flooding from Kailua Gulch .
- Relocate parking, pavilion and other improvements out of the projected sea-level rise zone.
- Install new security gates at west entrance, maintenance road, vehicular drop-off road, and Rinzai Zen Mission entrance.

SELECTED KEY ACTIONS



Expand paths to other parts of the park.

Provide new entrance to Rinzai Zen Temple.



Explore options to address flooding from Kailua Ditch.

Relocate parking and pavilion mauka out of projected sea-level rise zone.

Initiate dune restoration along shoreline.

Baldwin Beach Park Extension/Middle Park Zone

This zone comprises the bulk of the property acquired from A&B in 2014 and consequently, is unimproved and inaccessible for many visitors. It is however, an area with great recreational potential and can also serve as a space that links Paia Bay Beach Park with the existing Baldwin Beach Park.

The Middle Park portion of the project is the most open and disconnected from the other portions of the project, as well as having poor access and connectivity from Hāna Highway.

Some of the critical issues in this zone include improving connections between the two ends of the park, providing parking areas and additional access from Hana Hwy., and protecting the park from sea level rise and other threats.

APPROACH

The focus for this zone is to:

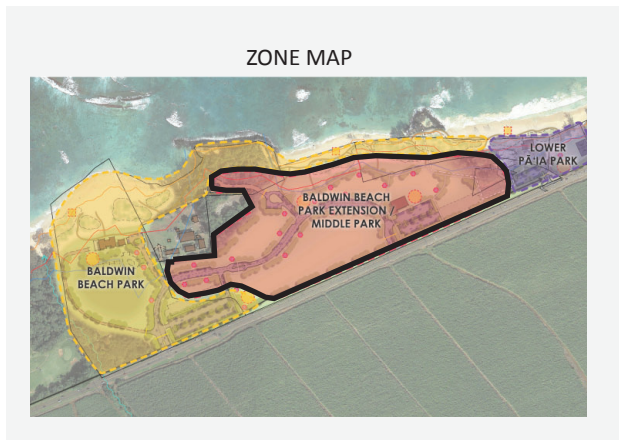
Develop the unimproved areas as multi-purpose spaces that can be used for a variety of recreational activities,

Provide basic improvements with paths, access roads, and recreational facilities, and

Address sea-level rise along the shoreline.

KEY ACTIONS

- Create open lawn areas with a network of paths that connect to other parts of the park.
- Develop an access loop and parking lots.
- Develop small covered picnic shelters along the proposed access road.
- Initiate a dune restoration program.



SELECTED KEY ACTIONS

Create multi-purpose open spaces and system of paved paths

Create network of paths connected to existing paved path along highway



Provide parking along road and outside SLR zone.

Develop access road and additional access point from highway

Restore dune system along shoreline

Lower Pā'ia Park Zone

The Lower Pā'ia Park Zone comprises the area also known as Lower Pā'ia Park. Although the site is relatively small, it includes several facilities - a restroom, basketball court, lawn area, parking, and the Pā'ia Youth and Cultural Center (PYCC).

Because of its proximity to Pā'ia town, this zone also attracts people visiting the shops and restaurants. The park is also heavily used during the annual PYCC-sponsored bodyboard competition.

One of the most critical issues in this zone is to address the need for parking, for both the public and PYCC. Also, the center is proposing to build a new facility closer to the highway, which will further increase the need for a clearly defined parking layout.

APPROACH

The focus for this area is to:

Improve existing access, parking and circulation to PYCC and other portions of the park,

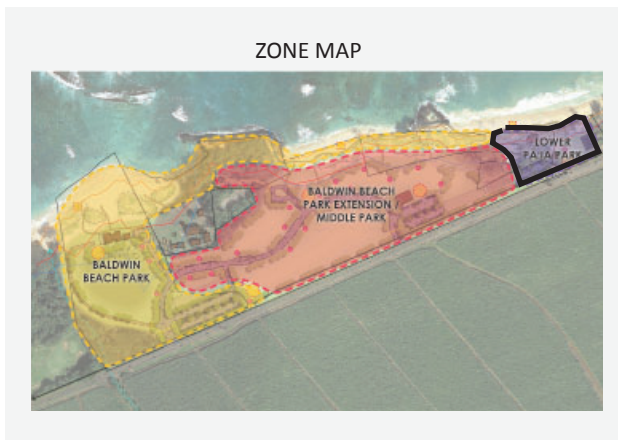
Improve parking for park users and PYCC visitors, and

Improve existing recreation facilities and provide new facilities as needed.

KEY ACTIONS

- Redevelop the parking area for the public and PYCC,
- Works with State DOT to develop a plan for the area along Hāna Highway to address parking issues along the road.
- Improve trails and provide additional trail connections to the shoreline and other parts of the park.
- Resurface existing basketball court, add more trees, and picnic facilities.

SELECTED KEY ACTIONS



Address parking issues along Hāna Highway.

Redevelop parking for park and PYCC.

Improve/repair park features



Provide paths to other parts of the park.

Site for new PYCC facility.

Install lifeguard stand


Cost Estimate


A generalized and preliminary cost estimate for the Baldwin Beach Park Master Plan was prepared for the County by J. Uno and Associates on October 24, 2019. The report's construction cost is estimated to be \$20,866,000 (2019 dollars), divided into three project phases. These costs are summarized below. They also include a 20% percent contingency.

The estimate included cost projections for demolition work, sidewalk/road/parking lot paving, parking lot lighting, landscaping, new structures including pavilions, and associated features such as picnic tables, playground and exercise equipment, lifeguard stands and equipment, and security gates. The estimate also included projected costs for design contingency, contractor overhead, profit, bonds/insurance, and G.E. tax.

PARK ZONE	SIZE	COST ESTIMATE
BALDWIN BEACH PARK	19.1 Acres	\$4,986,000
MIDDLE PARK	26.0 Acres	\$14,699,000
LOWER PĀ'IA PARK	3.8 Acres	1,181,000

Baldwin Beach Park and Shoreline Zone

P R O J E C T C O S T S U M M A R Y				
	PROJECT:	MASTER PLAN	ESTIMATE NO.:	18-155
	LOCATION:	PAIA, MAUI, HAWAII	PROJECT NO.:	N/A
	ARCHITECT:	PBR HAWAII	SUBMITTAL:	CONCEPT
	QTY BY:	T. UNO	PRICES BY:	J. UNO
			DATE:	10/24/2019
			CHECKED BY:	-
			DATE CHECKED:	
DESCRIPTION	QTY	UNIT	T O T A L	
			UNIT COST	TOTAL
BALDWIN BEACH PARK				
DEMOLITION				
Remove Existing Pavilion	1	ls	\$16,800.00	\$16,800
Remove Existing Parking Lot	5900	sf	\$2.40	\$14,160
PAVEMENTS				
ROAD SEGMENT A				
Asphalt & Crushed Stone	15800	sf	\$5.25	\$82,950
AC Pavement	22730	sf	\$6.50	\$147,745
Site Lighting	5	ea	\$18,500.00	\$92,500
WEST PARKING LOT				
AC Pavement	53500	sf	\$6.50	\$347,750
Site Lighting	11	ea	\$18,500.00	\$203,500
WEST PARKING LOT EXPANSION				
AC Pavement	24000	sf	\$6.50	\$156,000
Site Lighting	5	ea	\$18,500.00	\$92,500
PAVED PATHWAYS				
West Parking Lot to Unpaved Trail, Concrete	4376	sf	\$6.50	\$28,444
UNPAVED TRAIL				
Clear & Grub	27920	sf	\$1.80	\$50,256
Compact, Stabilize Soil	27920	sf	\$5.00	\$139,600
LANDSCAPING				
Canopy Trees, 15 g.c. Field Stock	85	ea	\$5,800.00	\$493,000
STRUCTURES				
Open Walled Structure	6000	sf	\$165.00	\$990,000
Open Picnic Pavilions, 12' x 12'	6	ea	\$6,200.00	\$37,200
Picnic Tables, BBQ Grilles @ Lime Kiln	6	ea	\$3,200.00	\$19,200
Playground/Exercise Equipment	1	ls	\$65,000.00	\$65,000
Security Gates	2	ea	\$4,500.00	\$9,000
Lifeguard Stand	1	ea	\$110,000.00	\$110,000
Lifeguard Storage, Matson Container	1	ea	\$9,500.00	\$9,500
SUBTOTAL, DIRECT COST,				\$3,105,105
DESIGN CONTINGENCY,	20.00%			\$621,021
PRIME CONTRACTOR'S OVERHEAD,	16.00%			\$596,180
PRIME CONTRACTOR'S PROFIT,	8.00%			\$345,784
BONDS & INSURANCE,	2.00%			\$93,362
G.E. TAX,	4.71%			\$224,360
TOTAL ESTIMATED CONTRACT COST,				\$4,985,812
ROUNDED,	92,610	SY	\$53.84	\$4,986,000


P R O J E C T C O S T S U M M A R Y					
	PROJECT:	MASTER PLAN	ESTIMATE NO.:	18-155	
	LOCATION:	PAIA, MAUI, HAWAII	PROJECT NO.:	N/A	
	ARCHITECT:	PBR HAWAII	DATE:	10/24/2019	
	QTY BY:	T. UNO	SUBMITTAL:	CONCEPT	
		PRICES BY:	J. UNO	CHECKED BY:	-
			DATE CHECKED:		
DESCRIPTION		QTY	UNIT	T O T A L	
				UNIT COST	TOTAL
BALDWIN BEACH PARK (Yellow Outline)					
DEMOLITION					
	Remove Existing Pavilion	1	ls	\$16,800.00	\$16,800
	Remove Existing Parking Lot	5900	sf	\$2.40	\$14,160
PAVEMENTS					
ROAD SEGMENT A					
	Asphalt & Crushed Stone	15800	sf	\$5.25	\$82,950
	AC Pavement	22730	sf	\$6.50	\$147,745
	Site Lighting	5	ea	\$18,500.00	\$92,500
WEST PARKING LOT					
	AC Pavement	53500	sf	\$6.50	\$347,750
	Site Lighting	11	ea	\$18,500.00	\$203,500
WEST PARKING LOT EXPANSION					
	AC Pavement	24000	sf	\$6.50	\$156,000
	Site Lighting	5	ea	\$18,500.00	\$92,500
PAVED PATHWAYS					
	West Parking Lot to Unpaved Trail, Concrete	4376	sf	\$6.50	\$28,444
UNPAVED TRAIL					
	Clear & Grub	27920	sf	\$1.80	\$50,256
	Compact, Stabilize Soil	27920	sf	\$5.00	\$139,600
LANDSCAPING					
	Canopy Trees, 15 g.c. Field Stock	85	ea	\$5,800.00	\$493,000
STRUCTURES					
	Open Walled Structure	6000	sf	\$165.00	\$990,000
	Open Picnic Pavilions, 12' x 12'	6	ea	\$6,200.00	\$37,200
	Picnic Tables, BBQ Grilles @ Lime Kiln	6	ea	\$3,200.00	\$19,200
	Playground/Exercise Equipment	1	ls	\$65,000.00	\$65,000
	Security Gates	2	ea	\$4,500.00	\$9,000
	Lifeguard Stand	1	ea	\$110,000.00	\$110,000
	Lifeguard Storage, Matson Container	1	ea	\$9,500.00	\$9,500
SUBTOTAL, DIRECT COST,					\$3,105,105
DESIGN CONTINGENCY,				20.00%	\$621,021
PRIME CONTRACTOR'S OVERHEAD,				16.00%	\$596,180
PRIME CONTRACTOR'S PROFIT,				8.00%	\$345,784
BONDS & INSURANCE,				2.00%	\$93,362
G.E. TAX,				4.71%	\$224,360
TOTAL ESTIMATED CONTRACT COST,					\$4,985,812
ROUNDED,				92,610 SY	\$53.84
					\$4,986,000

P R O J E C T C O S T S U M M A R Y

	PROJECT: MASTER PLAN	ESTIMATE NO.: 18-155	
	LOCATION: PAIA, MAUI, HAWAII	PROJECT NO.: N/A	DATE: 10/24/2019
	ARCHITECT: PBR HAWAII	SUBMITTAL: CONCEPT	CHECKED BY: -
	QTY BY: T. UNO	PRICES BY: J. UNO	DATE CHECKED:

DESCRIPTION	QTY	UNIT	T O T A L	
			UNIT COST	TOTAL
MIDDLE PARK				
STRUCTURES				
Open Walled Structure	6000	sf	\$145.00	\$870,000
Shower	1	ea	\$5,500.00	\$5,500
Water Fountain	1	ea	\$3,500.00	\$3,500
Open Picnic Pavilions, 12' x 12'	38	ea	\$6,200.00	\$235,600
Picnic Tables, BBQ Grilles	38	ea	\$3,200.00	\$121,600
Playground/Exercise Equipment	3	ea	\$65,000.00	\$195,000
Security Gates	2	ea	\$4,500.00	\$9,000
Lifeguard Stand	1	ea	\$110,000.00	\$110,000
SUBTOTAL, DIRECT COST,				\$9,153,812
DESIGN CONTINGENCY,	20.00%			\$1,830,762
PRIME CONTRACTOR'S OVERHEAD,	16.00%			\$1,757,532
PRIME CONTRACTOR'S PROFIT,	8.00%			\$1,019,369
BONDS & INSURANCE,	2.00%			\$275,229
G.E. TAX,	4.71%			\$661,410
TOTAL ESTIMATED CONTRACT COST,				\$14,698,114
ROUNDED,	26	AC	\$565,346.15	\$14,699,000

Lower Pā'ia Park Zone

P R O J E C T C O S T S U M M A R Y					
	PROJECT:	MASTER PLAN	ESTIMATE NO.:	18-155	
	LOCATION:	PAIA, MAUI, HAWAII	PROJECT NO.:	N/A	
	ARCHITECT:	PBR HAWAII	DATE:	10/24/2019	
	QTY BY:	T. UNO	SUBMITTAL:	CONCEPT	
		PRICES BY:	J. UNO	CHECKED BY:	-
				DATE CHECKED:	
DESCRIPTION	QTY	UNIT	T O T A L		
			UNIT COST	TOTAL	
LOWER PA'IA <u>line</u>					
DEMOLITION					
Clear & Grub Existing Vegetation	3.8	ac	\$20,000.00	\$76,000	
PAVEMENTS					
LOWER PA'IA PARKING LOT					
AC Pavement	21660	sf	\$6.50	\$140,790	
Site Lighting	4	ea	\$18,500.00	\$74,000	
EXISTING BASKETBALL COURT					
Resurface & Stripe	5810	sf	\$16.00	\$92,960	
UNPAVED TRAIL					
Clear & Grub	4080	sf	\$1.80	\$7,344	
Compact, Stabilize Soil	4080	sf	\$5.00	\$20,400	
LANDSCAPING					
Canopy Trees, 15 g.c. Field Stock	20	ea	\$5,800.00	\$116,000	
STRUCTURES					
Open Picnic Pavilions, 12' x 12'	2	ea	\$6,200.00	\$12,400	
Picnic Tables, BBQ Grilles	5	ea	\$3,200.00	\$16,000	
Playground/Exercise Equipment	1	ea	\$65,000.00	\$65,000	
Security Gates	1	ea	\$4,500.00	\$4,500	
Lifeguard Stand	1	ea	\$110,000.00	\$110,000	
SUBTOTAL, DIRECT COST,				\$735,394	
DESIGN CONTINGENCY,	20.00%			\$147,079	
PRIME CONTRACTOR'S OVERHEAD,	16.00%			\$141,196	
PRIME CONTRACTOR'S PROFIT,	8.00%			\$81,893	
BONDS & INSURANCE,	2.00%			\$22,111	
G.E. TAX,	4.71%			\$53,136	
TOTAL ESTIMATED CONTRACT COST,				\$1,180,809	
ROUNDED,	18,620	SY	\$63.43	\$1,181,000	

