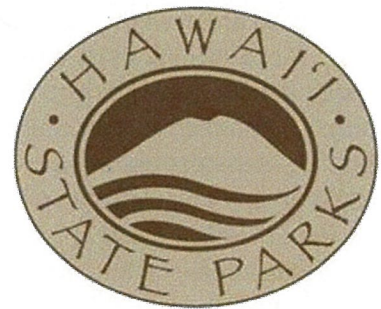




AHUPUA'A 'O KAHANA STATE PARK BACKGROUND INFORMATION AND RECENT PLANNING INITIATIVES

Supplemental Report - February 2019



Department of Land and Natural Resources
Division of State Parks

This report provides additional information and clarification to supplement the 2018 Townscape Report on Ahupua'a 'O Kahana State Park.

Division of State Parks
Background Information and Recent Planning Initiatives
February 2019

Preface

This supplemental report is intended to provide additional data to the *Ahupua'a 'O Kahana State Background Information and Recent Planning Initiatives* (Townscape Inc., draft February 2018). This original document was submitted to the Department of Land and Natural Resources (DLNR) Division of State Parks (DSP) in February 2018. Townscape's report helped to identify, document, and perform an analysis on issues and impediments to creating a master plan (as set forth in Act 15 Session Laws Hawaii 2009 (SLH) for Ahupua'a 'O Kahana State Park). Subsequently, there is additional information that is prudent to include in a supplemental report.

The concept of nestling a residential community within a state park with the intent of having the residents participate in the park performing specific hours by doing cultural practices in an authentic and meaningful manner to enhance the park user's experience has never been fully optimized or successful as envisioned in its inception 50 years ago. Former Governor Burns (early 1970's) was approached by the existing residents who were going to be forced to leave when the state condemned the property for park use. The Burn's Administration established the Living Park concept, which was as I understand from one of his cabinet members visiting the historical town of Williamsburg, Virginia where residents dressed in period costume and engaged in replicating colonial life. While a laudable idea at the time, it was determined to be the only legal method to allow residents in a state park. However, the concept has never been truly crafted in a manner that is successful.

While there are residents who do honor the intent and leasehold commitment to perform the requisite 25 hours per month service, a large percentage of the residents simply want to live their lives and not be engaged in interpretive program participation. This has created the current situation of residents being in significant arrears on their service requirement as stipulated in their lease. Also, there is the perception that residents do not want to engage in cultural activities for the enrichment of out-of-state tourists. In addition to the lessees, there are six families that were granted approval for leases by the Board of Land and Natural Resources (BLNR) – but due to undocumented cess pools in the flood plain – and the inhibiting cost elements of infrastructure design to manage human waste in a flood prone area – the leases have not been executed. Absent the leases, the families cannot obtain financing to improve their homes or install the waste water systems to allow for the decommissioning of the cess pools. Vault toilets were considered a plausible and environmentally sound solution, but the Department of Health (DOH) has not approved this method as a solution for residential waste management. Vault toilets require a pumping service to function.

Act 15 (SLH, 2009) established the Kahana Planning Council (KPC) to create a master plan to attempt to rectify these issues in the park. Due to the extreme complexity and social issues of the existing residential community, competing resident expectations and lack of consensus on direction and participation – a master plan was never created. Because of this and to identify the impediments for the DSP and support the KPC, in 2015 and 2016 State Parks contracted a consultant to perform a critical analysis of issues and three (3) major impediments to master planning. A sustainable future for this park has been identified and are discussed in the Townscape Report:

- The cultural living park concept – is this concept still valid for Kahana and the existing residential community?

Division of State Parks
Background Information and Recent Planning Initiatives
February 2019

- The 65-Year Leases that dictate the terms under which Kahana families are permitted to live in the valley – the terms of these leases should be reviewed and may need to be amended. Lease-to-fee (requires legislative amendments) or change to a monetized rent are questions that have been circulated among the Kahana community.
- Overall management of Ahupua'a 'O Kahana – Is the DSP still the most appropriate manager to this park and/or its resident community? If not, then what new entity or entities could and should manage Kahana?

DSP has identified other critical and complex issues that essentially derail the Living Park concept. The land is zoned Conservation – the highest level of protection in the state and yet the residents are expected to engage in traditional agricultural practices (growing taro and other traditional food crops, etc.), which is a violation of this designation. A change in zoning should have occurred to facilitate agriculture practices in this fertile ahupua'a.

The other time sensitive issue that is increasing in severity is that the leases are terminal – they expire in 40 years. There are people whose parents were the original lessee, and who now have their own children and are living on state land with a terminal lease. This is increasing the underlying tension for the Kahana community. Also, as with any other residential community there are emerging social issues and economic challenges. These issues contribute to the increasing challenges to creating a meaningful plan that still enables a "Living Park" model of management.

Both DSP and the residents have different expectations as to the degree of management and involvement that is warranted in responding to residential issues.

This 5,249-acre (8.2 square miles) ahupua'a is a robust watershed with a historic and functioning lo'i (taro patch) and a historic fishpond, a popular hiking trail, a public hunting area, a popular beach campground adjacent to a bay that still provides subsistence fishing opportunities in addition to ocean recreation. These features are what DSP/DLNR has management acumen for, unlike a residential community. This supplemental report includes data on these other park elements.

The Townscape report and the process to create the report was helpful for me to examine Kahana. There are some assertions and assumptions made by the consultant and comments by residents which do not reflect the opinion or feasible direction for DSP to take – but have been left intact in the Townscape report.

I have concluded that there is the *right* thing to do regarding people's lives, and there is the *legal* thing to do regarding covenants on state land.

Balancing these two fundamental and conflicting precepts is the challenge before us.

Curt Cottrell
Administrator
Division of State Parks

Division of State Parks
Background Information and Recent Planning Initiatives
February 2019

Table of Contents

- I. Camping
- II. Hunting
- III. Operating Expense
- IV. Interpretive Programs
- V. Interpretive Program Staff Perception
- VI. Additional Management Challenges
 - A. Kahana Boat Ramp
 - B. Pu'u Manamana
- VII. Water Quality and Stream Profile
 - A. Department of Health (DOH) Clean Water Branch
 - B. Division of Aquatics (DAR)
 - C. Commission on Water Resource Management (CWRM)
- VIII. Undocumented Cesspool and Department of Health Violations
- IX. Appendices
 - A. Appendix A: Report on Interpretive Programs (March 1999)
 - B. Appendix B: Commission on Water Resource Management initiatives
 - C. Appendix C: Commission on Water Resource Management-Pacific Islands Fish and Wildlife Office Annual Report (2017)
 - D. Appendix D: Department of Health Cesspool Violation

Division of State Parks
Background Information and Recent Planning Initiatives
February 2019

I. Camping:

Kahana contains a very popular beach campground. There are 10 campsites fronting the beach and Kahana Bay. Reservations for campsites are available 30 days before the intended stay either by walk-in at the DSP Administration office or the online system. Camping is available from Friday through Tuesday. All campsites are closed on Wednesday and Thursday for weekly maintenance.

For the 2016 and 2017 fiscal year (July through June), there were approximately 780 reservations per year. Based on the 780 permits, roughly \$20,000 is generated annually from the camping permits. Approximately 3,000 individuals spent, on an average, 2 days camping in Kahana. This data does not include Special Use Permits or unauthorized programs that camp while in Kahana.

II. Hunting:

Hunting is a critical activity for public subsistence, recreation and to reduce the impacts to the watershed by feral ungulates. Hunting data is collected monthly and the data is self-reported on a sheet located at the entrance of the hunting area.

Unit F Kahana PHA								
Date	Hunters	Boar	Sow	Total Pigs	Mam/hunter trip			
2007-08	88	14	12	26	29.55%	Missing Log for July,Dec,Feb,Apr,June		
2008-09	47	4	6	14	29.79%	Missing Log for Sep,Oct,Nov,Dec,Mar,Apr,May		
2009-10	190	36	20	60	31.58%	Missing Log for May		
2010-11	58	11	2	16	27.59%	Missing Log for Aug,Nov,Dec,Jan,Mar,Apr,May,June,July		
2011-12	22	4	2	6	27.27%	Missing Log for July,Aug,Sep,Oct,May,June		
2012-13	124	14	4	18	14.52%	Missing Log for July,Sep,Oct,Nov,May,June		
2013-14	30	0	0	0	0.00%	Missing Log for July, Combo wasn't working Feb-June15		
2014-15	21	0	0	0	0.00%	Missing Log July14.Check station was removed March 15.		
2015-16	0	0	0	0	0.00%	No Data. No Check Station		
2016-17	7	0	1	1	14.29%	Check station was installed July16. Missing sheet Oct,Dec,April,May,June		
TOTAL	587	83	47	141	24.02%			
Data is collected from Kahana PHA monthly. Data collected is off recovered sheets only.								

Division of State Parks
Background Information and Recent Planning Initiatives
February 2019

III. Operating Expense:

This table reflects the annual operating expenses related to the Ahupua'a 'O Kahana park unit

	2015	2016	2017	2018 (as of Aug)
Auto Repair	3385.11	1801.33	1024.62	4061.37
Disposal Expense	\$9,905.62	\$10,433.83	\$7,788.70	\$7,026.01
Electric	\$11,779.28	\$11,117.41	\$11,403.10	\$6,876.83
Gas Expense	\$2,702.43	\$2,206.99	\$2,937.42	\$1,876.79
Gate Construction	\$7,643.98			
Payroll Expense	\$115,003.44	\$127,794.45	\$119,005.56	\$63,724.16
Portable Toilets	\$9,561.62	\$11,166.25	\$13,605.38	\$7,619.32
Repair & Maintenance	\$22,359.90	\$15,128.43	\$25,977.49	51650.93.
Safety Gear	\$298.80	\$294.60	\$387.97	
Supplies	\$5,136.10	\$4,774.58	\$4,750.77	\$2,351.47
Tree Trimming	\$15,137.90	\$12,980.00	\$91,000.00	\$15,400.00
Vehicle Tow			\$7,404.85	\$2,952.87
Water	\$6,601.18	\$13,400.34	\$15,374.08	\$8,222.72
Total Operating Expense	\$206,130.25	\$209,296.88	\$298,413.16	\$115,934.99

Division of State Parks
Background Information and Recent Planning Initiatives
February 2019

IV. Interpretive Programs:

Act 5 (1987) was established to issue leases to 31 families who were currently residing in Kahana. As part of the lease requirement, the residents need to provide 25 hours of cultural interpretive activities in lieu of monthly rental payment. Exhibit C of the Kahana Lease Agreement outlines the interpretive requirements of the cultural interpretive program. In March 1999, the Kahana Advisory Committee produced *Report of Interpretive Programs*, which provides support and guidance to the residents for their required participation.

Act 15 (2009) authorizes the Board of Land and Natural Resources to issue leases to those who meet the criteria and qualifications. Written into this law includes the required criteria of participating in cultural interpretive programs.

Below is a summary of the visiting groups to Kahana over the course of the last 10 years. The numbers are approximate as only groups that have been reported and/or hosted by DLNR State Parks have been recorded. Age of participants range from 3 years old to 80 years old. Programs utilize areas from uka (hiking trails, lo'i) to kai (fishpond, hukilau).

YEAR	# OF GROUPS	# OF PARTICIPANTS
2008	61	3868
2009	231	3027
2010	99	3842
2011 (JAN-JULY)	53	1976
2013 (JAN-SEPT)	81	4003
2014	66	2783
2017	41	1524

There is incomplete data due to the lack of residents reporting last minute programs, however, since 2008 programs have grown exponentially compared to the prior years since the inception of the lease requirement. For the last 3 years, there has been an absence of State presence as the full-time staff has been temporarily assigned to another position. Kupuna who were instrumental in the programs and revitalization of the Kahana cultural programs have recently passed away. The younger makua are faced with challenges of perpetuating the cultural practices, and the practical need of working outside their community to provide for their ohana.

Division of State Parks
Background Information and Recent Planning Initiatives
February 2019

V. Interpretive Program Staff Perception:

By Renee Kamisugi

Interpretive Program Coordinator over the past 12 years, her role and experience in Kahana:

For the last 12 years, it has been a pleasure to work with the families and community of Kahana. As most of the residents know, most of my time spent in Kahana is usually partnered with Uncle Nana Gorai. If it's not up at the lo'i or further uka, then we were at the fishpond, boat ramp, or in the kai. Many times we are working with other community members on programs at various locations. The knowledge and experience that he has shared with me is priceless. I certainly feel blessed that I have the wonderful opportunity to be the one spending quality time with him. His love for the 'aina and kai is deep and authentic. I love listening to stories of his 'young kid time', or his visions and hope for Kahana. About 10 years ago, Uncle Nana initiated the the first community hukilau since konohiki practices. As time passes by for Uncle Nana and community members move out of the valley, this practice will become a mere memory of what the 'old time Kahana' was like.

Sometimes the stories are minamina but Uncle Nana always tries to think for what's best for Kahana. He reminisces about the times he goes holoholo in the kai or go uka to follow the streams. The one practice that he tries not to forget is his love for his family kuleana land up uka; the lifestyle his parents shared with him. He shares the passion of his father's aloha to the family's kuleana land. Day in and day out he works hard to maintain and restore the lands that his family once lived and farmed generations ago. As I struggle to help keep his practices and memory alive, I'm often reminded that the kuleana I am asked to hold is not in my own lands. I am just a visitor, a hand to kako'o Uncle Nana. My own challenges associated with Kahana is another chapter that will not be shared here, but is mentioned as a reminder of the constant struggle that this land burdens.

I would be remiss if I didn't mention the many other residents who have been instrumental to the efforts of restoring the cultural living park in Kahana. Most of these residents have embraced my efforts in Kahana, and provided support and comfort when problems arise. These residents are far more than I can name, but their aloha will never be forgotten. These residents and families are often working at the lo'i, fishpond, and kai hosting programs or leading groups. Many residents are always willing to help and kokua where needed (planning, prepping food, making lauhala items, etc.) Families come out to help at the lo'i and auwai; host groups down at the bay and feed them; coordinate groups at Huilua fishpond; as well as, provide educational programs to visitors. However, the aging community and the financial responsibilities of supporting a family has shifted the values and committment from cultural practices to day to day survival.

VI. Additional Management Challenges:

A. Kahana Boat Ramp

Although the boat ramp is not under State Parks jurisdiction, staff are often plagued with the comments and phone calls regarding the current condition of the parking lot and boat ramp at Kahana. The fishermen who use Kahana Boat Ramp are huge advocates of maintenance in the valley and the boat ramp. They have come out many times to lend resources and hours to maintain the dilapidated parking area and boat ramp in Kahana. Increased impacts from the ocean associated with rising tides and global warming lends credence to taking a good look at how to restore the parking lot and boat ramp infrastructure to minimize damages and impacts associated with these environmental changes.

B. Pu'u Manamana (Crouching Lion Trail)

This unmanaged and traditional route up the mountain has become a chronic issue of social media promoting a route previously only known by residents. Social media has taken this traditional route – historically used to spot when the fish are running in the bay - away from the community and promotes it to the entire world. With approximately 206k results on “puu manamana hike” and 7500 hits on “puu manamana” on Google, social media now dominates and accelerates the rate of information distribution to out-of-state visitors. Since 2015, there have been deaths on this route that warrant a different management and enforcement approach. Closure and warning signs are ineffective and preventing access to Pu'u Manamana has been an on-going challenge due to the dramatic vistas visible while hiking along narrow and windy routes – creating safety problems, traffic issues and degradation to the trail. This unmanaged use also places County rescue personnel at risk when they must rescue and retrieve a member of the public who is injured or lost.

Optimizing public health and safety is a priority in addition to the management of the natural resources. With constant disregard to hiking on unpermitted trails, people do not realize that they are traversing on cultural sites, creating erosion and degradation to the natural environment, and being very disrespectful to the historical places that was never intended to be used in this frequency or magnitude. These unpermitted activities pose huge environmental, spiritual, and financial challenges.

VII. Water Quality and Stream Profile

A. Department of Health (DOH) Clean Water Branch:

The Hawai'i State Department of Health Clean Water Branch monitors state surface waters to determine if water quality conditions support public health while recreating in and on the water (recreational health) and for the protection and propagation of shellfish, fish, and wildlife (ecosystem health). Recreational health is assessed by enumerating enterococci, the

Division of State Parks
Background Information and Recent Planning Initiatives
February 2019

recommended EPA fecal indicator bacteria for coastal recreational waters. Ecosystem health is assessed by comparing nutrients and other pollutants to the applicable water criteria. The nutrient pollutants assessed in Kahana include total nitrogen (TN), nitrate + nitrite – nitrogen (NO₃+NO₂), total phosphorus (TP), chlorophyll a, total suspended solids (TSS), and turbidity. Water quality sampling sites for the Kahana watershed include three (3) coastal marine locations: Kahana Bay Near-Shore waters, Kahana Bay Park, and Kahana Park; and one (1) inland freshwater location: an unnamed western tributary of Kahana Stream. According to the 2018 State of Hawai'i Water Quality Monitoring and Assessment Report, all marine and inland waterbodies failed to meet water quality standards for intended uses.

For Kahana marine waters, high turbidity and total suspended solids in Kahana Bay Near-Shore waters did not meet standards to support aquatic life. For Kahana Bay Park, turbidity and nutrients (TN and TP) failed to meet standards for ecosystem health. Recreational uses were not attained at Kahana Bay Park and Kahana Park due to high levels of enterococci. For inland waters, Kahana Stream (tributary) nutrients exceeded dry season water quality standards to protect ecosystem health. Enterococci was not sampled to assess recreational uses.

B. Division of Aquatics Resources:

(Data collected prior to the start of DLNR's hau removal project)

Stream Profile

The Kahana stream system occurs in the amphitheater-shaped valley of Kahana. The 21.7 km² (8.38 mi²) drainage basin is headed by the 2500-foot high Ko'olau crest and bordered by two spur ridges. This catchment provides large quantities of surface water to Kahana Stream as well as two major tributaries: Kawa on the east and Hanalele on the west. Rainfall at the crest of the Ko'olau exceeds 760 cm (300 inches) per year. Ground water also contributes to the system via low permeability dikes in the upper valley and groundwater input in mid-valley reaches. As a result, the stream gains water continuously from headwaters to mouth with average flow exceeding 38 cfs (24.5 mgd). Mid-valley reaches are characterized by clear, cool water with turbulent flows and infrequent deep pools between riffle stretches. Streamflow slows, becomes less clear, and warmer in the lower valley as the channel meanders through a low-gradient wetland before graduating into one of 20 true estuaries in the Hawaiian archipelago. In terms of surface flow, the Kahana system is the largest stream-wetland-estuary complex on windward O'ahu. The relatively undisturbed condition of the upper drainage, with few human impacts in the floodplain and coastal area, suggests that Kahana Estuary is of higher natural quality than its few ecological counterparts elsewhere on O'ahu .

Biological Resources

Kahana stream system contains high biological diversity, and supports the full complement of native freshwater fish, shrimp, and mollusks. This includes regular observation of 'o'opu nōpili (*Sicyopterus stumpsoni*), which is very rare on O'ahu. In 2002, a single o'opu 'alamo'o (*Lentipes concolor*) was observed near the headwaters; this is notable because until recently this species was regarded as extinct on O'ahu. Also inhabiting the stream are several species of introduced

Division of State Parks
Background Information and Recent Planning Initiatives
February 2019

animals (at least three fishes and two decapod crustaceans). Unfortunately, these non-native species surpass native species in abundance.

Kahana Estuary supports a variety of native fish and invertebrates that are of recreational, commercial and cultural importance. These include 'ama'ama (*Mugil cephalus*), papio (*Caranx spp.*), āholehole (*Kuhlia xenura*) and 'o'opu akupa (*Eleotris sandwicensis*). There is a popular recreational/subsistence crab-pot fishery for the introduced Samoan crab (*Scylla serrata*) and Tahitian prawn (*Macrobrachium lar*).

Riparian Vegetation

The mid-valley reaches of Kahana Stream system are characterized by alien wet tropical rainforest. The swampy environment in the relatively flat areas adjacent to the stream are dominated by hau shrub (*Hibiscus tiliaceus*), California grass (*Brachiaria mitica*), and exotic trees (esp. false kamani, *Terminalia catappa*, and ironwood, *Casuarina equisetifolia*). In recent decades, unimpeded growth of hau (*Hibiscus tiliaceus*) has altered the flow of water and changed the stream channel characteristics in the middle and lower sections of the stream and estuary. These changes have gradually increased in severity over the last few decades; impeding migration of native fish. Clearing hau, restoring the stream channel, and recovering native vegetation in the lower reaches of Kahana Stream will increase native fish and invertebrate populations, improve cultural uses of natural resources, and enhance recreational uses of the stream and estuary.

C. Commision on Water Resource Management (CWRM):

In partnership with other DLNR divisions, CWRM has taken the lead on the Hau Removal Project located at the 'o'opu area on Kahana Valley Road. Attached is the completed report of the *Kahana Stream Restoration Project* (Appendix B). The Pacific Islands Fish and Wildlife Office Annual Report (2017) (Appendix C)

VIII. Undocumented Cesspool and Department of Health Violations:

In November 2013, the Wastewater Branch, State Department of Health issued its informal notice of violation on unregistered cesspools servicing six (6) lots proposed for leases (Appendix D). The violation cited that the cesspools were not registered with DOH and the structures being serviced did not have building permits issued by the City and County of Honolulu that would confirm compliance with DOH regulations and requirements. The Division of State Parks initiated measures to address the violations through analyses of compliant individual wastewater systems, preparing an environmental assessment and requesting a compliance timeframe. Due to the high cost of the systems and the lack of available funding to construct the systems, DSP eventually obtained additional compliance extensions to October 2018. In November 2018, State Parks requested an additional extension to complete compliance measures by 2021. The 2018 State

Division of State Parks
Background Information and Recent Planning Initiatives
February 2019

Legislature appropriated \$300,000 for sewer improvements and Division of State Parks is currently reviewing systems that can be funded.