RESPONSE TO THE COMMISSION ON WATER RESOURCE MANAGEMENT REQUEST FOR INFORMATION ON TRADITIONAL AND CUSTOMARY PRACTICES

A Report Prepared for the U.S. National Park Service

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Prepared by Jonathan Likeke Scheuer, Ph.D. &
Bianca Isaki, Ph.D., Esq. Honolulu, Hawai‘i.

Introduction

This is a report prepared for the U.S. National Park Service (NPS) that is responsive to the State of Hawai‘i Commission on Water Resource Management's (the Commission's) December 29, 2014 Preliminary Order (Preliminary Order), which requested that the NPS provide specific information related to the exercise of traditional and customary practices within Kaloko–Honokōhau National Historical Park (KAHO or "Park"). This report consists of three sections that review: (1) the legal and procedural background of the Commission request for information; (2) documented, existing, and planned practices that have been, are, or may be conducted in the Park, as well as associated practitioner resources; and (3) the NPS' management of these practices.[1] Some concluding remarks are also offered.

Findings contained within this report were also assembled to fulfill the NPS' statutory mandate to preserve and perpetuate traditional and customary practices at KAHO - a mandate that parallels that of the Commission. The NPS shares its findings with the Commission in order to help meet their shared responsibilities. As preface, we describe our perspective on the NPS' obligations to preserve and perpetuate traditional and customary practices at the Park and the nature of traditional and customary practices in broad terms.

In 1974, the Honokōhau Study Advisory Commission assembled, "The Spirit Report of Ka-loko-Hono-kō-hau, a proposal for the establishment of a Ka-loko-Hono-kō-hau National Cultural Park, Island of Hawai‘i," also referred to as the "Spirit Report." The NPS is required to administer the Park in general accordance with guidelines provided in the Spirit Report.[2] KAHO's General Management Plan (1994) is also "based on the recommendations for preservation, interpretation, management, and research contained in the 1974 [Spirit Report]."[3] The Spirit Report envisioned the Park as a sanctuary for the perpetuation of native Hawaiian traditional and customary practices and stated:

> Good water quality is essential to fishpond culture, and since the source is almost entirely in the rainy mauka areas, management of these and other lands adjacent to the park will have a direct impact on water resources within the park. Thus, cooperative planning efforts with the state, county, and private landowners is an important part of this proposal.[4]

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[1] This report was prepared to meet a May 30, 2015 deadline indicated by the Commission in their Agenda for their May 20, 2015 meeting. It does not represent an exhaustive list of Park resources or traditional and customary practices at the Park or the intertwined relationships between the resources and practices within and outside the Park boundaries.

[2] *See* 16 U.S.C. § 396d(c).

[3] National Park Service, *General Management Plan and Environmental Impact Statement: Kaloko-Honokohau National Historical Park*, at 5 (1994).

[4] The Spirit of Ka-loko-Hono-kō-hau ("Spirit Report"), at 29 (1974).

The Park's authorizing legislation thus directs that the Park provide for traditional native Hawaiian accommodations, enter into cooperative agreements with the State of Hawai'i to manage submerged lands in the Park, enter agreements with other government entities and private landowners to "establish adequate controls on air and water quality" and to establish the Nā Hoapili o Kaloko-Honokōhau Advisory Commission (Advisory Commission).[5] The Advisory Commission advises the Park with respect to the Park's historical, archaeological, cultural, and interpretive programs, with particular emphasis on the quality of traditional Native Hawaiian cultural practices at the Park. In accord with the Spirit Report, these provisions concern off-site as well as on-site management actions.[6] The NPS' approach to management of traditional and customary practices at KAHO is further described *infra*, Part III.

Regarding practices in general: traditional and customary practices do not exist in isolation from the landscape they occur in, the people who practice them, and the generations who have come before and who will continue these practices. An examination narrowly tailored to current practices ignores these relationships. A narrowly focused analysis also misses that it is water that is the thread that weaves together not only the resources but also the people - past, present, and future – who conduct these practices. Today, lineal descendants of the first practitioners on the lands comprising Kaloko-Honokōhau are engaged in protecting, managing, and continuing cultural practices at the Park. It is this broader context and perspective, along with the understanding of the NPS's relationship to perpetuating practices, that informs the remainder of this report.

I. Procedural and legal background

On December 10, 2014, the Commission held a day-long meeting at the West Hawai'i Civic Center to consider the Petition for Water Management Area Action (Petition), filed by the NPS fifteen months earlier for the Keauhou Aquifer System Area. Testimony relevant to the Commission's request for specific information on traditional and customary practices was received into the record of this meeting and was not disputed by any other parties providing testimony. This section reviews this relevant testimony as well as the legal context of the testimony as an essential and integral part of any response to the Preliminary Order.

[5] 16 U.S.C. §396d(d)(4) *and see* National Park Service, *General Management Plan and Environmental Impact Statement: Kaloko-Honokohau National Historical Park*, at 5 (1994).

[6] *See* Spirit Report at 50-54.

Testimony on the record for the December 10, 2014 meeting relevant to traditional and customary practices

A number of individuals and organizations offered specific information into the record that is pertinent to the subject of traditional and customary practices and the Commission's Preliminary Order.

Testimony of the Office of Hawaiian Affairs (OHA). In written testimony submitted to the Commission for that meeting, OHA recommended that in the event that the Commission extended the investigation and study period for the Petition, that the Commission staff:

> [c]onduct publicly-noticed outreach meetings and other research to identify traditional and customary practices that may be impacted by reduced groundwater discharge into the coastal areas of the Keauhou Aquifer System Area, to facilitate future *Ka Paʻakai*[7] analyses required for water management decisions for the Kona coast.

OHA further noted, "[a]s a state agency and as required under the state water code, the Commission and its staff must protect and enforce the traditional and customary rights of Native Hawaiians in its administrative decision-making."

Testimonies from Native Hawaiian cultural practitioners.

Herbert A. Kai: In written testimony submitted to the Commission for that meeting, Herbert A. Kai, a Native Hawaiian familiar with cultural practices in the area, recounted the changes to water that he has observed over his lifetime at the southern end of the coastal portion of the Keauhou Aquifer System. He testified that he and his ʻohana have practiced fishing, gathering, drinking and bathing practices proximate to "where the flowing fresh water, fresh water springs, brackish water pools, and opae ula were...not to mention the wana, lobsters, and octopi."[8] He specifically noted, "[t]hese flowing fresh water, fresh water springs, brackish water pools, and opae ula ARE GONE… or, at least not easy to find; they've been slowly diminishing since the Kahalu'u well was drilled in 1975" (emphasis in the original). Kai also noted that his cousin Kane taught him about, and conducted, practices around Kaloko–Honokōhau. "He'd point out the critters in the tide pools and plants for fishing; dunk us in the ice water pool; play with the springs gurgling through the rocks; throw net; scoop-net fish and crabs; point out the heiau, landmarks, and fish shrines along the way."

Hannah Kīhalani Springer: In written testimony submitted for the December 10, 2014 meeting, Hannah Kīhalani Springer came forward as kamaʻāina of Kekaha, of which Honokokuaiki, Honokōhau, Kaloko and her home of Kukuiʻohiwai at Kaʻūpūlehu are a

[7] *Ka Paʻakai o Ka ʻĀina v. Land Use Comm'n*, 94 Hawaiʻi 31, 7 P.3d 1068 (2000).

[8] English common names are "red shrimp" for ʻōpaeʻula (*Penaeus marginatus*) and "sea urchin" for wana (class *Echinoidea*).

part. Springer submitted that tending and caring for water resources ("mālama i ka wai") are themselves Hawaiian traditional and customary practices. Her homelands are called, "Kekaha waiʻole" (Kekaha without water) and "Kukuiʻohiwai," for the kukui groves traditional Hawaiians intentionally planted as part of their practice of enhancing the watershed. Springer and her family collected water at Huʻehʻe, and like other Hawaiian practitioners, sought water from caves, specifically the cave of Makalei. Springer's family continues to propagate kukui and collect water from these traditional sources.

Her testimony continued, in part:

> From Kukuiʻohiwai, we can look below to Kahuwai Bay and imagine the basal spring that issues from the rocky reef ma kai of the old Kona Village Resort, the Waiakane. We know the out pouring of subterranean water from land into sea because our people used it for domestic, healing, and ceremonial purposes.
>
> Our cultural traditions, life style, and place names in Kekahawaiʻole reflect intercepting, gathering, and protecting water as it moves from heaven to earth and through the earth into the sea. Discussion of traditional and customary practices typically focuses on extractive, consumptive activities, rather than taking a holistic view and considering also the caring for, tending, protecting, maintain[in]g, honoring, and being of service to those things which we consume and the environments which support them. This is precautionary practice is called malama, and malama, malama i ka wai, in particular, is a traditional and customary practice.

Fred Cachola: Cachola, the longtime chairperson of the Advisory Commission and chairperson of Makani Hou o Kaloko-Honokōhau (the Park's Friend's group), submitted testimony in support of the Petition for the December 10, 2014 meeting on behalf of these groups. Cachola identified Park management and planning efforts and testified that by seeking protection of the water resources in the area through the Petition, the Park was "doing exactly what our wise kupuna commissioners directed them to do in [the Spirit Report]." Cachola, with his decades-long experience on Park commissions, including the 1974 Honokōhau Study Advisory Commission that first envisioned the Park, further testified that the Petition would "certainly be endorsed and supported" by "passionate Native kamaaina who had intimate awareness and appreciation of our unique Kona environments. . . and who were dedicated to malama the lands and waters of Kaloko-Honokohau." Cachola advised the Commission to develop methods of calculating sustainable yield to include consideration of Native Hawaiian rights and practices and specifically "requirements for preserving/maintaining significant historical/cultural/natural/scenic environments that gives identity and inspiration to Native Hawaiians."

The Kona Hawaiian Civic Club (Kona HCC): Kona HCC submitted testimony in support of the Petition in part because it "strongly disagree[d]" with the proposition that water

withdrawals under an undesignated Keauhou management regime would not impact Hawaiian cultural practices.[9] Kona HCC stated that many of its members are traditional and customary practitioners and have previously testified to negative impacts of past and planned development around the Park on traditional and customary practices, including those that concern fishponds.

The Commission's Motion and Preliminary Order

The Commission made and voted on a motion on December 10, 2014. However, on December 29, the Commission issued a Preliminary Order to the parties in lieu of the publication of that motion in its meeting minutes. In that order, they requested a number of items from numerous parties, some with specified deadlines, and other items without deadlines. From the NPS, the Commission requested (with no deadline specified in the Preliminary Order) that the NPS provide (items C. 3(b) and (c)):

- Specific traditional and customary practices that are exercised in the Kaloko–Honokōhau National Historical Park.

- How NPS manages traditional and customary practices in the Kaloko–Honokōhau National Historical Park

Legal context of the Commission's Preliminary Order and December 10, 2014 Motion.

OHA's testimony emphasized the importance of the Hawai'i Supreme Court case of *Ka Pa'akai o Ka 'Āina v. Land Use Commission*, 94 Hawai'i 31, 7 P.3d 1068 (2000), relative to traditional and customary practices. Thus, a review of its holdings is useful to understanding and responding to the Commissions' order. Under *Ka Pa'akai*, when an *approving agency* is considering approval of an action that would allow the *development* of an area or resource, the *approving agency* is required to undertake specific tasks. Specifically, the *approving agency* (which was the Land Use Commission (LUC) in *Ka Pa'akai*) was required to make findings as to:

> (A) the identity and scope of "valued cultural, historical, or natural resources" in the petition area, including the extent to which traditional and customary native Hawaiian rights are exercised in the petition area;
> (B) the extent to which those resources—including traditional and customary native Hawaiian rights—will be affected or impaired by the proposed action; and

[9] Testimony of the Kona Hawaiian Civic Club, Commission on Water Resource Management Meeting Submittal E2, at 254-56 (Dec. 10, 2014) *available at*: http://files.hawaii.gov/dlnr/cwrm/submittal/2014/sb20141210E2.pdf.

(C) the feasible action, if any, to be taken by the LUC to reasonably protect native Hawaiian rights if they are found to exist.[10]

Furthermore, the court held that the LUC had not entered sufficient findings to demonstrate that it had discharged its non-delegable duty to protect those rights and had improperly delegated its public trust duties to the developer.[11] The LUC had tasked the developer with developing and coordinating resource management plans that would ensure protections for native Hawaiian traditional and customary rights. Under *Ka Pa'akai*, requisite findings should be completed independently by the approving agencies and the *development proponent* was required to provide relevant information, which the agency was to subsequently verify, analyze, and use to develop and prescribe conditions necessary to protect traditional and customary native Hawaiian rights.

Requiring development proponents to provide information relevant to a *Ka Pa'akai* analysis is entirely consistent with the water code case law that governs the Commission's duties and practices. In *Waiāhole I* (*In re Use Permit Applications*, 94 Hawai'i 97, 9 P.3d 409 (2000)), the Hawai'i Supreme court noted:

> Thus, insofar as the public trust, by nature and definition, establishes use consistent with trust purposes as the norm or "default" condition, we affirm the Commission's conclusion that it effectively prescribes a "higher level of scrutiny" for private commercial uses such as those proposed in this case. *In practical terms, this means that the burden ultimately lies with those seeking or approving such uses to justify them in light of the purposes protected by the trust.*[12]

Similarly, in its extensive analysis of the ways in state and county agencies can make decisions that affect water resources and how those agencies should meet their decision-making responsibilities (*Kaua'i Springs, Inc. v. Kaua'i Planning Commission*, 133 Hawai'i 141, 324 P.3d 951 (2014)), the court directed that: "*[a]pplicants* have the burden to justify the proposed water use in light of the trust purposes."[13]

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[10] *Ka Pa'akai*, 94 Hawai'i at 31, 7 P.3d at 1068 (footnote omitted).

[11] LUC's order granting the developer's boundary amendment provided that the developer "*will develop*" a resource management plan (RMP); "*would coordinate* development with native Hawaiian rights to coastal access[;]" "concept[ualize] the RMP," which was an approximately 235 acre resource management area; and would make their RMP consistent with an ahupua'a plan that "*will involve* native Hawaiians[.]" *Ka Pa'akai*, 94 Hawai'i at 37-38, 7 P.3d at 1074-75 (emphases in original). LUC further conditioned the permit:

> 18. *[The developer] shall preserve and protect any gathering and access rights of native Hawaiians who have customarily and traditionally exercised subsistence, cultural and religious practices on the subject property.*
> *Id.*

[12] *Waiāhole I*, 94 Hawai'i at 142, 9 P.3d at 454 *(emphasis added).*

[13] *Kaua'i Springs*, 133 Hawai'i at 175, 324 P.3d at 985 (*emphasis added*).

The relationship of this report to the legal context, testimony on the record, and the Commission's duties

As recounted above, traditional and customary practitioners took it upon themselves to assist the Commission with its public trust obligations by offering testimony into the record regarding the many traditional and customary practices in which they engaged, stretching along the entirety of the coastal portion of the Keauhou aquifer.

Hannah Springer testified that her efforts to protect water resources in the Petition area was in effect a continued traditional and customary practice of protecting, and not just a consuming use of water resources. Kai's testimony presented the Commission with evidence that his ability to conduct traditional and customary practices in the southern coastal portion of the Keauhou Aquifer System Area has been adversely affected by ongoing groundwater withdrawals for municipal purposes. Based on Kai's observations of the adverse effects of groundwater withdrawals in this portion of the aquifer, Kai reasonably foresees that such adverse affects will arise in and around Kaloko–Honokōhau National Historical Park. Based on his past experience and present concerns, Mr. Kai has requested that the Commission acknowledge that "[w]e need the fresh water from the Keauhou aquifer for the fresh water springs for the brackish water ponds for ʻopae ʻula, plants, pua ʻamaʻama, and the aquatic environment so customarily and traditionally native Hawaiian subsistence, culture, religion, fishery, and hatchery practices---our lifestyle---can be sustained."[14] Similarly, Springer's testimony noted that the outpouring of groundwater near and off the coast was essential to the exercise of traditional and customary practices. Apropos of *Ka Paʻakai* guidelines, Cachola advised the Commission that it should assess whether its calculation of sustainable yield considers impacts on traditional and customary rights, and specifically groundwater requirements for "preserving/ maintaining significant historical/ cultural/ natural/ scenic environments that gives identity and inspiration to Native Hawaiians."

Also as reviewed above, relevant applicable case law indicates that it is not the duty of an agency to burden practitioners or advocates of practitioners rights with compiling information for the Commission to undertake the necessary *Ka Paʻakai* analyses to comply with constitutional public trust obligations. The Commission has proceeded as though the NPS petition for designation of a Water Management Area, rather than the continuing development of groundwater under the existing undesignated regime, was the action that may affect practices and thus triggered the need for a *Ka Paʻakai* analysis.

In filing its Petition, the NPS has not sought to develop groundwater resources, but rather to protect them. The NPS is not obligated to conduct *Ka Paʻakai* analyses in support of its Petition, but as noted *supra*, shares the following information with the Commission in response to its request in the Preliminary Order, in the hope it helps the Commission in preparing its own required *Ka Paʻakai* analyses.

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[14] Pua ʻamaʻama refers to small young mullet (*Mugil cephalus*).

In order to ensure that the requirements of *Ka Paʻakai* are met, the Commission could itself hold outreach meetings as suggested by OHA. The Commission could also require the Department of Water Supply of the County of Hawaiʻi (HDWS) to identify the traditional and customary practices that may be affected by its existing and proposed water withdrawals. Moreover, the Commission could and should require that any proposed user of fresh groundwater be required to assist the Commission in its duties to gather information on the identity and scope of traditional and customary practices in the area where such new groundwater withdrawals would occur. Therefore, the Commission should adopt a process to ensure that this information is obtained and used to prepare the required *Ka Paʻakai* findings – a process that currently does not exist under the well construction and pump installation permitting scheme, but which does exist under the Water Use Permit Application process required in designated Water Management Areas.

II. Specific Native Hawaiian traditional and customary practices exercised in the Kaloko- Honokōhau National Historical Park.

As noted by Superintendent Tammy Duchesne on December 10, 2014, the NPS does not actively track the exercise of traditional and customary practices in the Park. Such surveillance would be antithetical to the Park's role as a sanctuary for such cultural activities. Advisory Commission members have stated that asking practitioners "what they are doing would be offensive."[15] The NPS seeks to be respectful of people and their practices. Consequently, the Park does not have extensive data on the number of practitioners, specific practices that occur, or how these practices vary over time.

Because of this, the NPS' response to the Commission's request regarding exercised practices consists of: (1) a review of historic documented traditional and customary practices in the area that now comprises the Park; and (2) a review of known existing and planned traditional and customary practices.

The included tabulation and discussion of documented, existing, and planned cultural practices requires further preface. Inquiries into "existing" cultural practices must be met with responses that recognize the many historical and ongoing factors that may have prevented Native peoples from "continuity of use" of specific resources. Pertinent in this regard, the State of Hawaiʻi assesses the historical significance of a property according to its value to Hawaiian cultural practitioners and it exists regardless of whether those cultural practices are "still carried out [. . .] at the property" and significance may rather be "due to associations with traditional beliefs, events or oral accounts - - these associations being important to the group's history and cultural identity."[16]

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[15] Nā Hoapili o Kaloko-Honokōhau Advisory Commission, Meeting Minutes, at 4 (Jun. 20, 2014).

[16] Hawaii Administrative Rules (HAR) §§ 13-275(6)(b)(5) (1998) and 13-284(6)(b)(5) (Oct. 2002) provide in pertinent part:

> (b) To be significant, a historic property shall possess integrity of location, design, setting, materials, workmanship, feeling, and association and shall meet one or more of the following criterion:

As a further example, Dr. Davianna McGregor testified to efforts on Kahoʻolawe to reconstruct and rededicate sites, which Hawaiian practitioners had not used for decades due to historical events, in order to "bring [them] back to life" and such "that they will again become a living part of our culture and practice."[17]

The Park was founded because Hawaiian lands and cultural practices were under threat; "the Hawaiians and other people of Hawaiʻi who share the Hawaiian culture heritage feel that Ka-loko, Hono-kō-hau will help satisfy their great hunger for a renewal of those cultural and spiritual values that have come so close to extinction in recent decades."[18] The Spirit Report envisioned the Park in a dynamic context in which Hawaiian cultural resources were not only to be preserved, but to serve as a resource for further cultural and spiritual "renewal."[19] Former Honokōhau Study Commissioner David Kahelemauna Roy has likewise tied the present condition of Park resources to future practices, stating, "it is critical that all that we have in the groundwater supply be maintained in perfect condition for the sake of our people that are living in this area [Kaloko-Honokōhau]. The time will come when they will need that and we cannot afford to jeopardize our marine life along the shorelines."[20]

These considerations indicate that the Commission's decisions concerning traditional and customary practices should not be limited by available information on existing practices. Hence in support of the NPS' and Commission's duties, this section of the report discusses past, existing, and planned practices.

Documented Historic Traditional and Customary Practices

In the course of the Park's development since its establishment by Congress in 1978, the NPS collected information on historical traditional and customary practices in and around

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> [. . . .]
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> (5) Criterion "e". Have an important value to the native Hawaiian people or to another ethnic group of the State due to associations with cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts--these associations being important to the group's history and cultural identity . . . [.]

[17] *State v. Pratt*, 124 Hawaiʻi 329, 388, 243 P.3d 289, 298 (App. 2010).

[18] Spirit Report at xx.

[19] Likewise, Roy & Nahale described their Kaloko-Honokohau oral history project as "salvage [of] the kind of historical impact that this area emits" that would "have long reaching social effects upon the Hawaiian community[.]" *See* L. ʻAʻalaonaona Roy & J. Kuʻualoha Nahale, KA MOʻOLELO HAʻI WAHA O HONOKŌHAU-KALOKO: ORAL TRADITION OF HONOKŌHAU-KALOKO, Ms. No. 063075, prepared for the U.S. Natʻl Parks Srvc., 6 (1975).

[20] David Kahelemauna Roy Jr., Testimony to the Land Use Commission, State of Hawaiʻi, Dkt. No. A00-732 (Jul. 18, 2001).

the area of the Park. These studies indicate a large number of resources located in and around the area now comprising Kaloko-Honokōhau National Historical Park. These resources are crucial; as the Advisory Commission has advised that Hawaiian water, land, food, spiritual, and cultural resources and self-determination practices are integrated such that impacts on any of them cannot be assessed in isolation from another.[21] Likewise, former Honokōhau Study Commissioner, David Kahelemauna Roy, "[i]f we don't allow our freshwaters to produce the proper quantity of fish we're not going to have our traditional practices. One leads to the other."[22] With this frame in mind, we submit the appended tables of resources historically and presently utilized for traditional and customary practices. For each resource (e.g. fish), there were traditional and customary practices associated with that resource (e.g. fishing practices).

Below, we discuss the relationship of resources to practices and fresh and brackish water, fresh and brackish water sources as directly gathered and used resources, and the religious significance of these waters.

Relationship of resources to practices and fresh and brackish water. Although the studies available to the NPS were not conducted expressly to investigate the relationship of traditional and customary practices and the availability of fresh or brackish water, they nevertheless provide substantial data and analyses supporting such relationships. In some cases, it is obvious and intuitive that the conduct of the practice requires fresh water. For instance, in this dry area fresh water was and is required to grow sweet potatoes, pumpkins, and other vegetables that are fed to fish for the purpose of attracting fish to special, traditional feeding spots.

Other practices may not obviously require abundant fresh water, such as burial protocols and maintenance of burial sites. However, in at least some areas of the Hawaiian Islands, burial practices include a requisite ritual cleansing with fresh water after the burial for the burial practitioners.

The appended tables summarize documented culturally significant resources: non-marine, marine fish, and marine non-fish gathered, religious, and cultural resources.[23] In addition, immediately below we provide information regarding specific historic practices

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[21] *See* Nā Hoapili o Kaloko-Honokōhau Advisory Commission, Meeting Minutes, at 2 (May 1, 2015) (noting the connection between the fishponds and integration of oli and prayers); id., at 4 (Feb. 2, 2015) (what will stand through the Petition process is the "truth and spirit of [the] whole thing" and mentioned the "[s]ource of rain, names and genealogy, will need oral traditions and understanding of the people here"); id., at 6 (Jun. 20, 2014) (water is "the second most important element for us to live. The situation implores us to connect this element with the situation being proposed, the threat of the inability to practice Hawaiian culture"); id., at 3 (Nov. 8, 2013) (emphasizing that cultural, water, land, and food practices are all integrated).

[22] David Kahelemauna Roy Jr., Testimony to the Land Use Commission, State of Hawai'i, Dkt. No. A00-732 (Jul. 18, 2001).

[23] Cited sources in the tables correspond to those listed in Maly & Maly (2002), Peterson & Orr, and Maly (2000); *see infra* notes.

that use fresh and brackish water at the Park as itself a critical resource used in protected native Hawaiian traditional and customary gathering and religious practices.

Fresh and brackish water sources as directly gathered and used resources. Hawai‘i Revised Statutes (HRS) § 7–1 is “a statute protecting gathering rights” and includes “drinking water” in its list of such gathering rights.[24] Oral histories and witness testimony documents provide evidence that Native Hawaiians utilized certain springs and anchialine pools in KAHO for drinking water.

In 1962, Mary (Keli‘ikoa) Simiona, who had lived at Honokōhau iki beach from 1927-1940 and continued to work in fishponds and fisheries at Kaloko-Honokōhau thereafter, identified a bathing pool behind ‘Ai‘opio; “[t]hat’s where the water is. Ka‘i‘iwai. It is a spring, drinking water, for the fishermen of earlier times. The people gathered water to cook rice, cook sweet potatoes. It was not bitter water. We were used to the brackish water. Kamilo, the water was cold.”[25]

The 1974 “The Spirit of Ka-loko Hono-ko-hau” (“Spirit Report”) reproduced findings of the Honokōhau Study Advisory Commission, whose consultants and commissioners included Fred Cachola, Herb Kane, Richard Kapololu, John D. Waihe`e III, Stephen Morse, and David Roy. These findings referenced the significance of KAHO’s brackish water springs:

> What they [ancient Hawaiians] found scattered along the shoreline and among the jagged lava, were cool, brackish water springs. To the Hawaiians, the presence of these springs throughout the area was indication that there was enough of an underground water source to sustain the everyday needs of a settlement of people.[26]

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[24] *State v. Pratt*, 127 Hawai‘i 206, 213, 277 P.3d 300, 307 (2012).

[25] On June 13, 1962, Mary Kawena Pukui (MKP) conducted an oral history interview with Mary (Keli‘ikoa) Simiona (MS) and Mahone Ka‘eo (MK):

> MS: Behind ‘Ai‘opio. Behind, that’s the goat pen. Below there, it is a bathing pool. It is deep.
> MKP: Who are the people that go there.
> MS: Not many. It is close to that place, the rock cliff. That’s where the water is. Ka‘i‘iwai. It is a spring, drinking water, for the fishermen of earlier times. The people gathered water to cook rice, cook sweet potatoes. It was not bitter water. We were used to the brackish water. Kamilo, the water was cold.

Kepā Maly & Onaona Maly, *He Wahi Mo‘ōlelo ‘Ohana no Kaloko me Honokōhau ma Kekaha o Nā Kona: A Collection of Family Traditions Describing – Customs, Practices and Beliefs of the Families and Lands of Kaloko and Honokōhau, North Kona, Island of Hawai'i,* prepared for Kaloko-Honokōhau National Historical Park, Nat‘l Park Srvc., at 16 (Apr. 1, 2002) (“Maly & Maly”).

[26] Spirit Report at x-xi.

On September 11, 2000, Kepā Maly conducted an oral history interview with Peter Keka, a lineal descendant of Honokōhau-Kalaoa section of Kekaha, North Kona and whose family has had a working relationship with Kaloko and Honokōhau (ʻAimakapā) fishponds for at least three generations.[27] Keka recalled his grandfather referring to a pond, ʻOia ka wai inu – water that they could drink. This pond's water had been fresh enough to drink in Keka's early years, but is no longer drinkable.[28] In 2000, Malaea Keanaaina-Tolentino recalled drinking water from mauka areas of the Park and brackish water nearer to the Park.[29]

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[27] *See* Maly & Maly, at 200 (2002).

[28] The following is an excerpt from the exchange between Kepā Maly (KM) and Peter Keka (PK):

> KM: No. Do you remember a name for that pond?
> PK: All my grandpa said, "ʻOia ka wai inu."
> KM: "ʻOia ka wai inu."
> PK: Yeah, that water we could drink.
> KM: In the old days the way your grandpa them did, did you go swim in the same water you drank?
> PK: No [gestures, you get slapped].
> KM: No, paʻi [chuckling]… You divided your uses, where you drink you no haumia.
> PK: Where you drink, no. Where you bathe, separate.
> PK: In my time, in the early days during my time we used to drink water.
> KM: The water in these little pools like this?
> PK: Yeah. They were little more…
> SB: Fresh?
> PK: Yeah, then now.
> PK: Yeah. Like you see in the pond over there. I remember you know, before we used to come here with the dogs and we take the water give the dogs the water and they would drink ʻem. We always say if the dog can drink ʻem, then we would drink the water. And we tried the water, it tasted pretty good. But now, I don't think you can drink ʻem because too many people been here.

Maly & Maly, at 200 (2002).

[29] On October 2, 2000, Kepā Maly (KM) conducted an oral history interview with Malaea Keanaaina-Tolentino (MKT) and Cynthia Torres (CT) at the Park:

> MKT: We would fill the gallons with water from mauka and drink brackish water in between, it cleans you out [smiling].
> CT: You drink the brackish water?
> MKT: Yeah, sometimes when you run out of fresh water. If you can handle.
> KM: Like mama said, some when you…she clean you out a little bit first but then you come maʻa?
> MKT: Yeah.

Maly & Maly, at 142 (2002).

In his July 18, 2001 testimony before the Hawai'i Land Use Commission, David Kahelemauna Roy Jr., Chairman of the Kaloko-Honokōhau Advisory Commission stated:[30]

> [T]he Hawaiians were able to condition their bodies so that they drank fresh -- spring water and brackish water along the shoreline when they could not find freshwater. If they had no coconuts to drink, their brackish water was sufficient for them. So that kind of explains some of the ways that they could survive along the shoreline . . .

The historic direct use and gathering of fresh and brackish water in this area is clear.

Religious significance of freshwater. The Hawai‘i state constitution protects "all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua‘a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights."[31] Adverse impacts on groundwater should be assessed in light of traditional and customary religious practices. Hawaiian spiritual cosmogonies place particular significance on freshwater sources, including groundwater. "Freshwater represented male procreative energy flowing above ground and as groundwater; it was called "water of life of Kane[.]"[32]

In this regard, NPS staff have accompanied practitioners in the collection of fresh/anchialine water from anchialine pools, which was necessary for ceremonial use.

Tyler Paikuli-Campbell, Cultural Resource Manager for the Park, states that he and his Native Hawaiian family have participated in Kumu Keala Ching's annual hi‘uwai (cleansing) at ‘Alula Beach, located within the Park, for the past few years.[33] Kumu Ching has conducted this ceremony for approximately 15 years. During the hi‘uwai ceremony, participants pour freshwater from their ahupua‘a into the ocean where it mixes with the freshwater in the nearshore waters. When ocean water mixes with the freshwater at ‘Alula, the kūpuna of Kealakehe recognize where you are from. For this

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[30] Testimony of David Kahelemauna Roy Jr., Chairman of the Kaloko-Honokohau Advisory Commission, Land Use Commission, State of Hawai'i, Dkt. No. A00-732 (Jul. 18, 2001).

[31] HAW. CONST. art. XII, sec. 7 (am. 1978).

[32] *See* J. Yoshioka & C. Nash, Appx. M "Cultural Values of Indigenous and Other Culturally Associated Groups," in PACIFIC ISLAND NETWORK VITAL SIGNS MONITORING PLAN, (L. Hay Smith, et. al eds.) National Park Service Natural Resource Rep. No. NPS/PACN/NRR—2006/003, at 4 (rev'd Jul. 19, 2006) (citing Handy E.S.G. &E.G. Handy, *Native planters in old Hawaii: Their life, lore, and environment*, BERNICE P. BISHOP MUSEUM BULLETIN, at 233 (1991)).

[33] Personal e-mail communication from Tyler Paikuli-Campbell, Cultural Resource Manager, Kaloko-Honokōhau National Historical Park (May 12, 2015).

reason, freshwater specific to ahupua‘a within the Keauhou aquifer system area are a very important part of this hi‘uwai ceremony.[34]

Paikuli-Campbell brought water from each of the Park fishponds (Kaloko, ‘Aimakapā, and ‘Ai‘opio) in an ipu grown at the Park as ho‘okupu to the Loko‘ia Conference (April 30 through May 2, 2014) in Hana, Maui. Cultural practitioners and Park staff also attended the May 2015 Loko‘ia conference in Kahana, O‘ahu, and noted that a West Hawai‘i loko‘ia ‘ohana is forming.[35]

Existing and Planned Traditional and Customary Practices

Existing practices. As noted above, the NPS does not actively track the exercise of traditional and customary practices in the Park. Despite the Park's policy of not conducting surveillance of traditional and customary practitioners, Park staff, in the course of their regular duties, have observed certain activities that appear to be traditional and customary practices, such as fishing and gathering various resources at the shoreline including fish, invertebrates, and limu.

Existing practices include ongoing commemorative ceremonies held at the Park. In accord with its statutory mandate, KAHO endeavors to "provide a center for the preservation, interpretation and perpetuation of traditional native Hawaiian activities and culture."[36] On August 23, 2014, the Park held a "Spirit Day" to honor the descendants and ‘ohana of the area, which involved presentations on fishing and other practices of Park areas, kani kapila, hula, and food. The Park also hosts Makahiki programs and an annual "Children's Festival", which, in 2013, included presentation of a grade-school level curriculum on water and Hawaiian culture. The Makahiki program includes a fish harvest component from Kaloko fishpond, utilizing traditional fishing methods. The Park anticipates it next Makahiki event in November 2015.

Planned practices. A significant planned traditional and customary practice dependent on the continued flow of fresh water into the Park is the maintenance of, and production of fish from, Kaloko Fishpond. Restoration of the fishpond wall, which had been subject to significant deterioration prior to the NPS's stewardship at Kaloko, has been a multi-year effort by full time staff and contractors.

This emphasis on moving Park fishponds into production accords with the Spirit Report, which provides, "[a]though overgrown and in disrepair . . . the Ka-loko and ‘Aimakapā fishponds . . . still represent the finest example of ancient Hawaiian ability to adapt to their physical environment." The Spirit Report continued, "[f]ishpond culture was of vast importance to the ancient Hawaiian way of life, and it can now regain much of that value

[34] *Id.*

[35] Nā Hoapili o Kaloko-Honokōhau Advisory Commission, Meeting Minutes, at 1 (Feb. 2, 2015).

[36] 16 U.S.C. §396d(a).

by assisting modern man in adapting to his environment."[37] The goal of the NPS, in accordance with the Spirit Report, is to produce long-term, sustained harvests of ʻamaʻama or striped mullet (*Mugil cephaus*), one of two species of native mullet and a culturally significant estuarine species in Hawai'i.

The freshwater needs of striped mullet are detailed in the Petition and were also referenced from a practitioner's perspective in the above referenced testimony of Herbert A. Kai. The freshwater needs of mullet are related to their different life stages,[38] as oral historian Carol Wyban has documented:

> Traditional Hawaiian lifestyle required a keen observation of nature. A knowledge of the ocean and the may creatures which live in the water was essential to life. There are many stories, poetical sayings, proverbs, and legends about fish. Many of these are about the favored species of fish which were grown in fishponds… In Hawaiian terminology there are 7 names for the stages of growth of the mullet, which was one of the favored fish grown in the fishponds[.]"[39]

The location of fishpond resources at the Park is part of a legacy of traditional Hawaiian resource stewardship. "Traditional fishponds were located at sites which more than likely attracted great number of [mullet] fingerlings since the areas provided a protective habitat and optimal growing conditions[.]"[40] Hawaiians located fishponds in these areas of incoming freshwater that provided a mix of waters, fresh and salt, which, according to Hawaiians, produced the sweetest of fish[.]"[41] Fishponds are thus cultural treasures and valuable educational tools because they instruct in traditional Hawaiian geographies of resource management and sciences of food production. Through the maintenance of such

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[37] Spirit Report at xvii.

[38] The striped mullet inhabits estuarine waters as larvae and juveniles where there is freshwater outflow from streams or groundwater. Adult mullet migrate offshore during winter months to spawn and spend the early larval stages at sea. Mullet larvae and prejuveniles return in small schools to intertidal and estuarine habitat along the coast. Pua ʻama, or mullet fingerlings, inhabit protected shallow intertidal areas to avoid predators. CWRM has acknowledged that young mullet "depend on a euryhaline or brackish water environment for the nursery stage of their life cycle[.]" *See* In re: Water Use Permit Application filed by Kukui (Molokaʻi), Contested Case Hearing No. CCH-MO97-1, Finding of Fact No. 147.

[39] Wyban, Carol Araki, 1996. Feasibility Study for Kaloko-Fishpond, Kaloko-Honokōhau National Historical Park, Island of Hawai'i, prepared for the U.S. Dep't of the Interior, National Park Service, Kaloko-Honokōhau National Historical Park, at 115 (Jul. 4, 1996).

[40] Nishimoto, R.T., Shimoda, T.E. & L.K. Nishiura, *Mugilids in the Muliwai: a tale of two mullets*. in BIOLOGY OF HAWAIIAN STREAMS AND ESTUARIES., vol. 3 (N.L. Evenhuis and J.M. Fitzsimons, eds.) BISHOP MUSEUM BULLETIN IN CULTURAL & ENV'L STUD. 143, 143-56 (2007).

[41] Wyban, C.A., 1992. Tide and Current: Fishponds of Hawaiʻi. Honolulu, University of Hawaii Press, at 106.

historic and cultural resources, Hawaiians can reclaim and perpetuate a living heritage of aquaculture.[42]

Planned cultural practices also include the adaptive re-use of traditional agricultural enclosures along Kaloko road for the growing of pumpkin, ʻuala, and other customarily grown vegetation. These will be grown for both human consumption and fish food.[43]

Other planned efforts to facilitate the maintenance and revival of traditional and customary practices include cultural interpretation workshops, festivals celebrating traditional and customary practices, and the construction of a community center dedicated to traditional and customary practices.

Planning for the proliferation of practitioners at the Park accords with recommendations of Nā Kōkūa Kaloko Honokōhau, Inc., the Park's original "friends" group, which underscored that the Park was planned to protect for cultural resources for *future* practitioners. Their missions statement reads: "[t]o reawaken the spirit of Kaloko-Honokōhau, to nurture it so that it flourishes again, and through the guidance of our forefathers, introduce its traditions and values to the world so that all may be enlightened."[44] Nā Kōkūa Kaloko Honokōhau made specific recommendations concerning the restoration of the Park as a place for traditional and customary practices.[45]

III. NPS management of traditional and customary practices in the Kaloko-Honokōhau National Historical Park

This section responds to the Commission's inquiry into NPS management of traditional and customary practices. As noted in Part I *supra*, the exercise of traditional and customary practices in the area that now comprises the Park occurs within a legal and policy framework related to the establishment of the Park.

Kaloko-Honokōhau National Historical Park was established, "to provide a center for the preservation, interpretation, and perpetuation of traditional native Hawaiian activities and culture, and to demonstrate historic land use patterns as well as to provide a needed resource for the education, enjoyment, and appreciation of such traditional native Hawaiian activities and culture by local residents and visitors (Public Law 95-625, Nov. 10, 1978, Sec 505(a)). In addition, that same law provided:

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[42] Wyban (1992) at 156.

[43] Personal e-mail communication from Tyler Paikuli-Campbell, Cultural Resource Manager, Kaloko-Honokōhau National Historical Park (May 12, 2015).

[44] Wyban (1996) at 114 (citing Honokokau Study Advisory Commission, The Spirit of Kaloko-Honokōhau: A proposal for the establishment of a Kaloko-Honokōhau National Cultural Park, Island of Hawaiʻi, State of Hawaiʻi, prepared by the Honokōhau Study Advisory Commission and the National Park Service, U.S. Dept. of the Interior (1974) ("Spirit Report")).

[45] Wyban (1996) at 114.

> (c) The Secretary shall administer the park in accordance with this section and the provisions of law generally applicable to units of the national park system, including the Acts approved August 25, 1916 (39 Stat. 535; 16 U.S.C. 461467), and August 21,1935 (49 Stat. 666; 16 U.S.C. 461 et seq.), and generally in accordance with the guidelines provided in the study report entitled "Kaloko-Honokohau" prepared by the Honokohau Study Advisory Commission.

The Spirit Report specifies in part that the Park should not be managed in open, unregulated total access to all areas, but rather:

> The park will be physically separated into appropriate use zones which will provide for (1) the preservation, stabilization, and restoration of historic features, (2) living history demonstrations, (3) recreation use, (4) the education and training of native Hawaiians in traditional cultural pursuits, and (5) kapu (restricted) areas, such as the concentration of burials in Ka-loko, (6) intense watershed management and low density recreation, and (7) offshore water and marine life management.[46]

In accord with the mandate of the Spirit Report, the Kaloko Fishpond is preserved and maintained as a resource for traditional fishpond management. By contrast, the ʻAimakapā fishpond, which provides critical habitat for two endangered native waterbirds, is managed primarily as a wetland habitat. The NPS is unaware of requests for use of ʻAimakapā for specific traditional and customary practices. Long-term management of ʻAimakapā may allow for some traditional and customary practices to occur when compatible with the preservation of critical habitat for the two endangered native waterbirds.

The NPS seeks to support and increase the exercise of traditional and customary practices at the Park in a manner that complies with laws and regulations. Unless a practice is observed that is directly in violation of law (for instance, if someone was observed attempting to harvest an endangered or threatened species), the practices are not restricted.

IV. Conclusion

In conclusion, the NPS will welcome the opportunity to further collaborate over findings that can further protections for Hawaiian traditional and customary practices in the Park and its surrounding communities. We believe that the information provided will be of use to the Commission in their duties regarding the protection of traditional and customary practices.

[46] Spirit Report at 26.

Key findings herein concerning the Commission's inquiry into specific traditional and customary practices exercised in the Park include: Herbert Kai and Hannah Springer testified to specific practices in and around Park areas; there are collaborative efforts to continue customary practices of protecting resources; there exists the gathering of ahupuaʻa-specific fresh and brackish waters; hiʻuwai are performed; commemorative ceremonies are conducted; there continues to be a utilization of traditional fishing methods. Further pertinent to this inquiry into existing practices is consideration of the Park's policy of respectful non-intrusion into cultural practitioner activities at the Park and the historical context of Hawaiian cultural renewal.

Findings pertinent to the Commission's inquiry into the NPS management of traditional and customary practices include: an Advisory Commissioner's expert opinion that the Park's management practices accord with directives of kūpuna contained in the Spirit Report; the Park's protections of cultural resources, especially native mullet and ʻōpaeʻula; the restoration of Kaloko fishpond walls, mākāhā, and other traditional structures; and the ongoing planning for future cultural practices such as adaptive re-use of traditional agricultural enclosures along Kaloko road for the growing of pumpkin, ʻuala, and other customarily grown vegetation; the future workshops and festivals celebrating traditional and customary practices, and the construction of a community center dedicated to traditional and customary practices.

Table I. Hawaiian non-marine cultural resources:[47]

Hawaiian/ English name	***Use*. References**
ʻAkulikuli kai or ʻaeʻae/ pickleweed (*Batis maritima*)	*Food preparation.* Advisory Commissioner Nicole Lui noted the historical use of pickleweed for imu.[48]
ʻIlina/ burials	*Reverence, rituals.* Graves are being disturbed due to sea level rise;[49] family sites, including pā ilina or burials – within the Park;[50] strong sentiments expressed that ilina (burials) be protected where they lay;[51] burials should not be moved (due to significance of ʻilina);[52] Advisory Commission member and lineal descendant, Isaac Harp has identified a familial cemetery on Park grounds.
Lauhala ʻula/ red lauhala	*Weaving, hats.* "My grandmother was a weaver. She and I went to collect her *lau hala* from Kohanaiki (Kalaoa side of the Kohanaiki Church; in the vicinity of the present-day Lee property).[53] We would walk from Honokōhau to Kohanaiki to gather the *lau hala*[;]"[54] red lau hala gathered to make hats from inside Aiu's place (at the lands now known as "ranch house");[55] and mom used ulana lauhala to make mats.[56]
ʻŌpae/ ʻōpaeʻula	*Fishing, eating.* Fishers and others gather ʻōpae, especially ʻōpaeʻula from anchialine ponds to use as bait, in cooking, and to eat.
ʻUala/ sweet	*Fishing, eating, traded/ shared/ makana.* Hawaiians used to make

[47] Adapted from Kepā Maly & Onaona Maly, *He Wahi Moʻōlelo ʻOhana no Kaloko me Honokōhau ma Kekaha o Nā Kona: A Collection of Family Traditions Describing – Customs, Practices and Beliefs of the Families and Lands of Kaloko and Honokōhau, North Kona, Island of Hawai'i,* prepared for Kaloko-Honokōhau National Historical Park, Natʻl Park Srvc. (Apr. 1, 2002) (hereinafter "Maly & Maly 2002") and Kepā Maly, *Nā Honokōhau – Nā Hono I Nā Hau ʻElua (Honokōhau – Bays of the Two Wind-Born Dews) District of Kona, Island of Hawai'i, Vol. II Oral History Interviews,* prepared for Lanihau Partners, L.P., (Sept. 2000) (hereinafter "Maly 2000").

[48] Nā Hoapili o Kaloko-Honokōhau Advisory Commission, Meeting Minutes, at 3 (Nov. 8, 2013).

[49] R. Greenwell in Maly 2000 at 84.

[50] Violet Leimomi "Momi" Nihi-Quiddaoen in Maly 2000 at 18.

[51] George Kinoulu "Kino" Kahanui Sr. in Maly 2000 at 189.

[52] Robert Kaʻiwa Punihaole, Sr. in Maly 2000 at 264.

[53] Nā Hoapili o Kaloko-Honokōhau Advisory Commission, Meeting Minutes, at 5 (May 1, 2015).

[54] Malaea Agnes Keanaaina-Tolentino in Maly 2000 at 259.

[55] John Kills Kaʻiliwai in Maly 2000 at 254-55.

[56] Violet Leimomi "Momi" Nihi-Quiddaoen & Agnes Puakalehua Nihi-Harp in Maly & Maly (2002) at 11, 26.

potato	palu (pala ʻai) - they did not catch every time and instead would hānai the fish;[57] also ʻuhi, a Hawaiian sweet potato with white interior and black skin);[58] fish were fed sweet potatoes and pumpkins and other vegetables so the fish would remain and increase at special feeding spots (koʻa).[59]
Paʻakai/ salt	*Seasoning, preserving food/ rituals*. John Kaʻelemakule was making it at Makaʻeo side for personal consumption, as was Kanakamakaʻi;[60] gathered salt makai ʻOʻoma-Keāhole side – "by where that house stay, the Kamaka house" and "What the Hawaiians look for [for paʻakai] is not low, you look for where the ocean hit, and the spray [where the water cannot go back down]."[61]
Pinaoʻula/ orange-black damselfly (*Megalagrion xanthophelas*)[62]	*Spiritual offerings, rituals*. "Insects were significant in [historical] Hawaiian culture, the creation chant, *Kumulipo*, mentions many native insects. Some served as food for Native Hawaiians, dragonfly nymphs were used in indigenous rituals, and certain caterpillars and other insects were honored as *ʻaumākua* (guardian spirits)."[63] "Pinao" refers to dragonflies, while "pinaoʻula" may refer to damselflies and certain varieties of dragonflies.[64] Hawaiian language includes several names for immature dragonflies and damselflies, including "lohelohe," "lohaloha," "puaʻalohelohe," and "ʻolopelope."[65] Hawaiian damselfly researchers observed, "Hawaiians certainly appreciated and valued these animals far more than we do now, as demonstrated by the fact that they sometimes presented the immatures as religious offerings, or *puaʻalohelohe*[;]"[66] the State

[57] Al Kaleoʻumiwai Simmons in Maly 2000 at 124.

[58] R. Greenwell in Maly 2000 at 78.

[59] Peterson & Orr (2005) at 22.

[60] Peter Keka in Maly & Maly 2002 at 245.

[61] Al Kaleoʻumiwai Simmons in Maly 2000 at 107.

[62] Daniel Hoover, Colette Gold, "Assessment of Coastal Water Resources and Watershed Conditions at Kaloko-Honokōhau National Historical Park, Hawai'i," Nat'l Park Service Tech. Rep. No. NPS/NRWRD/NRTR- 2005/344, at 5 (Dec. 2005) *available at*: http://www.nature.nps.gov/water/nrca/assets/docs/kaho_coastal.pdf.

[63] F.G. Howarth, et.al, *Insects and their kin*, in ATLAS OF HAWAII (3d. ed.) at 140 (1998)).

[64] G.M. Nishida, Hawaiʻi Biological Survey, "Hawaiian Insect Names," Bishop Museum (Jan. 8, 1998); *see also* (Pukui & Elbert 1986).

[65] Dan Polehmus & Adam Asquith, HAWAIIAN DAMSELFLIES: A FIELD IDENTIFICATION GUIDE (HAWAII BIOLOGICAL SURVEY HANDBOOK), at 18 (1996).

[66] *Id.*

	included the pinao ʻula (damselfly) in the Natural Area Reserves System logo to "represent[] aquatic ecosystems" and acknowledges its presence "is indicative of a healthy ecosystem[.]"[67]
ʻŪlei/ trees growing on lava, including ʻēlama, wiliwili, halapepepe	*Fishing, burials, spiritual practices.* ʻŪlei used for ʻōpelu net (the circle – waha ʻupena);[68] Advisory Commission member Mikahala Roy explained trees, including kiawe, and their placement may impact ʻewe (placenta) may be planted with trees.[69]
Wai-a-kaʻīlio (limu)/ a water moss	*Freshwater.* "And this Wai-a-ka-ʻīlio is the name of the moss, it's on the *pali.* You go over there, you grab a handful and you squeeze it *a loʻa ka wai* [you get water;]" "Kaloko Road and you turn, ten ʻo clock, then you see the telephone company dish, next to Hina-kapo-ʻula. Right in there has a like a big ravine, a gulch. Right inside there, on the bank. You can look from on top and you see this big stone, a high rock, standing up like that [gestures upright]. Then you walk inside there, and you find this *limu*, this moss."[70]

[67] The State of Hawai'i Natural Area Reserves System (NARS) included the damselfly in its logo, which "symbolically weaves together the symbols of NARS; land, water, flora, fauna, and our shared Hawaiian culture." Natural Area Reserves System, Dep't of Land & Nat. Resources, State of Hawai'i, "The Natural Area Reserves System Logo" (Sep. 2013) *available at*: http://dlnr.hawaii.gov/ecosystems/files/2013/09/NARSC-logo-brief.pdf.

[68] George Kinoulu "Kino" Kahanui Sr. in Maly 2000 at 201.

[69] Nā Hoapili o Kaloko-Honokōhau Advisory Commission, Meeting Minutes, at 5 (Nov. 8, 2013).

[70] George Kinoulu "Kino" Kahanui Sr. in Maly 2000 at 211-12.

Table II. Hawaiian marine cultural resources:[71]

Hawaiian/ English (*Scientific Name*)	**Habitat/ Catch Method**	**Preparation Method/ References**
ʻAhi/ yellofin tuna (*Thunnus sp.)*	Offshore/ hook-line trolling	Raw, baked in imu, dried/ ʻahi can be dried to last for years in a dry climate[72]
Āhole/ —/ (*Kuhlia sandvicensis*)	Nearshore/ pole, net, various	Raw, dried, pūlehu, salted/ young stage called ʻaholehole; fish used for magic, as to chase away evil spririts and for love magic; used ceremonially as a substitute for pig.[73]
Aku/ skipjack tuna (*Katsuwonus pelamis*)	Offshore/ hook-line with live bait or shell lure	Raw, dried, baked in imu, used for palu/ "considered the most ʻono fish by some Hawaiians; every part was eaten, from head to tail;"[74] pole-fishing with live bait or lure made from mother-of-pearl bivalve;[75] legend of Paʻao and Lonopele.[76]
Akule/ big-eyed scad (*Trachurops sp*.)	Nearshore/ kāmākoi (pole) kuʻu (gill net) hukilau	Raw, dried, broiled, good for palu, cooked in ti-leaf bundles, in imu/ various.
ʻAmaʻama/ Striped mullet (*Mugil cephalus*)	nearshore fishpond/ throw net	Raw, dried, wrapped in ti-leaf to broil, or bake most important fresh/ brackish water fish in Hawaiʻi; spawn caught by net and impounded in fishponds to mature.[77]
ʻAnae/ mature ʻAmaʻama/ Striped mullet	Fishpond/ net	Raw, dried, wrapped in ti-leaf to broil, or bake/ most important fresh/brackish water fish in Hawaiʻi; spawn caught by net and impounded

[71] From John A. Peterson & Maria Kaʻimipono Orr, *I ʻOno Ke Kole, Iʻa Ono Ke Kole – Sweet Conversation, Sweet-Tasting Fish: A Marine Ethnography of Kaloko-Honokōhau National Historical Park, Kailua-Kona, Hawaiʻi*, prepared for the Natʻl Park Srvc. at 23 [PDF 36]: "Table 1. Fish Collected in KAHO Area (based on oral history interviews)"/ at 42-44 [PDF 56-58]: "Table 3. Marine resources: Fish." (Oct. 2005). Supplemented with information from Maly 2000 & Maly 2002.

[72] Peterson & Orr at 43 (citing Margaret Titcomb, NATIVE USE OF FISH OF HAWAII, 59 (1972)).

[73] Mary Kawena Pukui & Samuel Elbert, HAWAIIAN-ENGLISH DICTIONARY at 8 (1986).

[74] Dennis Kawaharada, ed. HAWAIIAN FISHING LEGENDS, at 115 (1992).

[75] Samuel Mānaiakalani Kamakau, THE WORKS OF THE PEOPLE OF OLD, NĀ HANA A KA POʻE KAHIKO, at 73 (1976); Kawaharada, at 94-96 (1992).

[76] Peterson & Orr at 43 (citing Titcomb, at 61).

[77] Peterson & Orr at 43 (citing Titcomb at 64).

Hawaiian/ English (*Scientific Name*)	**Habitat/ Catch Method**	**Preparation Method/ References**
(*Mugil cephalus*)		in fishponds to mature[78]
ʻApahu kūniehi/ Sunfish (*Ransania laevis mola; Masturus lanceolatus)*		not commonly eaten[79]
ʻApi/ Surgeonfish (*Acanthurus guttatus*)	Nearshore.	all methods
Awa/ Milkfish (*Chanos chanos*)	Fishpond/ throw net.	*lomi poke,* steamed/ Pākē awa (awaʻaua or awa kalamoho) deep sea awa – like a hybrid of awa and ʻōʻio.[80]
Halahala/ baby amberjack (*Seriola sp.*)	Fishpond/ throw net, pole fishing.	References to pole-fishing methods.[81]
Hilu/ — (*Corus sp.)*	Nearshore.	Raw, dried and salted, baked, broiled/ known for its quiet demeanor: "A child that is quiet from childhood up, is called a hilu, a pregnant woman who eats hilu will have a quiet, dignified child"[82]
Hināle a	Nearshore/ imu fishing	Dried.[83]
Humuhumu/ triggerfish (various)	Various/ hook-line with ʻōpae lōlō bait.	hekka-style, pūlehu, broiled in ti leaves/ "Hawaiians used humuhumu for fuel… A few cooked, eaten, then the bones, especially of the head, were used to keep the fire going for further cooking"[84]

[78] Peterson & Orr at 43 (citing Titcomb at 92).

[80] Maly & Maly 2002 at 9.

[81] Abraham Fornander, Collection of Hawaiian Antiquities and Folk-lore. Memoirs of the Bernice Pauahi Bishop Museum, Ser 1-3, V. 4, 5, 6, at 176-77 (1916-1919); Kawaharada (1992) at 110.

[82] Peterson & Orr at 44 (citing Titcomb at 75).

[83] Al Kaleoʻumiwai Simmons in Maly 2000 at 167.

[84] Peterson & Orr at 44 (citing Titcomb at 81).

Hawaiian/ English (*Scientific Name*)	**Habitat/ Catch Method**	**Preparation Method/ References**
Kāhala/ amberjack (*Seriola sp.*)	Offshore/ hook-line.	Raw, cooked whole in imu, salted, baked in ti leaves/ sometimes 40 hooks let down on one line.[85]
Kala/ surgeonfish (*Teuthidae sp.)*	Nearshore / kāmākoi (pole) ku‘u (gill net) throw net.	Broiled, baked, dried/ fishing baskets for catching kala; netting kala.[86]
Kole/ surgeonfish (*Ctenochaetus strigosus)*	Nearshore / throw-net.	Raw/ in house-building, kole put in ground where houseposts to stand facing east.[87]
Kūmū/ goatfish (*Parupeneus porphyreus)*	nearshore offshore/ hook-line.	Raw, broiled, cooked in ti leaves.
Kupīpī	Nearshore/ ‘imu fishing.	
Maiko (young pualu) (*Acanthurus sp.*)	Nearshore/ throw net.	Raw, broiled.
Makanui ‘ahi/ bluefin ahi (*Thunnus sp.)*	Offshore/ hook-line, trolling.	Raw, baked, dried.
Mamali (young ‘ō‘io) / young bonefish (*Albula vulpes)*	Nearshore/ throw net.	
Manini/ striped surgeonfish (*Acanthurus triostegus)*	Nearshore/ throw net, ‘imu fishing.	Raw, baked, dried/ “We make our own *imu* in the water.”[88]
Moano/ goatfish (*Parupeneus multifasciatus)*	nearshore offshore/ hook-line.	Raw, broiled in ti leaves.
Moi/	Nearshore/	Raw, dried, cooked in ti leaves in imu/ reserved for

[85] Peterson & Orr at 44 (citing Titcomb at 84).

[86] Kawaharada, at 84, 86 (1992).

[87] Peterson & Orr at 44 (citing Titcomb at 91).

[88] Al Kaleo‘umiwai Simmons in Maly 2000 at 165-67

Hawaiian/ English (*Scientific Name*)	**Habitat/ Catch Method**	**Preparation Method/ References**
threadfish(*Polydactylus sexfilis)*	throw net.	chiefs.[89]
Mū / bigeye emperor fish (*Monotaxis sp.)*	Offshore/ hook-line with ‘a‘ama crab bait.	Broiled, sometimes in imu.
Nenue (also enenue)/ rudder or pilot fish (*Kyphosus sp.)*	Nearshore/ throw net.	Raw, broiled in ti leaves, palu/ reserved for chiefs.[90]
‘Ō‘io/ bonefish (*Albula vulpes)*	Nearshore, fishpond/ hook-line, net from boat.	Raw (eaten with bones), lomi, ni‘oi wai/ netting ‘ō‘io.[91]
‘Ōpakapaka / blue snapper (*Pristipomoides sp.)*	Offshore/ long-line, hook.	Raw, dried, cooked in any manner.
‘Ōpelu / mackeral scad (*Decapterus sp.)*	Offshore, nearshore/ hook-line with ‘ōpae or crab bait.	Raw, dried, broiled/ legend of Pa‘ao and Lonopele;[92] most common fish noted by oral history consultants in the Peterson & Orr study.
Pānuhunuhu/ stareye parrot fish (*Scarus sp)*	Nearshore/ throw net, hook-line.	Raw, dried, broiled, steamed.
Pāpio/ young ulua (*Caranx sp.)*	Fishpond.	Salted, dried.
Pualu/ surgeonfish (*Acanthurus xanthopterus)*	Nearshore/ kāmākoi (pole), ku‘u (gill net).	Raw, dried, broiled.
Ta‘ape/ foreign		

[89] Peterson & Orr at 44 (citing Titcomb at 111).

[90] Peterson & Orr at 44 (citing Titcomb at 11).

[91] *See* Kawaharada, at 87 (1992).

[92] Peterson & Orr at 45 (citing Titcomb at 61).

Hawaiian/ English (*Scientific Name*)	**Habitat/ Catch Method**	**Preparation Method/ References**
fish		
ʻUlaʻula / red snapper (*Lutjanidae sp.)*	Offshore/ long-line, hook.	Raw, dried, broiled/ deep sea fishing with hook-line.[93]
Ulua/ crevalle (*Caranx sp.)*	Offshore/ cast with hook-line slide bait.	Raw, baked in imu, broiled.
Uouōa/ false mullet (*Neomyxus chapalii)*	Nearshore/ throw net.	Raw, cooked in ti leaves/ "head sometimes contained a substance that caused nightmares or wakefulness"[94]
ʻŪʻū/ squirrelfish (*Myripristis sp.)*	Nearshore/ cast with hook-line slide bait.	Raw, broiled/ caught at night.[95]

[93] *See* Kawaharada at 86-87 (1992).

[94] Peterson & Orr at 45 (citing Titcomb at 157).

[95] Peterson & Orr at 45 (citing Titcomb at 159).

Table III. Hawaiian marine cultural resources (non-fish):[96]

Hawaiian/ English (*Scientific Name*)	**Habitat/ Catch Method**	**Preparation Method/ References**
ʻAʻama / black crab (*Grapsus sp.)*	Shoreline, fishpond/ net.	Raw.
Heʻe/ octopus (*Polypus sp)*	Nearshore, Offshore/ hand, spear, lure.	Dried, cooked/ lures for deep sea fishing for heʻe.[97]
Honu/ turtle (*Chelonia mydas)*	Nearshore, offshore.	Turtle hale (where they caught turtles) a "cone shape in front of Kaloko."[98]
ʻIna / small sea urchin (*Echinometra sp)*	Nearshore/ hand.	Raw.
Koholā/ whale	Offshore.	Kanaloa.
Koloa/ duck (*Anas wyviliana)*	Fishpond.	
Leho/ cowry (*Cypraea sp.)*	Nearshore.	Used as octopus lure for deep sea fishing for heʻe;[99] heʻe fishing generally.[100]
Limu kala/ seaweed (*Sargassum echinocarpum)*	Shoreline.	Rarely eaten raw because of toughness; used in ceremonies to drive away sickness and to obtain forgiveness.[101]
Limu kohu/ seaweed (*Asparagopsis taxiformis*	Shoreline.	Keep fish cool for transport; eaten/ Kahanui and his hanai family would use the mauka-makai trail to trade with people in Honokōhau kai. They used horses to transport food –

[96] From John A. Peterson & Maria Kaʻimipono Orr, *I ʻOno Ke Kole, Iʻa Ono Ke Kole – Sweet Conversation, Sweet-Tasting Fish: A Marine Ethnography of Kaloko-Honokōhau National Historical Park, Kailua-Kona, Hawaiʻi*, prepared for the Natʼl Park Srvc. at 24, 46-47 [PDF 37, 59-60]: "Table 2. Non-Fish Marine Resources Collected in the KAHO Area (based on oral history interviews)"/ "Table 4. Marine resources: Non-Fish." Supplemented with information from Maly 2000 and Maly 2002.

[97] *See* Kawaharada, at 88 (1992).

[98] V. Ako in Maly & Maly 2002, at 8, 10.

[99] *See* Kawaharada, at 88 (1992); Kamakau, at 67 (1976).

[100] *See* Kawaharada, at 89-92 (1992).

[101] Pukui and Elbert, at 207 (1986).

Hawaiian/ English (*Scientific Name*)	**Habitat/ Catch Method**	**Preparation Method/ References**
Pterocladia capiliacea)		bringing back fish in a basket layered with limu to keep the fish cool.[102]
Limu lipoa/ seaweed	Shoreline.	
Loli/ sea cucumber (*Holothuria sp.)*	Nearshore/ hand.	Raw, stripped, *poke*;[103] Isaac "Paka" Harp recalled harvests of 400-500 pounds of sea cucumbers at the Park.[104]
Naiʻa/ dolphin/ porpoise	Offshore.	
ʻŌpae keʻo/ shrimp	Fishpond/ net.	Dried, bait/ for some people, ʻōpae were ʻaumakua;[105] ʻōpae ʻula; ʻōpae lōlō, ʻōpae keʻo used to be in Wawaloli (where NELHA is now);[106] "I went in the pond to gather *ʻōpae* [*ʻula*] at Kahinihiniʻula (bathing pond);"[107] used to "mix the ʻōpae [from pond by Alulā bay] with pumpkin for bait."[108]
ʻŌpae lōlō/ brackish-water shrimp (*Penaeus marginatus)*	Fishpond/ net.	
ʻŌpaeʻula/ endemic shrimp	Fishpond/ net.	
ʻOpihi/ limpet (*Cellana sp)*	Nearshore/ pry.	Raw.
Puhi/ eel (*Gymnothorax sp.)*	Nearshore/ scoop net, basket trap, spear, hook-line, hand.	Salted and dried; broiled, lāwalu.

[102] George Kinoulu "Kino" Kahanui Sr. in in Maly 2000 at 195.

[103] Peterson & Orr at 62.

[104] Nā Hoapili o Kaloko-Honokōhau Advisory Commission Meeting Minutes, at 3 (Nov. 15, 2012).

[105] Pukui & Elbert, at 291 (1986).

[106] Peterson & Orr at 73.

[107] Mary Simiona in Maly & Maly 2002 at 338.

[108] Al Kaleoʻumiwai Simmons in Maly 2000 at 159; *see also* Interview with Malaea Agnes Keanaaina-Tolentino on February 28, 2000 in Kepā Maly, Nā Honokōhau – Nā Hono I Nā Hau ʻElua (Honokōhau – Bays of the Two Wind-Bord Dews) District of Kona, Island of Hawaiʻi, Volume II, Oral History Interviews, at 260 (Sep. 1, 2000) (on file with NPS). Keanaaina-Tolentino stated:

> My grandmother and I also used to go catch *ʻōpae* in the pond. It was mostly the white *ʻōpae (kowea*). Grandma made her own *kaʻeʻe* (scoop net) to catch the *ʻōpae.* We used the ʻōpae for bait, and they were also good to eat. Using the *ʻōpae,* my grandma would go *kamakoi* (pole fish) for *poʻopaʻa, mamo*, and other fish like that along the shore. We caught the *ʻōpae* right inside the pond. We would also gather *limu*, eat fish, what ever."

Hawaiian/ English (*Scientific Name*)	**Habitat/ Catch Method**	**Preparation Method/ References**
Puhi paka/ Eel (*Lycodontis flavimarginatus)*	Nearshore/ scoop net, basket trap, spear, hook-line, hand.	Salted and dried; broiled, lāwalu.
Ula/ Lobster (*Panuulirus sp.)*	Nearshore/ net.	Steamed.
Wana/ sea urchin (*Diadema sp.)*	Nearshore/ hand.	Raw.