

## Empowering Indigenous agency through community-driven collaborative management to achieve effective conservation: Hawai'i as an example

Kawika B. Winter<sup>A,B,C,D,N</sup>, Mehana Blaich Vaughan<sup>B,E,F</sup>,  
 Natalie Kurashima<sup>D,G</sup>, Christian Giardina<sup>D,H</sup>, Kalani Quiocho<sup>B,I</sup>,  
 Kevin Chang<sup>D,J</sup>, Malia Akutagawa<sup>E,K,L</sup>, Kamanamaikalani Beamer<sup>E,K</sup> and  
 Fikret Berkes<sup>M</sup>

<sup>A</sup>Hawai'i Institute of Marine Biology, University of Hawai'i at Mānoa, Kāne'ohe, HI, USA.

<sup>B</sup>Natural Resources and Environmental Management, University of Hawai'i at Mānoa, Honolulu, HI, USA.

<sup>C</sup>National Tropical Botanical Garden, Kalāheo, HI, USA.

<sup>D</sup>Hawai'i Conservation Alliance, Honolulu, HI, USA.

<sup>E</sup>Hui 'Āina Momona Program, University of Hawai'i at Mānoa, Honolulu, HI, USA.

<sup>F</sup>University of Hawai'i Sea Grant College Program, University of Hawai'i at Mānoa, Honolulu, HI, USA.

<sup>G</sup>Natural and Cultural Ecosystems, Kamehameha Schools, Kailua-Kona, HI, USA.

<sup>H</sup>Institute of Pacific Island Forestry, US Forest Service, Hilo, HI, USA.

<sup>I</sup>Papahānaumokuākea Marine National Monument, Honolulu, HI, USA.

<sup>J</sup>Kua'āina Ulu Auamo, Kāne'ohe, HI, USA.

<sup>K</sup>Hawai'i inuiākea School of Hawaiian Knowledge – Kamakakūokalani Center for Hawaiian Studies, University of Hawai'i at Mānoa, Honolulu, HI, USA.

<sup>L</sup>William S. Richardson School of Law – Ka Huli Ao Center for Excellence in Native Hawaiian Law, University of Hawai'i at Mānoa, Honolulu, HI, USA.

<sup>M</sup>Natural Resources Institute, University of Manitoba, Winnipeg, Manitoba, Canada.

<sup>N</sup>Corresponding author. Email: kawikaw@hawaii.edu

**Abstract.** Indigenous peoples and local communities (IPLCs) around the world are increasingly asserting 'Indigenous agency' to engage with government institutions and other partners to collaboratively steward ancestral Places. Case studies in Hawai'i suggest that 'community-driven collaborative management' is a viable and robust pathway for IPLCs to lead in the design of a shared vision, achieve conservation targets, and engage government institutions and other organisations in caring for and governing biocultural resources and associated habitats. This paper articulates key forms of Indigenous agency embodied within Native Hawaiian culture, such as *kua'āina*, *hoa'āina*, and the interrelated values of *aloha 'āina*, *mālama 'āina*, and *kia 'i 'āina*. We also examine how Hawai'i might streamline the pathways to equitable and productive collaborative partnerships through: (1) a better understanding of laws protecting Indigenous rights and practices; (2) recognition of varied forms of Indigenous agency; and (3) more deliberate engagement in the meaningful sharing of power. We contend that these partnerships can directly achieve conservation and sustainability goals while transforming scientific fields such as conservation biology by redefining research practices and underlying norms and beliefs in Places stewarded by IPLCs. Further, collaborative management can de-escalate conflicts over access to, and stewardship of, resources by providing IPLCs avenues to address broader historical legacies of environmental and social injustice while restoring elements of self-governance. To these ends, we propose that government agencies proactively engage with IPLCs to expand the building of comprehensive collaborative management arrangements. Hawai'i provides an example for how this can be achieved.

**Keywords:** community-based subsistence fishing area (CBSFA), community-driven collaborative management, Indigenous community conserved area (ICCA), Indigenous people and local communities (IPLC), Native Hawaiian, Place.

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## Introduction

Conservation organisations have long held that humans are separate from and inherently destructive to nature (Mace 2014). This perspective is deeply rooted in centuries of racism against Indigenous peoples and continues to be used to justify past and ongoing removals of Indigenous people from their ancestral Places, and to deny access to their Places for gathering and stewardship (Kashwan 2020). Not surprisingly, efforts by Indigenous peoples to assert their rights to access and care for ancestral Places can result in conflicts with government agencies. These struggles have paved the way for more integrated forms of conservation – including ecosystem-based management and various forms of comanagement between government agencies and communities. However, ‘comanagement’ approaches may be only partially successful in resolving conflicts because of power structures that favour government agencies and limit decision making authority of communities, especially Indigenous communities (Tipa and Welch 2006; Berkes 2009).

Comanagement can mean various things, including ‘community-based management’, ‘cooperative management’, and ‘collaborative management’, each of which exists on a scale of power differential between communities and government agencies. ‘Collaborative management’ is built on mutual respect for both mainstream and Indigenous knowledge systems, represents negotiated agreements between government agencies and Indigenous peoples and local communities (IPLCs), and engages all parties in capacity building (Tipa and Welch 2006). This is recognised as a viable conservation approach (Berkes 2009). We propose that ‘community-driven collaborative management’ represents a subset of approaches to collaborative management that empowers various forms of ‘Indigenous agency’, which, as described by the UN (2007), is the ability and capacity of Indigenous people to govern themselves in their own self-interest. Approaches founded in Indigenous values and strategies to conservation that bring government agencies, non-government organisations (NGOs) and IPLCs together to collaborate are embraced in international policy (IUCN 2016). Community-driven collaborative management empowers IPLCs, and can be embodied in Indigenous Community Conserved Areas (ICCAs) and Community-based Conserved Areas, which are both internationally recognised ways to achieve globally recognised sustainability goals (Woodley *et al.* 2012; Worboys 2015). Work on this trajectory also honours some of the goals set forth in the UN Declaration on the Rights of

Indigenous Peoples, which recognises Indigenous peoples’ right to their ‘lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired’ (UN 2007; Hill *et al.* 2020).

Hawai‘i’s unique history as an independent kingdom governed by its Indigenous people, prior to the illegal overthrow by the American government, provides a strong foundation for collaborative management. Current laws and constitutional provisions have roots in the Kingdom period, and they acknowledge forms of Indigenous agency that deal directly with issues of stewardship, such as conservation and resource management (Akutagawa *et al.* 2016b). Despite the existence of strong legislation and common law protections, however, Native Hawaiians (‘Native Hawaiian’ being the legally recognised term for the Indigenous people of Hawai‘i) have been made vulnerable to prosecution for criminal trespass on private and government lands when in the course of exercising Indigenous agency relating to protection, conservation, and stewardship of their ancestral and sacred Places (Akutagawa *et al.* 2016a, 2016b). The implementation of collaborative management agreements that build on Indigenous agency could support efforts to reconcile historical distrust between government agencies and IPLCs while contributing to a future of reduced conflicts and improved resource management.

In 2018, the conservation community in Hawai‘i adopted collaborative management as a formal conservation strategy (HCA 2018). This was done, in part, to acknowledge that this approach is gaining momentum across the Hawaiian archipelago and that community-driven collaborative management in rural areas can achieve notable conservation successes, as witnessed in Hā‘ena on Kaua‘i Island, Ka‘ūpūlehu on Hawai‘i Island, He‘eia on O‘ahu Island, and the remote Papahānaumokuākea Marine National Monument in the Northwestern Hawaiian Islands (Kikiloi *et al.* 2017; Delevaux *et al.* 2018, 2019; Winter *et al.* 2020a) (Table 1). For example, scientific evidence now shows that Community-Based Subsistence Fishing Areas (CBSFAs) and other collaborative marine management arrangements can increase fish stocks (Minton *et al.* 2018; Rodgers *et al.* 2018, 2019). Despite the success of these pilots, and favourable international, national and state policies and laws (e.g. Ige 2016; IUCN 2016), IPLC-led collaborative management efforts continue to be challenged by a heavily bureaucratic process, with very limited progress made by agencies to streamline transitions from agency-controlled management to collaborative management

**Table 1. Examples of community-driven collaborative management initiatives in Hawai‘i that are currently in place**

The official acknowledgement and participation of Indigenous people and local communities (IPLC), state government, and federal government is indicated for each example

Comanagement initiatives	IPLC	State	Federal
Hā‘ena Community-based Subsistence Fishing Area (Kaua‘i Island)	×	×	
He‘eia National Estuarine Research Reserve (O‘ahu Island)	×	×	×
Pāku‘i Watershed Project (Moloka‘i Island)	×	×	
Ka‘ūpūlehu Fish Replenishment Area (Hawai‘i Island)	×	×	
‘Aha Moku Advisory Committee and Island ‘Aha Moku Councils (Main Hawaiian Islands)	×	×	
Papahānaumokuākea Marine National Monument (NW Hawaiian Islands)	×	×	×
Hawaiian Humpback Whale National Marine Sanctuary (Main Hawaiian Islands)	×	×	×

arrangements. This is true even where community-based leadership has secured a formal legal designation that confers some level of decision-making authority over matters of resource stewardship and non-exclusive harvesting. The bureaucratic nature of this process is highlighted by more than 20 years of complex negotiations and delays that hindered the designation of the Hā'ena CBSFA, finally approved in 2018 (Ayers *et al.* 2017, 2018), and continues to hinder designation of other CBSFAs. Indeed, the desire grows as the community of Mo'omomi (Moloka'i Island) continues to navigate political and bureaucratic obstacles and hurdles in an effort to officially adopt a set of draft administrative rules and associated management plan for their CBSFA, a process that initially began more than 30 years ago.

At the writing of this article, an increasing number of rural Hawaiian communities are attempting to assert Indigenous agency to engage in community-driven collaborative management to care for their Places, such as in Kīpahulu on Maui Island, as well as Miloli'i and Ho'okena on Hawai'i Island. A multi-decade timeline for community-driven efforts is simply too slow to secure shared decision making over resource management. Long delays in securing a legal comanagement designation create excessive hardships for IPLCs, not to mention also result in decades of lost opportunities for effective conservation and resource management.

One source of conflict, and perhaps an important driver of delays, is the limited understanding government and other institutions have of Place-based resource management and conservation as practiced from a Native Hawaiian perspective, which can be viewed as an engagement process with the 'people of Place'. In contrast with the Indigenous perspective, US government institutions are tasked with engaging 'the public', including all stakeholders who use a place, with the goal of ensuring equal protection for the rights of all users. Past legal interpretations of equal protection by state agencies have been quite narrow, precluding for example community promulgated regulations to require boats fishing along a particular coastline to launch from the area boat ramp. In Hā'ena, the community strongly advocated to codify in their CBSFA rule a long-standing social understanding that the most accessible stretch of reef be reserved for harvest by elders. However, after negotiations, the governing agencies considered this designation preferential and an infringement on the rights of all users, ultimately rejecting the proposed rule (Vaughan *et al.* 2017). The process of translating policies on collaborative management into rules and action often results in more questions than answers, and the lack of clarity in turn delays formulation and implementation of policy.

Current efforts to procedurally enact comanagement arrangements in Hawai'i are stymied by administrative concerns that become barriers to progress. These concerns relate to questions about who counts as 'community', what are the cultural mechanisms to engage in resource management, how can community management rules be adapted to changing resource abundance once they are formalised into state law, and how are Indigenous rights balanced with those of an undifferentiated public, including all recreational users. State agencies have worked to streamline the designation process for collaborative management arrangements, such as through CBSFAs, but the process requires steps that are burdensome for communities including: the founding of a registered nonprofit; the surveying of all community members;

detailed documentation of all meetings with stakeholder groups; identifying and validating geographic boundaries of the applying community; and conducting baseline and repeat ecological surveys of community subsistence harvest and of resource health. State agencies have few resources to assist with these many required steps, as they are under-staffed and under-resourced themselves. However, creating so many requirements erects barriers to the very community partnerships that could address lack of funding and personnel by increasing community's role in management.

This paper's aim is to provide perspectives on how to: (1) advance community-driven collaborative management more effectively and efficiently; and (2) elevate the role of Indigenous environmental stewardship concepts and agency in these community-driven collaborative management arrangements. By articulating Indigenous agency as a concept and approach that supports collaborative management policies we can broaden the conversation about process and more fully achieve effective conservation. Specifically, we will explore the concepts of Native Hawaiian agency based on a relationship to Place (e.g. *kua'āina* and *hoa'āina*), which were explicitly used in the policies of the 19th century to empower 'people of Place' when the Hawaiian Kingdom transitioned into a constitutional monarchy and a capitalist economy (Beamer 2014; Oliveira 2014); and other examples of Native Hawaiian agency (e.g. *aloha'āina*), which are ancestral concepts that were revitalised in the late 19th century (Pukui and Elbert 1986; Beamer 2014). Additionally, we will explore further concepts of Native Hawaiian agency (e.g. *mālama'āina* and *kia'i'āina*) that emerged in the Hawaiian renaissance of the late 20th and early 21st centuries (Chang *et al.* 2019; Gon and Winter 2019).

In this treatment, we use two common nouns as proper nouns – 'Indigenous' and 'Place' – to allow us to speak in general terms while acknowledging that the things we speak of have specific names and distinct histories. The paper starts by exploring collaborative management basics, and then briefly explores Native Hawaiian agency and how Indigenous agency shapes community-driven collaborative management. The paper concludes by presenting perspectives on how agencies and NGOs can engage with Indigenous agency to achieve more effective conservation. This paper includes several Hawaiian words and terms relating to stewardship and environmental management (Table 2).

## Conceptual understandings

### *Forms of Indigenous agency in Hawai'i*

Understanding and engaging Indigenous agency will allow for more effective collaborative management between government agencies that have the legal mandate to protect natural resources, NGOs that have a mission to conserve habitats and biodiversity, and the IPLCs who have familial obligations to protect their Places and perpetuate their Indigenous practices. A failure to do this can lead to conflicts, such as those surrounding the approval to construct telescopes within the conservation zone on the sacred mountain, Mauna Kea (Alegado 2019). Native Hawaiian expressions of Indigenous agency take many forms, but are all centred on relationship to Place and among members of a community – human and non-human. Here we describe keystones of

**Table 2.** Glossary of Hawaiian words and terms used in this paper that are associated with environmental stewardship and resource management

Hawaiian	Meaning
<i>‘āina</i>	Land, cultural landscapes; literally, that which feeds
<i>ali‘i</i>	Royalty, ruling class
<i>aloha ‘āina</i>	Kinship-based love for, or reciprocity with, Place
<i>haole</i>	Foreign to Place
<i>hoa‘āina</i>	Companions of Place with shared responsibility for Place
<i>kama‘āina</i>	Child of Place
<i>kia‘i ‘āina</i>	Kinship-based guardianship of Place
<i>konohiki</i>	An <i>ali‘i</i> -appointed, local resource manager
<i>kua‘āina</i>	Rural citizenry; literally, the backbone of the land
<i>kulāiwi</i>	Ancestral land; literally, bones in Place
<i>kupa‘āina</i>	Citizen or permanent resident of Place
<i>kuleana</i>	Responsibility
<i>mālama ‘āina</i>	Kinship-based care for Place
<i>maka‘āinana</i>	Working class; literally, those who tend the land
<i>malihini</i>	Visitor or newcomer to Place
<i>‘ōiwi</i>	Ancestral indigeneity to Place; literally, bones of place
<i>one hānau</i>	Born of Place; literally, birth sands

Indigenous agency, including the conceptual frameworks of agency held in Native Hawaiian (Indigenous) and local communities in Hawai‘i that convey these relationships to Place.

#### *Kua‘āina: the backs of the land*

In many sociocultural scenarios, preferential treatment is proportional to one’s proximity to the centres of power and governance. However, in a Native Hawaiian worldview, those who existed outside of the centres of power and governance are valued. They are embraced as foundational to the cultural landscapes that feed and sustain the masses, rather than otherwise regarded as, ‘out-of-sight, out-of-mind’, by conventional decision making. *Kua‘āina* (literally, the backbone of the land) is a venerable term applied to people who live in the rural countryside (McGregor 2007; Oliveira 2014). This term is an example of Indigenous agency in that it empowers rural residents and elevates them to a point where their well-being is given due deference in decisions and the implementation of policy. The mere utterance of this term also serves as a reminder to those in power to act proactively in the benefit of those who live outside the centres of power, and not to marginalise them to the point of obscurity. The term *kua‘āina* provides the cultural foundation to create policy that acts in the best interests and for the well-being of those who live in remote places.

#### *Hoa‘āina: the people of Place*

In the *ali‘i* era (i.e. prior to European contact in the 18th century) the system of governance and resource management was spatially related from *ali‘i nui* (supreme leader) at the island level to lower-ranking *ali‘i* at the level of various subdivisions of land. It was connected to the *maka‘āinana* (those who tend the ‘āina) through the *konohiki* (the *ali‘i*-appointed local resource manager) (Kurashima *et al.* 2018). That spatial ladder of management was lost with the creation of a hybridised system of governance after the processes to privatise land were initiated by



**Fig. 1.** The concept of ‘*hoa‘āina*’ is an example of Indigenous agency in Hawai‘i that emerged in the 19th century to encompass all relationships to Place under a unifying term that conveyed a sense of shared *kuleana* (responsibility) to Place, regardless of social class. The concept of *hoa‘āina* collectively includes, but is not limited to, those who have the following people-Place relationships (these are not mutually exclusive categories): ‘*ōiwi*’ (those whose ancestors were Indigenous to Place), *kulāiwi* (the Place where one’s ancestors are buried), *one hānau* (the Place one was born in), *kama‘āina* (those who were raised in Place), and *kupa‘āina* (those who are permanent residents of Place); but does not include *malihini* (those who are new to or visiting Place) nor *haole* (those who are foreign to Place). All of these terms are based on a relationship to Place and are not race-based.

the Hawaiian Kingdom in the first half of the 19th century. This created a gap then filled by newer forms of Indigenous agency. The specific term ‘*hoa‘āina*’ (literally, companion of the land), is the Native Hawaiian conceptualisation of the term, ‘people of Place’. It is a term that exemplifies emergent Indigenous agency in the context of the Hawaiian kingdom era.

The term conceptually protected collective rights of the people of Place during the process that allowed for privatisation of land (Andrade 2008; Beamer 2014). *Hoa‘āina* describes the people of Place as a collective while acknowledges the various types of relationships to, and knowledge of, Place (Fig. 1), regardless of social class (e.g. *ali‘i* or royalty, and *maka‘āinana* or working class). Both the Hawaiian Kingdom’s constitution of 1840 and later the *Māhele* – the process that formalised the privatisation of land – had specific legal provisions that recognised the historically vested interest of Native Hawaiians to ‘āina, and therefore granted access to ‘āina. The law specifically granted access rights for the ‘people of Place’ to the resources of Place that sustained the nutritional, cultural, and spiritual needs of embedded communities for countless generations (MacKenzie *et al.* 2015). This was, in part, because the Hawaiian government recognised their citizens’ legal rights – being the collective benefit to public trust resources of *hoa‘āina* to their Place. Hence, to be involved in the decision-making and management of Place-based resources was central to *hoa‘āina*-based resource management and conservation. This form of Indigenous agency allowed for hybridised governance that was simultaneously Place-based and centralised, perhaps best viewed as a blend of bottom-up (*hoa‘āina*) and top-down (*ali‘i*) management of public trust resources (Beamer 2014).

#### *Aloha ‘āina, mālama ‘āina, and kia‘i ‘āina: the responsibilities of people of Place*

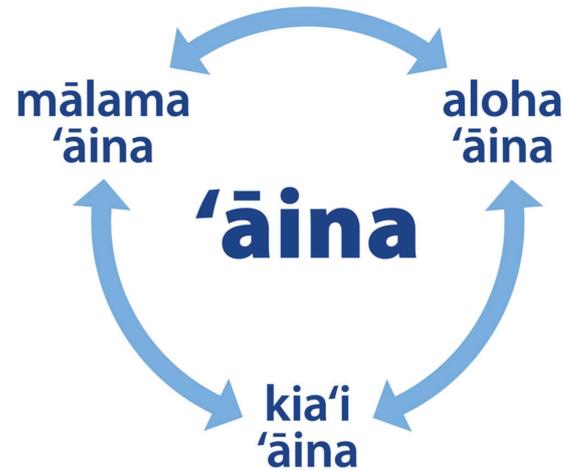
‘*Āina* (literally, that which feeds; figuratively, land) is the physical foundation for mountains-to-sea social-ecological

systems and Native Hawaiian cultural landscapes (Winter *et al.* 2018). In a Native Hawaiian worldview, *‘āina* is the central component of kinship-based values and ethics. This is expressed via the inter-related concepts of *aloha ‘āina*, *mālama ‘āina*, and *kia‘i ‘āina*, which convey a kinship-driven *kuleana* (responsibility) to Place (Fig. 2). These terms represent other forms of Indigenous agency in Hawai‘i, and are born out of the worldview that Native Hawaiians are genealogically connected to the *‘āina* (the Hawaiian Islands themselves) and to its native biodiversity and ecological processes within these systems (Kame‘eleihiwa 1992). *Aloha ‘āina* (literally, love for the land) is a term that speaks to the *kuleana* of *hoa ‘āina* to love the *‘āina* as they do as a cherished elder. This term is founded on the concept of reciprocity between people and Place. *Mālama ‘āina* (literally, care for the land) is a term that speaks to the *kuleana* of *hoa ‘āina* to care for the *‘āina* because it is a beloved family member. *Kia‘i ‘āina* (literally, guardianship of the land) is a term that speaks to the *kuleana* of *hoa ‘āina* to protect and defend the *‘āina* as one would one’s own family.

These terms, along with their associated values and principles, are known and understood by IPLCs in Hawai‘i. However, State agencies and other land management institutions have had, at times, contentious relationships with IPLCs embracing these forms of agency. As a result, Indigenous agency has played a limited role in the day to day operational environment (e.g. decision making about resource management; design and implementation of state and federal initiatives; policy agendas for agencies and organisations). With a history of operating from a ‘resource as commodity’ model of centralised management led by professional practitioners who have been trained to view IPLCs as problematic to management, government agencies and other conservation institutions have had difficulty bridging with and sharing decision making authority with IPLCs. Fundamentally different worldviews, operating environments and relationships to Place have all driven conflicts in the pursuit of effective IPLC-led collaborative conservation and resource management. Moving forward, there are some burgeoning initiatives that are bridging Indigenous worldviews across natural resources management institutions, such as the successful stewardship training program Hālau ‘Ōhi‘a (Kealiikanakaoleohaililani *et al.* 2018, Kealiikanakaoleohaililani *et al.* 2019), which trains existing and future resource management professionals in kinship-based Native Hawaiian lifeways.

## Discussion

Limitations with command-and-control approaches to resource management have been described by others in detail (e.g. Holling and Meffe 1996; Kikiloi *et al.* 2017). In Hawai‘i, command-and-control approaches to conservation predominate, yet funding levels for biodiversity conservation (e.g. invasive species management; fire suppression and mitigation; rare, threatened and endangered species extinction prevention) are far below those needed to cross effectiveness thresholds. Simply put, current neocolonial (colonially derived) agency-based approaches and practices married to a lack of attention to historical injustices associated with colonialism, and within a woefully underfunded conservation context all impose severe limitations on achieving desired conservation outcomes. Furthermore,



**Fig. 2.** Three interrelated forms of Indigenous agency in Hawai‘i that flow from a deep connection to Place, all of which feed into one another. These include *aloha ‘āina* (kinship-based love for Place), *mālama ‘āina* (kinship-based care for Place), and *kia‘i ‘āina* (kinship-based protection of Place).

these limitations are being amplified by an increasingly complex and rapidly changing world. Innovative strategies are needed that explicitly foster collaboration, lead to social learning, trust-building, and the formation of social networks of communities, researchers, and decision-makers. Over time, mature forms of comanagement may incorporate elements of adaptive management (also known as learning-by-doing) into neocolonial processes. Such adaptive comanagement relies on collaboration, learning, and iterative modification of management practices based on experience and insight (Olsson *et al.* 2004; Armitage *et al.* 2007; Kikiloi *et al.* 2017). Continuous testing and then refining of both policies and actions ideally lead to collaborative management that is adaptive and flexible, tailored to local resource management and conservation, and is broadly supported by both communities and governments at various levels. It brings together diverse perspectives and sources of knowledge, and it may involve negotiations as necessary to steer the social–ecological system towards a collaboratively determined desired state (Kikiloi *et al.* 2017).

Collaborative management in Hawai‘i, as with other Indigenous geographies, is more effective than when decision making over resources is accomplished entirely through a centralised but woefully underfunded process that, at times, seems detached from on-the-ground realities. Collaborative management offers the promise of effective conservation through the honouring of local connections to resources and the enhancing of stewardship capacity by people who live in, and are intimately a part of, the resources being stewarded (Johnson *et al.* 2016; Kikiloi *et al.* 2017). As with most Indigenous cases, Native Hawaiian agency is based on the notion of human relationship with, and responsibility to, the environment, seen as a coupled coexistence model of social–ecological systems (Berkes and Folke 1998; Winter *et al.* 2020b).

Biocultural diversity, the diversity of life in all its biological and cultural manifestations, holds that humanity is part of the environment, and recognises symbiotic relationships between societies and their environment (Chang *et al.* 2019). Biocultural

approaches emphasise coevolution and encompass Indigenous and local community knowledge, innovations, and practices that developed within a social–ecological context (Johnson *et al.* 2016). As adaptive community-driven collaborative management is a knowledge partnership, such management arrangements in Hawai‘i require an understanding of the knowledge, practice, and worldviews of Native Hawaiians.

Conflicts are inherent to conservation, but collaborative management provides avenues for bridging the gaps between worldviews and cultural perspectives that often drive conflicts. As such, collaborative management represents a central component to moving contemporary conservation efforts forward by directly engaging with and resolving sources of conflicts. In Hawai‘i, conflicts between government and IPLCs can arise when government agency and/or institution staff – who have a mandate to manage the resources of Place, but are foreign to, or lack a deep relationship with, Place – perceive their legal mandate to manage Place and/or protect biocultural resources as paramount above Indigenous agency. This neocolonial dynamic and underlying perspective could be mitigated through collaborative management that engages Indigenous agency as central to achieving effective resource management and conservation.

Government agencies, NGOs, and people of Place all share a vested interest in the conservation of biocultural resources and associated habitats. However, attempts at Place-based collaborative management that generically identify ‘the community’ as the focus of engagement, can be delayed or even stalled by competing efforts to define community. In Hawai‘i, ambiguity in how ‘community’ is defined has led some opponents of ‘Place-based collaborative management’ to claim that all citizens of the State of Hawai‘i should be viewed as the ‘community’, and therefore every citizen – regardless of relationship to Place – has an equally vested interest regarding decision making and stewardship of specific Places. This applies to collaborative management efforts in both terrestrial and marine environments. While there are circumstances under which it would be necessary to engage all citizens regardless of relationship to, or genealogical connection with, Place, two factors should be integrated into government agency and institutional discussions about conservation and management of natural and cultural resources of Place: (1) the involvement of people of Place (i.e. *hoa‘āina*), and (2) the engagement with Indigenous agency.

Specifically, the intergenerational knowledge and understanding of the resources of Place speak to the importance of engaging *hoa‘āina* in collaborative management of Place-based biocultural resources. Because *hoa‘āina* have a multigenerational *kuleana* to engage in *aloha‘āina*, *mālama‘āina*, and *kia‘i‘āina* of their Place, these forms of Indigenous agency constitute sociocultural components that can harness the energy and capacity of hundreds of thousands of individuals in effective conservation. As well, Indigenous agency can also harness the cultural practices that sustain collective identity and Hawaiian biocultural-based knowledge systems. We contend that this approach is preferable to ignoring or denying Indigenous agency, identity and knowledge, and simply living with perpetual conflicts between government agencies and IPLCs. Such a community-driven collaborative management approach can meet multiobjective conservation goals while make inroads to

addressing the legacy of historical injustices relating to Indigenous peoples.

Transitioning beyond neoclassical forms of governance, and reframing government agency approaches to resource management and conservation does require a collective, organisation-level self-examination of the norms, beliefs, methods, practices and actions, with the goal of operationally engaging Indigenous agency. As more people understand the depth and the roots of humanity’s disconnect with nature, a global movement in support of IPLC empowerment grows. With this movement so do the diversity of biocultural concepts and approaches, like the emerging global jurisprudence in ‘Right of Nature’ and the recognition of Native Hawaiian Cultural Landscapes (Van Tilburg *et al.* 2017). The international experience in creating legal rights for nature is summarised by O’donnell and Talbot-Jones (2018).

A core feature of a biocultural approach is the integration of Indigenous and local knowledge systems in the pursuit of effective conservation (Chang *et al.* 2019). Such a reflective, transformative, and responsive process within government agencies can develop an enhanced pathway to collaborative development, coproduction of knowledge, and then implementation of comanagement focused projects. Such an enhanced dialogue within government agencies allows a broader set of core Hawaiian concepts (described above) to form the basis for effective communication among agency representatives and community leaders. Such two-way communication becomes effective at facilitating larger comanagement goals, as well as meeting the more complex and long-term needs of adaptive processes. This context is also relevant for scientific fields, such as conservation biology, as it provides some context with which to engage IPLCs, and conduct research into the efficacy of comanagement in protecting biodiversity, species abundance and habitats.

## Conclusions

From an Indigenous perspective, ‘conservation’ is not about preservation of nature within rapidly degrading protected areas that exclude people; rather, it is about a Place-based stewardship where IPLCs are empowered to conserve biodiversity along with cultural diversity, and habitats within the context of social–ecological systems. ‘Community-driven collaborative management’ fueled by Indigenous agency empowers IPLCs to engage in stewardship over their places and fulfill this vision of conservation and associated goals. Various forms of Indigenous agency exist throughout the world within Place-specific contexts. Within these contexts exist Place-based solutions for collaborative management arrangements that provide viable means for the recognition of Indigenous and human rights. Innovative and Indigenous-led strategies are needed that explicitly foster collaboration, lead to social learning, trust-building, and the formation of a transformative collaborative management. Indigenous agency can fuel collaborative management in manners that allow for hybridised governance that is simultaneously Place-based and centralised, from the perspectives of both IPLCs (i.e. *hoa‘āina*) and government institutions. The Indigenous concepts that describe the importance of Place for IPLCs can highlight critical management implications for developing and/or maintaining collaborative management strategies.

Community-driven collaborative management is a form of Place-based collaborative management, but incorporates the concepts held by IPLCs, and is an approach that can elevate the role of Indigenous agency in environmental stewardship. To realise this, government agencies must acknowledge, include and seek to understand Indigenous agency within the context of both their own mandates and within the context of the responsibilities IPLC carry to steward their Place. Likewise, IPLCs have forms of agency that derive from Place and should consider the most effective and efficient means of advocacy with government institutions. Therefore, in order to realise broad implementation of collaborative management and achieve both social and environmental justice, actors must appropriately broaden participation, encourage learning, maintain and/or increase connectivity and communication, and foster adaptive systems thinking. Doing so will facilitate the cogeneration, coproduction and coapplication of new knowledge needed to navigate through an uncertain future.

### Conflicts of interest

The authors declare no conflicts of interest.

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