Applying Indigenous Ecological Knowledge for the Protection of Environmental Commons: Case Studies from Hawai‘i for the Benefit of “Island Earth”

David M. Forman[*]

I. EVOLVING INTERNATIONAL RECOGNITION OF INDIGENOUS ECOLOGICAL KNOWLEDGE AS A VALUABLE TOOL FOR PROTECTING ENVIRONMENTAL COMMONS THROUGH THE PRINCIPLE OF INTERGENERATIONAL EQUITY. 305
II. THE INTERGENERATIONAL EQUITY LEGAL FRAMEWORK FOR DEPLOYING INDIGENOUS ECOLOGICAL KNOWLEDGE TO PROTECT ENVIRONMENTAL COMMONS. 309
III. EXAMPLES OF THE INTERGENERATIONAL EQUITY FRAMEWORK HAVE ALREADY BEEN DEPLOYED IN HAWAI‘I. 317
A. Case study #1: Community-based subsistence fishing areas. *318*
B. Case study #2: Incorporation of the ‘Aha Moku system into statewide natural resource management processes. *323*
C. Case study #3: Kamehameha Schools reconfigures its land management policies to embrace cultural and environmental values *330*
IV. THE CULTURAL AND LEGAL FOUNDATIONS OF THE INTERGENERATIONAL EQUITY FRAMEWORK IN HAWAI‘I. 332
A. Under Hawai‘i's Constitution, public natural resources are held in trust and must be conserved and protected for the benefit of present and future generations. *336*
B. Under Hawai‘i's Constitution, each person also has an enforceable right to a clean and healthful environment. *341*
C. Reaffirmation of Native Hawaiian traditional and customary rights under the Hawai‘i Constitution. *346*
V. CONCLUSION 351

Indigenous ecological knowledge (“IEK”)[1] deserves far greater international recognition than it currently enjoys. The evolution of such

---

[*] Director, Environmental Law Program (“ELP”), and Faculty Specialist, Ka Huli Ao Center for Excellence in Native Hawaiian Law (“KHA”), William S. Richardson School of Law, University of Hawai‘i at Mānoa. The author frequently delivers presentations on Traditional and Customary Rights as part of KHA‘s statutorily-mandated Native Hawaiian Law training sessions for appointed and volunteer members of boards and commissions, in addition to community groups throughout the state. Helpful comments on an initial draft of

recognition, nonetheless, represents a significant measure of progress toward multi-pronged outcomes such as:

(i) more effective responses to the climate crisis and other pressing environmental challenges;[2]

(ii) deeper harmonization between the law of human rights and the law of environmental protection;[3] and

this article were graciously provided by ELP colleagues, Professor Richard Wallsgrove and Associate Dean Denise Antolini. In addition to the stellar work of the editorial team at the University of Hawai'i Law Review, Brazilian law student Lorenzo Lima provided helpful assistance in response to a variety of issues that emerged while attempting to finalize this article.

[1] I choose to use the term "Indigenous Ecological Knowledge" in this Article while cognizant of foundational scholarship that instead uses the term "traditional ecological knowledge" as well as alternative references to "indigenous environmental knowledge." *Compare* FIKRET BERKES, SACRED ECOLOGY: TRADITIONAL ECOLOGICAL KNOWLEDGE AND RESOURCE MANAGEMENT (1999), *with* INDIGENOUS ENVIRONMENTAL KNOWLEDGE AND ITS TRANSFORMATIONS: CRITICAL ANTHROPOLOGICAL PERSPECTIVES (Roy Ellen et al. eds., 2000); *see also infra* note 20 (discussing a resolution adopted by the Members Assembly at the 2016 World Conservation Congress, International Union for the Conservation of Nature, which references the traditional knowledge of indigenous people and local communities).

[2] Maxine Burkett, *Indigenous Environmental Knowledge and Climate Change Adaptation*, *in* CLIMATE CHANGE AND INDIGENOUS PEOPLES: THE SEARCH FOR LEGAL REMEDIES 118 (Randall S. Abate & Elizabeth Ann Kronk eds., 2013) (arguing that "[t]he foundational worldview that forms the specific management tools prescribed in [indigenous environmental knowledge] are more relevant to the complex and ever-changing natural system that we have so deeply disturbed").

[3] D. Kapua'ala Sproat, *An Indigenous People's Right to Environmental Self-Determination: Native Hawaiians and the Struggle Against Climate Change Devastation,* 35 STAN. ENVT'L L.J. 157, 197 (2016) (proposing an "analytical framework for the development of remedial measures to redress the consequences of colonization, including climate change . . . to guide, and possibly compel, local decision-makers to proactively combat climate change" by "infusing international human rights norms into local laws and embracing restorative justice to realize the indigenous right to environmental self-determination"); Susan K. Serrano, *A Reparative Justice Approach to Assessing Ancestral Classifications Aimed at Colonization's Harms*, 27 WM. & MARY BILL RTS. J. 501, 523 (2018) ("For Indigenous inhabitants of the territories, in particular, the preservation of their deep connections to land (and where applicable, the return of land), the reclaiming of knowledge systems, language, and life ways, and the regeneration of self-government, are also central to their self-determination."); Rebecca Tsosie, *Climate Change and Indigenous Peoples: Comparative Models of Sovereignty*, *in* CLIMATE CHANGE AND INDIGENOUS PEOPLES, *supra* note 2, at 79–80 ("With respect to the issue of climate change, the domestic sovereignty framework is inadequate to address the challenges confronting indigenous communities because tribal jurisdiction is largely circumscribed by boundaries of reservation and membership. International human rights law offers a more comprehensive framework of analysis for the principle of indigenous self-determination, as it governs the relationship of indigenous peoples

(iii) nearer realization of the principle of indigenous self-determination.[4]

It was no surprise, then, that questions arose about how international law implements—and should implement—indigenous ecological knowledge, when participants in the 2018 Pluricourts and *University of Hawai'i Law Review* Symposium considered "The Role of International Courts in Protecting Environmental Commons."

During the symposium welcoming dinner, several participants mentioned the carbon offset programs that they selected in order to mitigate greenhouse gas emissions resulting from their respective journeys to our isolated archipelago in the middle of the Pacific Ocean. I could not help but think of the historic Mālama Honua Worldwide Voyage that took place from 2013 to 2018.[5] Two Native Hawaiian sailing canoes called Hōkūle'a[6] and

---

with their traditional lands and resources, and places responsibility on the nation-states to account for the impact of their policies upon indigenous peoples.").

[4] Sproat, *supra* note 3, at 197; *cf.* John H. Knox (Special Rapporteur on Human Rights and the Environment), *Rep. of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, at 3–4, U.N. Doc. A/HRC/31/52 (Feb. 1, 2016) ("In the past eight years, the relationship between climate change and human rights has received increasing attention from the Human Rights Council, mandate holders, Governments and international bodies, including the Conference of the Parties to the United Nations Framework Convention on Climate Change. An important milestone was the Male' Declaration on the Human Dimension of Global Climate Change, adopted by representatives of small island developing States in November 2007. The Male' Declaration was the first intergovernmental statement explicitly recognizing that climate change has 'clear and immediate implications for the full enjoyment of human rights', including the rights to life, to an adequate standard of living and to the highest attainable standard of health. The Declaration requested the Human Rights Council to convene a debate on human rights and climate change, the Office of the United Nations High Commissioner for Human Rights (OHCHR) to study the effects of climate change on the full enjoyment of human rights, and the Conference of the Parties to seek the cooperation of OHCHR and the Council in assessing the human rights implications of climate change.").

[5] *The Mālama Honua Worldwide Voyage Continues Into 2018*, POLYNESIAN VOYAGING SOC'Y, http://www.hokulea.com/worldwide-voyage/ (last visited Feb. 14, 2019).

[6] Hōkūle'a, or "Star of Gladness" is the Hawaiian name for Arcturus, which is a zenith star of Hawai'i; traditional wayfinders memorized the zenith stars of different islands as well as the time distances between them. *Hōkūle'a*, POLYNESIAN VOYAGING SOC'Y, http://www.hokulea.com/vessels/hokulea/ (last visited Feb. 14, 2019); *The Canoe is the People: Indigenous Navigation in the Pacific*, UNITED NAT'L EDUC., SCI. & CULTURAL ORG., http://www.canoeisthepeople.org/navigating/zenith_star.php (last visited Feb. 14, 2019). Hōkūle'a was "the first deep-sea Polynesian voyaging canoe to be built in more than 600 years, reviving the art and science of celestial navigation and deep-ocean voyaging." Nainoa Thompson, *Traditional Knowledge for Today's Obstacles*, IUCN (July 21, 2016), https://2016congress.iucn.org/news/20160721/article/traditional-knowledge-todays-obstacles.html ("Hōkūle'a and her crew have been crossing the ocean for over 40 years in the wake of our ancestors, committed to showing the world that old knowledge can be made new again, and that traditional ecological understanding holds the key to solving some of Earth's

Hikianalia[7] circumnavigated the globe using traditional sailing techniques, while "engaging local communities and practicing how to live sustainably."[8] As the Polynesian Voyaging Society explains:

> *Mālama Honua*, means "to care for our Earth." Living on an island chain teaches us that our natural world is a gift with limits and that we must carefully steward this gift if we are to survive together. As we work to protect cultural and environmental resources for our children's future, our Pacific voyaging traditions teach us to venture beyond the horizon to connect and learn with others. The Worldwide Voyage is a means by which we now engage all of *Island Earth*—bridging traditional and new technologies to live sustainably, while sharing, learning, creating global relationships, and discovering the wonders of this precious place we all call home.[9]

Global relationships nurtured over the years by symposium organizer Dr. Christina Voigt, Distinguished Scholar in Residence with the ELP, allowed

---

greatest problems."). According to the Polynesian Voyaging Society:

> On March 8, 1975, a performance-accurate deep sea voyaging canoe built in the tradition of ancient Hawaiian *wa'a kaulua* (double-hulled voyaging canoe), was launched from the sacred shores of Hakipu'u-Kualoa, in Kaneohe Bay on the island of O'ahu. . . . This launching was one of many events that marked a generation of renewal for Hawai'i's indigenous people. Along with the renewal of voyaging and navigation traditions came a renewal of Hawaiian language, dance, chant, and many other expressions of Hawaiian culture. The renewal represented a new-found respect and appreciation for Hawaiian culture, by all of Hawai'i's people. For the Hawaiian people, it has meant that they once again have begun to feel proud of who they are, and where they come from.

Hōkūle'a, supra.

[7] Hikianalia launched for sea trials on September 15, 2012. *Hikianalia*, POLYNESIAN VOYAGING SOC'Y, http://www.hokulea.com/vessels/hikianalia/ (last visited Feb. 14, 2019) ("Hikianalia is the Hawaiian name for the star known as Spica, which rises together with Hōkūle'a (Arcturus) in Hawai'i. They are sister stars because they break the horizon together at the latitude of the Hawaiian [I]slands. While Hikianalia had her own sail plan for part of the Worldwide Voyage, she and Hōkūle'a began and concluded their respective voyages side-by-side. Hikianalia combines the latest ecological technology with the heritage of the voyaging tradition. Each of our hulls contains an electric motor powered by onboard photovoltaic panels that convert sunlight to electric propulsive energy. With a zero carbon footprint, her design supports the '*Mālama Honua*' intent of the Worldwide Voyage.").

[8] *Mālama Honua Worldwide Voyage*, *supra* note 5.

[9] *Mālama Honua Worldwide Voyage*, *supra* note 5 (emphasis added) (scroll down to "The Mālama Honua Worldwide Voyage") (explaining that the "sail plan include[s] more than 150 ports, 23 countries and territories, and [8] of UNESCO's Marine World Heritage sites" to "connect with more than 100,000 people . . . across the South Pacific, Tasman Sea, Indian Ocean, Atlantic Ocean, and the Caribbean Sea, including Samoa, Aotearoa (New Zealand), Australia, Indonesia, Mauritius, South Africa, Brazil, U.S. Virgin Islands, Cuba, the East Coast of the United States, Canada, Panama, and the Galapagos Islands").

fortunate symposium participants to connect and learn about different approaches for protecting environmental commons. Whether intentionally or subconsciously, stewards from around the world were brought together consistent with Pacific voyaging traditions: "It wasn't about navigation. It wasn't about building a canoe. It wasn't about the stars. *It was about bringing people together*."[10]

This Article begins in Part I by using two examples to describe evolving international recognition of IEK as a valuable tool for protecting environmental commons using the principle of intergenerational equity. Part II then provides some global context for an intergenerational equity framework that has been increasingly embraced by environmental constitutionalism around the world, and to which international (and domestic) courts should look for support concerning worldwide efforts that aim to protect environmental commons. Many of these constitutional provisions are rooted in IEK, including the public trust and environmental rights provisions of the Hawai'i Constitution. In Part III, the voices of indigenous practitioners and other members of local communities in Hawai'i illustrate three contemporary applications of IEK, which have already operationalized the intergenerational equity framework in the jurisdiction that hosted this symposium: (A) community-based subsistence fishery areas; (B) the *'Aha Moku* (District Council) system; and (C) a decision by

[10] Sam Low, *Sacred Forests: The Story of the Logs for the Hulls of Hawai'iloa*, HAWAIIAN VOYAGING TRADITIONS (emphasis added), http://archive.hokulea.com/ike/kalai_waa/low_sacred_forests.html (last visited Mar. 14, 2019); *id.* (describing a 200-year-old story of a 108-foot Native Hawaiian canoe built of pine, "a gift from the gods" that apparently drifted all the way from the Pacific Northwest; then, describing the reluctance to accept the gift of the spruce trees until after a soul-healing day planting *koa* seedlings with accompanying cultural protocol and recognition of cultural renewal). According to one tradition, Hawai'iloa was the first discoverer of Hawai'i. *The Building of Hawai'iloa*, HAWAIIAN VOYAGING TRADITIONS, https://archive.hokulea.com/ike/kalai_waa/hawaiiloa.html (last visited Mar. 14, 2019); *see also* Dennis Kawarahada, *Hawai'iloa's Northwest-Alaska Journey / May–July 1995*, HAWAIIAN VOYAGING TRADITIONS, http://archive.hokulea.com/holokai/1995/hawaiiloa_alaska.html (last visited Mar. 14, 2019) (referencing the canoe's first voyage to Tahiti and the Marquesas and back to Hawai'i, then from British Columbia up the Alaskan coast). During the IUCN's 2016 World Conservation Congress, Polynesian Voyaging Society President Nainoa Thompson shared the following story about Hawai'iloa, "the first modern canoe of its time created as much as possible from native materials" except that there were "only two living *Koa* trees in Hawai'i large enough for her hulls." World Conservation Congress, National Host Committee, *Hawaiian Culture: Caring for People and Place*, IUCN, https://2016congress.iucn.org/hawaii/about-the-host/hawaiian-culture/index.html (last visited June 22, 2019). Instead, a respected elder from an Alaskan native tribe (who joined other activists as a teenager in successfully suing the United States and obtaining a land claims settlement that returned millions of acres to Alaskan natives) facilitated a gift of two large spruce trees, explaining that it was "like giving you our children" in order to carry the Native Hawaiian culture. Low, *supra*.

Kamehameha Schools to modify its land management policies by incorporating cultural values associated with beneficiaries‘ familial relationship with the land, instead of focusing solely on maximizing economic return on trust assets. Part IV elaborates on the sub-national context for environmental constitutionalism in Hawai‘i, exploring the cultural and legal foundations of the intergenerational equity framework as applied through constitutional provisions adopting the public trust doctrine, protecting environmental rights, as well as reaffirming traditional and customary Native Hawaiian rights. Drawing inspiration from an ongoing renaissance that continues to be fueled by local communities in the Hawaiian Islands, this article concludes by suggesting that the role of international courts in protecting environmental commons will be greatly enhanced by recognizing the foundational role that IEK plays in the exercise of sub-national constitutionalism, whether in Hawai‘i or elsewhere around the globe.

I. EVOLVING INTERNATIONAL RECOGNITION OF INDIGENOUS ECOLOGICAL KNOWLEDGE AS A VALUABLE TOOL FOR PROTECTING ENVIRONMENTAL COMMONS THROUGH THE PRINCIPLE OF INTERGENERATIONAL EQUITY.

The principle of intergenerational equity plays a foundational role in deploying IEK to improve environmental laws and policies, as Professor Maxine Burkett explains using examples that include the Iroquois' "Seventh Generation" intergenerational planning principle, and Hawai‘i's public trust doctrine (with roots in Native Hawaiian custom and tradition).[11] International recognition of the value of IEK for protecting environmental

[11] Burkett, *supra* note 2, at 105–12, 115–18 ("Neither the [UNFCCC] nor the Kyoto Protocol mentioned indigenous communities, despite their clearly vulnerable status."); *see also* Joaggquisho (Oren Lyons), *Scanno*, 28 PACE ENVTL. L. REV. 334, 335 (2010). Joaggquisho (Oren Lyons), "Chief and Faithkeeper of the Turtle Clan of the Onondaga Nation, Haudensaunee (Iroquois Confederacy, or the Six Nations, the world's oldest continuously functioning democratic government)" was honored for his extraordinary work on behalf of Indigenous Peoples in the United Nations during the symposium, *On the Prospects for the United Nations Declaration on the Rights of Indigenous Peoples*. Lyons, *supra*, at 334. Chief Lyons quoted the mandate of the Onondaga Council of Chiefs, the Haudenosaunee Council of Chiefs, as shared with Chief Lyons by one of his predecessors: "[M]ake your decisions on behalf of the seventh generation coming . . . protect them, so that they may enjoy what you enjoy today." *Id.* at 335; Nicholas A. Robinson, *Evolutionary Roots Nurturing Equity Across Generations*, *in* TAKING LEGAL ACTIONS ON BEHALF OF FUTURE GENERATIONS: NEW PATHS (Emilie Gaillard & David M. Forman eds., forthcoming Nov. 2019) [hereinafter GAILLARD & FORMAN].

commons is a relatively recent and evolving phenomenon, however. Professor Burkett notes that the 1992 U.N. Framework Convention on Climate Change ("UNFCCC") and subsequent 1997 Kyoto Protocol each failed to mention indigenous communities.[12] When the UNFCCC parties initially sought to enable "systematic channels of communication" between stakeholders and the agreement's secretariat and parties, it recognized only two stakeholder constituencies—representing business and industry non-governmental organizations ("NGOs") on the one hand, and environmental NGOs on the other hand.[13] This changed in 2001, when indigenous peoples' organizations became the third recognized constituency.[14] In 2007, the *Fourth Assessment Report of the Intergovernmental Panel on Climate Change* placed "greater emphasis on the value of indigenous input, a sentiment affirmed in 2010 . . . [as follows]: 'indigenous or traditional knowledge may prove useful for understanding the potential of certain adaptation strategies that are cost-effective, participatory, and sustainable[.]'"[15] In 2015, the parties incorporated this concept in the Paris Agreement, comprising a global acknowledgement that climate change adaptation "should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems."[16]

A similar evolution took place within the International Union for the Conservation of Nature ("IUCN") over the course of the last three meetings of the World Conservation Congress ("WCC"). At the fourth WCC in Barcelona, Spain (2008), the IUCN Members' Assembly endorsed the Declaration on the Rights of Indigenous People—which the United Nations ("U.N.") General Assembly adopted barely one year earlier on September 13, 2007.[17] The IUCN resolution emphasized "that the foundations for

---

[12] Burkett, *supra* note 2, at 98 n.7.

[13] *See* UNFCC, CONSTITUENCIES AND YOU (May 2014), *available at* https://unfccc.int/files/parties_and_observers/ngo/application/pdf/constituencies_and_you.pdf. Additional constituencies were subsequently admitted, representing perspectives from trade union NGOs, women, and youth. *See id.*

[14] *See Admitted NGOs*, UNFCC, https://unfccc.int/process-and-meetings/parties-non-party-stakeholders/non-party-stakeholders/admitted-ngos (last visited Jan. 25, 2016)

[15] Burkett, *supra* note 2, at 98 n.7 (citing COMM. TO REVIEW THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE ASSESSMENTS: REVIEW OF THE PROCESSES AND PROCEDURES OF THE IPCC 33 (Oct. 2010), *available at* https://www.ipcc.ch/site/assets/uploads/2019/03/IAC-Report.pdf).

[16] Framework Convention on Climate Change, *Report of the Conference of the Parties on its Twenty-First Session, held in Paris from 30 November to 13 December 2015*, art. 7, ¶ 5, FCCC/CP/2015/10/Add.1 (Jan. 26, 2019).

[17] WCC Res. 4.052, Implementing the United Nations *Declaration on the Rights of Indigenous Peoples* (Oct. 2008) ("Sharing the Republic of Bolivia's concerns that 'at the day of adoption of the Declaration, the Planet was clearly wounded' and while 'it did not solve the

sustainable development require intra-generational and intergenerational equity" and called for the deployment of internal IUCN "mechanisms to address and redress the effects of historic and current injustices against indigenous peoples in the name of conservation of nature and natural resources[.]"[18] During the fifth WCC in Jeju, Republic of Korea (September 2012), the IUCN Members' Assembly requested that its governing entities and representatives "develop a policy for ensuring that the principles of the U.N. *Declaration on the Rights of Indigenous Peoples* are observed throughout the work of the Union" and "establish a taskforce to examine the application of the *Declaration* to every aspect of the IUCN Programme (including Commission mandates), policies and practices and to make recommendations that guarantee its implementation in the *IUCN Programme 2013–2016*, especially with respect to the Programme's focus on 'rights-based' nature conservation."[19] Most recently, at the sixth WCC in Honolulu, Hawai'i (September 2016; theme: "Planet at a Crossroads"), the IUCN Members' Assembly voted to create a new category of membership for indigenous peoples' organizations ("IPOs")—allowing IPOs to join 217 state and government agencies, more than 1,000 NGOs, and networks of more than 16,000 experts in 185 countries.[20] According to then IUCN Director General Inger Anderson:

> [This] decision to create a specific place for indigenous peoples in the decision-making process of [the] IUCN marks a major step towards achieving the equitable and sustainable use of natural resources . . . . Indigenous peoples are key stewards of the world's biodiversity. By giving them this crucial

problems, nor ease the tensions between people,' it was a step forward in allowing indigenous peoples to 'participate in global processes for the betterment of all societies.'"). Thirty-three years earlier, at its twelfth General Assembly meeting in Kinshasa, Zaire (September 1975), the IUCN recommended that "governments maintain and encourage traditional methods of living and customs which enable communities, both rural and urban, to live in harmony with their environment[.]" IUCN G.A. Res. 12/5, Protection of Traditional Ways of Life (Sept. 1975); *see also* IUCN G.A. Res. 15/7, The Role of the Traditional Life Styles and Local People in Conservation and Development (Oct. 1981) ("[T]raditional conservation systems have much to recommend them, not because of sentimental nostalgia, but because they are based on common sense, are cost-effective and fit in with the needs of many local communities[.]").

[18] WCC Res. 4.052, *supra* note 17. *Cf.* Sproat, *supra* note 3, at 197; Serrano, *supra* note 3, at 523; Tsosie, *supra* note 3, at 79-80.

[19] WCC Res. 097-EN, Implementation of the United Nations *Declaration on the Rights of Indigenous Peoples* (2012).

[20] Press Release, IUCN, WCC, IUCN Congress Boosts Support for Indigenous Peoples' Rights (Sept. 10, 2016), *available at* https://www.iucn.org/news/secretariat/201609/iucn-congress-boosts-support-indigenous-peoples%E2%80%99-rights.

> opportunity to be heard on the international stage, we have made our Union stronger, more inclusive[,] and more democratic.[21]

Elements of the intergenerational equity legal framework discussed in Part II below were implicitly recognized by "Nature-Culture Journey" participants at the sixth WCC; this particular subset of Congress participants issued a statement of commitments, which expressly incorporates the concept introduced at the beginning of this Article; namely, "Mālama Honua—to care for our island Earth."[22] The Nature-Culture Journey participants' statement:

> Recall[s] the potential afforded by existing international treaties such as the UNESCO World Heritage Convention, which explicitly brings together nature and culture, as well as culture and biodiversity related conventions, declarations and other international documents that set global standards;
>
> . . .
>
> Recognize[s] the profound contribution that natural and cultural heritage make toward the achievement of the UN Sustainable Development Goals, the Paris Agreement, the Sendai Framework, and Habitat III's New Urban Agenda, and the fundamental need to better link nature and culture to achieve that potential; [and]
>
> . . .
>
> Call[s] upon governments, local authorities and practitioners to implement joint approaches that advance synergies among Conventions, legal frameworks and international instruments for safeguarding cultural and biological diversity[.][23]

In addition, Polynesian Voyaging Society President and Master Navigator, Nainoa Thompson, discussed the Mālama Honua Worldwide Voyage during a high-level session on *Actions for a Sustainable Ocean* moderated by Dr. Sylvia A. Earle.[24]

---

[21] *Id. See also* Mike Gaworecki, *IUCN to Create New Category of Membership for Indigenous Peoples' Organizations*, MONGABAY NEWS (Sept. 13, 2016), https://news.mongabay.com/2016/09/iucn-to-create-new-category-of-membership-for-indigenous-peoples-organizations.

[22] IUCN, MĀLAMA HONUA – TO CARE FOR OUR ISLAND EARTH (2016), *available at* https://www.iucn.org/sites/dev/files/malama-honua-en.pdf.

[23] *Id.* at 1–2.

[24] Tim Jones (Chief Rapporteur to the Hawai'i Congress), WCC, *Proceedings of the Members' Assembly*, 26–27 (2016), *available at* https://portals.iucn.org/library/sites/library/files/documents/WCC-6th-004.pdf; Risa Oram, *Master Navigator Nainoa Thompson*, YOUTUBE (Sept. 4, 2016), https://youtu.be/f__teb05OaA; IUCN, International Union for Conservation of Nature, *Oceans, The Driver of Life*, YOUTUBE (July 4, 2017), https://youtu.be/9U5COonhpYY.

The IUCN Members' Assembly subsequently affirmed the role of indigenous cultures in global conservation efforts generally,[25] and expressed specific support for a concrete example of community-based natural resource management in the State of Hawai'i.[26] This particular example along with other *boots-on-the-ground* illustrations of collaborative natural resource management in the Hawaiian Islands, may be of particular interest to international audiences. Before describing a few of these initiatives in greater detail, Part II presents an emerging legal framework rooted in intergenerational equity that can and should be deployed (by both international *and* domestic courts) to implement IEK for the protection of environmental commons.

II. THE INTERGENERATIONAL EQUITY LEGAL FRAMEWORK FOR DEPLOYING INDIGENOUS ECOLOGICAL KNOWLEDGE TO PROTECT ENVIRONMENTAL COMMONS.

The principle of intergenerational equity has woven itself into international law commencing with the 1972 Stockholm Declaration on the Environment, and through the subsequent adoption of major treaties, along with general principles of law recognized by civilized nations, and judicial opinions.[27] Among other sources, Professor Edith Brown Weiss highlights the eloquent dissenting opinion by International Court of Justice ("ICJ") Judge Christopher Weeramantry, who famously described the normative

[25] IUCN, IUCN RESOLUTIONS, RECOMMENDATIONS AND OTHER DECISIONS 179 (Sept. 2016), *available at* https://portals.iucn.org/library/sites/library/files/documents/IUCN-WCC-6th-005.pdf (reprinting WCC Res. 075-EN, including but not limited to: "NOTING that while the world seeks innovative approaches to sustainable development, indigenous peoples and local communities can provide examples of sustainability to serve as global models, including by means of their traditional knowledge" and "ACKNOWLEDGING that the integration of indigenous peoples' and local communities' approaches and knowledge systems with other conservation efforts is essential to achieve sustainable development").

[26] *Id.* at 158–59 (reprinting WCC Res. 065-EN, including but not limited to: "NOTING that decentralized management enables local people to address unique social, political, and ecological problems and find solutions ideal to their situation" and "RECOGNISING [sic] the contemporary importance of indigenous Hawaiian principles such as *kuleana* (the indivisibility of rights and responsibilities) and *aloha 'āina* (the love of the land which feeds) to the well-being of Hawai'i and the world").

[27] *See, e.g.*, EDITH BROWN WEISS, IN FAIRNESS TO FUTURE GENERATIONS: INTERNATIONAL LAW, COMMON PATRIMONY, AND INTERGENERATIONAL EQUITY (1989); *see also* Edith Brown Weiss, *Intergenerational Equity as a Change of Paradigm*, *in* GAILLARD & FORMAN, *supra* note 11 (citing Professor Brown Weiss's own book published in 1989).

framework for evaluating legal challenges that involve the interests of future generations[28] as follows:

> It is to be noted in this context that the rights of future generations have passed the stage when they were merely an embryonic right struggling for recognition. They have woven themselves into international law through major treaties, through juristic opinion and through general principles of law recognized by civilized nations.
>
> Among treaties may be mentioned, the 1979 London Ocean Dumping Convention, the 1973 Convention on International Trade in Endangered Species, and the 1972 Convention Concerning the Protection of the World Cultural and Natural Heritage. All of these expressly incorporate the principle of protecting the natural environment for future generations, and elevate the concept to the level of binding State obligation.
>
> Juristic opinion is now abundant, with several major treatises appearing upon the subject and with such concepts as intergenerational equity and the common heritage of mankind being academically well established. Moreover, there is a growing awareness of the ways in which a multiplicity of traditional legal systems across the globe protect the environment for future generations. To these must be added a series of major international declarations commencing with the 1972 Stockholm Declaration on the Human Environment.
>
> When incontrovertible scientific evidence speaks of pollution of the environment on a scale that spans hundreds of generations, this Court would fail in its trust if it did not take serious note of the ways in which the distant future is protected by present law. The ideals of the United Nations Charter do not limit themselves to the present, for they look forward to the promotion of social progress and better standards of life, and they fix their vision, not only on the present, but on "succeeding generations[.]"[] This one factor of

---

[28] Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. Rep. 226, 429, at 455–56 (July 8) [hereinafter Weeramantry Dissent] (dissenting opinion by Weeramantry, J.). More recent opinions issued in 2010 and 2014 by another ICJ Judge, Antônio A. Cançado Trindade, likewise acknowledged these generally recognized principles of international law. *See* Whaling in the Antarctic (Austl. v. Japan: N.Z. intervening), Judgment, 2014 I.C.J. Rep. 226, 348, ¶¶ 7, 10–12, 41–47 (Mar. 31) (separate opinion by Cançado Trindade, J.); Pulp Mills (Arg. v. Uru.), Judgment, 2010 I.C.J. Rep. 135, 138, ¶¶ 5–6, 215, 220 (Apr. 20) (separate opinion by Cançado Trindade, J.) (recognizing "the principle of prevention and the *precautionary principle*, added to the long-term temporal dimension underlying *inter-generational equity*, and the temporal dimension underlying the principle of sustainable development" as general principles of law recognized by civilized nations under Article 38(1)(c), Statute of the International Court of Justice). *See also* Arg. v. Uru., 2010 I.C.J. at 157–59, ¶¶ 54–61 (discussing the prevention principle); *id.* at 159–70, ¶¶ 62–93 (discussing the precautionary principle); *id.* at 170–71, ¶¶ 93–96 (discussing the prevention and precautionary principles together); *id.* at 177–84, ¶¶ 114–31 (discussing the principle of intergenerational equity).

> impairment of the environment over such a seemingly infinite time span would by itself be sufficient to call into operation the protective principles of international law which the Court, as the pre-eminent authority empowered to state them must necessarily apply.[29]

The connection between intergenerational equity and IEK is implicit in Professor Brown Weiss' acknowledgement that notions of intergenerational solidarity and future needs are deeply rooted in diverse cultural and religious traditions; more specifically, traditions that expressly recognize rights held in relationship to our ancestors that must also be protected for our descendants.[30] In fact, the year after his dissent in the *Nuclear Weapons Advisory Opinion*, Judge Weeramantry joined the majority in the *Pulp Mills (Argentina v. Uruguay)* case.[31] He wrote separately to highlight

---

[29] Weeramantry Dissent, *supra* note 28, at 455. *See also* Gabčíkovo-Nagymoros Project (Hung./Slovk.), Judgment, 1997 I.C.J. Rep. 7, 41, ¶ 53, 68, ¶ 112 (Sept. 25) (recalling the "great significance" the Court attached "to respect for the environment, not only for States but also for the whole of mankind" in its earlier *Nuclear Weapons Advisory Opinion*); Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. at 241–42, ¶ 29 ("[T]he environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including *generations unborn*." (Emphasis added)). In *Gabčíkovo-Nagymoros Project*, the ICJ wrote:

> The Court is mindful that, in the field of environmental protection, vigilance and prevention are required on account of the often irreversible character of damage to the environment and of the limitations inherent in the very mechanism of reparation of this type of damage.
>
> Throughout the ages, mankind has, for economic and other reasons, constantly interfered with nature. In the past, this was often done without consideration of the effects upon the environment. Owing to new scientific insights and to a growing awareness of the risks for mankind—for present and *future generations*—of pursuit of such interventions at an unconsidered and unabated pace, *new norms and standards have been developed, set forth in a great number of instruments during the last two decades. Such new norms have to be taken into consideration, and such new standards given proper weight*, not only when States contemplate new activities but also when continuing with activities begun in the past. *This need to reconcile economic development with protection of the environment is aptly expressed in the concept of sustainable development.*

1997 I.C.J. at 78, ¶ 140 (emphasis added). *See* Gabčíkovo-Nagymoros Project (Hung./Slovk.), Separate Opinion of Vice-President Weeramantry, 1997 I.C.J. Rep. 88, 110 (Sept. 25) [hereinafter Separate Opinion of Weeramantry] ("[T]he principle of trusteeship of earth resources, the principle of intergenerational rights, and the principle that development and environmental conservation must go hand in hand.").

[30] WEISS, *supra* note 27.

[31] Arg. v. Uru., 2010 I.C.J. at 88. Citing Judge Weeramantry's opinion for the proposition that protection of the environment is a *sine qua non* for human rights, the Honorable Dr. Emmanuel Ugirashebuja, Judge President of the East African Court of Justice, and 2019 International Jurist-in-Residence at the William S. Richardson School of Law, discussed two

intergenerational concern for the environment, discussing examples "from nearly every traditional system, ranging from Australasia and the Pacific Islands, through Amerindian and African cultures to those of ancient Europe."[32] Among other sources Judge Weeramantry identified: Native American and American Indian attitudes;[33] a "Pacific Islander" who

relevant cases touching upon some of the topics addressed in this Article. Emmanuel Ugirashebuja, Judges, Environment and Indigenous People: Role of Judiciary in Creating a Safe and Just Place for Humanity, Presentation at the William S. Richardson School of Law for Maoli Thursday (Mar. 7, 2019). *See* African Commission on Human and Peoples' Rights v. Republic of Kenya, No. 006/2012, Judgment, African Court on Human and Peoples' Rights [Afr. Ct. H.P.R.], ¶ 109 (May 26, 2017) ("The most salient feature of most indigenous populations is their strong attachment with nature, particularly, land and the natural environment. Their survival in a particular way depends on unhindered access to and use of their traditional land and the natural resources thereon. In this regard, the Ogieks, as a hunter-gatherer community, have for centuries depended on the Mau Forest for their residence and as a source of their livelihood."); *id.* ¶ 130 (concluding that the Kenyan government "has not provided any evidence to the effect that the Ogieks' continued presence in the area is the main cause for the depletion of natural environment in the area" instead "the main causes of the environmental degradation are encroachments upon the land by other groups and government excisions for settlements and ill-advised logging concessions"); Social and Economic Rights Action Center (SERAC) and Center for Economic and Social Rights (CESR)/Nigeria, Communication 155/96, African Commission on Human and Peoples' Rights [Afr. Comm'n H.P.R.], 9 (Oct. 27, 2001), *available at* http://www.achpr.org/files/sessions/30th /comunications/155.96/achpr30_155_96_eng.pdf (holding that the Federal Republic of Nigeria violated the African Charter; accordingly, the commission appealed to the government to "ensure protection of the environment, health and livelihood of the People of Ogoniland" by, *inter alia*, "[e]nsuring that appropriate environmental and social impact assessments are prepared for any future oil development and that the safe operation of any further oil development is guaranteed through effective and independent oversight bodies for the petroleum industry; and [p]roviding information on health and environmental risks and meaningful access to regulatory and decision-making bodies to communities likely to be affected by oil operations").

[32] Separate Opinion of Weeramantry, *supra* note 29, at 107–09 & nn.67–70, 75. *See also id.* at 104 n.53 (describing the sacred duty held by each generation of Tanzania's Sonjo tribe to keep their irrigation system in good repair). Judge Weeramantary concluded this part of his analysis by pointing out that modern researchers have shown that some unwritten, traditional legal systems in Africa are "in some respects even more sophisticated and finely tuned than [their written cousins]" in other parts of the world. *Id.* at 109 n.75 (citing MAX GLUCKMAN, AFRICAN TRADITIONAL LAW IN HISTORICAL PERSPECTIVE (1974); MAX GLUCKMAN, THE IDEAS IN BAROTSE JURISPRUDENCE (2d ed. 1972); MAX GLUCKMAN, THE JUDICIAL PROCESS AMONG THE BUROTSE (1955); ARNOLD L. EPSTEIN, JURIDICAL TECHNIQUES AND THE JUDICIAL PROCESS: A STUDY IN AFRICAN CUSTOMARY LAW (1954)).

[33] *Id.* at 107 n.67 (citing INTERNATIONAL ENVIRONMENTAL LAW AND WORLD ORDER 298–99 (Lakshman D. Guruswamy et al. eds., 1994); J. Baird Callicott, *Traditional American Indian and Western European Attitudes Toward Nature: An Overview*, 4 ENVTL. ETHICS 293 (1982); Armstrong Wiggins, *Indian Rights and the Environment*, 18 YALE J. INT'L L. 345 (1993); J. DONALD HUGHES, AMERICAN INDIAN ECOLOGY (1983)).

"point[ed] out that land was treated in his Society with respect and with due regard for the rights of future generations" while giving evidence before the first Land Commission in the British Solomons (1919–1924);[34] Aboriginal Australians;[35] ancient India;[36] and Islamic law.[37] He then observed that "[m]odern environmental law needs to take note of the experience of the past in pursuing this 'congruence of fit' between development and environmental imperatives."[38]

In the nearly quarter century that has passed since Justice Weeramantry pointed out a "growing awareness" about the principle of intergenerational equity,[39] international recognition concerning the value of IEK for the protection of environmental commons has ripened significantly. As a result, today:

> Environmental constitutionalism enjoys global ubiquity. About half of the world's constitutions guarantee a substantive right to a clean or quality or healthy environment explicitly or implicitly, and about half of those also guarantee procedural rights to information, participation or access to justice in environmental matters. Nearly seventy constitutions specify that individuals have responsibilities or duties to protect the environment [e.g., Benin, Chechnya, and India] . . . while others define the environment . . . as a public trust or in terms of sustainable development.[40]

Sub-national environmental constitutionalism has also "gained a foothold throughout the globe—including in Austria, Argentina, Brazil, Ethiopia, Germany, India, Iraq, Netherlands, and the Philippines, in addition to the

---

[34] *Id.* at 104 n.68 (citing PETER G. SACK, LAND BETWEEN TWO LAWS: EARLY EUROPEAN LAND ACQUISITIONS IN NEW GUINEA 33 (1993)).

[35] *Id.* at 104 n.69 (citing ELIZABETH MOULTON EGGLESTON, FEAR, FAVOUR OR AFFECTION: ABORIGINES AND THE CRIMINAL LAW IN VICTORIA, SOUTH AUSTRALIA AND WESTERN AUSTRALIA (1976)).

[36] *Id.* at 108 n.70 (citing NAGENDRA SINGH, HUMAN RIGHTS AND THE FUTURE OF MANKIND 93 (1981)).

[37] *Id.* at 108 (explaining that under "Islamic law, all land . . . is only held in trust, with all the connotations that follow of due care, wise management, and custody for *future generations*. The first principle of modern environmental law—the principle of trusteeship of earth resources—is thus categorically formulated in this system" (emphasis added)).

[38] *Id.* at 109. Weeramantry noted that many traditional societies carried out "sustainable irrigation agriculture over thousands of years," while "modern irrigation systems rarely last more than a few decades," and suggested that this success was "due to the achievement of a 'congruence of fit' between [traditional societies'] methods and 'the nature of land, water and climate.'" *Id.* (citing EDWARD GOLDSMITH & NICHOLAS HILDYARD, THE SOCIAL AND ENVIRONMENTAL EFFECTS OF LARGE DAMS (1985)).

[39] Weeramantry Dissent, *supra* note 28, at 455.

[40] James R. May, *Subnational Environmental Constitutionalism*, 38 PACE L. REV. 121, 122–23 & nn.8–9 (2017) [hereinafter *Subnational Environmental Constitutionalism*].

United States."[41] Hawai'i is one of just five U.S. states—in addition to Illinois, Massachusetts, Montana, and Pennsylvania—whose constitutions provide a substantive right to a quality environment.[42]

By comparison, all twenty-seven Brazilian states and the Federal District promote environmental protection—e.g., "guaranteeing substantive and procedural rights and imposing duties and responsibilities that apply to all for the benefit of present and *future generations*."[43] Indeed, "most Brazilian states express environmental rights in terms of duties and responsibilities that are owed by all for the benefit of present and *future generations*."[44] Governmental means for implementing substantive environmental rights are

---

[41] *Id.* at 132 (citing Joseph Marko, *Federalism, Sub-national Constitutionalism, and the Protection of Minorities*, RUTGERS U. CTR. FOR ST. CONST. STUD. (2015), http://statecon.camden.rutgers.edu/sites/statecon/files/subpapers/marko.pdf). In addition to Brazil and the United States, Professor May adds that state constitutions within Germany also include "substantive and procedural environmental rights, environmental duties, and sustainable development, for present and future generations, often with much more specificity and enforceability than provided in national constitutions." *Id.* at 123–24 (citing JAMES R. MAY & ERIN DALY, GLOBAL ENVIRONMENTAL CONSTITUTIONALISM 236–54 (2016); James R. May & William Romanowicz, *Environmental Rights in State Constitutions*, *in* PRINCIPLES OF CONSTITUTIONAL ENVIRONMENTAL LAW 305, 306–07 (James R. May ed., 2011). *See also Subnational Environmental Constitutionalism*, *supra* note 40, at 132 n.24 (observing that the 2006 federalism reform in Germany gave the *Bundesländer* (states) "the right to deviate from federal law in the areas of nature conservation, landscape planning, and water and flood water management"). Regarding relevant judicial decisions from Argentina, see Juan Ignacio Pereyra, *The Recognition of Rights for Future Generations in Argentinian Lawsuits: Review and Prospects*, *in* GAILLARD & FORMAN, *supra* note 11.

[42] *Subnational Environmental Constitutionalism*, *supra* note 40, at 137 (citing HAW. CONST. art. XI, § 9; ILL. CONST. art. XI, § 2; MASS. CONST. art. XCVII; MONT. CONST. art. II, § 3; PA. CONST. art. I, § 27). The Hawai'i, Illinois, and Montana Constitutions specifically recognize "future generations" while the Pennsylvania Constitution addresses "generations yet to come" and the Massachusetts Constitution does not include any comparable reference. Pennsylvania's provision "has been recommended for consideration in other national constitutions." John C. Dernbach, *Taking the Pennsylvania Constitution Seriously When It Protects the Environment: Part I – An Interpretive Framework for Article I, Section 27*, 103 DICK. L. REV. 694, 698 (1999) (quoting Elizabeth F. Brown, Comment, *In Defense of Environmental Rights in East European Countries*, 1993 U. CHI. L. SCH. ROUNDTABLE 191, 215 (1993), for the suggestion that "East European countries adopt constitutional provisions similar to Pennsylvania's"); *see also Subnational Environmental Constitutionalism*, *supra* note 40, at 125 (citing Brown, *supra*, at 191–92, to support his contention that "experience in U.S. states with environmental constitutionalism could provide Eastern Europeans with models for making such environmental provisions self-executing and enforceable").

[43] *Subnational Environmental Constitutionalism*, *supra* note 40, at 133 nn.33 & 39 (emphasis added) (citing MAY & DALY, *supra* note 41, at 221–22, 225–26) (summarizing the "typical" Mato Grosso Constitution and quoting the Maranhão Constitution).

[44] *Id.* at 134 & nn.42–43 (emphasis added) (citing MAY & DALY, *supra* note 41, at 225–26) (quoting the Constitutions of Espírito Santo, Mato Grosso, Acre, and Amapá as examples).

further dictated in constitutional provisions for the Brazilian states of Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso do Sul, Minas Gerais, Paraíba, Paraná, Piauí, Rio de Janeiro, Rio Grande do Sul, Rio Grande do Norte, Santa Catarina, Sergipe, and Tocantins, as well as the Federal District.[45] In Argentina, the duty to protect future generations has been incorporated through constitutional reforms in Buenos Aires, Córdoba, Chubut, Mendoza, and Santiage de Estero.[46]

In some cases, sub-national constitutions "reflect local environmental concerns that [may] be ignored or underserved by the national constitution, even when those concerns may address global challenges"—e.g., climate change and sustainable development, which are addressed by the Dutch provinces of Zeeland, North Holland, Friesland, and Groningen.[47] Likewise, "[a] recent study reports that many cities in the Philippines, including Puerto Princessa, Naga, Quezon, and Makati Cities have adopted local constitutional action plans to address various environmental concerns, including climate

[45] *Id.* at 128.

[46] Pereyra, *supra* note 41 (citing the provincial constitutional measures as follows: Buenos Aires, articles 26 and 28; Córdoba, article 68; Chubut, article 109; Mendoza, article 1; and, Santiage de Estero, article 35). The Argentine Constitution was amended in 1994 to include a duty to provide a "right to a healthy and balanced environment fit for human development in order that productive activities shall meet present needs without endangering those of future generations; and shall have the duty to preserve it." *Id.* (citing Art. 41, CONST. NAC. (Arg.)).

[47] *Subnational Environmental Constitutionalism*, *supra* note 40, at 126 & n.17 (citing MAY & DALY, *supra* note 41, at 211). The atmospheric trust litigation in the United States and elsewhere is beyond the scope of this article. *See, e.g.*, Elizabeth Brown et al., *Securing the Legal Right to a Healthy Atmosphere and Stable Climate for the Benefit of All Present and Future Generations*, *in* GAILLARD & FORMAN, *supra* note 11 (discussing the case, *Juliana v. United States*, trial in the United States District Court for the District of Oregon currently stayed pending the outcome of an interlocutory appeal before the United States Court of Appeals for the Ninth Circuit); Nathalie J. Chalifour & Jessica Earle, *Feeling the Heat: Climate Litigation Under the Canadian Charter's Right to Life, Liberty, and Security of the Person*, 42 VT. L. REV. 689, 693 & n.15 (2018) (mentioning *Leghari v. Pakistan*, a case which "held the government accountable for failing to implement its climate commitments, and ordered the government to take steps to reduce [greenhouse gas] emissions and help communities adapt to climate change" and urging similar litigation in Canada); Josephine van Zeben, *Establishing a Governmental Duty of Care for Climate Mitigation: Will* Urgenda *Turn the Tide?*, 4 TEL 339 (2015) (discussing *Urgenda Foundation v. Netherlands*, a case now pending before the Hague Court of Appeal). *Compare* Rick Reibstein, *Can Our Children Trust Us with Their Future?*, AM. BAR ASS'N: TYL (Jan. 16, 2018), https://www.americanbar.org/groups/young_lawyers/publications/tyl/topics/environmental-law/can-our-children-trust-us-their-future.html, *with* James Huffman, *Another Take on* Juliana, AM. BAR ASS'N: TYL, https://www.americanbar.org/groups/young_lawyers/publications/tyl/topics/environmental-law/another-take-on-juliana/ (responding to Rick Reibstein's Article "Can Our Children Trust Us with Their Future").

change."[48] Alternatively, unsuccessful "efforts to advance environmental constitutionalism at the federal and provincial level in Canada contributed to the enactment of provincial legislation recognizing substantive environmental rights in the Northwest Territories, Nanavut, Ontario, Quebec, and the Yukon."[49]

> Super-subnational environmental constitutionalism by municipal and other local governmental entities is also trending upward, particularly in subnational governmental entities that operate under constitutional mandates to promote environmental interests . . . [that] can be even more protective and expansive than what is typically found at the subnational and national levels, such as, for instance, those American cities whose charters protect rights of nature, including Pittsburgh, Pennsylvania.[50]

Occasionally, subnational experiences with constitutional environmental rights provisions may even normalize environmental constitutionalism and goad activity at the national level, as demonstrated by the Province of Córdoba in Argentina.[51]

The success of global efforts to instantiate environmental rights for the benefit of present and future generations will depend at least in part, of course, upon judicial enforcement of environmental constitutionalism. In

---

[48] *Subnational Environmental Constitutionalism*, *supra* note 40, at 138 (citing ATENEO SCH. OF GOV'T, STUDY ON CARBON GOVERNANCE AT SUBNATIONAL LEVEL IN THE PHILIPPINES (2011)); *see also id.* at 149–50 & n.142 (characterizing the Pennsylvania Supreme Court's 2013 plurality opinion in Robinson Twp. v. Pennsylvania, 83 A.3d 901 (Pa. 2013), as "[e]choing sentiments from the majority opinion in" Minors Oposa v. Sec'y of the Dep't of Env't & Nat. Res., G.R. No. 101083 (S.C. July 30, 1993) (Phil.), *translated in* 33 I.L.M. 173); Erin Daly & James R. May, Robinson Township v. Pennsylvania*: A Model for Environmental Constitutionalism*, 21 WIDENER L. REV. 151 (2015). This is notwithstanding the "murky" nature of Pennsylvania law with respect to public trust obligations, as discussed *infra* note 109 & accompanying text.

[49] *Subnational Environmental Constitutionalism*, supra note 40, at 131 & n.27 (citing DAVID R. BOYD, THE RIGHT TO A HEALTHY ENVIRONMENT: REVITALIZING CANADA'S CONSTITUTION 61–66 (2012)). Canadian jurisprudence may also be of interest to sovereignty activists in Hawai'i. For example, Professor Jeremy Webber posits an "agonistic constitutionalism" that brackets the question of sovereignty in a way that suspends its final determination—and which "may turn out to be a more common feature of constitutional orders than we have ever suspected." Jeremy Webber, *We Are Still in the Age of Encounter: Section 35 and a Canada beyond Sovereignty*, *in* FROM RECOGNITION TO RECONCILIATION 63–64 (Patrick Macklem & Douglas Sanderson eds., 2016) (citing JAMES TULLY, STRANGE MULTIPLICITY: CONSTITUTIONALISM IN AN AGE OF DIVERSITY (1995); Jean Leclair, *Le Fédéralisme Comme Refus des Monismes Nationalistes (Federalism as Rejection of Nationalist Monisms)*, *in* LA DYNAMIQUE CONFIANCE/MÉFIANCE DANS LES DEMOCRACIES MULTINATIONALES 209 (Dimitrios Karmis & François Rocher eds., 2012)).

[50] *Subnational Environmental Constitutionalism*, *supra* note 40, at 138.

[51] *Id.* at 132 & n.30 (citing ANTONIO MARIA HERNANDEZ, SUB-NATIONAL CONSTITUTIONAL LAW IN ARGENTINA 24 (2011)).

this regard, the recent establishment of a Global Judicial Institute for the Environment ("GJIE")[52] is a welcome development, as is the prospect of a Global Pact for the Environment,[53] along with efforts to promote an International Covenant on the Human Right to the Environment,[54] in addition to a proposed Universal Declaration on the Rights and Duties of Humankind.[55] While these distinct initiatives move forward on their respective paths, it is vitally important to acknowledge important efforts by indigenous peoples and local communities to implement environmental constitutionalism—particularly here in Hawaiʻi, which served as the host site for this Symposium *On the Role of International Courts in Protecting Environmental Commons*. Accordingly, Part III below discusses three case studies from Hawaiʻi.

III. EXAMPLES OF THE INTERGENERATIONAL EQUITY FRAMEWORK HAVE ALREADY BEEN DEPLOYED IN HAWAIʻI.

Contemporary applications of IEK in Hawaiʻi have already operationalized the intergenerational equity framework outlined above in Part II.[56] This part provides three brief case studies involving: (1)

---

[52] *See, e.g.*, World Comm'n on Envtl. Law, *Global Judicial Institute on the Environment*, IUCN, https://www.iucn.org/commissions/world-commission-environmental-law/our-work/global-judicial-institute-environment (discussing the establishment of GJIE and the first meeting of its Interim Governing Committee in Brasilia on March 17–18, 2018) (last visited Apr. 10, 2019).

[53] *See, e.g.*, World Comm'n on Envtl. Law, *Global Pact for the Environment*, IUCN, https://www.iucn.org/commissions/world-commission-environmental-law/our-work/global-pact-environment (noting the adoption of a resolution by the U.N. General Assembly that sets in motion a process to discuss and potentially reach agreement on an international instrument) (last visited Apr. 10, 2019). *See also* G.A. Res. 72/277, Towards a Global Pact for the Environment (May 10, 2018).

[54] *See, e.g.*, Michel Prieur, *Draft International Covenant on the Human Right to the Environment*, *in* GAILLARD & FORMAN, *supra* note 11.

[55] *See, e.g.*, Corinne Lepage & Emilie Gaillard, *Towards the Recognition of Rights and Duties of Humankind*, *in* GAILLARD & FORMAN, *supra* note 11 (citing E. Morin, *Le chemin de l'espérance* [*The Path of Hope*], S. Hessel & E. Morin (eds.), éditions Fayard, 2011, Chap. 1 *in* C. Lepage & Equipe de Redaction, "Declaration Universelle des Droits deL'Humanite: Rapport à l'attention de Monsieur Le Président de La République" [Universal Declaration of the Rights & Duties of Humankind: A Report to Monsieur the President of the Republic], 25 Sep. 2015, p. 10, *available at* http://droitshumanite.fr/the-declaration/?lang=en) (following the hybrid citation format created by Gaillard & Forman for their interdisciplinary, cross-cultural publication).

[56] Note, however, that the United States Court of Appeals for the Ninth Circuit refused to certify questions to the Hawaiʻi Supreme Court involving the potential application of article XI, section 1 in the context of industry challenges to ordinances adopted by "political

community-based subsistence fishery areas; (2) the *'Aha Moku* (District Council) system; and (3) the land management policy at Kamehameha Schools.

A. Case study #1: Community-based subsistence fishing areas.

Fishery management in Hawai'i is shifting from concentration within a centralized state agency, back to communities—with practitioners who are stepping forward to exercise their *kuleana* (right and responsibility) to ensure that resources are available for future generations.[57] The state Department of Land and Natural Resources ("DLNR") is now legally authorized to designate community-based subsistence fishing areas ("CBSFA").[58] In 2005, Miloli'i on Hawai'i Island became the first CBSFA designated by statute—although proposed administrative rules are still awaiting action by the governor of Hawai'i.[59] The following year, a second CBSFA was designated in Hā'ena on the northeastern coast of Kaua'i[60]—unlike the

subdivisions"—*viz.*, the counties of Maui, Kaua'i and Hawai'i—while ignoring relevant Hawai'i precedent applying that very constitutional provision to both Maui, *see* Kelly v. 1250 Oceanside Partners, 111 Hawai'i 205, 140 P.3d 985 (2006), and Kaua'i, *see* Kauai Springs, Inc. v. Planning Comm'n of Cty. of Kaua'i (*Kauai Springs*), 133 Hawai'i 141, 324 P.3d 951 (2014), then invalidating the county ordinance under the implied state preemption doctrine relying in part on decisions that were either issued prior to the 1978 constitutional amendments, or that did not involve analogous constitutional provisions. *See* David M. Forman, *Marooned in the Doldrums While Ignoring Indigenous Environmental Knowledge: Attempting to Regulate Pesticide Use in Hawai'i*, *in* GAILLARD & FORMAN, *supra* note 11; Atay v. Cty. of Maui, 842 F.3d 688, 705–10 (9th Cir. 2016); Syngenta Seeds, Inc. v. Cty. of Kauai, 842 F.3d 669, 676–81 (9th Cir. 2016); Haw. Papaya Indus. Ass'n v. Cty. of Haw., 666 Fed. App'x 631, 633–34 (9th Cir. 2016).

[57] This development arguably represents a measure of restorative justice, *see* Sproat, *supra* note 3, at 197, which constitutes a step forward in addressing long-standing issue of "environmental justice" in Hawai'i. *Id.* at 159 ("native peoples' claims to land, water, and other resources are most appropriately framed not simply as 'environmental' issues, but, more aptly, as 'environmental justice' issues. When an indigenous group and the local legal regime interact around environmental justice, the tenor and even outcome of those interactions potentially turn upon the extent to which *restorative justice* underpins local laws. This becomes crucial.").

[58] HAW. REV. STAT. § 188-22.6 (2007 & Supp. 2017) (authorizing DLNR to adopt administrative rules "for the purpose of reaffirming and protecting fishing practices customarily and traditionally exercised for purposes of [N]ative Hawaiian subsistence, culture, and religion").

[59] *Id.* § 188-22.7 (designating the Miloli'i CBSFA on Hawai'i Island).

[60] *Id.* § 188-22.9 (designating the Hā'ena CBSFA on the island of Kaua'i). Recently announced as one of three 2019 Equator Prize winners from the United States to be honored in a high-level award ceremony in New York on September 24, 2019 (along with another CBSFA-related non-profit organization from Mo'omomi, Moloka'i), the Hā'ena based non-profit Hui Maka'āinana o Makana is a "native Hawaiian grassroots initiative [that] has woven

previously-designated Miloli'i CBSFA, administrative regulations governing the Hā'ena CBSFA were approved by the governor in 2015 and enacted into law.[61] Residents elaborated on the benefits and responsibilities inherent in such initiatives as follows:

---

together traditional, place-based knowledge and policy advocacy to sustainably manage their near-shore fisheries, resulting in the official designation of the first community co-managed fishery in the state of Hawai'i." United Nations Development Programme, Equator Initiative, *Announcing the Equator Prize 2019 Winners*, https://www.equatorinitiative.org/2019/06/02/ep-2019-meet-the-winners/ (identifying a total of three winners from the United States, including two CBSFA-related initiatives in Hā'ena and Moloka'i); *see also* Alden Alayvilla, *Hui Maka'ainana o Makana Educates, Cultivates, Inspires*, GARDEN ISLAND, Dec. 4, 2016, https://www.thegardenisland.com/2016/12/04/hawaii-news/hui-makaainana-o-makana-educates-cultivates-inspires/ (describing Hui Maka'āinana o Makana as "a nonprofit that aims to restore Hawaiian values and stewardship practices in Hā'ena[,]" and quoting an explanation by the organization's then President that, "[w]e're here to protect our natural resources in the ocean, so we can bring it back to *future generations*") (emphasis added). The success of the Hā'ena CBSFA was underscored in the aftermath of a major storm that devastated the area and cut off tourism for more than a year, but apparently gave dwindling fish stocks desperately needed time to recover. *See, e.g.*, Brittany Lyte, *Kauai's Newly Reopened Park is a Case Study in Controlling Tourism*, CIVIL BEAT, June 19, 2019, https://www.civilbeat.org/2019/06/kauis-newly-reopened-park-is-a-case-study-in-controlling-tourism/?fbclid=IwAR3VPaVKBOXhPmv2a7NteqGP-oUrB9ibOqO-xvvogTpwkTjkq5CU1XUMc-A (noting that tourism in Hā'ena "came to a halt in April 2018 when a record-setting storm dumped 49.7 inches of rain in 24 hours" that "damaged hundreds of homes, unleashed dozens of landslides, destroyed the park's infrastructure and ravaged the road that is this region's lifeline" and "bar[red] entry to all but construction workers and those who live in the neighborhoods for 14 months"; adding that the closure also resulted in things residents "hadn't seen since the 1950s: empty beaches and roads, *undisturbed waters teeming with fish and a resurgence of community spirit* . . . [a] popular sentiment among born-and-raised locals is that the flood was *a divine declaration from Mother Nature that she had had enough*; "[e]ven the fish started looking up and recognizing that there was room now for them to come back and swim") (emphasis added); Allison Schaefers, *Kauai Officials Promise to Manage Tourism Concerns by Teaching Visitors About the Aloha Pledge*, HONOLULU STAR-ADVERTISER, June 20, 2019, https://www.staradvertiser.com/2019/06/20/hawaii-news/kauais-tourism-concerns-are-being-addressed/?HSA=7b6395b9808410fb5e7454ae04fda450246bdf59 (discussing a community protest that briefly shut down access into Hā'ena a day after it reopened so community members could distribute an "Aloha Pledge" – a grassroots initiative described as "an opportunity for residents and visitors to assume *joint responsibility* for Kauai's well-being" by asking "visitors to promise they will obey rules, follow laws, and respect local residents and the environment" – and telling visitors to "respect local road rules, use non-reef harming sunscreen and avoid walking on the fragile coral"; the protest followed the state's decision to reopen access to Hā'ena the previous day and impose a 900 person limit, compared with the unrestricted pre-storm daily average of 3,000 – which had the unintended consequence of pushing "visitors without permits to other parts of the community — leaving rubbish on the pristine shores and walking on the region's delicate reefs" and "[s]peeding motorists, who killed two pet dogs in the community") (emphasis added).

[61] After a lengthy process including "nearly ten years of planning and negotiation, over

We gotta get back to the konohiki[62] *system, and maybe the konohiki is gonna be the community.*

– David Sproat, Kalihiwai, 2015

You gotta believe in it and you gotta live it. If we're gonna make these rules then we gotta live it.

– Chipper Wichman, Hā 'ena, 2011

This isn't about extra agencies being needed or extra enforcement; all we need is the ability to do what we know how to do, in a place [the families of Hā'ena] know best.

– Maka'ala Ka'aumoana, Hanalei, 2014

. . . .

I limit myself because I see what it was like before. There were plenty fish! Not like today, you strain your eyes looking. Big like this tent, the pile of moi, and some bigger, the ulua behind, riding the wave, silver all in the wave.

– Tommy Hashimoto, elder [indeed "oldest"] Hā'ena fisherman, 2009[.][63]

---

seventy meetings, fifteen rule drafts, three public hearings, and multiple studies undertaken to document visitor impacts, user groups, fishery health and the importance of locally caught fish within and beyond the Hā'ena community," the administrative rules for the Hā'ena CBSFA were finally adopted in 2015. Jade M.S. Delevaux et al., *Linking Land and Sea through Collaborative Research to Inform Contemporary Applications of Traditional Resource Management in Hawai'i*, 10 SUSTAINABILITY 3147 (2018), *available at* https://www.researchgate.net/publication/327443779_Linking_Land_and_Sea_thro ugh_Collaborative_Research_to_Inform_Contemporary_applications_of_Traditional_Re source_Management_in_Hawai'i ("This was the first time in the state of Hawai'i that local-level fisheries management rules, based on indigenous Hawaiian practices, were recognized.").

[62] *Konohiki* means "Headman of an *ahupua'a* land division under the chief; land or fishing rights under the control of the *konohiki*; such rights are sometimes called *konohiki* rights; *Lit*., invites ability." MEHANA BLAICH VAUGHAN, KAIĀULU: GATHERING TIDES 223 (2018). *Kaiāulu* means "[c]ommunity, neighborhood, village[.]" *Id.* at 222; MARY KAWENA PUKUI & SAMUEL H. ELBERT, HAWAIIAN DICTIONARY 115 (rev. ed. 1986); PUKUI & ELBERT, *supra* (providing that another definition of *Kaiāulu* is the "[n]ame of a pleasant, gentle trade-wind breeze, famous in song [albeit on a different island] at Wai'anae, O'ahu").

[63] VAUGHAN, *supra* note 62, at 138–39. Vaughan elaborates upon the quoted excerpts above based on interviews with, and more informal stories shared by, community members:

> Historically in Hawai'i, the people of an *ahupua'a* [land division] served as *kia'i*, guardians or caretakers of local resources, from fishponds to streams, mountain forests to coral reefs. Though *konohiki* shifted, *maka'āinana* families [literally, "people that attend the land"] stayed in and watched over the *ahupua'a* of their ancestors across generations. Under the territorial and, later, state governments, decision-making about natural resources shifted from local *konohiki* and *maka'āinana* families to centralized state agencies. . . . As they carry *kuleana* [rights and responsibilities] into governance,

At least nineteen other communities in Hawai'i are now pursuing co-management of local fisheries.[64] These communities are embarking upon their respective journeys as a kind of cultural imperative,[65] with full knowledge of the associated demands and challenges involved.

---

the families of Hā'ena are strengthening their community and state policy.

Id. at 138. The term *ahupua'a* is defined as a "[l]and division usually extending from the uplands to the sea, so called because the boundary was marked by a heap (*ahu*) of stones surmounted by an image of a pig (*pua'a*), or where a pig could be offered as tax to the chief[.]" *Id.* at 221. The term *maka'āinana* is defined as "[p]eople in general; citizen, commoner, subject; *Lit*., people that attend the land[.]" *Id.* at 224. The term *kuleana* is defined, in part, as "[r]ight, privilege, concern, responsibility . . . jurisdiction, authority . . . reason, cause, function, justification[.]" *Id.* at 223. The *moi* and *ulua* mentioned by Uncle Tom Hashimoto are defined, respectively as "[t]hreadfish (*Polydactus sexfilis*)" and "[c]ertain species of Carangidae (crevalle, jack, or pompano), the most common is the giant trevally (*Caranx ignobilis*), an important game fish and food item[.]" *Id.* at 224 & 226; *see also id.* at 132 (describing "Uncle Tom Hashimoto, Hā'ena's oldest fishermen," as an highly respected elder in the community who "shared some of the place-names for fishing holes taught to him by his father").

[64] Delevaux et al., *supra* note 61. Another "nearly ten years of planning and negotiation and over 350 community meetings and multiple studies undertaken to document fishing impacts and coral reef health[,]" preceded the adoption of a ten-year fishing rest period known as "Try Wait" in Ka'ūpūlehu on Hawai'i Island, commencing in 2015. *Id.* (defining the local Pidgin language phrase to mean "Let's wait a moment"). Draft administrative rules for a CBSFA at Mo'omomi on the island of Moloka'i are awaiting the Governor's approval to commence public hearings. E-mail from Shaelene K. Kamaka'ala, Acting CBSFA Coordinator, to author (Sep. 17, 2018, 10:25 HST) (on file with author). *See, e.g.*, *Na Loea: The Masters, Mac Poepoe: Malama Moomomi*, 'ŌIWI TV (Apr. 24, 2014), https://oiwi.tv/oiwitv/na-loea-malama-moomomi/ (exploring the "wealth of knowledge and expertise accumulated . . . growing up in the rigor and lifestyle of a Hawaiian family that has been [hunting,] fishing and maintaining the sustainability of these waters for generations"; adding that Uncle Mac Poepoe is "one of a dying breed . . . of skilled fishermen who approach their practice with a passion not just for the sport of it but to hone and perpetuate their skill and expertise in managing Hawai'i's ocean ecosystems, which is critical to the sustainability of Hawai'i and its people"); *id.* (quoting Kanohowailuku Helm, one of Uncle Mac's students, who explained that one of the lessons he learned is that a fishing expert's legacy and kuleana—or right and responsibility—goes beyond providing for himself, his family, and the present community but, more importantly, "to look at providing for *generations that are unborn*" (emphasis added)).

[65] *See, e.g.*, Sproat, *supra* note 3, at 160 ("[R]estorative justice is imperative because it links environmental justice for native peoples to principles of self-determination. As a fundamental expression of restorative justice, self-determination is essential to this task to begin to heal the harms flowing from colonization. It is critical, in this context and others, because indigenous peoples are seeking to remedy cultural destruction, land dispossession, the loss of self-governance, and more.").

I wish I had a secretary, so I don't have to be here at these meetings. I could be down the beach, watching, that's my TV.

– Uncle Mac Poepoe, Mo'omomi, Moloka'i, community leader and pioneer of community-based fisheries management, 2016[.][66]

It's not about pointing fingers. It's something that we learned from way back when we were small: mālama what you get, take care what you get, take what you need and that's it, think about tomorrow, think about the future. Simple. So remember every one of you in this room get something to do with this.

– Keli'i Alapa'i, 2016[.][67]

CBSFAs are also inspiring innovative solutions to resource management issues that plague centralized models. For example, collaborative research involving scientists and local communities is incorporating dynamic interactions between people and nature rather than expert-driven, narrowly focused scientific research.[68] These collaborations have demonstrated that "different environmental conditions make place-based solutions essential,

---

[66] VAUGHAN, *supra* note 62, at 144 (observing, in a section entitled "Monopolizing Community Time Away from 'Āina [land; lit., that which feeds,]" that "[f]ishermen carrying *kuleana* [rights and responsibilities] into governance found themselves starting email accounts, learning to use social media, tracking legislation, traveling off island, and spending long weeks in meetings."); *id.* at 142 ("[T]he choice to partner with state government agencies to restore local-level fisheries governance held challenges for the Hā'ena community. While some community leaders felt collaboration with state agencies was necessary to protect area resources and enhance local governance, others were more cautious. Key challenges included concerns regarding legitimacy of government regulation, risk of undermining informal community efforts, monopoly of community time, and bureaucratic delays."). *See also* United Nations Development Programme, *supra* note 60 (identifying Uncle Mac's "Hui Mālama o Mo'omomi, a native Hawaiian grassroots initiative on the island of Molokai, [which] uses traditional ecological management practices such as the art of kilo and pono fishing to sustainably manage their nearshore fisheries in the face of climate change *for generations to come*" as one of two 2019 Equator Prize winners from Hawai'i) (emphasis added); *id.* (acknowledging Hāena based non-profit Hui Maka'āinana o Makana as the other 2019 Equator Prize winner from Hawai'i).

[67] VAUGHAN, *supra* note 62, at 159 (emphasis added).

[68] Delevaux et al., *supra* note 61, at 7 & 14 (observing that such collaboration "offers a flexible, transferable, data-driven, place-based model that is spatially explicit and relies on increasingly available free remote sensing imagery and bathymetry data"). To illustrate the narrow focus that often describes scientific research relative to indigenous ecological knowledge, Professor Akutagawa quotes Uncle Mac as saying: "I work with a lot of scientists. They come around for the 'kodak moments.' Me . . . I'm here every day." Malia Akutagawa, Return of the Konohiki: Exercising Kuleana in Natural Resource Management, Presentation to the William S. Richardson School of Law Faculty (Dec. 4, 2014). In other words, more narrowly focused scientific research is often based on mere snapshots in time, as compared with lifetimes of empirical observation (or *kilo*) by *Kanaka 'Ōiwi* practitioners whose database is rooted in oral histories passed down from generation to generation.

because one-size-fits-all kinds of management ignore issues of place and scale."[69] Thus, departures from centralized models of governance can be seen as *essential* to ecological-social resilience.[70]

B. *Case study #2: Incorporation of the 'Aha Moku system into statewide natural resource management processes.*

Another illustration of the intergenerational equity framework at work in Hawai'i is the *'Aha Moku* (District Council), a traditional Native Hawaiian system of localized natural resource use and management.[71] The name *'Aha Moku* derives from one of the strongest natural fibers on earth, *olonā*—i.e., *Touchardia latifolia* (from the *Urticaceae* family, but without stinging hairs). As explained by the late, revered *Kumu Hula* (Hula Master)[72] John

[69] Delevaux et al., *supra* note 61, at 15 (citations omitted); *id.* (adding that "local-scale and place-based solutions are particularly important in Hawai'i, where locally sourced food is socially and culturally important and food systems are vulnerable to coastal development and climate change impacts"). Not coincidentally, "traditionally managed community fisheries in Hawai'i have exhibited equal or higher biomass than even no-take marine protected areas." *Id.* at 2 (citations omitted).

[70] *See, e.g.*, *id.* at 2 (observing that a resurgence of interest among academics, policy makers, and communities in reviving the traditional Hawaiian biocultural resource management system is now taking place, after "nearly two centuries of decline"). Beyond Hawai'i, analogous examples of "social-ecological system approaches to natural resources management" include Indonesia, the Solomon Islands, Yap, and Fiji, in addition to the Pacific Northwest, Asia, Africa, and Oceania. *Id.* at 14.

[71] This discussion is based on a presentation delivered by the author on April 16, 2018, at the 7th International Conference on Environmental Future. An abstract for that presentation is available at http://manoa.hawaii.edu/7ICEF/wp-content/uploads/2018/04/7th-ICEF-Abstract-Booklet-4.2.2018.docx.pdf. A summary of the conference is available at https://foundationforec.org/wp-content/uploads/2018/06/7ICEF-Summary-Output.pdf. The author's presentation was entitled, *'Aha Moku Councils: Collaborative Natural Resources Management Guided by the Application of Indigenous Knowledge*, with thanks to my colleague Malia Akutagawa for graciously sharing her deep knowledge of this issue. *See, e.g.*, Malia K. H. Akutagawa, *The 'Aha Moku Rules of Practice and Procedure: Weaving 'Ōiwi Governance and Expertise in Mālama 'Āina* (2017) (unpublished manuscript) (on file with author). Professor Akutagawa is the "*po'o* (head) of the 'Aha Kiole o Moloka'i (the *'aha moku* island council on Moloka'i)" and "drafter of the Final Rules of Practice and Procedure for the 'Aha Moku Advisory Committee [AMAC]" under the DLNR. *See* 'Aha Moku Advisory Committee Rules §§ 1-1 to 4-1 (Oct. 2016) [hereinafter AMAC Rules], *available at* http://www.ahamoku.org/wp-content/uploads/2016/12/FINAL.AMAC_.Admin_.Rules_.effective.102016.pdf.

[72] *Cf.* PUKUI & ELBERT, *supra* note 59, at 182 (defining "hula teacher"). *See generally*, DOROTHY B. BARRERE ET AL., HULA: HISTORICAL PERSPECTIVES (1980). Ka'imikaua received the "*mo'okuauhau* (genealogy) of his *Kumu* [Ka-wahine-kapu-hele-i-ka-po-kane, or 'Sacred Woman Traveling on the Night of Kane'] and her *Kumu* dating back to 900 A.D. to the first

Ka'imikaua, *'aha* means council, but is also symbolized by *olonā* fibers that are woven into a cord with each strand, or *aho*, representing an expert who sits on the council;[73] all the collective strands of expertise are woven together in order to serve the people and to help to preserve the lands as well as other things that help sustain life for the community—i.e., a collaborative natural resource management process that represents *lōkahi* (meaning the balance between people, land and *akua* [i.e., gods]), which results in *pono*, or spiritual balance, that enables the land and people to flourish without starvation.[74]

---

keeper of this knowledge." *John Ka'imikaua*, MOLOKA'I KA HULA PIKO, www.kahulapiko.com/john-kaimikaua.html (last visited June 22, 2019). "At the age of 14, he learned the history, chants and dances of Moloka'i from . . . Kawahinikapuheleikapokane" and "viewed the hula as a vehicle to educate and enlighten all people about our ancestors through the early traditions of Hawaiian chant and dance." Ka'oi Ka'imikaua, *John Ka'imikau*, MOLOKAI DISPATCH (May 16, 2007), https://themolokaidispatch.com/john-kaimikaua/ (during the month prior to the anniversary of his death, Kaimikaua's wife wrote that her late husband "was relentless in promoting the Hawaiian way of life, its principles and values").

[73] *See, e.g.*, AMAC Rules § 2-2(a) ("They were experts in fisheries management, hydrology and water distribution, astronomy and navigation, architecture, farming, healing arts, etc. . . . These experts utilized their knowledge to *kia'i 'āina*, or care for the natural resources and produced food in abundance—not just for the people of that time, but for all successive generations.").

[74] Hui Mālama o Mo'omomi, *John Kaimikaua – Aha Moku*, VIMEO, https://vimeo.com/29767407 (explaining that the term *ki'ole* refers to fish hatchlings that shroud the south shores of Moloka'i between October and January, as a metaphor for the dense populations of people that lived on Moloka'i when the ancient *'aha* councils were operating as intended on all four *moku* or districts on Moloka'i). After the first 300 years under the *'aha* councils, the population expanded so dramatically that the practitioners from all islands gathered again on Moloka'i and devised a plan to divide each *moku* into smaller parcels called *ahupua'a* with their own *'aha* councils of practitioners living in each *ahupua'a*; these smaller councils would make decisions about producing food or making changes to the land for the benefit of the people, except when a wider pool of expert practitioners was required because the decision would affect other (or even all) *ahupua'a* within the *moku*. *See, e.g.*, Nalani Minton & Na Maka O Ka 'Āina, *A Mau A Mau (To Continue Forever): Cultural and Spiritual Traditions of Molokai* (2000) [hereinafter *A Mau a Mau*] (quoting Ka'imikaua, who added that this natural and cultural resource management system spread to the other Hawaiian Islands and continued for another 700 years before the arrival of the *ali'i*, or chiefs, at the end of the ninth century—the *'ike*, or knowledge, of the experts was passed down through generations, based on learning by doing).

> After the passing of the first seven generations under the 'aha councils, peace was established. By the sixteenth generation, there was no more manufacture of weapons and no knowledge of war amongst the people. The leadership of the *'aha* councils was so proficient in providing for the people's needs. Everyone had enough food, materials for housing, and clothing. There were no rich, no poor. Because of the *'aha* councils, the people were able to progress and expand their farming and fishing abilities and excel spiritually. About three-hundred years after the formation of the 'aha councils, the lands became abundant and the population of the islands increased.

> [T]his system of localized use and management optimizes the well-being of the ecosystem and that of its users. By way of contrast, Hawaiians often assert that management of resources under the Euro-American paradigm involves formal centralized control of resources and habitats and thus less sensitivity to local biophysical dynamics, less appreciation for the needs and interests of the indigenous human populations, and less capacity for enforcing rules and regulations at the local level. . . . Traditional resource management is often said to be relatively more adaptable to real-time conditions and situations in specific places, places which in sociocultural and biophysical terms can vary significant[ly] within and across the islands. . . . In contrast, institutionalized statewide rules are far less flexible and adaptive to localized conditions which can vary from ahupuaʻa to ahupuaʻa [land divisions within districts], moku to moku [regional districts], and island to island.[75]

In 2012, the state formally authorized the ʻAha Moku Advisory Committee ("AMAC") to advise DLNR on, *inter alia*: "[i]ntegrating indigenous resource management practices with western management practices in each *moku* [district]"; "[f]ostering the understanding and practical use of [N]ative Hawaiian resource knowledge, methodology, expertise"; "[s]ustaining the

AMAC Rules § 2-2(d) (quoting Kaʻimikaua); *see also A Mau a Mau*, *supra* (noting that the great productivity on land and sea was due to ingenuity and an intimate understanding of the resources). For example, the first offshore *loko iʻa*, fishpond, was built on Molokai at Pukoʻo—which translates as complete organization/cooperation—by many thousands of people, standing in seven human chains, passing long stones one by one from the mountains to the shore. *A Mau a Mau*, *supra* (adding that the technology was transferred to Oʻahu, Maui, and Hawaiʻi by bringing the same expert who supervised construction of the first seven fishponds on Molokaʻi; he then supervised construction of the first fishponds on those islands). After six centuries, there were hundreds of fishponds on Molokaʻi, ranging from ten to five hundred acres in size (including fifty-eight main fishponds), and providing more fish than needed by the islandʻs people. *Id.* According to Professor Akutagawa, Kaʻimikaua taught her the following phrase used by Molokaʻi *kūpuna* (elders) to describe the abundance of fish in their fishponds: "Aia nā kai poʻoloʻoloʻuo Molokaʻi" ("There are the turbulent waters of Molokaʻi")—meaning the fish were so numerous in these ponds that they created turbulent seas even while the waters outside of the fishpond were calm. Malia Akutagawa, *Molokai's "Turbulent Seas,"* SUSTʻĀINABLE MOLOKAI (Mar. 24, 2011), http://www.sustainablemolokai.org/aia-na-kai-pooloolou-o-molokai-molokais-turbulent-seas-abundant-ponds-churning-with-fish/.

[75] HOʻOHANOHANO I NĀ KŪPUNA 15–16 (2010), *available at* http://ahamoku.org/wp-content/uploads/2011/09/Hoohanohano-Puwalu-Series-Summary.pdf. *Id.* at 15 (noting that "modern science and contemporary management approaches often do not address whole systems and relationships of the human and biological components that compromise the whole" while traditional systems "tend to be holistic in nature" and "healthy ecosystems are highly valued"). One of the Puwalu convenors, Kamehameha Schools, makes for an interesting case study itself. *See infra* notes 94–99.

State's marine, land, cultural, agricultural, and natural resources"; and "[f]ostering protection and conservation of the State's natural resources."[76]

Four years later, the AMAC promulgated administrative rules.[77] Notwithstanding the AMAC's placement with the DLNR for administrative purposes and its express authority to "advise the chairperson of the board of land and natural resources[,]"[78] multiple provisions of the AMAC rules contemplate the provision of advice to other state, county and even federal agencies, as well as the state legislature.[79] Among other things, the AMAC

---

[76] HAW. REV. STAT. § 171-4.5(d) (Supp. 2017).

[77] *See generally* AMAC Rules, *supra* note 71; S. Con. Res. 55, 28th Leg. (Haw. 2015), *available at* https://www.capitol.hawaii.gov/session2015/bills/SCR55_SD1_.htm (authorizing the AMAC to "engage stakeholders for the purpose of developing and adopting rules for its operation and administration" then "report its proposed administrative rules to the Legislature" before the 2016 legislative session).

[78] § 171-4.5(a).

[79] *See, e.g.*, AMAC Rules § 1-2(g) ("[AMAC] shall proactively . . . collaborate with *state, county, and federal agencies, and the state legislature* on how to affirmatively protect and preserve Native Hawaiian rights, traditional and customary practices, and natural and cultural resources that are protected as part of the public trust. Namely, the [AMAC] shall provide guidance to *agencies and the state legislature* for practical and customized application of statutory and constitutional protections of Native Hawaiian rights and the public trust, and judicial cases respecting the same." (Emphasis added)). "Agency" includes "*any federal, state or county agency* that the [DLNR] advises." *Id.* § 1-3 (emphasis added). "Collaborative governance" means "a governing arrangement where *one or more public agencies* . . . directly engage non-state stakeholders, such as the [AMAC] and island *'aha moku* councils, in a collective decision-making process that is *formal*, *consensus-oriented*, and *deliberative* and that aims to make or implement public policy or manage public programs or assets" implying "two-way communication and influence between *agencies* and stakeholders." *Id.* (emphasis added). *See also id.* § 1-12(i) (authorizing the AMAC executive director to "only offer testimony in public hearings before agencies and the legislature related to specific findings, policies, and recommendations that have been formally approved by the [AMAC] at its meetings"); *id.* § 1-12(j) (providing that in response to inquiries from DLNR, *other agencies, and the legislature* on island-specific issues, the AMAC "executive director shall only consult with and seek a response from the respective Island *Po'o* [representative either appointed by the governor, or appointed locally to serve on an island *'aha moku* council] for which the matter corresponds to"; mandating that the executive director "defer to the Island *Po'o* on next steps and recommended action"; and, prohibiting the executive director from acting "independently and without consent and authority from the Island *Po'o* on matters affecting the respective *Po'o's ahupua'a* [land divisions], *moku* [districts], and *mokupuni* [island] issues and concerns" (emphasis added)); *id.* § 2-1(c) (stating the purpose of the *'aha moku* system to include "serving in an advisory function . . . that enhances the capacity of [DLNR], its divisions, and *other agencies* to *mālama 'āina* and implement their statutory obligations to affirmatively protect the public trust, traditional and customary rights and practices of Native Hawaiians, and the natural and cultural resources that Hawai'i's Indigenous people depend on for subsistence, cultural, and religious purposes" (emphasis added)); *id.* § 2-3(a)(2) (citing Ka Pa'akai O Ka 'Āina v. Land Use Comm'n, 94 Hawai'i 31, 7 P.3d 1068 (2000)) ("Under this framework, *state and county agencies*, when reviewing land use applications, must

must "liberally apply the 'precautionary principle' when advising agencies [including state agencies beyond DLNR, as well as county and federal agencies][80] regarding development or use of lands under the public trust."[81] In addition, the AMAC and the respective island *'aha moku* councils "shall serve as vehicles for free prior and informed consent" pursuant to articles 18, 19, and 32(a) of the U.N. Declaration on the Rights of Indigenous Peoples (as formally adopted by the United States under the administration of President Barack Obama).[82] More specifically, AMAC members are required to incorporate the methodology employed by their ancestors in assessing natural and cultural resource management issues:

(1) Accountability to and protection of eight resource realms[.][83]

---

independently assess: (A) The identity and scope of valued cultural and 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 rights will be affected or impaired by the proposed action; and (C) The feasible action, if any, to be taken to reasonably protect Native Hawaiian rights if they are found to exist." (Emphasis added)); *id.* § 2-3(b) (requiring the AMAC to "liberally apply the 'precautionary principle' when advising *agencies* regarding development or use of lands under the public trust" (emphasis added)); *id.* § 2-5(a) (requiring representatives in island *'aha moku* councils to "relay their concerns about site-specific natural and cultural resources issues to their respective island *Po'o* [representative appointed by the governor] serving on the *'aha moku* advisory committee" so that "the [AMAC] and those participating in the *'aha moku* system . . . [will] be effective in advising *agencies*, the [DLNR], its divisions, and the board" (emphasis added)).

[80] *See supra* note 79 (quoting AMAC Rules § 1-2(g)). *See also supra* note 28 (citing discussion of the precautionary principle in Judge Cançado-Trindade's separate opinions for the ICJ's 2010 *Whaling in the Antarctic* and 2014 *Pulp Mills* decisions).

[81] AMAC Rules § 2-3(b).

[82] *Id.* § 2-3(c)(1) to (3).

[83] The description of these eight resource realms demonstrates how much attention to detail *Kanaka 'Ōiwi* paid concerning their natural environment: "Moana-Nui-Ākea – the farthest out to sea or along the ocean's horizon one could perceive from atop the highest vantage point in one's area." *Id.* § 2-2I(1)(i). "Kahakai Pepeiao – where the high tide begins to where the *lepo* [soil] starts. This is typically the splash zone where crab, *limu* [seaweed], and *'opihi* [limpets] may be located; sea cliffs; or a gentle shoreline dotted with a coastal strand of vegetation; sands where turtles and seabirds nest; extensive sand dune environs; and the like." *Id.* § 2-2(e)(1)(ii). "Ma Uka – from the point where the *lepo* [soil] starts to the top of the mountain." *Id.* § 2-2(e)(1)(iii). "Nā Muliwai – all the sources of fresh water, ground or artesian water, rivers, streams, springs, including coastal springs that create brackish-water and contribute to healthy and productive estuarine environments." *Id.* § 2-2(e)(1)(iv). "Ka Lewalani – everything above the land, the air, the sky, the clouds, the birds, the rainbows, etc." *Id.* § 2-2(e)(1)(v). "Kanaka Hōnua – the natural resources important to sustain people. However, care for these resources are based on their intrinsic value. Management is based on providing for the benefit of the resources themselves, rather than from the perspective of how

(2) Consider and weigh issues, problems, and potential solutions in terms of their impact, both beneficial and adverse, to the eight resource realms described above.

(3) Adopt measures and implement solutions that[:]

(i) Are determined to be non-harmful and/or beneficial to each of the resource realms;

(ii) Honor the ancestral past and wisdom of the *kūpuna*;

(iii) Address the needs of the present;

(iv) And establish abundance and sustainability for future generations.[84]

The AMAC Rules further identify three houses of knowledge representing the categorization and organization of the natural world[85]—which are "contained in orature, including *oli* [chants], *mele* [song], *mo'olelo* [song], *hula* [dance], other Native cultural expressions, oral histories, and *kama'āina* testimony;[86] archival literature; and expressed in the living culture and

---

these resources serve people." *Id.* § 2-2(e)(1)(vi). "Papahelōlona – knowledge and intellect that is a valuable resource to be respected, maintained, and managed properly. This is the knowledge of *kahuna* (priests and experts), *konohiki*, astronomers, healers, and other carriers of *'ike*." *Id.* § 2-2(e)(1)(vii). "Ke 'Ihi'ihi – elements that maintain the sanctity or sacredness of certain places." *Id.* § 2-2(e)(1)(viii).

[84] *Id.* § 2-2(e).

[85] Known collectively as Papakū Makawalu, the three houses of knowledge are Papahulilani, Papahulihonua, and Papahānaumoku. *Id.* § 2-2(f). Papahulilani is "the space from above one's head to where the stars sit. It includes the sun, the moon, stars, planets, winds, clouds, and the measurement of the vertical and horizontal spaces of the atmosphere. It is also a class of experts who are spiritually, physically, and intellectually attuned to the space above and its relationship to the earth." *Id.* § 1-3. Papahulihonua is "both the earth and ocean. It is the ongoing study of the natural development, transformation and evolution of the earth and ocean. It is also a class of experts who are spiritually, physically, and intellectually attuned to earth and its relationship to the space above and the life forms on it." *Id.* Papahānaumoku is "the embryonic state of all life forces and their transition to death. It is the birthing cycle of all flora and fauna, including humans. It is the process of investigating, questioning, analyzing and reflecting upon all things that give birth, regenerate, and procreate. It is also a class of experts who are spiritually, physically and intellectually attuned to things born and the habitat that provides their nourishment, shelter, and growth." *Id.* The latter house of knowledge may sound familiar to persons already aware of one of the largest marine conservation areas in the world (an area larger than all of the United States' national parks combined). PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT, https://www.papahanaumokuakea.gov/ (explaining that the name commemorates the union of two Hawaiian ancestors—Papahānaumoku and Wākea—who gave rise to the Hawaiian Archipelago, the taro plant, and the Hawaiian people) (last visited Apr. 23, 2019).

[86] This legal term of art refers to "testimony from a Native Hawaiian person who is familiar from childhood with a particular locality. Testimony from *kama'āina* is recognized

traditional practices of Native Hawaiians for the protection of cultural and natural resources"[87]—and which must be protected, respected, maintained, managed, and prevented from being appropriated during the process.

When "determining and maintaining the ecological health of *nā ahupua'a* [land divisions within districts] and protecting the natural and cultural resources within *nā ahupua'a*," the AMAC and island *'aha moku* councils are required to use "indigenous tools of assessment and *ahupua'a* design principles adopted by the ancient *kūpuna* [elders/ancestors] which include *mālama*[88] of the [five] biocultural zones."[89] The AMAC Rules specifically recognize that the descriptions of these five biocultural zones are not necessarily universally applicable, and that each Hawaiian island may have fewer or greater biocultural zones, and/or may have named and categorized them differently.[90] In addition, the AMAC Rules recognize that there were appropriate biota, ecologies, and uses for various landscape and oceanscape

---

as the appropriate method to determine the nature of Hawaiian traditional and customary practices in general, and also specifically in describing the customs exercised in a given area." *Id.* § 1-3 (citing *In re* Ashford, 50 Haw. 314, 440 P.2d 76 (1968)). *Ashford* recognized that "it has long been the rule, based on necessity, to allow reputation evidence by *kamaaina* witnesses in land disputes." 50 Haw. at 316, 440 P.2d at 77 (citing *In re* Boundaries of Pulehunui, 4 Haw. 239 (1879); Kanaina v. Long, 3 Haw. 332 (1872)). Further, "[t]he rule also has a historical basis unique to Hawaiian land law . . . [as] the custom of the ancient Hawaiians to name each division of land and the boundaries of each division were known to the people living thereon or in the neighborhood[,]" especially persons who "were specially taught and made repositories of this knowledge[]" across generations. *Id.* at 316, 440 P.2d at 77–78.

[87] AMAC Rules § 2-2(f)(2).

[88] "*Mālama 'Āina*' means to care for and/or responsibly manage the land, ocean, natural and cultural resources, and ecosystems with the understanding that humans are also part of the natural environment and active participants in its care." AMAC Rules § 1-3.

[89] *Id.* § 2-2(g). The five biocultural zones (referred to collectively in traditional terms as *nā wao*) are, respectively: (1) *Wao Akua*, the "sacred, montane cloud forest, core watershed, native plant community that is non-augmented and an area that was traditionally *kapu* (human access usually forbidden and prohibited)"; (2) *Wao Kele*, the "saturated forest just below the clouds, the upland rainforest where human access is difficult and rare, and an area that is minimally augmented"; (3) *Wao Nahele*, the "remote forest, highly inconvenient for human access; a primarily native plant community; minimally augmented; and utilizing by early Hawaiians as a bird-catching zone"; (4) *Wao Lā'au*, "a zone of maximized biodiversity comprised of a highly augmented lowland forest due to integrated agroforestry of food and fuel trees, hardwood trees, construction supplies, medicine and dyes, and lei-making materials"; and (5) *Wao Kānaka*, "where the early Hawaiians chiefly settled. These were the *kula* lands, the sloping terrain between the forest and the shore that were highly valued and most accessible to the people. These were the areas where families constructed their *hale* [homes], cultivated the land, conducted aquaculture, and engaged in recreation. For coastal *ahupua'a* [land divisions within districts], *Wao Kānaka* also extended into the sea to include fishponds and fisheries." *Id.* §§ 1-3, 2-2(g)(1) to (5).

[90] *Id.* § 2-3(h) & Attachment A.

features that were also named and categorized by the *kūpuna* (ancestors, elders).[91] Accordingly, the *'aha moku* advisory committee has positioned itself as "a global leader in the integration of Indigenous resource management models into modern legal and regulatory structures" consistent with the principles recognized by IUCN barely more than a month earlier,[92] such that "Act 288 and the [AMAC] represent one of the first codifications of this developing international policy."[93]

While some may find the breathtaking scope contemplated under the AMAC Rules invigorating, these administrative rules may be disconcerting from other perspectives. For those in the latter category, it may be helpful to consider one final case study for the purposes of this article.

C. *Case study #3: Kamehameha Schools reconfigures its land management policies to embrace cultural and environmental values.*

An indigenous institution with a massive endowment has stepped back from its previous focus on maximum economic return on assets, in favor of an approach that now recognizes the cultural importance of land as part of the Native Hawaiian *'ohana* (or family). Kamehameha Schools is a charitable trust for the educational benefit of Hawaiian children established by the great-granddaughter and last recognized descendant of Kamehameha I's royal line, which managed a whopping $9 billion dollar endowment as of 2012.[94] After having "lost its way"[95] in the 1990s and getting forced to reform by its beneficiaries, the new leadership at Kamehameha Schools began (and, today, continues) to consider "what it means to be a permanent indigenous organization in the modern world" after belatedly recognizing

---

[91] *Id.* § 2-3(i) & Attachment B.

[92] *See supra* notes 20–21 & 25–26 (IUCN Press Release and resolution affirming the role of indigenous peoples in global conservation efforts).

[93] AMAC Rules § 2-3(d).

[94] Avis Kuuipoleialoha Poai & Susan K. Serrano, *Ali'i Trusts: Native Hawaiian Charitable Trusts*, *in* NATIVE HAWAIIAN LAW: A TREATISE 1172–73 (Melody Kapilialoha MacKenzie et al. eds., 2015) [hereinafter NATIVE HAWAIIAN LAW TREATISE] (providing a historical overview of the Bishop Estate, Bishop's will, and the establishment of the Kamehameha Schools charitable trust); *see also* David M. Forman, *The Hawaiian Usage Exception to the Common Law: An Inoculation Against the Effects of Western Influence*, 30 U. HAW. L. REV. 319, 350 (2008); Susan K. Serrano et al., *Restorative Justice for Hawaii's First People: Selected Amicus Briefs in* Doe v. Kamehameha Schools, 14 ASIAN AM. L.J. 205, 223 (2007); Peter Vitousek & Kamanamaikalani Beamer, *Traditional Ecological Values, Knowledge, and Practices in Twenty-First Century Hawai'i*, *in* LINKING ECOLOGY AND ETHICS FOR A CHANGING WORLD 66 (Ricardo Rozzi et al. eds., 2013).

[95] Vitousek & Beamer, *supra* note 94.

that the trust's "actions should be governed by the perspective of having a familial relationship with the land, and its life" instead of focusing solely on maximizing economic return on assets.[96] The trust realized that it could:

> [U]se its lands to support education directly, without first monetizing it. Students can learn ecology, soils, and agriculture on the land; they can learn to appreciate it. They can learn how Hawaiian culture once managed land, before the arrival of Europeans and others; they can learn how land can be managed under modern "best practices"; they can learn to find ways to navigate managing land from an indigenous perspective in the modern world. Similarly, land assets can support environmental values—watersheds can provide clean water for drinking or for agriculture, or to support native stream biota or to feed beautiful waterfalls. Land can support cultural values, sustaining significant gathering, artistic, or agricultural practices; land can also support the livelihood and well-being of Hawaiian communities.[97]

As a result, Kamehameha Schools "has explicitly traded off [monetary] economic benefits for other values, sometimes to the chagrin of other Hawai'i businesses that are driven by [more direct] economics."[98] Briefly, the trust "is actively and explicitly managing its assets on the basis of [a five-value framework consisting] of educational, environmental, community, and cultural values as well as economic values."[99]

Each of the contemporary applications of IEK described above are made possible, at least in part, by 1978 amendments to the Hawai'i Constitution

---

[96] *Id.* at 66–67 ("Any actions on the land should account for the reciprocity of human-land interactions; the land feeds people, people have a responsibility to take care of the land.").

[97] *Id.* at 67–68 (citations omitted) (citing Neil J. Hannahs, *Indigenizing Management of Kamehameha Schools' Land Legacy*, *in* 2 I ULU I KA 'ĀINA: THE HAWAI'INUIĀKEA MONOGRAPH (2014); since November 2016, the article has also been available at Hawaii Scholarship Online).

[98] *Id.* at 68 (adding that the trust's land managers "are fully aware that while there may be immediate economic gains to be had by (for example) filling in marine estuaries to build marinas or ocean-front gated communities, the adverse *intergenerational* impacts on *'āina*, community, culture, ecology, as well as the estuary's potential for education often outweigh the nearly guaranteed lucrative economic profits" (emphasis added)); *see also id.* at 68–70 (describing the 'Āina Ulu program that "links resource management and place-based education with community capacity building . . . to create a seamless flow between stewardship and education"; including one example involving a fishpond that was slated for marina development but "is now producing fish that feed people; it has also been a vehicle for the rejuvenation of the traditional knowledge underlying fishpond management, and the traditional practices through which people interacted with this innovative aquacultural system").

[99] *Id.* at 70 (noting that "other indigenous organizations ([e.g.,] the Ngai Tahu Tribe from Te Waipounamu, Aotearoa (the South Island of New Zealand)) have been quick to adapt and then adopt the approach").

that are rooted in traditional Native Hawaiian cultural values as discussed in Part IV below. Even community members who do not have the luxury of a $9 billion dollar purse, and who may therefore lack the ability to forego opportunities for monetary gain, are continuously confronted with serious challenges to their cultural relationship with the land—evoking sentiments like those quoted below, which proponents of other projects (as well as judges evaluating environmental justice claims) should not callously dismiss:

> *It's a place people go to, but to see it as its living being, you go there, you clean it, you take care of it, protect it from people that will do it harm. Like you would anybody, any little sister, little brother, older person. So that, that's what I think it means to really care for and see a place as family. That you would lay your life down for that place.*
>
> – Kamealoha Forrest, 2016[.][100]
>
> *It's the coming together and saying, "Hey we want our culture to live." It's obviously not how it was two hundred years ago, it's not how it was one hundred years ago, but we're going to figure out how to operate within this system to make sure that our culture survives today. We can still eat from the land and the ocean and mālama 'āina so that our families are healthy. And so that's the role, it is the embodiment of the community's voice that is attempting to be resilient in the face of change.*
>
> – Kawika Winter, 2011[.][101]

The core Native Hawaiian cultural value of *mālama 'āina* referenced in the quote above is at the root of the concept introduced at the beginning of this Article—"Mālama Honua (to care for the Earth)"—and is described more fully below in Part IV.

IV. THE CULTURAL AND LEGAL FOUNDATIONS OF THE INTERGENERATIONAL EQUITY FRAMEWORK IN HAWAI'I.

Ka Wā Ma Mua, Ka Wā Ma Hope.[102]

---

[100] VAUGHAN, *supra* note 62, at 119.

[101] *Id.* at 162. *See also* Nina Wu, *Hirono, Schatz Introduce Act Preventing U.S. Withdrawal From Paris Accord,* HONOLULU STAR-ADVERTISER, June 6, 2019, https://www.staradvertiser.com/2019/06/06/breaking-news/hirono-schatz-introduce-act-preventing-u-s-withdrawal-from-paris-accord/ (quoting Senator Mazie Hirono regarding introduction of the International Climate Accountability Act: "[i]n Hawaii we understand why it is important to *malama, or take care of, our land, ocean, and air* – our way of life depends on it") (emphasis added).

[102] In 1993, I applied this *'ōlelo no'eau* (Hawaiian proverb) in a similar context for a capstone paper submitted in satisfaction of the requirements for a Graduate Ocean Policy Certificate from the School of Oceans and Earth Sciences and Technology, University of Hawai'i at Mānoa; regrettably, that paper is no longer available. "It is as if the Hawaiian

Island Earth would be well-served by recognizing IEK acquired by the people who lived here on these islands sustainably for more than a millennium, on the most isolated land mass in the world. It is also important to understanding the consequences that have followed as a result of marginalizing the ancestors of those who hold this valuable information.[103] According to Native Hawaiian cultural traditions:

> The Kumulipo, the Hawaiian genealogical and cosmological chant, articulates and reveals the connection between sky and earth, earth and ocean, ocean and land, land and *Kānaka Maoli*, and *Kānaka Maoli* and *akua* (gods), and it describes the way in which this connection establishes the interrelationship of all things in an everlasting continuum.
>
> It is the Kumulipo, and specifically the genealogy of Papa and Wākea, that inherently connects *Kānaka Maoli* to the *ʻāina* (land). According to this genealogy, the union of Papa, earth-mother, and Wākea, sky-father, resulted in the creation of most of the principal Hawaiian Islands. Their union also produced a daughter, Hoʻohōkūkalani [star-of-heaven], whose subsequent joining with Wākea resulted in the birth of Hāloanaka [quivering long stalk]. Hāloanaka, a stillborn offspring, was buried in the ground and subsequently became the first *kalo* (taro) plant, the staple food of the Hawaiian diet. A second offspring, Hāloa, eventually became the progenitor of the Native Hawaiian people. This relationship establishes the spiritual and genealogical connection of *Kānaka Maoli* to *ʻāina*: Hāloanaka, or *kalo*, as the elder sibling,

---

stands firmly in the present, with his back to the future, and his eyes fixed upon the past, seeking historical answers for present-day dilemmas." *See, e.g.*, Lena Lei Ching, Ka Wā Ma Mua, Ka Wā Ma Hope 1 (May 2003) (unpublished M.A. thesis, University of Hawaiʻi), *available at* https://scholarspace.manoa.hawaii.edu/bitstream/10125/6916/2/uhm_mfa_438_r.pdf (citing LILIKALĀ KAMEʻELEIHIWA, NATIVE LAND AND FOREIGN DESIRES: PEHEA LĀ E PONO AI? 22 (1992)). "Hawaiian navigators oriented themselves without instruments by using a system based upon knowing where they came from and by having faith in the words of their ancestors." *Id.* "We Hawaiians view the world looking to that time that came before us because it is rich in knowledge." *Id.* However,

> [I]t makes little sense to talk about going back to traditional knowledge, values, and practices at the time of European colonization. Traditional knowledge is neither timeless nor immutable; Hawaiian knowledge and practices would have evolved from 1778 (European arrival) to the present had Europeans not arrived, as they had evolved continuously up to 1778. Moreover, contact with the world is now a fact of Hawaiian society—and that contact has been actively absorbed into and influenced Hawaiian knowledge, values, and practices. (Of course some values and practices have been imposed on Hawaiian society as a result of imperialism. Still, Hawaiian culture has evolved in contact with the world, would have evolved had it not contacted the world, and is no less "traditional" for its changes.)

Vitousek & Beamer, *supra* note 94, at 65.

[103] Sproat, *supra* note 3, at 197; Serrano, *supra* note 3, at 523; Tsosie, *supra* note 3, at 79-80.

> and the Native Hawaiian people as the younger sibling. Out of this familial relationship arises the concept of *mālama 'āina*, caring for and serving the land, an essential pattern of Hawaiian life. It is the duty of *Kānaka Maoli*, as the younger sibling, to care for and serve the *'āina*, which in turn provides food and shelter. This *reciprocal relationship* helps to create and preserve *pono*—balance and harmony in the universe.[104]

Moreover, the act of burying *iwi kūpuna* (Native Hawaiian ancestral remains)[105] "is to transfer *mana* (divine power or life force) to growing plants that in turn nourish *Kanaka Maoli*" and further acknowledges "the spiritual sustenance that *kūpuna* offer to succeeding generations[,]" thus reinforcing the *reciprocal relationship* representative of a "fundamental *kuleana* (responsibility) [that] perpetuates harmony between the *'āina* and generations past and present."[106]

Decimation of the Native Hawaiian population following the introduction of western disease, loss of political sovereignty, diversion of native streams to support plantation agriculture (sugar and pineapple), along with the more-recent shift to a military- and tourism-based economy, dramatically altered the balance and harmony (*pono*)[107] reflected by deeply held *Kānaka 'Ōiwi* cultural values.

> [T]he health and well-being of the Native Hawaiian people is intrinsically tied to their deep feelings and attachment to the land . . . the long-range economic and social changes in Hawaii over the nineteenth and early twentieth centuries have been devastating to the population and to the health and well-being of the Hawaiian people . . . the Native Hawaiian people are determined to preserve, develop and transmit to future generations their ancestral territory, and their cultural identity in accordance with their own spiritual and traditional beliefs, customs, practices, language, and social institutions[.][108]

---

[104] Melody Kapilialoha MacKenzie, *Religious Freedom*, *in* NATIVE HAWAIIAN LAW TREATISE, *supra* note 94, at 860–61 & nn.13, 16–19 (emphasis added) (citations omitted) (citing THE KUMULIPO: A HAWAIIAN CREATION CHANT 7, 55–57 (Martha Warren Beckwith trans., 1972); KAME'ELEIHIWA, *supra* note 102, at 23–25); *see also* Natasha L.N. Baldauf, *Iwi Kūpuna: Native Hawaiian Burial Rights*, *in* NATIVE HAWAIIAN LAW TREATISE, *supra* note 94, at 912 (citing THE KUMULIPO, *supra*, at 125) (defining Hāloanaka, "quivering long stalk," and Ho'ohōkūkalani, "star-of-heaven").

[105] Baldauf, *supra* note 104, at 911.

[106] *Id.* at 912 & nn.16–19 (citing Kūnani Nihipali, *Stone by Stone, Bone by Bone: Rebuilding the Hawaiian Nation in the Illusion of Reality*, 34 ARIZ. ST. L.J. 27, 36–37 (2002)).

[107] *See, e.g.*, Sproat, *supra* note 3, at 169 ("Since the documented arrival of foreigners beginning in about 1778, traditional Maoli society has changed completely. The decimation of Native Hawaiians by disease, imposition of industrial agriculture, and illegal overthrow of the Hawaiian Kingdom by the United States military inflicted significant cultural harms, many of which remain unaddressed today.").

[108] S.J. Res. 19, 103d Cong. (1993).

As sugar plantations began to lose their dominant economic role (following the islands' admission to the United States in 1959 as the fiftieth state in the union), the people of Hawai'i seized an opportunity to more proactively manage their natural resources for the benefit of the larger community rather than for the profit of a handful of private interests.[109] Hawai'i's voters simultaneously reaffirmed traditional and customary Native Hawaiian rights as a background principle of state property law,[110] and made Hawai'i one of only four states in the union whose fundamental governing documents consider the interests of future generations.[111]

---

[109] D. Kapua'ala Sproat, *Where Justice Flows Like Water: The Moon Court's Role in Illuminating Hawai'i Water Law*, 33 U. HAW. L. REV. 537, 547 & nn.75–77 (2011); *see also* Melody Kapilialoha MacKenzie & Aviam Soifer, *Introduction* to KA LAMA KŪ O KA NO'EAU: THE STANDING TORCH OF WISDOM vi–vii (2009).

[110] HAW. CONST. art. XII, § 7; *see, e.g.*, Public Access Shoreline Haw. v. Haw. Cty. Planning Comm'n (*PASH/Kohanaiki*), 79 Hawai'i 425, 437–51, 903 P.2d 1246, 1258–72 (1995) (discussing the obligation to preserve and protect cultural and historic resources in accordance with article XII, section 7); *PASH/Kohanaiki*, 79 Hawai'i at 451–52, 903 P.2d at 1272–73 (rejecting a resort developer's judicial and regulatory takings claims based on preexisting principles of state property law). I have added "Kohanaiki" to the short form case citation out of respect for the native Hawaiian sense of place, recognizing that the environmental association represented native Hawaiian practitioners from that part of the island.

[111] A fifth state constitution that includes an environmental rights provision, in Massachusetts, does not include any reference to future generations. MASS. CONST. art. XCVII ("The people shall have the right to clean air and water, freedom from excessive and unnecessary noise, and the natural, scenic, historic, and esthetic qualities of their environment; and the protection of the people in their right to the conservation, development and utilization of the agricultural, mineral, forest, water, air and other natural resources is hereby declared to be a public purpose."). As compared with express references to "future generations" in the Hawai'i, Illinois, and Montana Constitutions, the Pennsylvania Constitution instead reference "generations yet to come." *Compare* PA. CONST. art. I, § 27 ("The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including *generations yet to come*. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people." (Emphasis added)), *with* HAW. CONST. art. XI, § 1, *infra* text accompanying note 113; ILL. CONST. art. XI, § 1 ("The public policy of the State and the duty of each person is to provide and maintain a healthful environment for the benefit of this and *future generations*. The General Assembly shall provide by law for the implementation and enforcement of this public policy." (Emphasis added)); MONT. CONST. art. IX, § 1(1) ("The state and each person shall maintain and improve a clean and healthful environment in Montana for present and *future generations*." (Emphasis added))

A. Under Hawai'i's Constitution, public natural resources are held in trust and must be conserved and protected for the benefit of present and future generations.

The people of Hawai'i made the intergenerational equity framework part of their primary governing document, embedded within the same constitutional provision that adopts the public trust doctrine with respect to all public natural resources. Among just four states in the Union that provide similar constitutional protections for future generations, Hawai'i is the *only* state where these rights are clearly self-executing.[112] The Hawai'i Constitution provides that:

> For the benefit of present and *future generations*, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the *self-sufficiency* of the State.
>
> All public natural resources are held in trust by the State for the benefit of the people.[113]

---

[112] *See infra* notes 113–16 and accompanying text.

[113] HAW. CONST. art. XI, § 1 (emphasis added); *see also id.* art. IX, § 8 (giving the state "power to promote and maintain a healthful environment, including the prevention of any excessive demands upon the environment and the State's resources"). Previously, the Hawai'i Constitution merely directed the state legislature to "promote the conservation, development and utilization of agricultural . . . and other natural resources." *Id.* art. X, § 1 (1968).

By comparison, the situation appears to be a bit murky in Montana[114] and Pennsylvania.[115] Likewise, the Illinois courts do not yet appear to have

[114] *Compare* MONT. CONST. art. II, § 3 ("All persons are born free and have certain inalienable rights. They include the right to a clean and healthful environment . . . . In enjoying theses rights, all persons recognize corresponding responsibilities."), *with id.* art. IX, §§ 1(2), (3) ("[(2)] The legislature shall provide for the administration and enforcement of this duty. [(3)] The legislature shall provide adequate remedies for the protection of the environmental life support system from degradation and provide adequate remedies to prevent unreasonable depletion and degradation of natural resources."). In *Mont. Envtl. Info Ctr. v. Dep't of Envtl. Quality*, 988 P.2d 1236 (Mont. 1999), the court held that a right to a clean and healthful environment is a fundamental right, *id.* at 1246, and "did not look to additional legislation to enforce the right" so it "can be said to be self-executing." Anil S. Karia, *A Right to A Clean and Healthy Environment: A Proposed Amendment to Oregon's Constitution*, 14 U. BALT. J. ENVTL. L. 37, 52–53 (2006). *But see* Barton H. Thompson, *Constitutionalizing The Environment: the History and Future of Montana's Environmental Provisions*, 64 MONT. L. REV. 157, 169 & n.50 (2003) (noting that the Montana Supreme Court skipped the threshold question of self-execution and proceeded directly to standing; adding that "Professor John Horwich justifiably has criticized the Montana Supreme Court's opinion in MEIC for this and other failings"); John L. Horwich, MEIC v. DEQ*: An Inadequate Effort to Address the Meaning of Montana's Constitutional Environmental Provisions*, 62 MONT. L. REV. 269, 284–88 (2001) (criticizing the Montana Supreme Court for not explicitly discussing self-execution); *id.* at 298 & n.101 (observing that the case was subsequently resolved on remand without further reliance on the Montana Supreme Court opinion). *Accord* Brian P. Wilson, Comment, *State Constitutional Environmental Rights and Judicial Activism: Is the Big Sky Falling?*, 53 EMORY L.J. 627, 631–32 (2004) ("[T]hough it did not explicitly say so, the court determined in effect that the right to a clean and healthful environment was self-executing.")

[115] *Compare* Payne v. Kassab, 312 A.2d 86, 94 (Pa. Commw. Ct. 1973) (establishing a three-prong test for determining constitutionality of action), *aff'd*, 361 A.2d 263, 272 (Pa. 1976) (declining to "explore the difficult terrain of whether the amendment is or is not 'self-executing'" but, nevertheless, holding that article I, section 27 is at least *partially* self-executing to the extent that it "declares and creates a public trust of public natural resources for the benefit of all the people" because "[n]o implementing legislation is needed to enunciate these broad purposes and establish these relationships"), *with* Commonwealth v. Nat'l Gettysburg Battlefield Tower, Inc., 302 A.2d 886 (Pa. Commw. Ct. 1973), *aff'd*, 311 A.2d 588, 594–95 (Pa. 1973) (affirming, in a fractured 2-1-2-2 decision, the denial of an action to enjoin construction; holding that "before the environmental protection amendment can be made effective, supplemental legislation will be required to define the values which the amendment seeks to protect and to establish procedures by which the use of private property can be fairly regulated to protect those values"). *See* Margaret J. Fried & Monique J. Van Damme, *Environmental Protection in a Constitutional Setting*, 68 TEMP. L. REV. 1369, 1394 (1995) (observing that "only two justices actually held [in the controlling opinion] that the Amendment was not self-executing" in *Gettysburg Tower*, "while four of the seven (including two dissenters) asserted that it was" self-executing); *id.* at 1394–97 (discussing the Pennsylvania Commonwealth Court's subsequent application of the three-prong test in *Payne*, including the first prong requiring "compliance with all applicable statutes and regulations relevant to the protection of the commonwealth's public natural resources"; and, concluding that even when the first two prongs have been met, the courts have never applied the third

addressed the question whether that state's constitutional provision is self-executing.[116]

Since its adoption, the Hawai'i Constitution has expressly provided that its provisions "shall be self-executing to the fullest extent that their respective natures permit."[117] Accordingly, the Hawai'i Supreme Court concluded in

---

prong—instead deferring to agency policy decisions regarding "the scope and intensity of the commonwealth's interest in protecting environmental values"). *But See* Robinson Twp v. Pennsylvania, 83 A.3d 901, 967 (Pa. 2013) ("[W]e conclude that the non-textual Article I, Section 27 test established in *Payne* and its progeny is *inappropriate* to determine matters outside the narrowest category of cases, *i.e.*, those cases in which a challenge is premised simply upon an alleged failure to comply with statutory standards enacted to advance Section 27 interests." (Emphasis added)). Interestingly, a Pennsylvania law provides that "no ordinance or regulation of any political subdivision or home rule municipality may prohibit or in any way attempt to regulate any matter relating to the registration, labeling, sale, storage, transportation, distribution, notification of use or use of *seeds* if any of these ordinances, laws or regulations are in conflict with this chapter." 3 PA. STAT. AND CONS. STAT. ANN. § 7120(b) (West, 2018) (emphasis added). *Compare* Forman, *supra* note 56 (criticizing the Ninth Circuit's *implied* state preemption analysis on state constitutional grounds involving three county ordinances attempting to regulate the genetically engineered seed industry in Hawai'i).

[116] ILL. CONST. art XI, § 2 ("Each person has the right to a healthful environment. Each person may enforce this right against any party, governmental or private, through appropriate legal proceedings subject to reasonable limitation and regulation as the General Assembly may provide by law."). *See, e.g.*, Karia, *supra* note 114, at 54 ("The provisions in Illinois' and Massachusetts' Constitutions are the weakest and most problematic of all because they require further legislative action for the enforcement of the enumerated rights."); Jose L. Fernandez, *State Constitutions, Environmental Rights Provisions, and the Doctrine of Self-Execution: A Political Question?*, 17 HARV. ENVTL. L. REV. 333, 364 (1993) (concluding that the language above "clearly expresses the drafters' intent that the Illinois legislature enact enabling legislation"). *But see id.* at 352–55 (citing Gherna v. State, 146 P. 494 (Ariz. 1915), for the proposition that similar language was "permissive, merely inviting the legislature to 'provid[e] a more specific and convenient' enforcement procedure"; "although a constitutional provision may call for legislative action, it may still be found self-executing if the rule it contains is otherwise complete and the court detects a clear intent that the provision be self-executing"). Note also the Hawai'i Supreme Court's conclusion that article XI, section 9 of the Hawai'i Constitution is self-executing, despite the presence of similar language: "subject to reasonable limitations and regulations as provided by law." *See infra* text accompanying notes 127–28 (citing Cty. of Haw. v. Ala Loop Homeowners (*Ala Loop*), 123 Hawai'i 391, 411–13, 235 P.3d 1103, 1123–25 (2010)); *infra* text accompanying notes 130-32 (citing *Ala Loop*, 123 Hawai'i at 414 nn.32 & 33, 235 P.3d 1126 nn.32 & 33); *infra* text accompanying note 142–43 (citing *In re* Application of Maui Electric Co. (*Maui Electric*), 141 Hawai'i 249, 261–62 & 264 n.28, 408 P.3d 1, 13–14 & 16 n.28 (2017)).

[117] HAW. CONST. art XVI, § 16; *see also In re* Water Use Permit Applications (*Waiāhole I*), 94 Hawai'i 97, 132 n.30, 9 P.3d 409, 444 n.30 (2000) (citing HAW. CONST. art XVI, § 16, in the context of discussing the state's obligation under article XI, section 7, "to protect, control and regulate the use of Hawaii's water resources for the benefit of its people"); *id.* at 193, 9 P.3d at 505 (citing 2 PROCEEDINGS OF THE CONSTITUTIONAL CONVENTION OF HAWAII OF 1978, at 863 (1980) (statement of Delegate Waihee), *available at* http://lrbhawaii.org/conconjrnl78v2.pdf) ("What the [amendment] attempts to do is to, first of all, create

Waiāhole I, that article XI, section 1 "adopt[s] the public trust doctrine as a fundamental principle of constitutional law in Hawai'i."[118] The *Waiāhole I* court noted that this fundamental duty to protect the public trust may only be surrendered "in rare cases when the abandonment of that right is consistent with the purposes of the trust."[119]

In *Waiāhole I*, the court explained further that the public trust "requires planning and decision making from a global, long-term perspective," which means that "the state may compromise public rights in the resource pursuant only to a decision made with a level of openness, diligence, and foresight commensurate with the high priority these rights command under the laws of our state."[120] In addition to requiring transparency and public participation,

---

a fiduciary duty to on the part of the State to regulate and control the water. The second thing that it does is establish a coordinating agency to regulate all water."). The court observed further that neither legislation adopted pursuant to article XI, section 7, nor its implementing agency can "override the public trust doctrine or render it superfluous." *Waiāhole I*, 94 Hawai'i at 133, 9 P.3d at 445 (holding that the State Water Code "does not supplant the protections of the public trust doctrine").

[118] *Waiāhole I*, 94 Hawai'i at 132, 9 P.3d at 444. *Accord In re* Contested Case Hearing on Water Use Permit Application Filed by Kukui (Molokai), Inc. (*Kukui (Molokai), Inc.*), 116 Hawai'i 481, 490, 174 P.3d 320, 329 (2007) (observing that this fundamental principle is now "well established"). It is relevant to note here that Professor Sproat was one of the attorneys at Earthjustice who litigated the *Waiāhole I* case before she became a law professor, and continues to do important work as Of Counsel at Earthjustice in addition to providing live-client representation as Director of our Law School's Environmental Law Clinic.

[119] *Waiāhole I*, 94 Hawai'i at 138, 9 P.3d at 450 (quoting Nat'l Audubon Soc'y v. Superior Ct. of Alpine Cty., 658 P.2d 709, 723–24 (Cal. 1983) (en banc)). *See also* Envtl. Law Found. v. State Water Res. Control Bd., 237 Cal. Rptr. 3d 393, 409 (Cal. Ct. App. 2018) (responding to the question whether the fiduciary duties imposed by the public trust doctrine survived enactment of the 2014 Sustainable Groundwater Management Act ("SGMA"), by concluding that "enactment of SGMA does not . . . occupy the field, replace or fulfill public trust duties").

[120] *Waiāhole I*, 94 Hawai'i at 143, 9 P.3d at 455. *Accord Kukui (Molokai), Inc.*, 116 Hawai'i at 490, 174 P.3d at 329. *But see* Kilakila 'O Haleakala v. Bd. of Land & Nat. Res., 138 Hawai'i 383, 409–10, 382 P.3d 195, 221–22 (2016) (McKenna, J., concurring) (dismissing allegations of improper ex parte communications based on the presence of the Attorney General and Senator Daniel K. Inouye's chief of staff, as lawyers aware of prohibitions prohibiting such communications except with regard to procedural matters, then noting "it is preferable and indeed advisable that procedural questions be raised and responded to in writing, so that questions do not linger whether improper communications took place"); *id.* at 412, 419–20 & nn.8–9, 382 P.3d at 223, 231–32 & nn.8–9 (Pollack, J., dissenting) ("the record is inadequate for this court to conclude that external political pressure was not made an ingredient in the BLNR Chair's decisionmaking process"; listing communications involving Senator Inouye's chief of staff, the governor's chief of staff, the University of Hawai'i Institute for Astronomy, and others; noting inconsistencies in BLNR's explanations about the contents of ex parte communications purportedly involving only procedural matters); *id.* at 426–62, 382 P.3d at 238–74 (Wilson, J., dissenting) (opining that the CDU permit should be vacated

the Hawai'i Supreme Court observed that "the lack of full scientific certainty does not extinguish the presumption in favor of public trust purposes or vitiate the [government's] affirmative duty to protect such purposes wherever feasible."[121] Accordingly, "the absence of firm scientific proof should not tie the [government's] hands in adopting reasonable measures designed to further the public interest."[122] Thus, the Hawai'i Supreme Court applied the public trust doctrine in order to incorporate the precautionary principle alongside the intergenerational equity framework under Hawai'i law:

> As the public trust arises out of a constitutional mandate, the duty and authority of the state and its subdivisions to weigh competing public and private uses on a case-by-case basis is *independent of statutory duties and authorities created by the legislature.* "The public trust doctrine at all times forms the outer boundaries of permissible government action." . . . "The public trust has never been understood to safeguard rights of exclusive use for private commercial gain." The very meaning of the public trust is to recognize separate and enduring public rights in trust resources *superior* to any private interest . . . [such that] a "higher level of scrutiny" is [] employed when considering proposals for private commercial use.
>
> When an agency is confronted with its duty to perform as a public trustee under the public trust doctrine, it *must preserve the rights of present and future generations* . . . [and] take the initiative in considering, protecting, and advancing public rights in the resource at every stage of the planning and decision-making process. . . . The agency must apply a *presumption in favor of . . . resource protection.*
>
> The agency is duty-bound to *place the burden on the applicant* to justify the proposed [] use in light of the trust purposes. . . . If there is a reasonable allegation of harm . . . then *the applicant must demonstrate* that there is *no harm in fact* or that any potential harm does not preclude [approval of the proposed use]. . . . "[I]n other words, the absence of evidence . . . is insufficient."
>
> When an agency or other deciding body considers an application for permits under circumstances that requires [sic] the deciding body to perform as

---

and the matter remanded to BLNR for another contested case hearing with instructions to produce ex parte communications and allow Kilakila O Haleakala to seek appropriate remedies in that proceeding).

[121] *Waiāhole I*, 94 Hawai'i at 155, 9 P.3d at 467. *Accord Kukui (Molokai), Inc.*, 116 Hawai'i at 499, 174 P.3d at 338 (recognizing the "predicament when inconclusive allegations raise a specter of harm that cannot be dispatched by readily available evidence" but explaining that "to the extent that harm to a public trust purpose . . . is alleged, the permit applicant must demonstrate that there is, in fact, no harm, or that any potential harm does not rise to a level that would preclude a finding that the requested use is nevertheless reasonable-beneficial" under the State Water Code).

[122] *Waiāhole I*, 94 Hawai'i at 155, 9 P.3d at 467.

> a public trustee to protect a public trust resource, the agency or other deciding body must make findings sufficient to enable an appellate court to track the steps that the agency took in reaching its decision . . . [and] "clarity in the agency's decision is all the more essential . . . where the agency performs as a public trustee and is duty bound to demonstrate that it has properly exercised the discretion vested in it by the constitution and the statute."
>
> Under the foregoing principles and purposes of the public trust, it is manifest that a government body is precluded from allowing an applicant's proposed use to impact the public trust in the absence of an *affirmative showing* that the use does not conflict with those principles and purposes. . . . [A] lack of information from the applicant is exactly the reason the agency is empowered to deny a proposed use of a public trust resource.[123]

Other constitutional provisions are also relevant to this analysis, including the right to a clean and healthful environment.

B. Under Hawai'i's Constitution, each person also has an enforceable right to a clean and healthful environment.

Like the public trust provision of the Hawai'i Constitution, its so-called "environmental rights" provision codified as article XI, section 9, is also self-executing[124]:

> Each person has the right to a clean and healthful environment, as defined by laws relating to environmental quality, including control of pollution and conservation, protection and enhancement of natural resources. Any person

[123] *Kauai Springs*, 133 Hawai'i at 172–74, 324 P.3d 951, 982–84 (emphasis added) (citations omitted) (citing *Kukui (Molokai), Inc.*, 116 Hawai'i at 490, 499, 509, 174 P.3d at 329, 338, 348; *In re* Wai'ola O Moloka'i, Inc., 103 Hawai'i 401, 442, 83 P.3d 664 (2004); *Waiāhole I*, 94 Hawai'i at 132, 138, 141–43, 154, 9 P.3d at 444, 450, 453–55, 466); *see also Kauai Springs*, 133 Hawai'i at 181–82, 324 P.3d at 991–92 (Recktenwald, C.J., concurring and dissenting) (observing that it "is *beyond dispute* that public trust doctrine imposes on the State *and its political subdivisions* a serious and significant duty to protect the natural water resources of the State" under the plain language of article XI, section 1 of the Hawai'i Constitution (emphasis added)). Chief Justice Recktenwald and Justice Nakayama disagreed only to the extent that the majority's approach in *Kauai Springs* requires "each agency that considers a permit application . . . to ensure compliance with every other agency's potentially applicable regulatory requirements [including those that involve third parties not under the control of the applicant] without reference to whether doing so furthers the purposes of the public trust." *Id.* at 183, 324 P.3d at 993.

[124] Mary Ellen Cusack, *Judicial Interpretation of State Constitutional Rights to a Healthful Environment*, 20 B.C. ENVTL. AFF. L. REV. 173, 182 & n.67 (1993) (stating that article XI, section 9 of the Hawai'i Constitution is self-executing because it "refer[s] to individuals' right to enforce compliance without any further legislation"). *See supra* notes 112–23, and *infra* notes 125–46.

> may enforce this right against any party, public or private, through appropriate legal proceedings, subject to reasonable limitations and regulations as provided by law.[125]

In *Ala Loop*, the Hawai'i Supreme Court held that the "plain language of article XI, [section] 9 suggests . . . the right of enforcement described in the provision is self-executing."[126] Explaining that "the right exists and can be exercised even in the absence of" reasonable limitations and regulations provided by law,[127] the court confirmed its plain language interpretation on multiple grounds.

First, the final clause of article XI, section 9 ("subject to reasonable limitations and regulations provided by law"), "simply refer[s] to an existing body of statutory and other law on a particular subject" including a reasonable statute of limitations that might otherwise have been rendered unconstitutional in the absence of said clause.[128] Second, the judiciary has the ability to implement the right to seek enforcement "through appropriate legal proceedings" without legislative action because "[u]nlike the establishment of a new right to grand jury counsel [under article I, section 11] . . . establishing a right to enforce environmental rights does not raise practical issues of implementation."[129] Third, the framers intended to

---

[125] HAW. CONST. art. XI, § 9.

[126] 123 Hawai'i 391, 413, 235 P.3d 1103, 1125 (2010).

[127] *Id.* at 413, 235 P.3d at 1125.

[128] *Id.* at 412–13, 235 P.3d at 1124–25 (analogizing the 180-day statute of limitation for challenging the failure to prepare an environmental impact statement under HRS section 343-7(a) (Supp. 1975), to the existing law of collective bargaining as discussed in United Public Workers, AFSCME, Local 646 v. Yogi, 101 Hawai'i 46, 62 P.3d 189 (2002)); *see also Yogi*, 101 Hawai'i at 51–53, 62 P.3d at 194–96 (interpreting the limiting language "collective bargaining as provided by law" in article XIII, section 2, "as simply referring to an existing body of statutory and other law on a particular subject," *Ala Loop*, 123 Hawai'i at 412, 235 P.3d at 1123, *without* intending to give the legislature absolute discretion to define the scope of collective bargaining, because that term *already had a well-recognized meaning, usage, and application* under both federal and state laws when the constitutional amendment was adopted in 1968—including the "ability to engage in negotiations concerning core subjects such as wages, hours, and other conditions of employment"); *Ala Loop*, 123 Hawai'i at 411–12, 235 P.3d at 1123–24 (citing *Yogi*, 101 Hawai'i at 51–53, 62 P.3d at 194–96). Interestingly, the Hawai'i legislature expressly provided that its law with respect to collective bargaining in public employment "shall take precedence over all conflicting statutes concerning this subject matter and shall preempt all contrary local ordinances, executive orders, or rules adopted by the State, a county, or any department or agency thereof, including the departments of human resources development or of personnel services or the civil service commission. HAW. REV. STAT. § 89-19 (2007) (noting initial enactment in 1970). In other words, the Hawai'i legislature knew how to preempt all contrary local ordinances—but did not do so in enacting the statutes relied upon by the Ninth Circuit to support its implied state preemption holdings in *Syngenta Seeds*, *Atay*, and *Hawaii Papaya*. *See, e.g.*, Forman, *supra* note 56.

[129] *Ala Loop*, 123 Hawai'i at 413, 235 P.3d at 1125 (distinguishing "administrative details

remove standing to sue barriers without adding new duties merely as a complement to (without replacing or limiting) existing government enforcement authority, believing that "the safeguards of reasonable limitations and regulations as provided by law should serve to prevent abuses of the right to a clean and healthful environment."[130] Instead of requiring implementing legislation, the framers provided that "individuals may directly sue private and public violators"[131] subject to reasonable limits like statutes of limitation, without suggesting that such limits must be in place before such actions can be brought.[132] Fourth, based on the state legislature's subsequent decision not to enact legislation implementing "the environmental rights amendment (Article XI, Section 9)" because it "is self-executing [and] self-implementing, and that no legislation is necessary at this time to implement its provisions."[133] The legislature further recognized that the constitutional provision gave "the public standing to use the courts to enforce laws intended

---

such as the compensation of the counsel [and who gets to serve as counsel, that] needed to be addressed by the legislature" before effectuating the new right to grand jury counsel under Hawai'i Constitution article I, section 11). *See also id.* at 411, 235 P.3d at 1123 (citing State v. Rodrigues, 63 Haw. 412, 415, 629 P.2d 1111, 1114 (1981), for the conclusion that "reference to the appointment, term and compensation of the independent counsel 'as provided by law' reflected the framers intent that 'subsequent legislation was required to implement the amendment,' since at the time the amendment was adopted, 'there were no other constitutional provisions or statutes to which the phrase could refer'"); *id.* at 412, 235 P.3d at 1124 (citing Save Sunset Beach Coal. v. City & Cty. of Honolulu, 102 Hawai'i 465, 474–76, 78 P.3d 1, 10–12 (2003), for the conclusion that the provisions of article XI, section 3 relating to agricultural lands were not self-executing when read as a whole).

[130] *Id.* at 414, 235 P.3d at 1126 (quoting 1 PROCEEDINGS OF THE CONSTITUTIONAL CONVENTION OF HAWAII OF 1978, at 689–90 (1980)).

[131] *Id.* at 414 & n.32, 235 P.3d at 1126 & n.32 (quoting a Legislative Reference Bureau study for the conclusion that "[t]here are a number of advantages to the inclusion of a constitutional provision, in contrast to a statute, granting the right to sue").

[132] *Id.* at 414 & n.33, 235 P.3d at 1126 & n.33 (quoting 1 PROCEEDINGS, *supra* note 124, at 690) (noting that "the legislature *may* reasonably limit and regulate this private enforcement right by, *for example*, prescribing . . . a reasonable statute of limitations" for actions under HRS chapter 205 involving the State Land Use Commission, otherwise the generally applicable two-year statute of limitation for recovery of compensation for damage or injury to persons or property under HRS section 657-13 "can be applied to such claims consistent with article XI, section 9" (emphasis added)); *id.* at 414 n.34, 235 P.3d at 1126 n.34 (highlighting the framers' intent that adopting article XI, section 9 "*has* removed the standing to sue barriers" and "*provide*[*d*] that individuals may directly sue private and public actors").

[133] *Id.* at 414–15, 235 P.3d at 1126–27 (quoting H. SPEC. COMM. REP. NO. 22, 10th Leg., Reg. Sess. (Haw. 1980), *printed in* 1980 H. JOURNAL at 1248; *see also id.* at 415, 235 P.3d at 1127 (noting "that the experience to date in Hawai'i with the provision, as well as that in other states (such as Illinois) with similar provisions, did not justify" concerns raised by the private sector that "the broad, liberalized standing-to-sue provision in the subject amendment will encourage a flood of lawsuits").

to protect the environment" when "it specifically included [Hawai'i Revised Statutes ("HRS")] chapter 205 among the list of provisions for which attorneys' fees could be recovered in a suit by one private party against another for an injunction against development undertaken without permits or approvals" under HRS section 607-25.[134] Finally, scholars widely support the conclusion that article XI, section 9 is self-executing.[135]

The Hawai'i Supreme Court recently reaffirmed the self-executing nature of article XI, section 9 in *Maui Electric*.[136] The electric utility company sought approval from the state Public Utilities Commission ("PUC") of a proposed power purchase agreement with Hawaiian Commercial & Sugar Company ("HC&S"), which produced electricity by burning internal bagasse at its Pu'unene sugar mill, along with other fuels including coal and petroleum.[137] The Sierra Club attempted to intervene or otherwise participate

---

[134] *Id.* at 415, 235 P.3d at 1127 (citing 1986 Haw. Sess. Laws Act 80, § 607, at 104–05; H. STAND. COMM. REP. NO. 766-86, 13th Leg., Reg. Sess. (Haw. 1986), *printed in* 1986 H. JOURNAL, at 1373; S. STAND. COMM. REP. NO. 450-86, 13th Leg., Reg. Sess. (Haw. 1986) in 1986 S. JOURNAL, at 976). *Accord* Kahana Sunset Owners Ass'n v. Maui Cty. Council, 86 Hawai'i 132, 133–35, 948 P.2d 122, 123–25 (1997) (concluding that an award of attorneys' fees to a private defendant under HRS section 605-27 was not warranted because the plaintiffs' arguments were not frivolous, after explaining that "the legislature intended that individuals and organizations would help the state's enforcement of laws and ordinances controlling development by acting as private attorney generals and suing developers who did not comply with the proper development laws"); *see also Ala Loop*, 123 Hawai'i at 416, 235 P.3d at 1128 (citing HRS § 605-27).

[135] *Ala Loop*, 123 Hawai'i at 416, 235 P.3d at 1128 (citing Susan Morath Horner, *Embryo, Not Fossil: Breathing Life into the Public Trust in Wildlife*, 35 LAND & WATER L. REV. 23, 65 (2000); Janelle P. Eurick, *The Constitutional Right to a Healthy Environment: Enforcing Environmental Protection Through State and Federal Constitutions*, 11 INT'L LEGAL PERSP. 185, 208 (2001); Carole L. Gallagher, *The Movement to Create an Environmental Bill of Rights: From Earth Day, 1970 to the Present*, 9 FORDHAM ENVTL. L. REV. 107, 139 (1997); David Kimo Frankel, *Enforcement of Environmental Laws in Hawaii*, 16 U. HAW. L. REV. 85, 135 (1994)).

[136] 141 Hawai'i 249, 261 & n.21, 408 P.3d 1, 13 & n.21 (2017) (noting the distinction between substantive and procedural components of article XI, section 9—*viz.*, the right to a clean and healthful environment on the one hand, and the private right of enforcement of the right to a clean and healthful environment, on the other hand).

[137] *Id.* at 253 & n.4, 408 P.3d at 5 & n.4; *see also id.* at 254 & n.7, 408 P.3d at 6 & n.7 (noting that HC&S entered into a consent decree with the state Department of Health in 2016, agreeing to pay a $600,000 fine, relinquish certain equipment, related hardware, and supplies, in addition to maintaining air quality monitoring equipment at local schools). HC&S installed the state's first oil-fired power plant at the Pu'unene mill in 1907, but ended production in December 2016 as the last plantation in Hawai'i. Lee Imada, *HC&S Closure Will Pull Plug on Power Deal*, MAUI NEWS (Nov. 29, 2016), http://www.mauinews.com/news/local-news/2016/11/hcs-closure-will-pull-plug-on-power-deal/ ("In early January [2016], HC&S' parent company, Alexander & Baldwin, announced the closure of Hawaii's last sugar plantation at the end of this year.").

in the PUC proceeding, asserting potential adverse impacts to its members' health, aesthetic, and recreational interests as well as an organizational interest in reducing Hawai'i's dependence on imported fossil fuels and advancing a clean energy grid.[138] The PUC denied the Sierra Club's motion as well as its request for reconsideration, without addressing the organization's assertion of a due process right to participate in the hearing based on its constitutionally-protected environmental rights.[139] After the Hawai'i Intermediate Court of Appeals dismissed the Sierra Club's appeal, the Hawai'i Supreme Court granted certiorari.[140]

Drawing an analogy to Native Hawaiian water rights, the state's highest court observed that the Sierra Club's asserted "property" interest for constitutional due process purposes is defined by the substantive right to a clean and healthful environment under article XI, section 9.[141] The court then concluded that this particular substantive right is self-executing, defined by existing law relating to environmental quality and "thus[,] a property interest protected by due process."[142] Rejecting the dissenting justices' attempt to distinguish the Native Hawaiian water rights discussed in *'Īao* as statutory creations, the *Maui Electric* court stressed that the State Water Code (HRS chapter 174C) was *not intended to abridge rights already in existence*—e.g., traditional and customary rights reaffirmed in article XII, section 7[143]—even assuming, arguendo, that it would be constitutionally permissible to do so in reliance on the penultimate phrase "subject to the right of the State to regulate such rights." Because the PUC was "statutorily required to consider the

---

[138] 141 Hawai'i at 254 & nn.5–7, 408 P.3d at 6 & nn.5–7 (quoting applicable PUC rules and affidavits submitted by two of the organization's members).

[139] *Id.* at 255–56, 408 P.3d at 7–8.

[140] *Id.* at 256, 408 P.3d at 8.

[141] *Id.* at 260–61, 408 P.3d at 12–13 (citing *In re* 'Īao Ground Water Mgmt. Area High-Level Source Water Use Permit Applications (*'Īao*), 128 Hawai'i 228, 241–44, 287 P.3d 129, 142–45 (2012)).

[142] *Id.* at 261, 408 P.3d at 13 (citing Ala Loop, 123 Hawai'i 391, 417, 235 P.3d 1103, 1127 (2010), along with the duties and operation of the PUC in regulating public utilities under HRS chapter 269). *See also id.* at 261–62, 408 P.3d at 13–14 (citing the PUC's now mandatory obligation under HRS section 269-6(b) to "consider the need to reduce the State's reliance on fossil fuels through energy efficiency and increased renewable energy generation" and "explicitly consider" the effect of the State's reliance on fossil fuels on the level of "greenhouse gas emissions"); *id.* at 262, 408 P.3d at 14 (citing HRS section 269-27.2, which authorizes the PUC to reduce the State's dependence on fossil fuels by utilizing renewable energy sources).

[143] *Id.* at 264 & n.28, 408 P.3d at 16 & n.28 (explaining that HRS sections 269-6(b) and 269-27.2 merely define the contours of the rights guaranteed by article XI, section 9 "subject to reasonable limitations and regulation as provided by law," which represent protectable property interests for the purposes of constitutional due process).

hidden and long-term costs of the continued reliance on energy produced at the Pu'unene Plant, including the potential for increased air pollution as a result of greenhouse gas emissions[,][144] its analysis necessarily would have included "implied consideration of potential risks to health . . . affecting Sierra Club's members' right to a clean and healthful environment [under article XI, section 1] as defined by HRS [c]hapter 269."[145] Therefore, the PUC was obligated to provide the Sierra Club an opportunity to be heard at a meaningful time and in a meaningful manner.[146]

The Hawai'i Supreme Court has recognized a similar substantive due process right under article XII, section 7 of the Hawai'i Constitution, as discussed in subsection IV.C. below.

C. *Reaffirmation of Native Hawaiian traditional and customary rights under the Hawai'i Constitution.*

The link between culture and the environment in Hawai'i has, perhaps, been made most clear through efforts to implement the constitutional reaffirmation of traditional and customary Native Hawaiian rights.[147]

> The State reaffirms and shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by *ahupua'a* tenants who are descendants of [N]ative Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights.[148]

A little more than two years before its *Maui Electric* decision recognized a substantive due process right to intervene in a contested case hearing, the

---

[144] *Id.* at 265, 408 P.3d at 17.

[145] *Id.* at 266, 408 P.3d at 18.

[146] *Id.* at 266, 269–71, 408 P.3d at 18, 21–23. *Accord In re Hawaiian Elec. Light Co.*, No. SCOT-17-0000630, 2019 WL 2065921 (Haw. May 10, 2019) (vacating PUC decision approving power purchase agreement that involved construction and operation of a biomass-fueled energy production facility, because the agency violated Life of the Land's property interest in a clean and healthful environment when it failed to consider reduction of greenhouse gas emissions as required under HRS §269-6(b)).

[147] *See generally*, David M. Forman & Susan K. Serrano, *Traditional and Customary Access and Gathering Rights*, *in* NATIVE HAWAIIAN LAW TREATISE, *supra* note 94, at 779–822; *see also* Forman & Serrano, *supra*, at 784–86 (citing, *inter alia*, *PASH/Kohanaiki*, 79 Hawai'i 425, 445–47, 903 P.2d 1246, 1266–68 (1995), regarding preservation of Native Hawaiian customs and traditions consistent with then-applicable constitutional mandates during the period when private property rights were developed in these islands); Forman & Serrano, *supra*, at 796 nn.147–48 (citing *PASH/Kohanaiki*, 79 Hawai'i at 437 n.21, 903 P.2d at 1258 n.21, which traced the "Hawaiian usage" statute now codified at HRS section 1-1, back to the 1847 law creating an independent Judiciary for the Kingdom of Hawaii).

[148] HAW. CONST. art. XII, § 7.

Hawai'i Supreme Court issued the first of two decisions involving a proposed Thirty Meter Telescope ("TMT") on Mauna Kea (also known as Mauna a Wākea, or Wākea's mountain),[149] located at the top of the state's largest island, Hawai'i (known also as the "Big Island"). In *Mauna Kea Anaina Hou v. Board of Land and Natural Resources (Mauna Kea I)*,[150] the court held for the first time that article XII, section 7 and constitutional due process obligated the agency to allow Native Hawaiian practitioners to participate as intervenors in an administrative hearing involving whether a conservation area district use ("CDU") permit should be granted that would authorize construction of the proposed telescope.[151] The court vacated the CDU permit and remanded the matter back to the agency for further proceedings, because a decision by the State of Hawai'i Board of Land and Natural Resources ("BLNR") to grant the permit subject to a later hearing on the practitioners' petition to intervene put "the cart before the horse[.]"[152]

The agency appointed a new hearing officer who admitted multiple intervenors into the proceeding on the still-pending CDU application, and the board eventually agreed (by a vote of 5-2) to adopt the hearing officer's recommended decision and order granting the permit.[153] *Mauna Kea II* relied on the plain language of article XI, section 1, to hold that conservation district lands held by the State (including the summit area of Mauna Kea) are held in trust, which requires "a balancing between the requirements of conservation and protection of public natural resources, on the one hand, and the development and utilization of these resources on the other [hand] in a manner consistent with their conservation."[154] The court acknowledged its previous decision in *Waiāhole I* upholding "the exercise of Native Hawaiian

[149] *See* Melody Kapilialoha MacKenzie, *Historical Background*, *in* NATIVE HAWAIIAN LAW TREATISE, *supra* note 94, at 6 (discussing the cultural importance of Wākea, as the sky-father); Melody Kapilialoha MacKenzie and Wayne Chung Tanaka, *Papahānamokuākea: The Northwestern Hawaiian Islands*, *in* NATIVE HAWAIIAN LAW TREATISE, *supra* note 94, at 699 (same); MacKenzie, *Religious Freedom*, *supra* note 104, at 860 (same); Baldauf, *supra* note 104, at 912 (same).

[150] 136 Hawai'i 376, 363 P.3d 224 (2015).

[151] *Id.* at 390, 363 P.3d at 238. In an earlier CDU permit proceeding involving a proposed telescope at the top of Haleakalā, Maui, only concurring Justices Acoba and Pollack acknowledged that such a substantive due process right existed under article XII, section 7. Kilakila 'O Haleakala v. Bd. of Land & Nat. Res., 131 Hawai'i 193, 206, 317 P.3d 27, 40 (2013) (Acoba, J., concurring).

[152] *Mauna Kea I*, 136 Hawai'i at 381, 363 P.3d at 229.

[153] *In re* Conservation Dist. Use Application HA-3568 (*Mauna Kea II*), 143 Hawai'i 379, 387, 431 P.3d 752, 760 (2018).

[154] *Id.* at 400, 431 P.3d at 773; *see also id.* at 401, 431 P.3d at 774 (noting the presumption in favor of public access, use and enjoyment under *Waiāhole I*, 94 Hawai'i 97, 142, 9 P.3d 409, 454 (2000)).

traditional and customary rights as a public trust purpose."[155] However, the court concluded that the BLNR met its obligation as a trustee because "there was no actual evidence of use of the TMT Observatory site and Access Way area by Native Hawaiian practitioners"[156] and, in any event, Native Hawaiians would be included among those enriched by resulting scientific discoveries along with a community benefits package.[157] In reaching this conclusion, the court dropped a footnote observing that it would "not wholesale adopt our precedent setting out public trust principles as applied to the state water resources trust [under *Waiāhole I*] and its progeny. Rather the dimensions of this trust remain to be further demarcated."[158]

---

[155] *Id.* at 402, 431 P.3d at 775 (citing *Waiāhole I*, 94 Hawaii at 137, 9 P.3d at 449). *See also Kukui (Molokai), Inc.*, 116 Hawai'i at 507–09, 174 P.3d at 468.

[156] *Mauna Kea II*, 143 Hawai'i at 402, 431 P.3d at 775. Petitioners-Appellants Mauna Kea Anaina Hou and Kealoha Pisciotta, Clarence Kukauakahi Ching, Flores-Case 'Ohana, Deborah J. Ward, Paul K. Neves, and KAHEA: The Hawaiian Environmental Alliance filed a Motion for Reconsideration, which the Court granted in part by deleting footnote 15 from the original version of its decision (issued October 30, 2018), and substantially modifying a second footnote. Order Granting in Part and Denying in Part Motion for Reconsideration, Mauna Kea II, 143 Hawai'i 379, 431 P.3d 752 (2018) (No. SCOT-17-0000777), *available at* https://www.courts.state.hi.us/wp-content/uploads/2018/11/SCOT-17-0000777reconpg.pdf. These issues deserve careful further inquiry; however, such matters lie outside the scope of this particular article.

[157] *Mauna Kea II*, 143 Hawai'i at 402, 431 P.3d at 775. Whether or not the court's conclusion adequately considered the principle of indigenous self-determination also deserves careful analysis by scholars, practitioners, and others. *See, e.g.*, Timothy Hurley, *Thirty Meter Telescope Construction Will Proceed on Mauna Kea, Gov. Ige Says*, HONOLULU STAR-ADVERTISER, June 20, 2019, https://www.staradvertiser.com/2019/06/20/breaking-news/gov-ige-says-state-has-issued-a-notice-to-proceed-for-construction-of-thirty-meter-telescope-on-mauna-kea/ (reporting that the "highly controversial" project "has been given the green light to proceed with construction . . . sometime this summer"; adding that the announcement followed "an early morning operation by state law enforcement officers to remove . . . two Native Hawaiian altars located in the mountain's northern plateau, the planned site of the telescope[,] . . . including ceremonial platforms for placing flowers, sacred water and other offerings during prayer" utilizing "about 20 state vehicles . . . on the eve of solstice ceremonies" while blocking the road to the summit and refusing to allow Hawaiians to go pray at the summit); *id.* (adding that "[t]elescope parts have been built in California and partner countries while construction on Mauna Kea was halted"); *id.* (quoting a native Hawaiian activist as saying "It's a sad day in Hawaii [sic]. . . . If they're going to move forward on this project, then we are going to have conflict up on the Mauna. There's no question about it"); *see also supra* note 100 ("what I think it means to really care for and see a place as family . . . [is] you would lay your life down for that place").

[158] *Id.* at 401 n.24, 431 P.3d at 774 n.24 (citations omitted). On the day of this Pluricourts/UH Law Review symposium, Justice Michael Wilson filed a stinging dissent (later amended on November 30, 2018), which accused the BLNR of applying the newly-coined "degradation principle" to conclude that "the cumulative negative impacts from development of prior telescopes caused a substantial adverse impact; therefore, TMT could not be the cause of a substantial adverse impact." Amended Dissenting Opinion by Wilson, J., Mauna Kea II,

According to retired Hawai'i Supreme Court Associate Justice Simeon R. Acoba, Jr.:

> Over the last two decades, the Hawai'i Constitution's mandate for protection of natural resources and water resources, aligned with the right to a clean and healthy environment, has been of increasing social importance and has resulted in judicial oversight of public and private actions involving the environment that is likely to continue into the future.[159]

Justice Acoba concludes his article by noting both the court's "leading role among other jurisdictions" as well as the prospects for the development of public trust and environmental rights to provide "pathways for the future of the judicial system and the state."[160]

A similarly pathbreaking decision currently on appeal before the Hawai'i Supreme Court holds that the state's public trust duties include the obligation to *mālama 'āina*, or care for the land.[161] This case again involved the BLNR, which authorized United States military training exercises (including live ammunition and explosive ordinance) on public trust lands in an area of the Big Island called Pōhakuloa, provided that the Army "make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner[,]" and to "remove or bury all trash, garbage or other waste materials[.]"[162] Two Native Hawaiian practitioners filed a declaratory

---

143 Hawai'i 379, 431 P.3d 752 (2018) (No. SCOT-17-0000777), *available at* https://www.courts.state.hi.us/wp-content/uploads/2018/11/SCOT-17-0000777disam.pdf.

[159] Simeon R. Acoba, Jr., *Four Major Hawai'i Judicial Developments in the Last 50 Years*, 23 HAWAII B.J. 11 (2019).

[160] *Id.*

[161] Findings of Fact, Conclusions of Law and Order, Ching v. Case, No. 14-1-1085-04 GWBC (Haw. 1st Cir. Apr. 3, 2018) [Ching v. Case Order], *available at* https://www.slideshare.net/civilbeat/dlnr-nhlc-pohakuloa-ruling. The Hawai'i Supreme Court held oral argument in the case on May 16, 2019. Hawaii State Judiciary, Oral Argument Before the Hawaii Supreme Court-No. SCAP-18-0000432, *available at* https://www.courts.state.hi.us/courts/oral_arguments/archive/oral-argument-before-the-hawaii-supreme-court-no-scap-18-0000432 (scroll down and click on the link "Listen to the entire audio recording in mp3 format"). Two earlier attempts by practitioners unsuccessfully sought to establish a traditional and customary Native Hawaiian right to *mālama 'āina* in the context of defending against criminal trespass charges. *See* State v. Pratt, 127 Hawai'i 206, 277 P.3d 300 (2012); State v. Hanapi, 89 Hawai'i 177, 970 P.2d 485 (1998).

[162] Ching v. Case Order, *supra* note 161, at 6–7. During May 16, 2019 oral arguments before the Hawai'i Supreme Court, counsel for the practitioners argued that BLNR had ample reason to doubt assurances provided by the military about its purported clean-up efforts based on past experiences on the island of Kaho'olawe, as well as Lualualei and Makua on the island of O'ahu. *See, e.g.*, Hawai'i State Judiciary, Oral argument before the [Hawai'i] Supreme Court, https://www.courts.state.hi.us/courts/oral_arguments/archive/oral-argument-before-

judgment action over the state agency's failure to adequately care for trust resources at the expense of future generations.[163] Professor D. Kapua'ala Sproat observes that Judge Chang's ruling:

> [D]istinguished the State's *duty* to *mālama 'āina* the subject lands from the Plaintiffs' *ability* to *mālama 'āina* the lands as cultural practitioners—for whom the *'āina* is of "crucial importance" as the foundation of cultural and spiritual identity, as well as part of their *'ohana*, "central" to their existence, and reflecting their *kuleana* as stewards of the land.[164]

As Professor Sproat explains further:

> This duty to *mālama* is also firmly grounded in Native Hawaiian custom and tradition, which is an important background principle of property law in Hawai'i [since elevated to the status of independent constitutional mandates]. *Kanaka Maoli* scholar and professor Dr. Lilikalā Kame'eleihiwa describes the *kuleana* to *mālama* as the first lesson of Wākea. This reference to the Kumulipo, the great chant of cosmos that ties *Maoli* to the creation of life in Hawai'i, describes Native Hawaiians' inherent responsibility to respect and care for our elder sibling, the *kalo* plant, and in turn, all natural and cultural resources. By recognizing and upholding this cultural duty to *mālama*, Judge Chang illuminated the vital role of *Kānaka Maoli* custom and traditions as both a core value and a foundation for our current legal regime, especially in the context of the ceded lands and public trusts.[165]

Nevertheless, "on the ground in our communities, local decisionmakers have regularly turned a blind eye to their *kuleana*—as they did in Pōhakuloa—leaving enforcement to citizen groups and, eventually, the courts."[166]

---

the-hawaii-supreme-court-no-scap-18-0000432 (scroll down and click on "Listen to the entire audio recording in mp3 format") (last accessed June 22, 2019).

[163] D. Kapua'ala Sproat, *The First Lesson of Wākea:* Ching v. Case *and the Duty to Mālama 'Āina*, KA HULI AO CTR. FOR EXCELLENCE IN NATIVE HAWAIIAN L. (Sept. 18, 2018), http://blog.hawaii.edu/kahuliao/ka-moae/fall-2018/directors-column/. Note, once again, the reference to Wākea, the sky-father. *See supra* notes 85, 104 & 149.

[164] *The First Lesson of Wākea*, *supra* note 163 (citing Ching v. Case Order, *supra* note 161, at 24–26).

[165] *Id.* Professor Sproat's understanding of these issues represents significantly more than an academic interest. She and her father David Sproat (*see supra* note 59 and accompanying text) are descendants of the *konohiki* who served Kalihiwai, where Professor Sproat's parents raised her and still live; in addition, Professor frequently returns to Kalihiwai with her children to facilitate the passing on of this ancestral knowledge to the next generation.

[166] *Id.*

V. CONCLUSION.

Increasing recognition of the value inherent in IEK—which often includes deeply held beliefs about the need for intergenerational equity—provides a promising vehicle for protecting environmental commons. By enforcing intergenerational rights, domestic courts are building upon the strong foundation that already exists for applying the intergenerational equity framework as a general principle of international law, in order to better protect environmental commons around the world. This Article shares three case studies from the Hawaiian Islands to illustrate just a few of the diverse ways that the intergenerational equity framework has already operationalized IEK in this jurisdiction. The cultural and legal foundations that support these initiatives share characteristics with distant relatives throughout the world, which make up a web of environmental constitutionalism at national, sub-national, and super-subnational levels that can only strengthen the intergenerational equity framework.

Like the Maori tribe in New Zealand that adopted its modified version of Kamehameha School's five-value framework for evaluating proposed projects based on considerations beyond economic values,[167] or the Canadian provinces that enacted legislation recognizing environmental rights following the failure of efforts to advance environmental constitutionalism at the federal level,[168] sub-national entities can help advance global efforts to instantiate environmental rights for the benefit of present and future generations. Their success will depend at least in part, of course, upon judicial enforcement of environmental constitutionalism. The recently established Global Judicial Institute for the Environment,[169] as well as the prospect of a Global Pact for the Environment[170] and efforts to promote a Draft International Covenant on the Human Right to the Environment,[171] along with a proposed Universal Declaration on the Rights and Duties of Humankind,[172] are all welcome developments that could help pave the way for more explicit recognition of the important role that indigenous peoples can and should play in decision-making processes involving environmental commons.

---

[167] *See supra* note 99 and accompanying text.

[168] *See supra* note 49 and accompanying text (citing BOYD, *supra* note 49).

[169] *See supra* note 52 and accompanying text.

[170] *See supra* note 53 and accompanying text.

[171] *See, e.g.*, Prieur, *supra* note 54.

[172] *See supra* note 55 and accompanying text.

This Symposium *On the Role of International Courts in Protecting Environmental Commons* brought people together[173] in a manner that brings to light important lessons from the historic Mālama Honua Worldwide Voyage, along with efforts to construct the first modern canoe made as much as possible from native materials.[174] Byron Mallott (one of the Native Alaskans who assisted with the project) wrote to Polynesian Voyaging President Nainoa Thompson: "In your canoe you carry all of us who share your vision and aspiration for a people to live and prosper with their future firmly built on the knowledge of their heritage and tradition."[175] Similar thanks are owed to Dr. Christina Voigt for having the vision to bring together an amazing group of scholars, so that we could all embark upon a desperately needed journey. This journey must continue to expand across "Island Earth" and invite additional voices to lend us their wisdom, so that we can pass along this canoe to future generations better able to live sustainably together as fellow stewards of our planet.

---

[173] *See supra* note 10 and accompanying text (quoting Low, *supra* note 10).

[174] *See supra* notes 6–10 and accompanying text.

[175] Low, *supra* note 10. Byron Mallott is the former CEO of Sealaska Corporation, a Native institution whose core Native values "represent the rich heritage of the Tinglit, Haida and Tsimshian people." *Who We Are*, SEALASKA, https://www.sealaska.com/who-we-are (last visited Apr. 24, 2019).