

# INDIGENOUS-LED CONSERVATION

## A Strategic Evaluation of the Western Conservation Program: Current Learnings & Future Directions

20 DECEMBER 2022—FINAL

*“...Salmon sacrifices itself to us, so that we can be sustained, and we make this guarantee to them that as a thank you we’re always going to take care of the habitat and all the things that are necessary for them to be sustained.”*

*—Ryan Miller, Director of Treaty Rights, Tulalip Nation*

### I. INTRODUCTION

The William and Flora Hewlett Foundation’s Western Conservation Program strategy is centered in a vision that protecting the West’s ecological integrity can support the well-being of wildlife and people. In fact, people, and especially Indigenous communities with their unique political status as sovereign nations, have been core to Hewlett’s conservation vision for over a decade and at the heart of several notable conservation successes: from stewardship of the Great Bear Rainforest and Bears Ears to dam removal in the Klamath River basin. The 2018 refresh of the Western Conservation Program identified the need to deepen investments in Indigenous and community-driven conservation in the face of the advancing biodiversity and climate crises, increasing political polarization, and growing evidence that enduring conservation is inextricably linked to equity, justice, and place-based engagement. The refresh also spotlighted the need to wrestle with an increasingly important question for North American conservation: Can Indigenous-led conservation move the needle further and faster on the biodiversity and climate crisis? If so, how?

This question framed the TERRAMAR consulting group’s strategic evaluation of the Western Conservation Program’s investment in Indigenous-led conservation as part of its 2018-2023 grantmaking strategy, and focused on capturing learnings about success, as well as identifying any challenges, gaps, unintended consequences, and/or emergent strategic opportunities that might exist. These findings form the substance of this report and will inform the Western Conservation Program’s 2023-2027 strategy refresh and its approach to collaborating with Tribes and Indigenous communities in advancing community-led, durable conservation outcomes moving forward.

The evaluation’s methodologies were shaped by a set of guiding values, goals, and expected outcomes that were co-created with the Hewlett Team. This methodology, while primarily grounded in a series of semi-structured interviews<sup>1</sup>, also drew heavily on desk-top research and TERRAMAR’s nearly three decades of experience and engagement in Indigenous-led conservation globally and in what is now known as the United States. TERRAMAR conducted 17 confidential interviews in late fall 2022, including interviews with current grantees, Native and non-Native conservation organizations, thought leaders and influencers in the Indigenous-led conservation field, foundation partners, and independent experts and leading academics. The list of informants was co-created with the Hewlett Team and while not exhaustive, this grouping was selected to ensure that a diversity of views, perspectives, and relationships informed the evaluation findings. Anonymity was important to ensuring the most candid and honest conversations possible. Inquiry focused on a broad range of questions which included the following: 1) assessment of grantmaking strategic strengths and weaknesses; 2) identification of areas for continued and/or new investment; 3) areas where investment should stop; 4) examination of the influence Hewlett’s grantmaking has had on the conservation and philanthropic fields to date; 5) appraisal of unintended consequences; and 6) predicted durability of outcomes (See Appendix One for the details of the evaluation methodology). Finally, while the primary audience for the evaluation was the Hewlett Foundation, the Foundation’s commitment to transparency means the final report will be made publicly available and also shared with conservation funders and the field broadly, to inform ongoing debates about centering indigeneity in the conservation movement.

## II. INDIGENOUS-LED CONSERVATION: FOUNDATION & CONTEXT

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<sup>1</sup> Please note, we use interviewee, expert, informant, and project participant interchangeably. These are the individuals who participated in semi-structured interviews and informed the set of core learnings detailed in this evaluation report.

The vital significance of Indigenous lands, paired with Tribal stewardship and governance systems, in reversing the biodiversity crisis and averting climate chaos, is increasingly recognized in the scientific literature, international policy fora, and by a growing number of influencers, governments, donors and foundations, and conservation organizations (See Appendix Two for an annotated bibliography outlining the ecological and climate case for Indigenous-led conservation). In the United States, Tribal lands are essential to achieving critical conservation goals like 30x30, which is committed to conserving 30% of lands by 2030. This reality, along with the importance of Indigenous science and cultural knowledge, has been elevated in recent years and codified in a growing number of federal policies (see Indigenous Knowledge Guidance for Federal Agencies, American the Beautiful, Joint Secretarial Order & Memorandum to Heads of Department and Agencies).

Indian land in the United States is extensive, but land tenure on Native land is complicated. Understanding the history and context of Indigenous lands in the United States is foundational to appreciating the power of Indigenous-led conservation and importance of the unparalleled ecological values and stewardship models that abound in Indian Country and are increasingly seen as critical to the resolution of the biodiversity and climate crises:

- \* Currently, 574 sovereign Tribal Nations and Alaska Native villages have a formal Nation-to-Nation relationship with the U.S. government. The U.S. Constitution recognizes Indian Tribes as distinct governments and they have, with a few exceptions, the same powers as federal and state governments to regulate their internal affairs. Sovereignty for Tribes includes the right to establish their own form of government, determine membership requirements, enact legislation, and establish law enforcement and court systems. Sovereignty is what differentiates Tribes from other conservation ‘stakeholders,’ like hunters and anglers, ranchers, or conservation NGOs.
- \* The Tribes and Alaska Native villages in the United States steward and govern an estimated five percent of the United States’ land mass, approximately 100M acres; making Indian Country the fourth-largest state in the U.S. and second only to the federal government in land holdings. This land estimate doesn’t take into account Traditional Territories or ancestral lands, sacred sites, or geographies with overlaid guaranteed hunting and fishing rights.
- \* The ecological and climate significance of Indigenous lands in the U.S. mirrors what is evidenced internationally. The United Nation’s World Conservation Monitoring Center recently determined that Indigenous People & local communities provide stewardship for roughly 32% of global lands, most of which is in “good ecological condition” and contains an estimated 80% of the world’s remaining biodiversity. Tribal lands in the United States are similarly appreciated as sources of rich biocultural diversity, climate resilience, and critical habitat and connectivity for the one-third of species at risk of extinction in the U.S.

- \* Indigenous conservation leadership is increasingly seen as vital to U.S. conservation goals. Numerous national and international policy fora have established that 30x30 goals are unachievable without Tribal engagement. Tribal engagement is second to none in the arena of climate action. The Fourth Climate Assessment for example, catalogued more than 800 Native-led efforts to combat climate change over the last decade. The critical importance and influence of Indigenous-led conservation to durable biodiversity conservation and natural climate solutions is widely recognized to be at a tipping point in academic, decision-maker, and influencer circles.
- \* Realizing Indigenous-led conservation's potential is challenged by the realities of Native American land ownership, which involves a complex patchwork of titles, restrictions, obligations, statutes, and regulations. A range of laws and unmet treaties enabled the U.S. government to appropriate tens of millions of acres of Native American land and move Tribal Nations to reservations. Legislation enacted in the 1880s resulted in further appropriation of Tribal lands, with non-Native ownership and control asserted over a further two-thirds of established Native lands. The loss totaled 90M acres, about the size of Montana. An estimated 42% of the Tribes represented in historical records have no land base today.
- \* There are a number of federal laws that molded U.S. Indian policy and fractured land tenure in Indian Country, but the single most potent influence on Indian land, and thus Indigenous-led conservation, is the General Allotment Act of 1887, also known as the Dawes Act. Understanding the history and context of land tenure in Indian Country is foundational to developing Indigenous-led conservation strategies (see <https://iltf.org/land-issues/history/>) and in part explains the exponential increase in the number of cases or examples of Land Back in the last two or three years alone (See Appendix Three for a timeline and description of land back cases).
- \* Two major types of land ownership exist for recognized Tribes: 1) Trust Land, where the federal government holds legal title, but the beneficial interest remains with an individual or Tribe. Trust lands held on behalf of individuals are known as allotments; and 2) Fee Land purchased by Tribes, with legal title acquired under specific statutory authority. The U.S. holds approximately 56M acres of land in trust and the Tribal land base varies dramatically. For example, the Navajo Nation's landholdings stretch across about 17.5M acres, while the Pit River Tribe's land base is the smallest: a 1.32-acre cemetery.
- \* Tribal Nations and Indigenous-led organizations are structurally and systematically under-funded by both public and private sources. Baseline, non-competitive federal funding doesn't exist and Tribes are excluded from core federal programs, e.g., Land and Water Conservation Fund. Dollars directed to Indigenous efforts represent only 0.4% of total philanthropic dollars.

### III. CORE EVALUATIVE THEMES & FINDINGS

Our evaluation methodology worked to identify important themes and findings through the consistency with which they surfaced in the interviews. Where patterns emerged, we worked to deepen contextual understanding of these learnings and their significance through relevant literature, national and international research, and TERRAMAR's 30 years of experience in biocultural conservation. The findings highlighted in this section of the report range from the practical to the philosophical or theoretical to the granular; these conclusions are both inward and outward facing. They are presented with an eye to taking the reader from the big picture, or overarching frame within which Indigenous-led conservation takes place, to a coarser set of considerations and recommendations for Hewlett's Western Conservation Program.

It is also of note, that while each project participant was given a set of framing questions centered in evaluating the Western Conservation Program's work in the Indigenous-led conservation space to date, themes arguably outside the scope of the evaluation remit surfaced in the interviews with striking regularity. These learnings tended to be framed through a wider angle, consistently making connections between the success of any Indigenous-led conservation grantmaking strategy and the larger culture and commitment of that program's institutional home. We call attention to these findings, not because we feel we are in a position to provide strategic advice to the Hewlett Foundation, but because understanding the importance of these findings for the future direction and/or success of sustained Western Conservation Program investment and engagement in Indigenous-led conservation is core to the goals for this evaluation and the commitment we made to transparency and truth in evaluation.

Further, it is clear that because of Indigenous-led conservation's historical context, theoretical grounding, and present elevated political reality, investing and working authentically in this space is a much bigger conversation and praxis than a program officer, single program, theory of change and/or grantmaking strategy. For many reasons, not the least of which is the centrality of respect and reciprocal relationship to the Indigenous worldview, the Hewlett Foundation's commitment to and position on things like land acknowledgements, land back, decolonization of philanthropy, and the indigenization of conservation are of great import to Indigenous partners and grantees, and arguably the conservation field as a whole. For these reasons, we report out on both sets of findings: those centered in the Western Conservation Program and those that may be of relevance to a larger conversation regarding the Hewlett Foundation's work in support of what is no doubt one of the fastest growing investment strategies in conservation globally, as well as in the United States.

1. **Authentic Indigenous-Led Conservation Calls for Leadership & Commitment to the Indigenization of Conservation & Philanthropy.** Across the interviews, it was widely recognized that ultimately what authentic and meaningful investment in Indigenous-led conservation is really about is a very different ethos, mindset, and approach than what commonly informs

Western conservation. Many of the experts pointed out that the path to Indigenous-led conservation ultimately needs to be centered in a journey of decolonization. And the case was made that to decolonize a field, an institution, or even oneself, is not the work of ticking boxes—rather it is a lifetime commitment, the work of generations. Many of the interviewees pointed to or echoed the argument Tuck and Yang powerfully make in their seminal paper, Decolonization is not a metaphor, it is fundamentally a process that transforms the ‘why’, ‘what’ and ‘how’ of the grantmaking process and how conservation strategy is conceived and implemented:

“In my experience, the only safe space for Indigenous-led conservation is in Pueblo spaces...conservation is still really about upholding white supremacy. The western tool box (e.g., wilderness designations, monuments, etc.) is not what the Pueblos want first and foremost. And in contrast, the idea of de-centering federal lands and putting them in Tribal management is not something most conservation organizations are willing to accept. It’s about power ... these organizations and agencies are much more comfortable talking about co-management or co-stewardship.

“One of the biggest and most important risks philanthropy needs to take is an authentic, hands-off, trust-based empowerment of the Indigenous viewpoint on everything from management to well-being: the suite of things that Native people want and need investment in. Native organizations, leaders, projects can’t be expected to promise or deliver on Western outcomes. We need to learn how to trust that investing in this holistic, long-term strategy will get us the things we care about, but not on the backs of Native people.”

“The majority of ‘wild lands’ are on reservations and this is not just because we don’t have the resources or financing to develop these lands. It is because exploitation of land is not our way. There is no question that we will do a better job than Western conservation ... our way is a much more effective and enduring way to address the climate or biodiversity crisis. We are willing to forgo profit, forgo our own needs, for the animals and our homelands to heal. This is not about easements or protected areas or policy, this is about how do we ensure the well-being of our relatives, our non-human relatives. Philanthropy’s job should be to make sure we are still doing what we have been doing since time immemorial to protect the planet—drawing on our Elder’s and Societies’ counsel, engaging our young people, drawing on the wisdom in our languages and ceremonies—we shouldn’t have to trick philanthropy to support our ‘conservation’ work. Rather than making us prove our conservation value, we should have Western conservation prove they are as good as Tribes.”

Most of the interviews called on the Western Conservation Program to do more to address the challenges inherent in the nascent space Indigenous-led conservation occupies by providing much needed catalytic leadership. Further, many of the

experts pointed out that given the Hewlett Foundation's influence in so many vital spheres—from conservation to climate, to education and organizational effectiveness—and the fact the Foundation is seen by many as a thought leader, a commitment by both program and organization to authentically and visibly wrestle with the indigenization of conservation and philanthropy, was welcomed and lauded as a *“potential gamechanger.”*

The interviews broadly acknowledged the transformative force visionary leadership would provide in a field that historically has been resistant to change, or as some described it *“immune to the call or need for change when it holds the power and the purse strings.”* The need to ‘indigenize’ this leadership was also called for and Hewlett was encouraged to think about how its guiding values, governance structures, and grantmaking priorities and systems could evolve to better align with authentic Indigenous-led conservation: *“What percentage of Hewlett’s conservation funds go to Indigenous-led conservation? They should increase this by at least five-fold and they should make this commitment publicly. Indigenous-led conservation is an emaciated field. Conservation philanthropy’s investment in non-Native conservation has created a very parched environment for Tribes and Native-led organizations. It is important to realize we can’t even begin to think about scale or success or replicability without investment of meaningful resources.”*

Hewlett was called on to re-think what investment in Indigenous-led conservation should look like, and to do so not just through the lens of where Indigenous-led overlaps with the interest and priorities of Western conservation, but through an effort to more deeply understand what Indigenous-led conservation is, how it differs, and what about this worldview or paradigm and its inherent systemic approach explains why 80% of the planet's biodiversity is found on Native Lands. *“We need to increase and recognize the value of Indigenous-led conservation and science and cultural components of our approach. Western knowledge systems and approaches are missing the boat. Our data is looked at as less valuable in a way; held to a different standard. We need to recognize and reevaluate this bias, recognize that our ancestors and those out there fishing, hunting, gathering are just as important to answering/rising to the conservation challenges at hand. This is the science we need to redress the crises we are living through.”*

2. **The Case for Indigenous Led Conservation is First & Foremost an Ecological One.** Several project participants argued that the case for Indigenous-led conservation is about more than equity and justice, reflecting the growing chorus of international scientists, policy makers, conventions, and organizations that have elevated the fact that Indigenous-informed and led

strategies are vital to address the burgeoning global climate, biodiversity, and land degradation crises effectively.<sup>2</sup> Virtually every interview underscored the growing bodies of research internationally that points to the fact that *“without Indigenous-led approaches leading the way the planet is doomed.”* The United Nation’s Decade on Ecosystem Restoration has embedded rights-based restoration at the core of its strategic framework. The Intergovernmental Panel on Climate Change’s 2019 report emphasized the importance of securing Indigenous Peoples’ rights to fighting climate change by advancing land tenure and thus empowering Indigenous-led governance and management practices. Increasingly, proponents of area-based conservation solutions are seeing Indigenous-led conservation as the pathway for achieving biodiversity targets: *“Recognizing the knowledge, innovations, practices, institutions and values of indigenous peoples and local communities, and ensuring their inclusion and participation in environmental governance, often enhances their quality of life and the conservation, restoration, and sustainable use of nature, which is relevant to broader society. Governance, including customary institutions and management systems, and co-management regimes that involve indigenous peoples and local communities, can be an effective way to safeguard nature and its contributions to people by incorporating locally attuned management systems and indigenous and local knowledge. The positive contributions of indigenous peoples and local communities to sustainability can be facilitated through national recognition of land tenure, access and resource rights in accordance with national legislation, the application of free, prior and informed consent, and improved collaboration, fair and equitable sharing of benefits arising from the use, and co-management arrangements with local communities.”* (IPBES. 2010. Summary for policymakers of the global assessment report on biodiversity and ecosystem services: p.20)

Several experts emphasized that it is no longer enough for conservation to *“just be inclusive or equitable. Wholly new conservation approaches are needed and Indigenous-led conservation is the only real hope to deliver the paradigmatic shift that is needed.”* The literature supports this analysis and was a common theme across the interviews. Data demonstrating that Indigenous Peoples, with secure land rights, achieve conservation outcomes on par, or better, than private or public managed protected areas, and

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<sup>2</sup> See: a) IPBES (2019): Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (editors). IPBES secretariat, Bonn, Germany. 1148 pages. <https://doi.org/10.5281/zenodo.3831673>; b) IPCC, 2022: Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. Cambridge University Press, Cambridge, UK and New York, NY, USA, 3056 pp., doi:10.1017/9781009325844; c) IPCC. 2019. Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems; d) <https://ipccresponse.org/home-en>



usually at a much lower cost, is rich. And these data underscore that rising to the planetary crisis before us mandates recognition that the conservation strategies and tools deployed by the West are often more narrowly defined than those relied on by Indigenous cultures, and thus limited in their potentiality, scale of impact, and the durability of outcomes. For example, a 2020 study in *Frontiers in Ecology and the Environment* reported that Indigenous lands, both ancestral and titled, are the most biodiverse and best conserved on the planet (see Appendix Two).

Whereas modern conservation turns to population or habitat management plans, protected or conserved areas, Indigenous practitioners recognize the importance of stewardship and guardianship of their relations as well as of culture and ceremony, the need to embody and put into practice the wisdom of Elders and youth, and turning to Native languages for the 'operating instructions' to properly care for the natural world. It is important to note, that both worldviews rely on science, albeit science that differs in both its timeframe and point of view. Indigenous science draws from observational data gathered, refined, interpreted, and applied since time immemorial; the West's scientific model is one that is emergent, evolving over a few hundred years.

Western science reifies the importance of objectivity and thus works to remove the human point of view from the equation, whereas Indigenous science emanates from immersion and mutuality in and with the natural world. While at the surface Indigenous and Western science appear different, they in fact have much in common. Both seek to understand how the world works and what beneficial learnings for humanity can be derived from this understanding. Western science looks at the natural world through the lens of energy and matter and strives to determine the forces that shape or animate it. Indigenous science sees the land as spirited and derives knowing through a practice and philosophy of kinship; a belief system undergirded by the fact that we and the wild world are in relationship, interconnected—our actions affecting the order of things through cycles of mutuality. Alongside this observational data, Indigenous science elevates important questions that are moral or ethical in nature; the area where ultimately the planet's viability hangs in the balance. Clearly, one of the big questions that Western conservation and its allies in the philanthropic community need to wrestle with is how could/should conservation be done differently and how can Indigenous science, stewardship, and governance inform the evolution or emergence of a new conservation paradigm, one more relevant to the realities and opportunities inherent in the present moment and the conservation challenges we all face.

3. **Not All Indigenous-Led Conservation is Created Equal.** Conversations with project participants elevated the fact that strategic conservation philanthropy and its theories of change, prioritized strategies and tactics, and focus on measurable outcomes, can result in the need to focus primarily on the overlap in the *“Venn diagram between Western and Indigenous-led conservation.”* Authentic Indigenous-led conservation on the other hand, amplifies a very different set of priorities and approaches; priorities and approaches that at first glance might not look like conservation, but in fact are, and are key to systemic conservation outcomes and enduring transformational change, i.e., youth empowerment, language revitalization, ceremony, etc. *“Looking for overlap with a given project through a conservation lens can only go so far in realizing the power of truly authentic Indigenous-led conservation. Can we invest in Indigenous projects, projects that are inherently holistic, and invest from a bigger than conservation perspective?”* According to another expert, the siloing evidenced in conservation and philanthropy is one of the biggest obstacles to advancing Indigenous-led conservation and results in philanthropy falling short and not achieving what systemic approaches offer due to the narrow, or binary, focus that tends to typify the West. *“Investment in what the Tribes see as important, rather than what conservation sees as important, has the potential to deliver exponentially greater impacts for climate, biodiversity—what conservation funders like Hewlett care about—while also delivering critical outcomes for community vitality, economic development, etc.; outcomes that are the very foundation of durability and transformational impact.”*

Learnings surfaced through the evaluation point to the importance of wrestling with the reality that not all Indigenous-led conservation is created equal. One of the experts summarized thinking expressed across many of the interviews succinctly: *“Realizing the very real power of Indigenous-led conservation to change the world, to save the world really, requires rethinking not just about who you invite to sit at the table or who you seat at the head of the table, but really the very table itself.”* Said another way, *“For many funders, investment in language revitalization, ceremony or engagement with our young people and Elders is not about conservation or a pathway to conservation outcomes. They couldn’t be more wrong. Conservation can’t happen without language. Ceremony is conservation.”*

One expert shared the words of an important Native leader as a road map for thinking about how to get to authentic Indigenous-led conservation: *“The world is ready for us to be Native again.”* She went on to make the case that conservation philanthropy needs to: *“Support Native people being Native again. Invest in Native people doing the things they want to be doing and that make sense to them. Take the risk. Sit in the scary place that your grant might be counter to what you or your Board want. The biggest problem conservation faces is our whole style; the idea that we are going to put in a specific input and get out what we have set as the definition of conservation, and we do nothing that risks the outcome being something else. We have to take risks, we have to recognize that things might not work out, that what looks like failure is in fact success through Native eyes or down the road.”*

*We have to realize that even asking the question about best practices, formulas, case studies for success is a Western approach, a belief system that suggests there is one right outcome, one way of knowing.”*

4. **Durability of Any Conservation Outcome is Elusive in the Context of Today’s Political Reality.** If there is one thing learned through the Trump administration, it is that when the political winds blow hard, nothing is secure. Durability, meaning an ability for conservation to endure regardless of which political party is in power, is central to the Western Conservation Program’s strategy and embedded in many of its investments and grantee partners. While the evaluation surfaced meaningful evidence of not just impact, but transformational change across several components of Hewlett’s grantmaking in this space, several experts underscored that the truth of the matter is that in our highly politicized society and polarized zeitgeist, there is little that can’t be overturned, undermined, or ignored. *“There is no doubt that a change in the Administration will result in all our gains being overturned. Nothing is solid enough to not be smashed. But this is true of all progressive policies in a conservative administration. State level work feels more durable.”*

That said, deeper conversation and reflection on the question of durability across the interviews amplified the need to think outside the Western conservation box and acknowledge the conclusions international experts and scientists have come to in recent years. Investing in the legal recognition and protection of Indigenous Peoples’ territorial rights including their right to self-determination, sovereignty, and self-strengthening of traditional knowledge and governance systems is foundational to achieving conservation targets. Investments that secure land tenure, and thus sovereignty, are increasingly seen as one of the more effective global conservation strategies possible (see Appendix Two). While the connections between sovereignty and land and water protection might not be immediately obvious, several of the interviewees pointed out that the bulwark Tribal sovereignty presents against unfettered access to 'resources' is abundantly clear to the strategists and lobbyists advancing the conservative agenda. *“The protection of sovereignty writ large may not appear to be a conservation issue; it is. There is a reason leading conservative strategists are not happy about it and are actively working to undermine it.”<sup>3</sup>*

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<sup>3</sup> See reporting on the current Supreme Court case, *Haaland v. Brackeen*, which several interviewees pointed out is not just about the welfare of Native children, but more accurately a Trojan horse aimed at advancing a conservative agenda and dismantling Tribal sovereignty and the power implicit in it to protect land: <https://crooked.com/podcast-series/this-land/> or a recent piece on National Public Radio: <https://www.npr.org/2022/11/30/1139983308/the-indian-child-welfare-act-is-before-the-supreme-court-what-is-it>

Continued investment in building Indigenous power, agency, and capacity, and deepening the conversation about decolonization, were seen by several project participants as long-term investments that will endure and will create the necessary socio-political conditions for durability of progressive policy change and the foundational context requisite for conservation gains to take root. *“Now more than ever invest in Tribes because lord knows we’ve been dealing with [political headwinds] for generations. I always point to the unique legal and political power that Tribes bring to the table; philanthropy has not understood that for too long. Tribes endure and there are a lot of reasons for that: Nation-to-Nation relationships; state level relationships; the fact that we provide so much vital infrastructure to manage land, water, wildlife—none of which is susceptible to politics because of who Tribes are [because Tribes are sovereign]. This is one of the most important reasons to elevate [all forms of] Tribal investment: Tribes are the most important frontline protectors and advocates on [everything] conservation philanthropy cares about regardless of who’s in charge.”* In response to the durability question and the challenge of maintaining political momentum for Indigenous-led conservation, several of the interviewees also underscored the fact that land ownership is sacrosanct in this country and thus, strategies that get more land into the hands of sovereign Tribal Nations and under the influence of Indigenous guardianship and governance systems, may offer one of the most potent strategies for maximizing conservation impact and ensuring its durability.

- 5. The Western Conservation Program’s Grantmaking Ethos & Practice is Appropriate & Effective.** Broadly speaking, interviewees were highly supportive and laudatory of the Western Conservation Program’s commitment to Indigenous-led conservation. It was clear that for many, the success of the portfolio to date is directly related to the Program Officer’s integrity, intelligence, strategic mind, and trust-based approach to philanthropy. More specifically, deep appreciation was expressed for the commitment to reciprocal relationship, to asking what was working or needed, as opposed to coming in with a predetermined grantmaking strategy and set of requisite deliverables. Relationship, respect, and reciprocity are central to the Indigenous world view and there was high regard for the fact that this ethos is clearly expressed and embodied in the Western Conservation Program’s grantmaking. Several interviewees (Native and non-Native) noted how refreshing it was that the work wasn’t centered in the Program Officer or Hewlett, but rather in the people doing the work, avoiding the “white savior complex” they have experienced as all too common in conservation and philanthropy: *“One of the biggest things [for Indian Country] is being able to build trust. To be able to say with confidence this is how we do business, this is what we want to do, and this is how we are going to do it. Hewlett has been open, accepting, and encouraging of this approach. They have been on the ball with asking ‘What do you need? Hewlett provides more than resources.’ This is huge, given our limited capacity, to have a partner step in and say what else do you need?”*

Beyond funding, Indigenous grantees also expressed deep appreciation for the connections and introductions made to other funders and the generosity of spirit evidenced in taking the time necessary to explain what, for those new to philanthropy, is an often dense, impenetrable, and at times unintelligible process. Several Indigenous grantees shared that Hewlett's investment, coupled with introductions and connections to other potential donors, resulted in the ability to leverage grants and secure additional investments in core projects and organizational priorities.

Drawing on Hewlett's commitment to organizational effectiveness (OE) and capacity building was seen as a brilliant way to not only bring much needed capacity into the Indigenous-led conservation arena, but also honor and elevate the wisdom of Indigenous defined conservation approaches through general operating support (GOS), rather than coming in with a predefined strategy and/or set of idealized outcomes. *"I have been so impressed with the Western Conservation Program's commitment to change things, to push the limits on what Hewlett can invest in and do, and I believe parts of the organization are changing, which is exciting and what needs to happen. Clearly to be successful in this work is not just about who you are granting to, but changing how philanthropy thinks and works."*

Philanthropic leaders in particular encouraged the Program to use the programmatic refresh as an opportunity to think about how grantmaking approaches and strategies can be even further indigenized:

*"One of the most difficult things for strategic conservation funders is, take language revitalization as an example, that culture is not at all separate from the work of Indigenous-led conservation. In fact, it's core to it because that knowledge, that way of seeing the world, is carried in the language, in the culture. If you are real about wanting to facilitate Indigenous-led conservation, the boundaries Western strategic philanthropy, and science in particular, require don't make sense and need to be broken down. Reducing things to what you can test, to their smallest pieces, is antithetical to the Indigenous world view. When it comes to working with Indigenous Peoples, if you want to empower Native Nationhood and an Indigenous approach to what we call conservation, culture needs to be restored and revitalized ... I am a little skeptical in how far foundations can go in this space. Looking for areas of overlapping interest makes a lot of sense as a first step ... but ultimately can we invest in Indigenous projects, projects that are inherently holistic, and invest from a perspective that is bigger than conservation?"*

- 6. The Western Conservation Program Delivered Meaningful Impact in the Indigenous-led Space.** Unanimity was evidenced across the interviews that Hewlett's investment in Indigenous-led has moved the conservation needle on several fronts. In the policy arena, the work and success around dam removal on the Klamath was held up as a shining example of what is possible

when philanthropy deeply invests in Indigenous-led conservation and when those commitments are long-term. Increased investment in the systems and process to get land back into Tribal stewardship and management, such as that evidenced at Bears Ears, was also pointed to as proof of durable change, transformation of political climates, and the amplification and authentication of the ecological case for Indigenous-led conservation. Movement on Snake River dam removal was suggested by interviewees as another significant win in the making, and worthy of long-term commitment.

The vital importance of investing in Indigenous capacity at the individual, organizational, and Nation level was underscored in many of the conversations we had. Overcoming the impacts of colonization was described as ultimately about building power, strength, and agency. Hewlett's investment in Indigenous Peoples *"that is about us, for us, and by us"* was highlighted by many of the experts we spoke with as a way in which the Western Conservation program is actioning an *"indigenized or decolonized philanthropic model"* and delivering outsized conservation outcomes, while also implementing a grantmaking strategy that is *"field changing."* Hewlett's movement in this direction is unique in the field, recognized as *"a more relevant version of strategic or impact-driven philanthropy"* and core to establishing a critical foundation for enduring, transformational change and conservation impact: *"I really like how Hewlett is bringing things together. Their approach seems to suggest: I am not just going to pick people and give them money. I like the link to unrestricted funding, to creating a strategic framework in a shared 'why' but then providing flexibility around the 'what,' 'how,' 'when,' etc. The use of Organizational Effectiveness resources in creative ways [that effectively function as general operating support] is very positive. Embedded is a recognition of the enormous challenge increased focus and investment in Indigenous-led conservation puts on Indigenous leaders, organizations, projects, and the fact that Native leaders carry a far greater burden."*

Finally, experts spotlighted that Hewlett's Indigenous-led conservation strategic vision and trust-based relationship with its non-Native grantees, has resulted in an evident increase in these organizations' ability to be authentic and respectful allies to Indigenous partners and Nations. It was also noted that this subtle influence has inspired organizational learning and evolution in commonly-held conservation theories of change and tool boxes. All of which hints at the possibility of a larger change in how conservation is done in North America—a change, according to the literature, that is requisite for effectively staving off the dire predictions associated with exponential biodiversity loss and the spiraling effects of climate change. These findings/data were underscored in a number of the interviews. *"We need to invest in non-Native organizations that are pushing the limits of indigeneity and indigenizing conservation; organizations that recognize and are invested in the need to do more than just try and set equitable and inclusive tables. The future is about a different power dynamic; it is about giving up power and investing in a way that*

*recognizes Western conservation doesn't control the outcome. It is important that Western conservation commit and continue to figure out how to work alongside Indigenous organizations. If we are always apart then we are perpetuating the problem, we are not forging a meaningful path to reconciliation. As one of my colleagues says, the biggest crises we face is not an ecological or climate crisis, it is a relationship crisis."*

#### IV. RETROSPECTIVE & PROSPECTIVE RECOMMENDATIONS

TERRAMAR's evaluation of the Hewlett Foundation's support, and investment in Indigenous-led conservation via its Western Conservation grantmaking program, is intended to inform the 2023 Program refresh. Our findings and recommendations are therefore both retrospective and prospective and they again, like the evaluation methodology, emerged from a focus on consistent patterns in external perspectives on the success and impact of the Western Conservation Program's investment in Indigenous-led conservation and suggestions for future directions. This set of recommendations also draws on leading edge thinking and practice in international and national Indigenous-led conservation. Finally, per the Hewlett Project Team's request, the recommendations are also informed from TERRAMAR's three decades experience engaging in all aspects of Indigenous-led conservation from academic research, to grantmaking, to strategy and program design, to implementation of projects on the ground in Indian Country.

Thematically the recommendations fall into three broad categories: 1) Relationship & Partnership and how these foundational values inform effective and enduring grantmaking with Indian Country; 2) Voice and the importance of amplifying and sharing the 'why', 'what', and 'how' of work in Indian Country to provide catalytic leadership and inform the way conservation is done; and 3) Learning and deeper understanding is needed to ensure the potential of Indigenous-led conservation is fully understood, let alone realized.

This section provides a brief contextual description of these categories and then elevates a set of important questions or riddles to contemplate, potential next steps, as well as programmatic recommendations. As discussed in the report's introduction, these recommendations, much like the thematic learnings and findings, operate at multiple scales—the individual to the programmatic to the institutional—and levels of granularity that span ethos to practice to policy.

**RELATIONSHIP & PARTNERSHIP — Grantmaking with Indian Country:** It is interesting to reflect on the fact that philanthropy is broadly defined as 'love for humankind.' This is the perfect ethos to guide grantmaking practice with Indian Country, where success emerges



from relationship and needs to center in core values like respect and reciprocity. The interviews leave little doubt that Hewlett’s approach to Indigenous-led conservation is informed by the art and practice of authentic relationship and trust-based philanthropy—an approach that our research and experience suggest is not just crux to equity and justice, but as significantly, to the impact and durability of partnership. Evidence of Hewlett’s thoughtful, self-critical, innovative, and learning-based approach to Indigenous-led grantmaking came through strongly in the interviews and in our review of current grants, the simplicity of the proposal and reporting processes, and the heavy reliance on general operating support. All of these factors significantly enable Indigenous partners to advance strategies and projects that are relevant and integral to their worldview and conservation vision. It is also important to note the work the Western Conservation Program dedicated in 2021-2022 to the development of relevant metrics. The process of indigenizing learning and evaluation through the co-creation of metrics with grantees, including Indigenous grantees, is nothing short of groundbreaking and a body of work philanthropy and the conservation field more broadly, could stand to investigate and learn from (See [Building Conditions for Enduring Conservation Outcomes-January 2022](#)).

These details of the Western Conservation Program’s grantmaking strategy reflect a commitment to relationship and partnership—and maybe most important to Indigenous grantees, a level of humility and trust that conveys a powerful and welcome message akin to: *“You know best what it will take to secure your homelands and those beings and places we both care about.”* It cannot be overstated how critical it is for the Hewlett Foundation to stay the course on Indigenous-led conservation—not just who is funded, but how. Hewlett should keep going, while also exploring and investing in new strategies that even further deepen relationships with individual grantees and field-wide influence.

#### RECOMMENDATIONS & NEXT STEPS:

1. ***Stay the Course & Double Down.*** The Western Conservation Program’s grantmaking ethos and approach are effectively elevating and advancing Indigenous-led conservation for the benefit of people and nature. The message on all fronts is “keep going” regardless of programmatic or staffing transitions and to consider applying this emergent approach to relationship-based grantmaking across the whole of the Environment Program and the Hewlett Foundation more broadly. How might it support the larger program’s vision and theory of change? How might it increase the Foundation’s impact, influence and/or relevance? Investments should continue to emphasize General Operating Support (GOS) and Organizational Effectiveness (OE) and explore other mechanisms to support collaboration between Native and non-Native organizations and Indigenous capacity-building.



2. **Go Deeper.** The amount of philanthropic dollars directed to Indigenous-led conservation are anemic, globally and in the Western United States, yet there is demonstrable evidence of its outsized impact and the fact that without Indigenous guardianship and secure land tenure, we will not succeed in mitigating climate change, preventing the loss of a million species, or forestall the unravelling of ecological integrity. Thought leaders, nation-states, and philanthropic leaders globally have recognized that the state of the planet mandates we double-down on investments in Indigenous-led conservation and amplify the vitality of this paradigm for all life on Earth. Many of the interviews called for a significant increase in Western Conservation Program investment towards Indigenous-led conservation over the next five years. One philanthropic leader and expert in the field made the case that *“the conservation reality and power of Indigenous-led conservation suggests that a ‘significant’ increase in Hewlett giving should be on the order of half of total annual giving.”* It was also suggested that Hewlett could explore increasing its commitment to Indigenous-led conservation by creating a portfolio that spans the Western Conservation and Climate Programs.
  
3. **Be Explicit about the Depth of Commitment to the Worldviews, Values & Historical Realities that Undergird & Inform Indigenous-Led Conservation.** The desire for the Hewlett Foundation to make an explicit and visible commitment to decolonized philanthropic models and conservation paradigms was expressed in a significant number of the interviews. Similarly, a Hewlett Foundation Land Acknowledgment was suggested consistently as a critical next step and expression of respectful and reciprocal relationship with Indigenous partners. While Land Acknowledgement holds differing levels of importance to different Peoples and Nations, it has been suggested and amplified as a critical step in reconciliation and recognizing the importance of reconnecting the Land with its original guardians and stewards. Development of a Hewlett Indigenous Land or Territorial Acknowledgement that names the fact that Indigenous Peoples have been dispossessed from the Homelands and Territories upon which the Hewlett Foundation was built and currently occupies and operates was described as an important next step by the majority of the project participants and a critical way to go deeper. The Statement should be informed by outreach to Indigenous communities with whom the Foundation intends to maintain a relationship and could be displayed prominently at the Foundation offices and on all public communications. The Foundation should be explicit in knowing and communicating its intention to learning and understanding the history of the Indigenous Peoples of the area—past, present, and emerging—and what concrete action is in play in relationship with and support of Tribal Nations and Indigenous organizations and communities.

Similarly, the Land Back (#LandBack) movement is recognized as both a path to recognizing Indigenous rights and Tribal sovereignty, and a conservation strategy that offers a unique intervention pathway to durable conservation outcomes by maintaining progress and momentum regardless of shifts in political power or priorities. The idea of Land Back is not a new one; it is effectively a reconciliation or rights-based strategy that has served as a call to action for Native People since the earliest days of colonization and genocide (see Appendix Three for a History of Land Back). It is also important to note that Land Back is not singular in its approach; it means different things to different people and represents a typology of approaches. For some Indigenous communities, co-management or the exercise of language is Land Back; for others, nothing less than the return of federal lands to a sovereign nation will suffice: “The movement goes beyond the transfer of deeds to include respecting Indigenous rights, preserving languages and traditions, and ensuring food sovereignty, housing, and clean air and water. Above all, it is a rallying cry for dismantling white supremacy and the harms of capitalism.”<sup>4</sup>

A key next step for the Western Conservation Program is to establish a definition of and position on Land Back. A Hewlett-specific Land Back investment typology should be a component of the 2023 Western Conservation Program refresh. Questions about Hewlett’s position will no doubt arise with predictable regularity in the Indigenous-led conservation space, especially as #LandBack continues to gain visibility and momentum.

Finally, it is important to note that conversations about decolonization, Land Acknowledgement, and Land Back are at the heart of Indigenous-led conservation because they are in effect a reflection of the history of erasure, genocide, dispossession, and centuries of efforts dedicated to truth telling critical to the long process of healing, reconciliation, and cultural revitalization. A willingness to enter these conversations with an open heart and mind, regardless of how hard or challenging they might be, is one of the highest forms of respect and expressed commitment to all that Indigenous-led conservation is and can be for all people and the planet.

**VOICE — Tell the Story of the Nature of the Work in Indian Country:** Indigenous-led conservation is at its core about doing conservation differently. It is about rethinking and reframing goals and expected outcomes, theories of change, and strategies through an Indigenous worldview and doing so in recognition that the Western conservation paradigm is limited in its ability to redress the planetary crisis, whereas an Indigenous-led conservation approach represents one of the most promising courses of action. Authentic

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<sup>4</sup> <https://grist.org/fix/justice/indigenous-landback-movement-can-it-help-climate/>

Indigenous-led grantmaking is therefore at its core about a different set of priorities and increased investment in projects, programs, and organizations that are by, for, and led by Indigenous Peoples. Central, is recognition that investment in youth and Elder engagement, Nation-to-Nation gatherings, language and ceremony, are in fact investments in conservation and foundational to moving the needle on the biodiversity and climate crises.

The Western Conservation Program's heavy reliance on GOS and regranters is a big, bold step toward authentic Indigenous-led conservation. Through this grantmaking approach, the Program is in effect acknowledging that the Indigenous lens is much broader than a project-based lens and maybe even more importantly, that this worldview, and resultant conservation paradigm, are central to realizing Western conservation goals like the protection of biodiversity, CO2 mitigation, and retention of ecological integrity. For example, Hewlett's investment in the Colorado Plateau Foundation, which operates as a regranter to Indigenous-led nonprofits in one of the strategy's priority geographies, is in effect an investment in language preservation as a vessel of knowledge essential to desired conservation outcomes, and an implicit acknowledgement that sustainable community-based agriculture and conservation is about relationship with the Land, which acts as an avenue for reconnecting and exercising the conservation power of Indigenous land guardianship and stewardship. Native American Rights Fund support is an investment in Tribal sovereignty: an investment in legal action directed at securing Indigenous rights to clean water, healthy fish and wildlife, and land. The power and centrality of Tribal sovereignty to impactful and durable conservation is indisputable, yet only emergent in conservation philanthropic circles at present.

#### RECOMMENDATIONS & NEXT STEPS:

1. ***Amplify & Direct Hewlett's Voice & Catalytic Leadership.*** The Western Conservation Program's leadership and catalytic influence was recognized and lauded in nearly every interview and an urgent call for larger organizational leadership in the Indigenous-led space was evidenced across the participants. The important take-away is that the field sees the Hewlett Foundation as a vital leader and catalyst for a much-needed transformation in the nature and practice of conservation and conservation philanthropy. The Western Conservation Program has facilitated philanthropic conversations about Indigenous-led conservation at funder convenings including the Biodiversity Funders Group and the Water Table; it has brought theoretical and practical learning into the conservation and philanthropic community through reports, webinars, and convenings; and provided catalytic OE grants to big green groups to build their fluency and facility with Indigenous-led conservation, resulting in transformative internal organizational conversations, diversification of staff, and development of all new Native America programming. The work in the Klamath is arguably one of the largest conservation victories in recent years, and only possible

in large part because of Hewlett's 30-year investment in authentic Indigenous-led conservation. It is vital to maintain and expand this philanthropic long-view and continue to share and give voice to the practices and learnings emerging from the relational centering of Hewlett's Indigenous-led conservation investments with the philanthropic and conservation community. As the saying goes: "Say it loud. Say it proud."

Moving forward it is important that: a) this catalytic leadership role is maintained and potentially expanded, and b) these conversations, learnings, and practices are brought into other critical conservation spaces like climate, and more specifically into climate mitigation work. Hewlett should intentionally share its learnings among other funders through blogs, op-eds, and philanthropic convenings.

LEARNING & IMPACT — Research & Policy Needs in Indian Country: The evaluation, as well as the TERRAMAR experience in Indigenous-led conservation, highlighted a number of important and interesting research and policy needs that the Western Conservation Program could uniquely contribute to, which would also serve to advance the field by increasing awareness and investment in the potential of Indigenous-led conservation to redress the most serious environmental challenges we are staring down.

#### RECOMMENDATIONS & NEXT STEPS:

1. ***Fund & Communicate the Case for Indigenous-Led.*** Indigenous-led conservation's ability to deliver ecological outcomes is not mainstreaming fast enough, given the degree and rate of planetary unravelling. Fund the research and data synthesis needed to make the climate case for Indigenous-led conservation as a mitigation strategy as well as its powerful role in the protection of ecological integrity and biodiversity conservation. Hewlett's years of work and investments in Canadian boreal forest conservation offers a powerful case study.

Further, while the power of Indigenous science is widely avowed, and there is growing recognition of the importance of braided knowledge systems or "two-eyed seeing" and the creation of "ethical space," many questions remain about the 'what,' and 'how' of implementation. The weaving of Indigenous and Western science also requires the development of clear data sovereignty principles and practices. Invest in a multi-faceted, multi-platform, targeted communication strategy that creatively articulates the 'why' of Indigenous-led conservation and makes a compelling and inspiring case for implementation.

2. ***Invest in Indigenous Thought Leadership.*** In-depth legal and political analysis of the Indian Child Welfare Act (ICWA) case, recently heard by the Supreme Court, highlights the fact that the conservative agenda sees Tribal sovereignty as one of the most significant and largest obstacles to codifying its agenda. Depending on how this case is decided, it is a very real possibility that the conservation vision Tribes and Hewlett grantees and advocacy groups are working to advance could be undone. State policy represents an important tactic to consider in order to protect or restore Tribal sovereignty and serve as a backstop, while a longer-term campaign centered in legislative protections for sovereignty is developed.

An independent think tank or policy center would serve as a powerful mechanism for identifying and resolving some of these questions and others inherent in future articulation, amplification, and implementation of sovereignty, including the ‘why’, ‘what’, and ‘how’ of Indigenous-Led conservation. Hewlett investment in the thought leadership needed to realize the policy and political opportunities of Indigenous sovereignty would simultaneously help to advance Indigenous-led conservation’s potential. Invest in the design and development of an independent think tank or policy center tasked with identifying and addressing the biggest questions and obstacles to Tribal sovereignty and Indigenous-led conservation in North America.

## V. LAST WORDS

It has been a tremendous honor to evaluate elements of the William and Flora Hewlett Foundation’s Western Conservation Program and to be steeped in the promise of a wholly different approach and potential future for Western conservation. I can’t say thank you enough to the individuals who generously shared their hearts and minds with me in the interest of forging a smarter, stronger, more enduring body of work for the Hewlett Foundation and the larger field. The conservation opportunity inherent in Indigenous-led conservation is of global significance and also vital to planetary survival. In the current context, with growing recognition of the power and importance of Indigenous world views, leadership, and approaches, there is arguably no better time to invest in amplifying Indigenous-led conservation. The urgency and centrality of this work as our planet hangs in the balance cannot be overstated. And the promise of what it would be for all of us to remember what it is to live in respectful and reciprocal relationship with the natural world once again is breathtaking and deeply hopeful.



# INDIGENOUS-LED CONSERVATION

A Strategic Evaluation of the Western Conservation Program:  
Current Learnings & Future Directions

## APPENDICES

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### APPENDIX ONE: EVALUATION METHODOLOGY

**Evaluative Framework & Approach.** Strategic evaluation of the William & Flora Hewlett Foundation's Western Conservation Program's investment in Indigenous-led conservation was informed by TERRAMAR and the Hewlett Project Team co-creating an evaluative frame centered in several guiding questions:

- ✓ Can Indigenous-led conservation move the needle on the biodiversity & climate crisis? If so, how?
- ✓ What does Indigenous-led conservation look like today in the United States? How sensitive is current momentum to the politics of the day?
- ✓ What new capacity (institutional, legal, communications, movement-building, etc.) is needed to accelerate impact?
- ✓ What is Hewlett doing in this space? What is working? What isn't?

✓ What should Hewlett do next? What should Hewlett stop doing?

The Team recognized the importance of articulating a set of values to undergird the evaluative process. A depiction of a Niitsitapi Seasonal Round (See figure below) which encapsulates the values that inform Blackfoot Ways of Knowing was drawn on as a spark and reflection point to surface principles important to the Team and foundational to the evaluative approach. Honesty, integrity, inclusion, bravery, vulnerability, and humility were prioritized and discussed to arrive at shared definitional understandings. These values guided the design of the evaluation strategy and its implementation.

A set of questions (detailed below) were developed to guide the expert interviews and get explicit about the types of information and learnings critical to the questions the Western Conservation Program is currently sitting with, in addition to feeding into the 2023 strategy refresh.

Inquiry focused on a broad range of questions which included the following: 1) assessment of grantmaking strategic strengths and weaknesses; 2) identification of areas for continued and/or new investment; 3) areas where investment should stop; 4) examination of the influence Hewlett's grantmaking has had on the conservation and philanthropic fields to date; 5) appraisal of blindspots and unintended consequences; and 6) predicted durability of outcomes. The evaluation not only worked to synthesize and unpack strategic learnings, but also pivoted from a retrospective look and current reflections about grantmaking strengths and weakness to recommendations and prospective next steps to increase the authenticity, impact, durability, and influence of Hewlett investment in Indigenous-led conservation in the coming years.

Expert interviews (via zoom) served as the primary data source and drew from diverse points of view, experience, and areas of expertise. These voices were assured anonymity to build a trusted and candid interview space. The 17 evaluation participants included current grantees, Native and non-Native conservation organizations, thought leaders and influencers in the Indigenous-led conservation field, foundation partners, and independent experts and leading academics. Their voices were central to this evaluation and are reflected in italics and highlighted in the report. In some cases, quotations were lightly edited for clarity. In addition to the expert interviews, the evaluation drew on materials provided by the

Hewlett Team, which included a number of active and inactive grants to Indigenous-led nonprofits, conservation advocacy groups, Tribes, and funder collaboratives, as well as programmatic materials developed by or for the Foundation.

**Interview Guide.** The Team co-created an interview guide consisting of a set of framing questions that could provide a loose, replicable structure to the expert interviews. These framing questions were as follows:

- ▶ For grantees only: How has Hewlett's investment in your Indigenous-led conservation efforts changed the nature of your work and its impact?
  - How has it changed your organization? You personally and/or professionally?
  - What investments need to be sustained or deepened? What should Hewlett stop doing?
  - Were there any unintended consequences of Hewlett's investment in your work? Positive or negative?
- ▶ For partners and thought leaders: What have you observed about Hewlett's investments thus far in Indigenous-led conservation, if anything?
  - How has it affected the field? Policy outcomes?
  - What should Hewlett stop doing? What should Hewlett double-down on? Or expand into?
- ▶ What role does Indigenous-led conservation play in meeting the challenges of the biodiversity and/or climate crisis? Is there research or case studies that you draw on to support the critical role ILC plays?
- ▶ Based on your experience, what are the critical elements or enabling conditions for ensuring that Tribes and/or Indigenous-led NGOs can lead on conservation?
- ▶ What obstacles have you seen/experienced that prevent/hinder conservation organizations from fully supporting authentic Indigenous-led conservation?
- ▶ Looking forward, where do you think the most significant opportunities for elevating and deepening meaningful investment in Indigenous-led conservation exist?



- What organizations are best positioned to drive Indigenous-led conservation forward at the federal and state level?
- What opportunities are primed for engagement now? Where and with which partners?
- ▶ The current national political climate is demonstrably committed to Indigenous-led conservation. What do you think can be done at the federal level to secure current support and wins, and pave the way for ongoing success regardless of who wins the 2024 election? At the state level?

## APPENDIX TWO: THE ECOLOGICAL CASE FOR INDIGENOUS-LED An Annotated Bibliography

**PURPOSE & APPROACH.** The last three-five years have evidenced exponential growth in interest in Indigenous-Led conservation across a range of stakeholders from donors to decision-makers, academics to agencies, governments to NGOs. In part this is explained by tragic yet catalytic events, like the murder of George Floyd in 2020, that unleashed the power of truth and history like a battering ram, breaking down binary barriers that have traditionally siloed social justice and conservation. This seismic shift in the cultural zeitgeist arguably has also been driven by a growing body of scientific data blazoning the severity of the biodiversity and climate crises and spotlighting the need for new conservation models and more importantly the need to query how approaches like Indigenous-led and community-driven conservation have managed to secure the largest remaining reserves of biological diversity on the planet.

The evidence that Indigenous-led conservation and strengthened Indigenous rights and secure land tenure leads to protection of biological diversity, increased climate resilience and mitigation, and improved ecological integrity grows larger and more irrefutable. The goal of the annotated bibliography presented here is to provide a high-level synthesis of some of the best resources (published and grey literature) for gaining deeper insight into the potential contribution that investing in and elevating Indigenous-led conservation, alongside correlated efforts to strength the rights, tenure, and management roles of Indigenous and local communities, can offer those interested in biodiversity conservation, culture revitalization, climate resilience and reduced emissions from deforestation and forest degradation. We provided brief abstracts for published papers to facilitate review. Finally, we imagine that this annotated bibliography can also help guide the Hewlett Foundation's future research priorities and areas for deeper inquiry in the Indigenous-led space.

The published and grey literature relevant to Indigenous-led conservation and the related topic of rights-based conservation is huge: a recent meta-study identified more than 6,000 titles. This bibliography by comparison is by no means comprehensive; it is simply a start. Our compilation efforts were guided by outreach to and interviews with experts,

as well as non-exhaustive keyword searches of publication databases, with an emphasis on works published within the last five years. A thorough review of all articles determined to be potentially relevant was not undertaken and we worked to narrow the focus to research and writings centered in answering the question: Can an ecological case for Indigenous-led conservation be substantiated? Does a body of science in this space exist and is there conclusive data at global, regional, and/or national scales? The answer to these questions is 'yes.' A few points of note: 1) the bulk of the research is global in focus and/or centered in the biodiversity rich regions of the planet; and 2) Indigenous-led conservation and social justice cannot be decoupled. While a clear ecological case for Indigenous-led conservation exists, the ability to implement these models is still about equity and justice. The conservation potential of Indigenous-led approaches is inextricably linked to Indigenous Peoples' rights and thus authority to draw on their Indigenous science, stewardship and governance systems to inform conservation praxis and practice.

## PUBLISHED & GREY LITERATURE

Armstrong, C. G., et al. (2021). "Historical Indigenous Land-Use Explains Plant Function Trait Diversity." *Ecology and Society* 26(2): 6.

Human land-use legacies have long-term effects on plant community composition and ecosystem function. While ancient and historical land use is known to affect biodiversity patterns, it is unknown whether such legacies affect other plant community properties such as the diversity of functional traits. Functional traits are a critical tool for understanding ecological communities because they give insights into community assembly processes as well as potential species interactions and other ecosystem functions. Here, we present the first systematic study evaluating how plant functional trait distributions and functional diversity are affected by ancient and historical Indigenous forest management in the Pacific Northwest. We compare forest garden ecosystems - managed perennial fruit and nut communities associated exclusively with archaeological village sites - with surrounding periphery conifer forests. We find that forest gardens have substantially greater plant and functional trait diversity than periphery forests even more than 150 years after management ceased. Forests managed by Indigenous peoples in the past now provide diverse resources and habitat for animals and other pollinators and are more rich than naturally forested ecosystems. Although ecological studies rarely incorporate Indigenous land-use legacies, the positive effects of Indigenous land use on contemporary functional and taxonomic

diversity that we observe provide some of the strongest evidence yet that Indigenous management practices are tied to ecosystem health and resilience. <https://doi.org/10.5751/ES-12322-260206>

Benyei, P., et al. (2020). "Storing and sharing: A review of indigenous and local knowledge conservation initiatives." *Ambio* 49(1): 218-230.

Despite its relative adaptive capacity and its many values, indigenous and local knowledge (ILK) is rapidly eroding. Over the past decades a myriad of efforts have emerged to prevent this erosion. In this work, we reviewed and systematically coded 138 ILK conservation initiatives published in academic papers in order to explore trends in participation, digitalization, timing, location, and approach of the initiatives. We also explored factors influencing initiative inclusiveness. Our findings reveal that ILK holders are generally absent from most phases of the studied initiatives, although IT-based and in situ initiatives (i.e., education and community based conservation) appear as the exceptions. We also found that ex situ initiatives (i.e., research/documentation and policy/legislation efforts) are predominant, despite the challenges they reportedly face. These findings call for re-formulating the ways in which ex situ ILK conservation is done and for supporting in situ and IT based initiatives, as they offer the potential to lead the participatory turn. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6889095/>

Birss, M., et al. (Summer 2022). "The Business Case for Indigenous Rights. *Stanford Social Innovation Review*. [https://ssir.org/articles/entry/the\\_business\\_case\\_for\\_indigenous\\_rights#](https://ssir.org/articles/entry/the_business_case_for_indigenous_rights#)

Büscher, B., et al. (2017). "Half-Earth or Whole Earth? Radical ideas for conservation, and their implications." *Oryx* 51(3): p. 407-410.

We question whether the increasingly popular, radical idea of turning half the Earth into a network of protected areas is either feasible or just. We argue that this Half-Earth plan would have widespread negative consequences for human populations and would not meet its conservation objectives. It offers no agenda for managing biodiversity within a human half of Earth. We call instead for alternative radical action that is both more effective and more equitable, focused directly on the main drivers of biodiversity loss by shifting the global economy from its current foundation in growth while simultaneously redressing inequality. <https://www.cambridge.org/core/journals/oryx/article/halfearth-or-whole-earth-radical-ideas-for-conservation-and-their-implications/C62CCE8DA34480A048468EE39DF2BD05>

Fa, J. E., et al. (2020). "Importance of Indigenous Peoples' Lands for the Conservation of Intact Forest Landscapes." *Frontiers in Ecology and the Environment* 18(3): 135-140.

Intact Forest Landscapes (IFLs) are critical strongholds for the environmental services that they provide, not least for their role in climate protection. On the basis of information about the distributions of IFLs and Indigenous Peoples' lands, we examined the importance of these areas for conserving the world's remaining intact forests. We determined that at least 36% of IFLs are within Indigenous Peoples' lands, making these areas crucial to the mitigation action needed to avoid catastrophic climate change. We also provide evidence that IFL loss rates have been considerably lower on Indigenous Peoples' lands than on other lands, although these forests are still vulnerable to clearing and other threats. World governments must recognize Indigenous Peoples' rights, including land tenure rights, to ensure that Indigenous Peoples play active roles in decision-making processes that affect IFLs on their lands. Such recognition is critical given the urgent need to reduce deforestation rates in the face of escalating climate change and global biodiversity loss. <https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/fee.2148>

FAO. (n.d.). "Forest governance by Indigenous and tribal peoples."

The forests of Indigenous and tribal territories in Latin America are key for mitigating climate change and conserving biodiversity. Indigenous peoples physically occupy 404 million hectares in Latin America, which is about one fifth of the total area of the region. This includes all the places where inhabitants self-identify as indigenous, not just those where they manage forests or territories collectively, and not all 404 million hectares are forested. Of the 404 million hectares, 237 million (almost 60%) are in the Amazon Basin and are covered by forests: that is an area larger than France, Great Britain, Germany, Italy, Norway, and Spain combined. Traditionally, due to a combination of factors, these forests have been much better protected than other forests in region. In 2019, the Intergovernmental Panel on Climate Change (IPCC) cited findings showing that strong territorial rights play a role in the lower rates of deforestation and forest degradation found on Indigenous territories. In just about every country in Latin America indigenous and tribal territories have lower deforestation rates than other forest areas. A study of intact forests released last year showed that, between 2000 and 2016, intact forests had declined worldwide. But forests managed by Indigenous Peoples had shrunk by far less than forests outside those areas: 4.9% compared to 11.2%. Threats to these forests are increasing and it can no longer be assumed that they will continue to be well protected without greater support. Almost half (45%) of the remaining intact forests (large undegraded forest areas) in the Amazon Basin are in indigenous territories. If the indigenous and tribal

territories in the Amazon Basin were to lose a significant portion of their forests, the evidence suggests this could lead to a tipping point, causing a chain reaction, reducing rainfall and increasing local temperatures, which, in turn, leads to greater forest loss due to droughts and forest fires. Indigenous and tribal communities continue to outperform managers of other tropical forests, but fires, mining, and unsustainable logging have taken an increasing toll on forests in almost all the Amazon Basin countries since 2012. Research and experience show that to effectively protect these forests in the future, and the livelihoods and cultures of the indigenous peoples who depend on them will require greater investment in and political support for: Collective territorial rights, Indigenous community forestry; Payment for environmental services; cultural revitalization and traditional knowledge; and strengthening indigenous and tribal organizations, including the equitable participation of women and youth. <https://www.fao.org/americas/publicaciones-audio-video/forest-gov-by-indigenous/en/>

Garibaldi, A., et al. (2004). "Cultural keystone species: implications for ecological conservation and restoration." *Ecology and Society* 9(3).

Ecologists have long recognized that some species, by virtue of the key roles they play in the overall structure and functioning of an ecosystem, are essential to its integrity; these are known as keystone species. Similarly, in human cultures everywhere, there are plants and animals that form the contextual underpinnings of a culture, as reflected in their fundamental roles in diet, as materials, or in medicine. In addition, these species often feature prominently in the language, ceremonies, and narratives of native peoples and can be considered cultural icons. Without these "cultural keystone species," the societies they support would be completely different. An obvious example is western red-cedar (*Thuja plicata*) for Northwest Coast cultures of North America. Often prominent elements of local ecosystems, cultural keystone species may be used and harvested in large quantities and intensively managed for quality and productivity. Given that biological conservation and ecological restoration embody human cultures as crucial components, one approach that may improve success in overall conservation or restoration efforts is to recognize and focus on cultural keystone species. In this paper, we explore the concept of cultural keystone species, describe similarities to and differences from ecological keystone species, present examples from First Nations cultures of British Columbia, and discuss the application of this concept in ecological restoration and conservation initiatives. <http://www.ecologyandsociety.org/vol9/iss3/art1/>

Garnett, S., et al. (17 July 2018). Indigenous peoples are crucial for conservation – a quarter of all land is in their hands. The Conversation [similar to article below but written for a popular audience] <https://theconversation.com/indigenous-peoples-are-crucial-for-conservation-a-quarter-of-all-land-is-in-their-hands-99742>

Garnett, S. T., et al. (2018). "A spatial overview of the global importance of Indigenous lands for conservation." *Nature Sustainability* 1(7): 369-374.

Understanding the scale, location and nature conservation values of the lands over which Indigenous Peoples exercise traditional rights is central to implementation of several global conservation and climate agreements. However, spatial information on Indigenous lands has never been aggregated globally. Here, using publicly available geospatial resources, we show that Indigenous Peoples manage or have tenure rights over at least similar to 38 million km<sup>2</sup> in 87 countries or politically distinct areas on all inhabited continents. This represents over a quarter of the world's land surface, and intersects about 40% of all terrestrial protected areas and ecologically intact landscapes (for example, boreal and tropical primary forests, savannas and marshes). Our results add to growing evidence that recognizing Indigenous Peoples' rights to land, benefit sharing and institutions is essential to meeting local and global conservation goals. The geospatial analysis presented here indicates that collaborative partnerships involving conservation practitioners, Indigenous Peoples and governments would yield significant benefits for conservation of ecologically valuable landscapes, ecosystems and genes for future generations. [https://www.researchgate.net/publication/326424629\\_A\\_spatial\\_overview\\_of\\_the\\_global\\_importance\\_of\\_Indigenous\\_lands\\_for\\_conservation](https://www.researchgate.net/publication/326424629_A_spatial_overview_of_the_global_importance_of_Indigenous_lands_for_conservation)

IPBES. (2019). *The Global Assessment Report on Biodiversity and Ecosystem Services*. Bonn, Germany, Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services [IPBES]. <https://ipbes.net/global-assessment>

This is shorter and more accessible: IPBES. (2019). *The Global Assessment Report on Biodiversity and Ecosystem Services: Summary for Policymakers*. Bonn, Germany, Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services [IPBES]. <https://zenodo.org/record/3553579#.Y3m5WuzMLt0>

Jacobs, L.A., et al. (2022). "Reimagining U.S. Federal Land Management through Decolonization and Indigenous Value Systems." *Journal of Park and Recreation Administration* 40 (1): 195-206.

U.S. Federal Land Management Areas (FLMAs) are grounded in settler colonialism, including Indigenous land dispossessions and violations of Tribal treaties. This critical thought-piece is written by Indigenous scholars to reimagine FLMAs (especially recreation areas) through decolonization and the Indigenous value systems embedded within the "four Rs": relationship, responsibility, reciprocity, and redistribution. We reweave conceptions about parks and protected areas, reimagine park management, and reconfigure management foci to reflect Indigenous value systems shared by Indigenous peoples. We emphasize a need for Tribal comanagement of FLMAs, the inclusion of Tribal land management practices across ecosystems, and the restoration of Indigenous land use and management rights. Land and recreation managers can use this paper to 1) decolonize park management practices, 2) understand how Indigenous value systems can inform park management foci, and 3) build a decolonized and reciprocal relationship with Tribes and their ancestral landscapes. <https://recpro.memberclicks.net/assets/Library/JPRA-v40n1-12Jacobs-10973.pdf>

Jones, B. (11 June 2021-online). Indigenous people are the world's biggest conservationists, but they rarely get credit for it—More than 30 percent of the Earth is already conserved. Thank Indigenous people and local communities. <https://www.vox.com/22518592/indigenous-people-conserve-nature-icca>

McGinn, M. (10 October 2022-online). "How tribal co-managing movements are transforming the conservation of public lands — Tribes are pushing for their voices, and traditional knowledge, to be part of decisions over their ancestral homelands. <https://www.popsci.com/environment/native-tribes-public-land-management/>

Mollett, S. & S. Sullivan. (2018). *Land Rights, Biodiversity Conservation and Justice*. New York: Taylor & Francis.

In the context of sustainable development, recent land debates tend to construct two porous camps. On the one side, norms of land justice and their advocates dictate that people's rights to tenure security are tantamount and even sometimes key to successful conservation practice. On the other hand, biodiversity protection and conservation advocates, supported by global environmental organizations and states, remain committed to conservation strategies, steeped in genetics and biological sciences, working on behalf of a "global" mandate for biodiversity and climate change mitigation. *Land Rights, Biodiversity Conservation and Justice* seeks to illuminate struggles for land and territory in the



context of biodiversity conservation. This edited volume explores the particular ideologies, narratives and practices that are mobilized when the agendas of biodiversity conservation practice meet, clash, and blend with the demands for land and access and control of resources from people living in, and in close proximity to, parks. The book maintains that, while biodiversity conservation is an important goal in a time where climate change is a real threat to human existence, the successful and just future of biodiversity conservation is contingent upon land tenure security for local people. The original research gathered together in this volume will be of considerable interest to researchers of development studies, political ecology, land rights, and conservation. <https://www.routledge.com/Land-Rights-Biodiversity-Conservation-and-Justice-Rethinking-Parks-and-Mollett-Kepe/p/book/9780367820862>

Nepstad, D., et al. (2006). "Inhibition of Amazon deforestation and fire by parks and indigenous lands" *Conservation Biology* 20(1): 65-73.

Conservation scientists generally agree that many types of protected areas will be needed to protect tropical forests. But little is known of the comparative performance of inhabited and uninhabited reserves in slowing the most extreme form of forest disturbance: conversion to agriculture. We used satellite-based maps of land cover and fire occurrence in the Brazilian Amazon to compare the performance of large (> 10,000 ha) uninhabited (parks) and inhabited (indigenous lands, extractive reserves, and national forests) reserves. Reserves significantly reduced both deforestation and fire. Deforestation was 1.7 (extractive reserves) to 20 (parks) times higher along the outside versus the inside of the reserve perimeters and fire occurrence was 4 (indigenous lands) to 9 (national forests) times higher. No strong difference in the inhibition of deforestation ( $p = 0.11$ ) or fire ( $p = 0.34$ ) was found between parks and indigenous lands. However, uninhabited reserves tended to be located away from areas of high deforestation and burning rates. In contrast, indigenous lands were often created in response to frontier expansion, and many prevented deforestation completely despite high rates of deforestation along their boundaries. The inhibitory effect of indigenous lands on deforestation was strong after centuries of contact with the national society and was not correlated with indigenous population density. Indigenous lands occupy one-fifth of the Brazilian Amazon-five times the area under protection in parks--and are currently the most important barrier to Amazon deforestation. As the protected-area network expands from 36% to 41% of the Brazilian Amazon over the coming years, the greatest challenge will be successful reserve implementation in high-risk areas of frontier expansion as indigenous lands are strengthened. This success will depend on a broad base of political support. <https://conbio.onlinelibrary.wiley.com/doi/10.1111/j.1523-1739.2006.00351.x>

O'Bryan, S.T., et al. (2021). "The importance of Indigenous Peoples' lands for the conservation of terrestrial mammals." *Conservation Biology* 35(3): 1002-1008.

Indigenous Peoples' lands cover over one-quarter of Earth's surface, a significant proportion of which is still free from industrial-level human impacts. As a result, Indigenous Peoples and their lands are crucial for the long-term persistence of Earth's biodiversity and ecosystem services. Yet, information on species composition on these lands globally remains largely unknown. We conducted the first comprehensive analysis of terrestrial mammal composition across mapped Indigenous lands based on data on area of habitat (AOH) for 4460 mammal species assessed by the International Union for Conservation of Nature. We overlaid each species' AOH on a current map of Indigenous lands and found that 2695 species (60% of assessed mammals) had  $\geq 10\%$  of their ranges on Indigenous Peoples' lands and 1009 species (23%) had  $>50\%$  of their ranges on these lands. For threatened species, 473 (47%) occurred on Indigenous lands with 26% having  $>50\%$  of their habitat on these lands. We also found that 935 mammal species (131 categorized as threatened) had  $\geq 10\%$  of their range on Indigenous Peoples' lands that had low human pressure. Our results show how important Indigenous Peoples' lands are to the successful implementation of conservation and sustainable development agendas worldwide. <https://conbio.onlinelibrary.wiley.com/doi/10.1111/cobi.13620>

Oldekop, J.A., et al. (2016). "A global assessment of the social and conservation outcomes of protected areas." *Conservation Biology* 30(1): 133–141

Protected areas (PAs) are a key strategy for protecting biological resources, but they vary considerably in their effectiveness and are frequently reported as having negative impacts on local people. This has contributed to a divisive and unresolved debate concerning the compatibility of environmental and socioeconomic development goals. Elucidating the relationship between positive and negative social impacts and conservation outcomes of PAs is key for the development of more effective and socially just conservation. We conducted a global meta-analysis on 165 PAs using data from 171 published studies. We assessed how PAs affect the well-being of local people, the factors associated with these impacts, and crucially the relationship between PAs' conservation and socioeconomic outcomes. Protected areas associated with positive socioeconomic outcomes were more likely to report positive conservation outcomes. Positive conservation and socioeconomic outcomes were more likely to occur when PAs adopted comanagement regimes, empowered local people, reduced economic inequalities, and maintained cultural and livelihood benefits. Whereas the strictest regimes of PA management attempted to exclude anthropogenic influences to achieve biological conservation

objectives, PAs that explicitly integrated local people as stakeholders tended to be more effective at achieving joint biological conservation and socioeconomic development outcomes. Strict protection may be needed in some circumstances, yet our results demonstrate that conservation and development objectives can be synergistic and highlight management strategies that increase the probability of maximizing both conservation performance and development outcomes of PAs. <https://conbio.onlinelibrary.wiley.com/doi/10.1111/cobi.12568>

Paneque-Gálvez, J., et al. (2018). "High overlap between traditional ecological knowledge and forest conservation found in the Bolivian Amazon." *Ambio* 47(8): 908-923.

It has been suggested that traditional ecological knowledge (TEK) may play a key role in forest conservation. However, empirical studies assessing to what extent TEK is associated with forest conservation compared with other variables are rare. Furthermore, to our knowledge, the spatial overlap of TEK and forest conservation has not been evaluated at fine scales. In this paper, we address both issues through a case study with Tsimane' Amerindians in the Bolivian Amazon. We sampled 624 households across 59 villages to estimate TEK and used remote sensing data to assess forest conservation. We ran statistical and spatial analyses to evaluate whether TEK was associated and spatially overlapped with forest conservation at the village level. We find that Tsimane' TEK is significantly and positively associated with forest conservation although acculturation variables bear stronger and negative associations with forest conservation. We also find a very significant spatial overlap between levels of Tsimane' TEK and forest conservation. We discuss the potential reasons underpinning our results, which provide insights that may be useful for informing policies in the realms of development, conservation, and climate. We posit that the protection of indigenous cultural systems is vital and urgent to create more effective policies in such realms. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6230329/>

Pretty, J., et al. (2009). "The Intersections of Biological Diversity and Cultural Diversity: Towards Integration." *Conservation and Society* 7(2): p. 100-112.

There is an emerging recognition that the diversity of life comprises both biological and cultural diversity. In the past, however, it has been common to make divisions between nature and culture, arising partly out of a desire to control nature. The range of interconnections between biological and cultural diversity are reflected in the growing variety of environmental sub-disciplines that have emerged. In this article, we present ideas from a number of these sub-disciplines. We investigate four bridges linking both types of diversity (beliefs and worldviews, livelihoods and practices, knowledge

bases and languages, and norms and institutions), seek to determine the common drivers of loss that exist, and suggest a novel and integrative path forwards. We recommend that future policy responses should target both biological and cultural diversity in a combined approach to conservation. The degree to which biological diversity is linked to cultural diversity is only beginning to be understood. But it is precisely as our knowledge is advancing that these complex systems are under threat. While conserving nature alongside human cultures presents unique challenges, we suggest that any hope for saving biological diversity is predicated on a concomitant effort to appreciate and protect cultural diversity.

[https://www.researchgate.net/publication/](https://www.researchgate.net/publication/285128434_The_intersections_of_biological_diversity_and_cultural_diversity_Towards_integration)

[285128434\\_The\\_intersections\\_of\\_biological\\_diversity\\_and\\_cultural\\_diversity\\_Towards\\_integration](https://www.researchgate.net/publication/285128434_The_intersections_of_biological_diversity_and_cultural_diversity_Towards_integration)

Raygorodetsky, G. (13 December 2011). Why Traditional Knowledge holds the key to climate change. United Nations University <https://waccglobal.org/why-traditional-knowledge-holds-the-key-to-climate-change/>

Rundle, H. (12 October 2019). Indigenous Knowledge can help solve the biodiversity crisis. Scientific American <https://blogs.scientificamerican.com/observations/indigenous-knowledge-can-help-solve-the-biodiversity-crisis/>

Schuster, R., et al. (2019). "Vertebrate biodiversity on Indigenous-managed lands in Australia, Brazil, and Canada equals that in protected areas." *Environmental Science & Policy* 101: 1-6.

Declines in global biodiversity due to land conversion and habitat loss are driving a 'Sixth Mass Extinction' and many countries fall short of meeting even nominal targets for land protection. We explored how such shortfall in Australia, Brazil and Canada might be addressed by enhancing partnerships between Indigenous communities and other government agencies that recognize and reward the existing contributions of Indigenous-managed lands to global biodiversity conservation, and their potential contribution to meeting international treaty targets. We found that Indigenous-managed lands were slightly more vertebrate species rich than existing protected areas in all three countries, and in Brazil and Canada, that they supported more threatened vertebrate species than existing protected areas or randomly selected non-protected areas. Our results suggest that overall, Indigenous-managed lands and existing protected areas host similar levels of vertebrate biodiversity in Brazil, Canada, and Australia. Partnerships with Indigenous communities that seek to maintain or enhance Indigenous land tenure practices on Indigenous-managed lands may therefore have some potential to ameliorate national and global shortfalls in land protection for biodiversity conservation using a mix of conventional

protected areas and Indigenous-managed lands. <https://www.rcinet.ca/en/wp-content/uploads/sites/3/2019/07/Schuster-et-al-Indigenous-lands.pdf>

Lee, J., (28 October 2022-online). The world's healthiest forests are Indigenous lands. Here's why. — A new report finds that Indigenous Land rights are key to biodiversity conservation. [similar to article below but written for a popular audience] <https://grist.org/global-indigenous-affairs-desk/the-worlds-healthiest-forests-are-on-indigenous-land-heres-why/>

Sze, S. S., et al., (26 October 2022-online). "Indigenous lands in protected areas have high forest integrity across the tropics." *Current Biology*.

Declines in global biodiversity Intact tropical forests have a high conservation value. Although perceived as wild, they have been under long-term human influence. As global area-based conservation targets increase, the ecological contributions of Indigenous peoples through their governance institutions and practices are gaining mainstream interest. Indigenous lands—covering a quarter of Earth's surface<sup>5</sup> and overlapping with a third of intact forests—often have reduced deforestation, degradation, and carbon emissions, compared with non-protected areas and protected areas. A key question with implications for the design of more equitable and effective conservation policies is to understand the impacts of Indigenous lands on forest integrity and long-term use, as critical measures of ecosystem health included within the post-2020 Global Biodiversity Framework. Using the forest landscape integrity index and Anthromes datasets, we find that high-integrity forests tend to be located within the overlap of protected areas and Indigenous lands (protected-Indigenous areas). After accounting for location biases through statistical matching and regression, protected-Indigenous areas had the highest protective effect on forest integrity and the lowest land-use intensity relative to Indigenous lands, protected areas, and non-protected controls pan-tropically. The protective effect of Indigenous lands on forest integrity was lower in Indigenous lands than in protected areas and non-protected areas in the Americas and Asia. The combined positive effects of state legislation and Indigenous presence in protected-Indigenous areas may contribute to maintaining tropical forest integrity. Understanding management and governance in protected-Indigenous areas can help states to appropriately support community-governed lands. <https://doi.org/10.1016/j.cub.2022.09.040>

UNFCCC. (6 September 2019). "Values of Indigenous peoples can be a key component of climate resilience." <https://unfccc.int/news/values-of-indigenous-peoples-can-be-a-key-component-of-climate-resilience>

## READING LISTS

Cannon, S. E. (2019). "Decolonizing Conservation: A Reading List."

The goal of the reading list is to help well-meaning non-Indigenous folks like myself educate themselves on the colonial, white it, is a This document is an introduction to a reading list about decolonizing conservation, which I created with the goal of helping well-meaning non-Indigenous folks like myself educate themselves on the colonial, white supremacist, and imperialist roots of biodiversity conservation. Many of us work in places with long histories of occupation and colonialism, where the impacts of colonialism are still ongoing, and no matter how well-intentioned, conservation work tends to continue those legacies. In order to stop inflicting harm on Indigenous communities, we need to start by understanding the many ways the work we do and the assumptions we make are informed by these frameworks.

The post introducing the reading list, as well as the reading list itself, are both regularly updated. You can access the most recent version here: <http://bit.ly/decolonizing-conservation> or <https://doi.org/10.5281/zenodo.4429220>

Youdelis, M., et al. (2021). "Indigenous-Led Conservation Reading List." *Conservation Through Reconciliation* Publication.

This list compiles literature relevant to the burgeoning Indigenous-led conservation movement, be that through Indigenous Protected and Conserved Areas (IPCAs, Canada), Indigenous Protected Areas (IPAs, global), Indigenous and Community Conserved Areas (ICCAs, global), or various forms of Indigenous-led co-governance mechanisms that elevate Indigenous rights, responsibilities, and legal traditions. The introductory Colonial Conservation section is not exhaustive, but rather provides context for the main import of the collection, which is to highlight the possibilities, successes, and challenges associated with decolonizing conservation through Indigenous-led governance. The list is global in scope but has been shaped by the Indigenous Circle of Experts' (2018) report, [We Rise Together](#), which provides 28 recommendations for facilitating IPCAs in Canada in order to meet global conservation commitments in the spirit of reconciliation.

The researchers compiling this list are part of the [Conservation Through Reconciliation Partnership](#), a coalition of Indigenous Elders and leaders, Indigenous and Crown governments, academics, NGOs, and conservation agencies working to facilitate Indigenous-led conservation across Canada. Two authors are also part of the [Canadian Conservation in Global Context](#) project, examining the rescaling of conservation to include a multitude of actors including Indigenous and local communities, neighbouring states, national and transnational NGOs, and market-based actors. <http://bit.ly/IndLedConsRL>

## APPENDIX THREE: THE HISTORY OF LAND BACK

### Cases of Land Back

1970-2022

Year	Tribe	State	Acres Returned	Partner Organization
1970	Native Activists	Multiple		
2004	Wiyot Tribe	CA	60	
2015	Mashpee Wampanoag	MA	323	
2016	Kashia Band of Pomo Indians	CA	700	Indian Land Tenure Foundation
2019	Wyandotte Nation	OK	3	
	Yurok Tribe	CA	50,000	Western Rivers Conservancy
2020	Salish & Kootenai Tribes	MT	19,000	National Wildlife Federation
	Esselen Tribe of Monterey County	CA	1,199	Western Rivers Conservancy
	Leech Lake Band of Ojibwe	MN	11,760	
	Penobscot	ME	753	The Nature Conservancy
2021	Snoqualmie Tribe	WA	12,000	Forterra
	Squaxin Island Tribe	WA	1,000	
	Colville Confederated Tribes	WA	9,243	Conservation Northwest/ The Nature Conservancy
	Lower Sioux Indian Community	MN	115	MN Historical Society
2022	InterTribal Sinkyone Wilderness Council	CA	523	Save the Redwoods League
	Boise Forte Band	MN	28,089	The Conservation Fund/ Indian Land Tenure Foundation
	Rappahannock Tribe	VA	465	Chesapeake Conservancy
	Fond du Lac Band	MN	2	
	Red Cliff Chippewa	WI	2,500	
	Mechoopda Indian Tribe of Chico Rancheria	CA	93	California Tribal Fund
	Tongva	CA	1	Tonga Taraxat Paxaavxa Conservancy