

Disrupted Pathways: Indigenous Knowledge and the Shifting Politics of Federal Resource Governance

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ABSTRACT

This article examines recent efforts to include Indigenous Knowledge and Traditional Ecological Knowledge into the stewardship and governance of US national parks and historic sites in the National Park Service (NPS) Northeast Region. Drawing on Mellon postdoctoral research conducted in collaboration with Tribal communities and NPS between 2023 and 2025, it traces both the transformative possibilities and structural constraints of these initiatives. Under Secretary of the Interior Deb Haaland's leadership (2021–2025), federal agencies began to institutionalize new pathways for equitable Tribal engagement, grounded in principles of sovereignty, relational stewardship, and the inclusion of Indigenous governance practices. Yet the abrupt termination of NPS's involvement with the postdoctoral program in early 2025 and policy reversals under the Trump administration disrupted these developments, undermining fragile relationships of trust and severing institutional commitments. Through ethnographic insights and policy analysis, the article interrogates the conditions that enable—or foreclose—meaningful Tribal collaboration in federal conservation efforts. It highlights the enduring gap between symbolic inclusion and actual power-sharing, arguing that the rapid reversal of policy illustrates how settler-state governance continues to reproduce historical patterns of dispossession and erasure within US environmental management.

INTRODUCTION

In the United States, the politics of conservation in national parks have diverged dramatically from one presidential administration to the next. Under President Biden, with Deb Haaland serving as the first Indigenous secretary of the interior, the Department of the Interior undertook unprecedented efforts to include

mental justice.¹ In stark contrast, the return of the Trump administration in 2025 marked an abrupt reversal. Federal directives demanded that parks and historic sites portray a triumphalist, settler-centric version of American history while restricting the use of terms such as “climate,” “diversity,” and “inequality” in research and interpretation. These shifts were compounded by the restructuring of federal agencies through the Department of Government Efficiency, which terminated thousands of employees and dismantled entire programs. In April 2025, the National Park Service (NPS) decided to terminate its participation in the Mellon Humanities Postdoctoral Fellowship—the program that structured the research presented here.

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Indigenous and Tribal perspectives into park stewardship. Federal guidance and co-stewardship and co-management agreements emphasize the importance of Indigenous Knowledge and Traditional Ecological Knowledge (IK and TEK), positioning these knowledge systems not as supplements to Western science but as vital frameworks for navigating ecological change and advancing environ-

This article emerges from my experience as a Mellon Humanities Postdoctoral Fellow based in the Northeast Regional Office of NPS, where I collaborated with the Office of Native American Affairs, Tribal and Cultural Affairs, and Partnership Wild and Scenic Rivers. The fellowship began under the Biden administration with a mandate to “integrate” IK into resource management practices. While this signaled a shift toward greater recognition, it also reflected a long-standing pattern



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that has been critiqued by Indigenous scholars and anthropologists alike—namely, the expectation that IK should conform to or be validated by Western scientific frameworks. These critiques emphasize that true equity requires not mere inclusion, but structural transformation and the recognition of Indigenous governance systems as authoritative in their own right. In this sense, the initiative was a move in the right direction but remained constrained by the enduring colonial structures under which Tribes continue to struggle for self-determination and sovereignty. By 2025, however, the Trump administration terminated the project, foreclosing possibilities for sustained collaboration with Tribal partners and disrupting fragile relationships that had been cultivated over nearly two years of work.

The urgency of these efforts cannot be overstated. Climate change is already transforming US national parks, particularly in coastal areas where sea level rise, erosion, and intensified storms threaten culturally significant Indigenous heritage sites (Bethel et al. 2022). For many Indigenous communities, these losses are not only ecological but cultural and spiritual, compounding historical traumas of displacement and dispossession. In this context, IK and TEK offer ways of knowing and governing that can address climate challenges while reaffirming responsibilities to land, water, and more-than-human kin (Daigle et al. 2019). Although Western science has long dominated US conservation policy, Indigenous frameworks provide alternative approaches that are holistic, relational, and deeply place-based (Robinson et al. 2021; Schultz et al. 2022).

As an anthropologist, I was drawn to the promise of these approaches through my earlier work in Pernambuco, Brazil, where Afro-descendant fishing communities grapple with ecological grief caused by state-sponsored coastal developments and the erosion of traditional practices. Entering the NPS fellowship, I hoped to contribute to efforts that could center Indigenous voices in federal resource governance in the United States. Similar experiments in Australia, Canada, and Aotearoa New Zealand suggest that Indigenous-led conservation can transform not only environmental outcomes but also governance structures (Loch and Riechers 2021). The Mellon fellowship represented a chance to test such possibilities in the US context.

The research unfolded across several sites in New England, including Acadia National Park, Boston Harbor Islands National Recreation Area, and St. Croix International Historic Site. It included regular participation in regional

office meetings; semi-structured interviews with Tribal historic preservation officers, knowledge keepers, planners, archaeologists, ecologists, and community members (n = 25); and participant observation in Tribal engagement processes. At St. Croix, for example, I joined six listening sessions with Passamaquoddy Elders facilitated by cultural knowledge keepers, which informed co-designed interpretive materials. These collaborations revealed both the potential and the limits of institutional attempts to incorporate IK.

This article does not claim to speak for Tribes or to present a comprehensive Indigenous history of the region. Instead, it offers a critical reflection on the challenges and possibilities of engaging IK within the structures of US federal resource governance. It interrogates the conditions that shape collaboration—mistrust rooted in colonial histories, divergent epistemologies, federal regulations that restrict Indigenous practices, and constantly shifting political priorities. At the same time, it highlights the relational practices that can foster more ethical and equitable partnerships.

In what follows, I first situate recent debates about IK within broader shifts in conservation policy and scholarship, paying particular attention to the tensions between symbolic inclusion and actual power-sharing. I then present ethnographic insights from nearly two years of research with parks and Tribal partners in New England, illustrating the barriers and possibilities for co-stewardship under volatile political conditions. Finally, I reflect on the broader implications of these dynamics for natural resource managers, conservation professionals, and policy-makers seeking to engage IK ethically and effectively. While the inclusion of IK into federal frameworks is often framed as progress, such efforts remain limited when they fail to address the deeper question of power. As Latulippe and Klenk (2023) emphasize, meaningful co-production of knowledge requires not simply “making room” but “moving over”—dismantling the settler institutions and epistemologies that have historically excluded Indigenous governance system. Ultimately, what is necessary is not inclusion within existing systems, but a transformation of governance structures toward stewardship that centers Indigenous self-determination and political authority.

INDIGENOUS KNOWLEDGE, SHIFTING NORMS, AND THE CONTESTED FUTURE OF US CONSERVATION

Over the past several decades, IK and TEK have become increasingly visible in US environmental policy and scholarly debates. For much of the 20th century, conser-

vation in federal lands was framed through Western scientific paradigms that positioned Indigenous Peoples as cultural contributors rather than as sovereign nations with distinct systems of governance and ecological expertise. This exclusion was not accidental but rooted in settler-colonial logics that sought to separate “nature” from human presence, thereby erasing Indigenous stewardship that had long shaped the landscapes now designated as parks (Cajete 2018; Schillings 2018).

Yet, in recent years, scholars and practitioners have challenged this epistemological dominance, arguing that IK systems are not merely supplements to Western science, but fully articulated worldviews grounded in relational ontologies (Latulippe and Klenk 2020; Kovach 2021). TEK is embedded in languages, ceremonies, legal traditions, and lived practices, making it a holistic mode of being and knowing rather than a collection of data points (Whyte et al. 2015; Cajete 2018; Ortiz 2018; Kovach 2021). In Wabanaki traditions, for instance, seasonal narratives about fiddlehead ferns, moose, or tidal rhythms encode ecological observations alongside moral and spiritual instruction (Daigle et al. 2019; McGreavy et al. 2021). Such examples underscore that TEK cannot be abstracted into “universal principles” without stripping it of meaning; it must be supported in the contexts where it flourishes (Lauer and Aswani 2009).

Policy shifts during the Biden administration reflect some of these insights. In 2023, the Department of the Interior issued guidance (301 DM 7) defining IK as a holistic and intergenerational system, and outlining protections for Free, Prior, and Informed Consent (FPIC), intellectual property, and community-led knowledge production. This guidance was reinforced by executive orders on equity (EO 13985) and environmental justice (EO 14096), which explicitly framed Indigenous participation not as inclusion but as sovereignty and justice. The 2024 National Park Service Co-Stewardship Report documented more than 80 formal agreements with Tribes—covering cultural resource protection, ecological restoration, language revitalization, and shared governance (DOI 2024). Together, these initiatives marked a historic attempt to embed Indigenous perspectives within federal conservation frameworks.

Importantly, these developments did not emerge solely from federal leadership but built on decades of Indigenous activism and scholarship. Indigenous scholars, anthropologists, and community practitioners have long advocated for the relevance of IK and TEK in conservation, as well as cautioned against superficial gestures of inclusion that fail to alter

the underlying structures of authority (Hecht 2018; Tsosie 2018; Latulippe and Klenk 2023; Pictou 2020). For example, Ortiz (2018) and Carr et al. (2017) emphasize that TEK cannot be severed from cultural transmission or language revitalization, as ecological knowledge is carried through Indigenous vocabularies and pedagogies. Programs such as Wabanaki Youth in Science (WaYS) demonstrate how intergenerational mentorship sustains TEK while fostering meaningful cross-knowledge collaboration (Carr et al. 2017). These initiatives suggest that “co-design” rather than after-the-fact consultation, or a redistribution of resources to communities themselves, are measures that ensure that community-defined goals shape conservation projects from their inception (Schultz et al. 2022).

At the heart of these debates is the question of power. As noted earlier, Latulippe and Klenk (2023) describe a politics of “moving over” rather than merely “making room” for IK, emphasizing that equitable knowledge co-production requires structural changes in authority and decision-making. Pictou (2020) critiques settler-state recognition of TEK as often little more than rhetorical gestures that fail to return land or jurisdiction. Similarly, Tsosie (2018) highlights that intellectual property frameworks often undermine Indigenous sovereignty by privileging Western legal categories over Indigenous governance systems. These critiques insist that TEK cannot be disentangled from Indigenous political authority; to “integrate” TEK without shifting power risks reproducing historical harms.

The Trump administration’s return in 2025 starkly illustrates these vulnerabilities. Secretary’s Order 3431 framed conservation and historical interpretation as having been distorted by “political ideology,” calling for a return to a nationalist narrative of American

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greatness. In practice, this directive mandates a de-emphasis of Indigenous histories of dispossession and restricted climate-related research and interpretation, such as the removal of Indigenous-centered educational signage at Acadia National Park in September 2025 that had the phrase “climate change.” Such reversals underscore that while federal policies may temporarily elevate IK, they remain subject to the volatility of

partisan politics and the enduring weight of settler-colonial governance structures.

Nevertheless, the scholarly consensus remains clear: meaningful conservation outcomes are inseparable from Indigenous governance. As Schultz et al. (2022) demonstrate in their review of ecological restoration projects, initiatives that incorporate cultural values—particularly TEK—tend to be more just, sustainable, and durable. These benefits only emerge, however, when Indigenous communities are engaged early, equitably, and with genuine authority over process and outcomes. In short, scholars highlight both the promise and perils of engaging IK in conservation. While policy advances during the Biden administration signaled a shift toward equity and co-stewardship, the Trump administration’s reversals demonstrate how fragile such gains can be. Beyond the fluctuations of federal policy, however, Indigenous scholars and practitioners continue to insist on the deeper work of re-centering Indigenous governance and relationships to land. This work suggests that TEK should not be understood simply as a tool for improving ecological outcomes to maintain the settler status quo, but as a pathway toward justice, relational accountability, and alternative futures for conservation.

DATA PRESENTATION AND FINDINGS

My academic background includes long-term research in Pernambuco, Brazil, where I collaborated with Afro-Brazilian traditional fishing communities that were displaced from their ancestral territories by state-sponsored mega-developments. These communities were not only navigating environmental degradation but also what I came to understand as ecological grief—the profound emotional, cultural, and spiritual losses tied to changes in land and water that are vital to their survival. Ecological grief was not merely a response to environmental decline but an embodied experience of rupture, where ancestral knowledge, livelihoods, and spiritual practices became fractured by forces beyond their control.

When I joined the Mellon Fellowship for the project *Reintegrating Indigenous Ecological Knowledge into Northeast Waterway and Park Co-Stewardship* with the NPS Northeast Regional Office, I was drawn to the parallels between Pernambuco and the northeastern United States. Both are regions of first colonial contact, and both contain communities whose environmental knowledge and cultural practices have been marginalized by settler-state systems. I initially envisioned an applied project that could support Indigenous-led conservation

and help mitigate some of the grief I had witnessed in Brazil—this time, by centering Indigenous voices in US federal resource governance. Yet the project evolved in ways that I had not anticipated, shaped by political shifts, bureaucratic structures, and the fragility of relationships between federal institutions and Tribal Nations.

Although based in the Northeast Regional Office, my research was designed to focus on the Boston Harbor Islands and Acadia National Park. Initially, the project also included the Taunton Partnership Wild and Scenic River, but complications surrounding Indigenous participation led to changes. Ultimately, through relationships that developed between Tribal communities and me, the project expanded to include the St. Croix International Historic Site in Calais, Maine. These shifts reflected a larger truth: research agendas and institutional plans often bend under the weight of real-world dynamics.

What is today known as New England is the ancestral homeland of numerous Tribes. In Massachusetts, there are both federally recognized Tribes, such as the Mashpee Wampanoag and the Wampanoag of Aquinnah, and state-recognized groups, such as the Nipmuc and Massachusett. Maine is historically the homeland of the Wabanaki Confederacy, and Acadia National Park exists on the ancestral lands of the Passamaquoddy, Penobscot, Houlton Band of Maliseet, and Mi’kmaq Nations. Each of these communities endured the traumas of settler occupation: genocide, the spread of diseases, forced removal, and cultural assimilation through residential schools that lasted well into the modern era. These histories are not distant. They are carried into every contemporary encounter between Tribal Nations and federal land managers.

This article does not attempt a comprehensive Indigenous history. Rather, I draw attention to these histories to illustrate how parks in Massachusetts and Maine are contested sites of sovereignty where Tribes are often asked to “engage” on lands taken from their ancestors. Deer Island, one of the Boston Harbor Islands, makes this reality especially visible. During King Philip’s War,² between 500 and 1,000 Nipmuc and Massachusett peoples were imprisoned on the island and left to starve. Today, Deer Island houses a wastewater treatment facility and remains largely inaccessible to local Tribal communities. This juxtaposition highlights why mistrust runs deep, and why engagement is fraught. A fundamental challenge to Tribal engagement in parks is the lack of trusting relationships. Levels of mistrust vary depending on site and circumstance, but the

underlying reality is consistent: lands managed by the federal government are overwhelmingly Native lands that were forcibly taken. Indigenous communities have every reason to question the sincerity of engagement by park managers or researchers, particularly when projects are designed without them. As Indigenous scholars and community leaders explained to me: too often, federal staff or outside researchers (like me) arrive with predesigned projects—complete with timelines, deliverables, and funding requirements—and only afterward seek Tribal “participation.” In practice, this reproduces long histories of broken promises, extractive research, and symbolic inclusion.

When relationships are absent, projects collapse. This failure is not incidental but symptomatic of a broader pattern in which engagement is treated as transactional rather than relational. Indigenous partners are understandably reluctant to collaborate with strangers who arrive with a finished project in hand. As community partners helped me understand, the first step is not launching a program but building informal, reciprocal relationships that are not defined by imposed deadlines or outputs. Relationship-building takes time and cannot be shortcut by

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policy guidance. It requires doing the necessary background work—learning about each Tribe’s history, political status, and ongoing struggles—so that encounters are informed, empathetic, and respectful. Such preparation is no guarantee of access, but it is a demonstration of good faith and humility. In some cases, the historical and ongoing harms are too deep to be repaired through partnership, and the absence of collaboration may represent an honest and respectful recognition of that reality. Rather than insisting on joint projects, agencies can instead support cooperative agreements that build Tribal capacity and enable communities to design and implement the initiatives they themselves prioritize. In other cases, sustained and accountable engagement can open the door to restorative justice and genuinely co-created efforts grounded in trust and shared purpose.

In the US, parks depend on both formal and informal relationships with Tribes. Formally, federal land managers must consult with Tribal historic preservation officers

(THPOs) to comply with legal requirements. In New England, the landscape of recognition is complex: federally recognized Tribes coexist with state-recognized ones, and these distinctions carry political weight. While federal law mandates a trust responsibility to federally recognized Tribes, state-recognized groups sometimes have more visible or immediate relationships to certain sites; for example, the Nipmuc and Massachusett are state-recognized Tribes with direct ties to Boston Harbor Islands. In practice, managers face difficult choices about whom to engage, and these choices can create or exacerbate tensions. During my fieldwork, I observed that fear of “messing up” often led NPS employees to withdraw rather than engage. One Indigenous partner remarked, “Trust takes a long time. But if you’re too scared to try, nothing will happen” (personal communication, April 22, 2024). Across multiple sites, I saw how this fear translated into a kind of bureaucratic paralysis, where staff retreated into internal deliberation rather than risk mistakes in building external relationships. Yet as my collaborators emphasized, mistakes are inevitable. What matters is acknowledging them, taking responsibility, and learning not to repeat them.

These relational challenges are compounded by epistemological and ontological differences. Conservation practices in national parks are rooted in Western scientific and scholarly traditions—biology, ecology, and archaeology, for example—that frame ecosystems as discrete objects of study. Many Indigenous communities, by contrast, articulate relational ontologies in which land, water, plants, and animals are kin. One Indigenous collaborator told me, “When you see land as your mother, you protect her like your mother” (personal communication, April 23, 2024). Another explained the absurdity of federal restrictions by saying, “When we are talking about the land, that is our mom. We have to ask the [park] manager to see our mom” (personal communication, April 30, 2024). These statements make clear that IK is not “data” to be integrated into scientific frameworks but a relational ecological stewardship system in its own right, rooted in responsibility and care. When federal institutions treat such perspectives as secondary or symbolic, they reproduce the very hierarchies that marginalize Indigenous authority.

Legal frameworks further constrain possibilities for collaboration. For decades, national parks generally prohibited all forms of gathering and hunting, effectively criminalizing Indigenous practices. In some cases, Tribes were violently dislodged from their homes so parks could be established (Spence 1999). The 2016 Plant Gathering

Rule³ marked an important shift, allowing Tribes to collect culturally significant plants in some parks. Acadia was one park that implemented this rule, enabling Wabanaki communities to gather sweetgrass. While this change represented a step toward recognition, it was also limited. Many Tribal members depend on a wide variety of species for spiritual, medicinal, and material purposes. The ability to gather one plant with formal permission remained a small concession compared to the broader rights and responsibilities that had been stripped away. In most cases, land return remains legally impossible without congressional action, and thus sovereignty over ancestral lands remains out of reach.

Despite these barriers, I also witnessed moments of genuine co-production—instances where relationships, rather than protocols, shaped the trajectory of collaboration. One of the most transformative occurred through the Butterfly Project, organized by Wabanaki Youth in Science (WaYS) at Acadia National Park. This long-term initiative brought together Wabanaki knowledge keepers, park managers, interpreters, and scientists to walk the landscape together—an act that was both literal and symbolic. Practicing what has been described as “two-eyed seeing,” or *Etuaptmunk*, participants engaged ecosystems through both Indigenous and Western epistemologies (Reid et al. 2021). These shared walks, often accompanied by stories, silence, questions, and observation, created a space where no single framework dominated. In contrast to formal consultation sessions, which often unfold within bureaucratic constraints, these meetings were informal, relational, and reciprocal—foregrounding presence and shared practice over deliverables or timelines. Through these encounters, trust was built slowly, not through consensus or agreement, but through a willingness to show up, listen deeply, and risk vulnerability across epistemological divides.

It was through such efforts that I was able to cultivate relationships for the interpretive dimension of my own project at St. Croix International Historic Site, near the Passamaquoddy community at Sipayik. Together with my community collaborator, whom I met through the Butterfly Project, we orchestrated a series of listening sessions with Passamaquoddy Elders and cultural knowledge keepers. These gatherings were structured less as interviews and more as intergenerational storytelling circles—spaces where memory, land, and language were held in relation. Importantly, unlike many federally supported interpretation projects where themes or outputs are defined in advance, this initiative began

with no fixed agenda. The community articulated what stories should be told, how they should be framed, and where they should be placed. The resulting interpretive waysides and signage (still in development) are emerging not as translations of IK into a federal framework, but as expressions of Tribal sovereignty and place-based narratives and pedagogy. Elders shared seasonal narratives, place names, and teachings that fundamentally reshaped how visitors might encounter the landscape—not simply as a historic site, but as a living cultural and political territory.

While the project remains ongoing, it offers a glimpse of what is possible when institutional actors are willing to relinquish control and invest in Tribal-defined processes. Rather than treating Indigenous engagement as a means to meet interpretive goals, this collaboration began from a position of listening and unfolded at a pace set by the community. In doing so, it exemplified a shift away from extractive models of knowledge acquisition toward co-production rooted in accountability, relationship, and respect.

These experiences suggest that the real barriers to Indigenous collaboration in US parks are not simply technical or logistical but relational, historical, and political. Trust, sovereignty, and epistemological difference shape every encounter, while laws and bureaucracies limit Indigenous agency even when relationships are strong. Yet they also reveal that when time and resources are dedicated to relationship-building, when epistemological difference is respected rather than diminished, and when communities define priorities, meaningful collaboration is possible.

CONCLUSION

The experiences recounted in this Mellon Fellowship project underscore that efforts to include IK into US park stewardship are never neutral or technical exercises. They are deeply shaped by the legacies of colonial dispossession, mistrust, and structural inequalities. As the cases of Boston Harbor Islands, Acadia National Park, and St. Croix International Historic Site demonstrate, Indigenous engagement within the National Park Service is conditioned as much by historical relationships and power dynamics as by any specific conservation mandate.

One of the clearest findings of this research is that trust is the foundation of collaboration, yet also the scarcest resource. The long history of broken promises, extractive research, and oppressive governance structures have left many Tribal communities understandably wary of federal

initiatives. When park staff or researchers approach with pre-designed projects and externally imposed timelines, engagement is destined to fail. By contrast, when time and resources are invested in building reciprocal relationships—sharing space, learning histories, and listening before acting—new forms of partnership become possible.

A second finding concerns the persistence of epistemological hierarchies. Western science and scholarship remains the dominant framework for conservation, often relegating Indigenous perspectives to “cultural knowledge” or symbolic contributions. Yet as my collaborators reminded me, when land is understood

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as a mother, responsibilities of care are inseparable from ecological practice. Such ontologies challenge the assumption that IK can be “integrated” into existing frameworks (see also Hecht 2018). Instead, they demand recognition as distinct governance systems, oriented around kinship, responsibility, and relationality. The Butterfly Project at Acadia illustrated how shared practices of walking, observing, and storytelling can open space for dialogue across epistemologies without requiring one to subsume the other.

Third, the cases highlighted the constraints imposed by law and policy. Even as recent regulations like the 2016 Plant Gathering Rule have opened small pathways for Indigenous access to culturally significant species, these reforms remain piecemeal. Permission to collect one plant, in one park, is a narrow concession compared to the broader stewardship responsibilities that Indigenous communities have historically carried. Land return, meanwhile, remains largely foreclosed by federal law. These realities reveal that sovereignty is not restored through inclusion alone but requires structural change.

Despite these barriers, moments of genuine co-production demonstrate the possibilities of doing conservation differently. At St. Croix, listening sessions with Passamaquoddy Elders generated interpretive materials that reflected Indigenous priorities, stories, and relationships to place. This project succeeded not because it “integrated” IK into existing frameworks but because it created space for Tribal

authority to guide the process. Taken together, these findings suggest that the rhetoric of “integration” may be insufficient for the challenges at hand. Integration often leaves federal frameworks intact while inviting IK to enter on conditional terms. What is needed instead is transformation: shifting authority, revising legal frameworks, and recognizing that parks exist on Indigenous homelands. Without such shifts, symbolic gestures risk reproducing the very inequities they aim to redress.

This project also reveals the fragility of institutional commitments. The fellowship was launched under an administration that championed co-stewardship, yet terminated abruptly when political leadership changed. Such reversals demonstrate that as long as Indigenous engagement is treated as an initiative of the federal government rather than as recognition of Indigenous sovereignty, it will remain vulnerable to partisan politics. What endures are not the shifting directives of Washington, but the practices, relationships, and commitments of Indigenous communities themselves.

For conservation professionals, the implications are clear. Building trust requires humility and a willingness to take risks. Respecting epistemological difference means recognizing IK as authoritative, not just additional information. Acknowledging structural barriers entails being honest about what is possible within existing legal frameworks while also supporting efforts to change them. Most importantly, co-production requires ceding control—allowing Indigenous partners to define priorities and shape outcomes on their own terms. Ultimately, the disruptions and collaborations of this fellowship point toward a broader truth: the future of US parks and conservation depends on re-centering Indigenous governance and knowledge. Indigenous Knowledge and Traditional Ecological Knowledge are not supplements to science but pathways to more just, resilient, and sustainable futures. Whether or not federal policy fully embraces this vision, our responsibility to build relationships of care, trust, and reciprocity remains essential.

ENDNOTES

1. A permalink to these directives is available here: <https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2023/12/06/fact-sheet-president-biden-signs-historic-executive-order-to-usher-in-the-next-era-of-tribal-self-determination/>. While often used interchangeably, Indigenous Knowledge (IK) refers to the broad, place-based systems of understanding encompassing spirituality, ethics, law, and kinship, embedded in Indigenous lifeways and epistemologies (Cajete 2018; Kovach, 2021). Traditional

Ecological Knowledge (TEK), by contrast, is a subset of IK that relates specifically to environmental and ecological understandings, often abstracted for use in resource management or scientific contexts (Cajete 2018). Scholars caution that TEK, when isolated from its broader cultural and spiritual contexts, risks decontextualizing and instrumentalizing Indigenous worldviews (Kovach 2021).

2. For additional resources and reading on King Philip's War, visit: <https://kpw350.org/leading-up-to-the-war-2/>.
3. National Park Service, "Gathering of certain plants or plant parts by federally recognized Indian Tribes for traditional purposes," *Federal Register* 81:133 (July 12, 2016): 45024–45039; <https://www.govinfo.gov/content/pkg/FR-2016-07-12/pdf/2016-16434.pdf>.

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