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# Unchecking the box: Overcoming barriers to meaningful consultation

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#### ABSTRACT

Intergovernmental consultation between public agencies and Tribal governments is a critical component of affirming Indigenous land sovereignty and protecting sacred sites and cultural resources in land use and decision making. However, despite the growing prevalence locally and nationally of natural and cultural resource laws that mandate government to government consultation, achieving "meaningful consultation" remains elusive. This article analyzes barriers to meaningful consultation through a case study analysis of intergovernmental consultation around cultural resources and cannabis permitting on Tribal ancestral lands in California. This study argues that cultural resource laws in general suffer from asymmetrical power relations, which are codified into policy through provisions such as "agency discretion" and unfunded mandates. We differentiate between "structural" barriers to consultation as those which embody exclusionary mechanisms of settler colonialism and "soft" barriers such as cultural differences, knowledge gaps, and relationships, all of which undermine the consultation process. Meaningful consultation requires equitable Tribal-agency relations, which depend on policies that affirm Tribal authority in land use decision making, as well as agency and Tribal capacity building, with equitable funding for Tribal staff time, Tribal-agency trust and relationship building, and agency training in Tribal culture, history, and cultural resource policy. Cultural resource laws and consultation policies that affirm Tribal sovereignty demonstrate awareness of and incorporate measures intended to eliminate these barriers.

# 1. Introduction

Intergovernmental consultation between Tribal governments and public agencies is a critical component of affirming Tribal land sovereignty and protecting Tribal sacred sites and cultural resources. Yet despite the increasing prevalence of natural and cultural resource laws

that mandate government to government consultation, achieving "meaningful consultation" remains elusive. Slow progress toward adequate legal protections for Tribal cultural heritage and the obstinacy of barriers to consultation within the context of state-administered cultural resource management has led some scholars to advocate for moving beyond the consultation paradigm (Bevan, 2020; Searle, 2016).

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¹ Several definitions are in order. "Consultation" between Native American Tribes and public agencies describes a process of *intergovernmental* decision making, which distinguishes it from processes of collecting feedback from members of the public. "Consultation" in the latter context, as characterized for example by the IAP2 Spectrum of Public Participation, describes a lower threshold of engagement and inclusion in decision making since public participants are not authorized government representatives. "Tribal sovereignty" refers to the inherent authority of Native American Tribes, as independent sovereign nations, to self-govern within the borders of the United States of America. "Tribal Cultural Resources," as defined in PRC §21074 and used in California cultural resource assessments, are "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" that are listed or eligible for listing in the California Register of Historical Resources or a local register. Despite this capacious definition, county planning offices still interpret cultural resources conventionally as historical sites and assets rather than as landscape features of traditional and ongoing cultural use. We thank an anonymous reviewer for pointing out that Indigenous peoples internationally define and defend cultural resources more broadly as tangible and intangible elements of "language, traditional practices, and spiritual narratives, etc.," which is consistent with the views of California Tribes as well and a source of ongoing dispute with public agencies.

In the near-term, however, it is imperative to understand the structural weaknesses of consultation law and practice, so that consultation can be improved for the benefit of Native American Tribal governments and communities

The literature on Tribal consultation offers in-depth case studies and legal analyses of impediments within and outside the consultation process, which include statutory weaknesses and exemptions (Hinds, 2017; Dadashi, 2021; Bathke, 2014), inadequate funding and staff support (Dadashi, 2021; Middleton, 2013; Wolfley, 2016), cultural differences and disconnections (Fuller, 2011; Dadashi, 2021; Milholland, 2010; Dongoske, 2020; King, 2011; TallBear, 2001), lack of political will (Hoss, 2022; Haskew, 1999; Alexander, 2012; Blumm and Pennock, 2022), weak enforcement mechanisms (Hinds, 2017; Bathke, 2014; Routel and Holth 2014; Routel, 2012; Welch et al., 2009), and power inequities between consulting parties (Stolte, 2023; Emanuel and Wilkins, 2020; Youdelis, 2016). Together, these deficiencies render consultation as a technical and sometimes perfunctory "box-checking exercise" instead of meaningful and shared intergovernmental engagement and decision making (Eitner, 2014).

This study examines Tribal consultation processes in cannabis permitting following Proposition 64 (2016), which legalized the commercial production and sale of cannabis in California. Since all land use potentially involves cultural and environmental impacts, Tribal consultation and Tribal cultural resource protection emerged as important issues across this and other arenas of development. In California, most consultation that arises from permit applications for building and development happens under Assembly Bill 52 (AB 52, 2014). AB 52 amended the California Environmental Quality Act (CEQA) to require state and local public agencies to notify Tribes about new permit applications and offer them the opportunity to consult on minimizing impacts to Tribal cultural resources.<sup>2</sup> As the first state law to offer Tribes the legal right to consultation on a per-project basis, AB 52 considerably expands scrutiny over development regarding Tribal cultural resource protection in California. It builds on, for example, Senate Bill 18 (SB 18, 2004), which is limited to "Tribal cultural places," and only takes effect for proposed General and Specific Plan amendments and updates, such as zoning changes.

The sharp increase in statewide cannabis production coupled with advanced statutory conditions that mandate local-level consultation on a per-project basis have led to an unprecedented amount of Tribal consultation in California (Sorgen et al. 2025). Capturing this experience through our case study, we identify general barriers to meaningful consultation. These barriers offer a framework to evaluate and improve consultation policies and practices. In addition, this article seeks to clarify interrelations among those barriers and, in particular, their common root in power asymmetries between consulting parties. We argue that this power asymmetry reflects the legacy of colonial governance (Emanuel and Wilkins, 2020; Elkins, Pedersen, 2005; Wolfe, 1999), which prioritizes Western over Indigenous forms of knowledge and decision making (Dadashi, 2021; Bathke, 2014; Middleton, 2013; Milholland, 2010), reproducing exclusionary practices on the ground.

#### 2. Methods

This study primarily relies on qualitative interviews with Tribal Historic Preservation Officers (THPOs), Tribal Chairs, and county planners involved in consultation in California. California is an exemplary location to study barriers to meaningful consultation because of the number and diversity of Tribes in the state (around 110 federally-recognized Tribes and several dozen non-federally recognized Tribes<sup>3</sup>) and because of progressive land-use policies, such as SB 18 and AB 52, that generate frequent consultations at the local level. These conditions set the stage, after the creation of the state-licensed cannabis market in 2016, for an unprecedented number of project notifications and consultation requests in high-volume producing counties such as Humboldt, straining Tribal offices and planning agencies alike. This strain surfaced existing tensions related to Tribal consultation, and it is this experience that our interviews captured.

The research team convened a Tribal advisory committee composed of five THPOs, one cultural resource specialist, and one Tribal Chair from a non-federally recognized Tribe. While the seven advisory members represented diverse regions of the state, they all had familiarity with cannabis impacts on Tribal ancestral lands and experience conducting consultation with state and local agencies. Through quarterly meetings, the advisory group provided guidance and oversight on the research study design, questions, outreach methods, and analysis of the research

In Summer 2022, researchers conducted 28 semi-structured interviews with 33 Tribal representatives and 20 semi-structured interviews with 39 agency representatives (several were focus groups or advisory team meetings). We also interviewed five archaeologists, six cannabis cultivators, and two academics. We reached out to Tribal representatives through the Native American Heritage Commission (NAHC) Tribal contact list and through the professional networks of researchers and advisory team members. The advisory team was also instrumental in helping us reach out to agency representatives at county and state planning departments. Our recruitment process, interview materials, and consent forms passed through a rigorous process of university oversight by the Human Research Protection Program at the University of California, Berkeley as well as Tribal oversight by our advisory team and the California Rural Indian Health Board (CRIHB). We paid advisory team members and Tribal representatives that we interviewed as expert consultants rather than as human subjects.

(Fig. 1 – distribution of interviewees)

Semi-structured interviews were thirty minutes to two hours long and focused on themes related to land use challenges, Tribal consultation, and Tribal cultural resource protection (see Appendix). We asked interviewees to first outline the process of consultation and then evaluate the process with specific attention to challenges and possible remedies. We asked Tribal representatives to evaluate differences in their interactions with different public agencies and different project types and the extent to which consultation achieves Tribal priorities around cultural resource protection. Following Mihas' inductive method (Mihas, Institute, 2019), we coded interview data in NVivo 1.7 (QSR International Pty Ltd.). Searching through text at the intersection of "Tribal consultation" and "challenges," we used a grounded theory approach (Glaser, Strauss, 2017) to derive basic categories from the data rather than theoretical frameworks. Then, lumping some categories and splitting others, we developed a complete list of barriers, which we tested and refined by discussing them with our Advisory Committee and by examining how well they accommodate barriers outlined in the academic literature.

<sup>&</sup>lt;sup>2</sup> Under CEQA, Tribes are entitled to comment and recommend on the scope of environmental review early in the process. If a Tribe identifies a potential impact to a TCR, it triggers the need for a full Environmental Impact Report (EIR) rather than just an Environmental Assessment (EA) or an exemption. As discussed below, there are important procedural qualifications to this mandate. For example, it is the responsibility of Tribal governments to notify agencies that they want to be contacted, which can be a significant barrier for nonfederally recognized Tribes in particular.

<sup>&</sup>lt;sup>3</sup> The federal government's Bureau of Indian Affairs (BIA) does not recognize all Tribes, effectively creating separate classes of federally-recognized and non-federally recognized Tribes where only federally-recognized Tribes possess certain rights and advantages, such as eligibility to consult under federal statutes, e.g. the National Historic Preservation Act (NHPA), or have a federally-funded Tribal Historic Preservation Officer position. In some states such as California, there are also state-recognized, but non-federally recognized Tribes that possess the same rights and advantages under state law.

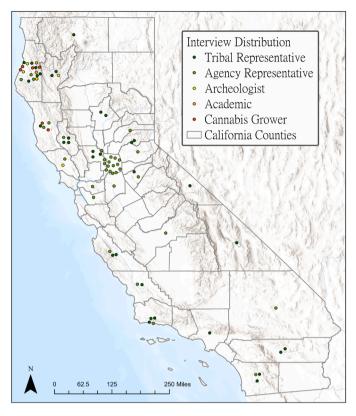


Fig. 1. Map of Interview Distribution.

Limitations of our study included the focus on cannabis permitting, which primarily occurs on the local level. Future studies might test our findings by investigating barriers and solutions for different arenas of development and levels of jurisdiction.

# 2.1. Tribal consultation in California's cannabis permitting process

Evidence from across the diverse geography of California revealed five key barriers to meaningful consultation: agency discretion; weak enforcement; prioritization of Western knowledge and expertise; knowledge gaps due to confidential information; and lack of capacity at both agency and Tribal offices.

Below we explore each barrier with reference to how they manifest in consultation policies and practices in California.

#### 2.1.1. Agency discretion

Agency discretion refers to the power of a government agency to decide whether and how to implement laws and regulations. According to California law, Tribes possess the right to consult when proposed development projects threaten Tribal cultural resources. But in practice, agencies exercise wide latitude to decide what consultation entails, what merits consideration as a Tribal cultural resource, what counts as sufficient mitigation of anticipated impacts, and even what projects are exempt from the requirement to consult. If a resource is not already listed on the California Register of Historical Resources (and many are not for reasons that we explain in the section below on knowledge gaps), the onus is on Tribes to convince agency counterparts of the merits of their claim: "You have to get a lead agency for a project doing CEQA to concur the site was actually a site" (TR 1). Sharing a similar sentiment,

an agency representative observed: "When I read AB 52, the fact is that the lead agency can listen to a Tribe through a consultation process and say, 'We disagree. We're going forward.' That is bizarre" (AR 2). When an agency, in their discretion, determines that the landscape feature in question does not merit consideration as a Tribal cultural resource or that impacts do not exceed certain "thresholds of significance" or that removal or compensation is a sufficient mitigation measure, Tribes that disagree have little recourse but to sue in court, which is very costly, time-consuming, and historically has not led to favorable outcomes for Tribes.

Further upstream, agencies can also exercise their discretion by creating a permit process that circumvents consultation or delays it to the point that consultation would be meaningless. In the case of cannabis, some counties created a regulatory category of "interim" or "provisional permit" or "early activation," which allowed cannabis operators to continue cultivation without completing the permit process. Under these temporary permits, operators sometimes cultivated cannabis for years without undergoing CEQA review (AR 2). Since AB 52 is part of CEQA, these projects would not be subject to Tribal consultation: "We were getting notifications for projects and going out there and things had already started. They had already dug their utility lines or their security shack or water lines...And so it was just a free for all, everybody was getting these early activations" (TR 2). Similarly, some counties and most cities used "ministerial approvals" for cannabis, that is, expedited review at the administrative level based on whether a project conforms to applicable building and zoning code requirements. For example, a small project on private property that does not meet a threshold level of ground disturbance may not require additional review. Like provisional licenses, ministerial permits bypass CEQA and deny Tribes the opportunity to consult under AB 52. The State intervened in some cases that they found too hasty (such as in Inyo County), yet many projects were allowed or had already begun on which Tribes would have liked to consult. In short, making consultation a part of other statutes rather than a standalone law, for example subsuming AB 52 under CEQA, creates legislative loopholes and ultimately limits the applicability of cultural resource laws, further strengthening agencies' discretionary authority to determine whether and how these laws apply.6

#### 2.1.2. Weak enforcement

Weak enforcement mechanisms tend to have the same effect as legislative loopholes and limitations placed on the scope of policies, all of which remove incentives for upholding cultural resource laws. As one Tribal representative explained, "It's almost meaningless to have permit conditions if no one is checking to see if they are followed" (TR 3). A common refrain among cultural resource practitioners is that these laws "lack teeth," that is, there are few consequences for agencies that fail to comply. For example, one of the main regulatory authorities, the State Water Resources Control Board, noted in an interview that it uses a

<sup>&</sup>lt;sup>4</sup> Tribal and agency representatives will remain anonymous unless they specifically asked us to publish their names. In-text, we will abbreviate Tribal representatives as "TR" and agency representatives as "AR" followed by the order in which their quotation appears. We shortened archaeologist to "Arch."

<sup>&</sup>lt;sup>5</sup> Counties made this allowance to help facilitate the transition of legacy cannabis growers to the regulated market.

<sup>&</sup>lt;sup>6</sup> A similar situation occurred with SB 35, which fast-tracked affordable housing in California yet inadvertently overlooked cultural resource protection standards. Legislators had to scramble to pass AB 168, which closed this loophole in SB 35. So, why make cultural resource laws subsidiary to other major statutes rather than a standalone law? Initially, in the case of CEQA, Tribal and legislative sponsors of AB 52 discussed the viability of a standalone sacred sites protection law analogous to State protections for sacred sites on public lands. Ultimately, because of the vast amount of Tribal cultural resources on private properties, the fact that CEQA archaeological analyses would continue with or without Tribes, and the enormous political endeavor to add an entirely new land use regulation during that time period, it was decided to amend the State's main environmental law in order to bring Tribal governments and the new, much needed category of Tribal Cultural Resources into the law (Laura Miranda, Pechanga, Technical Advisor to Assemblyman Gatto on AB 52).

complaint-based system, which is relatively strong on inspections prior to issuing permits and light on compliance checks after the fact (AR 3). A lack of enforcement renders cultural resource laws non-binding, which gives agencies wide latitude to apply the law as they see fit. A Tribal Chair said: "I think AB 52 has some good bones to it. The premise and the structure of it are good. It's just follow-through from agencies. I don't know how you change the mentality of, well, this is where...it says I need to check that box (TR 4).

Weak enforcement has downstream effects on other aspects of project approvals and development. Several interviewees described scenarios in which developers were able to remain vague about project start dates or did not keep their agreement to have cultural monitors onsite at the start of work: "Oftentimes they're grading and someone will find out, like 'Oh, they're grading over there. Aren't we supposed to have a monitor?' I'm like, 'Yeah.' And then we have to bark up a bunch of trees to get people to stop... And often the first cut is one of the most important times to be there. You want to see what's right under the surface" (TR 5). When they get caught," this interviewee continued, "all they get is a hand slap...They can get away with it. They go and grade everything and when we find out, there are no repercussions for them – not really." The Tribal Chair of a federally unrecognized Tribe interpreted this lack of enforcement as a loophole in the law: "AB 52 says that they need to notify. But they don't necessarily have to work with us. We don't have all that enforcement that federally recognized Tribes do, so that happens on occasion - on a lot of occasions" (TR 6).

#### 2.1.3. Prioritization of Western knowledge and expertise

Agencies and Tribes tend to define Tribal cultural resources differently, with policy prescriptions applying an atomistic perspective that focuses narrowly on the scope and scale of a project, compared with Indigenous perspectives applying a more holistic and interconnected view. For example, AB 52 requires a 600-foot buffer zone around Tribal cultural resources, but this clause assumes that cultural resources can be geolocated to a discrete site, whereas Tribes often consider sites on a landscape or ecosystemic level (see sections on knowledge gaps for more on this topic). Agencies typically view the anticipated impacts of single cannabis grows in isolation, whereas Tribes are concerned about cumulative effects on the environment: that is, impacts across cannabis grows (including illicit grows), across project types (including other agriculture and regional land and water uses), and across time. Tribes find that environmental assessments rarely address large-scale and cumulative impacts, even when CEQA requires it. Since permitting usually focuses on individual projects, "there's no true evaluation of the loss of water...If they're clearing another fifty acres, what is the cumulative impact of the loss of more oaks?...What's the loss of habitat that's really happening?" (TR 7).

These cultural differences are reified procedurally when agencies make determinations solely based on Western sciences, like archaeology, rather than incorporating Indigenous knowledge. Despite the reasonably broad definition of TCRs given in PRC §21074 (see fn1 above), planning departments tend to equate Tribal cultural resources with archaeological sites and artifacts. This leads agencies to rely almost exclusively on archaeological knowledge and discount Indigenous knowledge when defining sites of significance. Tribes frequently find that agency planners must be repeatedly reminded that cultural resources are more than objects of archaeological interest: "Many counties in the state focus on archaeological resources. That's not our issue. Most of the issues for [the Tribe] aren't archaeological. This is a living culture that includes our ceremonial practices. Not things of the past, but of 'right now' – present issues, involving private property, that directly affects our access and sacred trails" (TR 9).

Archaeological knowledge is insufficient when identifying and evaluating Tribal cultural resources, which can include gathering grounds, ceremonial grounds, trails and viewsheds. In some cases, a Tribal cultural resource will have no archaeological features: "When it comes to Tribal cultural resources, everybody thinks that it's just

archaeological items – artifacts – and it's not. It's landscapes – cultural landscapes, gathering landscapes, sacred landscapes. All of those things are taken into account when we're looking at something. And there's something totally different than what an archaeologist would be looking at" (TR 1).

Qualities that make a site culturally significant may not appear to someone without cultural knowledge. Significance may be in "the way a person feels when they're in that place, the connectivity that they have to a particular location" (TR 10). Relying on archaeology to determine what is significant may therefore miss the mark entirely: "A lot of times the problem is that counties don't have any cultural expertise when they're making the determinations for the Tribe as to what is significant and non-significant on a project. And that determines how you proceed with the project, too, and how the protections are put in place, whether you're able to get a Tribal monitor on the project while they're doing ground disturbance - things like that" (TR 11). As this THPO observed, the presumption that archaeological features are the source of significance leads to inappropriate conclusions in terms of adequate treatment and mitigation measures. Similarly, another Tribal representative complained that some planners consider any altered site to be damaged and therefore "unable to be damaged further" (TR 6). But an altered site may still possess significance for Tribes: "Just because it's been disturbed doesn't mean there's nothing there or that its character is lost as, say, a site where something happened in the creation story. These are all things that need to be considered...But what they [the agencies] are asking for when they ask us for knowledge about sites is they're asking for archaeology. They're asking for bedrock mortars and village sites and known burials, rock art, that kind of thing. They're not considering the intangible" (TR 8).

At bottom, prioritizing Western knowledge undermines Tribal authority and expertise regarding what is a Tribal cultural resource. "It is still a battle to try to convince them that you as planners aren't the expert. Even sometimes archaeologists aren't the experts in significance, in what's important to a Native Tribe" (TR 10). To make consultation meaningful, one THPO suggested a new consultation standard: "What I want to consult on is the level of review that's required" (TR 8).

# 2.1.4. Knowledge gaps

Tribal cultural resource protection often takes place in informationpoor environments. Genocide, forced displacement, and ongoing processes of Indigenous erasure have devastated Indigenous knowledge about ancestral lands, identity, and cultural practices (Baldy, 2013) and have raised concerns among Tribes about sharing sensitive site-specific data (Welch et al., 2009). Tribes across California are actively engaged in surveying and protecting cultural heritage and reclaiming knowledge and practices. Yet agency representatives we spoke with complained about not knowing who the aboriginal Tribes are for a given land use area, who the appropriate contacts are, and more generally how to obtain data on Tribal lands and cultural resources for front-end project processing. As one THPO points out, however, this genre of complaint "is less about what's in the statute and more about people not having an understanding of what 300 years of colonialism has done to Tribal knowledge. There is a reason why we get these requests that say, 'please let us know if there's anything of cultural significance we need to be concerned about at this project.' And I can say, 'Well, nothing that I know of, but that doesn't mean there's nothing there" (TR 8). Even where Tribal knowledge about cultural resources exists, histories of site desecration and looting often make it necessary for Tribes to keep this

<sup>&</sup>lt;sup>7</sup> The massive amount of cultural assessment surveys conducted in the wake of Prop 64 were a boon to the archaeological record in California. Tribal offices doing cultural surveys, such as the Wiyot and Karuk Tribes, were able to recover information about cultural heritage sites, but outside of Humboldt County, where Tribes were less frequently enlisted in this work or did not have capacity to do it, this was largely an opportunity missed.

sensitive information confidential.

Efforts to maintain confidentiality around sensitive sites while formalizing the planning process has led to the creation of complex information systems. California State Parks Office of Historic Preservation contracts with Sonoma State University's Northwest Information Center to maintain the California Historical Resources Information System (CHRIS), while the NAHC maintains the Sacred Lands File (SLF). Both systems are notoriously hard to access and contain incomplete information. CHRIS has been likened to a game of battleship: "You're like 'E5,' miss. 'Okay, what about D6?' You never know how close you are... What I would say about the information centers is they're kind of inscrutable, and we use them but they haven't been a huge benefit to us..." (AR 1). At the same time, an absence of results does not mean there are no cultural resources. Even when results are positive, those results may be incomplete or based on outdated survey methods. In most cases, CHRIS recommends doing a field survey.

The SLF is a more recent development, formalized after SB 18. The State of California asked Tribes to map "sensitive sites" and "areas of concern," and that map went to the NAHC. According to many Tribal representatives, that database has never functioned well. For starters, some Tribes balked at sending the NAHC, a state entity, areas of concern and making them the "gatekeepers" for "whose area is where" (TR 12). Making matters worse, Tribal representatives were frustrated with how this sensitive information was handled: "Our map came back to me three times and all three times it was wrong...The Commission [NAHC] is still giving out this long list of all the Tribes in the county [to lead agencies] as opposed to the Tribe that would have that particular little area...So it's bugging me and all the other THPOs because there's a lot of wasted mail and a lot of wasted effort" (TR 12). For these reasons and others, many Tribes have concerns about sharing sensitive information with state-run programs and decline to provide a map or upload only incomplete information.

While a centralized database with confidential information about sensitive cultural sites may seem like a good idea in theory, it has not worked well in practice. Impediments include a lack of trust between state and Tribal governments, agencies' lack of understanding of Tribes in their jurisdiction, and information lost from the historical record. Many Tribal representatives feel that their administrative dependence on state-run programs undermines Tribal sovereignty and that there is no adequate substitute for cultural surveys and Tribal consultation.

#### 2.1.5. Agency and Tribal capacity

Tribal representatives that engage with agency planning departments regularly find that agency staff are uninformed about the nature of Tribal cultural resources and the requirements of cultural resource laws: "Sometimes I had a kid, a young planner, and I would explain to them cultural resource law and what that means...And we'd have to pretty much re-educate each time we find these issues" (TR 10). Educating planners and holding them accountable can take significant time, time that could be productively spent attending to other important tasks: "Half our job is educating [agency staff] on how to do their job" (TR 11). This task can be especially challenging for non-federally recognized Tribes. As a representative of one such Tribe in a major urban area reported: "The major problem is that people don't understand we still live here" (TR 13).

Agency offices also lack personnel who are qualified to engage in Tribal consultation or review archaeological reports. "You got people that are giving out permits, you got people that are sitting on commissions where some people don't even know what a Tribal cultural resource is" (TR 1). "The review of archaeology reports is happening by people who are not qualified... They don't understand the intricacies of cultural resource laws" (Archaeologist 1).

The issue of uninformed and inadequately trained agency staff is compounded by high agency turnover. "The planners who are working on specific applications, a lot of the time they aren't the person we finish up the application process review with" (TR 14). "There's a lot of

turnover. You feel like you have a good relationship. And then something will happen. They were working with us [the Tribe] and then I find out —all new staff!" (TR 5). Describing how this becomes an impediment to meaningful consultation, a THPO stated, "When there is staff turnover, you lose institutional knowledge and you lose relationships of trust and rapport and reporting channels" (TR 2). On the agency side, much of this turnover is driven by the high workload: "We're all moving a million miles an hour and it seems like some things get overlooked... We've struggled tremendously with high turnover...planners come in and they look at the workload and it's a seemingly impossible job that we have here and it's hard to keep them around for too long once they realize all the pressure from all sides...We don't know how many requests for consultation might have been lost in a former planner's inbox" (AR 4).

On the other side, Tribal offices also face staff shortages and limited time and resources to meaningfully engage in consultation. Maintaining adequate staffing is especially difficult for non-federally recognized Tribes, since they are ineligible for federal funding to support a THPO position. Federal funding for THPOs, however, is often inadequate to attract good candidates, and even federally-recognized Tribes must often supplement federal funding, which is partially why many of these Tribes have not undergone the National Park Services' application process to obtain this funding. At the same time, THPO positions are generally stretched very thin. Many THPOs work without full-time staff and hold multiple roles across cultural and environmental departments. The heavy workload leads to burnout and staff turnover. One THPO shared her experience after cannabis was legalized and her office went from receiving 200-1200 projects per year: "It was a scramble just to make it out...how stressful it was just to try to get through so many projects knowing that with the staff that we had, there would certainly be projects where we couldn't make the best recommendations and we couldn't physically visit every single project...It was a crazy time for sure" (TR 15).

A good example of a statewide capacity challenge was the requirement in the rollout of AB 52 for Tribes to request project notifications from each lead agency. As one THPO explained it: "Rather than the Tribes being able to just tell the Native American Heritage Commission we want to be consulted, under AB 52 we had to send letters out to every potential lead agency saying, 'I want you to contact me.' And not every Tribe has done that even now, because it was very confusing" (TR 8). Part of this confusion was that the NAHC, the state agency responsible for facilitating Tribal affairs, did not adequately explain or coordinate the process: "The Native American Heritage Commission was required to publish the contact information for all the lead agencies and that means every school district, every cemetery district, every utility, every agency, every planning department, I mean, everything. And they had a deadline of sometime in 2015. And they did not get it done... I don't believe it's complete still to this day...So if you checked AB 52, you would see that most Tribes have not submitted letters. And why shouldn't the Tribes just be automatically part of it, so Tribes have to opt out? They should be opted in automatically" (TR 16).

This issue dovetails with another capacity challenge, which pertains to the complexity of cultural resource policy and practice. For starters, the environmental regulatory landscape in California is bureaucratic and varied across state, county, and municipal jurisdictions. "Many Tribes do not have the capacity (assuming they have the desire) to understand, track, and meaningfully participate in all available licensing and permitting review and decision making venues" (AR 5). Adding to this complexity are the long and technical reports that are part of environmental review: "Some reports are 46 pages and have a lot of repetition...There's a wide divergence in how reports are written" (Arch 2). The challenges of navigating the regulatory review process can be prohibitive for, especially non-recognized and under-resourced Tribal offices.

Adding pressure are the narrow time windows for responding to project notifications. Under AB 52, Tribes have thirty days to respond to

project notifications, and agencies often start counting from the time they send an email, regardless of Tribal ceremonial time or other office closures (TR 17). Within that thirty-day window, THPOs and their staff must complete any and all archival and information systems research, contact Tribal Elders, conduct site visits, and then take this information to Tribal Council, which may either make a decision or require additional information (all of this work, moreover, is unremunerated). Final decisions and substantiating evidence must then be documented and written up in a letter. "There's so much volume that just writing the letters and responding to the request for information from the county can take all day" (Archaeologist 1). Thus, thirty days is rarely enough time for project review, especially where cultural resources are threatened.

In summary, agency and Tribal offices suffer from poor funding, staff shortages, high turnover, and short time windows. Additionally, agency staff lack training in cultural sensitivity and cultural resource laws, adding further strain to Tribal offices to repeatedly educate agency staff. Agency staff also report frustration with staff turnover and unresponsiveness at Tribal offices: "One of the key struggles that the county has faced is keeping up with updated contact information from representatives and employees with the Tribes" (AR 4). "There are a number of Tribes in Humboldt County and some are, for various reasons, not as engaged in the process or not able to respond very quickly...And so in some cases, our process may be that we just go ahead and require an archaeologist to do a cultural resource survey in the absence of any communication from the Tribes" (AR 6). Capacity challenges in both agency and Tribal offices create communication and coordination challenges, even prior to consultation. Yet beyond staff shortages and heavy workloads, Tribal representatives also find that agencies are underinvested in developing legal and cultural competence and healthy intergovernmental relationships: "It's like you're always getting assigned to that kid who didn't do the reading" (Academic).

# 2.2. Interrelations among categories and structural barriers

To understand the immense challenge of overcoming the five core barriers to meaningful consultation identified in this study, we must consider the ways in which these barriers overlap and interrelate, revealing deeper structural issues. For example, agency discretion over what qualifies as a Tribal cultural resource is magnified because Tribes, due to histories of extraction and desecration, refuse to list some cultural resources in historical registries (see knowledge gaps section), because their claims are routinely discounted (see prioritizing Western knowledge section), and because they have little recourse when agency determinations do not go their way (see weak enforcement section). Similarly, the use of information systems and archaeological surveys to determine the presence of cultural resources reinforces the idea that resources can be geolocated to discrete sites and that resource management can be accomplished without direct input from Tribes, assumptions that reveal the further imbrication of agency discretion and the priority assigned to Western knowledge.

These findings demonstrate that agency discretion and weak enforcement subtend other barriers to meaningful consultation. It is because Tribes have no real decision making authority to interpret, implement, and uphold laws relating to the protection of their cultural heritage that the prioritization of Western knowledge, the existence of knowledge gaps, and capacity issues at agency and Tribal offices undercut meaningful and effective cultural resource management. The root issue is therefore the power differential between Tribes and agencies, which manifests most clearly in agency discretion and weak enforcement, which in turn make other challenges within the consultation process consequential for cultural resource outcomes.

To distinguish between barriers at their root and barriers as they may be experienced in everyday practices of consultation, we suggest a distinction between "structural" and "soft" barriers. Structural barriers, which include agency discretion, weak enforcement, and capacity issues, are grounded in power asymmetries between consulting parties, which correlate to differences in political and economic status that result from legacies of colonial governance and exclusion. Soft barriers, which include cultural differences, knowledge gaps, and poor relationships between Tribes and agencies, are not problematic in themselves, but become barriers to meaningful consultation when reinforced by structural barriers. Soft barriers are how dysfunction in the consultation process is often experienced on-the-ground (as meaningless lip-service), while it requires critical analysis to understand how this dysfunction is structurally created. The distinction between structural and soft barriers suggests that cultural differences, knowledge gaps, and poor relationships must be addressed not only through trust, education, and respect, but also through the material restoration of Tribal self-determination and shared decision making. It is the authority and capacity to approve and shape a project that ultimately makes consultation meaningful.

#### 2.3. Strengthening consultation policy and practice

To strengthen Tribal consultation in both policy and practice, recommendations must address both the "structural" and "soft" barriers, ultimately transforming the inherent power asymmetries that are deeply embedded in the current consultation process.

## 2.3.1. Reinforcing Tribal decision making authority

For many Tribal spokespeople, the definition of "meaningful consultation" is shared decision making authority. As one Tribal representative put it: "Without decision making authority, [consultation is] just manipulation." Attributing this view to Sioux scholar Vine Deloria Jr., this person pointed out that the significance of cultural resources is fundamentally relative to Tribes. Hence, Tribes must have the decision making authority "to say what is significant to them…you know, places of power – identifying what significant resources need to be preserved over others" (TR 18). Decision making authority, moreover, is more than having a seat at the table: Tribes should be able to delay or stop projects that will impact cultural sites (Middleton, 2013; Hinds, 2017).

In practice, however, projects would rarely need to be stopped or delayed so long as good consultation practices are followed. Many potential conflicts are avoided when agencies consult "early and often," meaning that Tribes are involved in the initial planning phase and throughout a project. "You know you're doing a project or you're thinking about doing a project - it's preconceptual: that's when you should reach out to Tribes" (TR 5). Both Tribal and agency representatives observed that early notification and consultation produces good results for Tribes and also helps to avoid conflict, project delays, and inflated costs for developers. "The more investments are piled in, the later you get into the process...the harder it is to pivot and the more it just becomes a battle of the wills..." (AR 2). Tribal engagement early in a planning process enables adjustments in the project design before significant resources are committed. "The more you engage with Tribes, the faster and easier your project will go. So don't see Tribes as a roadblock. Coming to them later is going to make things take longer" (TR 8).

Humboldt County enhanced Tribal discretionary authority beyond what is called for by AB 52, and these changes have produced mostly good results. In 2018, Humboldt amended its Cannabis Land Use Ordinance to grant Tribes the discretion to designate cultural sites and the independent authority to approve or deny projects threatening those sites. As a county planner explained: "It essentially gave the Tribes a lot of power and I was nervous about it. I felt like it's a matter of trust that the Tribe is not going to abuse the power we've given to it and I'm grateful that they have not. In my opinion they have been very judicious" (AR 2). This shift in authority had other unexpected benefits: it created goodwill between Tribes and agencies, simplifying and streamlining the consultation process and decreasing the administrative burden. For example, if CHRIS returns a negative search result but recommends a survey, the planning agency can rely on Tribal approval

of the project to move forward without a survey. Building trust and goodwill allowed for more informality, flexibility, and efficiency.

By giving Tribes real decision making authority over project outcomes, Tribal discretion turns consultation into a process of negotiation that reflects the ideals of sovereign-to-sovereign interaction (Hamilton, Nichols, 2018; King, 2011). It also achieves the international standard of "Free, Prior, and Informed Consent" (FPIC), which sets the moral horizon of consultation law and practice (Mengden, Walter, 2017). Short of Tribal discretion, simply removing language like "agency discretion" from cultural resource statutes and creating a procedure for resolving disputes when parties fail to reach agreement would increase Tribal authority and incentivize decision making by mutual agreement (Dadashi, 2021).

#### 2.3.2. Strengthening consultation standards and enforcement

Backstopping stronger laws and standards of practice is effective enforcement. State and federal agencies can ensure that cultural resource laws are being followed by increasing scrutiny and penalizing non-compliance. Some scholars suggest that legislative bodies should enact government-wide consultation standards (Eitner, 2014) or implement a ranking system (Rowe et al., 2017) or assessment tool (Smith and Mitchell, 2020) to evaluate agency performance.

Projects also require monitoring for inadvertent discoveries. Adequately funded cultural monitors are best equipped to recognize findings of significance and handle them appropriately. There are creative ways to fund cultural monitors. For example, San Diego County assesses a "cultural impact fee" that goes directly to Tribes, which they use to offset the costs of outreach, monitoring, and education (TR 8). Statutes should also reinforce requirements by outlining consultation standards, defining clear protocols for monitoring and discovery, and earmarking funds for enforcement. Interviewees noted that AB 52's failure to address Tribes' general preference for preservation in place, rather than "mitigation" through excavation and removal to an adjacent location or off-site storage, was an opportunity missed (TR 1; Arch 1).

#### 2.3.3. Prioritizing Indigenous knowledge

Several scholars have written eloquently about the inadequacies of Western legal and policy frameworks insofar as they (often inadvertently) prioritize Western concepts, protocols, and ways of knowing (Milholland, 2010; Bathke, 2014). "Integrating" Indigenous knowledge into existing frameworks has also received critical scrutiny (Latulippe and Klenk, 2020; Nadasdy, 1999). Since Western knowledge is baked into policies once they are formed, the only way to prioritize Indigenous knowledge in land use planning and decision making is by co-designing consultation processes with Indigenous groups (TallBear, 2001). It is important to bear in mind that each Indigenous group is an independent, sovereign nation with distinct values and priorities. Hence, only cultural resource policies and protocols that reflect the particularities of consulting parties enable those parties to fully participate. Co-designing a consultation process in collaboration with Indigenous groups respects Indigenous sovereignty, enables those groups to better protect their cultural heritage, and affords agencies more flexibility to adapt consultation processes to their agency mission, existing procedures, and the types of cultural resource issues they most often encounter (Mills, 2017; Wolfley, 2016; Alexander, 2012).

Rather than rewriting cultural resource laws and consultation mandates entirely, some level of integration can be accomplished through programmatic agreements and memoranda of understanding (Warner et al., 2020). Formal agreements can also introduce important contextual considerations such as cumulative impacts assessment, since many Indigenous communities are uniquely capable of recognizing long-term environmental changes (Gordon et al., 2023; Emanuel and Wilkins, 2020; Zidny et al., 2020).

# 2.3.4. Respecting knowledge/data sovereignty

Agencies can respect knowledge sovereignty by recognizing the

histories and cultural norms that prevent Tribes from sharing sensitive information about cultural sites. Because this is privileged information, agencies must also recognize that there is no adequate substitute for direct, meaningful consultation. Information systems, archaeological reports, and other Western forms of documenting Indigenous history can therefore only supplement culturally-embedded knowledge. But respecting knowledge sovereignty involves more than recognizing irremediable knowledge gaps: agencies can participate in rebuilding cultural knowledge.

To support Tribes in rebuilding cultural knowledge lost through histories of genocide, forced displacement, and cultural erasure, agencies should consider helping Tribal staff secure contracts to conduct required environmental and cultural surveys. This is the path Humboldt County takes for projects in the Karuk Tribe's ancestral territory. Applicants are encouraged to hire Karuk staff to conduct cultural resource surveys, which saves costs by consolidating the cultural resource assessment and Tribal approval process. Following this same cost-saving logic, some counties seeking to survey a large landbase after the legalization of cannabis considered a programmatic environmental and cultural review or "lumping" method. With Tribal representatives in the lead, supported by archaeologists as needed, this approach helps to spare administrative burden and recover cultural knowledge for Tribes: "Because I see all of these individual reports, every one of them has their own cultural context, which is pretty much boilerplate, and not really very interesting. That effort could be put into writing regional contexts, or the money that goes into writing these contexts could go into something else that would benefit the Tribe, like oral histories or Tribal ecological knowledge studies or language" (Arch 3). Teams of Tribal representatives could work together to create regional histories and investigate a landscape, enabling Tribes to restore traditional knowledge about aboriginal lands, while also assessing cumulative impacts for that area (Arch 1; TR 3).

#### 2.3.5. Building capacity: funding, education, and relationships

All of these activities – from consultation to cultural surveys and monitoring – take time and resources, which Tribal (and agency) offices rarely have. Paramount for enacting any set of recommendations is to not make cultural resource laws an unfunded mandate: legislation must be accompanied by funding for capacity building in both Tribal and agency offices.

Effective cultural resource laws rely on robust infrastructure, which includes funding for staff, education and training, and relationship-building. Tribes need funding to hire and train staff for cultural surveys, information databases, consultation, and project monitoring. Since this is not a public service supported by tax dollar but a mitigation measure in light of ongoing colonial expansion, Tribes should be compensated for this work:

"That's true consultation: the funding should be coming from the county going to the Tribe to develop that government to government relationship, or from the state going to the Tribe to fund that government to government relationship. Everyone needs to be paid for their time. They're not just an interested party or stakeholder, right? This isn't just an environmental group making comment on a project or something like that. They have a vested interest, a real interest, a hard interest in what's going on here...don't make it an unfunded mandate, or an underfunded mandate. If you want the process to work quickly and smoothly, make sure that you have a well funded Tribe because the infrastructure simply isn't there within the Tribes to handle this volume of applications." (Arch 1).

Agency staff also need training in applicable cultural resource policies and protocols of Tribal collaboration. One way to enhance Tribalagency coordination is to hire a liaison at each agency responsible for interfacing with Tribes that advocates for them within the agency. This was one goal of SB 18, which mandated the appointment of a Tribal liaison at every state agency (although the unfortunate outcome has

been that some agencies assigned existing staff to do double duty, stretching liaisons thin). A Tribal liaison cross-trained in archaeology would also be able to review archaeological surveys in-house, which is a capability that many planning offices do not have. One interviewee suggested that each county would benefit from hiring a Tribal liaison and an archaeologist (Arch 1), while another proposed a committee that includes a Tribal representative, archaeologist, and historic preservation specialist (TR 12). Someone who is up-to-date on the requirements of cultural resource laws and who Tribes trust would be able to alleviate the constant pressure of notifications (TR 18) and possibly gain access to high-level information about cultural resources to help anticipate and resolve complex cases (AR 4).

The cornerstone of meaningful consultation and what capacity is fundamentally about is building strong relationships, which take time, resources, trust and understanding, respect, and equality before the law. Where healthy relationships exist, Tribes are more comfortable sharing sensitive information about cultural sites and conflict situations are more easily resolved. "It'd be nice to get to the point... where I could pick up the phone and be like, 'Hey, I got a question,' or 'Hey, I heard through the grapevine that there is this project.' We're not at that level yet with the county. I strive to get there" (TR 4).

Many agency representatives talked about the difficulties of identifying and contacting Tribal offices and several discussed the lengths they travel to contact Tribes in their area: "It's that double-checking, making that extra phone call, just touching base one more time. 'Hey, we have this project, we've notified you, we didn't hear anything back. Did you get it?"" (AR 4). It might also help to hold some informal meetings or even have periodic check ins to evaluate and improve current processes:

"We really make headway with counties when we're able to sit down and have meetings on a regular basis, instead of a project by project basis...It's really not consultation at that point, it's that early relationship building. And that's the critical thing. AB 52, if there is something to be said about it, it would be agencies need to gain trust and form a relationship with Tribal communities before they start pushing projects through or consultation. I find that is more effective. They start to understand who they're dealing with better. And in general, the project just goes a lot smoother" (TR 11).

The power and importance of relationships and relationship-building is also a mainstay of the literature on Tribal consultation (Stolte, 2023; Dadashi, 2021; Routel and Holth, 2012), with some scholars focusing on the value of face-to-face relationships (Wolfley, 2016; Mueller, 2018). Face-to-face meetings can help Tribal and agency representatives get to know each other beyond the formal consultation process and have frank discussions about matters of importance. While local jurisdictions typically have less experience than state and federal agencies in conducting consultation, over time the proximity and shared landbase may prove to be a benefit, bringing Tribal and local governments together through more frequent and familiar encounters: "I've built relationships that are meaningful, like, 'I'm going to be in your face forever. But because I love this place. And I know that if you didn't love this place, you wouldn't want to be on the planning commission.' Yeah, you gotta love some part of it. Because you live here, you know" (TR 6). In theory, the more Tribes and counties are forced to work together, the more they will come to understand each other and come to see each other as partners in this process: "I think the number one takeaway message that a lot of counties and agencies need is to think of Tribes as equals and partners, not another box to check or hoop to jump through. And coming in with that approach makes a big difference" (TR 15).

# 3. Conclusion

"The bedrock of site protection policy is Tribal consultation" (TR 17), and we might add that the bedrock of meaningful consultation is shared decision making and good relationships. Consultation processes that afford Tribes the opportunity to fully express their views and concerns

and collaboratively inform decisions regarding land and its uses is key to achieving outcomes that are durable, affirm Tribal sovereignty, and ameliorate risk of indelible harm to cultural resources. Approaching consultation as a technical exercise – as a box to be checked – undermines Tribal sovereignty and ultimately evades the promise of stewarding the land for all who live and belong upon it.

As this study has shown, there are many ways in which processes of Tribal consultation are weakened or bypassed in their entirety. These barriers to meaningful consultation – from legal loopholes to policy language that diminishes Tribal knowledge and inflates agency authority, from weak enforcement mechanisms to inadequate staff training, resources, and investments in relationships – are all out of step with the spirit of cultural resource laws. However, these barriers can be addressed by strengthening cultural resource laws and by taking a more perspicacious approach to their implementation. To this end, we have presented recommendations from practitioners engaged in Tribal consultation in California and from the literature. While non-exhaustive, the categories that emerge from this study (discretionary authority; enforcement; sources of knowledge and expertise; knowledge/data sovereignty; and capacity) might be used as a starting point for evaluating and improving cultural resource policies and practices. Table 1

#### CRediT authorship contribution statement

**Butsic Van:** Supervision, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **LaRosa Seth:** Visualization, Software, Project administration, Methodology, Investigation, Formal analysis, Data curation. **Gaughen Shasta:** Writing – review & editing, Validation, Methodology, Data curation, Conceptualization. **Crosby Earl:** Validation, Methodology, Formal analysis, Data curation, Conceptualization. **Nelson Peter:** Methodology, Investigation, Funding acquisition, Data

**Table 1**Common barriers to meaningful Tribal consultation.

Barriers	Description	Examples from case study
Agency discretion	Agencies make the final determination about what qualifies as a TCR, if there will be a "significant effect," and what mitigation measures will limit that effect.	Agencies can award ministerial permits that obviate CEQA review and consultation.     Interim, provisional, and "early activation" licenses permit operators to begin work before full licensure and CEOA review.
Weak enforcement	Tribes have limited jurisdiction over what happens beyond reservation borders and little recourse to ensure compliance with consultation and cultural resource protection laws and policies.	<ul> <li>Agencies operate on complaint-based system, do not actively monitor</li> <li>Late consultation or treated as a "box-ticking exercise"</li> </ul>
Prioritization of Western knowledge and expertise	Western views and values are embedded in the law and are often at odds with Indigenous cultural practices.	<ul> <li>Over reliance on planner and archaeological expertise.</li> <li>Poor understanding of Tribal priorities, such as cumulative effects, traditional land uses, landscape-level thinking, and "preservation in place."</li> </ul>
Knowledge gaps	Privileged cultural information remains with Tribes, making consultation necessary.	<ul> <li>State information databases are incomplete because TCR locations are often confidential.</li> </ul>
Poor capacity	Limited staff, time, and resources for agencies and Tribes	<ul> <li>Agencies have limited staff and resources and suffer from high turnover.</li> </ul>

Table 2
Recommendations.

Possible solutions	Description
Tribal Discretion	Policy language that removes "agency discretion" and allows Tribes to actively share in decision making authority. The Humboldt County Land Use Ordinance allows Tribes to designate cultural resources and participate in project design to preserve cultural sites in place.
Early Consultation	"Early and often" notification and consultation with Tribes in the initial planning phase of the project enables Tribes to alert agencies to potential issues and saves costs, administrative burden, and potential conflict down the line.
Strengthening Consultation Standards and Enforcement	Stronger requirements, clearer guidelines, increased scrutiny, and enforceable penalties help align agency practices with the spirit of cultural resource laws.
Co-Designing Consultation	The distinct values, concerns, and preferences of different Tribes means that there is no one-size-fits-all procedure for meaningful consultation. Programmatic agreements between consulting parties can improve communication, clarify expectations, increase flexibility, and include other benefits like facilitating assessments of cumulative impacts. Programmatic environmental reviews can save time and costs and can help restore cultural knowledge for Indigenous groups.
Staff and Education	Designated staff in agency and Tribal offices responsible for cultural resource management and consultation would enhance coordination. Agency staff should be trained in Tribal protocols, cultural sensitivity, and cultural resource law. Ideally, each agency would have a liaison.
Funding	Adequate funding impacts many of the activities discussed, including hiring, retaining, and training staff, compensating staff for their time, and cultural monitoring. Many Tribes and their agency counterparts have developed creative ways to fund Tribal project review, including cultural impact fees, directing archaeology fees to THPOs, and other methods of cost-sharing.
Relationships and Trust	Relationships, especially face-to-face relationships, introduce a measure of agency and flexibility that can help to clarify gray areas in cultural resource laws, improve communication and coordination, and ultimately increase trust and accountability between consulting parties. As cultural resource laws and policies roll out at the state and local level, relationships may be one of the unanticipated benefits of more consistent contact through consultation.

curation, Conceptualization. **Sorgen Jeremy:** Writing – review & editing, Writing – original draft, Validation, Supervision, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Sowerwine Jennifer:** Writing – review & editing, Validation, Supervision, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Geary Robert:** Conceptualization, Data curation, Formal analysis, Methodology, Resources, Validation.

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# Appendix A. Supporting information

Supplementary data associated with this article can be found in the

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#### Data availability

The authors do not have permission to share data.

#### References

Alexander, S.Rheagan, 2012. Tribal consultation for large-scale projects: the national historic preservation act and regulatory review. Pace L. Rev. 32, 895.

Baldy, Cutcha Risling, 2013. Why we gather: traditional gathering in native Northwest California and the future of bio-cultural sovereignty. Ecol. Process. 2, 1–10.

Bathke, John P., 2014. Ocotillo wind: a case study of how tribal-federal governmental consultation is failing tribal governments and their spiritual landscapes through renewable energy development. Hum. Geogr. 7 (2), 46–59.

Bevan, Alana K., 2020. The fundamental inadequacy of tribe-agency consultation on major federal infrastructure projects. U. Pa. JL Pub. Aff. 6, 561.

Blumm, Michael C., Pennock, Lizzy, 2022. Tribal consultation: toward meaningful collaboration with the federal government. Colo. Env't LJ 33, 1.

Dadashi, Heather, 2021. CEQA Tribal cultural resource protection: gaps in the law and implementation. UCLA J. Envtl. L. Pol. 'Y. 39, 231.

Dongoske, Kurt E., 2020. Making mitigation meaningful to descendant communities: an example from Zuni. Adv. Archaeol. Pract. 8 (3), 225–235.

Eitner, Michael, 2014. Meaningful consultation with tribal governments: a uniform standard to guarantee that federal agencies properly consider their concerns. U. Colo. L. Rev. 85, 867.

Elkins, Caroline, Pedersen, Susan (Eds.), 2005. Settler colonialism in the twentieth century: Projects, practices, legacies. Routledge.

Emanuel, Ryan E., Wilkins, David E., 2020. Breaching barriers: the fight for indigenous participation in water governance. Water 12 (8), 2113.

Fuller, Reba, 2011. Consultation in cultural resource management: an indigenous perspective. A Companion Cult. Resour. Manag. 373–384.

Glaser, Barney, Strauss, Anselm, 2017. Discovery of grounded theory: Strategies for qualitative research. Routledge.

Gordon, Heather Sauyaq Jean, Ross, J.Ashleigh, Bauer-Armstrong, Cheryl, Moreno, Maria, 2023. Rachel Byington, and Nicole Bowman. Integrating indigenous traditional ecological knowledge of land into land management through indigenous-academic partnerships. Land Use Policy 125, 106469.

Hamilton, Robert, Nichols, Joshua, 2018. The tin ear of the court: ktunaxa nation and the foundation of the duty to consult. Alta. L. Rev. 56, 729.

Haskew, Derek C., 1999. Federal consultation with indian tribes: the foundation of enlightened policy decisions, or another badge of shame? Am. Indian L. Rev. 24, 21.Hinds, Brody, 2017. Twenty-five years later: the amendments to the national historic

preservation act and tribal consultation. Am. Indian Law Rev. 42 (1), 141–171. Hoss, Aila, 2022. Securing tribal consultation to support tribal health sovereignty. NEULR 14, 155.

King, Thomas F., 2011. A companion to cultural resource management. A John Wiley & Sons, Ltd., Publication.

Latulippe, Nicole, Klenk, Nicole, 2020. Making room and moving over: knowledge coproduction, Indigenous knowledge sovereignty and the politics of global environmental change decision-making. Curr. Opin. Environ. Sustain. 42, 7–14.

Mengden, I.V., Walter, H., 2017. Indigenous people, human rights, and consultation: the Dakota Access Pipeline. Am. Indian Law Rev. 41 (2), 441–466.

Middleton, Beth Rose, 2013. Just another hoop to jump through?" using environmental laws and processes to protect indigenous rights. Environ. Manag. 52 (5), 1057–1070.

Mihas, Paul, Institute, Odum, 2019. Learn to Build a Codebook for a Generic Qualitative Study. Sage Research Methods Datasets Part 2. SAGE Publications, Ltd., London.

Milholland, Sharon, 2010. In the eyes of the beholder: understanding and resolving incompatible ideologies and languages in US environmental and cultural laws in relationship to Navajo sacred lands. Am. Indian Cult. Res. J. 34 (2), 103–124.

Mills, Jennifer, 2017. Destabilizing the consultation framework in Alberta's tar sands. J. Can. Stud. 51 (1), 153–185.

Mueller, Brad, 2018. Consultation and compliance: then and now. In: Backhouse, Paul, N., Weisman, Brent R., Rosebrough, Mary Beth (Eds.), We come for good: archaeology and tribal historic preservation at the Seminole tribe of Florida. University Press of Florida.

Nadasdy, Paul, 1999. The politics of TEK: power and the 'integration' of knowledge. Arct. Anthropol. 1–18.

Routel, Colette, Holth, Jeffrey, 2012. Toward genuine tribal consultation in the 21st century. U. Mich. JL Reform 46, 417.

Rowe, Matthew J., Finley, Judson Byrd, Baldwin, Elizabeth, 2017. Accountability or merely" good words"? an analysis of tribal consultation under the national environmental policy act and the national historic preservation act. Ariz. J. Envtl. L. Pol. 'Y. 8, 1.

Searle, Jason, 2016. Exploring alternatives to the "consultation or consent" paradigm. Mich. J. Envtl. Admin. L. 6, 485.

Smith, J.A., Mitchell, T.L., 2020. Development of an UNDRIP compliance assessment tool: How a performance framework could improve state compliance. TheInternationalIndigenousPolicyJournal 11 (2). https://doi.org/10.18584/ iipi.2020.11.2.10713.

Sorgen, J., Nelson, P., Larosa, S., Butsic, V., Gaughen, S., Starkey, A.M., 2025. Tribal sovereignty in land use decision making: Evaluating cultural resource law in California. Environment and Planning E: Nature and Space, 25148486251322629.
 Stolte, Gretchen, 2023. Consultation is the new C-word. Am. Ethnol.

- TallBear, Kimberly, 2001. Understanding the Federal/Tribal Relationship and Barriers to Including Tribes in Environmental Decision-Making. International Institute for Indigenous Resource Management, *U. Denver*, *CO* (not sure where this is published).
- Warner, Elizabeth Kronk, Lynn, Kathy, Whyte, Kyle, 2020. Changing consultation. UC Davis L. Rev. 54, 1127.
- Welch, John, Riley, Ramon, Nixon, Michael, 2009. Discretionary desecration: dził nchaa Si an (Mount Graham) and federal agency decisions affecting American Indian sacred sites. Am. Indian Cult. Res. J. 33 (4).
- Wolfe, Patrick, 1999. Settler colonialism and the transformation of anthropology: The politics and poetics of an ethnographic event. Cassel, London.
- Wolfley, Jeanette, 2016. Reclaiming a presence in ancestral lands: the return of native peoples to the national parks. Nat. Resour. J. 56, 55.
- Youdelis, Megan, 2016. "They could take you out for coffee and call it consultation!": the colonial antipolitics of Indigenous consultation in Jasper National Park. Environ. Plan. A: Econ. Space 48 (7), 1374–1392.
- Zidny, Robby, Sjöström, Jesper, Eilks, Ingo, 2020. A multi-perspective reflection on how indigenous knowledge and related ideas can improve science education for sustainability. Sci. Educ. 29 (1), 145–185.