

UC Irvine

UC Irvine Previously Published Works

Title

Federal Statutes and Environmental Justice in the Navajo Nation: The Case of Fracking in the Greater Chaco Region

Permalink

<https://escholarship.org/uc/item/94m938st>

Journal

American Journal of Public Health, 112(1)

ISSN

0090-0036

Authors

Atencio, Mario

James-Tohe, Hazel

Sage, Samuel

et al.

Publication Date

2022

DOI

10.2105/ajph.2021.306562

Peer reviewed

Federal Statutes and Environmental Justice in the Navajo Nation: The Case of Fracking in the Greater Chaco Region

Mario Atencio, MA, Hazel James-Tohe, Samuel Sage, David J. Tsosie, EdD, Ally Beasley, JD, MPH, Soni Grant, PhD, MA, and Teresa Seamster, EdS, MS

 See also Levy and Hernández, p. 48.

Arguing for the importance of robust public participation and meaningful Tribal consultation to address the cumulative impacts of federal projects, we bridge interdisciplinary perspectives across law, public health, and Indigenous studies. We focus on openings in existing federal law to involve Tribes and publics more meaningfully in resource management planning, while recognizing the limits of this involvement when only the federal government dictates the terms of participation and analysis.

We first discuss challenges and opportunities for addressing cumulative impacts and environmental justice through 2 US federal statutes: the National Environmental Policy Act and the National Historic Preservation Act. Focusing on a major federal planning process involving fracking in the Greater Chaco region of northwestern New Mexico, we examine how the Department of the Interior attempted Tribal consultation during the COVID-19 pandemic. We also highlight local efforts to monitor Diné health and well-being.

For Diné people, human health is inseparable from the health of the land. But in applying the primary legal tools for analyzing the effects of extraction across the Greater Chaco region, federal agencies fragment categories of impact that Diné people view holistically. (*Am J Public Health*. 2022;112(1):116–123. <https://doi.org/10.2105/AJPH.2021.306562>)

Diné (Navajo) communities in the Greater Chaco region of northwestern New Mexico have raised concerns that the Department of the Interior (DOI) has not engaged in meaningful public involvement and Tribal consultation to inform its decisions about oil and gas development. For Diné people, human health is inseparable from the health of the land. But in applying the primary legal tools for analyzing the effects of extraction across the Greater Chaco landscape, federal agencies tend to fragment categories of impact that Diné people view

holistically. Because of federal agencies' failure to collaborate with communities most affected by extraction, the DOI, under previous leadership, has acted based on incomplete information about existing and potential direct, indirect, and cumulative impacts.

How federal agencies approach public participation and Tribal consultation has critical implications for environmental justice. Requirements in US federal laws such as the National Environmental Policy Act (NEPA) and the National Historic Preservation Act of 1966 (NHPA) establish minimum

standards for meaningful engagement with frontline communities, sovereign Tribal nations, and broader publics, but following these standards does not guarantee equitable, just processes or outcomes. In arguing this, we firmly believe that nothing short of a redistribution of power, which includes "the repatriation of Indigenous land and life,"^{1(p21)} will truly bring about environmental justice. But in this article, we focus on openings in existing federal law to involve Tribes and publics more meaningfully in resource management planning and decision-making, while

recognizing the limits of this involvement when only federal actors dictate the terms of participation and analysis.

We stress that the caretaking of Indigenous homelands is a public health and environmental justice issue for Diné people. Extraction in the Greater Chaco, as well as the control of Diné lands by non-Native actors, can interfere with the ability of Diné people to practice these relations of care. We point to Diné Fundamental Law as an example of where the inseparability of human and environmental well-being in a Diné worldview is expressed. We do not offer interpretations of fundamental law or expand in detail on Diné epistemology regarding relationships between humans and other beings, but we highlight these ways of knowing to signal some of their core differences from a Euro-American worldview. These differences, we suggest, are often problematically glossed over in federal decision-making.

Controversy over a Draft Resource Management Plan Amendment and Environmental Impact Statement (RMPA-EIS) for the Bureau of Land Management's (BLM's) Farmington Field Office in northwestern New Mexico exemplifies the critical nexus of public participation, Tribal consultation, health, and environmental justice. In process since 2014, the draft RMPA-EIS was released for public comment just as the COVID-19 pandemic devastated Indigenous communities across the region. Although the BLM has not yet made a final decision on the RMPA-EIS, it is worth examining the thus far 7-year process and the content of this draft plan for the coloniality it reveals in the federal oil and gas program.

The Navajo Nation chapters (local units of government) of Counselor, Ojo Encino, and Torreon, which together form the Tri-Chapter Council, are in the

heart of contentious new and ongoing hydraulic fracturing ("fracking") development near Chaco Culture National Historical Park, which the RMPA-EIS is meant to analyze. The Tri-Chapter Council is in an eastern part of Diné homelands called Diné'tah, the place of emergence of Diné people into this world. Diné homelands are bound by 6 sacred mountains. To the east is Sis Naajiní, to the south Tsoodzil, to the west Dook'oolííd, and to the north Dibé Nitsaa. Diné'tah, marked by the last 2 sacred mountains, Dził Na'oodilii and Dził Ch'ool'il, symbolizes a doorway into these homelands. Diné people have lived in Diné'tah since time immemorial, caring for the land as instructed by the Holy People.^{2,3}

Yet despite the paramount importance of Diné'tah in Diné cosmology and the prevalence of sacred sites throughout the region, much of the land base is controlled by federal, state, and private actors—not by the Navajo Nation government. Many of the Navajo chapters in Diné'tah are outside the formal reservation boundaries. Over the course of colonial settlement, Diné homelands were surveyed and divided into distinct tracts of land over which the federal government claimed jurisdiction—and then granted piecemeal to settlers, the State of New Mexico, and some individual Diné allotment owners. The result is a "checkerboarded" legal landscape: a complex patchwork of federal, state, private, Tribal trust, and Indian allotted jurisdictions. Because of the fragmentation of Diné territory in the region, the BLM and the Bureau of Indian Affairs (BIA) have the enforced legal authority to make most decisions regarding oil and gas development there.^{2,3} Because of the proximity of ongoing and potential fracking to Chaco Culture National Historical

Park and the importance of the Greater Chaco landscape to Diné, Pueblo, Hopi, and Apache peoples, controversy over extraction in this region has garnered substantial national attention.⁴

Taking the Farmington draft RMPA-EIS as a case study in which the COVID-19 pandemic rendered already inadequate consultation processes nearly impossible, we show why it is imperative that public participation and Tribal consultation not be treated merely as box-checking exercises for federal agencies. Instead, as exemplified by Diné residents documenting the impacts of fracking in the Tri-Chapter Council, frontline communities have a wealth of important knowledge about the actual and potential effects of extraction (Appendix A [available as a supplement to the online version of this article at <http://www.ajph.org>]). This knowledge should guide collaborative decision-making about land management and infrastructure projects.

RESOURCE MANAGEMENT PLAN AMENDMENT

In 2014, the BLM announced it would launch a public process to amend the resource management plan for its Farmington Field Office in northwestern New Mexico. Resource management plans are major planning documents that outline how a BLM field office will administer federally managed lands and resources in its jurisdiction over a long period, usually about 20 years. The last resource management plan for the Farmington Field Office was finalized in 2003. At that time, the BLM had not anticipated that by 2010 oil and gas companies would flock to the region's San Juan Basin to extract oil from a previously untapped hydrocarbon

reservoir, the Mancos Shale. Instead, the BLM had planned for long-standing “conventional” oil and gas development to continue as it had in previous years.⁵

The purpose of the RMPA-EIS process was to supplement the analysis in the 2003 resource management plan by accounting for the impacts of Mancos Shale development. In 2016, the BIA joined the BLM as a coleading agency in the preparation of the RMPA-EIS, which the BIA would use to guide mineral-leasing decisions on Tribal trust and Indian allotted lands.⁶

As the BLM and the BIA undertook a process to analyze the impacts of Mancos Shale development, the agencies proceeded to permit new extraction from Mancos Shale. In a region with more than 40 000 active and abandoned oil and gas wells, where more than 91% of federally managed lands are already leased for oil and gas extraction, this alarmed Tribal governments and many affected community members.⁷ The Navajo Nation, the All Pueblo Council of Governors, and the National Congress of American Indians adopted resolutions requesting that the BLM enact a moratorium on new leasing and drilling on federally managed lands until the RMPA-EIS was finalized.⁸⁻¹⁰ The DOI did not heed to these demands. Instead, between 2010 and 2021, its bureaus authorized drilling permits for more than 400 new Mancos Shale wells, whose potential cumulative impacts had never been analyzed. Indigenous and environmental advocates continue to challenge these actions in federal court.⁷

The National Environmental Policy Act

The NEPA is a federal statute that outlines procedural requirements for how

federal agencies should assess and disclose the potential environmental impacts of federal projects, with a goal of protecting and enhancing the human environment.¹¹ To accomplish this goal, NEPA has 2 broad aims: (1) ensuring public participation and transparency in federal agency decision-making, and (2) ensuring that federal agency decision-makers are fully informed of, and thoroughly consider, all the relevant factors and potentially significant impacts of their decisions (42 USC §§4321, 4331). These twin aims should be mutually reinforcing. A full public participation process, with the “fair treatment and meaningful involvement”¹² that environmental justice demands, is necessary to apprise agencies and publics of “relevant factors,” including comprehensive cumulative risks and impacts that can only be fully understood through collaboration with those who experience these impacts.¹³

The NEPA's implementation of Council on Environmental Quality (CEQ) regulations, as originally written, required agencies to consider cumulative impacts in their decision-making and planning processes—specifically, in NEPA's requisite Environmental Assessments or Environmental Impact Statements (40 CFR §1508.25(c)(3)). These CEQ regulations define cumulative impacts as

the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (40 CFR §1508.7)

The “environment,” in turn,

shall be interpreted *comprehensively* to include the natural and physical environment *and the relationship of people with that environment.* (40 CFR §1508.14; emphasis added)

This relationship includes, but should not be limited to or compartmentalized into, physical, biological, and social forces.¹¹

It is critical for advancing environmental justice in and through the NEPA process that the relationship between people and the environment be viewed from the perspective of those who know it firsthand. Environmental assessments must not be confined to a Euro-American worldview characterized by what Dongoske et al. call “scientific materialism,” a lens that views ecosystems as composed of discrete parts, whose variables and interactions can be studied.¹¹ Although this worldview has tended to dominate NEPA processes, Indigenous peoples often have other ways of understanding the environment that “get short shrift in NEPA analyses.”^{11(p41)} A focus on single-pollutant, risk-based modeling in US federal environmental laws and regulations has excluded other valid perspectives and sources of knowledge from decision-making and has led agencies to compartmentalize impacts, and even pollutants, and to dismiss their significance accordingly.¹¹

For example, in DOI's draft Farmington RMPA-EIS, the department bracketed the impacts of fracking and oil and gas development authorized by the plan into discrete categories, such as “cultural,” “health,” “economic,” “climate,” “air quality,” and “water quality.”¹⁴ This segregation of impacts does not reflect the perspectives and information shared by Tribal governments

and frontline communities for the years leading up to the draft RMPA-EIS.⁶ The DOI occasionally briefly discussed cumulative impacts in some of these categories in the draft RMPA-EIS, but did not appear to consider the relationships of these impacts to one another or to consider these and other impacts as they are identified and documented by those who live in the Greater Chaco region (Appendix A).

Diné Fundamental Law, ordained by the Holy People and formally enacted by the Navajo Nation Council in 2002, is an example of a long-standing juridical tradition that operates with a different understanding of the relationship between humans and the environment than that which the BLM assumes when applying NEPA, where “humans,” “environment,” and “culture” are treated as separate categories of analysis.¹⁵ No such distinctions are made in Diné Fundamental Law, whose purpose is to “provide sanctuary for the Diné life and culture, our relationship with the world beyond the sacred mountains, and the balance we maintain with the natural world.”^{16(p6)} The integral relationship between Diné people and the environment is articulated in Diné Fundamental Law as follows:

Mother Earth and Father Sky is part of us as the Diné and the Diné is part of Mother Earth and Father Sky; the Diné must treat this sacred bond with love and respect without exerting dominance for we do not own our mother and father. (1 NNC §205)

As expressed in Diné Fundamental Law and by Tri-Chapter Council residents, the continuation of Diné culture is bound up with care for the broader environment, which is, simultaneously, care for the people and kinship relationships (Appendix A).³

In 2020, the Trump administration gutted NEPA regulations and targeted sections at the heart of environmental justice—striking the mandates that agencies consider indirect and cumulative impacts and further eviscerating public participation requirements. If the Biden administration restores or strengthens the original CEQ regulations, it is critical that such revisions be drafted and reviewed with those in frontline communities as colleagues from the outset.

Regardless of the state of the CEQ regulations, US state and federal courts have held that federal agencies must take a “hard look” at environmental justice in their NEPA analyses and processes. In doing so, they have looked to the language of NEPA, Executive Order 12898 on environmental justice, and agency guidance on environmental justice in the NEPA process.¹⁷ For example, in recent rulings on challenges to the Dakota Access Pipeline,¹⁸ the court looked to the CEQ Guidance on Environmental Justice in the NEPA process and ruled that it was not enough for an Army Corps of Engineers environmental assessment merely to acknowledge that the Standing Rock community had a high percentage of “minorities” and “low-income individuals” and could be affected by an oil spill from the Dakota Access pipeline. The court noted that the environmental assessment was silent on the “cultural practices of the Tribe and the social and economic factors that might amplify its experience of the environmental effects of an oil spill”^{18(p54)} and that to meet its NEPA “hard look” obligations, the agency “needed to offer more than a bare-bones conclusion that Standing Rock would not be disproportionately harmed.”^{18(p54)} In a subsequent memorandum opinion, the court stated that

“In this Circuit, NEPA creates, through the Administrative Procedure Act, a right of action deriving from Executive Order 12898”^{19(p4)} and that NEPA further requires the agency to determine how a project will affect a Tribe’s treaty rights.¹⁹

The National Historical Preservation Act

The NHPA is a federal statute intended to preserve historic and archaeological sites across the United States. NHPA’s Section 106 requires federal agencies to consider how federally approved or funded projects, like the Farmington RMPA-EIS, may affect historic properties as defined by law.^{11,20} Section 106 mandates that federal agencies consult with Tribes, Alaska Natives, and Native Hawaiian Organizations, as well as the state historic preservation officer and the tribal historic preservation officer, regarding federal projects. Additionally Section 106 guides federal agencies to collaborate with these parties in identifying historic properties, assessing the potential effects of a project on these properties, and developing strategies to mitigate adverse effects.

Tribal consultation with the Diné Nation and the Pueblo Nation regarding the Farmington RMPA-EIS has occurred primarily under the framework of Section 106. However, Indigenous communities across the Greater Chaco region have raised concerns about the adequacy of this consultation process and the lack of thorough ethnographic surveying that should accompany Section 106 analyses, arguing that the DOI has failed to meaningfully consult with Indigenous peoples and governments during the RMPA-EIS process, quarterly oil and gas leasing, and regular permitting activities.

For example, Samuel Sage, community services coordinator for Counselor Chapter and coauthor of this article, describes his experience of “consultation” with DOI on the Draft RMPA-EIS as follows:

I have never once experienced BLM come to Counselor Chapter and actually listen to residents’ concerns. When BLM does occasionally show up, it is to inform us of a decision the agency has effectively already made and then to defend that decision without taking our community’s feedback into account. This is how the NHPA Section 106 process for the RMPA-EIS felt as well—like BLM had already decided they wanted to approve more oil and gas development in our area, and Tribal consultation was just a formality they had to go through beforehand. This is not meaningful consultation. (Counselor Chapter, NM, September 23, 2020)

Sage’s experience underscores how the minimum standards established by law do not ensure meaningful consultation. Like NEPA, NHPA is a procedural statute. Courts have tended to uphold agencies’ decisions to authorize projects even if doing so will result in adverse effects to cultural properties, so long as the procedural benchmarks of the law have been met.^{21,22} However, in the Greater Chaco region, DOI decisions have resulted in significant consequences for environmental justice in both the Counselor Chapter and the broader Tri-Chapter Council communities. Because fracking began in the Tri-Chapter Council, residents have noticed increased and constant air pollution, disappearance of medicinal plants, degradation of local roads, and increased health effects (Appendix A).

These concerns reflect the long-term presence of oil and gas development

across the Greater Chaco landscape, where Diné communities are surrounded by extraction. However, the BLM’s methods under both NEPA and NHPA for assessing oil and gas proposals rely on a tiered scalar analysis that undermines the agency’s ability to understand these cumulative impacts and their effects on the well-being of Diné and Pueblo communities. For example, the BLM defers its site-specific examination of potential cultural resource impacts to the drilling permit stage, right before a site is prepared for extraction.²³ At this point in the review process, oil and gas leases have already been approved and the lessee has secured a legal right to develop minerals. Minor modifications to the project may be made to mitigate impacts to cultural resources—for instance, a culvert may be moved over by a few feet to avoid a medicinal plant—but the project is unlikely to be stopped. This method bespeaks distinctly colonial assumptions about land inherent to the BLM’s management practices: that, once parceled out and sold, impacts to one piece of land can be examined in isolation from the landscape of which it is a part. By contrast, for Diné the land is a living entity. Like a human body, all its parts are connected.

Diné and Pueblo groups have argued that the BLM could reduce some of its blind spots regarding impacts to cultural resources by involving Tribes and Indigenous communities early and often in decision-making regarding federal land use planning and leasing through processes of meaningful consultation and consent.²⁴ These groups also remind the BLM that a congressionally funded ethnographic study, led by the pueblos of Acoma, Jemez, Laguna, and Zuni, the Hopi Tribe, and the

Navajo Nation, is under way and should inform future land use plans.²⁵ That this study is led by Indigenous experts is significant because, as Diné and Pueblo people have consistently pointed out, only experts from their own communities have the knowledge required to identify many cultural sites.⁶

Even when ethnographic studies are conducted, Indigenous peoples face challenges in rendering their concerns about the protection of sacred lands intelligible to federal agencies and courts. NHPA’s strict criteria for listing on the National Register of Historic Places, its tendency to value written evidence over oral histories, and the burden of demonstrating an impact to sacred sites under the law, all limit the usefulness of NHPA for Indigenous peoples in protecting sacred places.²⁶ Moreover, some Indigenous religious practices require keeping private the location and purpose of sacred sites, which can make it challenging for Tribes to present all the evidence needed to advocate the recognition of a place or site as a “historic property” under the NHPA.²⁷

Examining cases where Tribes have brought legal challenges against federal agencies’ decisions regarding cultural resources, the author (D. J. T.) notes that courts have tended to consider sovereign Tribal governments just one set of “stakeholders” in a broader conversation about public lands management.²⁰ This tendency glosses over the special government to government relationship that Tribes have with the United States, as well as the unique nature of Indigenous claims to place. The propensity in US jurisprudence to adjudicate resource conflicts in terms of competing property claims between Tribes and other parties, like potential

developers, often falls woefully short of what Tribes argue in such cases.²⁰ For instance, in the Greater Chaco region, Diné and Pueblo peoples advocating landscape-level protection are doing so to affirm not an individual right to property but an expansive set of collective and cultural rights and responsibilities to care for the land.^{20,26}

Federal laws like NHPA and NEPA tend to require Indigenous peoples to articulate their positions in the constraining frameworks of Euro-American juridical traditions, and federal agencies have typically treated Tribal consultation as merely a right to be involved, at best. But meaningful consultation conducive to an understanding of the cumulative and environmental justice impacts of federal projects must begin from a place where Indigenous peoples can “effectively determine the outcome of decision-making that affects them.”^{28,29} This means that the terms of participation and analysis cannot be presumed by federal institutions in advance.

Participation and Consultation

On February 28, 2020, just weeks before the Navajo Nation, the Pueblo Nations, and the State of New Mexico implemented stay-at-home orders in response to the COVID-19 pandemic, the DOI released a draft of the long-anticipated Farmington RMPA-EIS. The scenarios, or “alternatives,” presented in the plan did not reflect public feedback provided during scoping in previous years, during which commenters overwhelmingly asked the DOI to end new oil and gas development in the region.⁶ Instead, the alternatives presented would allow the drilling of 2345 to 3101 new oil and gas wells, signaling

to affected communities that their feedback about the destructive impacts of extraction had not been meaningfully taken into account.¹⁴

The release of the draft RMPA-EIS triggered a 90-day public comment period. Despite requests from Tribes, Pueblos, elected representatives, environmental groups, and publics that the comment period be extended until in-person public meetings could be safely held, the DOI opted to hold virtual forums to solicit feedback on the plan. At the 11th hour, amid widespread public outcry, the agencies extended the comment period by another 90 days. However, as the close of that comment period drew near, the impacts of the COVID-19 pandemic across the region had only worsened. The DOI ignored continued requests for a pause in the process and continued instead to host largely inaccessible virtual meetings.³⁰

The week that the DOI launched its first round of virtual meetings in May 2020, the Navajo Nation recorded the highest per capita rate of COVID-19 infections in the United States.³¹ Indigenous communities in New Mexico and across the country were devastated by the pandemic. Native American and Alaska Native peoples face a higher risk of COVID-19 infection and a mortality rate nearly twice that of non-Hispanic White populations.³² Moreover, in the Greater Chaco region, as in many Indigenous communities, low-income communities, and communities of color,^{22,33} residents are disproportionately exposed to harmful levels of air pollution from industrial sources, including oil, gas, and coal extraction.³⁴ These exposures compound COVID-19 risks.^{34,35}

In addition to facing disparate COVID-19 impacts, many Diné and Pueblo

communities do not have access to the broadband Internet or telephone coverage required to participate in virtual meetings. New Mexico ranks 49th in the United States for Internet access, and less than half of Indigenous residents have Internet access in their homes.^{36,37} Tribal governments were not only concerned about barriers to their citizens’ access to the virtual public meetings; elected leaders also insisted that meaningful consultation could not occur so long as Tribes remained focused on responding to the pandemic.

CONCLUSIONS

As of fall 2021, under new leadership, the DOI has not finalized the draft RMPA-EIS. It remains to be seen when the department will do so and under what conditions. Meanwhile, Tri-Chapter Council advocates continue to work toward environmental justice—in both process and outcomes—in the Greater Chaco region (Appendix A).

Current federal laws and regulations do not guarantee meaningful Tribal consultation and public participation—let alone environmental justice. These laws and regulations must be reimagined, with input from those they have served poorly. But, even in laws like NEPA as interpreted by courts to date, federal agencies can—and must—do more to advance environmental justice, as defined and understood by those who know firsthand the cumulative impacts of energy and infrastructure projects. For Diné residents of the Tri-Chapter Council, natural resources are cultural resources, and the health of people is inseparable from the health of the land. A cumulative impact assessment of existing and proposed

fracking in the region must begin from this place. *AJPH*

ABOUT THE AUTHORS

Mario Atencio and Samuel Sage are with Diné Citizens Against Ruining Our Environment, Navajo Nation. Hazel James-Tohe is with the San Juan Collaborative for Health Equity, Navajo Nation. David J. Tsosie is with Diné Centered Research and Evaluation, Navajo Nation. Ally Beasley is with the Western Environmental Law Center, Taos, NM. Soni Grant is with the Department of Sociology and Social Anthropology, Dalhousie University, Halifax, NS. Teresa Seamster is with the Northern New Mexico Group, Rio Grande Chapter of the Sierra Club, Santa Fe, NM. Mario Atencio, Hazel James-Tohe, Samuel Sage, and David J. Tsosie are Diné and are members of the Navajo Nation.

CORRESPONDENCE

Correspondence should be sent to Soni Grant, Department of Sociology and Social Anthropology, Dalhousie University, Marion McCain Arts and Social Sciences Building, Room 1128, 6135 University Ave, PO Box 15000, Halifax NS B3H 4R2, Canada (e-mail: spgrant@dal.ca). Reprints can be ordered at <http://www.ajph.org> by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Atencio M, James-Tohe H, Sage S, et al. Federal statutes and environmental justice in the Navajo Nation: the case of fracking in the Greater Chaco Region. *Am J Public Health*. 2022; 112(1):116–123.

Acceptance Date: September 16, 2021.

DOI: <https://doi.org/10.2105/AJPH.2021.306562>

CONTRIBUTORS

This article was written as a collaboration between scholars, community organizers, and practitioners of both Indigenous and settler backgrounds who have been working together for years as part of the Indigenous-led fight to protect the Greater Chaco landscape and living communities from fracking. The authors contributed equally to this article.

ACKNOWLEDGMENTS

The authors thank Kyle Tisdell, Daniel Tso, Brandon Velivis, the Western Environmental Law Center, 3 anonymous reviewers, and the editors at *AJPH* for guidance and insightful comments on earlier drafts of this article. We would like to thank the Diné Centered Research and Evaluation team and all the groups and people that make up the Greater Chaco Coalition for the important work they do.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

HUMAN PARTICIPANT PROTECTION

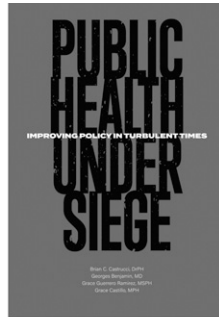
Research by the Counselor Health Impact Assessment—K'é Bee Hózhóogó Iná Silá Committee—of which coauthor D.J. Tsosie is the principal investigator and coauthors M. Atencio, S. Grant, H. James-Tohe, S. Sage, and T. Seamster are members (along with Kendra Pinto and Daniel Tso), was approved by the Navajo Nation Human Research Review Board (NNR-17.294T).

REFERENCES

- Tuck E, Yang KW. Decolonization is not a metaphor. *Decolonization: Indigeneity, Education & Society*. 2012;1(1):1–40.
- Kelley K, Francis H. *A Diné History of Navajo Land*. Tucson, AZ: University of Arizona Press; 2019. <https://doi.org/10.2307/j.ctvqsdsp4>
- Tsosie D, Benally H, Seamster T, et al. A cultural spiritual and health impact assessment of oil drilling operations in the Navajo Nation Area of Counselor, Torreon and Ojo Encino chapters. July 15, 2021. Available at: <http://nmhep.org/wp-content/uploads/FINAL-HIA-KBHS-06-52-2021-00-copy1.pdf>. Accessed November 5, 2021.
- Thompson J. Resistance to drilling grows on the Navajo Nation. March 2, 2018. Available at: <https://www.hcn.org/issues/50.4/tribal-affairs-resistance-to-drilling-grows-on-the-navajo-nation>. Accessed November 5, 2021.
- Bureau of Land Management. *Farmington Resource Management Plan With Record of Decision*. Farmington, NM: US Department of the Interior; 2003.
- Bureau of Land Management Farmington Field Office; Bureau of Indian Affairs Navajo Regional Office. *Farmington Mancos-Gallup Resource Management Plan Amendment and Environmental Impact Statement Scoping Report*. Vols. 1 and 2. Farmington, NM: US Department of the Interior; 2017.
- Diné Citizens Against Ruining Our Environment v. Bernhardt*, 923 F.3d 831. 10th Cir. (2019).
- All Pueblo Council of Governors. Tribal leaders host historic summit to support the protection of the greater Chaco landscape. March 22, 2019. Available at: <https://www.apcg.org/uncategorized/historic-joint-convening-between-the-all-pueblo-council-of-governors-and-navajo-nation-2019>. Accessed November 5, 2021.
- Navajo Nation. OPVP protect Chaco Canyon region through collaboration with All Pueblo Council of Governors. February 24, 2017. Available at: <https://www.navajo-nsn.gov/news%20releases/opvp/2017/feb/opvp%20protect%20chaco%20canyon%20region%20through%20collaboration%20with%20all%20pueblo%20council%20of%20governors.pdf>. Accessed November 5, 2021.
- Riley K. To support moratorium on leasing and permitting in Greater Chaco region. 2017. Available at: <http://www.ncai.org/resources/resolutions/to-support-moratorium-on-leasing-and-permitting-in-greater-chaco-region>. Accessed November 5, 2021.
- Dongoske KE, Pasqual T, King TF. The National Environmental Policy Act (NEPA) and the silencing of Native American worldviews. *Environ Pract*. 2015;17(1):36–45. <https://doi.org/10.1017/S1466046614000490>
- US Environmental Protection Agency. Learn about environmental justice. 2020. Available at: <https://www.epa.gov/environmentaljustice/learn-about-environmental-justice>. Accessed November 5, 2021.
- Southwest Network for Environmental and Economic Justice. Jemez principles for democratic organizing. December 1996. Available at: <https://www.ejnet.org/ej/jemez.pdf>. Accessed November 5, 2021.
- Bureau of Land Management Farmington Field Office; Bureau of Indian Affairs Navajo Regional Office. *Farmington Manco-Gallup Draft Resource Management Plan Amendment and Environmental Impact Statement*. Farmington, NM: US Department of the Interior; 2020.
- Yazzie R. Life comes from it: Navajo justice concepts. *N M Law Rev*. 1994;24(2):175–190.
- Bobroff K. Diné Bi Beenahaz'aañii: codifying Indigenous customary law in the 21st century. *Tribal Law Journal*. 2004–2005;5. Available at: <https://digitalrepository.unm.edu/cgi/viewcontent.cgi?article=1042&context=tj>. Accessed November 5, 2021.
- Exec. Order No. 12898, 32 CFR §651.17. Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. 59 Fed. Reg. 7629 (February 16, 1994).
- Standing Rock Sioux Tribe v. US Army Corps of Engineers*, 255 F. Supp. 3d 101, 114 (DDC 2017).
- Standing Rock Sioux Tribe v. US Army Corps of Engineers*, 440 F. Supp. 3d 1, 9–10 (DDC 2020).
- Tsosie R. Challenges to sacred site protection. *Denver Univ Law Rev*. 2006;83(4):963–980.
- Skibine AT. Towards a balanced approach for the protection of Native American sacred sites. *Mich J Race Law*. 2012;17:269–302.
- Gilio-Whitaker D. *As Long as Grass Grows: The Indigenous Fight for Environmental Justice, From Colonization to Standing Rock*. Boston, MA: Beacon Press; 2019.
- New Mexico Bureau of Land Management; New Mexico State Historic Preservation Officer. State protocol between the New Mexico Bureau of Land Management and the New Mexico Historic Preservation Officer regarding the manner in which BLM will meet its responsibilities under the National Historic Preservation Act. December 17, 2014. Available at: https://www.blm.gov/sites/blm.gov/files/NM%20BLM-SHPO%20Protocol%20Agmt_Signed_12-17-2014%20%281%29.pdf. Accessed November 5, 2021.
- Vallo B. Written testimony of Brian Vallo, Governor of the Pueblo of Acoma for the Senate Energy and Natural Resources Committee "The Department of the Interior's Onshore Oil and Gas Leasing Program" oversight hearing—April 27, 2021. 2021. Available at: <https://www.energy.senate.gov/services/files/0F06A226-45A5-423E-A5FF-14271D3BFA14>. Accessed November 5, 2021.
- Office of Senator Tom Udall. NM delegation secures protections for Chaco Canyon area in government funding bill. 2019. Available at: <https://www.krwg.org/post/nm-delegation-secures-protections-chaco-canyon-area-government-funding-bill>. Accessed November 5, 2021.
- Lorenzo J. Spatial justice and Indigenous peoples' protection of sacred places: adding Indigenous dimensions to the conversation. 2017. Available at: <http://www.jssj.org/article/justice-spatiale-et->

protection-des-lieux-sacres-par-les-peuples-autochtones-integrer-des-dimensions-autochtones-a-la-discussion. Accessed November 5, 2021.

27. Barclay SH, Steele M. Rethinking protections for Indigenous sacred sites. *Harv Law Rev.* 2021;134(4):1294–1359.
28. United Nations General Assembly. United Nations Declaration on the Rights of Indigenous Peoples. 2007. Available at: <https://www.refworld.org/docid/471355a82.html>. Accessed November 5, 2021.
29. White House Environmental Justice Advisory Council. Final recommendations: Justice40 Climate and Economic Justice Screening Tool & Executive Order 12898 revisions. May 21, 2021. Available at: <https://www.epa.gov/sites/default/files/2021-05/documents/whiteh2.pdf>. Accessed November 5, 2021.
30. Grover H. Drilling plan comment period closes Sept. 25, but has “meaningful consultation” occurred? 2020. Available at: <https://www.daily-times.com/story/news/local/2020/09/18/advocates-ask-blm-extension-comment-period-chaco-drilling-plan/5828632002>. Accessed April 15, 2021.
31. Silverman H, Toropin K, Sidner S, Perrot L. Navajo Nation surpasses New York State for the highest COVID-19 infection rate in the US. 2020. Available at: <https://www.cnn.com/2020/05/18/us/navajo-nation-infection-rate-trnd/index.html>. Accessed December 12, 2020.
32. Centers for Disease Control and Prevention. COVID-19 mortality among American Indian and Alaska Native Persons—14 States, January–June 2020. *MMWR Morb Mortal Wkly Rep.* 2020; 69(49):1853–1856. <https://doi.org/10.15585/mmwr.mm6949a3>
33. Taylor D. *Toxic Communities: Environmental Racism, Industrial Pollution, and Residential Mobility.* New York, NY: New York University Press; 2014.
34. Wu X, Nethery RC, Sabath MB, Braun D, Dominici F. Air pollution and COVID-19 mortality in the United States: strengths and limitations of an ecological regression analysis. *Sci Adv.* 2020;6(45):eabd4049. <https://doi.org/10.1126/sciadv.abd4049>
35. Evans MK. Covid’s color line—contagious disease, inequity, and racial justice. *N Engl J Med.* 2020;383(5):408–410. <https://doi.org/10.1056/NEJMp2019445>
36. Chamberlain K. BIA: Navajo members can “work around” connectivity issues to participate in online forum on oil and gas development. Available at: <https://nmpoliticalreport.com/2020/08/27/bia-navajo-members-can-work-around-connectivity-issues-to-participate-in-online-forum-on-oil-and-gas-development>. Accessed December 11, 2020.
37. Nez J. Testimony of Jonathan Nez president of the Navajo Nation before the United States House of Representatives Committee on Energy and Commerce. July 8, 2020. Available at: <https://docs.house.gov/meetings/IF/IF00/20200708/110874/HHRG-116-IF00-Wstate-Nez-20200708.pdf>. Accessed April 15, 2021.



2021, SOFTCOVER, 250 PP
ISBN: 978-0-87553-319-3

APHABOOKSTORE.ORG

Public Health Under Siege: Improving Policy in Turbulent Times

Edited by: Brian C. Castrucci, DrPH, Georges C. Benjamin, MD, Grace Guerrero Ramirez, MSPH, Grace Castillo, MPH

This new book focuses on the importance of health policy through a variety of perspectives, and addresses how policy benefits society, evidently through increased life expectancy and improved health. The book describes how detrimental social determinants can be to the overall population health and emphasizes how the nation is centered on policy change to create equal health care opportunities for all sectors of health.

APHA PRESS
AN IMPRINT OF AMERICAN PUBLIC HEALTH ASSOCIATION