Dikos Nitsaa'igii-19 ("The Big Cough"): Coal, COVID-19, and the Navajo Nation

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"Our Nation was born in genocide when it embraced the doctrine that the original American, the Indian, was an inferior race. Even before there were large numbers of Negroes on our shores, the scar of racial hatred had already disfigured colonial society. From the sixteenth century forward, blood flowed in battles over racial supremacy. Moreover, we exalted that tragic experience into a noble crusade. We are perhaps the only nation which tried as a matter of national policy to wipe out its indigenous population. Indeed, even today we have not permitted ourselves to reject or feel remorse for this shameful episode."

-Rev. Martin Luther King. Jr.1

Both in an absolute sense, and in a comparative sense, COVID-19 is infecting and killing people inside of Navajo Nation at a higher rate than in nearby states.² This Article investigates how U.S. energy or mineral extraction policy—particularly regarding coal and uranium— weakened Navajo health and may have contributed to the COVID-19 infection crisis on Navajo. The relationship between U.S. mineral extraction and the health vulnerabilities currently being exposed on the Nation raise issues of administrative law, Indian law, and finally, Tribal and federal governance. This Article also contributes to the

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^{1.} MARTIN LUTHER KING JR., WHY WE CAN'T WAIT 130–31 (1964).

^{2.} ADAM CREPELLE & ILIA MURTAZASHVILI, COVID-19, INDIAN RESERVATIONS, AND SELF-DETERMINATION I (2020), https://www.mercatus.org/system/files/murtazashvili_and_crepelle_-policy_brief_-cfi_series_-covid_and_indian_reservations_-v1.pdf (noting that the Navajo Nation's infection rate is higher than that of any U.S. state, including New York).

literature in environmental justice, natural resources law, and energy law. Methodologically, this Article attempts to integrate legal, epidemiological, peer reviewed, journalistic, and ethnographic sources. Due to the pandemic, opportunities for in person research were limited. In their absence, Indian Law scholars and Tribal officials have reviewed and corrected my work Energy policy on Navajo has been characterized by "abusive resource extraction arrangements." I argue that a history of inequality, neglect, and disregard of the energy and health needs of the Navajo people by the U.S. federal government has played a part in the high mortality rates caused by COVID-19 on Navajo.

^{3.} Michael Maruca, From Exploitation to Equity: Building Native-Owned Renewable Energy Generation in Indian Country, 43 WILLIAM & MARY ENV'T L. & POL'Y REV. 391 (2019).

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INTRODUCTION

At 12 p.m. on Friday, May 1, 2020, Governor Michelle Lujan Grisham responded to an urgent request from the mayor of Gallup, New Mexico⁴ and declared a state of emergency under the state's Riot Control Act in response to conditions caused by COVID-19.5 The Governor closed all roads into Gallup and closed all businesses in the city from 5 p.m. to 8 a.m. Governor Grisham further ordered that vehicles have a maximum of two individuals and instructed residents to stay at home, except for emergencies and essential outings. 6 Gallup City Police, the McKinley County Sheriff's Department, the New Mexico State Police, the Department of Transportation, and the New Mexico National Guard enforced this effort. The Navajo Nation's President, Jonathan Nez, restricted all off-reservation travel, closed government offices, and imposed a strict curfew.8 By late November 2020, in response to a surge in positive COVID-19 cases, the Nation⁹ imposed a "Shelter in Place Lockdown Order" from November 16, 2020 to December 6, 2020, 10 because the Nation had thirty-four communities with "uncontrolled spread" of COVID-19.11 As of late January 2021, the number of communities within the Nation¹² with an "uncontrolled spread" increased to fifty-three.¹³

- 4. According to a State of New Mexico news release, both outgoing Gallup Mayor Jackie McKinney and new Mayor Louis Bonaguidi requested the governor's assistance. *See* Press Release, Off. of Governor Michelle Lujan Grisham, Governor Authorizes Gallup Lockdown (May 1, 2020), https://www.governor.state.nm.us/2020/05/01/gov-authorizes-gallup-lockdown.
- 5. N.M. STAT. ANN. §§ 12-10-16 to 12-10-21 (1978). The Riot Control Act authorizes the governor to prevent residents from gathering on city streets, and to limit "the use of certain streets and highways . . ." *Id.* § 12-10-18.
- 6. Nathan O'Neal, Mayor of Gallup Discusses What is Motivating City's Lockdown, KOB4 (May 7, 2020, 5:08 PM), https://www.kob.com/new-mexico-news/mayor-of-gallup-discusses-what-is-motivating-citys-lockdown/5723025/; Christopher Helman, The Navajo Wanted to Go Green, Then This Surprise Deal Made Them America's 3rd Largest Coal Miner, FORBES, https://www.forbes.com/sites/christopherhelman/2020/06/10/the-navajo-wanted-to-go-green-then-this-surprise-deal-made-them-americas-3rd-largest-coal-miner/?sh=1b206c122eee (noting that in May, New Mexico blockaded roads in and out of Gallup to stop the spread of COVID-19) (last visited Apr. 27, 2022).
- 7. Governor Authorizes Gallup Lockdown, *supra* note 4. These measures were put in place with the support of Navajo Nation President, Jonathan Nez. *Id*.
- 8. Elise Kaplan, Navajo Nation Extends Virus Restrictions till Mid-May, ALBUQUERQUE J. (Apr. 22, 2020, 9:43 PM), https://www.abqjournal.com/1446758/navajo-nation-extends-virus-restrictions-till-midmay.html. Luckily, out of an abundance of caution, the Navajo Nation had established a response team to "monitor, plan, prepare, and coordinate precautionary efforts to address the coronavirus (COVID-19)." Navajo Nation COVID-19 Preparedness Team Established to Address Coronavirus Precautionary Efforts, NATIVE NEWS (Feb. 28, 2020), https://nativenewsonline.net/currents/navajo-nation-covid-19-preparedness-team-established-to-address-coronavirus-precautionary-efforts.
 - 9. The names "Navajo Nation" and "the Nation" will be used interchangeably in this Article.
- 10. See Megan Marples, Navajo Nation Faces Devastating Loss from Covid-19 Pandemic, CNN (Nov. 24, 2020, 3:22 AM), https://www.cnn.com/2020/11/24/health/navajo-nation-coronavirus-losses-wellness/index.html
- 11. Konstantin Toropin, Navajo Nation Says It Has 34 Communities with 'Uncontrolled Spread' of Covid-19, CNN (Nov. 11, 2020), https://www.cnn.com/2020/11/11/us/navajo-nation-covid-19-spread/index.html.
 - 12. The Navajo Nation uses the term "the Nation" in legal proceedings.
- 13. Noel Lyn Smith, Fewer Communities with 'Uncontrolled Spread' in Navajo Nation's COVID-19 Advisory Roster, FARMINGTON DAILY TIMES (Jan. 26, 2021, 2:48 PM), https://www.daily-times.com/story/

The Navajo Nation has the most COVID-19 (literally "big cough," or "Dikos Nitsaa'igii-19" in the Navajo language) cases of any tribe in the United States. AcKinley County, San Juan County, and Cibola County—which encompass the New Mexico portion of the Navajo Nation—have experienced a dramatic outbreak of COVID-19. At one point, McKinley County had the most positive cases in the entire state, registering more than one-third of New Mexico's total COVID-19 cases. Indeed, by late May 2020, the Nation had surpassed New York and New Jersey for the highest coronavirus infection rate in the United States. The total number of cases in the Navajo Nation reached 10,728 by early October 2020, climbing to 15,374 cases by late November. COVID-19 deaths in the Nation (population 173,667) reached 638 by late November 2020. As Christmas 2020 approached, the Nation had a total of 20,569 confirmed positive cases and 742 reported deaths from COVID-19 since March 2020. By February 16, 2021, the number of cases had risen to 29,308

news/local/navajo-nation/2021/01/26/navajo-nation-covid-19-advisory-list-has-fewer-communities-listed-with-uncontrolled-spread/4261410001.

- 14. Covid-19 Across the Navajo Nation, NAVAJO TIMES (Mar. 22, 2020), https://navajotimes.com/coronavirus-updates/covid-19-across-the-navajo-nation [https://web.archive.org/web/20210209150444/https://navajotimes.com/coronavirus-updates/covid-19-across-the-navajo-nation/]. The White Mountain Apache tribe also has a very high number of cases. See generally WMAT COVID Info, WHITE MOUNTAIN APACHE TRIBE, http://whitemountainapache.org/covid_flyers (last visited Apr. 27, 2022).
- 15. By July 14, 2020, 8,243 positive cases of COVID-19 and 401 confirmed deaths had been recorded in the Navajo Nation, spanning Arizona, New Mexico, and Utah. *See Dikos Ntsaaígíí-19 (COVID-19)*, NAVAJO DEP'T OF HEALTH, https://www.ndoh.navajo-nsn.gov/COVID-19 [https://web.archive.org/web/20200714003810/https://www.ndoh.navajo-nsn.gov/COVID-19] (last visited Apr. 27, 2021).
- 16. Governor Authorizes Gallup Lockdown, supra note 4. According to the Indian Health Service, over sixty-four deaths were reported on May 24, 2020, in Navajo Nation. See Covid-19 Across the Navajo Nation, supra note 14.
- 17. Hollie Silverman, Konstantin Toropin, Sara Sidner & Leslie Perrot, Navajo Nation Surpasses New York State for the Highest Covid-19 Infection Rate in the US, CNN (May 18, 2020, 5:55 PM), https://www.cnn.com/2020/05/18/us/navajo-nation-infection-rate-trnd/index.html; see also Rachel DeSantis, Navajo Nation Has More COVID-19 Cases Than 12 States—and More Deaths Than 7 States Combined, PEOPLE (June 11, 2020, 3:49 PM), https://people.com/human-interest/navajo-nation-more-covid-cases-7-states-combined (noting that by June, the Navajo Nation had the highest COVID-19 infection rate in the United States); Marples, supra note 10.
- 18. Covid-19 Across the Navajo Nation, supra note 14 [https://web.archive.org/web/20201015101010/https://navajotimes.com/coronavirus-updates/covid-19-across-the-navajo-nation/]; Navajo Nation Reports 44 More COVID-19 Cases, No New Deaths, AP NEWS (July 12, 2020), https://apnews.com/article/82253ef865fe759bb80e5b8b1406ccdf; ABC4 Staff, Navajo Nation Extends Closure of Government Offices, ABC4 (July 23, 2020, 6:30 PM), https://www.abc4.com/coronavirus/navajo-nation-reports-seven-confirmed-deaths-174-positive-tests-from-coronavirus; see also NAVAJO DEP'T OF HEALTH, supra note 15; NAVAJO DIV. OF HEALTH & NAVAJO EPIDEMIOLOGY CTR., NAVAJO POPULATION PROFILE: 2010 U.S. CENSUS 13 (2013), https://www.nec.navajo-nsn.gov/Portals/0/Reports/NN2010PopulationProfile.pdf; QuickFacts: Oklahoma, U.S. CENSUS BUREAU, https://www.census.gov/quickfacts/OK (last visited Aug. 22, 2020). As of September 16, 2020, there were 9,992 cases of COVID-19 in the Navajo Nation, and 573 confirmed deaths. NAVAJO DEP'T OF HEALTH, supra note 15 [https://web.archive.org/web/20200916044559/https://www.ndoh.navajo-nsn.gov/COVID-19]. According to the Navajo Nation Department of Health, the Nation had experienced 15,374 positive cases of COVID-19 and 638 confirmed deaths from COVID-19 by November 24, 2020. Id. [https://web.archive.org/web/20201125135808/https://www.ndoh.navajo-nsn.gov/COVID-19.
- 19. Press Release, Navajo Nation: Off. of the President & Vice President, 175 New Cases, 10,999 Recoveries, and 10 More Deaths Related to COVID-19 as the 57-hour Weekend Lockdown Takes Effect (Dec.

and the number of deaths from COVID-19 in the Navajo Nation had risen to 1,112.²⁰ By April 19, 2022, the Navajo Department of Health was reporting that 1,741 Navajo residents had passed on.²¹

In both an absolute sense and comparative sense, COVID-19 is infecting and killing people inside the Navajo Nation at a higher rate than in nearby states. According to CNN, citing data from John Hopkins University, at its peak in May 2020, the Nation had 2,304 cases of COVID-19 per 100,000 people, compared to the New York State rate of 1,806 cases per 100,000 people. Similarly, the state of New Mexico (population 2.1 million people) had registered 3,430 deaths from COVID-19 by February 10, 2021, a giving the state a mortality rate of 163 deaths per 100,000 people (or 1.6%). By contrast, the Nation, which has about 10% of the population of New Mexico, registered 1,075 deaths in the same time period, or nearly one-third as many deaths as a jurisdiction with ten times its population. Notably, the mortality rate in the Nation is *four times higher* than the mortality rate in New Mexico over the same period of time. The infection rate in the Navajo Nation is much higher than the local population clusters of Denver, Albuquerque, El Paso, and Phoenix.

By February 2021, vaccinations had begun on the Navajo Nation.²⁹ According to one source, as many as 25% of the Nation's population had been

- 20. NAVAJO DEP'T OF HEALTH, *supra* note 15 [https://web.archive.org/web/20210217172232/https://www.ndoh.navajo-nsn.gov/COVID-19].
 - 21. NAVAJO DEP'T OF HEALTH, supra note 15 (last visited Apr. 27, 2022).
- 22. See CREPELLE & MURTAZASHVILI, supra note 2, at 1 (noting that the Navajo Nation's infection rate is higher than that of any U.S. state, including New York).
 - 23. Silverman et al., supra note 17.
- 24. COVID-19 in New Mexico, N.M. DEP'T OF HEALTH, https://cvprovider.nmhealth.org/public-dashboard.html [https://web.archive.org/web/20210210000837/https://cvprovider.nmhealth.org/public-dashboard.html] (last visited Feb. 10, 2021).
- 25. Calculation completed by Dr. James David Bowman, Sr. Distinguished Scientist, Oak Ridge Nat'l Lab'y.
 - 26. Calculation completed by author and Dr. James David Bowman.
- 27. Hakim and de Soto suggest that the Navajo mortality rate may be one of the highest worldwide. *See* Shazia Tabassum Hakim & Joseph Angel de Soto, Medical Basis for Increased Susceptibility of COVID-19 Among the Navajo and Other Indigenous Tribes 4 (Apr. 14, 2020) (unpublished manuscript), https://www.preprints.org/manuscript/202004.0217/v1.
 - 28. Id.
- 29. The first shipment of vaccines to the Nation began in December 2020. Shondiin Silversmith, *Navajo Nation Receives 1st Shipment of COVID-19 Vaccine*, AZ CENTRAL (Dec. 14, 2020, 1:10 PM), https://www.azcentral.com/story/news/local/arizona/2020/12/14/navajo-nation-expects-first-covid-19-vaccines-arrive-week/5897865002/. By late January 2021, the Nation was implementing a comprehensive effort to vaccinate its citizens. Ailsa Chang, *Navajo Nation Begins Mass Vaccinations After Lifting Lockdown Order*, NPR (Jan. 29, 2021, 5:23 PM), https://www.npr.org/sections/coronavirus-live-updates/2021/01/29/962108912/navajo-nation-begins-mass-vaccinations-after-lifting-lockdown-order.

^{18, 2020),} http://www.navajo-nsn.gov/News%20Releases/OPVP/2020/Dec/175%20new%20cases%2010999%20recoveries%20and%2010%20more%20deaths%20related%20to%20COVID-19%20as%20the%2057-hour%20weekend%20lockdown%20takes%20effect.pdf; see also Exec. Order No. 011-20, NAVAJO NATION OFF. OF THE PRESIDENT & VICE PRESIDENT (Dec. 3, 2020), https://www.ndoh.navajo-nsn.gov/Portals/0/PDF/ExecutiveOrder/EXECUTIVE%20ORDER%20NO%20011-20%20COVID%2019%20extending%20gov%20limited%20services%20FINAL.PDF? ("The coronavirus continues its rapid rise on the Navajo Nation and surrounding States at an alarming rate.").

vaccinated by February 10.³⁰ However, both a curfew and a shelter in place order remained in effect, and positive cases and deaths continued to rise rapidly.³¹

Despite these glimmers of hope, we are still left with the task of explaining the disproportionate impact of COVID-19,³² which the Navajo people have suffered.³³ As CNN stated,³⁴ "[o]ne thing is clear: Covid-19 has only magnified the systemic inequalities that persist in the U.S."³⁵ and amplified long-standing health and economic disparities.³⁶ According to Ndidiamaka Amutah-Onukagha, an Associate Professor of Public Health at the Tufts School of Medicine, "the mortality and morbidity . . . [with] COVID-19 is directly related to decades of systemic racism and the impact of racism on communities of color."³⁷

Writing in the New England Journal of Medicine, Leonard E. Egede and Rebekah J. Walker make a similar point: "Structural racism—the ways in which societies foster discrimination through mutually reinforcing inequitable

^{30.} See Creede Newton, Navajo Nation Outpaces Much of US in Delivering COVID Vaccines, AL JAZEERA (Feb. 9, 2021), https://www.aljazeera.com/news/2021/2/9/navajo-nation-to-receive-29k-more-vaccines-has-used-94-percent.

^{31.} NAVAJO DEP'T OF HEALTH, *supra* note 15; Public Health Emergency Order No. 2021-002, Navajo Off. Env't Health & Prot. Program, Navajo Dep't of Health (Jan. 21, 2021), https://www.ndoh.navajo-nsn.gov/Portals/0/PDF/PHE/NDOH%20Public%20Health%20Emergency%20Order%202021-002%20Dikos%20Ntsaaigii-19.pdf.

^{32.} See Leonard E. Egede & Rebekah J. Walker, Structural Racism, Social Risk Factors, and Covid-19 — A Dangerous Convergence for Black Americans, 383 NEW ENG. J. MED. e77(1), e77(1) (2020) (conducting a meta-analysis of 293 studies revealing that racism is significantly associated with poorer mental and physical health). "Current protests through the United States are highlighting the history of marginalization of and discrimination against Black Americans . . . [s]imultaneously, disparities in Covid-19 infections and deaths are laying bare the underlying structural racism that protesters seek to disrupt." Id.

^{33.} See Mary Hasbah Roessel, COVID-19 Ravaging the Navajo Nation, MEDSCAPE (June 9, 2020), https://www.medscape.com/viewarticle/932019.

^{34.} The author's paternal grandmother was an elementary school teacher in Manuelito in the 1940s, on what is now the Navajo reservation. The author writes this Article in the spirit of racial solidarity with her Indian brothers and sisters, recognizing the joint history of struggle, support, and survival between African peoples and Native peoples.

^{35.} Harmeet Kaur, *The Coronavirus Pandemic is Hitting Black and Brown Americans Especially Hard on All Fronts*, CNN (May 8, 2020, 8:43 PM), https://www.cnn.com/2020/05/08/us/coronavirus-pandemic-race-impact-trnd/index.html; *see also* Desi Rodriguez-Lonebear, Nicolás E. Barceló, Randall Akee & Stephanie Russo Carroll, *American Indian Reservations and COVID-19: Correlates of Early Infection Rates in the Pandemic*, 26 J. Pub. Health Mgmt. & Prac. 371, 371–72 (2020).

^{36.} Rodriguez-Lonebear et al., *supra* note 35; *COVID-19 Cases by Race/Ethnicity*, KAISER FAM. FOUND., https://www.kff.org/other/state-indicator/covid-19-cases-by-race-ethnicity/?currentTimeframe=0&sortModel=%7B%22colld%22:%22Location%22,%22sort%22:%22asc%22%7D (last visited Apr. 27, 2022); Dana Hedgpeth, Darryl Fears & Gregory Scruggs, *Indian Country, Where Residents Suffer Disproportionately from Disease, Is Bracing for Coronavirus*, WASH. POST (Apr. 4, 2020, 1:35 PM), https://www.washingtonpost.com/climate-environment/2020/04/04/native-american-coronavirus. The New York Times observes that "[t]he data also showed several pockets of disparity involving Native American people." Richard A. Oppel, Jr., Robert Gebeloff, K.K. Rebecca Lai, Will Wright & Mitch Smith, *The Fullest Look Yet at the Racial Inequity of Coronavirus*, N.Y. TIMES (July 5, 2020), https://www.nytimes.com/interactive/2020/07/05/us/coronavirus-latinos-african-americans-cdc-data.html.

^{37.} Taylor McNeil, Why People of Color Are Suffering More from COVID-19, TUFTS NOW (July 10, 2020), https://now.tufts.edu/articles/why-people-color-are-suffering-more-covid-19.

systems—has received little attention as a determinant of population health . . . "38

Echoing these views, Dr. Olugbenga Ogedegbe, the Director of the Division of Health and Behavior, and a Professor of Population Health and Medicine at New York University's Grossman School of Medicine states:

"[New] studies . . . suggest that there is no innate vulnerability to the virus among Black and Hispanic Americans . . . Instead, these groups are more often exposed because of social and environmental factors." ³⁹

Epidemiologist Jon Zelner of the University of Michigan concurs, observing that the toll on communities of color, "could easily have been ameliorated in advance of the pandemic by a less threadbare and cruel approach to social welfare and health care in the U.S."⁴⁰

As is the case with other communities of color,⁴¹ numerous factors contribute to the unusually high COVID-19 infection rate of the Navajo.⁴² However, the Nation possesses some differences from other communities of color since the Nation is sovereign and has its own lands.

This Article focuses primarily on one factor that has contributed to the poor health of the Navajo people: decisions about mineral extraction by the U.S. Federal Government—particularly, the Department of the Interior—on the land known as "Navajo Nation." This Article does not attempt to definitively establish the causal chain between Navajo infection with COVID-19 and the Navajo people's exposure to debilitating health conditions caused by mining. I leave that to medical doctors, economists, epidemiologists, and statisticians. Nevertheless, the correlation is strong. The following facts are certain: (1) communities of color have been disproportionately affected by COVID-19; (2) Native Americans, particularly the Navajo, are among the hardest hit of the communities of color by COVID-19; and (3) the Navajo have been exposed to an unusually high level of toxins over the past century. The problems identified and the solutions and remedies presented here, however, are only one part of a

^{38.} Egede & Walker, supra note 32, at e77(1).

^{39.} Gina Kolata, *Social Inequities Explain Racial Gaps in Pandemic, Studies Find*, N.Y. TIMES (Dec. 9, 2020), https://www.nytimes.com/2020/12/09/health/coronavirus-black-hispanic.html.

^{40.} *Id*.

^{41.} Researchers have inadequate data on the effect of COVID-19 on Native American communities and research into health disparities between Black and Indigenous people of color is still emerging. Recent research indicates that adequate health data on sub-populations, such as Native Americans, has not been collected, making it difficult to research health concerns. Layal Liverpool, *How the Covid RNA Vaccine Works*, New Scientist, at 21:37 (Nov. 20, 2020); see also Oppel, Jr. et al., supra note 36.

^{42.} See Aila Hoss & Heather Tanana, Upholding Tribal Sovereignty and Promoting Tribal Public Health Capacity During the COVID-19 Pandemic, in ASSESSING LEGAL RESPONSES TO COVID-19 77, 79 (2020), https://static1.squarespace.com/static/5956e16e6b8f5b8c45f1c216/t/5f445c11d10a1b0c4024a9c9/1598315537 385/Chp10_COVIDPolicyPlaybook-Aug2020.pdf.

comprehensive solution that is necessary to ensure the health and welfare of citizens of the Navajo Nation.⁴³

A. CONTRIBUTION, METHODOLOGY, AND APPROACH

This Article investigates how U.S. energy or mineral extraction policy—particularly regarding coal and uranium⁴⁴—has weakened Navajo health and may have contributed to the Navajo COVID-19 infection crisis.⁴⁵ The relationship between U.S. mineral extraction and the health vulnerabilities currently faced by the Nation raise issues of administrative law, Indian law, and finally, Tribal and federal governance.⁴⁶ This Article also contributes to the literature in environmental justice, natural resources law, and energy law.

Methodologically, this Article attempts to integrate legal, epidemiological, peer-reviewed, journalistic, and ethnographic sources. ⁴⁷ Due to the pandemic, opportunities for in-person research were limited. In their absence, Indian Law scholars and Tribal officials have reviewed and corrected my work. This Article draws upon the importance of storytelling in the Navajo culture. ⁴⁸ Energy policy on the Navajo land has been characterized by "abusive resource extraction arrangements." I argue that the U.S. Federal Government's history of inequality, neglect, and disregard of the energy and health needs of the Navajo people has played a part in the high mortality rates among the Navajo caused by COVID-19.

B. STRUCTURE OF THE ARTICLE

This Article proceeds in seven parts. The Article starts by providing an overview of the Navajo people, as well as background regarding the Navajo

^{43.} Native Americans are the first peoples of the land that the colonists moved to, created their colonies on, which then later became what we call the United States of America. Native Americans did not become citizens of the United States, generally, until 1924. 1924: American Indians Granted U.S. Citizenship, NAT'L LIBR. OF MEDICINE: NATIVE VOICES, https://www.nlm.nih.gov/nativevoices/timeline/431.html (last visited Apr. 27, 2022).

^{44.} According to Becker, uranium from the Nation was used predominantly for nuclear weapons. *See* Jonathan Nez, President, The Navajo Nation & Myron Lizer, Vice President, The Navajo Nation, Written Statement of the Navajo Nation Prepared for the House Committee on Natural Resources Subcommittee on Energy and Mineral Resources on Uranium Mining: Contamination and Criticality and H.R. 3405, the Uranium Classification Act of 2019 (July 12, 2019), https://www.congress.gov/116/meeting/house/109694/documents/HHRG-116-II06-20190625-SD013.pdf

^{45.} Egede and Walker write, "[t]he Covid-19 pandemic clearly illustrates the intersection of structural racism, social risk factors, and health." Egede & Walker, *supra* note 32, at e77(2).

^{46.} Aila Hoss, COVID-19 and Tribes: The Structural Violence of Federal Indian Law, 2 ARIZ. ST. L.J. ONLINE 162, 164–66 (2020); CREPELLE & MURTAZASHVILI, supra note 2. See generally Elizabeth Ann Kronk Warner, Examining Tribal Environmental Law, 39 COLUM. J. ENV'T L. 42 (2014) [hereinafter Kronk Warner (2014)].

^{47.} See generally Robert M. Emerson, Rachel I. Fretz & Linda L. Shaw, Writing Ethnographic Fieldnotes (1995).

^{48.} See generally Klara Kelley & Harris Francis, Places Important to Navajo People, 17 Am. INDIAN Q. 151 (1993).

^{49.} Maruca, supra note 3, at 392.

Nation. The socioeconomic, environmental, and human health of the Navajo people has been harmed for generations by uranium and coal mining. The U.S. mining on the Nation has *literally* killed the Navajo over several generations. Given the health risks of COVID-19 and the fact that underlying respiratory conditions and poor health in general make the Navajo particularly susceptible to this disease, there is an urgent need to address infrastructure gaps. Further, legal decisions regarding coal on the Navajo land have been decided incorrectly. Notably, the U.S. Federal Government knows how to electrify remote rural areas and has electrified rural areas as remote and inaccessible as the Appalachian Mountains. Yet, the U.S. has failed to electrify the Nation. The health risks of coal mining and residential coal burning are well known, but due to the lack of electricity on the Nation, many Navajo are forced to burn coal in their homes. Indeed, the Nation is surrounded by power plants that send electricity to Phoenix, Los Angeles, and parts more distant, yet transmission lines and infrastructure have not been properly extended from those power plants to the Navajo Nation.⁵⁰ Finally, since the U.S. has had complete control over coal mining on Navajo land for nearly a century but has largely been indifferent to the health risks and environmental risks that coal mining has on the Navajo people, reparations are due.

C. DINÉ ARE THE PEOPLE, DINÉ BIKÉYAH IS THE LAND

"The Navajo Nation is a federally recognized tribe with its seat of government in Arizona..." The Navajos' name for themselves is Diné, meaning "The People." Navajo land (Diné Bikéyah) represents the largest American Indian reservation in the United States in terms of geographic land base. 4

1. Overview of Navajo Nation

The Navajo Nation has existed since time immemorial.⁵⁵ The Navajo Reservation was created in 1868 through a treaty between the United States and

^{50.} According to Nora Cata, "Natives paid a greater portion of their income to receive [electric services] service compared to the rest of the U.S. It is astounding that many electric utilities and mining firms are dependent upon the resources they obtain from tribal lands, yet pennies on every dollar going to energy corporations ends up on the reservations to support energy infrastructures." Nora Y. Cata, U.S. DEP'T OF ENERGY, SANDIA NAT'L LABS., SUSTAINABLE RURAL ELECTRIFICATION: RESIDENTIAL SOLAR ENERGY ON THE NAVAJO NATION (2012).

^{51.} Diné Citizens v. Bureau of Indian Affairs, 932 F.3d 843, 848 (9th Cir. 2019).

^{52.} Khalil Anthony Johnson, Jr., The Chinle Dog Shoots: Federal Governance and Grass-roots Politics in Postwar Navajo Country, 83 PAC. HIST. REV. 92, 97 (2014).

^{53.} Lloyd L. Lee, *The Future of Navajo Nationalism*, 22 WICAZO SA REV. 53, 55 (2007); *Fact Sheet*, DISCOVER NAVAJO, https://www.discovernavajo.com/things-to-know/fact-sheet/ [https://web.archive.org/web/20210513191334/https://www.discovernavajo.com/things-to-know/fact-sheet/] (last visited Aug. 22, 2020).

^{54.} NAVAJO POPULATION PROFILE: 2010 U.S. CENSUS, *supra* note 18, at 4; Kronk Warner, *supra* note 46, at 74–75, 75 n.161.

^{55.} Email from Bidtah Becker, Assoc. Att'y, Navajo Tribal Util. Auth. (NTUA) to author (Feb. 14, 2021) (on file with author).

the Navajo people.⁵⁶ It incorporated a portion of Diné traditional lands but also brought the Navajo people under the U.S. Government's control.⁵⁷ The population inside the Nation comprises 173,667 persons, which means that about 47% of Navajo tribal members live on the Nation.⁵⁸ According to the 2010 Census, the Reservation includes 27,425 square miles of land that extends into New Mexico, Arizona, Utah, and borders Colorado.⁵⁹ The Federal Government holds land in trust for many tribal communities. As many as fifteen million acres of Navajo tribal land is held in currently held in trust by the Federal Government.⁶⁰ The Nation completely encircles two other tribes, the Hopi nation and the San Juan Paiute.⁶¹ The Nation has more than 300,000 enrolled tribal members.⁶² Although poverty is widespread, Navajo lands contain significant amounts of valuable resources, including oil, gas, uranium, and coal.⁶³ As a result of those rich natural resources, the Nation has been subjected to significant resource extraction.

2. Overview of Health Risks Affecting the Navajo People

A variety of factors make the Navajo susceptible to diseases such as COVID-19. These factors include, but are not limited to, poverty and a lack of access to adequate health care, electricity, and water.⁶⁴ Other relevant social determinants of health include household air pollution, crowded living conditions, inadequate transportation, poor roads, and insufficient access to healthy foods.⁶⁵

3. Poverty

Widespread poverty represents a contributing factor to the spread of COVID-19 among the Navajo.⁶⁶ The median household income of residents who

^{56.} Treaty Between the United States of America and the Navajo Tribe of Indians, U.S.-Navajo, June 1, 1868. 15 Stat. 667.

^{57.} Johnson, supra note 52, at 97.

^{58.} Navajo Population Profile: 2010 U.S. Census, *supra* note 18, at 7 fig. 4.

^{59.} Id. at 4. See generally QuickFacts, supra note 16; Light Up Navajo Projects to Begin, NAVAJO TRIBAL UTIL. AUTH., https://www.ntua.com/light-up-navajo.html (last visited Apr. 28, 2022).

^{60.} David Wilkins, Governance Within the Navajo Nation: Have Democratic Traditions Taken Hold?, 17 WICAZO SA REV. 91, 91 (2002).

^{61.} Id.

^{62.} NAVAJO POPULATION PROFILE: 2010 U.S. CENSUS, supra note 18, at 5. See generally Silverman et al., supra note 17.

Robert E. Pendley & Charles D. Kolstad, American Indians and National Energy Policy, 5 J. ENERGY
 DEV. 221, 221 (1980).

^{64.} Monika Kakol, Dona Upson & Akshay Sood, Susceptibility of Southwestern American Indian Tribes to Coronavirus Disease 2019 (COVID-19), 37 J. RURAL HEALTH 197, 198 (2021). Low availability and affordability of healthier foods in food stores on the Navajo Nation (NN) may also be a community-level risk factor. Hakim & de Soto, supra note 27, at 9; see also Kakol et al., supra note 64, at 197; Sarah Krakoff, Settler Colonialism and Reclamation; Where American Indian Law and Natural Resources Law Meet, 24 COLO. NAT. RESOURCES, ENERGY & ENVIL. L. REV. 261, 263, 276–79 (2013).

^{65.} Rodriguez-Lonebear et al., supra note 35, at 372.

^{66.} Marples, supra note 10.

live on tribal land is less than \$35,000 per year.⁶⁷ The percentage of Navajo living in poverty is 167% larger than the total percentage of the American-Indian population living in poverty and 347% larger than the total percentage living in poverty across the United States.⁶⁸ Unemployment on Navajo Nation hovers around 42%.⁶⁹ Poverty ripples through the community in a variety of ways, including housing shortages and a lack of access to healthy foods. One factor that assists the spread of COVID-19 might be that the Navajo live in matrilineal clan units with multiple generations in close quarters, which may be in part due to housing shortages.⁷⁰

4. Lack of Access to Adequate Health Care

Emerging medical literature on COVID-19 indicates that areas exposed to high levels of pollution have a higher than average number of cases of COVID-19.⁷¹ Individuals with asthma are at increased risk for severe illness from COVID-19.⁷² Native Americans experience several underlying health conditions, including coronary heart disease, obesity, malnutrition, and diabetes.⁷³ Healthcare facilities on many reservations are grossly inadequate.⁷⁴ The Indian Health Service ("IHS") has been chronically underfunded.⁷⁵ Shockingly, *only twelve health-care facilities* serve the citizens spread across 27,000 miles of Navajo Nation.⁷⁶ Federal Indian law perpetuates structural

^{67.} Helman, supra note 6.

^{68.} Donald R. Baum, Defining Well-Being from Inside the Navajo Nation: Education as Poverty Deprivation and Poverty Reduction 7 (July 16, 2010) (M.Ed. thesis, Brigham Young University) (BYU Scholars Archive).

Scott Seckel, The Question of Renewable Energy on Tribal Lands, ASU NEWS (Feb. 23, 2016), https://news.asu.edu/20160223-solutions-navajo-nation-renewable-energy.

^{70.} Silverman et al., *supra* note 17; Telephone Interview with Dr. Setul G. Patel, MD, MBA (Feb. 10, 2021).

^{71.} X. Wu, R. C. Nethery, M. B. Sabath, D. Braun & F. Dominici, Air Pollution and COVID-19 Mortality in the United States: Strengths and Limitations of an Ecological Regressional Analysis, 6 Sci. Advances 1, 12 (2020).

^{72.} See People with Certain Medical Conditions, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html (last updated Feb. 25, 2022).

^{73.} Ann E. Tweedy, The Validity of Tribal Checkpoints in South Dakota to Curb the Spread of COVID-19, 2021 U. CHI. LEGAL F. 233, 260, 264–65 (2021).

^{74.} Id. at 267.

^{75.} Indeed, the American Journal of Public Health observes that "[a] deficiency of resources has plagued the provision of health services to AI/AN persons since the last treaties were signed in 1871." Donald Warne & Linda Bane Frizzell, American Indian Health Policy: Historical Trends and Contemporary Issues, 104 AM. J. PUB. HEALTH S263, S263 (2014); see also Matthew L.M. Fletcher, Indian Lives Matter: Pandemics and Inherent Tribal Powers, 73 STAN. L. REV. 38, 44 (noting that there is a drastic shortage of intensive care beds in Indian Health Service Hospitals); See also Hoss, supra note 46, at 4; Hoss & Tanana, supra note 42, at 78. See generally U.S COMM'N ON CIV. RTS., BROKEN PROMISES: CONTINUING FEDERAL FUNDING SHORTFALL FOR NATIVE AMERICANS (2018); Neill F. Piland & Lawrence R. Berger, The Economic Burden of Injuries Involving American Indians and Alaska Natives: A Critical Need for Prevention, 32 IHS PRIMARY CARE PROVIDER 269, 270 (2007).

^{76.} DeSantis, supra note 17.

violence on American Indian communities by establishing legal norms that disadvantage these communities in a variety of areas, including health.⁷⁷

In addition to limited healthcare facilities, there are significant gaps in staffing and transportation to and from those facilities. Reservation facilities often lack bed space, doctors, and other medical personnel.⁷⁸ Dr. Setul Patel, who worked in the Emergency Room in Tuba City Medical Center in Tuba City—the only Level III trauma center on the reservation⁷⁹—had this to say,

We need improved EMS transport. Patients are often transported by helicopter to Flagstaff or Phoenix. This transportation is very expensive and inefficient, and is a result of a combination of poor roads in the rural areas, as well as insufficient EMS personnel. The doctors in Tuba City are some of the most phenomenal doctors I have ever worked with. They do the best they can, given the resources that they have. However, hospitals on the edge of Navajo Nation are under-resourced and lack sub-specialists, such as cardiology and gastroenterology that are often needed by the Navajo people. Any patient who needs a sub-specialist has to come to Flagstaff or further south. ⁸⁰

5. Lack of Access to Electrification

A lack of electricity also limits the effectiveness of health care on Navajo land. Approximately 15,000 Navajo Nation households do not have access to electricity. These homes make up nearly 75% of all non-electrified households in the United States. Reliable power is critical for effective responses to COVID-19 and other diseases. Electricity assists in supplying and heating clean water in the home for essential hygiene and can enable communications and information technology services that connect people while maintaining social distancing. Most diagnostic tests for active COVID-19 infection require

^{77.} Hoss, supra note 46, at 7.

^{78.} Tweedy, supra note 73, at 267.

^{79.} The criteria for the designation of a trauma center varies from state to state, and the designation process itself is the responsibility of state or regional authorities and not healthcare organizations. The trauma center level (Level I–Level V) refers to the resources available to care for a trauma patient. A Level III Trauma Center provides prompt assessment, management, surgery, and stabilization for trauma patients. ALISON P. SOUTHERN & DANIEL H. CELIK, EMS, TRAUMA CENTER DESIGNATION 1 (2021) (ebook), https://www.ncbi.nlm.nih.gov/books/NBK560553.

^{80.} Telephone Interview with Dr. Setul G. Patel, supra note 70.

^{81.} The census does not collect data on electrification of homes. *Light Up the Navajo Nation*, AM. PUB. POWER ASS'N, https://www.publicpower.org/periodical/article/lighting-navajo-nation (last visited Apr. 27, 2022).

^{82.} Id.

^{83.} See Riccardo Puliti, Energy Access Takes Center Stage in Fighting COVID-19 (Coronavirus) and Powering Recovery in Africa, WORLD BANK (Apr. 22, 2020), https://www.worldbank.org/en/news/opinion/2020/04/22/energy-access-critical-to-overcoming-covid-19-in-africa.

electricity.⁸⁴ The risk of electrical outages in health clinics with ventilators or oxygen masks can be life-threatening. Electricity can assist with sanitation and cleaning equipment like autoclaves and air filtration and, in some places, pumping clean water.⁸⁵ Further, COVID-19 is more deadly in places where electricity is scarce or unreliable.⁸⁶ The pandemic has revealed an infrastructure gap of electrification in locations that house significant numbers of Native Americans.⁸⁷

6. Lack of Access to Water

Nearly 30% of people on the Nation lack access to running water. ⁸⁸ Many Navajo use only three gallons of water a day, compared to the average American, who uses eighty-eight gallons a day. ⁸⁹ Washing hands and keeping surfaces clean is a challenge for many on the Nation who have to leave home to draw water from a public tap that is hours away. ⁹⁰ The lack of indoor plumbing, a serious problem on the Nation, has a strong correlation with COVID-19. ⁹¹ President Nez observed that a lack of running water on Navajo Nation is likely a contributing factor to the spread of COVID-19. ⁹² All of these infrastructure gaps are serious, and all contribute to the spread of COVID-19. All deserve focused study. ⁹³

^{84.} See, e.g., World Health Org., Advice on the Use of Point-of-Care Immunodiagnostic Tests For COVID-19 1 (2020), https://www.who.int/publications/i/item/advice-on-the-use-of-point-of-care-immunodiagnostic-tests-for-covid-19-scientific-brief.

^{85.} Rob Fetter, Anthony Fuller, Jem Porcaro & Cyrus Sinai, You Can't Fight Pandemics Without Power— Electric Power, BROOKINGS INST. (June 5, 2020), https://www.brookings.edu/blog/future-development/2020/06/05/vou-cant-fight-pandemics-without-power-electric-power.

^{86.} Robert Bryce, *Beating Covid is All About Electricity*, FORBES (Apr. 19, 2020, 9:30 PM), https://www.forbes.com/sites/robertbryce/2020/04/19/beating-covid-is-all-about-electricity/?sh=7fadd21d50b8.

^{87.} Luis Carlos Pérez, *How Do You Face a Pandemic Without Water or Electricity?*, INTER-AM. DEV. BANK, https://www.iadb.org/en/improvinglives/how-do-you-face-pandemic-without-water-or-electricity (last visited Apr. 27, 2022). For a good overview of the infrastructure problems facing the Nation in the context of electrification see generally David Tarasi, Christian Alexander, Julie Nania, Bob Gregory, Naree Chan & Doug Vilsack, *18,000 Americans Without Electricity: Illuminating and Solving the Navajo Energy Crisis*, 22 COLO. J. INT'L ENV'T. L. & POL'Y 263 (2011).

^{88.} George McGraw & Radhika Fox, Closing the Water Access Gap in the United States: A National Action Plan 38 (2019).

^{89.} Id.

^{90.} Heather Hansman, *How a Lack of Water Fueled COVID-19 in Navajo Nation*, OUTSIDE (May 28, 2020), https://www.outsideonline.com/outdoor-adventure/environment/navajo-nation-coronavirus-spreadwater-rights; Rachel Brown, *Increasing Access to Safe Water on the Navajo Nation During the COVID-19 Pandemic*, INDIAN HEALTH SERV.: IHS BLOG (Dec. 9, 2020), https://www.ihs.gov/newsroom/ihs-blog/december2020/increasing-access-to-safe-water-on-the-navajo-nation-during-the-covid-19-pandemic; Rodriguez-Lonebear et al., *supra* note 35, at 375.

^{91.} Telephone Interview with Dr. Setul G. Patel, supra note 70.

^{92.} Toropin, supra 11.

^{93.} The Author plans to write a follow-up article on water distribution on Navajo Nation.

I. THEORETICAL FRAMEWORK

In the spring of 2020, the United States faced a profound, overdue racial reckoning. He Black Lives Matter movement highlighted the systemic racism in American life, exposing the embedded racism in the systems, structures, and institutions that underpin the U.S. society. He result has been a seismic shift in our understanding of the social impacts of racism. Racism in the United States remains deeply embedded in housing, education, employment, healthcare, and other systems.

An awareness of systemic racism informs this study of the Navajo Nation's experience with coal mining, energy production, and COVID-19.⁹⁸ My theoretical approach has four elements. First, an exposition of the experience of mineral extraction on the Navajo Nation must recognize that "the United States is a colonialist settler-state."⁹⁹ Second, a discussion of mineral extraction on Navajo land must acknowledge that "settler colonialism is a genocidal policy."¹⁰⁰ The development of energy resources on the Nation has been directed, shaped, and formed by systemic and structural racism. ¹⁰¹ Indeed, as was the case with former colonies in Africa, Latin America, and Asia, Navajo coal was developed on the basis of outdated and now rejected narratives of "modernization" and was developed in an extractive manner showing all the hallmarks of "dependency theory."¹⁰² Third, the exploration, mining, and burning of coal for energy and of uranium for nuclear weapons on the Nation

^{94.} Chantal Da Silva, BLM Global Leaders: 'It Feels Like There Is Actually Change Happening Now,' NEWSWEEK GLOB. (July 10, 2020, 6:00 AM), https://www.newsweek.com/2020/07/17/blm-global-leaders-it-feels-like-there-actually-change-happening-now-1513548.html.

^{95.} Liverpool. *supra* note 41. at 41–46.

^{96.} Da Silva, *supra* note 94. One of the most interesting outcomes of the Black Lives Matter movement and the protests of the Spring of 2020 was that it made many white Americans truly understand the gravity of racism in America for the first time in their adult lives. *Id.*

^{97.} Liverpool, *supra* note 41, at 41; *see also* Egede & Walker, *supra* note 32. *See generally* Andrea Wallace, *Patriotic Racism: An Investigation into Judicial Rhetoric and the Continued Legal Divestiture of Native American Rights*, 8 DEPAUL J. SOC. JUST. 91 (2016) (noting that the United States legally institutionalized racism, and that the legal system explicitly condoned racism within the past fifty years).

^{98.} See generally Wallace, supra note 97.

^{99.} ROXANNE DUNBAR-ORTIZ, AN INDIGENOUS PERSON'S HISTORY OF THE UNITED STATES 18 (2014); Kaitlin Reed, We Are a Part of the Land and the Land is Us, 43 HUMBOLDT J. SOC. RELS. 27, 28 (2020).

^{100.} DUNBAR-ORTIZ, *supra* note 99. Additionally, "[a] state violates international law if, as a matter of state policy, it practices, encourages, or condones (a) genocide." RESTATEMENT (THIRD) OF INTERNATIONAL LAW § 702 (AM. L. INST.); *see also* Convention on the Prevention and Punishment of the Crime of Genocide, Dec. 9, 1948, 78 U.N.T.S. 277 [hereinafter Genocide Convention]. The United States is a party to the Genocide Convention. *See generally The Convention on the Prevention and Punishment of the Crime of Genocide (1984): Status of Ratification*, U.N. (Jan. 2019), https://www.un.org/en/genocideprevention/documents/Convention% 200m%20Genocide%20Prevention%204586%20R1%20Jan19_ENG.pdf; Rennard Strickland, *Genocide-at-Law: An Historic and Contemporary View of the Native American Experience*, 34 U. KAN. L. REV. 714 (1986).

^{101.} See Broken Promises, supra note 75, at 213; see also Egede & Walker, supra note 32, at 12.

^{102.} Andrew Curley, *T'áá Hwó Ají T'éego and the Moral Economy of Navajo Coal Workers*, 109 Annals Am. Ass'n Geographers 71, 83 (2019).

must be viewed through the lens of environmental justice. ¹⁰³ Finally, any steps forward must be designed in line with Navajo values and have true—as opposed to nominal or token—Navajo control, with mechanisms for adaptation as needed by the Nation in the future.

A. MODERNIZATION

At least some of the mineral exploration and extraction, which took place on the Nation was conducted in the guise of "developing the Navajo." Development theory in the mid-century suggested that energy extraction could help the Navajo to become "modern." In the wake of World War II, the United States embarked on a mission to "modernize" the economies, cultures, and governments of former colonial territories. Becoming "modern," in this view, meant abandoning traditional qualities, moving away from farming and pastoralist activities, and shifting towards employment in large enterprises based on the use of intensive power and advanced technologies. Dependency theorists argued that modernization projects aimed to aid the exploitation of new territories. Dependency theorists argued that modernization projects aimed to aid the exploitation of new territories.

The U.S. Government, under the auspices of the Bureau of Indian Affairs ("BIA") and the Bureau of Reclamation ("BOR"), believed that the Nation needed "development" and that the extraction of natural resources could assist in that endeavor. Development, in the sense of "modernization," was used to mean the transition toward a capitalist, industrial economy. Development was also used to indicate a "standard of living" epitomized by industrialized Western societies. This ideology required that indigenous people adopt the values of the "cultivated European" and attempted to impose programs for

^{103.} Elizabeth Ann Kronk Warner, Environmental Justice: A Necessary Lens to Effectively View Environmental Threats to Indigenous Survival, 26 TRANSNAT'L L. & CONTEMP. PROBS. 343, 350 (2017) [hereinafter Kronk Warner (2017)]; see also Jaskiran Dhillon, Indigenous Resurgence, Decolonization, and Movements for Environmental Justice, 9 ENV'T & SOC'Y 1, 34 (2018); Reed, supra note 99, at 37.

^{104.} Walt Rostow's model assumed that all countries went through a linear path of stages in their transition to modernity and was well-known in the 1950s and 1960s. *See generally* W.W. ROSTOW, THE STAGES OF ECONOMIC GROWTH: A NON-COMMUNIST MANIFESTO (3d ed. 1991). Ragnald Nurske's influential work on balanced growth and the cycle of poverty emphasized heavy industrialization. *See generally* RAGNALD NURSKE, PROBLEMS OF CAPITAL FORMATION IN UNDERDEVELOPED COUNTRIES (1954). Arturo Escobar provides a detailed and thoughtful discussion of development discourse in the mid-century. *See generally* ARTURO ESCOBAR, ENCOUNTERING DEVELOPMENT: THE MAKING AND UNMAKING OF THE THIRD WORLD (1995).

^{105.} Daniel M. Cobb, Sarah Barger & Lily Skopp, "A Sickness Which Has Grown to Epidemic Proportions": American Indian Anti-and Decolonial Thought During the Long 1960s, 17 COMPAR. AM. STUD. AN INT'L J. 199, 199 (2020).

^{106.} Alex Inkeles, *The Modernization of Man, in Modernization*: The Dynamics of Growth 138–52 (Myron Weiner ed. 1966).

^{107.} ESCOBAR, *supra* note 104, at 43. *See generally* Adam Przeworski & Fernando Limongi, *Modernization: Theories and Facts*, 49 WORLD POL. 155 (1997).

^{108.} James Ferguson, The Anti-Politics Machine: Development, Depoliticization, and Bureaucratic Power in Lesotho 11 (1994).

^{109.} Curley, supra note 102, at 73, 83 (citation omitted).

^{110.} FERGUSON, supra note 108, at 15.

^{111.} Id.

industrialization and sedentary agricultural development. ¹¹² This approach left little room for indigenous people to maintain their traditional ways of life and did not provide an avenue for those being "developed" to voice their views on the proposed plan. Development assumed that the "natives will sooner or later be reformed." ¹¹³ Yet, the extraction of uranium and coal by private industry and by the U.S. Government did not industrialize the Nation, did not reduce poverty, and did not raise the standard of living on the Nation to that of those in surrounding states. Rather, oil and gas, uranium, and coal companies, working in concert with the U.S. Government, exported energy *away from the reservation* and inflicted irreparable damage on Diné health and upon the environment, which the Navajo hold as sacred. Melanie K. Yazzie observed that, "like other colonized nations, the Navajo Nation was incorporated into this hegemony of development." ¹¹⁴

B. FOUR GENOCIDES

The Navajo have experienced at least four genocides.¹¹⁵ Somewhat miraculously, the Navajo people have survived these historic "genocidal thrusts."¹¹⁶ The first occurred when the United States launched the "Navajo Wars" against Diné.¹¹⁷ Another took place when the Navajo were forced to leave their reservation and were forcibly removed to the Bosque Redondo.¹¹⁸ The Navajo call this period the Long Walk or "Hwéeldi."¹¹⁹ Then, the United States, under the auspices of the Department of the Interior, allowed uranium and coal mining to take place on Diné land in a manner which dramatically and negatively altered the health outcomes of Navajo.¹²⁰ Americans are currently witnessing the fourth genocide. This Article argues that Navajo are dying at disproportionate rates from Covid-19, in part, due to mineral extraction decisions made by the U.S. Government over seventy-five years ago.

The assertion that Navajo have been victims of genocide may strike readers as bold, controversial, or radical. But a survey of extensive legal, political, sociological, anthropological, and historical literature undeniably documents the genocide of Native peoples by the U.S. Government. The towering Indian law

^{112.} ESCOBAR, supra note 104, at 43.

^{113.} Id. at 53

^{114.} Melanie K. Yazzie, Decolonizing Development in Diné Bikeyah: Resource Extraction, Anti-Capitalism, and Relational Futures, 9 ENV'T & SOC'Y: ADVANCES RSCH. 25, 27 (2018).

^{115.} Some number between four and six seems to be a reasonable count. A more complete enumeration by Indian law scholars may be desirable.

^{116.} Strickland, supra note 100, at 715.

^{117.} See generally Paul D. Bailey, The Navajo Wars, 2 ARIZONIANA 3, (1961); Robert Torrez, New Mexico's Navajo Wars, 1836-39, Tradicion Revista, Oct. 2012; John L. Kessell, General Sherman and the Navajo Treaty of 1868: A Basic and Expedient Misunderstanding, 12 W. Hist. Q. 251 (1981).

^{118.} Jennifer Nez Denetdale, *Discontinuities, Remembrances, and Cultural Survival: History, Diné/Navajo Memory, and the Bosque Redondo Memorial, 82 N.M. HIST. REV. 295, 297 (2007).*

^{119.} Yazzie, supra note 114, at 32.

^{120.} Id.; David Rich Lewis, Native Americans and the Environment, 19 Am. INDIAN Q. 423, 431, 433 (1995).

scholar Rennard Strickland observes that genocide describes "the decimation of a people, of a nation." Alternatively, genocide can be considered "the deliberate and systematic destruction of a racial, political, or cultural group." The Navajo people have been decimated and destroyed through the so called "Navajo Wars," through the "Long Walk," through the destruction of their sheep herds, through the devastating health impacts of mining, and now, by the ravages of COVID-19. The Navajo are currently experiencing one particularly painful and poignant loss: the loss of their elders, who are keepers of their language, their lifeways, and their traditions. 123

C. TRIBAL SOVEREIGNTY IN THE CONTEXT OF SETTLER COLONIALISM

The Navajo have been the victims of settler colonialism and resource colonialism. ¹²⁴ Navajo is a sovereign nation, legally distinct from federal or state governments. ¹²⁵ Their sovereignty, however, has been shaped and constrained by the U.S. Government, limiting the Nation's ability to ensure the prosperity and well-being of their people.

1. Settler Colonialism and Resource Colonialism

Roxanne Dunbar-Ortiz and Yazzie draw our attention to the ways in which the Navajo have been subjected to "settler colonialism." Both settler colonialism and genocide use the organizing language of race, and the racial classification of Indians supported a logic of elimination. Native scholars, activists, and journalists have noted that resource exploitation on Indian lands presents striking parallels to colonialism in other parts of the developing world. As citizens of African, Latin American, and Asian countries threw off the shackles of colonialism, Diné and other tribal citizens were drawn into the conversation about Indian self-determination. 129

By contrast, Native Americans have not thrown off control from the "occupying force" of the U.S. Government. Native Americans must find a way

^{121.} Strickland, supra note 100, at 713.

^{122.} Id

^{123.} Laurel Morales, Navajo Nation Loses Elders and Tradition to COVID-19, NPR (May 31, 2020, 7:00 AM), https://www.npr.org/2020/05/31/865540308/navajo-nation-loses-elders-and-tradition-to-covid-19; see also Jack Healy, Tribal Elders Are Dying from the Pandemic, Causing a Cultural Crisis for American Indians, N.Y. TIMES (Jan. 19, 2021), https://www.nytimes.com/2021/01/12/us/tribal-elders-native-americans-coronavirus.html.

^{124.} Curley, supra note 102, at 74; Yazzie, supra note 114, at 30.

^{125.} Sarah Deer & Elizabeth Ann Kronk Warner, Raping Indian Country, 38 COLUMB. J. GENDER & L. 31, 38 (2019).

^{126.} Yazzie, *supra* note 114, at 29–31; DUNBAR-ORTIZ, *supra* note 99, at 6. *See generally* MAHMOOD MAMDANI, CITIZEN AND SUBJECT: CONTEMPORARY AFRICA AND THE LEGACY OF LATE COLONIALISM 3 (1996).

Patrick Wolfe, Settler Colonialism and the Elimination of the Native, 8 J. GENOCIDE RSCH. 387, 387 (2006).

^{128.} Maruca, supra note 3, at 451; Cobb et al., supra note 105, at 212.

^{129.} Yazzie, supra note 114, at 25-26.

to co-exist in a settled space.¹³⁰ Settler-colonialism, which comprises a phenomenon in North and South America, Australia, New Zealand, and parts of Africa,¹³¹ occurs when a population of settlers occupy land outside from their homeland and, over time, outnumber the aboriginal residents of the land.¹³² Indian law scholar Sarah Krakoff notes that the distribution of land and water required that these items be "wrested from Indian control."¹³³ I build on her work by exploring and exposing in detail how mineral resources were "wrested from Indian control."¹³⁴ Diné scholar Jennifer Nez Denetdale reminds us that settler colonialism as violence "is a structure, not an event": it is ongoing and continuing.¹³⁵ Settler colonial violence has contributed to environmental violence and environmental injustice.¹³⁶

The Navajo were also subjected to resource colonialism. Diné scholar Yazzie observes that tribes like the Navajo struggled to take control of energy development, even as their political leaders attempted to attain economic and political independence. ¹³⁷ In the words of Diné land defender John Redhouse, "Oh my god, we were a colony, an exploited energy and water resource colony..." ¹³⁸

Yazzie turns our attention to the period of Diné history spanning from *Hwéeldi* to "the dark period of the fossil fuel age." The extraction of resources on Navajo land was linked to a system of "extraction, exploitation and profiteering," and environmental destruction. Scholars Sarah Deer and Elizabeth Ann Kronk Warner use the term "rape" to discuss the serious harm which has occurred to the climate and Indian nations because of the exploitation of the fossil fuel industry. It

2. Tribal Sovereignty

Tribal sovereignty is complex. On one hand, tribes are sovereign nations that do not require validation from the U.S. Government. On the other hand, tribal sovereignty is vulnerable to predations by American legal and political forums. ¹⁴² In theory, the relationship between the Federal Government and tribes

^{130.} Id. at 29

^{131.} Natsu Taylor Saito, Tales of Color and Colonialism: Racial Realism and Settler Colonial Theory, 10 FLA. A&M U. L. REV. 1, 6 n.23 (2014).

^{132.} Krakoff, supra note 64, at 265.

^{133.} Id. at 262-63.

^{134.} Id.

^{135.} Jennifer Nez Denetdale, "No Explanation, No Resolution and No Answers": Border Town Violence and Navajo Resistance to Settler Colonialism, 31 WICAZO SA REV. 111, 113 (2016).

^{136.} See Dhillon, supra note 103, at 4.

^{137.} Yazzie. *supra* note 114. at 26.

^{138.} John Redhouse, Getting it Out of My System (on file with the John Redhouse Collection, MSS 780, Box 2, Fd. 16).

^{139.} Id.

^{140.} Yazzie, supra note 114, at 32; see also Reed, supra note 99, at 41.

^{141.} Deer & Kronk Warner, supra note 125, at 32.

^{142.} Kronk Warner (2014), supra note 46, at 31.

is viewed as a "government-to-government" relationship. 143 In practice, unequal treatment of tribal governments and lack of full recognition of the sovereign status of tribal governments by state and federal governments, laws, and policies have diminished tribal self-determination and negatively affected "criminal justice, health, education, housing, and economic outcomes for Native Americans." 144

Before conquest, the Navajo existed as an independent, self-governing community. After conquest, "tribal governments retain[ed] the status of independent, sovereign governments." In the United States, Native nations exist separately and apart from state and federal governments. Tribes maintain sovereign authority over their members and territory and can enact legislation affecting citizens within their territories. Article uncovers, however, how a history of abusive resource extraction by the Department of Interior in a period of weaker tribal governance created negative externalities whose effects continue into the present.

D. THIS LAND, NAVAJO LAND (DINÉ BIKÉYAH), IS SACRED

Resource colonialism is even more violent and destructive when viewed through the lens of the sacred relationship between the Navajo and their land. In a beautifully written article, historian David Lewis makes a poignant observation: "Land (its loss, location, and resource wealth or poverty), exploitation of land, and changing Indian needs, attitudes, and religious demands define the issues facing modern Indians and their environments." ¹⁴⁹

"Land-place," observes Lewis, "remains the essence of Native identity and sovereignty." Many "Native people possess a spiritual connection with land and the environment," in a manner that differs from that of the dominant American society. Land is the source of spiritual origins, cultural identity and provides a "landscape of cultural and emotional meaning" to Native peoples. Violence against the land is violence against Indigenous peoples—because "we are the land, and the land is us." Many tribal cultures view the "unchecked exploitation of the earth to be a violent attack on the land, which itself carries feminine qualities." The Navajo's sense of "place" is rooted in their traditional

- 143. Kronk Warner (2017), supra note 103, at 346.
- 144. See BROKEN PROMISES, supra note 75, at 5.
- 145. Lloyd L. Lee, Reclaiming Indigenous Intellectual, Political, and Geographic Space: A Path for Navajo Nationhood, 32 Am. INDIAN Q. 96, 96 (2008).
 - 146. Kronk Warner (2014), supra note 46, at 54.
 - 147. Kronk Warner (2017), supra note 103, at 346.
 - 148. Deer & Warner, *supra* note 125, at 38.
 - 149. Lewis, supra note 120, at 424.
 - 150 Id at 440
 - 151. Kronk Warner (2014), supra note 46, at 48.
 - 152. Kronk Warner (2017), supra note 103, at 350; Deer & Kronk Warner, supra note 125, at 64.
 - 153. Reed, supra note 99, at 36.
 - 154. Deer & Kronk Warner, supra note 125, at 32.

homelands.¹⁵⁵ The Navajo have a strong concept of "territory," which is linked to individuals, families, and clans.¹⁵⁶ Their foundation is in the earth and has a root, which extends to "Asdzáán Nádleehi, Changing Woman," who is the Earth herself.¹⁵⁷ The Navajo recognize an obligation to the Earth, to their family, and to their community.¹⁵⁸ Diné conceptions of life are rooted in relationships with the land and responsibilities to beings such as sheep, corn, and family. Diné values support relationships with the land, water, animals, and ancestors.¹⁵⁹ "Every inch of ground, all vegetation, and the fauna on it are considered sacred. There are no places that are holier than others."¹⁶⁰

Yet, the sacred relationship between the Navajo and their lands has not been honored by the United States in its tribal land management.¹⁶¹ The rights of Indians to the use and income from their resources, including grazing and farmlands, forests, waters, and mineral rights, have not been protected. Indian rights have been exploited, often ruthlessly, and often with the complicity or at the direction of the U.S. Government.¹⁶²

E. ENVIRONMENTAL JUSTICE

In many ways, the protests in the Spring of 2020 by the Black Lives Matter movement were presaged and connected to the movements for environmental justice led by Indigenous people in North America. The Standing Rock Sioux Tribe worked bravely and in difficult conditions with activists of all colors, races, and ethnicities to resist the Dakota Access Pipeline and the threat that it posed to the Missouri River. Communities of lower socioeconomic status "disproportionately bear the effects of environmental problems." Modern environmental justice law examines how social inequalities intensify environmental disadvantages. Environmental justice means that no group of people "should bear a disproportionate share of negative environmental

- 155. Curley, supra note 102, at 78.
- 156. Id. at 76.
- 157. Kelley & Francis, *supra* note 48, at 158.
- 158. Yazzie, supra note 114, at 34.
- 159. Id.; Kronk Warner (2014), supra note 46, at 48.
- 160. Kelley & Francis, supra note 48, at 151 (quoting Interview with Mamie Salt (Dec. 1987)).
- 161. Wahleah Johns, Beyond Coal in Indian Country, in Homeland Security: When You're Poor, the Environmental Movement Doesn't Stop at Simple Things Like Pollution, SIERRA MAG. (July 7, 2010), https://vault.sierraclub.org/sierra/201007/ej.aspx.
 - 162. Pendley & Kolstad, supra note 63, at 240.
- 163. Dhillon, *supra* note 103, at 1–6; Kronk Warner (2017), *supra* note 103, at 355–56; *see also* ORTIZ, *supra* note 97, at 112–13.
- 164. Kronk Warner (2017), supra note 103, at 343; see also Sarah Krakoff, Essay, Environmental Injustice and the Limits of Possibilities for Environmental Law, 49 ENVT'L L. 229, 230 (2019).
- 165. Kronk Warner (2017), supra note 103, at 345; Michael J. Lynch & Paul B. Stretesky, Native Americans and Social and Environmental Justice: Implications for Criminology, 38 Soc. Just. J. 104, 104 (2011); Elizabeth Ann Kronk Warner, Working to Protect the Seventh Generation: Indigenous Peoples as Agents of Change, 13 Santa Clara J. Int'l L. 273, 274 (2015).

consequences."¹⁶⁶ Nearly all the environmental effects of coal and uranium mining have affected the Navajo, leaving residents of adjacent cities powered by Navajo energy untouched. ¹⁶⁷ The Women's Earth Alliance released a report documenting environmental violence on Indigenous people, focusing on the conscious and deliberate release of environmental toxins and their effect on Indigenous women, children, and future generations. ¹⁶⁸

F. RESPECT FOR INDIGENOUS COMMUNITIES AND INDIGENOUS CONTROL

Native American¹⁶⁹ communities are heterogeneous between tribes. Navajo views on coal and renewable energy are not monolithic, ¹⁷⁰ and views of Tribal leaders are changing. ¹⁷¹ Reductionist stereotypes have generally designated Indians as the original conservationists. Yet, even in their preconquest communities, Indian communities left their own marks on the land and had their own views regarding the appeal of or dangers posed by modernity. Native communities have different origin stories, languages, cultures, and lifestyles. ¹⁷² Indigenous peoples have some commonalities, but each tribe is distinctive.

Further, Native communities are not homogenous inside each given tribe. Like all other communities, Native Americans (including the Navajo) have disputes and disagreements. They have action and agency. ¹⁷³ Much like any state or local government, the official tribal government position does not always represent all the tribal citizens' views. ¹⁷⁴ They do not always agree on the best way to use their minerals or other natural resources. While some Navajo have supported agreements that extended the tribe's dependency on coal, ¹⁷⁵ Navajo environmental groups, like the Just Transition Coalition, opposed the tradeoff

^{166.} U.S. ENV'T PROT. AGENCY, GUIDANCE FOR INCORPORATING ENVIRONMENTAL JUSTICE CONCERNS IN EPA'S NEPA COMPLIANCE ANALYSES 2 (1998).

^{167.} Krakoff (2019), supra note 164, at 243.

^{168.} WOMEN'S EARTH ALL. & NATIVE YOUTH SEXUAL HEALTH NETWORK, VIOLENCE ON THE LAND, VIOLENCE ON OUR BODIES: BUILDING AN INDIGENOUS RESPONSE TO ENVIRONMENTAL VIOLENCE 14 (2016), http://landbodydefense.org/uploads/files/VLVBReportToolkit2016.pdf.

^{169. &}quot;Indian" is a term of art used in federal Indian law. It is used interchangeably in this Article with Native American and American Indian.

^{170.} Curley *supra* note 102, at 74 (observing that "tribal actors should not be treated as unified objects of analysis. Rather, they are people with complex and divergent perspectives").

^{171.} New Navajo President Works for 'Unity, Hope, and Resilience', INDIAN COUNTRY TODAY (Jan. 15, 2019), https://indiancountrytoday.com/opinion/new-navajo-president-works-for-unity-hope-and-resilience-a7OLzxOIAU21JpLo2_5-KQ [https://web.archive.org/web/20200919053856/https://indiancountrytoday.com/opinion/new-navajo-president-works-for-unity-hope-and-resilience-a7OLzxOIAU21JpLo2_5-KQ].

^{172.} Strickland, supra note 100, at 715-16.

^{173.} Lewis, *supra* note 120, at 439. Lewis makes this point elegantly in his article when he observes that "there is no Indian consensus, no tribal consensus on how to proceed." *Id.* at 440.

^{174.} Thanks to Heather Tanana for this insight.

^{175.} See generally Ezra Rosser, The Trade-off Between Self-Determination and the Trust Doctrine; Tribal Government and the Possibility of Failure, 58 ARK. L. REV. 291 (2005).

between economic development and environmental destruction represented by these agreements. 176

Any solutions to the tragic legacy of mineral exploitation must be created in line with Navajo values and by the Navajo People, who must resolve conflicts over development decisions internally.¹⁷⁷ Renewable resources must be developed on the Nation with significant sensitivity to the history of resource exploitation on Nation land.

II. MYRIAD PROBLEMS

Numerous policy and legal decisions have contributed to the existing health crisis on the Nation. The United States has failed to provide the Nation with much needed infrastructure. Further, due to the lack of electricity on the Nation, many Navajo burn coal in their homes. In addition, the history of uranium and coal mining on the Nation have weakened the health of the Navajo.

A. THE U.S. GOVERNMENT HAS NOT INVESTED IN INFRASTRUCTURE ON THE NATION

Several factors contribute to the lack of electricity on the Navajo Nation, including geographical isolation, poverty, and the fraught legal relationship between the Nation and the United States. Martin Pasqualetti, a professor at Arizona State University, observes that energy is a "social issue with a technical component." This Article provides historical evidence that these challenges can be overcome and that the failure to tackle them must be seen as an unpaid debt to the Nation. In the words of USAF Colonel Steve Austin, "[w]e have the technology." 179

The Nation is sparsely populated at only 6.5 persons per square mile. 180 The sheer distance between urban centers as well as the distance between individual homes make it less profitable for the private sector to provide electric power. 181 The difficulty of providing electricity to the Nation is further compounded by the rugged terrain, which ranges from arid deserts as low as 5,500 feet to alpine forests reaching as high as 10,500 feet. 182 Only one-fifth of the roads in the Navajo Nation are paved. 183 This lack of infrastructure mixed with the rugged and variant terrain makes extending power costly. Due to the

^{176.} Ezra Rosser, *Ahistorical Indians and Reservation Resources*, 40 Env't L. 437, 439 (2010); Andrew Needham, Power Lines: Phoenix and the Making of the Modern Southwest 254 (2014).

^{177.} Lee (2007), supra note 53, at 53-54 (writing on the future of Navajo Nationalism).

^{178.} Seckel, supra note 69.

^{179.} The Six Million Dollar Man: Survival of the Fittest (ABC television broadcast Jan. 25, 1974).

^{180.} NAVAJO POPULATION PROFILE: 2010 U.S. CENSUS, *supra* note 18, at 21.

^{181.} David Tarasi et al., supra note 87, at 266.

^{182.} Where is the Navajo Nation?, NAVAJO NATION, https://www.navajobusiness.com/fastFacts/locationMap2.htm (last visited Apr. 27, 2022); Fletcher, supra note 75, at 46.

^{183.} Daniel C. Vock, *In Navajo Nation, Bad Roads Can Mean Life or Death*, GOVERNING (June 27, 2017), https://www.governing.com/topics/transportation-infrastructure/gov-navajo-utah-roads-infrastructure.html.

widespread poverty and unemployment rate of Nation members, the costs of electrification cannot be passed on to the consumer through raising rates. ¹⁸⁴

Another challenge to electrification on the Nation stems from decisions made by the U.S. Federal Government that had significant unintended consequences. The Nation surrounds the 1.5 million acre Hopi reservation. Before Peabody Energy could begin mining operations on the Black Mesa mine, it needed to settle ongoing land disputes between the Navajo and the Hopi. The order to persuade the Hopi and Navajo to share title to the land, the BIA enacted the "Bennett Freeze" on land near the mine in 1966. The "Freeze" required the Hopi and the Navajo to agree on any economic activity in the area prior to its undertaking. The Hopi and the Navajo never reached an agreement, however, effectively halting all economic activity in the area. Local communities had to forgo infrastructure improvements, preventing the development of industries other than mining and burning coal. Feven more disturbingly, Tribal members were moved to make way for mining, and many were placed in public housing on a site contaminated by uranium.

In the face of the ongoing dispute, Congress acted in 1980, statutorily codifying the unilateral authority of the Hopi and adding language that placed restrictions on "any new construction or improvement to the property... including public work projects, power, and water lines." ¹⁹³ The Freeze was not completely lifted until 2009. ¹⁹⁴ Accordingly, for over forty years, the Bennett Freeze made the extension of electricity *statutorily impossible* on over 1.5 million acres.

Further, the U.S. Department of Agriculture ("USDA")'s Rural Utilities Service ("RUS") was reluctant to loan money to the Nation. ¹⁹⁵ The Navajo

^{184.} Telephone interview with Bidtah Becker, Associate Attorney, Navajo Tribal Util. Auth. (NTUA) (Sept. 15, 2020); e-mail from Bidtah Becker, Associate Attorney, NTUA (Feb. 14, 2021).

^{185.} Josh D. Moore, *Justice Too Long Delayed on the Navajo Reservation: The "Bennett Freeze" as a Case Study in Government Treatment of Native Americans*, 6 HARV. HUM. RTS. J. 222, 223 (1993) (citing Act of June 14, 1934, ch. 521, 48 Stat. 960, 961).

^{186.} William F. Rawson, 110-Year-Old Navajo-Hopi Land Dispute Haunts Tribal Relations: Southwest: Standoff Has Forced Hundreds of Native Americans to Leave Their Ancestral Homes. Those Remaining Live in Squalor, L.A. TIMES (Oct. 17, 1993, 12:00 AM), https://www.latimes.com/archives/la-xpm-1993-10-17-mn-46610-story.html

^{187.} Maruca, supra note 3, at 469.

^{188.} Moore, *supra* note 185, at 223. The freeze was named after Robert Bennett, a former BIA Commissioner. *See* Rawson, *supra* note 186; Moore, *supra* note 185, at 223; Krakoff (2019), *supra* note 164, at 245

^{189.} Moore, supra note 185, at 223.

^{190.} Rawson, *supra* note 186 (observing that the Bennett Freeze brought unimaginable hardship to the people living in the area).

^{191.} Maruca, supra note 3, at 469.

^{192.} Id

^{193. 25} U.S.C. § 640d-9(f) (2007).

^{194.} About the Bennett Freeze, NAVAJO THAW IMPLEMENTATION PLAN, https://navajothaw.com/about-the-bennett-freeze (last visited Apr. 27, 2022).

^{195.} Broken Promises, supra note 75, at 149.

Tribal Utility Authority ("NTUA") had no tax revenue and no history of borrowing, making securing a loan from the RUS difficult. ¹⁹⁶ It took until 1980 for the Navajo Nation to successfully negotiate a loan with the RUS, making them the first Tribal utility to do so. ¹⁹⁷ Accordingly, repeated administrative decisions by the executive branch of the United States, as well as poorly thought-out legislative decisions by Congress, have stunted economic development on the Navajo Nation, including electrification. As noted by Crepelle and Murtazashvili, conflicts between choice of law including Tribal law, state law, and federal law make doing business in Indian country extremely complex. ¹⁹⁸

According to a 2018 report by the U.S. Commission on Civil Rights, federal programs on Tribal lands are chronically underfunded and inefficiently structured. 199 Likewise, the Federal Government has failed to keep accurate records of federal spending on Native American programs, making monitoring of federal spending to meet its trust responsibility difficult. 200 There is a strong link between physical infrastructure and economic development, yet physical infrastructure projects in Indian Country have been underfunded for decades. The U.S. Government sank billions of dollars into rural infrastructure during the Great Recession in the American Reinvestment and Recovery Act (2009) ("ARRA"). 201 The ARRA helped send money to Indian country for infrastructure but not enough to close the massive funding deficit. 202

B. LACK OF ELECTRICITY RESULTED IN MANY BURNING COAL IN HOMES

As a result of the lack of electricity, many Navajo burn coal inside of their homes for heat and light.²⁰³ Only 25% of households on the Nation use electricity for heat, even though two coal-fired power plants on the Nation deliver electricity to major cities like Las Vegas, Phoenix, and Los Angeles.²⁰⁴ In fact, many households on Navajo Nation burn wood or coal as their primary source of heat.²⁰⁵ Wood stoves, however, are often old, in poor condition, or

^{196.} Jeannine Anderson, *Unique Transaction Will Allow Navajo Utility to Bring Power to About 300 Families*, AM. Pub. Power Ass'n (July 8, 2016), https://www.publicpower.org/periodical/article/unique-transaction-will-allow-navajo-utility-bring-power-about-300-families.

^{197.} Id

^{198.} CREPELLE & MURTAZASHVILI, supra note 2, at 2.

^{199.} BROKEN PROMISES, supra note 75, at 6.

^{200.} Id. at 217.

^{201.} American Recovery and Reinvestment Act of 2009, NAT'L TELECOMM. & INFO. ADMIN., https://www.ntia.doc.gov/legacy/recovery/index.html (last visited Apr. 27, 2022).

^{202.} *Id*.

^{203.} Navajo Transitional Energy Co. Loads 375 Tons of Coal for Delivery to Navajo Chapters Houses, Navajo-Hopi Observer (Feb. 11, 2020 10:24 AM), https://www.nhonews.com/news/2020/feb/11/navajo-transitional-energy-co-loads-375-tons-coal-/.

^{204.} W. Champion, P. Charley, K. Stewart, B. Klein, A. Denny, J. McKenzie, P. Solomon & L. Montoya, *Cultural and Technical Evaluation of Heating Alternatives to Improve Indoor Air Quality on the Navajo Nation*, U.S. ENV'T PROT. AGENCY, https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=311897 (last updated Apr. 15, 2016).

^{205.} Legacy of Coal Strains Indian Communities as Regional Organizations Seek Solutions, NAVAJO-HOPI OBSERVER (May 7, 2019), https://www.nhonews.com/news/2019/may/07/legacy-coal-strains-indian-

improperly vented and are not designed to burn coal, but families use them anyway.²⁰⁶ Indeed, many homes in the Shiprock section of Navajo Nation burn coal "around the clock,"²⁰⁷ resulting in a high rate of respiratory disease.²⁰⁸

The Navajo Generating Station ("NGS") is a 2250 MW coal plant on the western edge of Navajo land, commissioned in 1974 and fed by coal from the recently closed Black Mesa mine.²⁰⁹ The presence of the NGS generates over \$127 million in health costs annually and has steadily poisoned the Navajo and Hopi for longer than a generation.²¹⁰ It is a bitter irony that power lines stretch from the Navajo Reservation across the Southwest, yet the necessary infrastructure to electrify Navajo Nation has not been constructed.²¹¹

Coal is deemed an affordable, plentiful, thermally intense, "mined-in-Navajo" source of heat. Coal can be burned in small, indoor coal stoves. Norking in conjunction, the Navajo Transitional Energy Company ("NTEC"), North American Bisti Fuels, and the North American Coal Company created the Community Heating Resource Program ("CHRP"). This program provides free coal from the Navajo Mine to all tribal members. As many as 3,000 families from 85 Navajo chapters and four Hopi villages receive their

communities-regional-or ("According to the EPA, only 25 percent of Navajo homes use electricity for heating, and another 11 percent use bottled gas. The rest burn wood and coal.").

206. The smoke from burning wood and coal is made up of very small particles and toxic gases. Exposure to the pollutants in smoke can cause a variety of health problems, ranging from burning eyes and a runny nose to aggravation of chronic heart and lung diseases (such as heart failure, ischemic heart disease, chronic obstructive pulmonary disease and asthma). *Prof. Lupita Montoya Works with Navajo Nation to Reduce Indoor Air Pollution*, UNIV. OF CO. BOULDER: ENV'T ENG'G PROGRAM, COLL. OF ENG'G & APPLIED SCI. (Apr. 23, 2018), https://www.colorado.edu/even/2018/04/23/prof-lupita-montoya-works-navajo-nation-reduce-indoorair-pollution; KATHLEEN STEWART, U.S. ENV'T PROT. AGENCY, NAVAJO NATION WOOD AND COAL STOVE CHANGEOUT PROJECT 6 (2018), https://www.nescaum.org/documents/march-2018-residential-wood-heating-workshop/navajo-nation-changeout.pdf; *EPA and Partners Bring Custom-Designed Cleaner-Burning Stoves to Navajo Homes*, U.S. ENV'T PROT. AGENCY (Dec. 3, 2018), https://www.epa.gov/sciencematters/epa-and-partners-bring-custom-designed-cleaner-burning-stoves-navajo-homes.

207. Jonathan Romeo, For Warmth, Some Households Still Burn Coal, THE JOURNAL (Mar. 15, 2018, 4:48 PM), https://the-journal.com/articles/88065.

208. Id.

209. Maruca, supra note 3, at 398, 469. The Navajo Generating Station closed on November 19, 2019. Julia Pyper, The Navajo Generating Station Coal Plant Officially Powers Down. Will Renewables Replace It?, GREENTECH MEDIA (Nov. 20, 2019), https://www.greentechmedia.com/articles/read/navajo-generating-station-coal-plant-closes-renewables; Ryan Randazzo & Shondiin Silversmith, Navajo Generating Station — The Largest Coal Plant in the West — Has Shut Down, AZCENTRAL (Nov. 19, 2019, 4:56 PM), https://www.azcentral.com/story/money/business/energy/2019/11/18/navajo-generating-station-coal-plant-arizona-closes/2567154001.

- 210. Maruca, supra note 3, at 470; Krakoff (2019), supra note 164, at 243-44.
- 211. Maruca, *supra* note 3, at 470 (observing that despite hosting the Navajo Generating Station on their lands, 37% of Navajo households on the reservation had no access to electricity as of 2011).
- 212. Tom Zeller Jr. & Stefan Milkowski, *Burning Coal at Home Is Making a Comeback*, N.Y. TIMES (Dec. 26, 2008), https://www.nytimes.com/2008/12/27/business/27coal.html.
 - 213. *Id*.
- 214. NTEC is a limited liability company, which is 100% owned by the Navajo people, and which is organized under the laws of the Navajo nation that owns mines in New Mexico, Wyoming, and Montana.
 - 215. Navajo Transitional Energy, supra note 203.

heat through this program.²¹⁶ Although this gesture sounds philanthropic, burning coal in the home is extremely dangerous from a health perspective. According to the World Bank, household air pollution significantly increases vulnerability to respiratory illnesses such as COVID-19 and pneumonia.²¹⁷

Burning coal throws small particles into the air that have a respiratory impact.²¹⁸ According to the National Institutes of Health ("NIH"), burning coal inside the home for heating or cooking produces particulate and gas emissions, including benzene, carbon monoxide, formaldehyde, and other hydrocarbons.²¹⁹ Census Bureau statistics indicate that in 1940, more than half of American homes burned coal.²²⁰ By 2019, only 130,000 households in the United States burned coal, many of them on the Nation.²²¹ The World Health Organization ("WHO") issued a study in 2015, linking emissions from wood and coal heating to health problems such as respiratory and cardiovascular mortality and morbidity, with 10,000 attributable deaths in North America.²²² The WHO explicitly opposes the use of unprocessed coal as a household fuel.²²³

C. URANIUM AND COAL MINING EXPOSURE CAUSED HEALTH VULNERABILITY

Many of the factors that have contributed to COVID-19's spread, are closely related to—or indeed caused by—systemic inequality. As noted above, Navajo people exhibit "higher-than-average numbers of diabetes, heart disease, and cancer." These serious health conditions are "the awful consequence of centuries of colonialism." These maladies are aggravated by high levels of pollution from uranium mining, oil and gas wells, and coal mining on Navajo Nation. One tribal leader described the situation succinctly: "It's genocide aimed at Indian people who will suffer the consequences of poisoning our rivers and our land with nuclear waste "227"

- 216. Id.
- 217. Puliti, supra note 83.
- 218. Zeller Jr. & Milkowski, *supra* note 212.
- 219. Indoor Emissions from the Household Combustion of Coal, NAT'L CANCER INST. (Feb. 15, 2019), https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/indoor-coal.
- 220. U.S. CENSUS BUREAU, 1940 SURVEY RESULTS, https://www2.census.gov/programs-surveys/decennial/tables/time-series/coh-fuels/fuels1940.txt (last visited Apr. 27, 2022).
- 221. Jeff Brady, For the Few Who Heat Homes with Coal, It's Still King, NPR (Mar. 3, 2019, 8:25 AM), https://www.npr.org/2019/03/03/699325560/for-the-few-who-heat-homes-with-coal-its-still-king.
- 222. Romeo, *supra* note 207; Zoë Chafe, Michael Brauer, Marie-Eve Héroux, Zbigniew Klimont, Timo Lanki, Raimo O. Salonen & Kirk R. Smith, Residential Heating with Wood and Coal: Health Impacts and Policy Options in Europe and North America viii (2015), https://www.euro.who.int/__data/assets/pdf_file/0009/271836/ResidentialHeatingWoodCoalHealthImpacts.pdf.
 - 223. ZOË CHAFE ET AL., supra note 222, at 2.
 - 224. Roessel, *supra* note 33.
 - 225. Fletcher, supra note 75, at 43.
- 226. See Uranium Mine Waste on the Navajo Reservation: Joint Oversight Hearing Before the Subcomm. on Native American Affairs of the H. Comm. on Natural Resources, 103d Cong. 1 (1994) (testimony of the Navajo Nation before the S. Comm. on Native American Affairs); Roessel, supra note 33.
- 227. Lewis, *supra* note 120, at 435 (quoting Klickitat chief Johnny Jackson of the confederated Yakima Nation in 1992).

"The history of uranium mining and the Navajo people is one of poor treatment, illness, inadequate compensation, and inconsistent tribal government authority."²²⁸ Uranium mining in "crude and irresponsibly administered mines" began in the Kayenta, Arizona area on the Navajo reservation in the 1940s.²²⁹ Diné scholar Rebecca Tsosie observes that this contamination was a result of the U.S. Government's ability to control Tribal lands in its trustee role. ²³⁰ Uranium ore was mined on the Navajo reservation for the U.S. atomic energy program from the 1920s to the early 1970s.²³¹ The sole purchaser was the U.S. Government.²³² Uranium mining caused cancer in thousands of Navajo who were not informed about the hazards, although the hazards of uranium mining were known, and precautionary measures were available.²³³ Companies provided no protection to Navajo miners, who were exposed to high levels of radiation in uranium mines and mills, and Navajo citizens today still show high levels of radiation.²³⁴ Radioactive tailings were spilled into the San Juan watershed and the Rio Puerco watershed, rendering the water unusable.²³⁵ The Nation was left with at least 1,000 known abandoned uranium mines, with hazardous radioactive waste scattered across Navajo lands. 236 As a result of uranium contamination, Navajo were subjected to cancers, respiratory ailments, and birth defects among miners, millworkers, and their families.²³⁷ In addition, a high percentage of babies born on the Nation have uranium in their bodies.²³⁸

Previous uranium mining and coal strip-mining operations "devastated the [Nation's] lands and caused many health issues due to air pollution and contamination of soil and water resources."²³⁹ As a result of these environmental

^{228.} Alice Segal, Note, Uranium Mining and the Navajo Nation—Legal Injustice, 21 S. CAL. REV. L. & Soc. Just. 355, 355–56 (2012).

^{229.} Curley, supra note 102, at 77 (citation omitted).

^{230.} Rebecca Tsosie, Indigenous Peoples and the Ethics of Remediation: Redressing the Legacy of Radioactive Contamination for Native Peoples and Native Lands, 13 SANTA CLARA J. INT'L L. 203, 211 (2015).

^{231.} Lewis, *supra* note 120, at 433.

^{232.} Telephone Interview with Bidtah Becker, *supra* note 184. According to Brugge and Goble, the U.S. Government was the sole purchaser of uranium ore from World War II until 1971. Doug Brugge & Rob Goble, *The History of Uranium Mining and the Navajo People*, 92 AM. J. Pub. HEALTH 1410, 1410 (2002).

^{233.} Curley, supra note 102, at 78.

^{234.} See Pendley & Kolstad, supra note 63, at 229; Associated Press, Navajo Nation Still Shows Uranium Exposure Today, Decades After Atomic Age Mining, CPR NEWS (Oct. 8, 2019), https://www.cpr.org/2019/10/08/navajo-nation-still-shows-uranium-exposure-today-decades-after-cold-war-mining/#:~:text= About% 20a% 20quarter% 20of% 20Navajo,a% 20U.S.% 20health% 20official% 20Monday; Rebecca A. Tsosie, Climate Change, Sustainability and Globalization: Charting the Future of Indigenous Environmental Self-Determination, 4 ENV'T & ENERGY L. & POL'Y J. 188, 219 (2009).

^{235.} Lewis, *supra* note 120, at 433. Tailings are the wastes left after the target mineral is extracted from ore and contain radioactive materials. LINCOLN L. DAVIES, ALEXANDRA B. KLASS, HARI M. OSOFSKY & JOSEPH P. TOMAIM. ENERGY LAW AND POLICY 111 (2d ed. 2018).

^{236.} Tsosie, supra note 230, at 219.

^{237.} Lewis, supra note 120, at 433.

^{238.} Laurel Morales, For the Navajo Nation, Uranium Mining's Deadly Legacy Lingers, NPR (Apr. 10, 2016, 5:07 AM), https://www.npr.org/sections/health-shots/2016/04/10/473547227/for-the-navajo-nation-uranium-minings-deadly-legacy-lingers.

^{239.} Tsosie, supra note 234, at 209.

depredations, the Navajo Nation Council passed the Diné Natural Resources Protection Act on April 19, 2005 to prohibit uranium mining "within Navajo Indian Country."²⁴⁰ Signed into law ten days later by the former Navajo President Joe Shirley, Jr., the Navajo Nation Code declared that uranium mining was antithetical to Navajo Fundamental Law regarding protection of the Nation's natural resources and to the teachings of medicine peoples regarding "harmony and balance in life and a healthy environment."²⁴¹ Tragically, and emblematic of the deeply troubling relationship between the U.S. Government and the Nation, uranium mining, for which the U.S. Federal Government was the only client, resulted in silicosis, tuberculosis, pneumonia, emphysema, lung cancer, and other diseases in Diné people. ²⁴²

In addition to being exposed to uranium contamination, the Navajo have experienced the contamination of their rivers, air, aquifers, lands, and bodies from coal mining.²⁴³ During its heyday, the NGS was the largest coal-fired plant in the West, requiring fifteen tons of coal per minute, representing the largest single contributor of greenhouse gases in Indian country, and providing over a million households in Arizona, California, and Nevada with power.²⁴⁴

The negative externalities of the coal industry are well understood. ²⁴⁵ Coal mining produces hazardous wastes, which damage the environment, including heavy metals and mining tailings, in addition to the release of nitrogen oxide, carbon dioxide, sulfur dioxide, particulate matter, and carbon monoxide. ²⁴⁶ For decades, the smokestacks of the Four Corners Power Plant spewed emissions of coal based particulate matter, including soot, dirt, and ash, all over the reservation. ²⁴⁷ In the 1970s, the Navajo Mine was the largest strip mine in the United States, and provided fuel to the Four Corners Power Plant. ²⁴⁸ By 1975, coal from the Nation and Hopi generated almost 65% of the electricity consumed in Arizona, New Mexico, and Southern California. ²⁴⁹ Grazing lands were transformed into tailing piles. Mercury, chromium, and sulfurous compounds—byproducts of coal combustion—seeped into aquifers and contaminated water

^{240.} NAVAJO NATION CODE ANN. tit. 18, § 1303 (1999).

^{241.} Ezra Rosser, *supra* note 176, at 443 (2010) (quoting Navajo Nation Council Res. CAP-18-05 § 1301); *see also* Segal, *supra* note 228, at 389; Tsosie, *supra* note 234, at 252.

^{242.} Brugge & Goble, *supra* note 232, at 1413.

^{243.} Coal Mining on Navajo Nation's Land, ARIZ. J. ENV'T L. & POL'Y (Apr. 27, 2019), https://www.ajelp.com/single-post/2019/04/27/coal-mining-on-navajo-nation-s-land; Mireya Navarro, Navajos Hope to Shift from Coal to Wind and Sun, N.Y. TIMES (Oct. 25, 2010), https://www.nytimes.com/2010/10/26/science/earth/26navajo.html.

^{244.} Maruca, supra note 3, at 470; Curley, supra note 102, at 71.

^{245.} Curley, supra note 102, at 73.

^{246.} Kronk Warner (2014), supra note 46, at 51, 75. See also Deer & Kronk Warner, supra note 125, at 59.

^{247.} NEEDHAM, *supra* note 176, at 247. The Four Corners Power Plant is scheduled to close in 2031. Felicia Fonseca, *Coal Industry on Navajo Nation Could End with Plant Closure*, AP NEWS (Jan. 23, 2020), https://apnews.com/article/13994822a3d38d2a22c11b34efcf4807.

^{248.} Pendley & Kolstad, supra note 63, at 230.

^{249.} NEEDHAM, supra note 176, at 248.

holes.²⁵⁰ And sixteen million tons of carbon dioxide spewed from the Four Corners Power Plant annually.²⁵¹ By the mid-1990s, it was clear that mine and drilling sites, roads, and machinery, tailing piles, and settling ponds were threatening tribal land, water, air, and health.²⁵²

This information may overwhelm the reader with sorrow, surprise, and outrage. ²⁵³ Even in 2021, Indigenous people and the Navajo still demonstrate the tragic evidence of the failure of American society to help our original people to survive and thrive. As many as 700 years after occupation by people of European descent, Indigenous peoples, and the Navajo in particular, continue to "suffer . . . indignities that few groups in America suffer in equal measure." ²⁵⁴ Legal scholars, practitioners, and judges cannot simply accept and continue to rely upon legal decisions, and in particular, Supreme Court decisions, that do not appropriately consider and incorporate this history of destruction and disregard in its entirety.

III. LEGAL RESPONSES TO THE DESTRUCTION SUFFERED BY THE NAVAJO FROM COAL EXTRACTION

"The genocidal story of the dissolution of the Indian nations is primarily one of white law and white policy. . . . Federal law dominates Indian life in a way that is not duplicated."²⁵⁵

-Rennard Strickland (1986)

In this Section of the Article, I assert that *United States v. Navajo Nation*, 537 U.S. 488 (2003) and a companion case *United States v. Navajo Nation*, 556 U.S. 287 (2009) were wrongly decided. These are complex cases, which have generated significant literature.²⁵⁶ I build upon this work and add a new set of limited critiques of these decisions. These decisions suffer from what one might call "thin storytelling,"²⁵⁷ both on the facts, and on the law.

Three factors argue for the legal reconsideration of these cases: (1) the appointment of Justice Neil Gorsuch, a noted expert in the area of Native law,

^{250.} Id. at 250.

^{251.} Id. at 248.

^{252.} Lewis, supra note 120, at 431.

^{253.} I urge other scholars to investigate the chronic underfunding of the Indian Health Service and the sparse number of medical facilities in separate articles.

^{254.} Richard Nixon, President, Remarks in Omaha, Nebraska: A Better Day for the American Indian (Sept. 27, 1968).

^{255.} Strickland, supra note 100, at 723, 738.

^{256.} See, e.g., Curtis G. Berkey, Rethinking the Role of the Federal Trust Responsibility in Protecting Indian Land and Resources, 83 DENV. U. L. REV. 1069 (2006); Rosser, supra note 175; Gregory C. Sisk, The Indian Trust Doctrine After the 2002-2003 Supreme Court Term: Yesterday and Today: Of Indians, Breach of Trust, Money, and Sovereign Immunity, 39 TULSA L. REV. 313, 322–28 (2003).

^{257.} Thin storytelling means that the decisions only provide the facts and the law which supports the narrative they wish to promote, while leaving out critical facts that may point to a different outcome.

(2) the protests in the spring of 2020, and (3) the devastating effects of coal mining and energy production on the health of the Navajo, which is becoming evident with the Covid-19 crisis. Any one of these factors, standing alone, would be cause enough to re-evaluate these decisions. When considered collectively, there is a compelling need to reconsider the validity of these decisions' reasoning.

This Article does not focus on one breach of one coal lease. Rather, this Article illustrates that the relationship between the Nation, the United States, and the coal mining industry is at best tragic, and at worst, so cataclysmic that it cannot even be described with words. Tears and screams of anguish are more appropriate responses. The Navajo have been injured both physically and financially by coal mining on the Nation and are due a remedy. The U.S. Government had so much control over coal rights for so long that the Nation was not properly able to exercise their sovereignty over these transactions.

Decisions about coal mining were made in large part by the U.S. Government with little to no input from the Nation. Navajo governance developed significantly between the time of the earliest coal exploration on Navajo lands. Only after the 1970s did the Nation have significant sovereign strength to begin to resist Federal Government directives. By that time, nearly all coal leases were already signed and underway. From an administrative law perspective, it is highly problematic that the U.S. Federal Government has had complete control over every single aspect of coal mining from selecting lessors to setting royalty rates for over seventy years on the Nation yet has not cared for the people residing on the Navajo Nation. Accordingly, this control, which arose from the United States' role of trustee, was used to exploit both Navajo resources and Navajo people.

A. UNITED STATES V. NAVAJO NATION I AND II

This Article discusses these cases for the limited purpose of illustrating two misconceptions by the Supreme Court of the United States regarding the relationship between the Nation and coal companies. Specifically, this Article focuses on two specific and fundamental failures with the Court's reasoning in these cases. First, the majority position was wrong on the facts; the story presented in the majority opinions was not correct. Second, the Court's position is wrong on the law; the Court did not properly recognize the extent of the fiduciary relationship between the Federal Government and the Navajo.

The case *United States v. Navajo Nation*, 537 U.S. 488 (2003) (hereinafter *Navajo I*) held that the Navajo Tribe's claim for compensation from the U.S. Government failed because it did not derive from any liability-imposing provision of the Indian Mineral Leasing Act of 1938 ("IMLA") or its

^{258.} A full exposition of the numerous problems with the legal reasoning in these cases is not possible in this Article. The time is ripe for a review article which considers all the literature on these cases and provides an in-depth reconsideration of the legal reasoning found in *Navajo I* and *II*.

implementing regulations. The Court acknowledged "the undisputed existence of a general trust relationship between the United States and the Indian people," and that this relationship may reinforce the idea that a relevant statute or regulation imposes fiduciary duties. ²⁵⁹ The U.S. Supreme Court, however, found that the Secretary of the Interior's conduct did not implicate a duty enforceable in an action for damages under the Indian Tucker Act. ²⁶⁰

In 1964, a coal lease was entered into by the predecessor of Peabody Coal Company and the Nation with the approval of the Secretary of the Interior. ²⁶¹ The original lease allowed a low royalty payment of about *two percent of the gross proceeds* to the Nation: a mere fraction of the 12.5% rate set by statute in 1977 as the minimum permissible royalty figure. ²⁶² Under the terms of the lease, the Secretary of the Interior had the ability to adjust the rate after twenty years. ²⁶³ In 1984, the Navajo Nation requested that the area director of the BIA adjust the lease rate. ²⁶⁴ The BIA adjusted the lease rate to 20% and Peabody filed an administrative appeal. ²⁶⁵

While the parties awaited a decision on the appeal, a secret meeting was held between a lobbyist for Peabody Coal, who was a close friend and former Aide to the Secretary, and the Secretary, Donald Hodel. No Navajo representative was present at the meeting, and the Nation was not informed of the meeting. Secretary Hodel issued an internal department memorandum, drafted by Peabody attorneys, directing that a decision on the administrative appeal be delayed and encouraging the parties to negotiate their own arrangement.

Under significant financial duress, the Navajo Tribal Council approved the amendments to Lease 8580 in August 1987.²⁶⁹ In 1993, the Tribe brought suit, asserting jurisdiction under the Indian Tucker Act, against the United States in the Court of Federal Claims, alleging that the Secretary's approval of the amendments to the lease constituted a breach of trust, and seeking \$600 million in damages.²⁷⁰ The argument by the Nation was that mineral assets were being exploited by a coal industry giant at inequitably low royalty rates.²⁷¹

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259. United States v. Navajo Nation (Navajo I), 537 U.S. 488, 490 (2003).
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^{260.} Id.

^{259.} Id.

^{262.} Sisk, supra note 256, at 2.

^{263.} See Navajo I, 537 U.S. at 495.

^{264.} Sisk, *supra* note 256, at 2.

^{265.} Navajo I, 537 U.S. at 496.

^{266.} See id. at 497; Sisk, supra note 256, at 3; Navajo Nation v. United States, 263 F.3d 1325, 1336 (Schall, J., concurring in part and dissenting in part).

^{267.} Navajo Nation, 263 F.3d at 1328.

^{268.} Navajo I, 537 U.S. at 488.

^{269.} Id. at 498.

^{270.} Id. at 500.

^{271.} Gregory C. Sisk, When May a Tribe Seek Damages from the Government for a Breach of Trust?, 5 Preview U.S. Sup. Ct. Cas. 332, 332 (Feb. 23, 2009).

The Court of Federal Claims found that the Secretary owed fiduciary duties to the Navajo Nation, which the Secretary "had flagrantly dishonored by acting in the best interests of Peabody rather than the Tribe."²⁷² The Court of Federal Claims concluded, however, that Navajo Nation had failed to link that breach of fiduciary duty to any statutory or regulatory obligation, which could "be fairly interpreted as mandating compensation for the government's fiduciary wrongs."²⁷³ On that basis, the Court of Federal Claims granted summary judgment for the United States.²⁷⁴

The Court of Appeals for the Federal Circuit reversed.²⁷⁵ It determined that the measure of control the Secretary exercised over the leasing of Indian lands for mineral development sufficed to warrant a money judgment against the United States for breaches of fiduciary duties connected to coal leasing.²⁷⁶ The Court of Appeals for the Federal Circuit observed that the actions of the Secretary of the Interior regarding Peabody's administrative appeal grossly violated the Government's fiduciary obligations to the Nation, and "favor[ed] Peabody interests to the detriment of Navajo interests."²⁷⁷

In *Navajo I*, the U.S. Supreme Court found that, in order to sustain a cause of action against the Federal Government, a Tribe "must identify a substantive source of law that establishes specific fiduciary or other duties and allege that the Government has failed to perform those duties."²⁷⁸ Then, the Court must "determine whether the relevant source of substantive law can fairly be interpreted as mandating compensation for damages sustained as a result of the breach of the duties [the governing law] imposes."²⁷⁹ The Court found that the IMLA and its implementing regulations do not provide the requisite substantive law that would mandate compensation by the Federal Government.²⁸⁰ The Court reversed the Federal Circuit and held that the IMLA did not impose detailed fiduciary responsibilities sufficient to support a claim for monetary relief for breach of trust under the Indian Tucker Act.²⁸¹

The Court made several deeply troubling assertions in *Navajo I*. The Court mentioned, more than once, that the IMLA was designed to enhance tribal independence, while conveniently failing to emphasize that IMLA was also designed to maximize tribal revenue.²⁸² The Court also stated that neither the IMLA nor its regulations establish anything more than a bare minimum

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272. See Navajo I, 537 U.S. at 501.
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^{273.} Id.; see also Navajo Nation v. United States, 46 Fed. Cl. 217, 236 (2000).

^{274.} Navajo Nation, 46 Fed. Cl. at 236.

^{275.} Navajo Nation v. United States, 263 F.3d 1325, 1333 (Fed. Cir. 2001).

^{276.} Id.

^{277.} Id. at 1332; Navajo Nation, 46 Fed. Cl. at 219.

^{278.} United States v. Navajo Nation (Navajo I), 537 U.S. 488, 506 (2003).

^{279.} Id.

^{280.} Id. at 507.

^{281.} Id. at 511.

^{282.} Id. at 516.

royalty.²⁸³ The Court glibly asserted that the IMLA and its regulations did not assign managerial control to the United States over coal leasing.²⁸⁴ The Court also incorrectly asserted that *Tribes had the lead role in negotiating mining leases with third parties*.²⁸⁵

Justice Souter's dissent in *Navajo I*, joined by Justices Stevens and O'Connor, comes much closer to the correct position. In his dissent, Justice Souter observed that IMLA indicates that a fiduciary duty was intended.²⁸⁶ He stated that the right to damages can be inferred from general trust principles and amenability to suit under the Tucker Act.²⁸⁷ Justice Souter interpreted the Secretary's obligation to approve mineral leases under the Tucker Act as raising a substantial fiduciary duty to the Nation.²⁸⁸ Justice Souter observed that both the majority and the dissenting opinions agreed that a fiduciary duty was intended.²⁸⁹ He then opined that if a fiduciary duty is intended, it need not provide a damages remedy explicitly, rather the right to damages can be inferred from general trust principles and amenability to suit.²⁹⁰ He further stated that the IMLA attempted to balance a maximization of tribal revenues with greater tribal responsibility.²⁹¹ Justice Souter emphasized that the Secretary defaulted on his fiduciary duty to withhold approval of an inadequate lease while under a disadvantage that the Secretary himself had imposed.²⁹²

In a related later opinion authored by Justice Scalia, *United States v. Navajo Nation*, 556 U.S. 287 (2009) (hereinafter *Navajo II*), the Court found that the claim of "the Indian Tribe known as the Navajo Nation" for compensation from the Federal Government over coal leases failed.²⁹³ The U.S. Supreme Court recited the terms of the IMLA. The Court found that the lease was issued pursuant to the supplemental authority of the IMLA preserved by the Rehabilitation Act."²⁹⁴

In *Navajo II*, the Federal Circuit, in its decision below, suggested that the Government's "comprehensive control" over coal on Indian land gave rise to fiduciary duties based on common-law trust principles.²⁹⁵ The Federal Circuit pointed to the surveys and studies of the Tribe's coal resources.²⁹⁶ The Federal Circuit observed that the Interior Department had regulated the minutiae of coal

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283. Id. at 511.
284. Id. at 491.
285. Id. at 508.
286. Id. at 514.
287. Id.
288. Id.
289. Id. at 514.
290. Id.
291. Id. at 517.
292. Id. at 520.
293. United States v. Navajo Nation (Navajo II), 556 U.S. 287, 289 (2009).
294. Id.
295. United States v. Navajo Nation, 263 F.3d 1325, 1330 (Fed. Cir. 2001).
296. Navajo Nation v. United Nations, 501 F.3d 1327, 1341 (Fed. Cir. 2007).
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mining operations on Indian Land, and that the Government even calculated coal values and quantities for royalty purposes.²⁹⁷

The Supreme Court, found, however, that "[t]he Federal Government's liability cannot be premised on control alone." Justice Scalia opined that the IMLA does not even create a limited trust relationship. The Court found that "because the Tribe cannot identify a specific, applicable, trust-creating statute or regulation that the government violated, we do not reach the question whether the trust duty was money mandating." It requires a suspension of disbelief to imagine that the same statutes written eighty years ago to extract natural resources from Tribal lands would also contain a provision which allows damages by Tribes for breach.

Although the dissent's position in *Navajo I* is largely correct, this Article suggests that the dissent could have gone even further. The Courts' opinions in *Navajo I* and *II* dramatically underplay one of the key purposes of the Indian Mineral Leasing Act, which was to optimize Native peoples' return on their mineral leases. Since both the majority and the dissent in *Navajo I* agreed that there was a trust relationship of some sort between the Department of the Interior and the Nation, it is difficult to fathom how there can be a fiduciary duty when there is no remedy for breach of that duty. Indeed, there is no right if there is no remedy.

The Court's decision also failed to adequately consider the duty of the Secretary to maximize the benefit to the Tribe. A careful review of the legislative history of the 1937 Act indicates that IMLA contemplated coal mining and reveals the following language: "It is not believed that the present law is adequate to give the Indians the greatest return from their property." Courts have interpreted the language of the IMLA to include an enforceable trust responsibility to the tribes. It must be re-emphasized that IMLA contemplated that the trustee of Indian lands has the responsibility of managing trust territories for the maximum benefit of the tribes. The same and the same

Unfortunately, historically this system has provided "only minimal levels of income," to native peoples in practice.³⁰⁷ Royster, cited by the dissent, highlights the exact problem which arose in the *Navajo I* and *II* cases: "[r]ents

^{297.} Id.; Navajo II, 556 U.S. at 301.

^{298.} Navajo II, 556 U.S. at 301.

^{299.} Id. at 302.

^{300.} Judith V. Royster, Mineral Development in Indian Country: The Evolution of Tribal Control Over Mineral Resources, 29 Tulsa L. Rev. 541, 565 (1994).

^{301.} Interview with Terrence Michael, Fed. Bankr. J. for the N. Dist. of Okla. (Feb. 6, 2021).

^{302.} Id.

^{303.} See S. Rep. No. 75-985 (1937); H.R. Rep. No. 75-1872 (1938). Both the Senate and the House report attach a letter from the Secretary of the Interior.

^{304.} See S. Rep. No. 75-985 (1937); H.R. Rep. No. 75-1872 (1938). Both the Senate and the House report attach a letter from the Secretary of the Interior.

^{305.} Royster, supra note 300, at 566.

^{306.} Pendley & Kolstad, supra note 63, at 241.

^{307.} Royster, supra note 300, at 566.

and royalties were also set lower than warranted by the market."³⁰⁸ Further, royalty mismanagement, inadequate accounting practices, and mineral theft reduced payments to tribes, and the Navajo Tribal Council itself was not paid proper royalties on uranium. Indeed, the U.S. Government Accountability Office issued reports documenting royalty management issues on tribal lands in the 1960s, 1970s, and 1980s, ³⁰⁹

The Court's decisions dramatically underplay the overall trust relationship between the Nation and the U.S. Federal Government, a point made by previous analyses of these cases. Over time, Indian Law has developed to recognize that Indigenous communities within the United States have a trust relationship with the Federal Government.³¹⁰ In principle, tribal trust lands and their resources are held by the Federal Government in trust for the tribes.³¹¹ The U.S. Government holds title to reservation land, which is held in trust for the Indian Nations that occupy the territory.³¹² Under the trust system, the United States holds the fee, and the tribes retain beneficial ownership of their territories, including beneficial ownership of the mineral resources vested in the land.³¹³ The Tribes also have beneficial ownership of the natural resources and subsurface minerals on their land.³¹⁴ The Trustee (that is, the Federal Government) has the responsibility of managing trust territories for the maximum benefit of the Tribes, which was lodged in the DOI, through the BIA.³¹⁵ Several presidents of the United States have reaffirmed the doctrine of federal trust responsibility towards Native nations. As Kronk Warner aptly observes,

"The trust relationship between the Native nations and the Federal Government emerged from the many cessions of both land and external sovereignty. The U.S. Government owes federally recognized Native nations fiduciary obligations related to the management of tribal trust lands and resources." 316

I add this insight. The Court's analysis in *Navajo I* and *II* promotes a troubling legal and a-historical *fiction* that the Navajo had full sovereignty, full tribal control, well developed tribal governments, and sufficient leverage to negotiate leases on fair terms with the coal companies. Part IV, below, will discuss in detail how the relationship between coal and the Nation has evolved

^{308.} Id. at 566-67.

^{309.} Id. at 567 n.166.

^{310.} Kronk Warner (2017), supra note 103, at 348.

^{311.} Pendley & Kolstad, supra note 63, at 241.

^{312.} Royster, supra note 300, at 546.

^{313.} Id. at 547.

^{314.} *Id.*; United States v. Shoshone Tribe of Indians, 304 U.S. 111, 118 (1938); United States v. Osage Wind, LLC, 871 F.3d 1078, 1082 (10th Cir. 2017).

^{315.} Pendley & Kolstad, supra note 63, at 241.

^{316.} Kronk Warner (2017), supra note 103, at 348.

and will demonstrate that at the time coal leases were signed between Peabody Coal and the Nation, the Nation was not strong enough to negotiate at armslength and secure itself the best terms.

Before this Article proceeds to the facts, it will briefly review the errors the Court made in the law regarding the Federal Government's "comprehensive control over coal." As the twentieth century proceeded, tribes became lessors as non-Indian producers began mining Indian lands. In 1919, Congress passed an act authorizing leasing in nine western states for the mining of gold, silver, copper, and other valuable metals. In 1926, the law was amended to include leases for other metals. The 1919 Act eliminated tribal consent to leasing, and leasing was conducted at the discretion of the Secretary of the Interior. Shortly thereafter, oil and gas leases were allowed on tribal lands. The Indian Reorganization Act extended the trust status of any allotments not yet patented in fee. Royster observes that "throughout most of the history of mining in Indian country, federal law confined the tribes to the part of [']passive lessors[,']" who had little say in their lease provisions.

The Court's opinions suggest that the Tribes were active negotiators with sufficient bargaining power to negotiate on equal footing with coal companies. Neither law nor history bears out that assertion. Royster notes, however, that Congress authorized alienation of the minerals in a series of mineral leasing acts during the allotment era.³²⁴ Congress believed non-Indian development of the mineral resources would constitute a wise use of Indian lands and demonstrate "civilized" behavior to Indian landlords.³²⁵ Until the 1980s, observes Royster, Native Americans had only a restricted role in the exploitation of their mineral estate.³²⁶

The Court erroneously suggested in its opinion that the job of leasing was the duty of the Tribe, not the Secretary of the Interior. Even today, however, there are strict limits on the Tribe's ability to negotiate leases. The Secretary has placed limits on tribal consent and has also restricted the tribes' ability to cancel or rescind leases. Tribes cannot, for example, unilaterally cancel leases for breach of the lease terms. Rather, the authority to terminate a lease lies with the Secretary or with the courts. Despite the theoretical trust duty that the Federal Government owes Tribes, scholars note that the Government has used the trust

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317. United States v. Navajo Nation (Navajo II), 556 U.S. 287, 301 (2009).
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^{318.} Royster, supra note 300, at 554.

^{319.} Id.

^{320.} Id. at 555.

^{321. 25} U.S.C. §§ 398-398a.

^{322.} Act of June 18, 1934, ch. 576, 48 Stat. 984 (1934) (codified in part at 25 U.S.C. §§ 461–494 (1988)).

^{323.} Royster, supra note 300, at 544.

^{324.} Id. at 553.

^{325.} Id.

^{326.} Id. at 552-53.

^{327.} Id. at 564.

^{328.} Id.

responsibility to largely take over the day-to-day management of "Indian affairs," in a paternalistic manner, which left Native Americans with little control over their affairs.³²⁹ Under the IMLA and Indian Mineral Development Acts, the Secretary still is required to approve all oil, gas and geothermal projects. Further, leases for renewable energy must be approved under the Long-Term Leasing Act.³³⁰

The legal errors in the *Navajo* decisions are numerous and grievous, as other scholars have observed. I wish to highlight that not only did the Nation lose money on the specific coal lease at issue in *Navajo I* and *Navajo II*, but the Nation has also lost lives through coal and uranium mining. The United States directed coal mining and energy production in a way that destroyed Navajo land and Navajo lives. Not only should the Nation get the \$600 million, adjusted for inflation, on the breached coal lease, but the Nation also needs significant reparations to unwind the destruction to the environment and to their health.

IV. RETHINKING THE RELATIONSHIP BETWEEN COAL, THE NAVAJO AND THE U.S. FEDERAL GOVERNMENT WITH THICK DESCRIPTION³³¹

As the discussion below of the relationship between the BIA with regard to coal and uranium will demonstrate, the Navajo have experienced significant social deprivation from their association with the Department of the Interior. They have experienced multi-generational trauma from "state-sanctioned violence."332 They have suffered reduced access to employment, low royalty rates for their natural resources, a loss of their traditional form of wealth, sheepherding, and, most tragically, destructive environmental exposures related to extraction of mineral resources on the Nation. No discussion of the relationship between the BIA and the Nation can proceed without a candid consideration of the structural racism the Navajo have suffered at the hands of the BIA. In this Part, I discuss the relationship between the Navajo, the BIA, and coal and uranium production. The Federal Government, historically, under the guise of its role as trustee, encouraged resource extraction in Indian country. 333 The Federal Government tended to focus on generating revenue while ignoring the ongoing degradation of the Tribe's homelands, threatening both the physical and cultural survival of Native Americans. 334

^{329.} Pendley & Kolstad, supra note 63, at 242.

^{330.} Deer & Kronk Warner, supra note 125, at 43.

^{331.} CLIFFORD GEERTZ, THE INTERPRETATION OF CULTURE: SELECTED ESSAYS 3–30 (2017). See generally Emerson et al., supra note 47.

^{332.} Egede & Walker, supra note 32, at 1.

^{333.} James M. Grijalva & Daniel E. Gogal, *The Evolving Path Toward Achieving Environmental Justice for Native America*, 40 ENV'T L. REP. NEWS & ANALYSIS 10905, 10907 (2010).

334. *Id*.

A THE CREATION OF NAVAJO GOVERNANCE IN THE PRESENCE OF U.S. HEGEMONY, AND MINERAL EXTRACTION

The Federal Government and the Nation have had and continue to have a contentious relationship in many areas.³³⁵ However, mineral extraction lays bare the unjust nature of this perilous partnership.³³⁶ The relationship between Navajo governance and the U.S. Government is longstanding and complicated. That relationship requires an exploration of uranium mining, oil and gas drilling, coal mining, and reclamation efforts for the pollution created by energy exploration on Navajo land. Andrew Curley observes that in the Navajo Nation, "oil, uranium, and coal co-evolved with institutions of tribal governance."³³⁷ As noted by author Dana E. Powell, governance and energy development are inextricably intertwined in the Navajo Nation.³³⁸ "[T]he modern Navajo Nation, as a political body," states Powell, "came to exist precisely through a pursuit of energy."³³⁹ According to David Wilkins, the Federal Government established the semblance of a Navajo governing authority "with which Washington might interact in providing leases for mineral development."³⁴⁰

This part of the Article will demonstrate that the assertion by the Supreme Court that the Nation government structure actively engaged in lease negotiations, and validly approved the coal contracts at issue in *Navajo I* and *II*, is incorrect. Not until the late 1970s did the Nation have a truly sovereign government that had the capability of examining mining contracts. Even as Navajo government increased in sophistication from the 1970s until the present, it has nonetheless been hamstrung by its position as an "occupied sovereign" dealing with a settler colonial power.

1. Diné Governance in the Period Before Conquest

The first leaders of Diné were known as *Nataani*.³⁴¹ They were selected by the "Holy People" (*Diyin Diné*), to provide discipline, moral injunctions, enforcement of economic laws, and spiritual intermediaries.³⁴² Navajo governance as based on a *natural community*, was geographically determined and was distinct from other local units, and consisted of ten to forty families,

^{335.} Lee, supra note 53, at 56.

^{336.} Andrew Curley, *The Navajo Nation's Coal Economy was Built to be Exploited*, HIGH COUNTRY NEWS (June 28, 2017), https://www.hcn.org/articles/analysis-tribal-affairs-cleaning-up-coal-on-navajo-nation.

^{337.} Curley. *supra* note 102. at 73.

^{338.} Dana E. Powell, Landscapes of Power: Politics of Energy in the Navajo Nation 5 (2018).

³³⁹ Id at 37

^{340.} Wilkins, supra note 60, at 101.

^{341.} James Kari, Review, From the Land of Ever Winter to the American Southwest: Athapaskan Migrations, Mobility, and Ethnogenesis, 80 INT'L J. OF AM. LINGUISTICS 415, 416 (2014).

^{342.} Wilkins, supra note 60, at 95.

directed by a *Nataani*.³⁴³ Internal matters, intertribal affairs, hunting, and food gathering were addressed by a deliberative body of leaders.³⁴⁴

Oral accounts indicate the existence of a periodic tribal assembly of peace and war leaders known as the *Naachid* in the early 19th Century.³⁴⁵ This assembly of twelve war and twelve peace leaders could be called at two- and four-year intervals, but also could be called in an odd year, should a tribal emergency arise.³⁴⁶ The *Naachid* could be conducted for a number of reasons, including, to insure soil fertility and an abundance of water, or to serve as a war or peace council.³⁴⁷ Importantly, women played an active role in the *Naachid*, and women of prominent status could speak openly to the gathered delegates and serve as headmen or chiefs.³⁴⁸ *Naachid* decisions were not binding on the assembled Navajos, and those who disagreed with the gathering's decision were not compelled to obey.³⁴⁹ The last Naachid was reportedly held in 1858.³⁵⁰

Traditionally, the Nation was a loose confederation of semi-nomadic groups. The Nation had more than sixty functioning clans, and this lack of central leadership made it difficult for Mexicans and Americans SED—who did not understand the Nation's organization—to negotiate with the Nation. Traditional Navajo governance structures remained intact through the early 1800s. SED

2. Shifts in Navajo Governance During the Period of Conquest

The Spanish attempted to give various Navajo headmen honorary titles in the Spanish Army—as well as significant financial inducements—in return for recruiting scouts and soldiers for Spain.³⁵⁴ With the passing of Spanish to Mexican rule, the Mexican government in Santa Fe was less and less able to "control" the Navajo.³⁵⁵ In the Pueblo Revolt of 1680, the Spanish were driven out of Arizona and New Mexico.³⁵⁶ When Conquistador Diego de Vargas returned with his Spanish army to reconquer the area, the Navajo gave sanctuary to escaping refugees.³⁵⁷

^{343.} Id.; see also Jennifer Nez Denetdale, Chairmen, Presidents, and Princesses: The Navajo Nation, Gender, and the Politics of Tradition, 21 WICAZO SA REV. 9, 11 (2006).

^{344.} Wilkins, supra note 60, at 95.

^{345.} Id. at 97.

^{346.} Id.

^{347.} Denetdale, supra note 343, at 11.

^{348.} *Id.*; Wilkins, *supra* note 60, at 97.

^{349.} Wilkins, supra note 60, at 97.

^{350.} Denetdale, supra note 343, at 11.

^{351.} Bailey, *supra* note 117, at 3–4.

^{352.} Id. at 3.

^{353.} Wilkins, supra note 60, at 97-98.

^{354.} Bailey, supra note 117, at 4.

^{355.} Id.

^{356.} Id.

^{357.} *Id*.

The 1800s represented a period of devastation for the Nation and Indians in the United States in general. The historic legal legacy of this period is written in blood. In 1823, the U.S. Supreme Court handed down Johnson v. McIntosh, which enshrined the "doctrine of discovery" into American law, giving the discoverer the exclusive right to extinguish Indian title "by purchase or conquest."358 Tribes retained the beneficial use of lands they traditionally occupied, but the Federal Government held the fee title to such lands by virtue of the "Doctrine of Discovery." President Andrew Jackson forced Native Americans to exchange traditional farming and hunting lands in the East and South for unknown, remote lands in the West. 360 In 1830, Congress enacted the Indian Removal Act, resulting in the relocation of eastern tribes west of the Mississippi River.³⁶¹ The U.S. military forcibly orchestrated the removal, known as the "Trail of Tears" by the Cherokee. 362 In 1832, Congress authorized the President to appoint a Commissioner of Indian Affairs.³⁶³ In 1849, the control of Indian affairs was transferred to the Department of the Interior, and moved to civilian control.364

3. The Navajo Wars

In 1846, the United States declared war on Mexico.³⁶⁵ Lieutenant-Colonel Alexander Doniphan marched against the Navajo with 350 soldiers.³⁶⁶ After a failed treaty, five American military expeditions took the field against the Navajo, yet all were unsuccessful.³⁶⁷ In 1849, Lieutenant-Colonel John Washington, a military commander of New Mexico, personally led an expedition against the Navajo with 175 seasoned troops.³⁶⁸ They killed Navajo head chief "Narbona," and pursued Navajo in their hideouts in the Canyon de Chelly. The first ratified treaty between the Navajo and the U.S. Government was signed in 1849 with three great Navajo raiding chiefs.³⁶⁹

In 1851, U.S. Colonel Edwin V. Sumner invaded Navajo country with four companies of mounted troops, one company of artillery, and two companies of infantry, and established Fort Defiance on the site of an old Navajo rendezvous

^{358.} Saito, supra note 131, at 38; John P. Bowes, American Indian Removal Beyond the Removal Act, 1 NATIVE AM. & INDIGENOUS STUDS. 65, 75 (2014).

^{359.} Deer & Kronk Warner, supra note 125, at 42.

^{360.} Pendley & Kolstad, supra note 63, at 238.

^{361.} DAVID E. WILKINS, THE NAVAJO POLITICAL EXPERIENCE 56 (4th ed. 2003); Bowes, supra note 358, at 65.

^{362.} Pendley & Kolstad, supra note 63, at 238.

^{363.} WILKINS, *supra* note 361, at 56.

^{364.} Paul Stuart, Administrative Reform in Indian Affairs, 16 W. HIST. Q. 133, 140 (1985).

^{365.} Bailey, *supra* note 117, at 5.

^{366.} See id.; see also William H. Lyon, Americans and Other Aliens in the Navajo Historical Imagination in the Nineteenth Century, 24 Am. INDIAN Q. 142, 148.

^{367.} *Id*.

^{368.} Id.

^{369.} Id.

in what is now the state of Arizona.³⁷⁰ In 1858, war broke out between the Navajo and the U.S. Army, which was resolved by a peace treaty signed on Christmas Day of 1858. "Herrero" was appointed head chief of the Navajo and was supposed to operate as leader of the Tribe.³⁷¹ U.S. Army Colonel James Carleton was placed in command of the Department of New Mexico and declared war on the Navajos, enlisting "Indian killer Kit Carson" as his principal field commander.³⁷² After a series of wars between the U.S. and the Navajo, Carson entered Navajo territory with one thousand troops with the aim of starving Diné into submission,³⁷³ destroying their cornfields, rooting their squash, shooting all their sheep, goats, horses, and dogs, cutting down peach trees, filling in water sources, and destroying anything that could sustain Navajo life.³⁷⁴

4. The Long Walk

General Carleton believed the Bosque would be a good "reformatory for Indians." All Navajo men who resisted were butchered on the spot. On March 6, 1864, women and children, and men who surrendered abjectly started the three hundred mile walk from their traditional homelands to a military-guarded reservation at Bosque Redondo, on the Pecos River in east central New Mexico. At least 8,000 members of the Navajo walked hundreds of miles from North West New Mexico to East Central New Mexico, to an incarceration camp at Fort Sumner. The "Long Walk," the Navajo suffered starvation, disease, and freezing weather. The Governor of New Mexico Territory (which encompassed current Arizona) declared the unconditional surrender of the "enemy" in April, 1864. Those who did not die beside the wayside arrived to a fort, with little food, fewer supplies, and unclean water, where they were to be refashioned in the image of the White Man. Short William Tecumseh Sherman found conditions at the Bosque deplorable.

- 370. Id. at 6.
- 371. Id. at 9.
- 372. DUNBAR-ORTIZ, supra note 99, at 138.
- 373. Johnson, supra note 52, at 107.
- 374. WARREN A. BECK, NEW MEXICO: A HISTORY OF FOUR CENTURIES 189 (1962); Sarah Krakoff, A Narrative of Sovereignty: Illuminating the Paradox of the Domestic-Dependent Nation, 83 Or. L. Rev. 1109, 1126 (2004); POWELL, supra note 338, at 31.
 - 375. BECK, supra note 374, at 190.
- 376. Bailey, supra note 117, at 11; DUNBAR-ORTIZ, supra note 99, at 138; Arrell Morgan Gibson, Native Americans and the Civil War, 9 Am. INDIAN Q. 385, 399–400 (1985).
 - 377. POWELL, supra note 338, at 31; Wilkins, supra note 60, at 99.
 - 378. DUNBAR-ORTIZ, supra note 99, at 139.
 - 379. Bailey, supra note 117, at 12.
- 380. Wilkins, *supra* note 60, at 99 (observing that most of the older Navajos who knew how to conduct the *Naachid* died during their imprisonment at Fort Sumner); Denetdale, *supra* note 343, at 12; *see also* Lyon, *supra* note 366, at 152. Lyon's tone leaves something to be desired.
 - 381. Kessell, supra note 117, at 258.

pneumonia³⁸² swept through the camp.³⁸³ The Navajo were able to negotiate a treaty providing for their return to their ancestral lands with General Sherman in 1868, which recognized their sovereign status.³⁸⁴ Upon their return to their homelands, the *Naachid* was no longer performed.³⁸⁵

The Indian Agents, appointed by Congress between 1870 and 1885 attempted to "civilize" Indians on the reservation or "assimilate" them to the dominant culture; an approach that remained through the 1930s. 386 The Dawes General Allotment Act of 1887 provided for the division of many reservations into individual holdings, and aimed to transform Indians into idealized agrarian-yeoman farmers. The General Allotment Act of 1887 destroyed the principle of common lands and parceled out reservation lands to individual holdings. 388 Further, the Dawes Act and subsequent statutes, accelerated the transfer of lands into non-Indian hands, contributing to the alienation of more than eighty-five percent of Indian reservation lands. 389 Courts of Indian offenses attempted to eliminate "heathenish practices." The Indian, writes Strickland, "was to become another lost race in the American melting pot." 391

5. Emergence of Centralized Governance on Navajo in Response to Oil and Gas Interests

With the discovery of oil and natural gas on Diné Bikéyah in the early 20th Century, the U.S. Government, under pressure from corporate oil and gas interests, formed a Navajo Tribal Council that "would speak for all Navajos." U.S. officials wanted to create a Navajo legislative body to approve pending oil leases. The Navajo Nation Government explains: "The discovery of oil on Navajoland in the early 1920's promoted the need for a more systematic form of government. In 1923, a tribal government was established to help meet the increasing desires of American oil companies to lease Navajoland for exploration." The U.S. Government structured a system of Navajo governance that supported extractive energy contracts on Navajo territory. 395

^{382.} Syphilis also bedeviled the camp, due to the soldiers depredating female Navajo detainees. BECK, *supra* note 374, at 191; Denetdale, *supra* note 343, at 12.

^{383.} BECK, supra note 374, at 190.

^{384.} BECK, supra note 374, at 191; Denetdale, supra note 343, at 12.

^{385.} Denetdale, supra note 343, at 12.

^{386.} Pendley & Kolstad, supra note 63, at 239; Royster, supra note 300, at 557.

^{387.} Lewis, supra note 120, at 423.

^{388.} Pendley & Kolstad, supra note 63, at 239.

^{389.} Lewis, *supra* note 120, at 423.

^{390.} Strickland, supra note 100, at 728.

^{391.} Id. at 732.

^{392.} Lee, *supra* note 53, at 56–57; Pendley & Kolstad, *supra* note 63, at 240; Krakoff, *supra* note 164, at 1128; Denetdale, *supra* note 343, at 13.

^{393.} Peter Iverson, Legal Counsel and the Navajo Nation Since 1945, 3 Am. INDIAN Q. 1, 1-2 (1977).

^{394.} Navajo Nation Profile, NAVAJO NATION WIND, https://navajoprofile.wind.enavajo.org (last visited Apr. 27, 2022).

^{395.} POWELL, supra note 338, at 39.

Herbert J. Hagerman, a non-Indian, was hired by the U.S. Federal Government to establish the Tribal council and run its meetings, and he was granted the authority to sign all oil and gas leases on behalf of the Navajo people. Tribal governments were designed in part to accommodate and intensify resource extraction on indigenous lands. These efforts to impose a centralized government upon the Navajo were not easily accepted by the Navajo people themselves, and many Navajo citizens questioned the legitimacy of their Tribal government.

Just as the Federal Government used the Council as a puppet for corporate oil and gas interests, the United States has generally favored corporate coal interests over those of the Navajo People. Further, the United States has historically shown a preference for leasing to non-Indian businesses.³⁹⁹ John Collier, the architect of the Indian New Deal, considered Indian people incapable of acting as economic agents in their own right.⁴⁰⁰

The Indian Reorganization Act of 1934 restored a certain measure of self-control to the reservations but continued the policy of leasing tribal lands and resources to non-Indians. In 1936, the BIA began controlling Navajo tribal governance, and all decisions passed by the council and executive body of the Navajo had to be approved by the BIA. Under the terms of the Omnibus Tribal Leasing Act of 1938, BIA sponsorship resulted in long-term leases under terms that yield a very meager return from the minerals to the tribe. Congress passed the IMLA in 1938 to regulate mining within Indian Lands.

Yet, while Congress was attempting to rationalize mineral leasing on Indian lands, the BIA waged a frontal attack on the Navajo's ability to support themselves. The livestock reduction program of the 1930s, carried out under the administration of Commissioner of Indian Affairs John Collier, assaulted the entire way of life of the Navajo people. In the 1930s, federal officials concerned about erosion and overgrazing destroyed Navajo sheep herds through the initiation of drastic livestock reduction plans. Observers note that the livestock reduction plan exposed the Navajo to unlawful searches and seizures, and represented a hot branding iron which seared the soul of the Navajo. Like the movement to fence in Irish pastures, the livestock reduction program

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396. Id.
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^{397.} Curley, supra note 102, at 74. See generally POWELL, supra note 338.

^{398.} Iverson, supra note 393, at 1.

^{399.} Id. at 462.

^{400.} NEEDHAM, supra note 176, at 132.

^{401.} Pendley & Kolstad, supra note 63, at 240.

^{402.} William Zimmerman, Jr., The Role of the Bureau of Indian Affairs Since 1933, 311 ANNALS AM. ACAD. POL. & Soc. Sci. 31, 32–33 (1957).

^{403.} Pendley & Kolstad, supra note 63, at 242.

^{404.} Curley, supra note 102, at 73.

^{405.} Iverson, supra note 393, at 1; Yazzie, supra note 114, at 31-32.

^{406.} Denetdale, supra note 343, at 13.

^{407.} Iverson, supra note 393, at 3.

made Navajo subjects more "legible" and more governable, and shifted them from a pastoral-agricultural economy to wage labor, in which the U.S. Government became the reservation's largest employer. 409

6. Navajo Governance and Mineral Exploration in the Post World War II Period

The Hoover Commission on Government Efficiency (1947) stated that traditional tribal organization had been "smashed," and that the BIA should encourage assimilation. The period of the late 1940s and the early 1950s represented a period in which Congress and the Department of the Interior supported the forceful assimilation of Indian people and incorporation of Indian lands. In addition, Congress enacted legislation to terminate Indian people's limited sovereignty, advocated for the abrogation of treaties, and supported the extension of state jurisdiction over Indian lands. Unring this time period, the BIA supported the idea of moving the Navajo off the reservation to labor camps throughout the Southwest. Regional BIA directors viewed the Navajo as "a primitive sort of individual." The Navajo "were treated as backward and uncivilized." Indeed, these derogatory views of the Navajo and Natives permeate the law relating to Indian mineral leasing.

The U.S. Government subsidized coal development and other natural resource development on Navajo lands by opening up federally controlled land to coal extraction at below market rates. The BOR's 1952 Study of Future Transmission for the West, observed that the Colorado Plateau, upon which the Nation is located, held extensive coal deposits. Importantly, the Department of the Interior did not sell the coal for its true market value. Coal was sold for as low as twenty cents per million BTU's of energy. Federal energy policy in the 1950s and 1960s focused on "unlocking resources on Navajo land, rather than ensuring that employment accompanied development." Many Tribes feel that through negligence, incompetence, or malice, agencies charged with the trust

^{408.} See generally James C. Scott, Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed (1998).

^{409.} Johnson, supra note 52, at 108; Denetdale, supra note 343, at 13.

^{410.} NEEDHAM, *supra* note 176, at 133 (Congress and the Interior Department believed that federal policy should aim for the assimilation and incorporation of Indian peoples).

^{411.} Krakoff (2004), *supra* note 374, at 1129; Pub. L. No. 83-280, 67 Stat. 588 (1953); H.R. CON. RES. 108, 83rd Cong. (1953) (House Concurrent Resolution 108 and Public Law 280 represented federal termination policy, which threatened to sell off tribal lands, withdraw all federal support, and allow states to extend their power over Indian reservations).

^{412.} Needham, supra note 176, at 134.

^{413.} Id. at 135.

^{414.} Curley, supra note 102, at 73.

^{415.} Maruca, *supra* note 3, at 451; Royster, *supra* note 300, at 552.

^{416.} Rosser, *supra* note 176, at 461 (2010).

^{417.} The BOR is also a sub-component of the Department of the Interior.

^{418.} NEEDHAM, supra note 176, at 125.

^{419.} Id. at 124.

responsibility have historically failed to provide tribes with sufficient data about the extent or value of mineral resources that tribes possess. ⁴²⁰ Ezra Rosser argues that up to a certain date, mineral resource based development may have been nominally approved by the Navajo Nation council, yet were heavily influenced by the Federal Government and mining interests. ⁴²¹

In the late 1940s and early 1950s the U.S. Department of the Interior, particularly the BOR, viewed the Colorado Plateau, upon which Navajo Nation sits, as a source of energy supplies for the burgeoning metropolitan Southwest. In 1957, Utah International received permission to explore for coal on 24,320 acres of what would come to be known as "The Navajo Mine." This contract was signed in the presence of James Stewart, Superintendent of the BIA for Navajo Agency. The result of this alignment between Navajo tribal officials, the Department of the Interior, and the private sector resulted in the construction of numerous coal mines and power plants on the Navajo Reservation.

In the 1950s, the BIA had pervasive control over the Navajo Reservation—tribal courts, police departments, health services, and local committees all operated under the authority of the BIA. The BIA appointed reservation superintendents, controlled tribal budgets, and could withhold federal funds for programs they did not approve. In addition, the Tribal Council in this time period was weak and operated largely with the acquiescence of the Federal Government. Ale

The BIA wished to relocate the Navajo off of the reservation, in an effort to accomplish both "acculturation" and "modernization". 429 By contrast, Tribal Chairman Paul Jones told the Navajo Tribal Council in 1957 that energy development would mean a modern way of living for the Navajo. 430 Further, Jones viewed energy development as a means to keep the Navajo people on the reservation, while maintaining autonomy. 431 Phoenix businessmen and Jones shared a vision of "modernization" for the Navajo. The Nation, in this vision, was arguably implementing an external sociotechnical imagery of a "collectively held and performed visions of desired futures" with regard to

^{420.} Pendley & Kolstad, supra note 63, at 236.

^{421.} Rosser, supra note 176, at 440.

^{422.} NEEDHAM, supra note 176, at 123.

^{423.} Id.

^{424.} Id.

^{425.} Id. at 124.

^{426.} Johnson Jr., supra note 52, at 99.

^{427.} Id.

^{428.} Id.

^{429.} NEEDHAM, supra note 176, at 134.

^{430.} Id. at 124.

^{431.} Id.

energy development.⁴³² For the Navajo Council, politicians, and businessmen from Phoenix, coal and energy development on Navajo in the 1950s evoked "the modern."⁴³³ Secretary of the Interior Stewart Udall of Arizona worked to build the Navajo Generating Station on Navajo Nation "as part of a modernization narrative."⁴³⁴ Efforts to assimilate the Navajo people proceeded apace in the 1950s. These efforts included the passage of the Navajo-Hopi Long Range Rehabilitation Act in 1950, which aimed to resettle the Navajo and relocated them off the reservation, and to indoctrinate Navajo adolescents in "white domestic habits, and other development endeavors."⁴³⁵

Although in Jones' vision, coal extraction would help the Navajo create an autonomous future of wealth and power, under the BIA's control, private companies were given the power to mine coal⁴³⁶ on Navajo and set it alight with no concern for the Navajo people or their culture. Federal policy in the late 1950s and 1960s focused on providing access to natural resources on Navajo, while not ensuring that such resource extraction would result in employment and improved living conditions for the Navajo.⁴³⁷ Each decision Navajo leaders made in this period about energy and development represented "a tradeoff between visions of what the present and future could and should be."⁴³⁸

In 1957, the first large Navajo coal lease was signed near Shiprock in an area that would be called the "Navajo Mine," which would provide fuel for the Four Corners Generating Station and the San Juan Generating Station. ⁴³⁹ Twenty-three utility companies joined together in the mid-1960s to build six coal fired plants in the Four Corners area. ⁴⁴⁰ The Navajo Mine would be joined by the McKinley Coal Mine in 1962 near Window Rock and two large coal mines in 1967 and 1973 on Black Mesa. ⁴⁴¹

These new coal-fired plants were located near coal supplies, with transmission lines that could carry 500 kilovolts to Southwestern cities. The plants were connected to the BOR's dams across the West, providing coordination between coal power and hydropower, diversifying loads, and smoothing demand curves. In 1964, Peabody Coal negotiated a lease of almost 65,00 acres with the Department of the Interior and the Navajo Tribal

^{432.} Sheila Jasanoff, *Future Imperfect: Science, Technology, and the Imaginations of Modernity*, in Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power 1, 19 (Sheila Jasanoff & Sang-Hyun Kim eds., 2015).

^{433.} NEEDHAM, supra note 176, at 124. See generally Jasanoff, supra note 432.

^{434.} Curley, supra note 102, at 73.

^{435.} Johnson Jr., supra note 52, at 103.

^{436.} Lewis, supra note 120, at 423-50.

^{437.} NEEDHAM, *supra* note 176, at 124.

^{438.} Lewis, *supra* note 120, at 440.

^{439.} Curley, supra note 102, at 73. See generally POWELL, supra note 338.

^{440.} Paul C. Rosier, Modern America Desperately Needs to Listen: The Emerging Indian in an Age of Environmental Crisis, 100 J. Am. HIST. 711, 728–29 (2013).

^{441.} NEEDHAM, supra note 176; Curley, supra note 102, at 73.

^{442.} NEEDHAM, supra note 176, at 127-28.

^{443.} Id.

Council to strip mine coal on Black Mesa.⁴⁴⁴ By the 1960s, power lines radiated outward from Four Corners Power Plant on Navajo in northwestern New Mexico, and Navajo Mine was marked by a deep gash on the reservation.⁴⁴⁵ Coal combustion from the Navajo and Mojave generating plants created a sulfur dioxide haze which hung over the Four Corners region.⁴⁴⁶

Importantly, some Navajos later asserted that that the Tribal Council never received an opportunity to truly evaluate and debate the leases. 447 Critics observed that the contracts between the Navajo Nation and Peabody Coal did not equally benefit all residents on Navajo lands, and instead, the money only went to a small number of recipients. 448 Leases for mineral wealth on Navajo lands were written in an inequitable manner. 449 Tribal authorities claim that, frequently, long-term leases were negotiated primarily between the BIA and the companies, who fixed low prices for the minerals, with no provision for changing market conditions. 450 The British-owned Peabody Coal company leases, which date back to 1964 were struck at "abysmal royalty rates," allowing the coal company to mine sixty-seven million tons of high-grade, low sulfur coal from a 64,858 acre site. 451 General Counsel George P. Vlassis, a non-Indian, spoke out against the BIA's failure to respect the decisions of the Navajo Tribal Council, and the BOR's further failure to protect Navajo water rights and land resources. 452 In addition to the low royalty payments, the mineral leases came at a human cost. Twelve thousand Navajo had to leave their land to make way for the strip-mining operation. 453 Scholars have characterized BIA's presence on Navajo lands during the late 1960s as "a colonial society with a colonial mentality."454

7. Emergence of Navajo Nationalism in the 1970s

Yet, not all Navajo believed in the vision of coal as the route to modernity. Critics protested the strip mining of coal on Black Mesa and the pollution from the coal-burning Four Corners Power Plant, which provided energy to Los Angeles, Phoenix, Albuquerque, and El Paso. The Sierra Club, National Wildlife Federation, the Committee to Save Black Mesa, and Navajo and Hopi citizens engaged in a "massive portfolio of protest." Navajo sheepherders protested

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444. Id. at 214.
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^{445.} Id. at 124.

^{446.} Lewis, *supra* note 120, at 432.

^{447.} NEEDHAM, supra note 176, at 214.

^{448.} Iverson, supra note 393, at 10.

^{449.} Lewis, supra note 120, at 431.

^{450.} Pendley & Kolstad, supra note 63, at 242.

^{451.} Lewis, supra note 120, at 431.

^{452.} Iverson, supra note 393, at 11.

^{453.} Johns, supra note 161.

^{454.} Johnson Jr., *supra* note 52, at 101; William K. Adams, Papers from the Third, Fourth, and Sixth Navajo Studies Conferences in Growing Up in Colonial Navajoland, 305, 309–10 (JUNE-ELPOPER 1993).

^{455.} Rosier, supra note 440, at 730.

Peabody Coal, because coal dust and other by-products of strip mining threatened their sheep herds. ⁴⁵⁶ Critics observed that Peabody's strip mine was proof of the tribe's colonial status within the Southwest. ⁴⁵⁷ The damage to Navajo culture through the strip mining of coal is evident in an interview conducted with Navajo elder Mamie Salt:

"[The Black Mesa Mountains] are another sacred area. It is said to be the body of the Female Pollen Range lying there. The Navajo people were told by the holy ones to leave it alone. Now the coal companies . . . have come in and are strip mining the mesa, desecrating it. This coal is said to be the blood of the Female Pollen figure lying there." 458

Accordingly, the mining of Black Mesa resulted in environmental and health problems. Even worse, this mining also violated ground that was spiritually significant to the Navajo people.

Young Navajo activists claimed that energy development represented the colonization of Navajo land and the destruction of Navajo culture. The Red Power movement emerged with "fish-ins" in the 1960s, lasted throughout approximately 1977, and was represented by the iconic occupation of Alcatraz in 1969 and the second battle for Wounded Knee. African American struggles for civil rights connected to Indigenous struggles for civil rights in the emergence of the Red Power movement. On the Nation, young people organized the National Indian Youth Council in Gallup, New Mexico. Red Power tried to create visibility regarding treaty violations, highlight struggles over land, and address Indians' unmet needs. Leaders were able to elevate their causes to an international level, building transnational alliances and recognition from the United Nations. American Indians demanded self-determination, and insisted on the decolonization of Indian-federal relationships.

^{456.} Rosier, supra note 440, at 731.

^{457.} NEEDHAM, supra note 176, at 213.

^{458.} Kelley & Francis, supra note 48, at 151.

^{459.} NEEDHAM, supra note 176, at 224.

^{460.} Lucie Kýrová & György Ferenc Tóth, Red Power at 50: Re-Evaluations and Memory Introduction, 17 COMPAR. AM. STUD. 107, 108 (2020); Dean J. Kotlowski, Alcatraz, Wounded Knee and Beyond: The Nixon and Ford Administrations Respond to Native American Protest, 72 PAC. HIST. REV. 201, 212–13 (2003).

^{461.} Lenada James, Ada Deer, Ramona Bennett, Gerald Wilkinson & Hank Adams, *Activism and Red Power, in Indian Self-Rule, 228–29* (Kenneth R. Philp ed., 1995); Kotlowski, *supra* note 460, at 205; Simon J. Ortiz, *Indigenous Activism: Our Resistance, Our Revitalization, Our Indigenous Native Studies, 32* WICAZO SA REV. 106, 109 (2017).

^{462.} Cobb et al., supra note 105, at 209.

^{463.} Kotlowski, supra note 460, at 207.

^{464.} Kýrová & Tóth, supra note 460, at 108; Cobb et al., supra note 105, at 113.

^{465.} Cobb et. al., supra note 105, at 212.

Some Native American activists and leaders reimagined the management of their tribal resources using ideals of ecological stewardship. 466 At the same time, the 1970s oil crisis increased corporate and government pressure to gain access to Native resources such as coal and oil. 467 The Indian Self-Determination Act of 1975 was intended to assist the tribes through a self-determination process so that they would no longer need the government as trustee. Yet self-determination remained elusive. The Indian Self-Determination Act left the leasing of mineral rights on Indian lands to be done with the advice and consent of the BIA. 468

Due to the colonial extractive economy imposed on Navajo through the efforts of the BOR and the BIA, working with private sector coal operators, the Nation became dependent on both the jobs and the royalties generated by coal, and uranium mining and the operation of power plants on the edge of the reservation. 469 Tribal leaders faced a Hobson's choice. They could employ their people at the cost of their people's health, water, and land. 470 Or, these leaders could protect their land, but lose the royalties. On the one hand, economic development strategies based on extracting natural resources posed a threat to the environment and the health of Navajo on the reservation. On the other hand, Navajo leaders had to consider the need of their people for gainful employment. 471

To put a finer point on this, the revenue generated by coal royalties, lease payments, and other mechanisms from the coal mines and powerplants funded the Navajo Nation's general fund.⁴⁷² These "general funds" are not earmarked for a specific, narrow function, and allow the Nation to spend the funds as it chooses. By contrast, federal funding must be used for specified purposes—at least as the Nation contracts for these funds. Accordingly, general funds support the Nation's vision for itself. Coal mines, powerplants, and uranium mining helped to contribute to general funds.⁴⁷³ This context helps to explain the manner in which Peter MacDonald attempted to develop a version of "decolonized" Navajo nationalism, while trying to improve the economic base of the Nation through extractive energy production.⁴⁷⁴

^{466.} The Fish-In movements emphasized tradition resource conservation and protection of treaty rights regarding fishing. Andrew H. Fisher, *Defenders and Dissidents: Cooks Landing and the Fight to Define Tribal Sovereignty in the Red Power Era*, 17 COMPAR. AM. STUDS.: INT'L J. 117, 130 (2020).

^{467.} Rosier, supra note 440, at 734.

^{468.} Pendley & Kolstad, supra note 63, at 240.

^{469.} During the NGS Lease Extension negotiations, the press was reporting that Hopi was reporting that coal revenues supplied 80% of Hopi's general budget. Lewis, *supra* note 120, at 432; Maruca, *supra* note 3, at 391

^{470.} Maruca, *supra* note 3, at 397 (observing that coal plants and coal mining bring with them severe health and environmental problems).

^{471.} Lewis, supra note 120, at 436; Phone Interview with Becker, supra note 184.

^{472.} Phone Interview with Becker supra 184.

^{473.} Id.; Email with Becker, supra note 184.

^{474.} Yazzie, supra note 114, at 26.

Today, the Navajo Mine is a 33,000-acre strip mine, which produces coal that powers the Four Corners Power Plant, both of which are located on Navajo Nation. The Mine operates pursuant to a surface mining permit issued by the Department of the Interior's office of Surface Mining Reclamation and Enforcement. The Four Corners Plant is located on Navajo land, and includes five coal-fired steam generating units, generating 2,040 MW. The have been "notoriously lax," in this regard, and businesses have taken advantage of the regulatory vacuum, cutting environmental corners while keeping costs low.

Navajo governance is far from static, and has been restructured several times over the past century. The Navajo Nation Council, as it is now configured, comprises the recognized voices of all Navajos. The Navajo Nation Council consists of eighty-eight delegates, acting as the legislative wing of governance. The Navajo Nation is divided into 110 local chapters (or communities) which are centered near population centers with enormous influence over local problem solving. Navajo retains a government that mimics the U.S. federal system, and is divided into three branches: executive, judicial, and legislative. All powers derive from the Council. Despite the appearance of sovereignty and, since the 1970s, significant improvements in terms of the Nation's ability to control their lands and resources, the Secretary of the Interior continues to wield veto power over certain council decisions, particularly those regarding minerals such as oil and gas, and coal. In the words of Jennifer Nez Denetdale, "the Navajo Nation struggles to claim its sovereignty in every sense of the word."

V. PROPOSED SOLUTIONS: RECONSIDERATION, REMEDIATION, REMEDIES, AND REPARATIONS

"We must trust our own thinking. Trust where we're going.

And get the job done."

-Wilma Mankiller

^{475.} Diné Citizens, 932 F.3d at 848.

^{476.} Stephen C. Braverman & Michael R. Braverman, Regulation of Surface Coal Mining: The End of a Thirty-Year Balancing Act, 27 NAT. RES. & ENV'T 28, 28 (2013).

^{477.} The Four Corners Plant is set to close in 2031.

^{478.} Lewis, *supra* note 120, at 437.

^{479.} Curley, *supra* note 102, at 79.

^{480.} Wilkins, supra note 60, at 94.

^{481.} Welcome to the Navajo Nation Government: History, NAVAJO NATION, https://www.navajo-nsn.gov/history.htm (last visited Apr. 27, 2022).

^{482.} Id.; Kronk Warner (2014), supra note 46, at 75.

^{483.} Kelley & Francis, supra note 48, at 152.

^{484.} POWELL, supra note 338, at 39; Kronk Warner (2014), supra note 46, at 75.

^{485.} Welcome to the Navajo Nation Government, supra note 479.

^{486.} Denetdale, supra note 343, at 14.

This Article has argued that *Navajo I and II* were decided wrongly by the U.S. Supreme Court. Given how much time has passed since its decision, and given that there is no current live controversy, it is unlikely, however, that the Court will reconsider those cases. Accordingly, a legislative remedy is more appropriate. A moral debt is due to the Navajo in the form of reparations, paid through cash, infrastructure, jobs, electricity, and investment in clean energy.

The medical situation is improving with regard to COVID-19 on the Nation. The Federal Government did send equipment to the Nation quickly after the epidemic reached its peak. As The Nation received polymerase chain reaction machines in the summer of 2020. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by the FDA. The Nation also received Remdesivir as soon as it was approved by

The Covid-19 pandemic has highlighted the extent of the damage the Nation has suffered. With the appointment of Laguna Pueblo Native Deb Haaland as Secretary of the Interior, and the decision of the Biden-Harris Administration to make climate change a holistic policy focus, it is time to use American ingenuity to build out green energy on the Navajo Nation. Secretary Haaland has underscored that the nation's transition to a clean energy future is essential to the national response to climate change. She has also started to seek to restore balance on uses of some 245 million acres of land held in trust by the Federal Government by advancing clean energy projects and ensuring all stakeholders have a say in what happens there.

Four remedies are needed to help repair the damage done to the Navajo Nation by US energy extraction: (1) a reparations statute by Congress modeled on the Japanese Internment statute; (2) a revision of the laws which make

^{487.} Telephone Interview with Dr. Setul G. Patel, supra note 70.

^{488.} Id.

⁴⁸⁹ Id

^{490.} According to the New York Times, "The rate of fully vaccinated tribal members — 70 percent, according to tribal data — is substantially higher than the nationwide rate of 58 percent." Alyssa Lukpat & Adeel Hassan, *The Virus is Surging on the Nation, Despite High Vaccination Rates*, N.Y. TIMES (Nov. 2, 2021), https://www.nytimes.com/2021/11/01/us/virus-navajo-vaccination-rates.html.

^{491.} NAVAJO TRIBAL UTIL. AUTH., 2020 CARES ACT – NTUA PROJECTS: PROGRESS REPORT UPDATE #22 FOR NAVAJO NATION LEADERS (2021), https://www.ntua.com/assets/ntua-update--22---nn-cares-projects-01-26-21-(005).pdf. As a result of efforts by NTUA and Neighboring Utilities: 719 families are now connected to the electric grid after receipt of CARES funding in August 2020. *Id.*

^{492.} Press Release, US Dep't of Interior, Secretary Haaland Highlights Clean Energy Commitments, Progress in Meeting with Renewable Energy Leaders (Sept. 9, 2021), https://www.doi.gov/pressreleases/secretary-haaland-highlights-clean-energy-commitments-progress-meeting-renewable.

^{493.} Jennifer A. Dlouhy, *Interior's Haaland Hints at Limits on Fossil Fuel Extraction*, BLOOMBERG: GREEN (Sept. 20, 2021, 1:35 PM), https://www.bloomberg.com/news/articles/2021-09-23/interior-s-haaland-hints-at-limits-on-fossil-fuel-extraction.

electrifying the Nation difficult in addition to grants to the NTUA for electrification; (3) a new Recovery and Reinvestment Act which invests on renewable energy and grid construction and repair on the Nation, and on other neglected Tribal territories; (4) finally, we must rethink the legal relationship between the Department of the Interior and First Peoples.

A. THE NATION IS DUE REPARATIONS FOR THE HEALTH IMPACTS OF URANIUM AND COAL

Tsosie argues that the U.S. Government should "assume responsibility as a trustee for the harms that occurred on the Nation in the past, as well as for the continuing consequences of those harms for human health and the environment on reservation lands and lands adjacent to the reservation where tribal members live." Remediation requires measures that support the reconstitution and continued vitality of indigenous peoples. In terms of legal sources, Congress may invoke the provisions of the Declaration on the Rights of Indigenous Peoples as the basis for such remedies.

Congress first authorized oil and gas exploration on Navajo Nation in the 1920s.⁴⁹⁷ Uranium mining began on Navajo Nation in 1948, with the U.S. Government as the sole purchaser until 1971. Uranium mining continued via private providers through the 1980s. 498 The first strip-mining coal lease on the Navajo Nation began in 1961.⁴⁹⁹ Yet, these actions were taken with little or no input by the Navajo people. The United Nations Declaration on the Rights of Indigenous Peoples ("Declaration") was adopted by the UN General Assembly in 2007.⁵⁰⁰ It emphasizes the right to indigenous self-determination, property, and redress.⁵⁰¹ Article 28 of the Declaration emphasizes that indigenous people have the right to just, fair, and equitable compensation for "lands, territories, and resources which they have traditionally owned or otherwise occupied or used, and which have been confiscated, taken, occupied, used, or damaged without their free, prior and informed consent."502 The Declaration also requires states to "consult and cooperate in good faith" with Native peoples, providing adequate notice and information and obtain their prior and informed consent before adopting legislative or administrative matters that may affect them.⁵⁰³ These

^{494.} Tsosie, supra note 230, at 269. See generally Rebecca Tsosie, Climate Change and Indigenous Peoples: Comparative Models of Sovereignty, 26 Tul. ENV'T L.J. 239 (2013).

^{495.} Saito, supra note 131, at 90; Genocide Convention, supra note 100, at art. II.

^{496.} Tsosie, *supra* note 230, at 269.

^{497.} Judith V. Royster, Oil and Water in the Indian Country, 37 NAT. RESOURCES J. 457, 457 (1997).

^{498.} Brugge & Goble, *supra* note 232, at 1411.

^{499.} Genevieve Atwood, The Strip-Mining of Western Coal, 233 SCI. Am. 23, 24 (1975).

^{500.} U.N. Declaration on the Rights of Indigenous People, GA Res 61/295, art. 3, UN Doc. A/RES/61/295 (Oct. 2, 2007) [hereinafter UNDRIP].

^{501.} Kronk Warner (2017), supra note 103, at 352.

^{502.} Id. at 353.

^{503.} UNDRIP, supra note 497, at art. 19. See generally Akilah Jenga Kinnison, Note, Indigenous Consent: Rethinking U.S. Consultation Policies in Light of the U.N. Declaration on the Rights of Indigenous Peoples,

elements were lacking in *every single one* of the coal and uranium leases, which took place on Navajo Nation. Further, the U.S. Supreme Court failed to consider such an international legal framework in the decisions it handed down in *Navajo I and Navajo II*.

There is precedent for reparations in American Law. The Civil Liberties Act of 1988 established a comprehensive program for paying restitution to individuals of Japanese ancestry who were interned or otherwise deprived of their liberties during World War II ("WWII"). 504 The Civil Liberties Act provided an official apology for the internment, and established a fund to be used, to pay \$20,000 each to individuals found eligible for restitution. ⁵⁰⁵ The Attorney General was responsible for identifying and locating eligible individuals and paying them this restitution. Through the Office of Redress Administration ("ORA") of the Civil Rights Division of the Department of Justice, the Attorney General notified individuals of their potential eligibility and verified their claims upon receipt of certain background information. 506 In addition, the U.S. Government has paid reparations to compensate Hungarian Jews whose property was looted by American soldiers during World War II.⁵⁰⁷ Tragically, and mysteriously, African Americans and Native Americans have not been treated similarly to Japanese Americans with regard to reparations. 508 Courts and citizens remain antagonistic.⁵⁰⁹ Yet, the reparations debate should continue, and Native Americans should be part of the discourse. Both African Americans and Natives have a strong case that they should receive reparations for genocide.⁵¹⁰ In the Japanese American case, the government provided a flat fee to each recipient and required that the recipient had to be alive at the time the legislation went into effect.⁵¹¹ Further, the recipients received a letter of apology from President G.W. Bush.⁵¹² Tsosie observes that the Nation has not received an apology for the harm that uranium did to Navajo lands, citizens, and resources.⁵¹³ The situation for the Nation is complicated by the fact that the genocides were repeated and are ongoing. Further, the elderly have disproportionately been felled by COVID-19. The loss of the elderly for the

⁵³ ARIZ. L. REV. 1301 (2011). The Declaration was affirmed by 144 United Nations member states; eleven abstained and Australia, Canada, New Zealand, and the United States voted "no." Since 2007, these four states have all stated that they support the Declaration while maintaining that it is not legally binding. *Id.* at 1302.

^{504.} Civil Liberties Act of 1988, 50 U.S.C. § 1989, (1988); see also Civil Liberties Act of 1988 50 U.S.C. §§ 1989b–4(a) & (b) (1988).

^{505.} Murakami vs. United States, 46 Fed. Cl. 653, 654 (2000); Jacobs v. Barr, 959 F.2d 313, 314–15 (1992).

^{506.} Murakami, 46 Fed. Cl., at 654.

^{507.} Allan D. Cooper, From Slavery to Genocide: The Fallacy of Debt in Reparations Discourse, 43 J. BLACK STUDS. 107–08 (2012).

^{508.} Id. at 108.

^{509.} Id.; Howard McGary, Reconciliation and Reparations, 41 METAPHILOSOPHY 546, 558 (2010).

^{510.} See Cooper, supra note 507, at 114-15.

^{511.} Id. at 117.

^{512.} Id.

^{513.} Tsosie, *supra* note 230, at 267.

Navajo is particularly debilitating, since the elderly are the keepers of the traditions.

Reparations are not about compensating victims for material loss. Rather, reparations provide a process to show respect to communities who have been subjected to violations of their human rights. Further, reparations provide an opportunity for the U.S. Government to embrace a broader vision of restorative justice, thus contributing to racial equality. And, reparations allow the victimized to have a sense of stability. Restorative justice embraces both a process ethos, as well as a values conception, which can help bring together all parties affected by harm and wrongdoing. As an initial matter, a reparations statute should compensate all Navajo citizens whose health has been harmed by coal mining, coal burning, and the lack of electrification on Navajo Nation.

B. COMPLETE THE ELECTRIFICATION OF NAVAJO

In addition, electrification on Navajo must be completed. What are the obstacles for electrification for Navajo? Electrification projects on Navajo have languished for decades. S18 As noted above, funding is a barrier because the costs cannot be easily passed onto the rate payers. One complicating factor for electrification is that the Nation has numerous service territories. Electric service territories are highly regulated. The Nation cannot, by law, provide electricity in an electric service territory under the control of one of these other companies, which include the Arizona Public Service Company, Jemez Electric, Socorro Electric Cooperative, and the Continental Divide Electric Cooperative, to name just a few providers of rural electricity.

Bidtah Becker, Associate Attorney with NTUA and former Director of Navajo Nation Division of Natural Resources observes:

"In the perfect world, assuming there is political will to address this problem, all of the regulations including access to land, easements regarding historical resources and archeological resources and how you have to access the land needs to be rethought to accomplish electrification. One cost is right of way costs. One cost is material cost. Importantly, the process of getting access to land is very long. That is why it is so hard to get power to people in the eastern

^{514.} Cooper, supra note 507, at 118.

^{515.} Theo Gavrielides, Bringing Race Relations into the Restorative Justice Debate, 45 J. BLACK STUDS. 216, 240 (2014).

^{516.} McGary, supra note 509, at 559.

^{517.} Gavrielides, supra note 515, at 220.

^{518.} Derril Holly, *COVID-19 Relief Money is Spurring a Push to Electrify Navajo Nation Homes*, NRECA (Oct. 27, 2021), https://www.electric.coop/covid-19-relief-money-is-spurring-a-push-to-electrify-navajo-nation-homes.

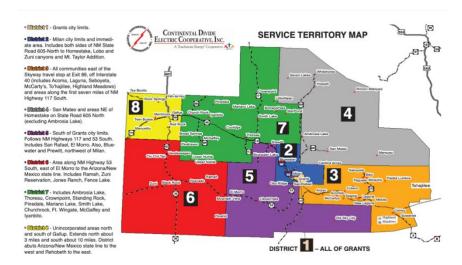
^{519.} See W. Area Power Admin. Renewable Res. Program, Tribal Authority Process Case Studies: The Conversion of On-Reservation Electric Utilities to Tribal Ownership and Operation 59 (2010), https://www.energy.gov/sites/prod/files/2016/04/f30/tribal_authority_case_studies_report.pdf

^{520.} Holly, supra note 518.

agency. It is the checkerboard nature of the land. It can literally take years to get clearance to build power lines."⁵²¹

One area of the Navajo Nation is called "the Checkerboard." The Checkerboard includes: fee land owned by an individual, fee land owned by the Navajo Nation, trust land held in trust for the Navajo Nation, trust land held in trust for individual Navajos (aka allotments), New Mexico State Trust Land, land held by the federal Bureau of Land Management ("BLM"), and other types of land. 522 Additional electric providers serve Navajos living on trust land and allotments, including Farmington Electric and Socorro Electric Cooperative. 523 Acquiring the necessary rights to access land is often cited as a reason why utilities are not built out in Indian Country and why there is a lack of economic development generally in Indian Country. This disaggregation of electric service territories on the Nation could be amended by Congress or by FERC regulation. 524

FIGURE 1: MAP OF CONTINENTAL DIVIDE ELECTRIC COOPERATIVE



Available at https://www.cdec.coop/sites/cdec/files/downloads/about-us/AM_Table_District_Map18.pdf.

^{521.} Telephone Interview with Becker, supra note 184.

^{522.} Walter E. Stern, Environmental Regulation on Indian Lands: A Business Perspective, 7 NAT. RESOURCES & ENV'T 20, 55 (1993); Jessica A. Shoemaker, Complexity's Shadow, American Indian Property, Sovereignty, and the Future, 115 Mich. L. Rev 482, 502 (2017); Jane E. Scott, Controlling Land Use on the Checkerboard, 10 Am. INDIAN L. Rev. 187, 198 (1982).

^{523.} Farmington Electric Utility System, CITY OF FARMINGTON, https://fmtn.org/181/Farmington-Electric-Utility-System (last visited Apr. 27, 2022).

^{524.} Phone Interview with Becker, supra note 184.

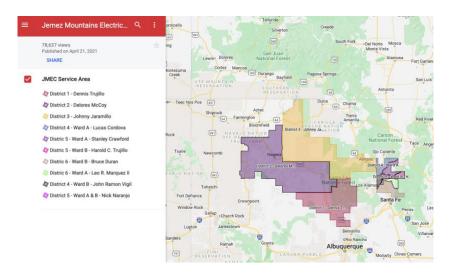


FIGURE 2: MAP OF JEMEZ ELECTRIC COOPERATIVE SERVICE AREA

Available at https://www.google.com/maps/d/u/0/viewer?mid=1QDN8CYAkK-dJMEuj6HU9jxo4KbA&ll=36.20022940419242%2C-107.0038815&z=8.

C. WE HAVE THE TECHNOLOGY (AND THE HISTORY) TO COMPLETE ELECTRIFICATION OF THE NATION

The United States has significant experience in electrifying remote, poor rural areas. In the early 1930s, rural America faced an electrification crisis, and only eleven percent of the nation's rural population received central station electrical service. Family incomes in the Appalachian region were forty-five percent of the national average. As part of the New Deal, President Franklin Delano Roosevelt ("FDR") and Congressman Lyndon B. Johnson ("LBJ") vigorously pursued efforts to bring electricity and telephony to rural America in the 1930s. 528

On May 11, 1935, FDR established a Rural Electrification Administration ("REA"), and Congress passed the Rural Electrification Act of 1936.⁵²⁹ The Act created attractive lending rates by affixing interest rates equal to the average cost

 $^{525.\,}$ John D. Garwood & William Carroll Tuthill, The Rural Electrification Administration: An Evaluation 59 (1963).

 $^{526. \ \} Robert\ A.\ Caro, The\ Years\ of\ Lyndon\ Johnson:\ The\ Path\ to\ Power\ 252\ (1982).$

^{527.} Id. at 252.

^{528.} ROBERT A. CARO, THE YEARS OF LYNDON JOHNSON: MEANS OF ASCENT 527 (1991). Hill Country residents were suspicious, yet, in the end, Johnson's conversations with President Franklin Delano Roosevelt were a decisive factor in the Pedernales Electric Co-operative receiving a loan to string electric lines across the Hill Country. Unfortunately, the Navajo lack access to this kind of political clout.

^{529.} Richard P. Keck, Reevaluating the Rural Electrification Administration: A New Deal for the Taxpayer, 16 ENV'T L. 39, 87–89 (1985).

of government borrowing, resulting in an average interest rate of three percent, which declined to two percent in 1944.⁵³⁰ The REA urged citizens to form cooperatives, non-profits, and private membership organizations organized under state law, for the purpose of supplying members with central power.⁵³¹ The cooperatives were funded through loaned administrative funds,⁵³² bringing electricity to half a million American farms in less than two years.⁵³³ The REA was hailed as a resounding success in rural America. Today, over ninety-nine percent of rural Americans have access to electricity at least as a partial result of the Act.⁵³⁴

As laudable as efforts for electrification in the New Deal were, they were not color blind. Communities of Indigenous people and other people of color were not electrified to the same extent as White communities. As Connor Harrison has observed.

"New Deal policies... were layered onto a racist state governance apparatus.... In many cases, racist county officials shaped New Deal programs locally to maintain 'a society structured in the interests of all whites.'... New energy systems do not emerge into places devoid of social order. Rather... energy systems deployed in already uneven and racialized landscapes tend to perpetuate marginalization." 535

Although discrimination against African Americans in the South regarding electric infrastructure was explicit during the New Deal, implicit racism played a role in the lack of electric infrastructure on tribal lands. Government loans largely bypassed citizens of reservations.⁵³⁶ The Rural Electrification Act of 1936, which offered federal loans to deploy electrical systems in rural areas across the country, but left out many tribal nations, is an example.⁵³⁷ According to the Department of Energy, Indian tribes have only been able to borrow funds on a tax-exempt basis since 1982.⁵³⁸ Limited and late amounts of governmental loans and infrastructure support to Tribal areas like Navajo Nation have contributed to the neglect of tribal groups by the REA.

 $^{530.\,}$ Philip J. Funigiello, Toward A National Power Policy: The New Deal and Electric Utility Industry, 1933-1941, at 152–53 (1973).

^{531.} Joel A. Youngblood, Note, *Alive and Well; The Rural Electrification Act Preempts State Condemnation Law:* City of Morgan v. South Louisiana Electric Cooperative Ass'n, 16 ENERGY L.J. 489, 491 (1995).

^{532.} Charles B. Hagan, Review, *The Public Power Industry and The Public Interest by Edward E. Hunt*, 39 Am. Pol. Sci. Rev 177, 177 (1945).

^{533.} CARO, supra note 526, at 522.

^{534.} GARWOOD & TUTHILL, supra note 525.

^{535.} Conor Harrison, Race, Space, and Electric Power: Jim Crow and the 1934 North Carolina Rural Electrification Survey, 106 ANNALS AM. ASS'N GEOGRAPHERS 909, 915 (2016).

⁵³⁶ *Id*

^{537.} Joseph Lee, *Living in the Dark: Native Reservations Struggle with Power Shortages in Pandemic*, THE GUARDIAN (Aug. 12, 2020, 6:00 AM), https://www.theguardian.com/environment/2020/aug/12/native-americans-energy-inequality-electricity.

^{538.} TRIBAL AUTHORITY PROCESS CASE STUDIES, supra note 519, at 6.

The U.S. Government has managed to solve the dilemma of rural electrification in other places, yet RUS grants and loans to Indian Country have been limited.⁵³⁹ The social problems will require significant financial investment, but metaphorically, the United States owes the Nation more than it can pay, and investing in electrification, and extending and updating the electrical grid would be one way to resolve its debt. For example, transmission and distribution over vast distances make electricity provision on tribal lands challenging.⁵⁴⁰ There are jurisdictional problems that may stand in the way of completely electrifying the Nation. One particularly thorny problem is that multiple rural electric cooperatives service the large spatial area covered by the Nation. According to the Department of Energy, it takes the cooperation of the Nation, the Federal Government, and other outside businesses to extend electricity to homes on Navajo Nation.⁵⁴¹ Further, tribes may have to build the technological capacity to maintain and repair electrical facilities inside of their reservation. External utilities may also resist the tribe's desire to appropriate their system. 542 Yet, local, state, and federal governments and agencies can pass statutes and issue regulations to make it easier to electrify the Nation.

D. THE FEDERAL GOVERNMENT SHOULD INVEST HEAVILY IN DEVELOPING RENEWABLE ENERGY (AND THE GRID) ON NAVAJO NATION

"[B]eing green is not a new concept to our people." 543

—Wahleah Johns

According to the BIA, the Nation possesses a highly valuable collection of mineral resources. These resources include fossil fuels, in the form of coal, other fuels, such as uranium, as well as renewable-energy sources such as wind and sunlight. Importantly, as coal plants shutter on the Nation, with an attendant loss of jobs, the transition to clean, green energy attains increasing urgency.

Like public education and national defense, roads and telephone lines, electricity exhibits many characteristics of a public good. The private sector

 $^{539. \ \} Off. \ Elec. \ Sys. \ Analysis \& \ Off. \ of \ State, Loc. \& Tribal Pol'y \ Analysis, Full Electrification in Indian Country Focus Area in DOE Energy Policy & Systems Analysis 5 (2017), https://www.ncsl.org/Portals/1/Documents/energy/Tribal_Energy/Marks_31737.pdf.$

^{540.} Id.

^{541.} Tribal Authority Process Case Studies, supra note 519, at 5.

^{542.} Id. at 18.

^{543.} Johns, supra note 161.

^{544.} Seckel, *supra* note 69, at 1; Kronk Warner (2014), *supra* note 46, at 44 (observing that Indian country contains traditional energy sources as well as potential for alternative and renewable energy development).

^{545.} Sisk, supra note 256, at 2 (the Navajo Reservation contains extensive and valuable coal deposits).

^{546.} Seckel, *supra* note 69, at 1; Maruca, *supra* note 3, at 397 (observing that tribal lands are rich in fossil fuels and mineral resources as well as vast wind and solar energy potential).

tends to under invest in public goods.⁵⁴⁷ Yet, government production of a public good is advantageous because the government does not need to make a profit; it merely needs to cover its costs. The long-term benefits to society far outweigh the short-term costs of the project, meaning that the government receives a high rate of "social return" on its investment in public goods.⁵⁴⁸ Further, the government can assess taxes or fees that in the long run pay for infrastructure projects.⁵⁴⁹

Importantly, even if all Navajo houses are fully electrified, the work is not fully complete. The current grid is old and outdated, and requires significant improvements, upgrades, and modernization. 550 The grid is currently not configured to easily accept solar and wind power, which are variable. Further, renewable energy needs significant improvements in storage capacity to reach its full potential.⁵⁵¹ Yet, the Nation is ripe for change: strategically located close to Los Alamos National Laboratories and Sandia National Laboratories, it presents an outstanding laboratory for innovation and advances in renewable energy. The Infrastructure, Investment and Jobs Act, signed in late November, moves in the correct direction.⁵⁵² The statute allocates \$11 billion to Indian Country, broadly defined, to expand broadband coverage, fix roads, and address water and sanitation needs.⁵⁵³ This is an extremely promising investment. Yet, sustained investment over several years will likely be needed to correct multiple infrastructure deficiencies on Navajo Nation. 554 According to Heather Tanana, a Navajo Assistant Professor at the University of Utah, success in shoring up infrastructure gaps will require improved coordination among federal agencies, working with tribes and through an existing tribal task force.⁵⁵⁵

The Navajo have already drawn and built the blueprint for success. In 2009, the Navajo Council established the Navajo Green Energy Commission (NGEC) tasked with studying the possibility of renewable energy development.⁵⁵⁶ NTUA was created in 1959. NTUA is a wholly owned enterprise of the Navajo Nation

^{547.} See Robert S. Pindyck & Daniel L. Rubinfeld, Microeconomics 644 (5th ed. 2001).

^{548.} Id. at 647.

^{549.} Id. at 649.

^{550.} DAVIES ET AL., supra note 235, at 276.

^{551.} Id. at 275.

^{552.} Felicia Fonseca, *Tribes Welcome Infusion of Money in Infrastructure Bill*, PBS (Nov. 18, 2021, 6:11 PM), https://www.pbs.org/newshour/economy/tribes-welcome-infusion-of-money-in-infrastructure-bill; Katia Riddle, *Tribes Hope Infrastructure Law Means They'll Finally Get Clean Drinking Water*, NPR (Nov. 15, 2021, 6:10 PM), https://www.npr.org/2021/11/15/1054418311/tribes-hope-infrastructure-law-means-theyll-finally-get-clean-drinking-water. Infrastructure Investment and Jobs Act, H.R 3684, 117th Cong. (2021), https://www.congress.gov/bill/117th-congress/house-bill/3684/text.

^{553.} Fonseca, *supra* note 552.

^{554.} *Id*.

^{555.} Id.

 $^{556.\ \}textit{Native Energy: Rural Electrification on Tribal Lands}, \ \texttt{ROCKY MOUNTAIN INST.}\ (June\ 24,\ 2014), \\ \texttt{https://www.rmi.org/news/blog_2014_06_24_native_energy_rural_electrification_on_tribal_lands}.$

and operates as a non-profit,⁵⁵⁷ whereas the majority of electric service providers in the United States are investor-owned utilities. Rural electric cooperatives were created to serve rural America and NTUA does receive some funding from the USDA Rural Electric Service.⁵⁵⁸ Currently, the Navajo are on their tenth such loan and have yet to default.⁵⁵⁹ In March, the USDA, which focuses on rural development, indicated its intention to invest in electrification on the Navajo Nation.⁵⁶⁰ The financing for the electric project on the Navajo Nation is being made to the NTUA, headquartered in Fort Defiance, Arizona.⁵⁶¹ The loan package will be in the amount of \$235 million to connect 1,340 consumers and build and improve 636 miles of electric line throughout the reservation in Arizona New Mexico and Utah.⁵⁶² Yet, according to NTUA attorney Bidtah Becker, the Nation would be better served with grants, not loans, particularly given the enormous delay in initiating the electrification of the Nation compared to other parts of the United States.⁵⁶³

Further, the NTUA is a proven success story. The NTUA provides six utilities: electricity, natural gas, water, wastewater, telecommunications, and off grid solar. See As a multi-utility, NTUA has efficiencies that allow the organization to offer reasonable rates. NTUA has developed two solar plants, Kayenta I and II, that generate power. See In 2017, NTUA introduced the first utility scale renewable energy farm on the Nation in the form of Kayenta I. See All the electricity from this project remains on Navajo Nation. Pay 2019, this project employed 414 people who also received specialized training in solar construction, with a workforce that was ninety-one percent Navajo. NTUA has provided off grid solar since the 1990s and may have the oldest off grid solar program in the country. See What separates NTUA from other programs is regular

^{557.} About NTUA, NAVAJO TRIBAL UTIL. AUTH., https://www.ntua.com/about-us.html (last visited Apr. 27, 2022).

^{558.} Press Release, U.S. Dep't of Agric.: Rural Develop., Electric Infrastructure on Navajo Nation to be Improved (Mar. 16, 2021), https://www.rd.usda.gov/newsroom/news-release/electric-infrastructure-navajo-nation-be-improved.

^{559.} Id.

^{560.} *Id*.

^{561.} Id.

^{562.} Id.

^{563.} Telephone Interview with Bidtah Becker, supra note 184.

^{564.} About NTUA, supra note 557.

^{565.} Powering Our Nation and the Western States Through Renewable Energy, NAVAJO TRIBAL UTIL. AUTH. SOLAR ENERGY DEV., https://www.ntuasolar.com (last visited Apr. 27, 2022).

^{566.} Non-carbon power production has increased with Kayenta I and Kayenta II. NTUA produces power and also buys power. Email from Bidtah Becker, *supra* note 55.

^{567.} NAVAJO TRIBAL UTIL. AUTH., 2018 PROGRESS REPORT 2 (2018), https://www.ntua.com/assets/2018-ntua-progress-report--ntua.com.pdf.

^{568.} NAVAIO TRIBAL UTIL. AUTH., 2019 PROGRESS REPORT 5 (2019), https://www.ntua.com/assets/2019-ntua-progress-report--ntua.com.pdf (noting that the Rural Utility Service approved a loan to the Navajo Tribal Utility Authority for the Kayenta Solar Farm).

^{569.} Powering Our Nation and the Western States Through Renewable Energy, supra note 565.

service to ensure the off grid solar units function for their entire useful life.⁵⁷⁰ The customer pays a monthly fee for this service.⁵⁷¹

Solar is particularly appropriate for off the grid applications such as are required in remote areas like the Nation. The Nation has also created the Navajo Energy Development Administration ("NEDA") located within the Executive Branch of the Nation.⁵⁷² NEDA's job is to plan energy related projects and to transfer project development to the Nation's Economic Development Division.⁵⁷³

E. RETHINK THE RELATIONSHIP BETWEEN THE DEPARTMENT OF THE INTERIOR AND NATIVE AMERICANS

The Federal Government should take a reduced role in decisions that affect development within the Nation. It should provide grant money to support the Navajo's energy projects, but step away and empower Tribal governments.⁵⁷⁴ The challenge for creating off the grid solutions, or grid expansion and connection solutions for Navajo is ensuring that energy projects reflect the will of the Navajo people, while meeting goals for economic development, cultural preservation, environmental protection, and sovereignty. Such investment will provide jobs for the Navajo people on their ancestral lands, while providing them a safer form of energy.

F. ALLOW THE NAVAJO MORE POWER TO ENFORCE EXISTING ENVIRONMENTAL STATUTES

Only four nations, the Cherokee Nation of Oklahoma, the Gila River Indian Community, the Navajo Nation, and the St. Regis Mohawk Tribe have enacted tribal laws related to the regulation of air pollution. Navajo Nation has enacted laws related to water pollution, the management and disposal of solid waste, and environmental quality generally, making it one of the only tribes that has enacted laws related to all of these categories. Indeed, the Navajo Nation's Air Pollution Prevention and Control Act represents a model tribal environmental code provision that regulates air pollution.

^{570.} Ya'a'teeh & Welcome to NTUA Online, NAVAJO TRIBAL UTIL. AUTH., https://www.ntua.com (last visited Apr. 27, 2022).

^{571.} Email from Bidtah Becker, *supra* note 184; NAVAJO TRIBAL UTIL. AUTH., CARES ACT: NTUA'S OFF GRID SOLAR PROGRAM, https://www.ntua.com/assets/-2-cares-act-ntua-s-off-grid-solar-program-flyer.pdf. *See generally* POWELL. *supra* note 338.

^{572.} GOV. SERV. COMM. 21ST NAVAJO NATION COUNCIL, COMM. REPORT ON REPEALING THE NAVAJO ENERGY DEV. ADMIN. ENABLING LEGISLATION (2020), https://www.nnols.org/wp-content/uploads/2021/02/CAP-20-10.pdf; 18 N.N.C. §§ 301–04.

^{573.} Kronk Warner (2014), supra note 46, at 93.

^{574.} Deer & Kronk Warner, supra note 125, at 82.

^{575.} Kronk Warner (2014), supra note 46, at 67.

^{576.} *Id.* at 72 (noting that the Navajo Nation has enacted several environmental statutes, including the Air Pollution Prevention and Control Act, the Clean Water Act, and the Solid Waste Act).

^{577.} Kronk Warner (2014), supra note 46, at 76.

CONCLUSION

"What then can we learn from the Indian? . . . We can learn that we must live in partnership with nature." 578

-Rennard Strickland (Osage)

Compelling evidence demonstrates that U.S. energy policy—particularly with regard to coal mining, and energy generation based on coal—has resulted in deeply adverse effects on Navajo health. As discussed above, U.S. energy policy has contributed to the susceptibility of the Navajo people to this new form of infection. In addition, the near total failure of federal and state governments to help electrify Navajo, while sending power to every non-Indian city in the near vicinity, has aggravated the matter. The disproportionate loss of Navajo elders, who have been hit particularly hard by Covid-19, compounds the tragedy of the general loss of life from this disease.

Writing in the New England Journal of Medicine, Egede and Walker observe that "structural racism exists because discriminatory practices in one sector reinforce parallel practices in other sectors, creating interconnected systems that embed inequities in laws and policies." They provide a call to action: "Given the tragic effects of the convergence of racism, social risk and COVID-19, we hope that the U.S. experience of the pandemic becomes a call for changing the systems that perpetuate poor health." 580

This article has attempted to demonstrate that one of the systems that perpetuate poor health is the U.S. Energy Industrial Complex. ⁵⁸¹ Electrical power has been developed in Indian Country in a manner "both uneven and unequal." The extraction of uranium and coal mining have not been beneficial to the Nation. ⁵⁸² The Nation has been industrialized, yet the Navajo did not share in the benefits of that industrialization. ⁵⁸³ The Nation has been heavily polluted by oil and gas wells, coal, uranium, and other substances—licensed, leased, and managed by the United States, leaving Diné sick and dead, leaving the Nation deficient in infrastructure, in terms of hospitals, water or enough electricity to put "a light bulb in every hogan." ⁵⁸⁴

Although the Navajo have suffered mightily at the hands of the U.S. Government, the Navajo are not victims. They are brave, resilient, proud, and

^{578.} Strickland, supra note 100, at 753.

^{579.} Egede & Walker, supra note 32.

^{580.} *Id*.

^{581.} Residents of the Appalachians have suffered at the hands of coal companies in a way which parallels the devastation of Navajo Nation.

^{582.} NEEDHAM, supra note 176, at 250.

^{583.} NEEDHAM, supra note 176, at 125.

^{584.} Id. at 250.

strong people.⁵⁸⁵ They have supported the United States in wartime and in peacetime,⁵⁸⁶ despite suffering wrongs at the hands of the U.S. Government that would have wiped out many other peoples.⁵⁸⁷ Yet, to say that the Navajo have survived, does not address the wrongs that they have experienced.

The Nation needs complete electrification, investment in a modernized grid, and investment in energy producing renewable resources such as solar and wind. Who are the stakeholders that should be involved in this effort at reparations? The Nation must direct all such efforts. One way of ensuring that these decisions are made holistically may be to ensure that energy decisions must be governed by *Hozhooji k'eiina* (a blessing way of living life in relation to all living beings). Further, attention should be paid to the Navajo ethic of *t' aa hwo aji t'eego*, which is an expression of hard work and the maintenance of one's livelihood on ancestral lands. 589

Funding should flow from the federal government, cities who have benefited from energy extraction on Navajo (including Los Angeles, Phoenix, Albuquerque and El Paso), state governments (including New Mexico, Arizona, Utah, Texas, Colorado and California) and coal companies. These entities should partner with Navajo and build out renewable energy, particularly solar and wind on Navajo. Such an initiative would create a variety of skilled, clean, and green jobs for Navajo citizens. The economic literature provides significant support for the idea that investments in infrastructure have significant positive multiplier effects. Neighboring State governments could also take the opportunity to convert their grids from fossil fuels and update their grids in the process.

We cannot undo the centuries of damages that the United S has inflicted on Native Americans, or the Nation. We cannot return the Nation to its pre-conquest state. Yet, with a strong dose of political will, the U.S. Government, in concert with state governments, private energy companies, and nonprofits, led by the Navajo themselves, can help the Nation attain a state of improved health, increased wealth, and expanded sovereignty.

^{585.} See generally Jessica R. Goodkind, Julia Meredith Hess, Beverly Gorman & Danielle P. Parker, "We're Still in a Struggle": Diné Resilience, Survival, Historical Trauma, and Healing, 22 QUAL. HEALTH RSCH. 1019 (2012).

^{586.} NEEDHAM, *supra* note 176, at 131 (noting that the all-Navajo "Code Talker" battalion helped the allies win World War II).

^{587.} Id.; see also Goodkind et al., supra note 585, at 24.

^{588.} Id.

^{589.} Curley, supra note 102, at 72.

^{590.} See generally Thomas G. Johnson, The Rural Economy in a New Century, 24 INT'L REG'L SCI. REV. 1 (2001).
