

6-13-2022

A Watershed Moment: The Health and Economic Impact of Water Sustainability in the Navajo Nation Post Pandemic

Onnaedo Nwankwo

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Recommended Citation

Nwankwo, Onnaedo (2022) "A Watershed Moment: The Health and Economic Impact of Water Sustainability in the Navajo Nation Post Pandemic," *American Indian Law Journal*: Vol. 10: Iss. 2, Article 3. Available at: <https://digitalcommons.law.seattleu.edu/ailj/vol10/iss2/3>

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A WATERSHED MOMENT: THE HEALTH AND ECONOMIC IMPACT OF WATER SUSTAINABILITY IN THE NAVAJO NATION POST PANDEMIC

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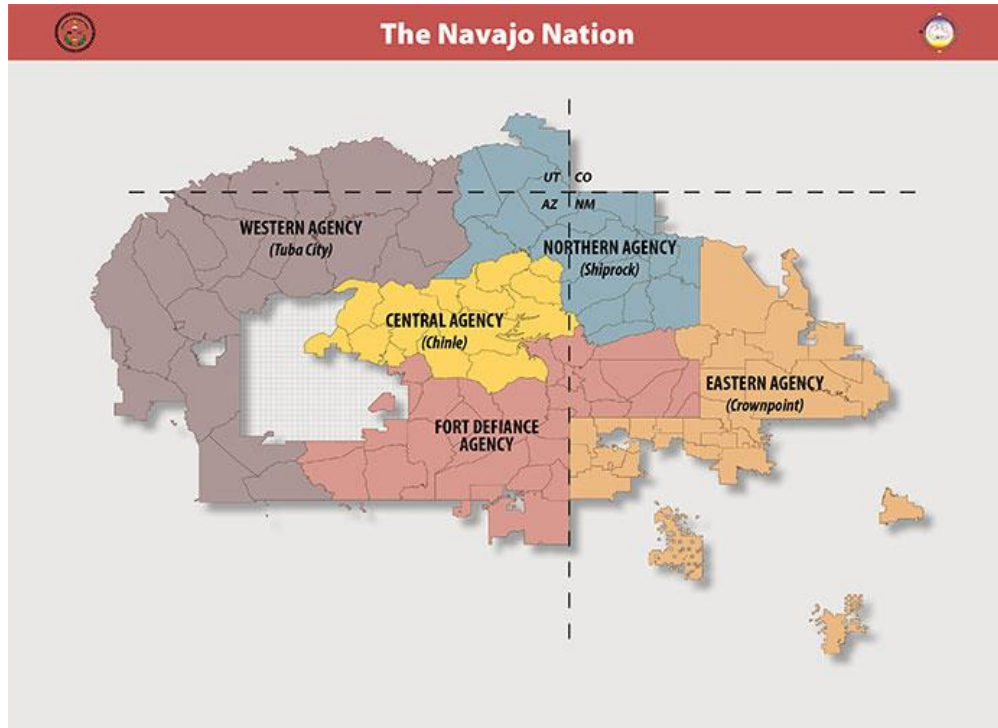
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I. INTRODUCTION

“Our Navajo people always say that water is life. . .[w]hen we plan for . . .water projects, we are planning for future generations. Clean water is a necessity for life.”

-Myron Lizer, Navajo Nation Vice President²



Taken from the <https://www.nec.navajo-nsn.gov>³

The Navajo Nation is the largest Indian Reservation in North America, stretching across territory in New Mexico, Arizona, and Utah.⁴ Current-day Navajo Nation spans nearly 17,544,500 acres, occupying portions of Northeastern Arizona, Southeastern Utah, and Northwest New Mexico.⁵ Though the land is vast, many resources are still scarce; despite having an area larger than 20 percent of the states in America, nearly 80,000 (33%) of Navajo citizens have lacked

² The Navajo Nation Office of the President and Vice President, *Navajo Nation files lawsuit against the U.S. EPA over the Clean Water Act*. (Jun. 24, 2020), <https://www.navajo-nsn.gov/News%20Releases/OPVP/2020/Jun/FOR%20IMMEDIATE%20RELEASE%20-%20Navajo%20Nation%20files%20lawsuit%20against%20the%20US%20EPA%20over%20the%20Clean%20Water%20Act.pdf>, (last visited Apr. 1, 2022).

³ *Welcome*, NAVAJO EPIDEMIOLOGY CENTER, (Nov. 10, 2021), <https://www.nec.navajo-nsn.gov/>.

⁴ Sean D. Lyttle, *The Third World In The American Southwest: The Navajo Nations Water Crisis and the Failures of the Water Law*. 2 GEORGETOWN J. OF L. & MODERN CRITICAL RACE PERSPECTIVES 83, 84. (2010).

⁵ *History*, OFFICIAL SITE OF THE NAVAJO NATION, <https://www.navajo-nsn.gov/history.htm> (last visited Apr. 1, 2022).

running water in their households for consecutive generations.⁶ On average, Navajo residents use seven gallons of water per day to drink, cook, bathe, and clean – compared to the average U.S. resident using around 100 gallons a day.⁷ Approximately one third of Navajo Nation residents are left without basic services that have been readily available to every other part of the United States for decades.⁸ As a result, many citizens are unable to clean and perform basic household task without difficulty.⁹

Clean water is the starting point of infection control, and almost every healthcare provider cites handwashing as the single most effective way to prevent disease transmission.¹⁰ Understandably, the conditions of the Navajo reservation make disease prevention an extremely difficult task.¹¹ Without clean water, residents are left with little to no remedies for sanitation, and more importantly handwashing.¹² Long before COVID-19, The Navajo Nation has lacked adequate and abiding water infrastructure necessary to facilitate a healthy environment.¹³ As a result, tens of thousands of US citizens have been living in conditions that can be described as “third world.”¹⁴

Since the first case of COVID-19 was identified, the Navajo Nation has been one of those communities most impacted by the crisis,¹⁵ specifically because barriers to clean water make it difficult to follow most of the key CDC guidelines, many of which require clean water.¹⁶ Due to limited clean water, the spread of COVID-19 was exponentially greater than any other group in the U.S.¹⁷ The U.S. Federal government initially sent funds to the Navajo Nation, but this aid came with many restrictions that stifled any real progress in the community.¹⁸

Furthermore, the Navajo have long been promised a solution of regional planning agencies in the form of construction of two major water pipelines, but Congress has yet to authorize any

⁶ Ian James, *Wanting For Water: On the Navajo Nation, Long Lines, Scarc Resources, A Cry For Solutions*, ARIZ. REPUBLIC, Jul. 22, 2020.

⁷ Gwynne Ann Unruh, *Navajo “Code Talkers” Water Pipeline Section Receives Funding*, THE PAPER, <https://abq.news/2022/01/navajo-code-talkers-water-pipeline-section-receives-funding/> (last visited Mar. 28, 2022).

⁸ *Id.*

⁹ *Id.*

¹⁰ *Handwashing in Communities: Clean Hands Save Lives*, Centers for Disease Control and Prevention, <https://www.cdc.gov/handwashing/why-handwashing.html> (last visited Apr. 1, 2022).

¹¹ Carol Lamoureux, *Quenching the Thirst of A Nation: Returning Water to the Navajo People*, 2 ARIZ. J. ENVTL. L. & POL’Y, 1 (Jan. 2012).

¹² *Id.*

¹³ Justin Gardner, *Navajo Water Supply is More Horrific than Flint, But No One Cares Because They’re Native American*, THE FREE THOUGHT PROJECT, <https://thefreethoughtproject.com/navajo-water-supply-horrific-flint/> (last visited (Mar. 3, 2021).

¹⁴ Lyttle, *supra* note 4 at 84.

¹⁵ *How the pandemic threatens Native American—and their languages*, THE ECONOMIST, <https://www.economist.com/united-states/2020/05/19/how-the-pandemic-threatens-native-americans-and-their-languages> (last visited Apr. 20, 2021).

¹⁶ *Id.*

¹⁷ Laurel Morales, *Navajo Nation Stymied by CARES Act Restrictions*, NCPR, (June 2, 2020). <https://www.northcountrypublicradio.org/news/npr/869949418/navajo-nation-stymied-by-cares-act-restrictions>.

¹⁸ *Id.*

significant plans.¹⁹ The limited funds and restrictions through current laws are major reasons for the ongoing water insecurity faced by tens of thousands of people in the Navajo Nation and contribute to ongoing healthcare disparities.

In comparison, within the states that encompass the Navajo Nation water accessibility issues are nowhere near as difficult as for the Navajo.²⁰ Those citizens living outside the Navajo Nation in Arizona, Utah, and New Mexico simply do not face the same challenges.²¹ By failing to supply citizens with an equal and sustainable access to clean water, the government has disproportionately limited members of the Navajo Nation's ability to fight disease at the most basic level and therefore left them at a greater risk to contracting diseases.²²

This article proposes that federal law makers should employ both an elimination of current barriers to funding and institute a long-term plan to ensure people living in Navajo Nation have equitable and sustainable access to clean water to directly reduce the amount of healthcare expenses. To illustrate this, the article is broken into eight parts.

Part II provides a brief history of the Navajo Nation and the formation of their government. While this article is not intended to provide any comprehensive history of the Navajo residents and nation, some historical background is useful to understand the current water crisis. Part III examines the water rights and the Tribal Law Codes currently in place for the Navajo that have long been neglected. Part IV discusses the barriers to clean water and the ties with the healthcare impact on the Navajo Nation. Part V looks at the federal and state response to Navajo Nation during the water crisis. Part VI looks at the Healthcare Impact of living on an area that lacks running water. Part VII is an economic analysis and the legal framework. And finally, Part VIII offer suggestions for how to improve these conditions.

II. A BRIEF HISTORY OF THE NAVAJO NATION AND GOVERNMENT ESTABLISHMENT

A. *A Bitter Beginning*

The origin of the Navajo Nation, like many narratives that deal with Native American narratives, was born out of struggle.²³ The Navajo people's history is fraught with incidents of coercion and violence at the hands of White Settlers.²⁴ Among the backdrop of the Civil War, Colorado Volunteers were sent to initiate war on Navajo civilians.²⁵ This attack was targeted with the hopes of removing the Navajo off fertile land that the White Settler's desired.²⁶

¹⁹ James, *supra* note 6.

²⁰ Lyttle, *supra*, note 4 at 133.

²¹ *Id.*

²² Official Site of the Navajo, *supra*, note 6.

²³ Lyttle, *supra* note 4 at 84.

²⁴ *Id.*

²⁵ ROXANNE DUNBAR-ORTIZ, AN INDIGENOUS PEOPLE'S HISTORY OF THE UNITED STATES, 138 (Beacon Press, eds., 2014).

²⁶ *Id.*

In March of 1864, a three hundred mile forced march of 8,000 Navajo aptly called “the Long Walk” to a concentration camp at Bosque Redondo in Southeastern New Mexico occurred.²⁷ By the end of their incarceration, at least one fourth of the Navajo prisoners died of starvation.²⁸ To mark the end of this tumultuous journey, the United States Federal Government entered into a treaty with the remaining Navajo that managed to survive.²⁹ The Navajo Nation was established following the conflicts between the Navajo and the United States Forces.³⁰

On June 1, 1868, The Treaty of Bosque Redondo (also the Navajo Treaty of 1868 or Treaty of Fort Sumner, Navajo Naal Tsoos Sani or Naaltsoos Sání) was signed by both the Navajo and the United States Federal Government, ending the Navajo Wars.³¹ This treaty consisted of 13 articles of obligations and promises between the two nations.³² Two key provisions included a stipulation that the Navajo people would stop raiding and remain on the reservation and in exchange, the federal government would supply Navajo Nation equipment for farming along with yearly subsidies for the next ten years.³³

B. Navajo Nation Sovereignty History

Unremarkably, the United States government never fully materialized the promises in the Treaty of Bosque Redondo, which still maintains plenary power over the Navajo Nation.³⁴ One of the first cases that highlight plenary power was in *United States vs. Kagama*. Kagama, a Native American, was tried for the murder of another Native American on the Hoopa Valley reservation in California.³⁵ At trial, Kagama challenged the court’s jurisdiction over the matter.³⁶ The Court in a unanimous opinion acknowledged the silent presence regarding the Native relations, but still established the limits of Native American sovereignty when it stated:

“There may be cities, counties, and other organized bodies, with limited legislative functions, but they are all derived from, or exist in, subordination to one or the other of these. The territorial governments owe all their powers to the statutes of the United States conferring on them the powers which they exercise, and which are liable to be withdrawn, modified, or repealed at any time by congress. What authority the state governments may have to enact criminal laws for the Indians will be presently considered. But this power of congress to organize territorial governments, and make laws for their inhabitants, arises, not so much from the clause in the constitution in regard to disposing of and making rules and regulations

²⁷ *Id.*

²⁸ *Id.*

²⁹ Lyttle, *supra* note at 20.

³⁰ See Navajo-Hopi Relocation Program, S. 1236, 100th Cong. (1988).

³¹ *Id.*

³² *Id.*

³³ *Id.*

³⁴ *Id.*

³⁵ See *United States v. Kagama*, 118 U.S. 375 (1886).

³⁶ *Id.*

concerning the territory and other property of the United States, as from the ownership of the country in which the territories are, and the right of exclusive sovereignty which must exist in the national government, and can be found nowhere else.”

Kagama, 118 U.S. 375, 380-81 (1886).³⁷

The idea of Native sovereignty is better understood in the framework of the political structure of each tribe. Being one of the larger tribes, the Navajo Nation have an extensive political system.

C. Political Structure

1. Executive

Like the United States, the Navajo Nation government is a three-part system.³⁸ Two branches, the executive and judicial, are independent of the council, or legislative branch.³⁹ The president and vice-president are elected every four years with two term limits.⁴⁰ The Executive nominates judges of the District Courts, and the Supreme Court.⁴¹ The first Navajo Nation was elected in 1989 after directives from the federal government guided the Tribal Council to establish the current judicial, legislative, and executive branch.⁴² This model was a departure from the system of "Council and Chairmanship" from the previous government body and similar to the one of the U.S. Federal governments.⁴³

2. Judicial

The president makes appointments subject to confirmation by the Navajo Nation Council; however, the president is limited to the list of names vetted by the Judiciary Committee of the Council.⁴⁴ In December 1985, the Navajo Tribal Council passed the Judicial Reform Act of 1985, which eliminated the Supreme Judicial Council.⁴⁵ It redenominated the "Navajo Tribal Court of Appeals" as the "Navajo Nation Supreme Court", and redenominated the "Trial Courts of the Navajo Tribe" as "District Courts of the Navajo Nation."⁴⁶ Navajo courts are governed by Title 7, "Courts and Procedures", of the Navajo Tribal Code.⁴⁷

³⁷ *Id* at 380-81.

³⁸ *The Three Branches of the Navajo Nation Government*,

<https://geoalliance.asu.edu/sites/default/files/LessonFiles/Himes/HimesComparingS.pdf> (last visited Apr. 2022).

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ Navajo Tribal Council Resolution No. CD-94-85 (4 De. 1985).

All the districts also have family courts, which have jurisdiction over domestic relations, civil relief in domestic violence, child custody and protection, name changes, quiet title and probate.⁴⁸ As of 2010, there were 17 trial judges presiding in the Navajo district and family courts.⁴⁹

3. Legislative

The Navajo Nation has an 88-member legislature⁵⁰ and 110-member local chapter Council, formerly the Navajo Tribal Council. This is the legislative branch of the Navajo Nation. As of 2010, the Navajo Nation Council consists of 24 delegates representing the 110 chapters, elected every four years by registered Navajo voters.⁵¹ Prior to the November 2010 election, the Navajo Nation Council consisted of 88 representatives.⁵² The Navajo voted for the change in an effort to have a more efficient government and to curb tribal government corruption associated with council members who established secure seats.⁵³

4. Administrative Agency: “Fourth Branch of Government”

There are five agencies within the Navajo Nation: the Chinle Agency in Chinle, Arizona; Eastern Navajo Agency in Crownpoint, New Mexico; Western Navajo Agency in Tuba City, Arizona; Fort Defiance Agency in Fort Defiance, AZ; and Shiprock Agency in Shiprock, New Mexico.⁵⁴

The Bureau of Indian Affairs (“BIA”) agencies in the United States Federal Government provide various technical services under direction of the BIA's Navajo Area Office at Gallup, New Mexico.⁵⁵ Agencies are further divided into chapters as the smallest political unit, like municipalities.⁵⁶ The Navajo capital city of Window Rock is in the Chapter of St. Michaels, Arizona.⁵⁷ Additionally, the Navajo Nation also has executive offices in the Washington, D.C. for lobbying services and congressional relations.⁵⁸

The governmental structure of the Navajo is central to the understanding of the current water infrastructure and subsequent COVID disparities because the Navajo political structure has in some ways harmed the distribution of aid directly to the citizens, as well as economic limitations placed on the Navajo.⁵⁹

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *Business in the Navajo Nation Capitalism's Last Frontier*, THE ECONOMIST, <https://www.economist.com/business/2008/04/03/capitalisms-last-frontier> (Last visited Apr. 28, 2021).

⁵¹ *Id.*

⁵² *Id.*

⁵³ *Courts & Peacemaking in the Navajo Nation, A Public Guide*, NAVAJO COURTS, (Feb. 23, 2021)

<http://www.courts.navajo-nsn.gov/publicguide.htm>.

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.*

D. Economy of Navajo Nation

1. Population and Current Infrastructure

The total population of Navajo Nation across the United States is over 300,000 and the actual population of citizens in the Navajo Nation roughly 180,000. More than half of those living on the reservation are between the ages of 0-29. The Navajo Tribal Utility Authority provides utility services for houses. By 2019, there was a campaign to electrify remaining houses without electricity. As of 2019, roughly 15,000 houses with 60,000 residents did not have electricity. Additionally, it is estimated that 20 percent of these homes also lack indoor plumbing.⁶⁰

While the federal government and Tribes have attempted to address these issues, current efforts are inadequate, as evidenced by an increasing need for funding to address infrastructure related to water insecurity.⁶¹ Underinvestment in physical infrastructure harms “the social, physical, and mental wellbeing” of Tribal communities and impairs their ability to thrive.⁶² However, investment in aging water infrastructure “can spark a new era of job creation and economic growth while protecting public health and improving the quality of life for families[.]”⁶³

2. Current Sources of Economy

a. Tourism & Travel

Roughly 23% of the Navajo Nation is attributed to the travel industry, and COVID-19 has quelled this industry for the indefinite future.⁶⁴ Prior to COVID-19, there were only about 400 businesses in the Navajo Nation.⁶⁵ This has contributed to the unemployment of roughly 50 % in the Navajo Nation.⁶⁶ Revenue has taken a sharp decline ever since the pandemic spread.⁶⁷ Navajo had to rely on other sources of income particularly in the natural resource industry.⁶⁸

⁶⁰ Justine Calma, *The Navajo Nation Faced Water Shortages for Generations – And Then The Pandemic Hit*, THE VERGE, (Jul. 6, 2020) <https://www.theverge.com/2020/7/6/21311211/navajo-nation-covid-19-running-water-access>

⁶¹ HEATHER TANANA E. AL., UNIVERSAL ACCESS TO CLEAN WATER FOR TRIBES IN THE COLORADO BASIN RIVER 18 (2021).

⁶² *Id.*

⁶³ *Id.*

⁶⁴ *Facts At a Glance*, THE NAVAJO NATION, <http://navajobusiness.com/fastFacts/Overview.htm> (last visited March 25, 2021).

⁶⁵ THE ECONOMIST, *supra* note 21.

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Id.*

b. Coal Mining & Abandoned Uranium Market

Almost 51% of the economy is mining-based, specifically, coal.⁶⁹ The volume of coal mined on the Navajo Nation land has declined in the early 21st century.⁷⁰ The main element mined outside of coal is uranium but has since been removed from the Nation as of 2005.⁷¹

The Navajo Nation have suffered considerable environmental contamination and health effects because of poor regulation of uranium mining.⁷² As of 2005, the Navajo Nation has prohibited uranium mining altogether within its borders.⁷³ This political structure is what was used establish codes and right of the Navajo people especially in relation to water.

III. NAVAJO WATER RIGHTS ORIGINS AND TRIBAL CODES

A. *Doctrine of Federal Reserve Water*

American Indian rights to water in the arid west are linked to the doctrine of federal reserved water rights.⁷⁴ Often a controversial topic and law, resistance is quite frequent.⁷⁵ Though Indian water rights claims are superior to those of states, localities, and private property owners, Indian rights are marked by periods of neglect by the federal government.⁷⁶ Disputes are typically resolved through settlements.⁷⁷

1. *Winters v. United States* (1908)⁷⁸

For example, in *Winters v. the United States*, the Supreme Court held that a federal law setting aside lands for Indian exclusive use and occupancy may also create Indian right to water even without express language in the reserving statute.⁷⁹ In this case, the United States brought suit against a company that tried to construct a dam in Montana that prevented water from the Milk River from flowing to the Belknap Indian Reservation.⁸⁰

Winters established that creation of Indian reservations by federal action automatically reserve Indian water rights necessary to effectuate the true purpose of the reservation—tribal survival.⁸¹

⁶⁹ Lyttle, *supra* note 4.

⁷⁰ James Rainey, *Lighting the West, Dividing a tribe*, NBC NEWS (Dec. 18, 2017), <https://www.nbcnews.com/specials/navajo-coal/>.

⁷¹ *Id.*

⁷² *Id.*

⁷³ *Id.*

⁷⁴ MATTHEW L.M. FLETCHER, *PRINCIPLES OF FEDERAL INDIAN LAW*, 309 (2017).

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ 207 U.S. 564 (1908).

⁷⁹ Fletcher, *supra*, note at 74.

⁸⁰ *Winters*, at 565.

⁸¹ Fletcher, *supra* note 74 at 311.

Almost a century later, many states sought to challenge this precedent and supremacy of Indian water rights but came up short when the Supreme Court affirmed *Winters* ruling.⁸²

Despite the apparent victories in Indian water rights, the actions of many jurisdictions did not align with the purpose of this statute.⁸³ Perhaps this stance by many states may have been an impetus to specific tribes establishing their own codes and standards around water rights including in the Navajo Nation.

B. *Navajo Water Codes*

‘Navajo Waters’ are defined as the following:

(1) all waters reserved at any time for any purpose to the Navajo Nation, and to Navajo Indian lands by the Navajo Nation or by the United States including any waters which. . . the result of artificial works or artificial stream flow enhancement or weather modification methods, flow into or otherwise enhance such waters; (2) all waters held by the Navajo Nation through prior or existing use, appropriation, purchase, contract, gift, bequest, or other means of acquisition; (3) all surface and ground waters which are contained within hydrologic systems located exclusively within the lands of the Navajo Nation; and (4) all ground waters located beneath the surface of the lands held in trust by the United States of America for the Navajo Nation.”

22 Navajo Code § 1104, 22 N.N.C. § 1104.

This is a broad definition which the Navajo hoped to use to reinforce rights not granted by the Federal government.⁸⁴The Navajo code further solidifies these rights by providing guidelines for making the most effective use of available resources.⁸⁵ The three key policy guidelines assign both a Resource Committee and the Director of Division of Natural Resources shall take actions to “Insure adequate water supplies. . .[m]inimize water quality degradation and adverse effects of water pollution. . . [p]lan for long-term water development.”⁸⁶

Despite what seemed to be protective laws and clear standards by the Navajo, water security remains a prevalent problem in the largest tribe.⁸⁷ In order for these laws to hold more than aspirational power, a thorough examination at the causes and stumbling blocks to this water insecurity is needed.

⁸² See *Arizona v. California*, 530 U.S. 392, (2000).

⁸³ Fletcher, *supra* note 74 at 313.

⁸⁴ KLIPH NESTEROFF, WE HAD A LITTLE REAL ESTATE PROBLEM: THE UNHERALDED STORY OF NATIVE AMERICANS & COMEDY, 239 (2021).

⁸⁵ *Id.*

⁸⁶ Navajo Nation Code Ann. tit. 22, §1104 (1986).

⁸⁷ *Supra*, note 58.

IV. SOURCES AND BARRIERS TO CLEAN WATER IN THE NAVAJO NATION

A. *Causes of Water Contamination*

1. Land Suitability

The land reserved for the Navajo People was, and remains, largely unsuitable for farming, and it was even more difficult to establish irrigation systems. Initially, the Navajo Nation used their land for mining.⁸⁸ The geographic makeup of the western United States is suitable for naturally elevated levels of arsenic and uranium in the groundwater; some wells have been shown to exceed the Environmental Protection Agency (“EPA”) drinking water limit of 10 parts per billion (ppb) for arsenic and 30 ppb for uranium.⁸⁹ As difficult as the land was for farming, it made great for mining and tapping into natural resources.⁹⁰

2. Uranium Mining

As stated earlier, the same source that Navajo once relied on for much of their economy became the main causes of the contamination.⁹¹ In 1944, at the request of United States military’s the Manhattan Project uranium mining commenced.⁹² On August 1, 1946, the responsibility for atomic science and technology was transferred from the military to the United States Atomic Energy Commission.⁹³

Large uranium deposits on and near the Navajo Reservation were mined before there were any significant regulations. When the Environmental Protection Agency (“EPA”) was formed in 1970, passage of strict regulations revealed that uranium deposits were endangering the air and water quality of the Navajo lands.

Nonetheless, private companies hired thousands of Navajo men to work the uranium mines and failed to inform the Navajo workers about the dangers and to regulate the mining to minimize contamination. As more data was collected, they were slow to take appropriate action for the workers. For Navajo, uranium mining was one of the first contacts they had with the broader wage economy.⁹⁴

⁸⁸*Supra*, note 10.

⁸⁹ *National Primary Drinking Water Regulations*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, Feb. 14, 2020, <https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations>.

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *Id.*

⁹³ *Did You Think the Water in Flint was Bad? The Water is Even Worse for Native Americans*, DESERET NEWS, (Feb. 28, 2016) [rb.gy/g5oo3t](https://www.deseretnews.com/story/4300033).

⁹⁴ Doug Brugge et al., *Uranium Mining on Indian Land*, CULTURAL SURVIVAL (Mar. 2001).

<https://www.culturalsurvival.org/publications/cultural-survival-quarterly/uranium-mining-navajo-indian-land>

As mentioned above, uranium mining began in the United States after World War II in response to the needs of the government's nuclear program.⁹⁵ The Four Corners area of the southwestern United States was found to have accessible uranium deposits, and mining quickly spread throughout the region to include locations on Navajo. ⁹⁶

On the morning of July 16, 1979, a dam broke at a uranium mine near Church Rock, New Mexico, releasing more than 1,100 tons of radioactive waste and pouring more than 90 million gallons into the Rio Puerco.⁹⁷ This accident was one of many devastating effects to the Navajo Nation water system. The prioritization of mining by the United States government gravely diminished the prospects of the Navajo's ability to have clean water. ⁹⁸

Despite its cessation in 2005, uranium mining still has a devastating effect on the current day water system in Navajo Nation.⁹⁹ Gold King Mine in Silverton, Co. contaminated San Juan River in New Mexico, which has affected water in the state and in parts of Utah.¹⁰⁰

In August 2015, the Environmental Protection Agency accidentally spilled millions of gallons of radioactive toxic mine waste into the local watershed, turning the Animas River a mustard yellow and polluting a vital water source for thousands of Native Americans in Colorado, New Mexico, and Utah.¹⁰¹

Currently, 75% of abandoned uranium mines are on federal and tribal lands, mostly in Western states.¹⁰² More than 15,000 abandoned uranium mines cover the United States west. On the Navajo Reservation alone, more than 1,200 abandoned mines have been documented.¹⁰³ Nevertheless, this was not the only time that the federal government turned a blind eye to contaminated waters.¹⁰⁴

B. *Barriers to Clean Water*

1. Lack of Indoor Plumbing

As it stands now, nearly 40 percent of people in the Navajo Nation do not have access to running water in their homes.¹⁰⁵ Due to the scarcity of indoor plumbing, residents are unable to readily perform basic functions around the home and providing for livestock.¹⁰⁶ This lack of water

⁹⁵ *Id.*

⁹⁶ *Id.*

⁹⁷ Amber Crotty & Linda Evers et. Al, *Abandoned Mines, Abandoned Health*, AMERICAN DIAGNOSIS PODCAST, <https://podcasts.apple.com/us/podcast/s4e3-abandoned-mines-abandoned-health-amber-crotty/id1282044849?i=1000551144949> (last visited Oct 16, 2022)

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ Gardner, *supra* note 13.

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

also makes people in the Navajo Nation dependent on other less optimal methods of cleaning when water is limited such as harmful disinfectants.¹⁰⁷

2. Distance to Community Wells

Another barrier to clean water is the long distances to community wells and or clean water stations. Clean water stations have been set up throughout Navajo Nation to fill up water for each household.¹⁰⁸ Many residents must travel anywhere from 10 to 30 miles for clean water every week.¹⁰⁹ This distance presents a major roadblock literally and figuratively.¹¹⁰ Not only is the land very difficult for installing pipes, the land and roads are not the best for driving either.¹¹¹ Although it is important to respect the sovereignty of Navajo Nation, there is a strong public health argument in the need for greater access to water that desperately is affecting the Navajo Nation.¹¹² Water insecurity in the United States is not unique to the citizens of the Navajo Nation. In fact, almost a decade ago, there was another water crisis that affected a different demographic more than 1500 miles north of Navajo Nation in Michigan.

V. FEDERAL AND STATE RESPONSE TO THE WATER VIOLATIONS

A. A Water Crisis in A Different Zip Code: Flint, Michigan

In 2014, a water crisis from another part of the nation¹¹³ emerged in the United States that quickly caught the attention of our larger society. In 2011, the Governor of Michigan, Richard Snyder, declared financial emergency for the city of Flint.¹¹⁴ This declaration placed Flint in the state of receivership.¹¹⁵ An emergency manager was appointed and as a result, the mayor and council were stripped of their authority.¹¹⁶ In April 2014, the emergency manager, in an attempt to cut costs, switched Flint River to a drinking water source, which it was not prepared to treat as its own source.¹¹⁷

Almost instantly, residents reported a foul smell and discoloration of drinking water, adverse health effects, and other health concerns.¹¹⁸ There were many health conditions that

¹⁰⁷ *Id.*

¹⁰⁸ *Navajo Nation, History – The People*, INDIAN HEALTH SERVICE <https://www.ihs.gov/navajo/navajonation/> (last visited Apr. 1, 2022).

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ *Water poverty in the United States*, TATA & HOWARD, <http://tataandhoward.com/water-poverty-on-u-s-soil-why-the-navajo-nation-water-crisis-should-shame-us-all/> (last visited Apr. 1, 2021).

¹¹² *Id.*

¹¹³ Brian Palmer, *Why Is It So Easy for Officials to Cover Up Drinking Water Scandals?* NRDC (Mar. 8, 2016) <https://www.nrdc.org/onearth/why-it-so-easy-officials-cover-drinking-water-scandals>.

¹¹⁴ Dimple Chaudhary, *Litigating Groundwater Contaminants: Enforcing the Safe Drinking Water Act in Flint, Michigan*, Presentation at the American Law Institute CLE, Environmental Litigation, (June 21, 2018).

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ *Id.*

¹¹⁷ *Id.*

¹¹⁸ *Id.*

resulted from this water crisis including: Legionnaire’s Disease, still births and approximately 12,000 children significantly infected with lead poisoning.¹¹⁹ The amount of contamination in the water of thousands of homes shocked newsreaders nationwide. Legal action soon followed the egregious violation of an entire city’s water supply.¹²⁰

B. *Notable Flint Class Action Lawsuits*

1. *In re Flint Michigan*¹²¹

City residents and property owners brought a class action suit against various defendants, including state and city government officials, alleging, inter alia, violation of the Equal Protection Clause and the right to bodily integrity under the Fourteenth Amendment arising from injuries allegedly sustained because of the contamination of city's water supply.¹²² Residents and property owners moved for leave to file a fourteenth amendment complaint, and defendants moved to dismiss.¹²³ Although most claims in this case were ultimately remanded or denied in part, the result of this case was multilevel, but the real victory came from the measures and preliminary injunctions that resulted on the local level Clean Water Act violation.¹²⁴

2. *Boler v. Earley*¹²⁵

Later, city residents brought two §1983 actions against state and local officials and entities, relating to water contamination crisis in city.¹²⁶ The United States District Court for the Eastern District of Michigan dismissed based on preemption by Safe Drinking Water Act (“SDWA”) and the residents appealed.¹²⁷ The Plaintiffs, Flint residents, brought suit against various state and local officials and entities, alleging violation of their constitutional rights, along with other claims.¹²⁸

In *Boler*, the district court determined that the claims were preempted by the SDWA and dismissed the case for lack of subject matter jurisdiction.¹²⁹ Relying on its preemption analysis in *Boler*, the court also dismissed *Mays* a similar case.¹³⁰ The cases have since been consolidated on appeal.¹³¹ Some findings from this brought a chain-reaction of failures, including those by the financial managers, allowed the water crisis to develop if it did.¹³²

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ *In re Flint Water Cases*, 960 F.3d 303 (6th Cir. 2020).

¹²² *Id.*

¹²³ *Id.*

¹²⁴ Brugge et al., *supra*, note 94.

¹²⁵ *Boler v. Earley*, 865 F.3d 391 (6th Cir. 2017).

¹²⁶ *Id.*

¹²⁷ *Id.*

¹²⁸ *Id.*

¹²⁹ *Id.*

¹³⁰ *Id.*

¹³¹ *Id.*

¹³² *Id.*

Notably, more than 57 percent of Flint, Michigan residents are African American. Environmental racism claims were a common unspoken thread throughout these cases.¹³³ Likewise, the race element is only amplified in the Navajo Nation because they are exclusively isolated from any other population. The following cases did not bring such claims, but race is certainly an underlined issue that goes unmentioned.

C. Notable Navajo Nation Water Right Settlements

1. State of New Mexico ex. rel. State Engineer vs. Navajo Nation

On April 19, 2005, the Navajo Nation and New Mexico executed a settlement agreement to resolve the claims of the Navajo Nation for use of 1000 sq ft. of waters in the San Juan River Basin in northwestern New Mexico.¹³⁴ On March 30, 2009, President Obama signed federal legislation authorizing and providing funding for the Navajo Nation Water Rights settlement, and a revised settlement agreement, with the United States, was executed on December 17, 2010.

Appeals of the decrees are pending before the NM Supreme Court. The Navajo settlement provides water development projects for the benefit of the Navajo Nation and non-Navajo communities in exchange for a release of the Navajo Nation's claims to water that could displace existing non-Indian water uses in the basin. One of the primary elements of the settlement is the Northwestern New Mexico Rural Water Supply Project. The Project will bring a renewable surface water supply from Navajo Reservoir to both Navajo and non-Navajo communities in northwestern New Mexico.¹³⁵

2. Navajo Utah Water Rights Settlement Act

Shortly after COVID-19 was identified in the Navajo Nation in March and its per capita case rate exceeded all U.S. states, a common attitude emerged among health care workers, tribal leaders, and members of Congress: it is time to finally address water availability issues on the Navajo Nation.¹³⁶

In June 2020, the Senate unanimously passed the Utah Navajo Water Rights Settlement Act, a long-awaited piece of legislation aimed to do just that for the Utah portion of the reservation.¹³⁷ The legislation was aimed to recognize the Navajo Nation's right to 81,500-acre feet of water from the Colorado River basin in Utah — enough to meet the annual needs of an estimated 160,000

¹³³ Roberto Acosta, *Flint Water Probe by Congress puts Snyder on Witness List in March*, THE FLINT JOURNAL, https://www.mlive.com/news/flint/2016/02/gov_snyder_on_witness_list_for.html (last visited Apr. 1, 2022).

¹³⁴ *Navajo Nation Water Rights Settlement*, OFFICE OF THE STATE ENGINEER, <https://www.ose.state.nm.us/Legal/settlements/NNWRS/index.php> (last visited Apr. 1, 2022).

¹³⁵ *Id.*

¹³⁶ Zac Padmore, *Long-Awaited Bill to Settle Navajo Nation Water Rights In San Juan County Passed By Congress*, THE SALT LAKE TRIBUNE, (Dec. 22, 2020), <https://www.sltrib.com/news/2020/12/22/long-awaited-bill-settle/>.

¹³⁷ *Id.*

typical American households.¹³⁸ It also would settle the tribe's current and future water rights claims and provide \$220 million to build much-needed water projects in San Juan County.¹³⁹

However, despite its bipartisan passage, the then-outgoing President Donald Trump threw the entire funding and relief package into uncertainty, and he criticized it as “wasteful and unnecessary.”¹⁴⁰ The Biden Administration has yet to take any real action to this act. Once again, the water rights of the Navajo Nation hit another inevitable impasse.

D. *Comparative Responses to Water Crisis Across the U.S.*

1. Lead By Example: Federal Response to Flint Water Crisis

One immediate reaction to the Flint water crisis was the distribution of bottled water to residents used for cooking and drinking.¹⁴¹ Another short-term solution on the part of the federal government included an order for implementation and education, as well as extensive tap water testing.¹⁴² Additionally, one of the long-term goals initiated as a result of this crisis was an establishment to monitor pipes every 20 years.¹⁴³ The agreement from the lawsuits in federal court also required the state to provide \$97 million to fund the replacement of the lead and galvanized steel water pipes.¹⁴⁴ A total settlement of \$641 million was awarded to the 800 residents severely affected by this crisis.¹⁴⁵

2. Get the Lead Out: Michigan's Response to Flint

Michigan established a new Lead and Copper Rule (“LCR”) which will eventually result in removal of the lead service lines (the small pipes that feed drinking water to homes from the larger water mains under the street) which have been at the source of many contamination issues, including in Flint.¹⁴⁶ The ultimate goal would require all of Flint lead pipes to be replaced within the next two decades. Although not completely resolved, the action taken in Flint may provide a template to effectively implement change using organizational groundswell support. The National Resource Defense Council (“NRDC”) was one of the organizations integral in getting justice for Flint citizens. The former NRDC president describes the Flint crisis as the following:

When it comes to providing public services, few things are fundamental than clean drinking water. What has happened to the people of Flint should never have happened. Let's make sure it does not happen again.¹⁴⁷

¹³⁸ *Id.*

¹³⁹ *Id.*

¹⁴⁰ *Id.*

¹⁴¹ *Id.*

¹⁴² *Flint, MI, Safe Drinking Water Lawsuit*, NRDC (Jan. 27, 2016), <https://www.nrdc.org/resources/flint-mi-safe-drinking-water-lawsuit>.

¹⁴³ *Id.*

¹⁴⁴ *Id.*

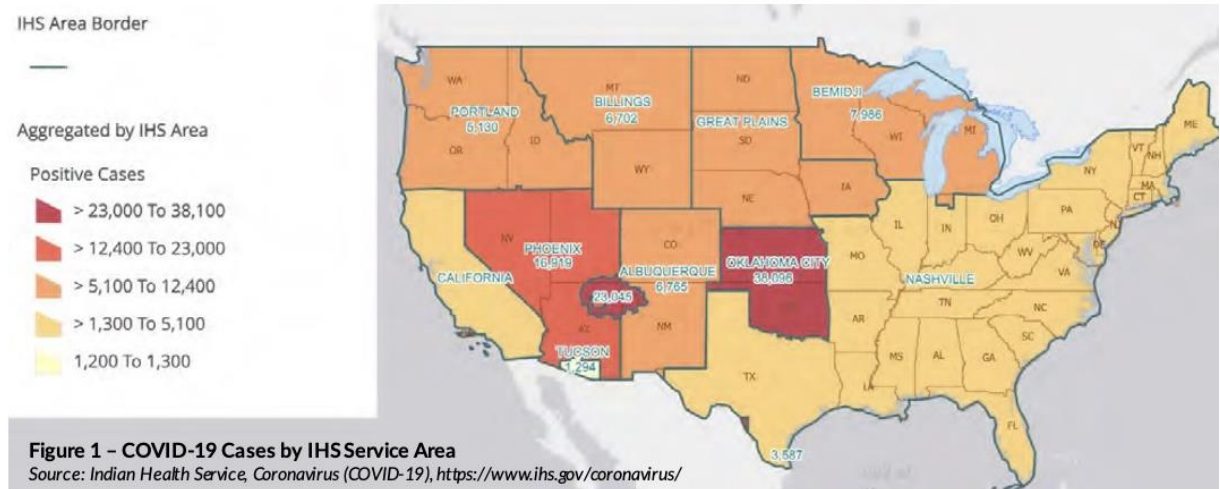
¹⁴⁵ *Id.*

¹⁴⁶ Brugge et al., *supra*, note 94.

¹⁴⁷ Rhea Suh, *Two Years of Tragedy in Flint* (Apr. 28, 2016) NRDC, <https://www.nrdc.org/experts/rhea-suh/two-years-tragedy-flint>.

One would think that these words would ring true to all parts of the United States, yet under the shadow of the Flint atrocities still exists the same if not, worse conditions still perpetuated in the Navajo Nation.

3. Lead Astray: U.S. Response to Navajo COVID Crisis CARES Act



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In June of 2020, the government allocated \$714 million for the Navajo Nation during the height of the COVID-19 outbreak.¹⁴⁹ The CARES Act was passed to provide immediate assistance to citizens, including the Navajo Nation access, in accessing direct funds to combat the economic setbacks of COVID-19.¹⁵⁰ The Act included \$5 million to support installation of temporary water stations and storage tanks, but tribal leaders were unable to invest the money in urgently needed infrastructure because of an arbitrary time limit on spending.¹⁵¹

Following approval by the U.S. House of Representatives, the U.S. Senate expedited their vote and passage of an omnibus appropriations package that included a \$1.4 trillion for federal spending and \$900 billion for COVID-19 relief. The historic measure also included the approval of the aforementioned Navajo Utah Water Rights Settlement Act.

On the surface, the Act appeared to be a very generous piece of legislation, but as an earlier point of contention in this article explained, this Act, did not benefit the Navajo Nation.¹⁵² The

¹⁴⁸ *Coronavirus (COVID-19)*, INDIAN HEALTH SERVICE, <http://www.ihs.gov/coronavirus> (last visited Apr. 1, 2022).

¹⁴⁹ Nina Lakhani, *Tribes Without Clean Water Demand an End to Decades of US Government Neglect*, THE GUARDIAN, (Apr. 28, 2021), <https://www.theguardian.com/us-news/2021/apr/28/indigenous-americans-drinking-water-navajo-nation>.

¹⁵⁰ *Id.*

¹⁵¹ *Id.*

¹⁵² Padmore, *supra* note at 136.

Navajo Nation was not only economically impacted, but the health of the citizens was severely impacted by COVID-19.¹⁵³

VI. HEALTHCARE IMPACT

A. *Healthcare History*

The Snyder Act of 1921 serves as the original national materialization of the federal government's authorization and obligation to provide health care to the Native Americans.¹⁵⁴ Originally, the United States instructed health care programs to be administered by the BIA.¹⁵⁵ In 1955, Congress transferred primary federal responsibility for Indian Health care administration to the Indian Health Service.¹⁵⁶

One key piece of legislation ingrained within this shift of obligation was the Indian Health Care Improvement Act of 1976.¹⁵⁷ The Indian Health Care Improvement Act of 1976 provided the budget of the IHS to expand health services. At the time, IHS was able to build and renovate medical facilities and focus on construction of safe drinking water. The law was also developed to increase the number of Native American professionals. Many Native Americans continue to get their health care services from their own providers.¹⁵⁸ For the Navajo, health care services primarily come from the Department of Health, funded by the federal government.¹⁵⁹ The Navajo Area Indian Health Service (NAIHS) is one of twelve regional administrative units of the Indian Health Service (IHS), in the US Department of Health and Human Services. The NAIHS delivers health services to a user population of over 244,000 American Indians in five federal service units on and near the Navajo Nation.¹⁶⁰

According to the American Nurses Association, handwashing is the single handed most important thing one can do to prevent the spread of the communicable disease.¹⁶¹ The crucial prevention strategy beyond problematic, it single handily is the catalyst for such high infection rates.¹⁶²

¹⁵³See DIG DEEP, ANNUAL REPORT 2019.

¹⁵⁴ Fletcher, *supra* note at 68.

¹⁵⁵ Koral E. Fusselman, *Native American Health Care: Is the Indian Health Care Reauthorization and Improvement Act of 2009 Enough to Address Persistent Health Problems within the Native American Community?*, 18 WASH & LEE J. CIVIL RTS. & SOC. JUST. 389, 395 (2012).

¹⁵⁶ Transfer Act, Pub. L. 83-568, §1, 68 Stat. 674 (1954). See also Betty Pfefferbaum et al., *Learning How to Heal: An Analysis of the History, Policy, and Framework of Indian Health Care*, 20 AM. INDIAN L. REV. 366, 382 (1995/1996).

¹⁵⁷ *Id.*

¹⁵⁸ *How the pandemic threatens Native American—and their languages*, THE ECONOMIST, (May 19, 2020), <https://www.economist.com/united-states/2020/05/19/how-the-pandemic-threatens-native-americans-and-their-languages>.

¹⁵⁹ *Id.*

¹⁶⁰ 10 IMPORTANT FACTS ABOUT INDIAN HEALTH SERVICE AND HEALTH INSURANCE, HEALTHCARE.GOV (2016).

¹⁶¹ Handwashing in Communities, *supra*, note 10.

¹⁶² Marcia Frellick, *Forces Combine to Aid Navajo Nation During Pandemic*, NURSE.COM, (Nov. 23, 2020), <https://www.nurse.com/blog/2020/11/23/forces-combine-to-aid-navajo-nation-during-pandemic/>

B. Navajo Nation and Covid Crisis

According to Kaiser Family Foundation, the Navajo Nation was hit particularly hard with more than 3,000 positive cases and at least 140 deaths back in May 2020.¹⁶³ That number skyrocketed to more than 15,000 positive cases and 631 deaths.¹⁶⁴ If it were its own state, Navajo Nation would have the highest infection rate in the country.¹⁶⁵

The glaring disparities in the Navajo was due primarily to the fact that 34% of Native Americans have pre-existing health conditions making the coronavirus infection likely to be serious or fatal.¹⁶⁶ This is the highest rate of any ethnic or racial group with black Americans at 27% and whites at 21%.¹⁶⁷ Furthermore, Native Americans are highly communal, and tight knit, making infections spread faster.¹⁶⁸ Additional factors responsible for the rapid spread of COVID include the fact that many Navajo live in small, multigenerational family structures, and technological access also contributed to a delay in overall information needed to prevent disease spreading. This delay was partly because most life-saving interventions guidelines were disseminated via virtually.¹⁶⁹

C. Navajo Health Crisis Narrative¹⁷⁰

Dr. Cristina Rivera Carpenter is a current Navajo Nation Program officer who has worked with the HEAL (Health, Equity, Action and Leadership) Initiative since 2016, starting as a Site Fellow.¹⁷¹ The core goal of HEAL is to make health achievable for even the most vulnerable populations through principles of equity, justice, and solidarity.¹⁷² HEAL implements these goals through a multilayered approach, starting with partnership with high need populations. It also includes a program to pair American-trained physicians with peers who live and work in partner communities as front-line clinicians, training with and mentoring without hierarchy throughout the fellowship, and lastly building a deep solidarity with marginalized populations.¹⁷³

Ordinarily, the HEAL model is a two-year fellowship, with many alumni continuing to live and work in community, but when the pandemic landed in the Navajo Nation, this model had to go into hyper drive to contain the rapid spread and the harmful effects of the pandemic.

Dr. Rivera describes her experience with working in the hospitals prior to and shortly after the peak of COVID. In her experience, she had already seen disparities, but she was also aware

¹⁶³ Brugge et al., *supra*, note 94.

¹⁶⁴ Frellick, *supra* note 142.

¹⁶⁵ Did you think the water in Flint was bad? *supra*, note 87.

¹⁶⁶ *Id.*

¹⁶⁷ *Id.*

¹⁶⁸ *Id.*

¹⁶⁹ *Id.*

¹⁷⁰ Telephone Interview with Dr. Cristina Rivera Carpenter, Navajo Nation Program Officer (Jan. 29, 2022)

¹⁷¹ *Id.*

¹⁷² *Why HEAL? HEALTH, EQUITY, ACTION, & LEADERSHIP UCSF*, <https://healinitiative.org/how-were-different/mission-and-vision/> (last visited Apr. 1, 2022).

¹⁷³ *Id.*

that these inequities were not by coincidence but rather design. Dr. Rivera postulates that the challenges the Navajo Nation face are structural challenges such as access to roads which make it difficult to travel necessary grocery stores and running water. Furthermore, the disparities continue at an economic level where healthier options like fresh foods are priced at a point that makes it virtually impossible to feed a family regularly. On the other hand, price-friendly processed foods are more accessible. Overtime, a diet primarily preservative-based can contribute to chronic ailments such as diabetes and hypertension. All of these factors, along with lack of running water in many households, contributed to disparities that resulted in alarming rates of COVID in the Navajo Nation that received national attention.

While national attention was helpful in making the case for more aid during this time, Dr. Rivera voiced concerns about certain mischaracterizations of the Navajo as solely a poverty-stricken nation rife with inefficiencies not seen anywhere else in the United States. These generic conclusions about the Navajo fostered an exceptionalism attitude that was harmful to any substantial progress. Essentially, until the rest of Americans view that the injustices faced daily by the Navajo as responsibility of other Americans, the consensus is that it is not a pressing issue to work towards resolving. An economic analysis of the infrastructure helps shed light on this issue.

VII. ECONOMIC ANALYSIS OF THE NAVAJO HEALTH AND STRUCTURAL SYSTEMS

“I put together a \$ 2billion plus package just to address coronavirus, this is a Band-Aid. Six hundred million is a lot but it’s a Band-Aid.”¹⁷⁴

-Amber Kanazbar Crotty, Navajo Nation Council Delegate

A. *Cost of Health Care in the Navajo Nation*

In 2015, annual spending on healthcare for a Navajo Nation citizen per patient was around \$3,700 compared with \$5,700 under Medicaid.¹⁷⁵ Additionally, many Native Americans who live outside reservations are not covered by the IHS or another tribal provider.¹⁷⁶ IHS is not mandatorily funded benefit like Medicare or Medicaid.¹⁷⁷ Those not insured make up 22% of the non-elderly, which represents a higher proportion than for any other American ethnic group.¹⁷⁸ Cost of health care in the Navajo Nation each year is \$340-450 million.¹⁷⁹ As it stands, IHS is not enough to support the Navajo People.¹⁸⁰ However, compared to the cost of a sustainable water infrastructure, the numbers are even more staggering.

¹⁷⁴ Lyttle, *supra* note 4.

¹⁷⁵ Brugge et al., *supra*, note 94.

¹⁷⁶ *Id.*

¹⁷⁷ *Id.*

¹⁷⁸ *Id.*

¹⁷⁹ Dig Deep, *supra* note 133.

¹⁸⁰ CENTER FOR MEDICARE AND MEDICAID SERVICES, SERVING THE NAVAJO RESERVATION (2020).

B. *Cost of Providing Adequate Long-Lasting Water to the Navajo Nation*

According to the U.S. Senate Committee on Indian Affairs, President Joe Biden signed a \$1.2 trillion deal that included \$11 billion in benefits for Indian Country on November 2021.¹⁸¹ About one-third, or \$3.5 billion, was set to go to the Indian Health Service, the federal agency tasked with providing healthcare for more than two million Native American and Alaska Natives.¹⁸² However, the IHS generally does not give money directly to tribes.¹⁸³

The funding was set aside to address more than 1,560 projects on the agency's list of water and sanitation deficiencies in 12 regions, estimated to cost nearly \$2.6 billion. Another \$2.5 billion will go to fulfill tribal water rights settlements that already have been approved.¹⁸⁴ Estimates of the cost to update entire water infrastructure in the Navajo Nation varies from several hundred million to the billions.¹⁸⁵ For instance, according to the Indian Health Service, an estimated \$700 million is the cost to ensure that every home has running water.¹⁸⁶ Another source estimates that \$4.5 billion is needed to address the widespread lack of water access on the Navajo reservation.¹⁸⁷ The Interior Department has not specified which agreements that quantify tribes' rights to water are included, but the leaders of the Navajo Nation, said they expect to benefit from the funding.¹⁸⁸

C. Economic and Policy Analysis Narrative¹⁸⁹

Professor Heather Tanana, JD, MPH (Diné) is an Assistant Professor & Wallace Stegner Center Fellow at the S.J. Quinney College of Law.¹⁹⁰ Professor Tanana is experienced in state, federal, and tribal courts and clerked at the U.S. District Court for the District of Utah.¹⁹¹ In a report previously cited in this article along with other research, she examines the economic and policy implications behind water access to tribal communities. The two key components of clean water access, as posited by Professor Tanana are 1) piped water delivery and 2) water quality.

Piped water is important to determine the source of where the water is retrieved. An estimated 30-40% of Navajo homes do not have piped water delivery to their homes and mostly rely on hauling stations. A majority haul water from either regulated watering points or unregulated

¹⁸¹ Felicia Fonseca, *Tribes Welcome Infusion of Money in Infrastructure Bill*, PBS, (Nov. 18, 2021), <https://www.pbs.org/newshour/economy/tribes-welcome-infusion-of-money-in-infrastructure-bill>.

¹⁸² *Id.*

¹⁸³ *Id.*

¹⁸⁴ *Id.*

¹⁸⁵ *Id.*

¹⁸⁶ Justine Calma, *The Navajo Faced Water Shortages for Generations-and Then the Pandemic Hit* (Apr 12, 2022), <https://www.theverge.com/2020/7/6/21311211/navajo-nation-covid-19-running-water-access>.

¹⁸⁷ Flint, MI, Safe Drinking Water Lawsuit, *supra* note, 112.

¹⁸⁸ *Id.*

¹⁸⁹ Telephone Interview with Professor Heather Tanana, JD, MPH, Univ. of Utah (Mar. 11, 2022).

¹⁹⁰ Heather Tanana, UNIVERSITY OF UTAH, https://faculty.utah.edu/u0174603-HEATHER_TANANA/hm/index.html (last visited Apr. 1, 2022).

¹⁹¹ *Id.*

sources (e.g., wells and springs). Most of Navajo nation's current water comes from groundwater sources.

Professor Tanana sites economic impediments to water access such as inadequate funds and distribution. Professor Tanana also cites bureaucratic tape, as was seen in the delays to deployment of funds from the CARES ACT to access funding, tribes like the Navajo often must submit grant proposals, which can present its own barriers. Many tribes in general lack the internal capacity and resources to compete with large organizations that successfully receive this funding. Navajo Nation has much greater capacity than other smaller tribes and has accessed some federal funding, but still nowhere near the same level of funding then the rest of the United States. Therefore, the limited funding to install new systems and replace degraded systems significantly affects the quality of water available.

The water quality component is equally, if not more, important in an economic analysis because depending on the quality of water, different amounts of water lines need replacing. Additionally, the hidden cost of maintenance requires frequent monitoring of the water quality. Professor Tanana posits that the work of monitoring the quality of water and other systems related to monitoring is a great employment opportunity for Navajo Nation the long term.

Building and improving upon water and sanitation systems will have a flowing effect in tribal communities and urban areas where most Native Americans live, improve health disparities, and foster economic development. The current temporary solutions do not provide such development. The following recommendations are perhaps a start to a sincere approach to the water inequities.

VIII. RECOMMENDATIONS

“I believe that every American has a fundamental right to. . .and drink clean water. I know that we haven’t fulfilled that right yet.” —Joe Biden, Wilmington, Delaware, Sept. 14, 2020.

A. Removing Barriers to Access Funds

Effective intergovernmental coordination is essential to promoting health and safety.¹⁹² Yet, the current political climate has seen discord between Tribes, states, and the federal government on issues ranging from public health to environmental protection, among countless others.¹⁹³ COVID-19 has magnified this discord.¹⁹⁴ Many states have challenged Tribal authority to access data, implement quarantine and isolation measures, and establish checkpoints and mask mandates.¹⁹⁵

¹⁹² Alia Hoss, *Securing Tribal Consultation to Support Health Sovereignty*, 1. NORTHEASTERN U. L. REV., (Feb. 9, 2022).

¹⁹³ *Id.*

¹⁹⁴ *Id.*

¹⁹⁵ *Id.*

The federal government has delayed access to COVID-19 data, established burdensome and inconsistent policies for the use of federal response funds, and failed to meet its obligations to provide health care in many American Indian and Alaska Native communities.¹⁹⁶ In 2020, the Navajo have joined other tribes in a lawsuit against the Department of the Treasury for a greater share of relief funds.¹⁹⁷ Still, consultation with Tribal Leadership may be a better start on the path to addressing the barriers on a societal level.

B. *Concerted Consultation Among Tribal Leadership*

As a sovereign nation, the Navajo have authority and responsibility over their land and people.¹⁹⁸ Federal Indian law both recognizes Tribal sovereignty, but in certain instances, infringement on a Tribe’s criminal or civil jurisdiction applies.¹⁹⁹ One method for ensuring Tribal and Native perspectives in these decision-making processes has been through Tribal consultation.²⁰⁰ Consultation is a formal, government-to-government process that requires governments to consult with Tribes before taking actions that would impact them.²⁰¹ Tribal consultation is essential for effective Indian health policy.²⁰² This article argues for a more robust mechanism for Tribal consultation for health policy issues.

Professor Tanana, and the Tribal Clean Water Initiative , released a roadmap on how the federal government can move forward with the funding effectively.²⁰³ It includes coordination among federal agencies, working with tribes and through an existing tribal task force.²⁰⁴ Officials with the Biden administration repeatedly referred to a “whole of government” approach during the White House Tribal Nations Summit in announcing agreements among federal agencies on tribal treaty rights and sacred sites.²⁰⁵

Professor Tanana said goals and accountability also must be part of the equation, along with building capacity for tribes to operate water and sanitation systems on their own.²⁰⁶ The group of tribal members, water experts and nonprofits pushes for access to clean water for tribes in the Colorado River basin and beyond.²⁰⁷

¹⁹⁶ *Id.*

¹⁹⁷ Brugge et al., *supra*, note 94.

¹⁹⁸ *Navajo Tribal Sovereignty: What Is It and Why Is It A National Holiday*, ETD INCORPORATED, <https://etd-inc.com/recent-news/navajo-tribal-sovereignty>, (last visited Apr. 15 2021).

¹⁹⁹ *Id.*

²⁰⁰ *Id.*

²⁰¹ *Id.*

²⁰² *Id.*

²⁰³ Tanana, *supra* note at 190.

²⁰⁴ *Id.*

²⁰⁵ Hoss *supra* note at 192.

²⁰⁶ Tanana, *supra* note at 190.

²⁰⁷ *Id.*

Tribal leaders told the Biden administration during the virtual summit that they appreciated the money in the infrastructure bill, but pointed out some potential hurdles, including hurdles for tribes that don't have the resources to compete for grants or match the funding.²⁰⁸

Navajo President Jonathan Nez suggested federal policies and regulations be eased or updated so projects won't be stalled.²⁰⁹ He cited needing environmental clearances from two different federal agencies when a BIA road or bridge is constructed on the reservation.²¹⁰ White Mountain Apache Chairwoman Gwendena Lee-Gatewood said lasting differences will come only with sustained investments to make up for decades of underfunding and neglect.²¹¹

IX. CONCLUSION

“I do not understand why the richest Country in the world cannot take care of our people. It is shameful and hurtful.”

- J. Michael Chavarria. Governor Santa Clara Pueblo²¹²

In sum, the road to water rights and water equality in the Navajo Nation has been an endless path of pitfalls full of many setbacks and stalled efforts. The U.S. Federal government signed a treaty with the Navajo Nation leaders centuries ago, and effectually made a promise that they have failed to keep. Because water is fundamental to the human existence, the fact that a third of Navajo residents lack clean running water in this country suggests that the United States federal government does not equally value all its citizens and their basic needs. One would hope that this is not the case.

Admittedly, the water insecurity issue in the Navajo Nation is multifaceted and multilayered. An innovative, inter-governmental approach can truly address these concerns, but there must be a sincere effort to tackle this basic human right problem. There has been glimmers of these efforts, but nothing on a scale to make any significant progress. To reconcile centuries of systematic oppression faced by the Navajo Nation, there needs to be a dynamic and consistent effort to this approach. Hopefully, the response in communities like Flint can illuminate some legal and organizational solutions surrounding water rights.

The United States government's past approach to providing the Navajo Nation with clean drinking water and sanitation must be radically changed to tackle decades of underfunding and neglect. Tribal leader consultation is one way the federal government can bridge the concerns of the community while also respecting the sovereignty of the Navajo Nation.

²⁰⁸Hoss, *supra* note at 192.

²⁰⁹ Navajo Nation President Discuss The Federal Regulations And Infrastructure, ARIZONA PBS, Arizona State Univ. (Apr. 5, 2022). <https://azpbs.org/horizon/2022/04/navajo-nation-president-nez-federal-regulations-infrastructure/>.

²¹⁰ *Id.*

²¹¹ *Id.*

²¹² *Access to Contract Health Services in Indian Country: Hearing before the Committee on Indian Affairs, Cong. 110, 2nd Sess., (2008) (statement of Gov. J. Michael Chavarria).*

At the beginning of COVID, there was a groundswell of momentum and unfortunately, that motivation is slowly starting to dry up. The United States needs to confront the water insecurity, as an urgent public health crisis that requires a comprehensive and coordinated response. If not, the Navajo Nation will possibly be right back in the same position if not worse the next health crisis. The current methods that have been enacted are the about as effective as a Navajo delegate stated, “placing a Band-Aid” on a gaping wound.

Moral motivations, aside, concerted undertaking of real water infrastructure makes more sense economically. The yearly health costs could be reduced significantly if the federal government accounts for and realizes that the lack of clean water correlates to increasing health costs each year. The fact that that the Navajo Nation have managed these current circumstances demonstrates they have a profound resilience. However, this burden of resilience should not absolve the government from fulfilling their promise to this community.

The citizens of the Navajo Nation deserve better, and health of this community relies upon clean water. Any real steps towards a healthy and thriving society are futile until the federal government meets this basic right.