

Build Back Better: Water Infrastructure Needs for Native Communities
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Introduction

Chairman Schatz and Committee members, thank you for this opportunity to discuss water infrastructure needs for the Navajo Nation. I am Jason John, Director of the Navajo Nation Department of Water Resources. I have worked for the Navajo Nation for 20 years. The Navajo Department of Water Resources (NDWR) is delegated with many of the responsibilities to assist and coordinate water resources development on the Navajo Nation across the over 27,000 square miles (Figure 1). The assistance and coordination includes working with appropriate Navajo Nation, local, state, and federal programs across Arizona, New Mexico, and Utah. While today’s discussion will focus on the Navajo Nation’s domestic and municipal water development needs, I have also shared information on agricultural, livestock, and environmental water needs.

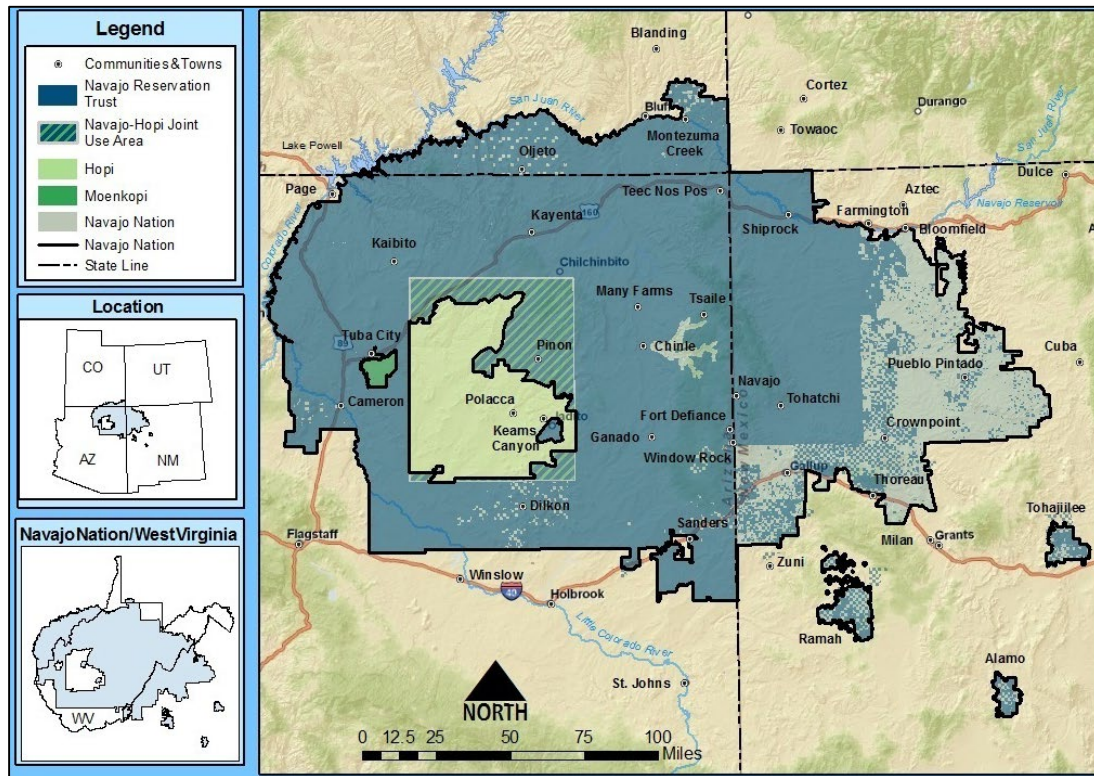


Figure 1. Map of the Navajo Nation

Goal

The Navajo Nation is committed to improving the standard of living on the reservation. Access to land, water, and electricity for families, government programs, public institutions, and businesses are critical to a better quality of life. Recognizing that water is integral to human health and economic development, the Navajo Nation has placed water development as one of its highest needs. It is also one of its highest priorities, as exemplified by the Navajo Nation investing over \$200 million of its funds over the last several years. The collective should be to provide the necessary infrastructure so that thousands of families can live a better life.

Need

In 2020, the Navajo Nation estimated almost \$4 billion in water-related development needs, as shown in Table 1. A majority of the funding, over \$2.4 billion, is for critically needed domestic and municipal projects (bolded in Table 1).

Table 1. Navajo Nation Water Development Needs

Category	Total
Large Regional Municipal Water Supply Projects	\$ 632,000,000
Local Domestic and Municipal Water Infrastructure	\$ 1,806,057,000
Livestock and Agriculture	\$ 682,410,000
Service to Water Haulers	\$ 8,000,000
Completion of Navajo Indian Irrigation Project	\$ 760,000,000
Address Water Storage Facilities	\$ 47,500,000
Drought Response and Mitigation	\$ 10,000,000
Floodplain delineations and management	\$ 10,000,000
Watershed Restoration Demonstration Projects	\$ 8,308,000
Navajo Nation Total:	\$ 3,964,275,000

Note: Table does not include funds needed for housing and electricity needs.

Connection to Housing and Electricity Needs

The need for water for a better quality of life is connected to the critical need for additional housing and electricity. The 2010 census depicted approximately 40 percent of the 50,000 households across the Navajo Nation were multi-generational homes. About 19,000 homes on the Navajo Nation have relatives/family living in them who could have separate housing if housing were available and affordable. Furthermore, due to the low income of many families, many existing homes lack the necessary plumbing for water/wastewater and wiring for electricity which leads to a delay in providing critical water services once funding is available.

- Additional funding and program support are needed to construct additional homes and upgrade existing homes to receive water and electricity.

Data for Domestic Water Needs

There is a need to obtain better information about the ongoing water-related sanitation deficiencies in the Navajo Nation. The Navajo Nation estimates a high percentage (30 percent to 40 percent) of homes without access to water. The Indian Health Service (IHS) is the only agency with data specific to this need and estimates a lower percentage. Under the provisions of the Indian Health Care Improvement Act, Sections 1632(g)(2) and (3), the IHS conducts an annual review of all the sanitation deficiencies (water, sewer, solid waste) on the Navajo Nation in their Sanitation Deficiency System (SDS) database. In 2020, IHS estimated that between 7,000 to 7,500 homes lacked adequate water and wastewater facilities on the Navajo Nation. The IHS currently has staff shortages that hinder obtaining updated information quickly for the needed surveys. During the COVID-19 pandemic, the U.S. Public Health Service Commissioned Corps, in

coordination with IHS, was able to facilitate technical staff from other agencies to assist in acquiring updated information on homes identified for cistern water systems.

- Additional resources are needed to acquire updated information for the ongoing water-related sanitation deficiencies in the Navajo Nation.

Development Challenges

There are challenges at every phase of water development in the Navajo Nation. There is a federal nexus at almost every stage of domestic water development. The speed at which waterlines can be built to serve homes directly depends on the staffing levels and funding levels of federal and tribal programs involved in the planning, design, surveys, environmental permitting, cultural resource reviews, design reviews, and construction management.

- There needs to be a review of and improvements to the current staffing levels, funding, and policies imposed upon programs that assist in the pre-construction and construction activities for water-related projects.
- Federal agencies with the expertise may need to dedicate resources to assist existing programs to efficiently review and permit infrastructure projects to expend funds allocated through CARES Act and the American Rescue Plan.
- Tribal programs involved in the review and permitting of water infrastructure need additional funding, staffing, and adequate workspace to assist water development efficiently.
- Federal programs can assist the Navajo Nation with capacity building; this is especially important now with both the CARES Act and American Rescue Plan funding was and is to be distributed directly to tribal nations, respectively.

Domestic Water Development

There is insufficient funding for domestic water infrastructure. IHS is the primary federal program constructing domestic water lines. According to IHS, there is more than a half-billion dollars in the current need for domestic water projects on the Navajo Nation. While the IHS has done good work to provide water with their limited funding and staffing, the needs far exceed what this program can accomplish without additional staffing and project funding.

- Adequate funding needs to be provided to get projects “shovel ready” so that more projects can be built in less time when funding becomes available.

Municipal Water Development

The longer-term goal for the Navajo Nation is to provide water for population growth and economic development. , the domestic water program funding through the Indian Health Service authorized through P.L. 86-121 has limitations that do not allow sizing for long-term economic growth.

The Navajo Nation has been working on analyzing the existing water systems to determine their short-term (5-10 years), mid-term (20 years), and long-term (40 years) capital improvement plans to provide water for future population growth and economic development.

When analyzing many of the plans over the years, it became apparent that some communities do not have the local water supply to meet existing and future needs. In some cases, groundwater has to be imported from neighboring communities or reliable surface water supplies such as the San Juan River. The need to import water results in additional time and cost to build water projects. The Navajo Nation’s long-term

strategy includes additional access and use of Colorado River supplies due to limited groundwater resources in many regions.

The Navajo Nation participated in the “Colorado River Basin Study through the Colorado River Basin Ten Tribes Partnership Tribal Water Study (2018)”. The report can be found at: [WaterStudy.pdf \(tentribespartnership.org\)](https://www.tentribespartnership.org/WaterStudy.pdf). Chapter 7 of that report described the challenges and opportunities to tribal water development. Some of the potential actions from the study that I wanted to emphasize are as follows:

- Work with federal and state agencies to prioritize the identification of legal and regulatory constraints to full use of tribal water, and to design ways to overcome constraints, and to broaden opportunities that enable Partnership Tribes to put their water to full beneficial and economic use
- Address statutory and regulatory prohibitions to interstate water management and use
- Develop and draft proposed policy changes addressing legal and regulatory constraints, as well as proposed legislation that allows for water management flexibility for Partnership Tribes
- Explore opportunities for federal agencies and Partnership Tribes to work together to develop the expertise, funding and/or resources for comprehensive water management planning and implementation
- Repair, rehabilitate, or improve aging infrastructure
- Construct/improve storage facilities to permit or enhance tribal access to storage
- Draft and propose appropriate legislation to authorize the interstate use of a tribe’s reserved water rights
- Work with BIA to develop programmatic right-of-way agreements to simplify obtaining rights-of-way for domestic, commercial, municipal, and industrial projects
- Advocate for tribal waivers of the requirement for matching funds in federal water-related funding programs
- Create and improve relations with the adjacent communities and establish a forum for bringing tribal and other communities together to discuss issues of mutual concern
- Conduct more detailed and comprehensive assessments of tribal water infrastructure demands to inform funding agencies better and promote increased funding through the federal budget process
- Broaden the access to federal expertise to finance water infrastructure through specialized programs within the Department of Interior and within the Environmental Protection Agency

Many of the current federal programs cannot fully fund the planning and design of the regional water projects needed to provide the required water for long-term water use. The Navajo Nation, at times, is also penalized for being a large reservation when analyzing tribal finances concerning individual projects that serve small areas of the reservation. Nonetheless, the Navajo Nation continues to work with federal programs and other funding opportunities to meet its ongoing needs. We also appreciate dedicated federal agency staff who work closely with the Navajo Nation to provide technical assistance to meet the current and future water development needs.

Agriculture Needs

In 1986, the Soil Conservation Service (SCS) conducted an inventory of irrigation projects across the Navajo Nation. The SCS investigated 83 irrigation projects to determine existing conditions, consolidate resource data, and prioritize possible rehabilitation projects (SCS, 1986; Figure 2). During the 1980s, these small irrigation projects could irrigate approximately 55,000 acres of land (SCS, 1986). Due to insufficient staffing for management and funding for the operation, maintenance, and replacement, many of these systems have deteriorated and need funding. While most historic irrigation projects are not actively

monitored, there are existing efforts to improve several irrigation systems, including the Fruitland, Hogback, Many Farms, and Wheatfield projects. The cost to conduct studies and repair some of the small irrigation projects is included in Table 1. The highest cost for agriculture in Table 1 is a proposed Lake Powell to Shonto raw water delivery project for irrigation at the cost of over \$600 million.

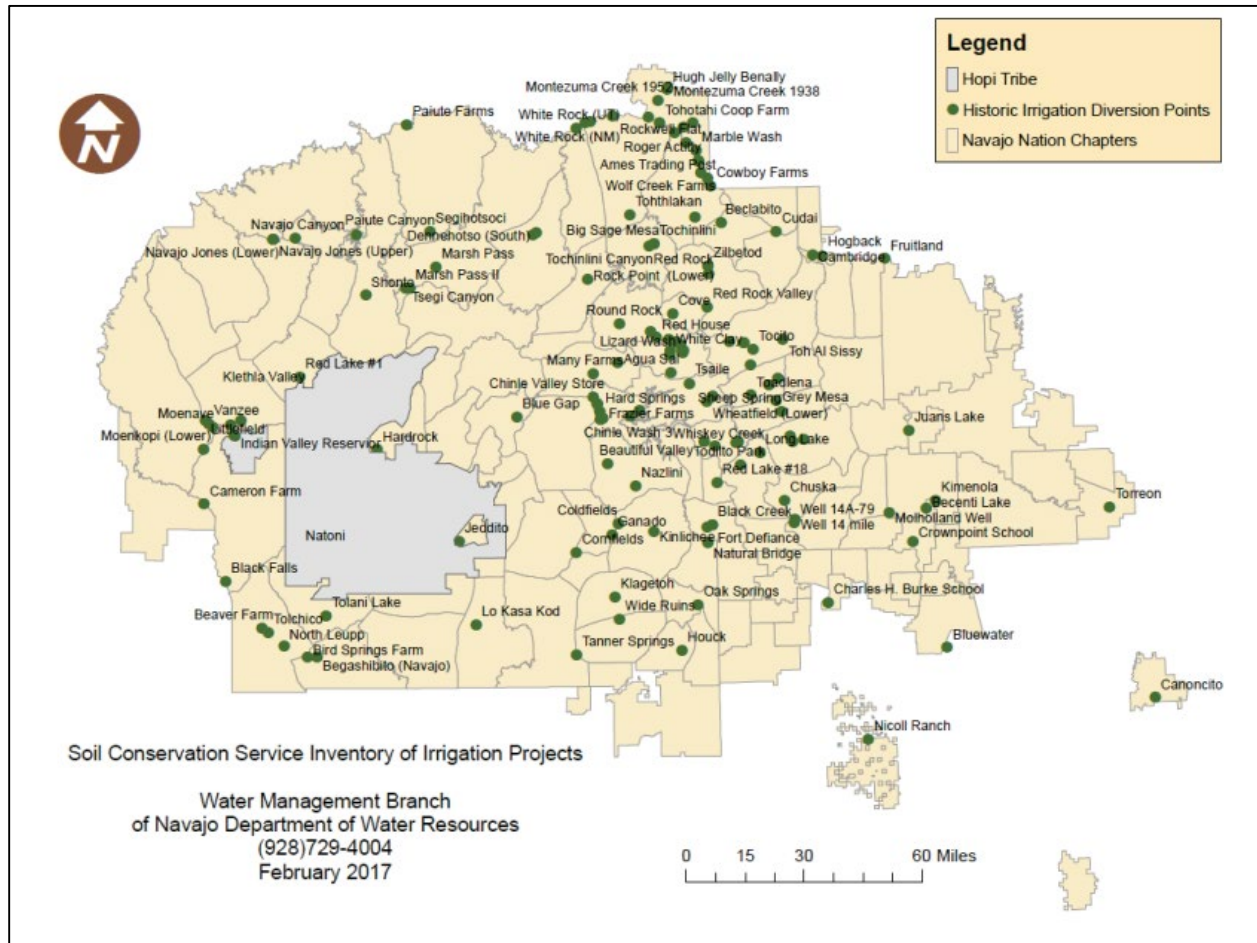


Figure 2. Map of irrigation projects in the Navajo Nation inventoried by the Soil Conservation Service.

The Navajo Nation continues to advocate for the completion of the Navajo Indian Irrigation Project (NIIP). Approximately 70,000 acres of the planned 110,000 acres are developed. Blocks 9, 10, and 11 contain the remaining undeveloped acreage. The most recent estimated cost to complete NIIP is included in Table 1.

- Consultation is needed with the Bureau of Indian Affairs, U.S. Department of Agriculture, U.S. Bureau of Reclamation to begin discussions about rehabilitating and improving the small irrigation projects on the Navajo Nation.
- A plan is needed from the United States in consultation with the Navajo Nation and the Navajo Agricultural Products Industry to complete the construction of the Navajo Indian Irrigation Project,

Livestock Water and Infrastructure Needs

The Navajo People take pride in their care of livestock as a way of life and to provide food and income for their families. The Navajo Nation Department of Agriculture estimates that livestock on the Navajo Nation requires approximately 1 to 2 million gallons per day or 1,000 to 2,000 acre-feet of water per year. The

water for livestock comes primarily from surface water impoundments and livestock wells (Figure 15). NDWR maintains approximately 900 livestock wells throughout the Navajo Nation. There are over 4,000 stock ponds in the Navajo Nation, and a majority need sediment removal and rehabilitation. The cost to repair and provide additional water sources is included in Table 1.

- There is a need for technical assistance to conduct an overall assessment of the livestock water infrastructure needs and to develop a plan to fund, operate and maintain these systems.

Environmental

The reservoirs on the Navajo Nation provide storage for irrigation water, livestock, wildlife, and recreation. There are more than 20 significant surface water reservoirs with a surface area greater than 200 acres. These reservoirs are either included in the NDWR Safety of Dams Program and/or are stocked with fish by the Navajo Department of Fish & Wildlife. The lakes and reservoirs have a combined storage capacity greater than 80,000 AF. Over \$47 million of water storage project needs are included in Table 1.

In addition, the Navajo Nation has been an active participant in the San Juan River Recovery Implementation Program (SJRIP) through the U.S. Fish & Wildlife Service and the Recommendations for San Juan River Operations through the U.S. Bureau of Reclamation to mitigate impacts to water users and the environment. We ask for continued support for these programs.

- There is a need for continued support to monitor and rehabilitate the existing reservoirs and plan, design, and construct new reservoirs.
- Continued support of the San Juan River Recovery Implementation Program and the Recommendations for San Juan River Operations is critical for the continued balanced use of water in the San Juan River.

Conclusion

There are far too many projects to discuss in detail today, but I invite members of this Committee to follow up with me about specific programs or projects. Overcoming the legacy of neglect and infrastructure deficits on the Navajo Nation will require an aggressive water development program. I look forward to working with you. Thank you.