

The Navajo Nation

As a people, The Navajo have always been aware of its arid conditions and fragile balance with Nature. Our culture and beliefs revolve around Nature, therefore its precise elements have always been respected. However, in the more recent years, that balance has been interrupted by GROWTH. Growth of population, industry, development, energy needs, etc.

The Navajo Nation

- ▶ The Navajo Nation (Diné Bikéyah) covering about 26,000 square miles (67,339 square kilometers, 17 million acres), occupying all of northeastern Arizona, the southeast portion of Utah, and northwestern New Mexico. It is the largest land area assigned primarily to a Native American jurisdiction within the United States.

The Navajo Nation

- ▶ The 2000 census reported 298,215 Navajo people living throughout the United States, of which 173,987 were within the Navajo Nation boundaries. Of these, 131,166 lived in Arizona (17,512 in Maricopa County, which includes the city of Phoenix).

Drought Experience

- ▶ 1988 Establishment of the Navajo Nation Department of Emergency Management (NDEM) – organization coordinates to response to drought
- ▶ 2003 Development of Navajo Nation Drought Contingency Plan
- ▶ 2004 Aug Drought Declaration by The Navajo Nation President
- ▶ 2006 March Reaffirmation of Drought Declaration by The Navajo Nation President

Although the nation is still considered to be in a “Drought” the declaration has not again been reaffirmed.

Drought Impacts

- ▶ A greater percentage of the Navajo Nation still does not have access to running water or electricity and must still haul water for basic daily need.
- ▶ In more recent years, a greater push has been made to more developing communities to provide such basic needs as water and electricity.
- ▶ 900 windmills and over 5,000 livestock ponds.

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Drought Impacts

For instance, many residents in the Navajo Mountain area need to travel forty miles each way to the Shonto Chapter to get water. It has been estimated that the typical cost of hauling water to Navajo households is \$47 per 1000 gallons (Merchant, 2001). These domestic water haulers pay twenty times more for water than the water users in the surrounding non-Navajo communities. During drought the cost of hauling water can double. And, some residents resort to water from nearby non-potable sources. Even for residents with access to public drinking water systems, the per capita water use is far less than the per capita water use rates of the surrounding communities.

Concerns Regarding Drought & Water Resources

Health

Pollution

Economy

Agriculture

Forest and Rangeland

Livestock and Wildlife

Concerns Regarding Drought & Water Resources

Health

- ▶ Water Shortage, the depletion of drinking water for humans and animals
- ▶ Poor hygiene practices
- ▶ Increase in health problems i.e. allergies, allergies, dehydration, malnutrition, heat strokes, eye infections, sinus infections, lung infections, stress, heart attacks etc.
- ▶ Increase in plague and disease , i.e. hantavirus

Concerns Regarding Drought & Water Resources

Pollution

- ▶ Dust pollution
- ▶ Drying structures, causing instability, fracturing and then trash
- ▶ Noxious plant growth
- ▶ Water quality impacts – increased salt concentration
- ▶ Sanitation issues

Concerns Regarding Drought & Water Resources

Economy

- ▶ Reduction of construction and structural improvements
- ▶ Basic business needs for sanitation ie. Mc Donald's needs water for business
- ▶ Recreational activities – fishing, hunting, camping, etc
- ▶ Tourism – hotel and business needs
- ▶ Utility cost increase

Concerns Regarding Drought & Water Resources

Agriculture

- ▶ Less water, more money for water = higher prices to product.
- ▶ Stress on farmers, less production – less farms.
- ▶ Harder on equipment, more time and more money on replacement and maintenance.

Concerns Regarding Drought & Water Resources

Forest and Rangeland and Livestock and Wildlife

- ▶ Less vegetation – more erosion and runoff
- ▶ Increased forest fires
- ▶ More plague and diseases to wildlife
- ▶ Higher cost of vaccinations and care
- ▶ Infestation to forest i.e.. Bark Beetle, fleas/ticks
- ▶ Poor livestock practices and management due to stress
- ▶ Higher cost of management

2006 - Noticeable Change



Photographs of the stream flow in Wheatfields Creek upstream of Wheatfields Lake in April 2005 (left) and April 2006 (right).