US ERA ARCHIVE DOCUMENT

# Air Quality Challenges Resulting from Climate Change





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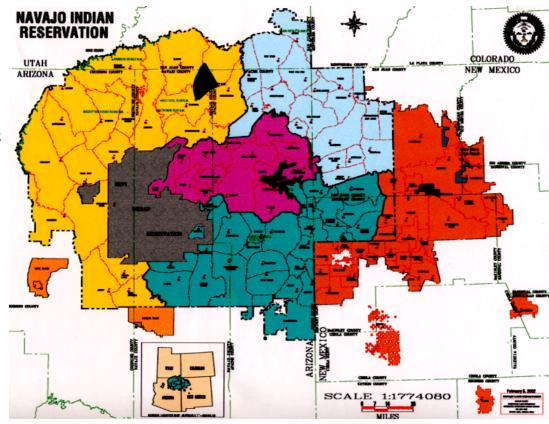
### What is the Navajo Nation?

- > We are a federally recognized tribe.
- We have more than 200,000 tribal members.
- We combine many aspects of modern society with cultural and traditional beliefs
- ➤ We have the largest land base (17.3 million acres).

## The Navajo Nation Land Base

> 27,000 square miles of land in the states of New Mexico, Arizona, & Utah.

- By comparison, the Navajo Nation is larger than the state of West Virginia.
- The majority of the reservation is held in trust by the U.S. Government.



# Who is Navajo Nation EPA?

- > 1972: the Navajo Nation Environmental Protection Commission was established to evaluate/assess human health and environmental impacts of natural resource development.
- > 1995: NNEPA was established as an independent regulatory agency within the Executive Branch of the Navajo Nation Government.
- NNEPA has an Air & Toxics Department, Waste Regulatory Compliance Department, Surface & Groundwater Protection Department, and a Criminal Enforcement Department.

#### Air Quality Program

- > All areas of the Navajo Nation are in attainment for all NAAQS.
- NNEPA currently regulates 14 major source facilities, including two coal-fired power plants.
- NNEPA currently implements the federal level of protections.
- NNEPA is not currently developing regulations for CO2 emissions.

# Navajo Nation CO2 Emissions Sources & Sequestration

- Primary sources of CO2 emissions are the Four Corners Power Plant near Farmington, NM, operated by Arizona Public Service Co.; and the Navajo Generating Station, near Page, AZ, operated by Salt River Project.
- Another large source of CO2 emissions come from automobile exhaust.
- There are no urban areas on the Navajo Nation and most of the area is rural and undeveloped. Forest lands and rangeland vegetation have a mitigating impact, converting CO2 back to Oxygen.



# Carbon Dioxide (CO2) Emissions (2005 – 2006)

	CO2 Emissions	Percentage		
U.S.	7,260.4 MMtCO2e	100%		
Arizona	92.6 MMtCO2e	1.2%		
New Mexico	83 MMtCO2e	1.2%		
Navajo Nation	33 MMtCO2e	0.4%		

## Navajo Nation Challenges

- Finding new and improved ways to use remaining fossil fuels and reduce CO2.
- Maintaining regulatory authority at the two existing power plants; leveraging additional emissions reductions (leases expire).
- > Expanding the Renewable Energy portfolio.
- > Developing meaningful and measurable health data.

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Desert Rock	+9.9 MMtCO2e		Beginning in 2012	

### Navajo Nation Challenges (cont.)

- Developing GHG Emissions Inventory & Navajo Nation specific Air Quality Standards.
- Obtaining/Maintaining a place at the table regarding national Climate Change legislation and policy development.
- Developing and maintaining partnerships with neighboring governments (States and Locals).

#### References

- USEPA Climate Change website; http://www.epa.gov/climatechange/
- Dirty Kilowatts: America's Most Polluting Power Plants; Environmental Integrity Project, July 2007.
- Native Communities and Climate Change: Protecting Tribal Resources as Part of National Climate Policy; University of Colorado Law School, Natural Resources Law Center, September 2007 (Pending Final Review).

#### Thank You for Your Interest

- Mission: with respect for Dine' values, to protect, preserve and enhance public health, welfare and the environment by developing, implementing and enforcing strong environmental laws to foster public awareness, support and cooperation through education and motivation.
- Website: http://www.navajonationepa.org