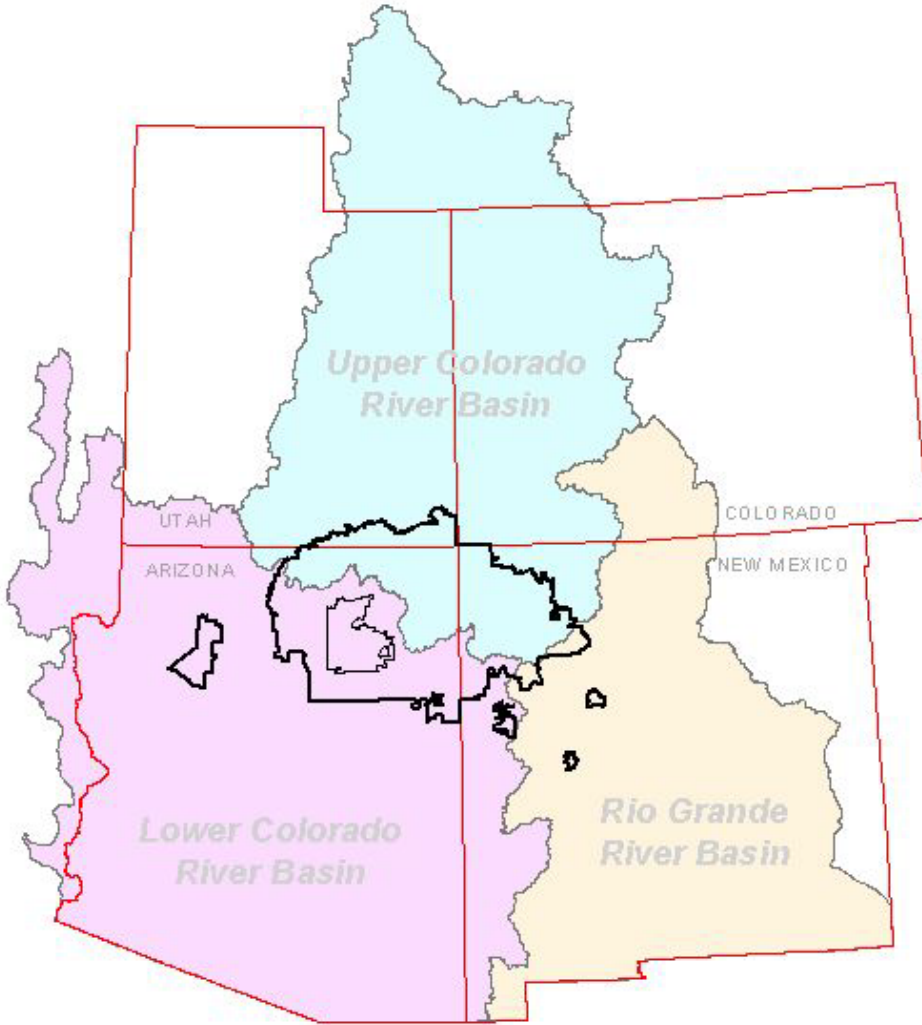


# Water Resources of the Navajo Nation

Closing the Gap between Water Supply and Demand – University of Arizona

April 2014



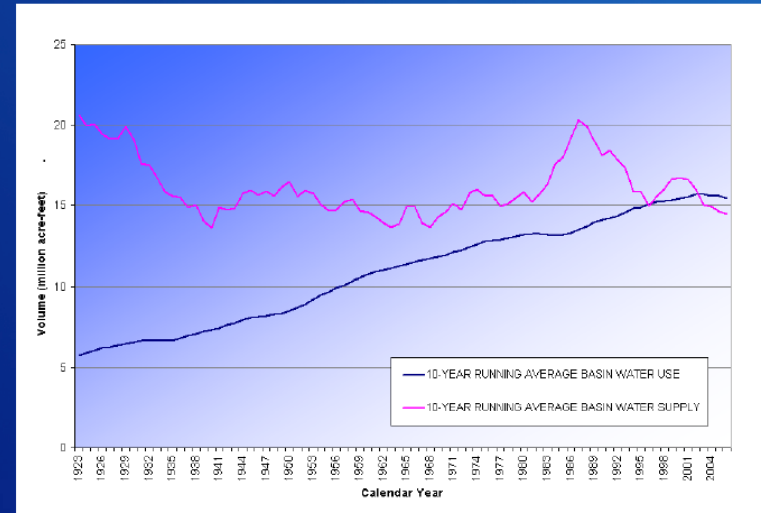
## Navajo Nation Water Use

- Water Supply
- Legal Right to use the Water
- Infrastructure to Convey the Water

# Water Development & Use Issues

- **Quantity**
  - Surface water
  - Groundwater
  - Water Rights
- **Accessibility**
  - Source: Ground Water or Surface Water
  - Permitting
  - Conveyance
  - Land Status & Right-of-Way
- **Reliability**
  - Drought
  - Maintenance
    - Public Water Systems & Wells
    - Livestock Wells & Stock Ponds
    - Irrigation Systems
- **Quality**
  - EPA Standards
- **Funding**
  - To improve quality, accessibility & reliability
  - Bureaucratic Processes
    - Tribal
    - State
    - Federal
      - Trust Responsibility is Subject to Debate

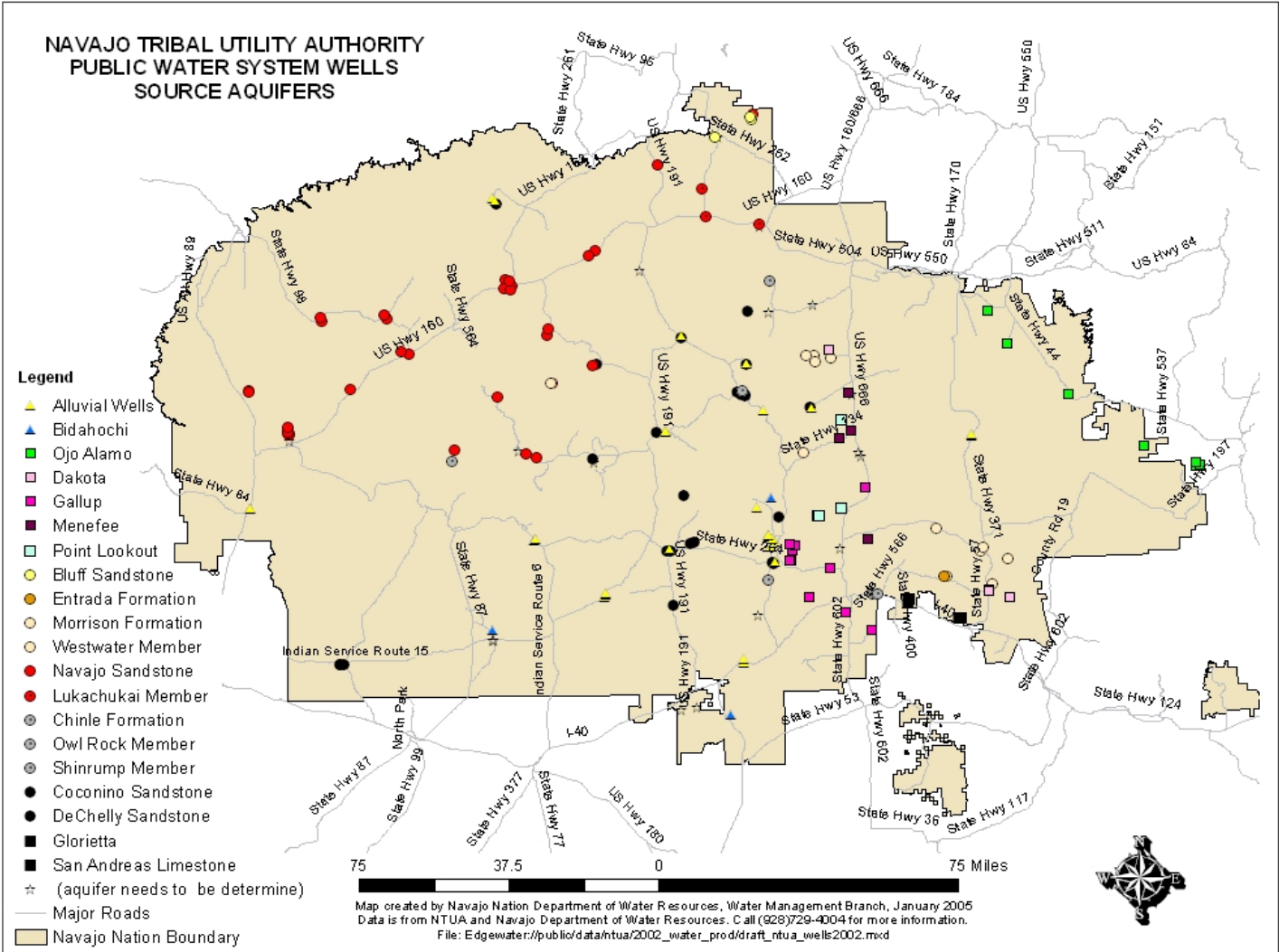
## Colorado River Water Supply and Demand



RECLAMATION



# Current Supplies: More than 90 Percent is Groundwater. The Navajo Nation Needs Access to Surface Water Supplies



# Current and Future Demands

- **Domestic**
  - More than \$600 million in current needs
- **Agricultural**
  - More than \$1 billion needed for various projects
- **Cultural**
  - Important throughout the Navajo Nation
- **Municipal**
  - Many current systems not sized for municipal demands
  - Upgrades are needed for many systems
  - Studies being conducted.
- **Industrial**
  - Major part of economy until other sectors of business can participate
- **other**

# Planning Funding

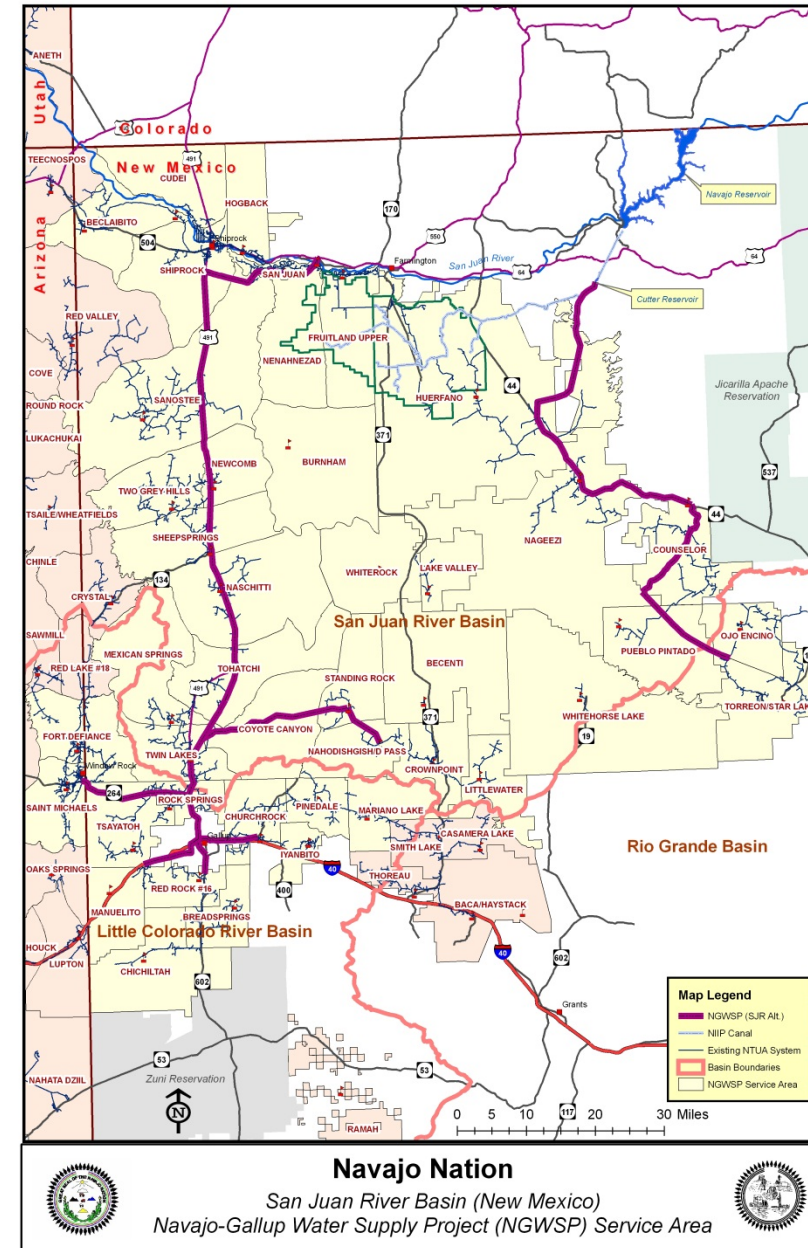
- **Navajo Area Indian Health Service**
  - **Feasibility Reports**
- **Bureau of Indian Affairs**
  - **Water Resource Planning & Predevelopment**
- **Bureau of Reclamation**
  - **Appraisal Studies, Basin Study, etc.**
- **New Mexico**
  - **Tribal Infrastructure Funds, etc.**
- **Arizona**
  - **Water Infrastructure Finance Authority, etc.**
- **Navajo Nation**
  - **General Funds**
- **Other**

# Planning and Design Funding

- Navajo Area Indian Health Service
  - Feasibility Report
- US Bureau of Reclamation
  - Appraisal Study
  - Feasibility Study
- US Department of Agriculture
  - Rural Development
    - Preliminary Engineering Report Reimbursement
- US Army
  - Water Resources Development Act 1999/2000
    - Specific Authorities
- New Mexico
  - Tribal Infrastructure Funds
  - Water Trust Board Funds
- Arizona
  - Water Infrastructure Finance Authority
- Navajo Nation
- Other

# Construction Funding

- **Competitive/Programmatic Annual Appropriations**
  - **Navajo Area Indian Health Service**
    - \$5 to \$10 million per year
  - **US Department of Agriculture**
    - Rural Development
      - Up to \$1 million per chapter
  - **US EPA**
    - Safe Drinking Water Act
    - Clean Water Act
  - **Navajo Nation**
    - General Funds
    - Community Development Block Grant
    - Abandoned Mine Lands
  - **New Mexico**
    - Water Trust Board
    - Tribal Infrastructure Funds
    - Legislative Appropriations
- **Dedicated Appropriations**
  - **Negotiated Water Settlement Projects**







**Navajo Nation Water  
Planning & Development:  
VISION, PLANNING &  
COORDINATION IS KEY!**

Thank you