

**EXHIBIT S**  
Public Meeting Posters



# WELCOME

## TO THE FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT

Public Meetings on the Draft Environmental Impact Statement





# FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT EIS

## NEPA PROCESS AND COMMUNITY INVOLVEMENT

The National Environmental Policy Act (NEPA) requires federal agencies to consider how their proposed actions may impact the environment.

OSMRE has prepared a Draft EIS that evaluates the potential environmental impacts of the Proposed Actions.

Public involvement is a fundamental part of developing an EIS. Your input will help OSMRE make a well-informed decision on the Proposed Actions.

### NEPA Process

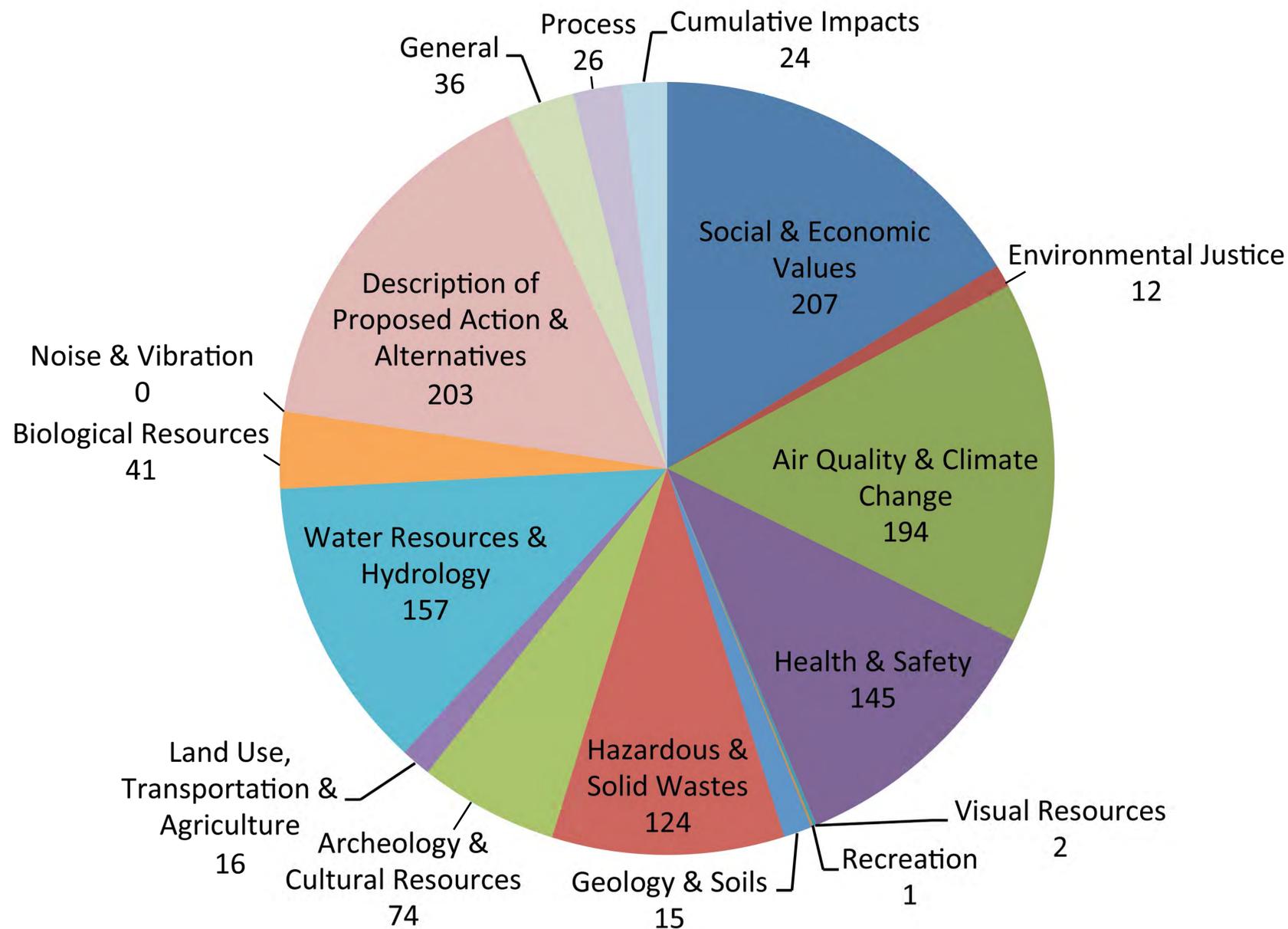
MILESTONE	DESCRIPTION	ANTICIPATED SCHEDULE
Notice of Intent to prepare an EIS	The public involvement phase begins when the Notice of Intent is published in the Federal Register	July 18, 2012
Scoping Period/Scoping Meetings	Involves the public in identifying the environmental issues to be addressed in the EIS <b>Opportunity for Public Review and Comment</b>	July 18 – Nov. 1, 2012
Draft EIS	Presents the analysis of potential environmental impacts for the proposed actions	March 28, 2014
Public Meetings and Comment Period	Provides a minimum of 45 days for the public to comment on the analysis presented in the Draft EIS <b>Opportunity for Public Review and Comment</b>	Comment Period: March 28 – May 27, 2014  Public Meetings: April 30 – May 9, 2014
Final EIS	Updates the Draft EIS and includes responses to all public comments received during the public comment period	Early 2015
30-Day Wait Period	Provides for a 30-day wait period after the Final EIS is published	Spring 2015
Record of Decision	Follows the 30-day wait period Documents the decision made by OSMRE Cooperating agencies will use the EIS to inform their decision-making processes	Spring 2015

- Complete
- In Progress
- Next Steps



# FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT EIS

## SCOPING RESULTS



### COMMENTS RECEIVED BY TOPIC

#### Scoping

- July 18 – Nov. 1, 2012
- Notices placed in 13 local newspapers
- Public Service Announcements sent to 31 local radio stations
- 9 meetings held
- 539 comments received

#### Public Concerns Identified

- Air quality degradation
- Water quality degradation
- Public health concerns
- Support for economic contributions of Four Corners Power Plant and Navajo Mine
- Both support and concern for scoping open house meeting format
- Desire for alternative energy options
- Concern about proximity of transmission lines to sacred sites
- Issues with coal combustion byproduct/residue



# FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT EIS

## ABOUT THE OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT (OSMRE)

### Surface Mining Control and Reclamation Act of 1977 (SMCRA)

SMCRA ensures that coal mining operations are conducted in an environmentally responsible manner. It also ensures that the land is adequately reclaimed during and following the mining process.

**OSMRE's mission is to carry out the requirements of SMCRA in cooperation with States and Tribes.**

#### OSMRE:

- Regulates coal mine reclamation
- Protects the environment
- Provides resources to States and Tribes

**OSMRE is the lead agency in preparing the EIS and has the primary responsibility for complying with the National Environmental Policy Act.**

#### OSMRE is responsible for:

- Approving or denying Navajo Transitional Energy Company's application for a new mine area, known as the Pinabete Permit area
- Approving or denying the Navajo Mine Permit renewal
- Consulting with U.S. Fish and Wildlife Service for potential impacts to threatened and endangered species
- Consulting with State and Tribal Historic Preservation Officers for potential impacts to cultural and historic resources
- Working with cooperating agencies for other regulatory aspects of the EIS
- Informing the public and considering comments in the decision-making process

Since 1977, approximately 23,000 acres of 39,000 acres of coal mining disturbance on Navajo and Hopi lands have been backfilled, graded, top-soiled, and seeded



Passage of SMCRA has facilitated the provision of \$7 billion to States and Tribes to reclaim more than 220,000 acres of abandoned mine lands. (Annual Report 2009)





## COOPERATING AGENCIES ASSISTING IN DEVELOPMENT OF THE EIS



**US Army Corps  
of Engineers**  
Albuquerque District



AGENCY	ROLE
Bureau of Indian Affairs	<ul style="list-style-type: none"> <li>• Approve or disapprove the Arizona Public Service (APS) Lease Amendment No. 3</li> <li>• Approve or disapprove the realignment of portions of Burnham Road</li> <li>• Approve or disapprove the rights-of-way (ROW) renewal for additional access roads</li> <li>• Approve or disapprove ROW renewals for APS and Public Service Company of New Mexico (PNM) transmission lines</li> </ul>
Bureau of Land Management	<ul style="list-style-type: none"> <li>• Issue a decision on the Pinabete Mine Plan to ensure maximum economic recovery of the coal resource</li> <li>• Approve or disapprove ROW renewal for PNM West Mesa transmission line</li> <li>• Consult with OSMRE to identify and evaluate potential impacts to cultural resources under Section 106 of the National Historic Preservation Act (NHPA)</li> </ul>
U.S. Army Corps of Engineers	<ul style="list-style-type: none"> <li>• Approve or disapprove Navajo Transitional Energy Company's (NTEC) application for an individual permit under Section 404 of the Clean Water Act</li> </ul>
U.S. Environmental Protection Agency	<ul style="list-style-type: none"> <li>• Ensure that emissions from the Four Corners Power Plant (FCPP) comply with the Clean Air Act</li> <li>• Approve or disapprove NTEC's application for a new source National Pollutant Discharge Elimination System permit for the Pinabete Permit application under Section 402 of the Clean Water Act</li> </ul>
U.S. Fish and Wildlife Service	<ul style="list-style-type: none"> <li>• Issue a Biological Opinion for federally listed species under Section 7 of the Endangered Species Act (ESA) for the FCPP lease renewal, the renewal of the Navajo Mine's Surface Mining Control and Reclamation Act (SMCRA) permit, the SMCRA permit for the Pinabete Permit area, and for the ROW renewals for the transmission lines</li> </ul>
Navajo Nation	<ul style="list-style-type: none"> <li>• Consult with OSMRE to identify and evaluate potential impacts from all components of the proposal to cultural resources under Section 106 of NHPA</li> <li>• Consult with OSMRE to identify and evaluate potential impacts from all components of the proposal to biological resources under Section 7 of ESA</li> <li>• Issue Clean Water Act Section 401 water quality certification for FCPP and Navajo Mine</li> <li>• Issue Clean Air Act Title V permit for FCPP</li> <li>• Review and comment on SMCRA permit application</li> </ul>
Hopi Tribe	<ul style="list-style-type: none"> <li>• Consult with OSMRE to identify and evaluate potential impacts from transmission line ROW renewals to cultural resources under Section 106 of NHPA</li> <li>• Consult with OSMRE to identify and evaluate potential impacts from transmission line ROW renewals to cultural resources under Section 7 of ESA</li> </ul>
National Park Service	<ul style="list-style-type: none"> <li>• Review potential impacts from FCPP and transmission line renewals to national parks in region</li> <li>• Review ROW renewal for PNM West Mesa transmission line</li> <li>• Consult with OSMRE to identify potential impacts to cultural resources under Section 106 of NHPA</li> </ul>



# FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT EIS

## ABOUT THE FOUR CORNERS POWER PLANT

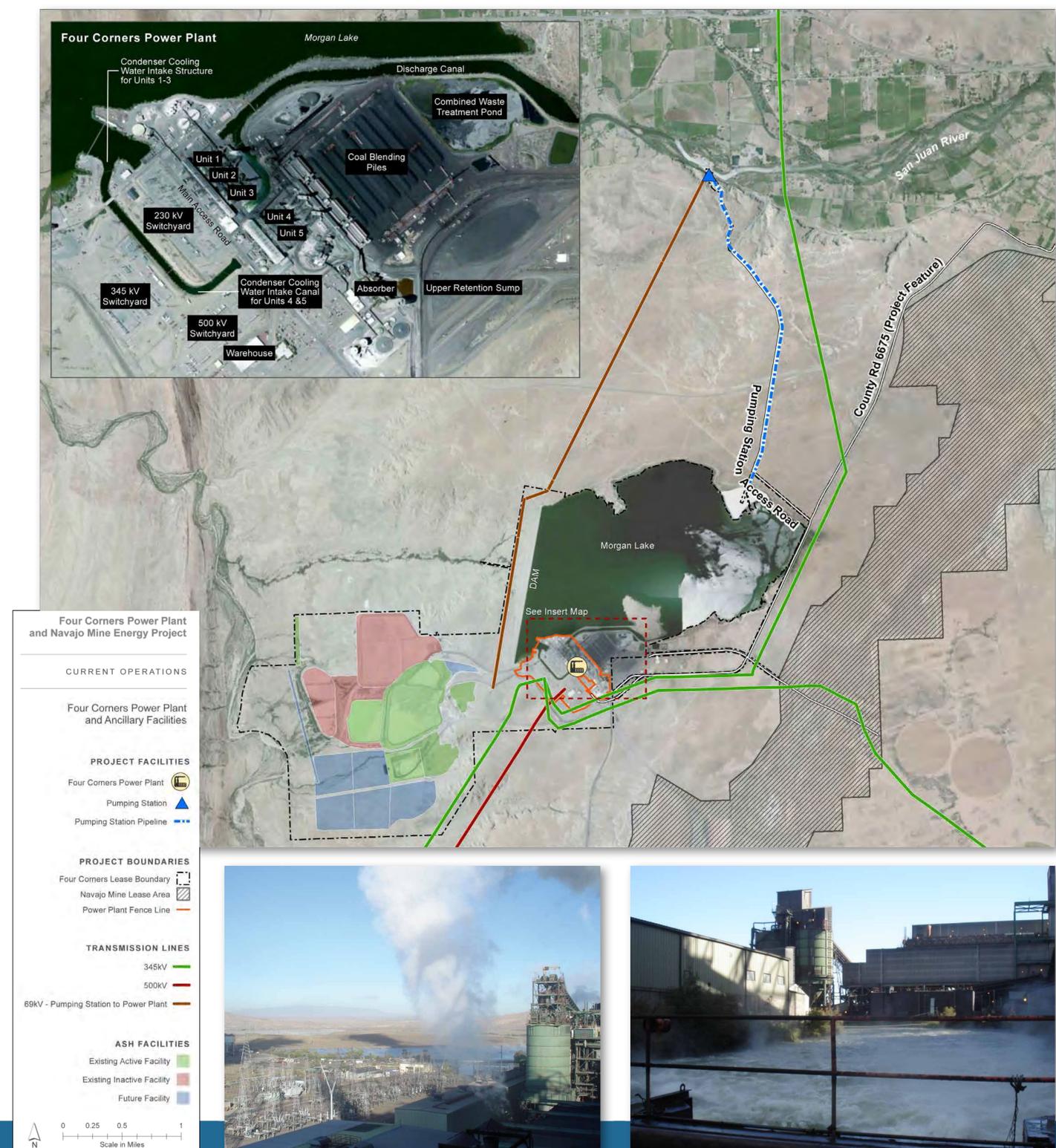
The Four Corners Power Plant (FCPP) is a coal-fire electric generating station located on tribal trust lands in the New Mexico portion of the Navajo Nation. Approximately 80 percent of employees are Native American.

### Pre-2014

- Shut down Units 1, 2, and 3 on December 31, 2013, with the remaining Units generating 1,540 megawatts of electricity
- Provided power to more than 500,000 homes in the southwestern United States

### Post-2014

- Southern California Edison (SCE) divests its interest in FCPP
- Arizona Public Service purchases SCE and El Paso Electric Company interest in Units 4 and 5
- Units 4 and 5 continue to operate, generating 1,540 megawatts of electricity
- Selective catalytic reduction devices are installed on Units 4 and 5 by July 31, 2018





# FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT EIS

## ABOUT THE NAVAJO COAL MINE

- The coal mine is used solely for the Four Corners Power Plant
- Coal is transported to the power plant via a dedicated rail system
- Approximately 5.8 million tons of coal is mined annually
- The mine provides over 500 jobs, and approximately 79 percent of employees are Native American

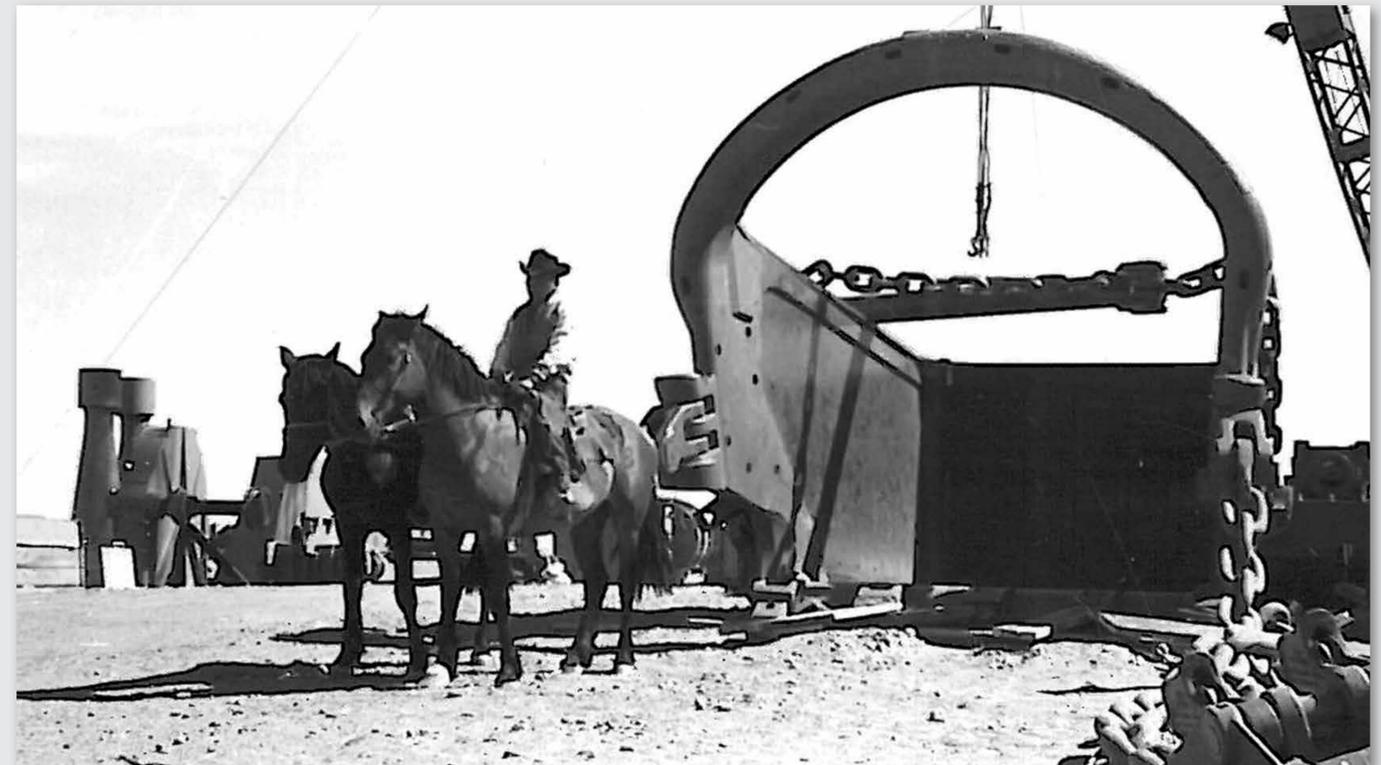
## NTEC Purchase of Navajo Mine

- Late in 2013, Navajo Transitional Energy Company (NTEC), a Navajo Nation entity, purchased Navajo Mine from BHP Navajo Coal Company (BNCC)
- Early in 2014, the Surface Mining Control and Reclamation Act permit was transferred to NTEC, and BNCC's role was modified to become NTEC's contract miner; BNCC was renamed BHP Billiton Mine Management Company

## Development of Pinabete Area

- In spring 2012, BNCC submitted an application to OSMRE to develop a new 5,569-acre mine area within the existing Navajo Mine Lease area
- This new area is referred to as the Pinabete Permit area
- Proposed mining operations, including ancillary facilities, would disturb up to 4,104 acres of the 5,569-acre proposed Pinabete Permit area
- The new mine area would supply low-sulfur coal for up to 25 years, at a rate of approximately 5.8 million tons per year

In July 1957, the Navajo Nation granted a mining lease to Utah Construction & Mining Company, which as amended is 33,600 acres.



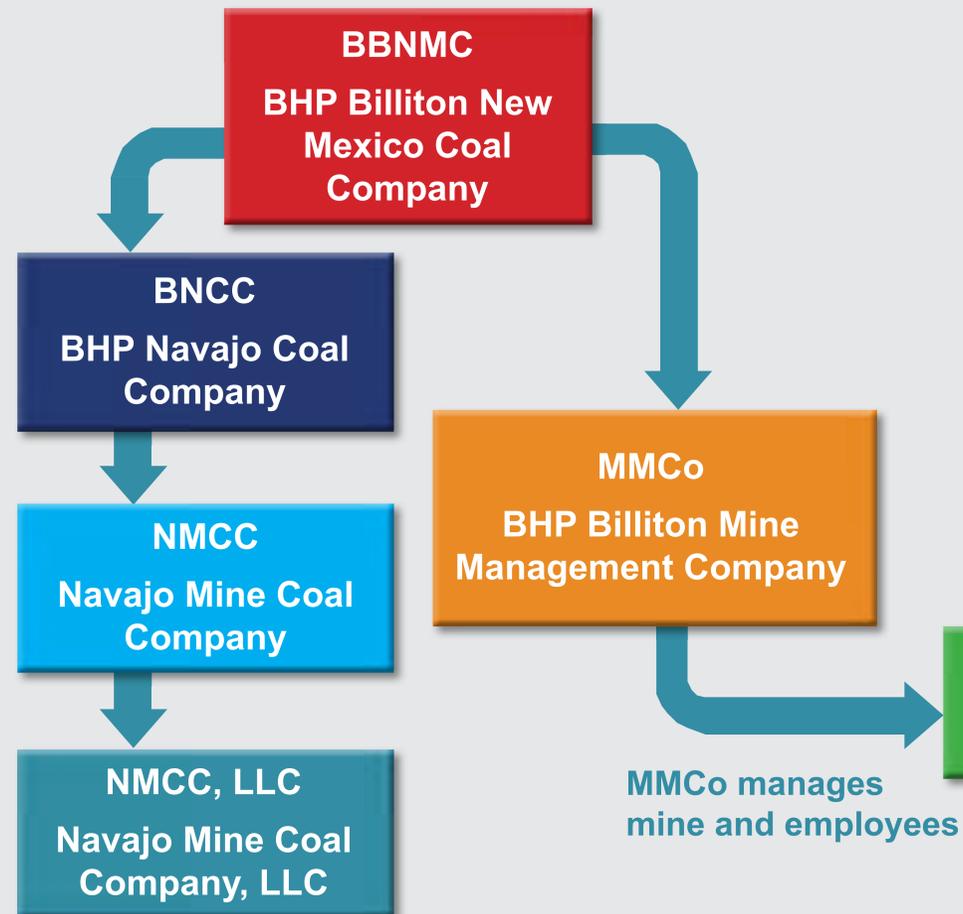


# FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT EIS

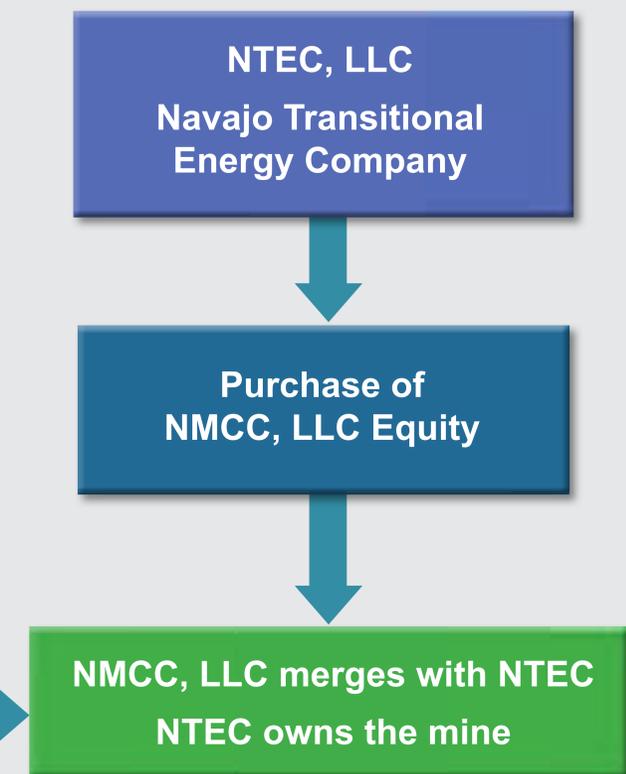
## NAVAJO MINE PERMIT TRANSFER AND MINE SALE

- OSMRE conditionally approved the transfer of the mining and reclamation permit for the Navajo Mine from BNCC to NTEC on November 1, 2013. The permit was issued to NTEC on February 4, 2014, after all conditions were met
- Sale of Navajo Mine from BBNMC to NTEC completed December 2013
- NTEC owns the mine and is the permittee for the mine, with MMCo serving in the role of NTEC's contract miner
- Change in mine ownership and management used as Post-2014 baseline condition
- Project applicant for new Pinabete Permit and Navajo Mine Permit renewal is NTEC

### BHP Billiton New Mexico Coal



### Navajo Nation forms NTEC, April 2013





# FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT EIS

## SUMMARY OF COAL RESOURCE AREA RECLAMATION

RESOURCE AREA	DISTURBED/RECLAIMED AREA (acres)*	MINING PERIOD	COMMENT
I	4,078/3,614	1960s-1970s	All pits inactive and reclaimed
II	5,179/2,917	1970s-present	Portions of Hosteen and Yazzie pits kept as contingency reserves; will be mined prior to final reclamation in 2017
III	3,730/1,434	1980s-present	Lowe and Dixon pits still active; mining will continue in Dixon pit until approximately 2018, depending upon customer needs
IV North	268	2012-present	Approximately 268 acres mined
IV South			Not currently permitted; no mining has occurred
V			Not currently permitted; no mining has occurred

\*Acreage represent mining and disturbance land status as of July 2011.

Prior to purchase of the mine by NTEC, BNCC submitted a request for permit revision to change the rates of coal mining and therefore reclamation under the existing permit to reflect the shutdown of Four Corners Power Plant Units 1, 2, and 3.



Photo of the San Juan Mine demonstrates reclamation areas being recontoured to blend with native topography. Arrow 1 shows the pit outline being backfilled. Arrow 2 shows the backfilled area reestablishing connection with native topography. Arrow 3 shows completed contouring.

(Source: BNCC)





# FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT EIS

## PROPOSED ACTIONS AND ALTERNATIVES

The purpose of the Proposed Actions is to facilitate ongoing operations at the Four Corners Power Plant (FCPP) and on Navajo Transitional Energy Company's (NTEC) Navajo Mine Lease. The project need is to provide for long-term, reliable, uninterrupted base load electrical power to customers in the southwestern United States using a reliable and readily available fuel source.

### Alternative A – Proposed Action

- Approval of the FCPP Lease Amendment No. 3 for continued operation through 2041
- Renewal of existing rights-of-way for continued operation and maintenance of four transmission lines, which are set to expire by 2018
- Renewal of the existing Surface Mining Control and Reclamation Act (SMCRA) permit for Areas I, II, III and portions of Area IV North for five years beginning in 2014
- Approval of the 5,569-acre Pinabete Mine Plan SMCRA permit application for Areas IV North and IV South, with proposed mining disturbance in approximately 4,104 acres

### Alternative B – Navajo Mine Extension Project Mine Plan

- NTEC would seek a 5,412-acre SMCRA permit in Areas IV South and V, with proposed mining disturbance in approximately 4,998 acres. All other components of the Proposed Action would be included in this alternative

### Alternative C – Alternative Pinabete Mine Plan

- NTEC would seek a 10,094-acre SMCRA permit in Areas IV North and IV South, with proposed mining disturbance in approximately 6,492 acres. All other components of the Proposed Action would be included in this alternative

### Alternative D – Alternate Ash Disposal Area Configuratio

- Arizona Public Service would construct a single 350-acre “super cell” dry fly ash disposal area at FCPP. Construction of this would eliminate the number of impoundment walls and roads through the disposal area. All other components of the Proposed Action would be included in this alternative

### Alternative E – No Action Alternative

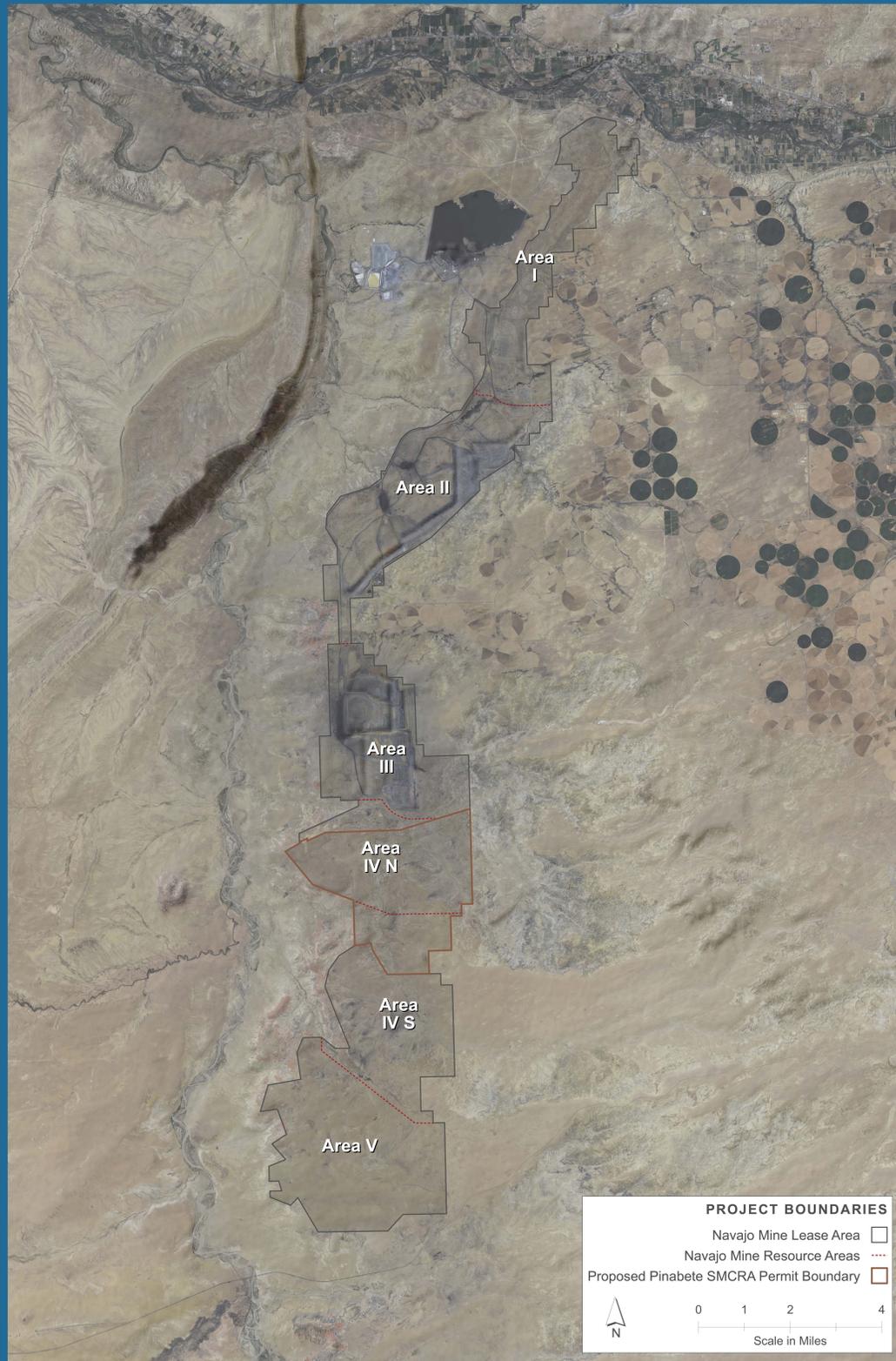
- Under the No Action Alternative, none of the components of the Proposed Action, or the other action alternatives would be implemented. As a result, operation of the FCPP and Navajo Mine would cease. Navajo Mine would be reclaimed as required by the existing Navajo Mine SMCRA permit, and FCPP would be decommissioned



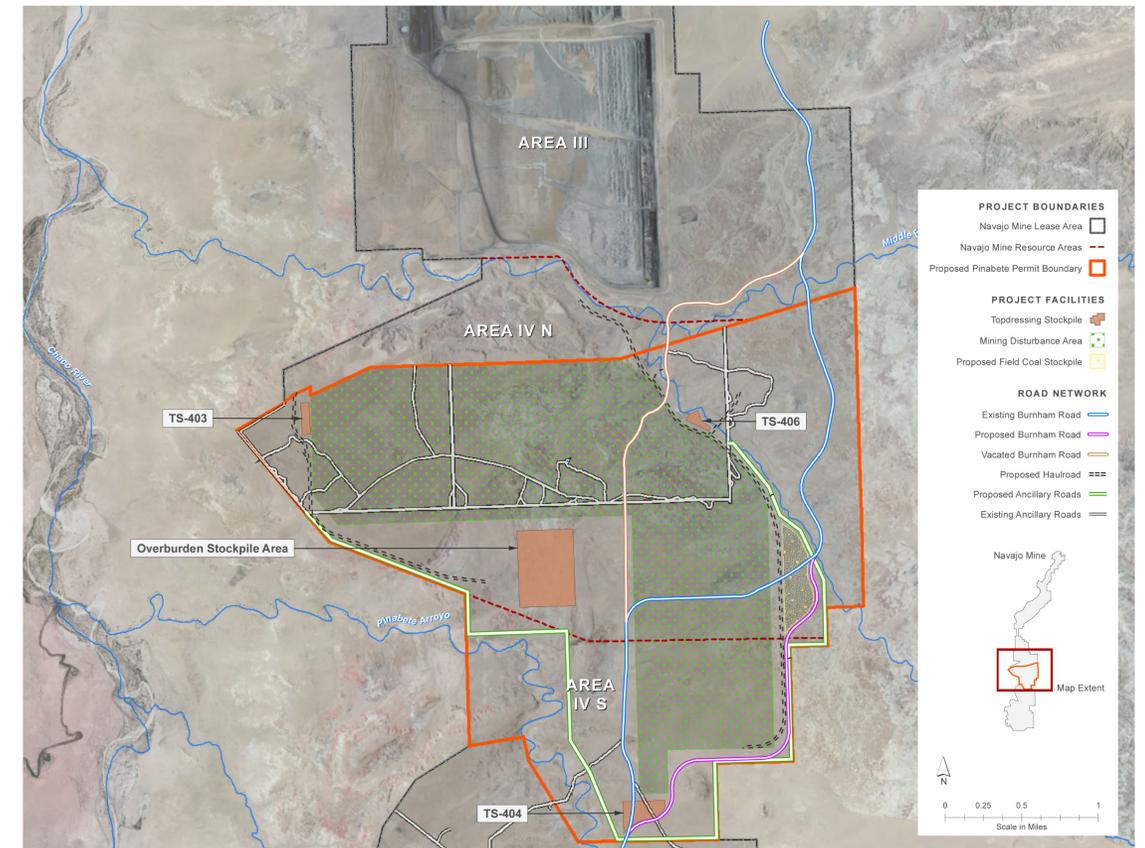


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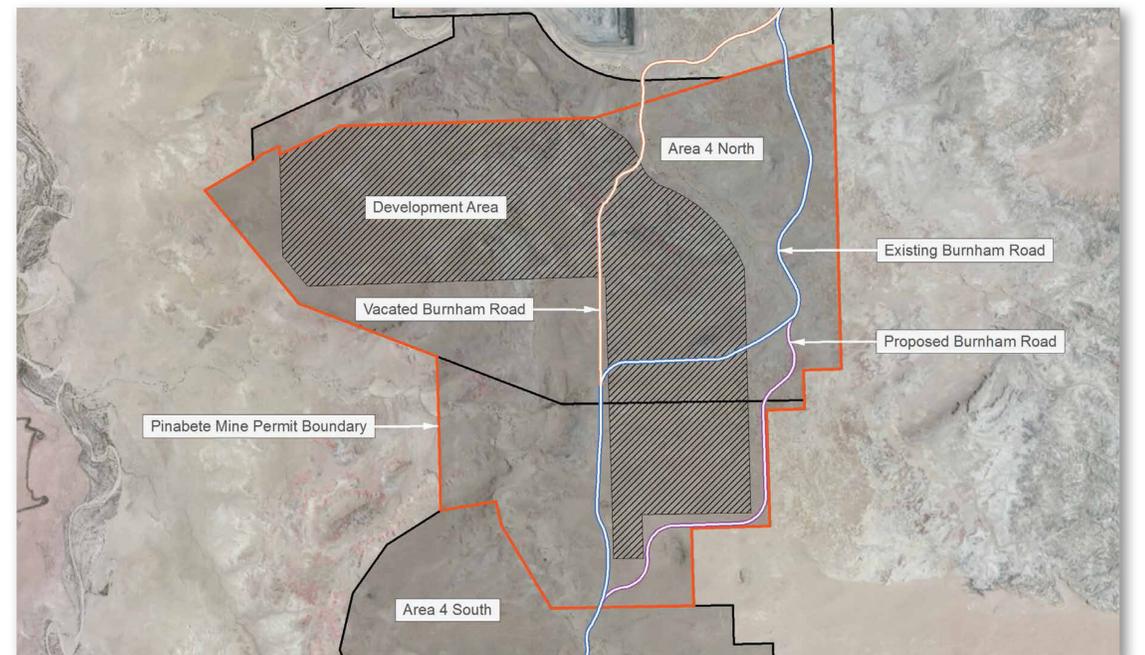
## Navajo Mine Lease Area



## Proposed Pinabete Development Area



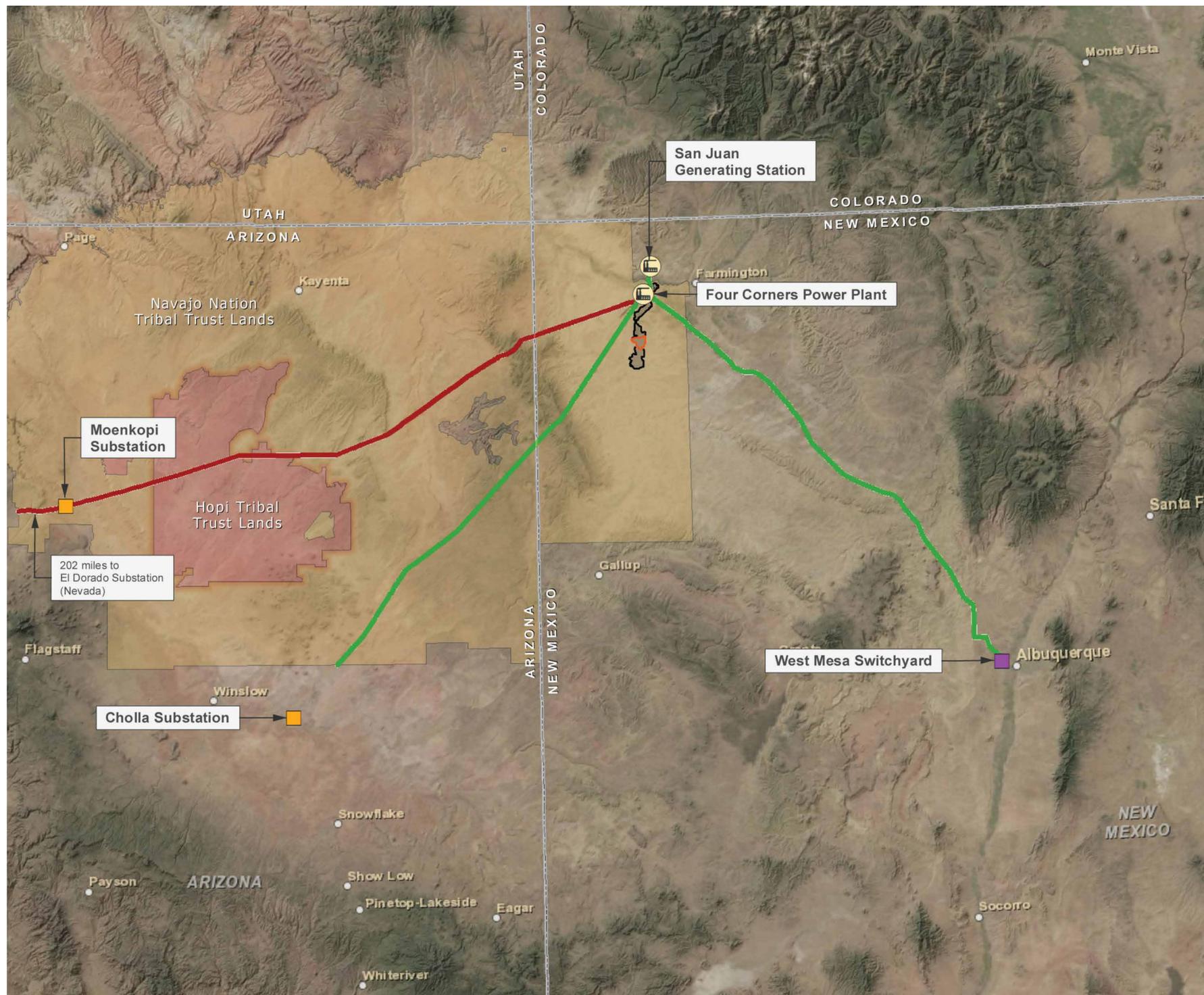
## Burnham Road Realignment



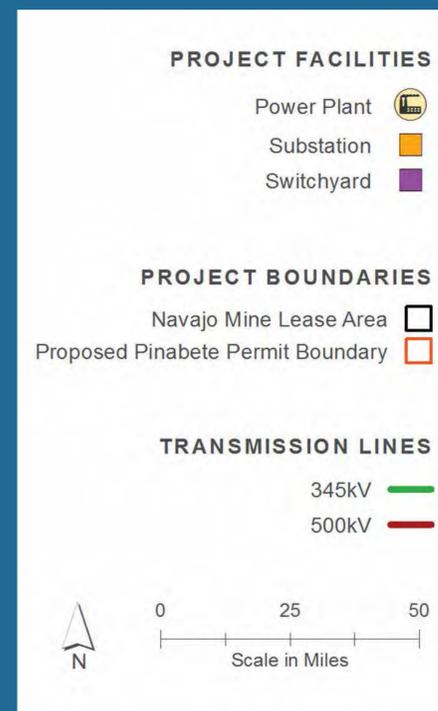


# Four Corners Power Plant and Navajo Mine Energy Project EIS

## Project Transmission Lines



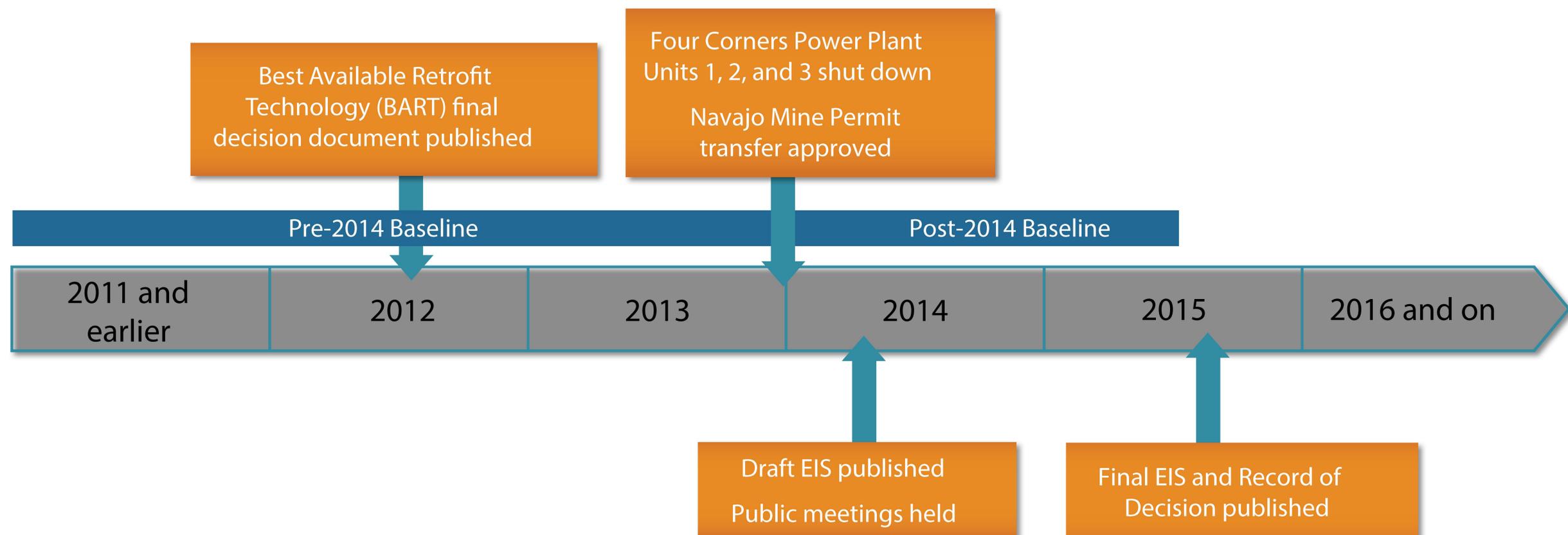
- Existing transmission lines rights-of-way renewals needed within the next five years
- Transmission line operations are dependent on the Four Corners Power Plant
- Operations and maintenance activities would not change from current conditions





# FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT EIS

## EIS BASELINE



- The baseline is the existing environmental condition for a specified time period prior to the project
- Changing conditions or environmental impairments that may result from project alternatives are compared to the baseline condition throughout the EIS analysis
- The baseline condition for this EIS is divided into two sections (Pre-2014 and Post-2014)
- The analysis considers the effects of continuing operations compared to environmental benchmarks

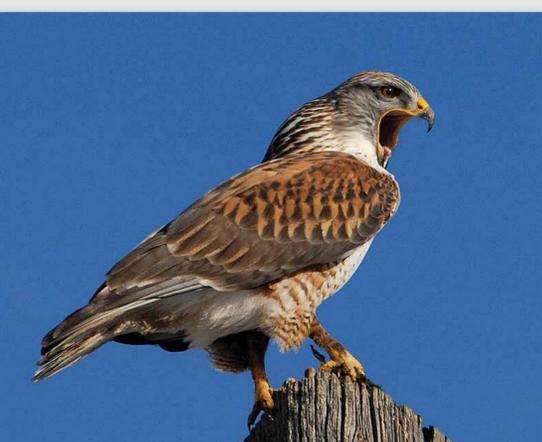


# FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT EIS

## ENVIRONMENTAL RESOURCES

The Draft EIS addresses environmental impacts to the following resources:

- Air Quality
- Climate Change
- Earth Resources
- Cultural Resources
- Water Resources/  
Hydrology
- Vegetation
- Wildlife and Habitats
- Special Status Species
- Land Use and  
Transportation
- Socioeconomics
- Environmental Justice
- Indian Trust Assets
- Visual Resources
- Noise and Vibration
- Hazardous and  
Solid Wastes
- Recreation
- Health and Safety





# FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT EIS

## AIR QUALITY AND CLIMATE CHANGE

### Clean Air Act

Air pollution affects visibility. Regional haze is produced by a multitude of sources and activities located across a broad geographic area. Power plant operations impact air quality and contribute to regional haze.

In the 1990 Clean Air Act Amendments, Congress set a national goal of restoring visibility at national parks and wilderness areas to natural conditions. In response, the U.S. Environmental Protection Agency (EPA) issued regulations to improve visibility in national parks and wilderness areas.

Stationary pollution sources such as power plants that were built between 1962 and 1977 are required to install and operate Best Available Retrofit Technology (BART) to reduce pollutants that impact visibility.

### Impact Analysis

- The Four Corners Power Plant (FCPP) and Navajo Mine emit greenhouse gases, and therefore, contribute incrementally to climate change; however, these emissions comprise less than 1 percent of the U.S. greenhouse gas inventory and the national electric power sector
- Stationary source emissions from the FCPP would not result in exceedances of National Ambient Air Quality Standards for the action alternatives. No stationary source emissions would occur under the No Action Alternative (FCPP would shut down)

**The closure of Units 1, 2, and 3, and installation of additional pollution controls on Units 4 and 5 would reduce:**

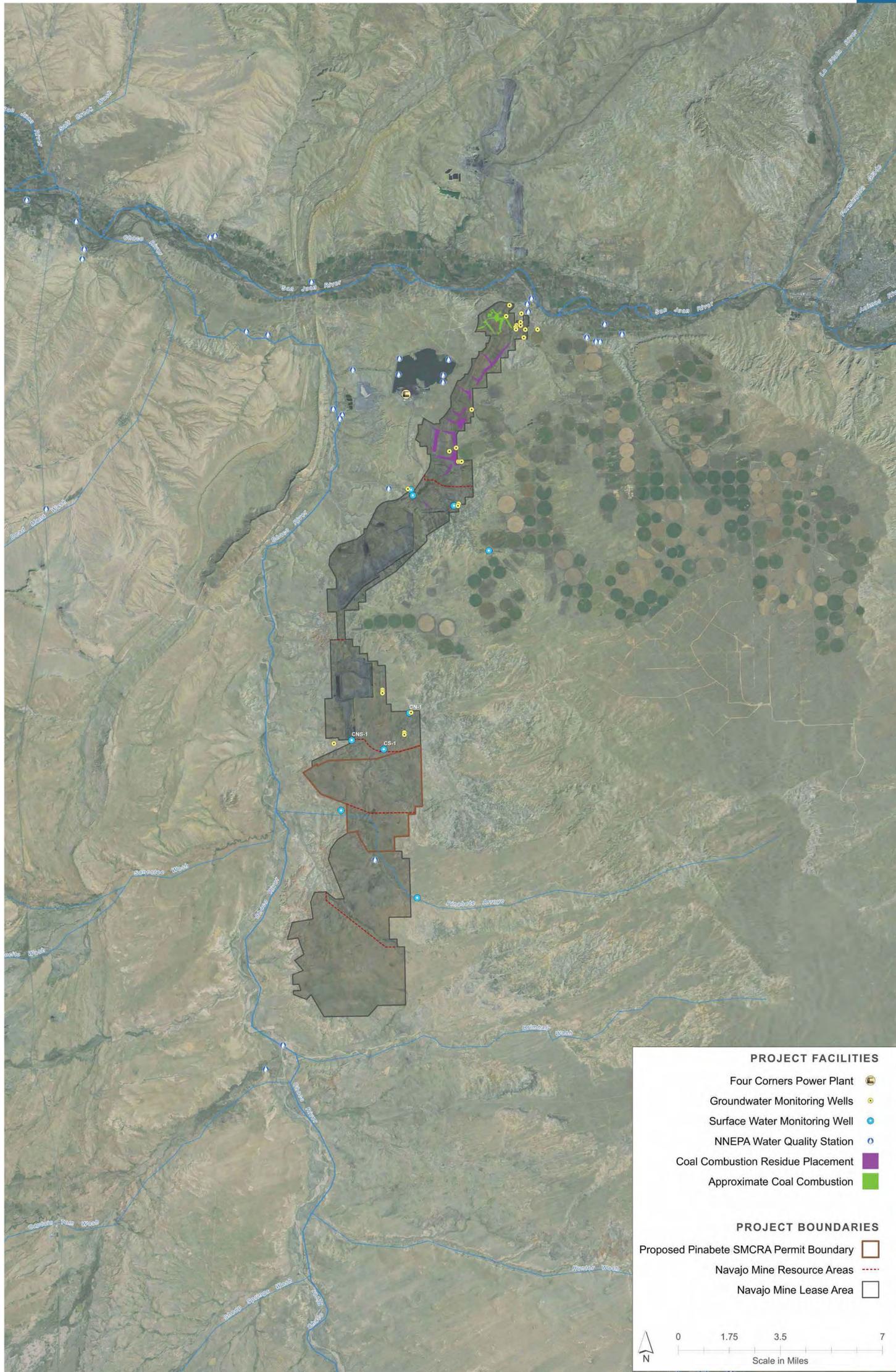
- Nitrogen oxides by 86%
- Mercury by 61%
- Particulates by 43%
- Carbon dioxide by 30%
- Sulfur dioxide by 24%
- Greenhouse gases by 26%





# FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT EIS

## Water Quality



- Evaluation compared surface water and groundwater quality data upstream and downstream of project facilities to regulatory standards
- Best management practices for sediment control and stormwater would protect surface water quality
- Deposition of mercury and selenium into San Juan Watershed from Four Corners Power Plant emissions would be reduced from baseline conditions
- Impacts to waters of the United States at the Navajo Mine are being addressed through a Clean Water Act Section 404 Permit with the U.S. Army Corps of Engineers



# FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT EIS

## PUBLIC HEALTH AND HAZARDOUS AND SOLID WASTE

### Coal Combustion Residue (CCR) Placement

CCR is not currently considered hazardous waste. The U.S. Environmental Protection Agency (EPA) is currently considering changes to its regulatory status.

**CCR was used during reclamation at Navajo Mine until 2008:**

- Potential impacts of placement of CCRs at Navajo Mine were concluded to be minor. The EPA's proposed CCR rule would not be applicable to Tribal lands

**CCR from Units 4 and 5 was placed in lined ash impoundments and dry fly ash disposal areas on the Four Corners Power Plant (FCPP)**

**Lease area:**

- EPA inspection of the existing impoundments found they met standards

**To reconcile EPA's pending requirements with tribal lands, OSMRE recommends that the new dry fly ash disposal areas be constructed to meet municipal landfill standards**



### Ammonia Transportation and Storage

Ammonia is required for use in the selective catalytic reduction (SCR) on Units 4 and 5.

**Three options for ammonia were evaluated:**

- Anhydrous ammonia (gaseous form)
- Liquid ammonia (liquid form)
- Urea (solid form)

**The evaluation concluded that using urea resulted in the least risk of accidental release during transportation or during use at FCPP. Therefore, OSMRE recommends the use of urea for operating SCR on Units 4 and 5.**



# FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT EIS

## THREATENED, ENDANGERED, AND SENSITIVE SPECIES

- OSMRE is evaluating potential impacts on sensitive species\* in coordination with the U.S. Fish and Wildlife Service (USFWS), Navajo Nation, Hopi Tribe, and Bureau of Land Management (BLM). This includes Section 7 consultation under the Endangered Species Act and assessing impacts to species protected under the Bald and Golden Eagle Act and Migratory Bird Treaty Act
- OSMRE and USFWS are using regional air deposition and fate and transport models to evaluate ecological impacts to riverine species
- The Navajo Nation, Hopi Tribe, BLM, and USFWS will issue their findings regarding the impacts on sensitive species under their responsibility
- Monitoring of ongoing impacts of mine operations will be required under the Surface Mining Control and Reclamation Act

\*Sensitive species include those listed or candidates for listing under federal or state Endangered Species Acts, species identified as culturally important by the Navajo Nation or Hopi Tribe, or those included on BLM's sensitive species list.

- There are 32 sensitive species potentially present in the project area
- There are no significant impacts identified from project action
- Risk associated with some metals under baseline and future conditions have been identified

### Representative species include:





# FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT EIS

## SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

The Draft EIS analyzes how environmental impacts from the Proposed Actions would affect socioeconomics.

Socioeconomics is a broad discipline and includes topics such as employment, household income, business output, property values and disadvantaged populations.

Environmental justice studies are part of the larger socioeconomic analyses in the National Environmental Policy Act process and examine the potential for disproportionate impacts to minority and low-income populations.

- The economic contributions of the Four Corners Power Plant (FCPP) and Navajo Mine were estimated in an economic impact analysis prepared by Arizona State University
- Levels of economic activity at the FCPP and Navajo Mine would decrease as a result of Best Available Retrofit Technology (BART) compliance (shutdown of Units 1, 2, and 3 and associated reduction in coal demand); the Proposed Action would not affect this baseline
- Social and economic well-being could be altered as a result of BART compliance and Navajo Transitional Energy Company's (NTEC) purchase of the mine; the Proposed Action would not affect this baseline
- Purchase of the mine by NTEC could lead to increased revenue to the Navajo Nation; the Proposed Action would not affect this baseline
- No significant disproportionate impacts have been identified





# FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT EIS

## CULTURAL RESOURCES

Section 106 of the National Historic Preservation Act of 1966 requires federal agencies to take into account the effects of proposed actions on historic properties listed on or eligible for listing on the National Register of Historic Places.

Potential impacts were analyzed in three groups: archaeological resources, historic resources, and properties of religious and cultural significance (including Traditional Cultural Properties).

**As part of the proposed project, two Programmatic Agreements (PAs) are being developed that define mitigation for adverse effects on historic properties:**

- One PA will address effects on the historic properties within the Navajo Mine Lease area
- The other PA will cover historic properties within the area of potential effect for the transmission lines and Four Corners Power Plant





# FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT EIS

## TRADITIONAL CULTURAL PROPERTIES

**Traditional Cultural Properties (TCPs) are locations with significance to the beliefs, customs and/or practices of a living community.**

TCPs are defined by their importance in maintaining a community's cultural identity.

They include places associated with religious, spiritual, ceremonial, medicinal, or subsistence practices, customs, or beliefs. Examples include:

- Rock imagery
- Rock alignments
- Stone circles
- Cairns
- Natural topographic features
- Material source areas, or
- Areas with no distinguishing characteristics

**TCPs are generally considered eligible for the National Register of Historic Places if they are associated with cultural practices or beliefs:**

- Rooted in a community's history
- Important in maintaining the cultural identity of a community that form the basis of their traditional function within, and perpetual importance to, the cultures of living communities

