

# Black Mesa Pumped Storage Project (BMPSP)



Tó Nizhóní Ání
"Sacred Water Speaks"
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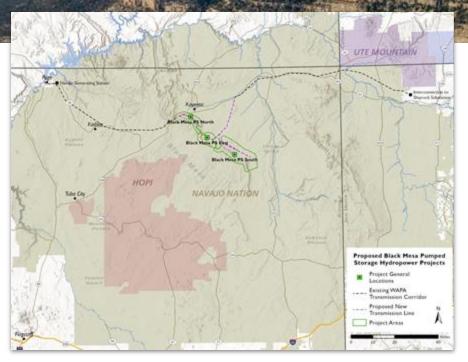
**Applicant:** Nature & People First - Arizona

Filing Date: November 7, 2022 (P-15233-000)

**Federal Agency:** Federal Energy Regulatory Commission (FERC)

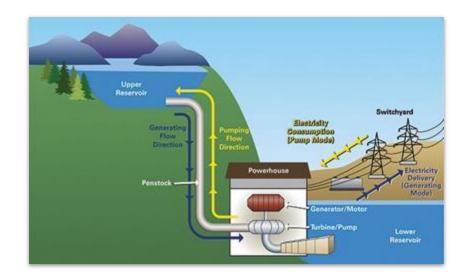
**Location:** Navajo Nation (3 miles south of Kayenta)

**Duration:** 100 years



The Black Mesa Pumped Storage Project (BMPSP) is a pumped storage hydropower project proposed by Nature & People First. This energy development company wants to build three "Pumped Storage" energy projects along the northeastern edge of Black Mesa which would require 450,000 acre-feet of Navajo water.

# What is a Pumped Storage energy project?



These pumped storage projects would pump water uphill to newly constructed reservoirs atop Black Mesa when electricity prices are low and generate electricity and revenue from return flows to

reservoirs below the mesa when prices are higher.

Pumped storage hydropower (PSH) is a type of hydroelectric energy storage. It is a configuration of two water reservoirs at

different elevations that can generate power as water moves

into the upper reservoir (recharge).

down from one reservoir to the other (discharge), passing through a turbine. The system also requires power as it pumps water back

Map by: Southwest Research Institute

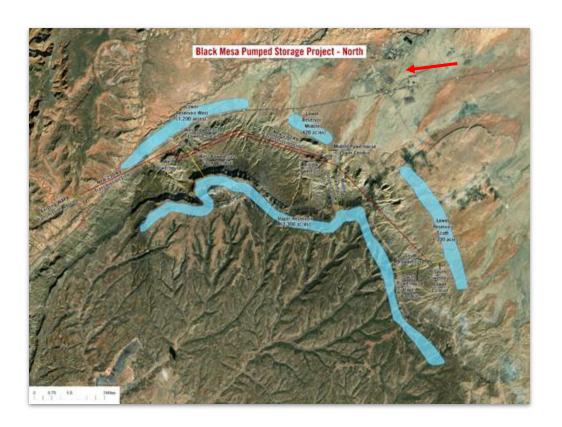
Website: https://www.swri.org/technology-today/capturing-wind-saving-sunshine



The Black Mesa Pumped Storage
Project is three projects identified
as:

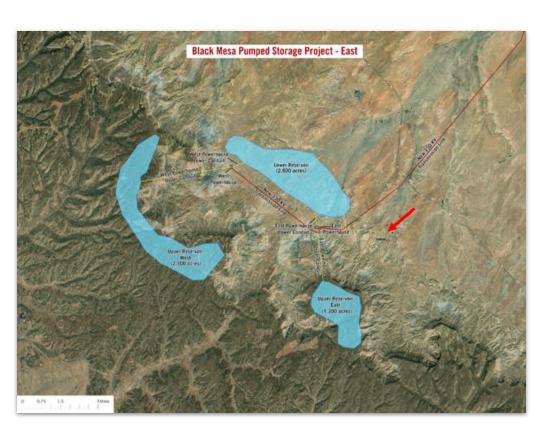
- North Project
- East Project
- South Project

## **BMPSP North**



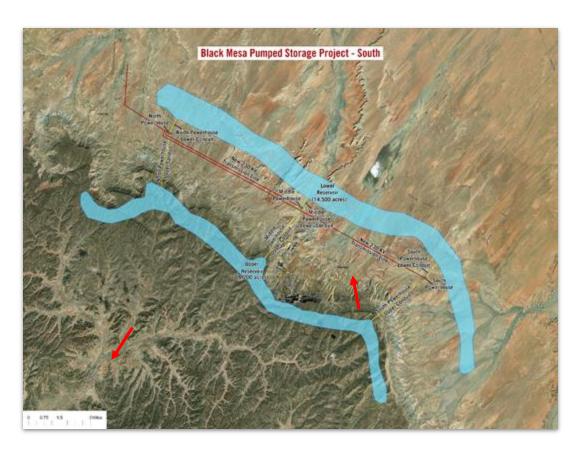
- Adjacent Community/Town: Kayenta
- 4 reservoirs
  - Upper west
  - Lower west
  - Lower middle
  - Lower south
- 65 billion gallons (100,000 AF) of water
- Source of water:
  - Colorado River
  - o San Juan River
  - o and/or local aquifers
- 3 powerhouses
  - o West + Middle + North with 3 turbine-generator units each
- 5 miles of tunnels and conduits
- 80 miles of transmission lines
- Navajo Generating or Powell Glen Canyon substations
- 4,928 GWH annual power generation

## **BMPSP East**



- Adjacent Community/Town: Chilchinbito
- 3 reservoirs
- Upper West
- Upper East
- Lower
- 65 billion gallons (100,000 AF) of water
- Source of water from:
- Colorado River
  - o San Juan River
  - o and/or local aquifers
- 2 powerhouses:
- West and Middle with 3 turbine-generator units each
- 6 miles of tunnels and conduits
- 110 miles of transmission lines
- Shiprock substation
- 3,285 GWH annual power generation

## **BMPSP South**



- Adjacent Community/Town: Rough Rock,
   Black Mesa/Kitsilii Chapter
- 2 reservoirs:
  - Upper
  - Lower
- 81 billion gallons (250,000 AF) of water
- Source of water from:
  - Colorado River
  - San Juan River
  - and/or local aquifers
- 3 powerhouses:
- North, Middle, and South with 3 turbinegenerator units each
- 10 miles of tunnels and conduits
- 110 miles of transmission lines
- San Juan substations
- 4,028 GWH annual power generation



## **Our Concerns with this Project**

- Dangerous use of water
- The water source is **not**identified
- 3. Water evaporation
- Lack of CommunityConsultation/Consent
- 5. Land & Wildlife Impacts



## All 3 Projects combined would require:

**450,000 acre-feet of water** (nearly 127 billion gallons) initially:

- Water source mentioned in The preliminary permits mention the following water sources: permits: Black Mesa groundwater and/or the Colorado River and San Juan River.
- 9 reservoirs on/near Black Mesa totaling 35,720 acres.
- Additional 8,000 acre-feet of water is estimated to be required each year after project completion



## All 3 Projects combined would require:

**30-40 miles** of Black Mesa's north and northeastern edge would be **industrialized** with:

- Reservoirs
- Pump stations
- Generators
- Roads
- Water
- Electric lines



## This project would destroy:

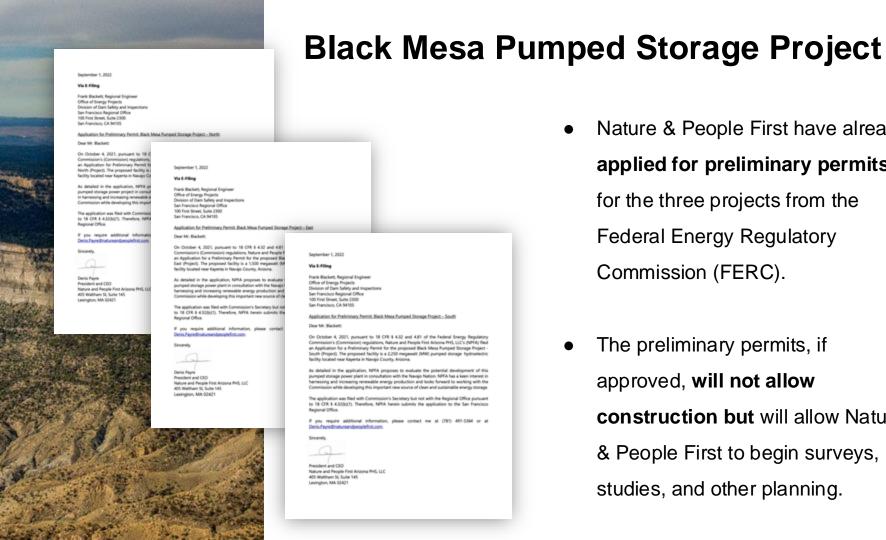
- Aquifers and spring productivity groundwater withdrawals
- Traditional land uses
- Endangered Mexican Spotted Owl habitats
- Geological stability due to overdraft of aquifers
- Impact endangered species like the Navajo
   Sedge & Colorado Pikeminnows

# Navajo Water Facts



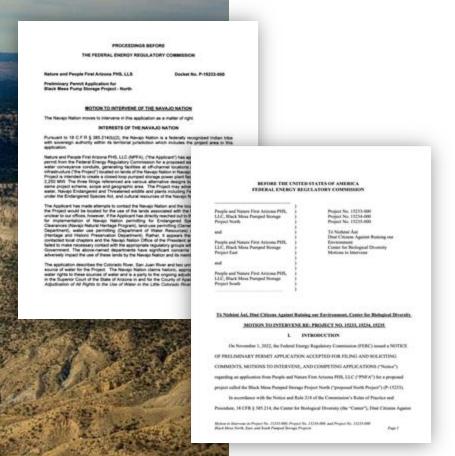
Photo By: Wheatfield Lakeside Store Facebook Page

- 450,000 acre-feet = nearly 127 billion gallons
  - Over 2 billion 55 Gallon Barrels
- Wheatfields Lake has only 4,500 acre-feet of water and covers 315 acres.
  - 100x Wheatfields Lake
- Total industrial withdrawals from the Navajo aquifer from 1965-2018 from the Black Mesa area, 154,800 acre-feet.
  - 3 x Coal Mining Impacts



Nature & People First have already applied for preliminary permits for the three projects from the Federal Energy Regulatory Commission (FERC).

The preliminary permits, if approved, will not allow construction but will allow Nature & People First to begin surveys, studies, and other planning.



 Nature & People First is asking for these federal permits before consulting with or obtaining the consent of impacted communities on and near Black Mesa.

 The Navajo Nation Department of Justice, Grand Canyon Trust, Tó Nizhóní Ání, Diné C.A.R.E, and Center for Biological Diversity filed a motion with FERC opposing the project.

### RESOLUTION OF THE CHAPTER

SUPPORTING LOCAL RESIDENTS AND TRADITIONAL LAND USERS OF BLACK MESA OPPOSING THE PROPOSAL FUNDING, AND DEVELOPMENT OF THE WORTH, EAST, AND SOUTH BLACK MESA FUNDING STORAGE PROJECTS

### WHEREAS

- The \_\_\_\_\_\_Chapter is a recognized chapter of the Navejo Nation Government, pursuant to Nevejo Netional Council Resolution CAP-34-96, known as the Nevejo Nation Local Governments Act and herein codified in Title Twenty-six (35) of the Navejo Nation Code: each
- Title Twenty-six (26) of the Newgo Nation Code allows \_\_\_\_\_ Chapter to make decisions over local matters; and
- The \_\_\_\_\_ Chapter exports traditional land use on Black Mesa consistent with the health of land, longitis, non-human relatives, and Mahassibiler doo Yadihir Sitappday Beahas Sani-Deel Mahamid Lee (1 N CC § 201); sex.
- The \_\_\_\_\_Chapter recognizes that decedes of coal mining has damaged the health and productivity of thick Missis land, groundletter, and springs that people and nonhuman statutes depend one and
- The \_\_\_\_\_\_Chapter recognizes that restoring Black Mess's land to pre-mining confiltrate in a log priority, and apposes further industrial use of the Navigo Nation water, including proundwater beneath Black Mess; and
- The \_\_\_\_\_Chapter understands, acknowledges, and recognizes that the proposed Black bless North, East, and South Pumped Storage Projects, if built, would construct new reservoirs, pipelines, power lines, and other energy infrastructure attp Stack Mess.
- The \_\_\_\_\_Chapter understands, acknowledges, and recognizes that the proposed than Mass North, (Seet, and Doub? Pumped Storage Projects, if built, would require 400,000 acre-free of eater to begin operations and would require additional water to continue operations for 100 years; and
- The \_\_\_\_\_\_Chapter uniterstands, acknowledges, and recognizes that water required for the proposed Stack Mess North, East, and South Purposed Strongs Projective would come from the San Juan Rose. The Colorado River, or Stack Mess groundwater, and
- The \_\_\_\_\_\_Chapter understands, acknowledges, and recognizes that the proposed Black Stees Asinh. East, and South Pumped Storage Philants, if built, would destiny land and deplace baddisonal land uses no Black Mesa, incomisional with the health of

## Resolution

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retainds, acknowledges, and recognizes that the proposed and South Pumped Storage Projects, if built, would, like coal and and water to create and export electricity and profits to ter

mands, acknowledges, and recognizes that preliminary than Mess North, East, and South Pumped Storage Projects Evergy Regulatory Commission without consulting with or sa region Chapters, residents, and total limit users; and

### KIVED THAT

ses the proposes, funding, and development of the Black all Projects and requesting Nariago Nation President thus shatton Council to oppose the preliminary permit applications Burago Project field with the Federal Drivety Regulatory

## The following Chapters/Committees

### have supported our Resolution:

- 1. Dził Yíjiin Regional Council
- 2. Hardrock Chapter
- 3. Chinle Agency Grazing Committee
- 4. Pinon Chapter
- 5. Whippoorwill Chapter
- 6. Rough Rock Chapter
- 7. Black Mesa/Kits'iili Chapter
- 8. Kayenta Chapter
- 9. Forest Lake Chapter
- District 4 Grazing Committee
- 11. Tolani Lake Chapter
- 12. LaChee Chapter
- 13. Dennehotso Chapter
- Navajo Mountain Chapter
- 15. Bodaway/Gap Chapter
- 16. Coppermine Chapter
- 17. Tsidi To'ii (Birdsprings) Chapter
- 18. Western Agency Grazing Committee
- 19. Leupp Chapter



## **Stay Connected/Updated**



Tó Nizhóní Ání "Sacred Water Speaks"

Contact: Adrian Herder | adrian@tonizhoniani.org

www.tonizhoniani.org/no-bmpsp

### Supporting Documents:

- Nature & People First Preliminary Permits: North, East, and South
- Community Group Motion to Intervene Letter
- Navajo Nation Motion to Intervene Letter
- Community Group Press Release
- Project Summary Presentation developed in partnership with Grand Canyon Trust

### Source:

- Application for Preliminary Permits, Nature & People First
- Water Resource Development Strategy for the Navajo Nation, NNDWR Motion to Intervene of the Navajo Nation, NNDOJ
- Groundwater, Surface-Water, and Water-Chemistry Data, Black Mesa Area, Northeastern Arizona—2016–2018, USGS