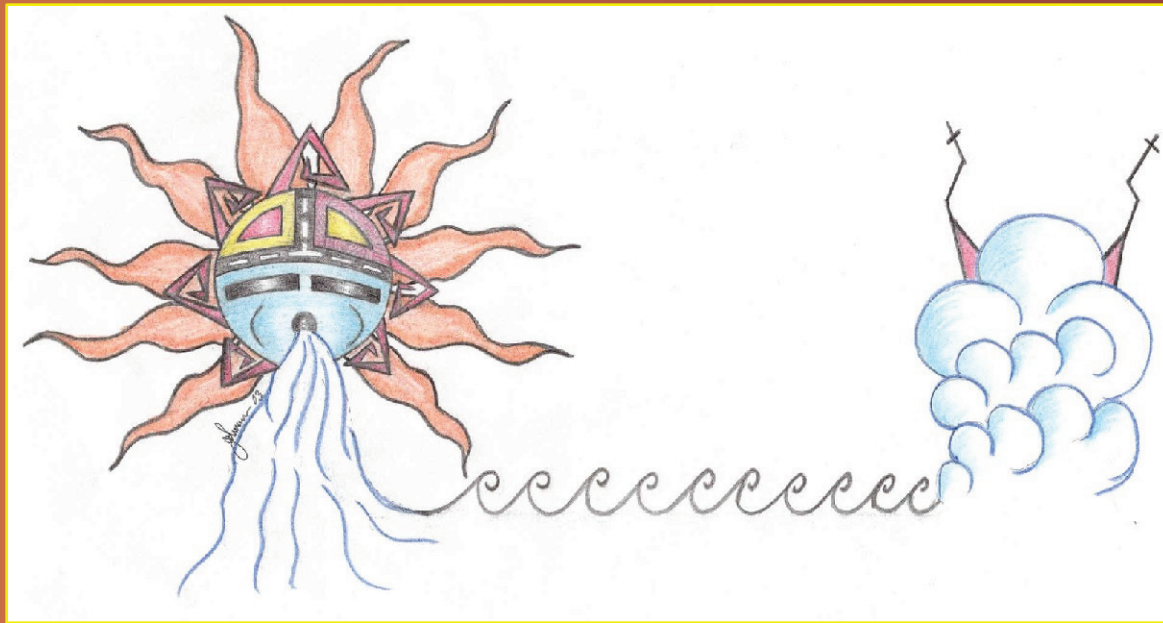


HOPI TRIBE CLEAN AIR PARTNERSHIP PROJECT



Roger Tungovia, Project Manager

Ken Lomayestewa, Energy/Utility Specialist

HOPI TRIBE

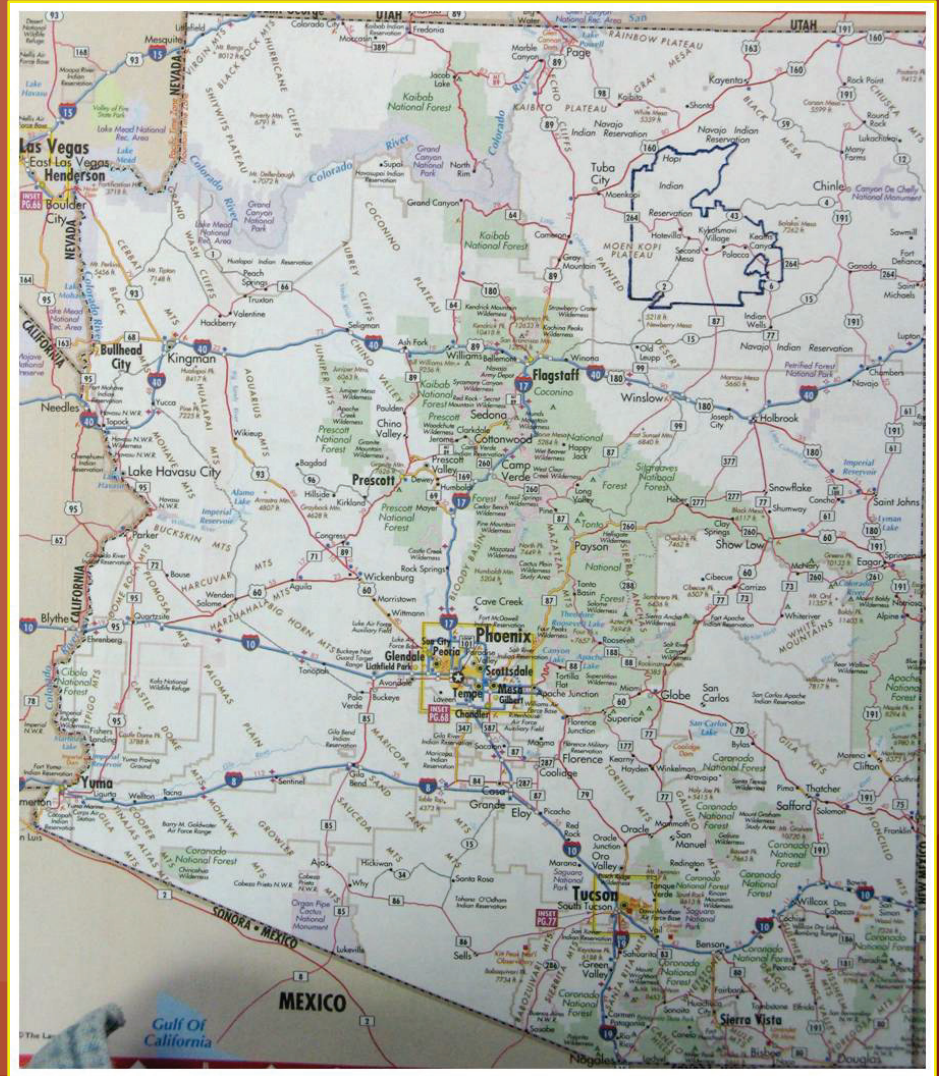
Located in Northeast Arizona
elevation from 3,900 to 7,500 feet.

Land Base: 1.6 million acres – District
6: main residential area; Hopi
Partitioned Lands (HPL); and Fee
Simple Lands (aboriginal lands)

Population: 12,500 plus with 7,500
living on the reservation

12 separate villages (each
independent and autonomous from
the Tribal Government) and two
communities.

Tribal Council representatives are
appointed or elected from each
village



District Six

Main route: State Route 264 – west to east across the reservation, State Route 87 north from Winslow, AZ, State Route 77 north from Holbrook AZ. and BIA Route 2 from Luepp, AZ.

Third Mesa Villages: Bacavi, Hotevilla, Oraibi and Kykotsmovi

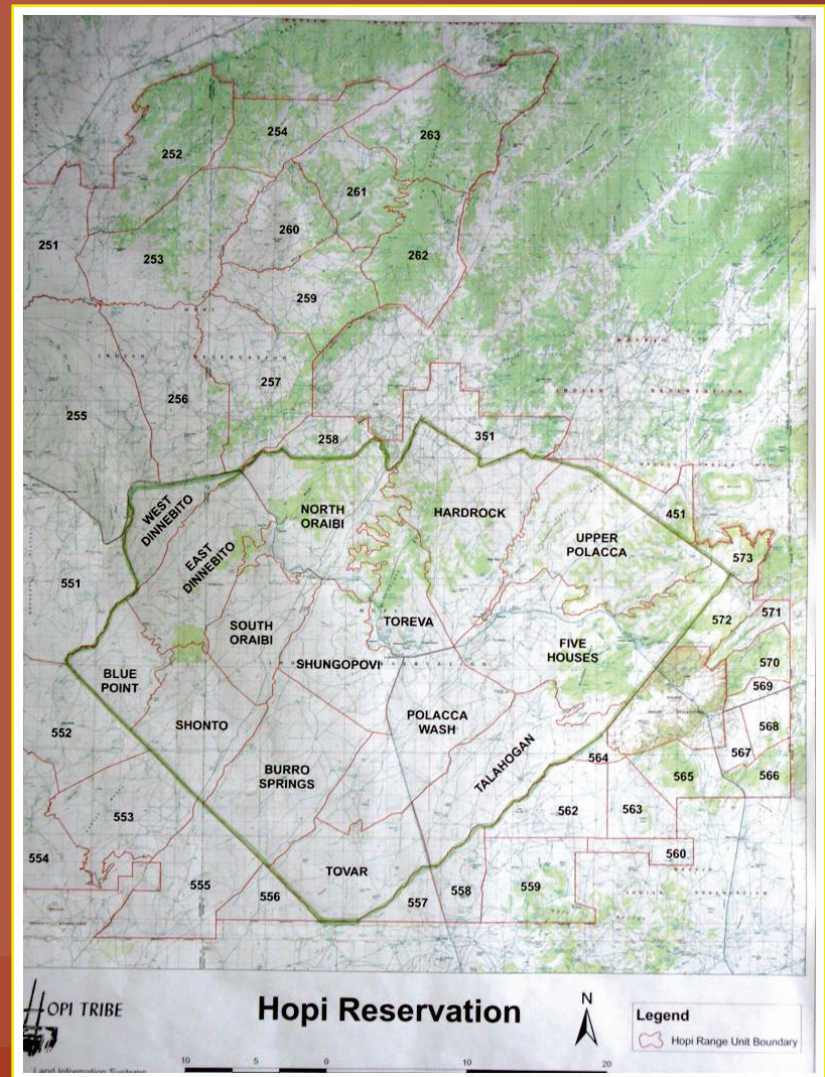
Upper Moencopi, Lower Moencopi are branched from Oraibi

Second Mesa Villages: Shungopovi, Sipaulovi and Mishongnovi

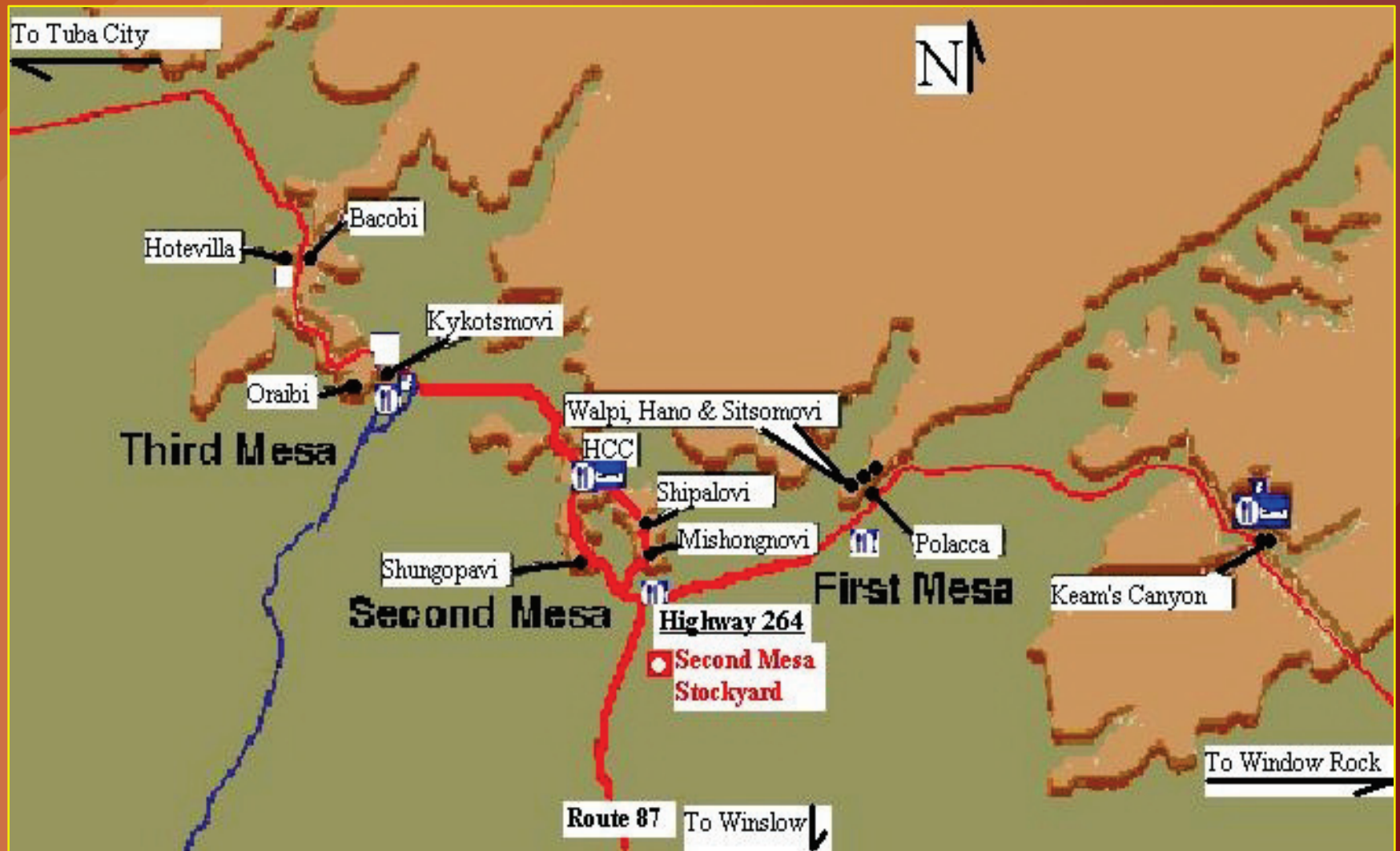
First Mesa Villages: Walpi, Sichomovi and Tewa (Polacca)

Keams Canyon (BIA Hopi Agency Headquarters)

Yu Weh Loo Pah Ki (new community in HPL)



Hopi Villages and Communities



Fee Simple Lands

352,000 acres of aboriginal
lands acquired in 2002

Lands were checker-
boarded with State and Fee
Simple Lands which have
become Trust Lands in
December 2008

Land used for grazing

Wind Feasibility Study
proposed for these lands



HOPI WIND PROJECTS

Hopi has four wind projects they are involved in.

The Sunshine Wind Park which is approximately 15 miles east of Flagstaff, AZ. , was a 60 MW project and was the most ready project but due to issues this project has not happened. No wind resource report provided to the Tribe.

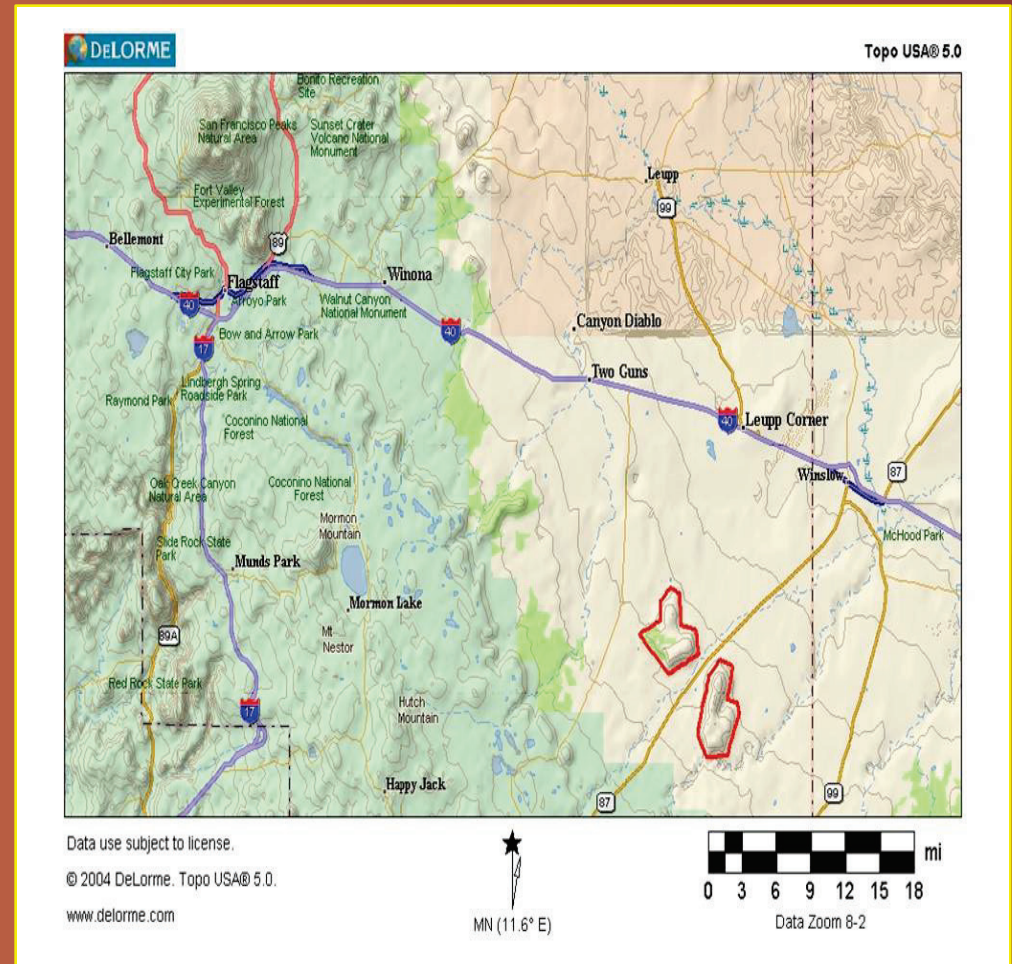
The Hotevilla MET tower project was for collecting data for a community housing project, this is located on the main Hopi Reservation 8 miles west of the village of Hotevilla.

The Hotevilla MET tower report shows a Class 1 rating.



Hopi Wind Projects

- The Clear Creek Ranch is the primary site for the Feasibility Study for a Utility-Scale Wind Farm. This site has two 50 meter MET towers and is now able to start collecting wind data . The site is located 17 miles south of Winslow, AZ.
- The Hart Ranch site is the alternate site if the Clear Creek Ranch site is not feasible. This site is 17 miles east of Flagstaff, and already has some MET towers, north (Sunshine Wind Park) and south of that location installed by NAU including the Grapevine Canyon Wind Project.



Project Participants

Northern Arizona University

Arizona State University

Texas A&M University

Sol Aqua Inc., El Paso, TX.

NRG Systems

Foresight Wind Energy LLC.

Arizona Wind Working Group



OBJECTIVES

- Resource Assessment
- Power Market Assessment
- Transmission & Interconnect Study
- Technology Option Analysis
- Preliminary Pro-Forma and Financial Projection
- Environmental and other Land Assignments
- Conduct Benefits Assessment
- Professional Development and Capacity Building
- Community Awareness Outreach
- Financial and Business Plan



PROJECT STATUS

- Site Assessments: Completed - primary and alternate sites
- MET towers installed – Completed two towers with satellite i-Packs
- Interconnect request - Completed but only as a Draft
- Archeological Clearances - Completed: for MET tower sites only
- Avian and Bat Baseline study – Completed a Draft for Clear Creek area
- Bird Monitoring Study – Started for MET towers with and without bird-flight diverters
- Public Outreach – Ongoing: Handout materials, public presentations for wind project information and presentation to the Energy Team and Energy Regulatory Board
- Capacity Building - WEATS and Strategic Energy Development training completed

ACCOMPLISHMENTS

The Hopi Wind Project started in 2004, due to change in management of the DOE Grant from the Tribal Chairman's Office to the Office of Mining and Mineral Resources there was a high turn over of staff.

In August of 2007, the Energy/Utility Specialist was hired. In late October 2007 the Project Manager was hired.

Issues with the Coconino County Building Permits not being completed slowed the project. This process was completed with assistance from NAU.

In December 2008 the Contract Agreement was finalized with Northern Arizona University to install two MET towers on the Clear Creek Ranch south of Winslow, Arizona.

In March 2009 the first tower was installed and the second one completed in September 2009.





LESSONS LEARNED

- Be sure the consultant is able to provide and do the work and not subcontract to others. Attend all meetings with the consultants. (Able to complete permitting paper work, installation of MET towers)
- Good communication with: Tribal Leaders, Energy Team Members , Consultants, Contractors, Tribal programs and program staff. (All tribes and communities have their own processes)
- Good communication with Traditional leaders to explain proposed project and ensuring consultants and contractors make efforts to learn and respect cultural protocols and to provide updates and progress on projects.
- Check to ensure all equipment purchased are not obsolete and are able to work at the site locations of the proposed project. (Cell phone coverage or satellite feed for downloading of data collection, anchors for different soils, surface and subsurface conditions)
- Keep good records and files of project information and issues which were encountered. (In case of project staff changes)
- Know what conditions you will encounter on project sites: cattle grazing, road conditions (Not passable during rain or flooding)

ACTIVITIES TO BE COMPLETED

- Completion of data collecting and wind resource reports
- Develop a plan for taking down MET towers and a plan for moving towers according to wind resource reports
- Keep abreast of all Energy Projects which could affect your projects
- Complete Historical and Cultural assessments by working with the Hopi Cultural Preservations Office, Traditional Leaders and local communities close to project sites
- Continue working with the Hopi Energy Team in finding an Energy Developer for development of wind and renewable energy projects
- Change the name from Hopi Clean Air Partnership Project to Hopi Renewable Energy Office

QUESTIONS



THANK YOU

HOPI TRIBE

CLEAN AIR PARTNERSHIP PROJECT

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Dry Lakes Wind Power Project
Heber, Arizona
63 megawatts
Iberdrola Renewables