Standing Rock Sioux Tribe – Lakota/Dakota Nation



Establishment of Renewable Energy & Energy Development Office

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OVERVIEW:



- BACKGROUND INFORMATION ON STANDING ROCK RESERVATION
- SITTING BULL COLLEGE WIND TURBINE
- EECBG (ENERGY EFFICIENCY & CONSERVATION BLOCK GRANT) ENERGY EFFICIENCY & WIND TURBINE INSTALLATION AT SITTING BULL COLLEGE
- WIND ASSESSMENT STUDY
- WIND FEASIBILITY STUDY & FUTURE STUDIES
- ESTABLISHMENT OF RENEWABLE ENERGY & ENERGY DEVELOPMENT OFFICE (REEDO)
- FUTURE PLANS
- LESSONS LEARNED

STANDING ROCK



- ONE OF SEVEN RESERVATIONS OF THE GREAT SIOUX NATION
- LOCATED IN SOUTH-CENTRAL NORTH DAKOTA & NORTH-CENTRAL SOUTH DAKOTA
- LOCATED IN SIOUX COUNTY, NORTH DAKOTA; CORSON COUNTY, SOUTH DAKOTA AND SMALL PORTIONS OF ZIEBACH & DEWEY COUNTY, SD
- RESERVATION DIRECTLY TO THE SOUTH IS CHEYENNE RIVER SIOUX TRIBE

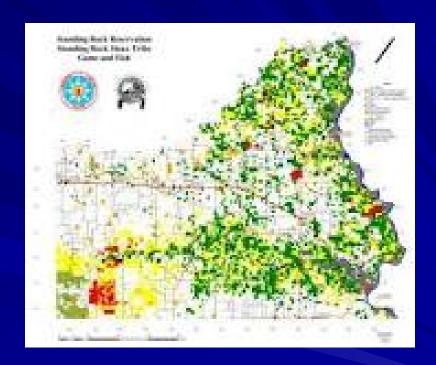


STANDING ROCK



LAND

- Terrain
 - Woodlands, rolling hills, river valleys, and lakes
- CHECKERBOARD OWNERSHIP
- ALLOTTED, TRIBAL, AND OTHER (STATE, FEDERAL, NON-INDIAN)
- 2,320,247.67 ACRES
- LOST NEARLY 56,000
 ACRES DUE TO THE
 PICK-SLOAN ACT OF
 1944



STANDING ROCK: LAKOTA/DAKOTA NATION



- DAKOTA:
 HUNKPATINA &
 CUTHEAD YANKTONAI
- LAKOTA: MAJORITY HUNKPAPA, BLACKFEET



Cetan Wakinyan – Chief Thunderhawk – Hunkpapa Lakota

STANDING ROCK SIOUX TRIBE



- ORGANIZATION
 - CHAIRMAN, VICE-CHAIRMAN, SECRETARY
 - 8 DISTRICT REPESENTATIVES
 - 6 AT-LARGE REPRESENTATIVES
 - SEPARTED INTO 3 COMMITTEES (JUDICIAL; HEALTH, EDUCATION, & WELFARE; ECONOMICS)
 - EACH PROGRAM DIRECTOR REPORTS TO A COMMITTEE

SITTING BULL COLLEGE WIND TURBINE



- WIND TURBINE CURRENTLY PROVIDES ENERGY TO THE SCIENCE CENTER & TRANSIT CENTER
- SITTING BULL COLLEGE NOW HAS A 1 YEAR WIND TURBINE TECHNOLOGY CERTIFICATE PROGRAM
 - Introduction to wind turbines
 - Wind energy fundamentals
 - Electricity & circuits
 - Safety & environmental
 - Basic hydraulics
 - OSHA standards



EECBG



Energy Efficiency

- Two possible locations (science center & family support center)
- Family support center was chosen (Vocational Rehabilitation Program, Campus Kids DayCare, and Teaching & Learning)
- Had the highest energy use/unit area from 2007 2010
- Final Energy Efficiency
 Strategy is currently being written



EECBG



- Small Wind Turbine Location
 - Sitting Bull FinanceCenter
 - Chosen for the location



EECBG

- 10KW Bergey was installed in July 2012.
- Hooked up to SBC Finance Center
- Analysis is currently being conducted on energy usage and savings



WIND ASSESSMENT STUDY



- FUNDED THROUGH THE DEPARTMENT OF INTERIOR
- WORKED WITH CONSULTANT AECOM TO ASCERTAIN THE BEST LOCATION FOR A WIND FARM



Wind Feasibility Study

- Used the data from the Wind Assessment Study to ascertain the best location for a wind farm
- Site 5 was determined the best location
 - Based on availability of Tribal and alloted land and wind data classification >3
- Received a THPO Clearance in August 2012 for Met Tower locations
- Currently working with consultant ERM to install two 50m Met
 Towers at sites
- Preliminary EA studies will be completed
- After one year of Met Tower data, consultants Godfrey & Kahn SC will write a business plan for Standing Rock Sioux Tribe to Develop an LLP

Future Studies

- After the wind feasibility study is completed it will be determined whether or not we will move forward with an Environmental Assessment or an Environmental Impact Study
- Once one of these is completed, we can move forward with the construction of the wind farm.

Renewable Energy & Energy Development Office



- Begin educational outreach activities
- Gathering of data in the 8 communities of Standing Rock including the tribal government
 - Goals & concerns of the SRST
- To serve as a research center and information clearinghouse
- To ensure that energy development proceeds in a systematic way



Renewable Energy & Energy Development Office



- An advisor to tribal government during "energy" decision making
- Oversee current & future energy grants
- Investigate additional types of renewable energy products
 - Educate SRST on types of renewable energy products

Renewable Energy & Energy Development Office



- Conducted two renewable energy investigation within the past two quarters
- Standing Rock Farms
 - Wrote an unsucessful grant to implement renewable energy to offset the energy costs of irrigation pivots, three buildings, and grain dryers.
- Rock Creek District
 - District is interested in forming their own community-based energy office in order to investigate ways in which renewable energy can assist them with economic development.

Future Plans



- Complete the Energy Efficiency Strategy on the Sitting Bull College Family Support Center
- Analyze energy data for the Sitting Bull College Finance Center
- WRITE for new grants
- Continue Data Collection for Renewable Energy Investigations within Communities
- Continue research on Renewable energy products and strategic planning
- Begin research on developing an Energy & Mineral Code of Regulation for SRST
- Research on Environmental Effects of Renewable Energy/Energy Development

Summary/Lessons Learned



- There's a lot to do...
- Talk to the community members
- Having an Energy/Mineral Development Office is a must

ANY QUESTIONS/COMMENTS?





"Let us put our minds together to see what we can build for our children." Tatanka lyotake