

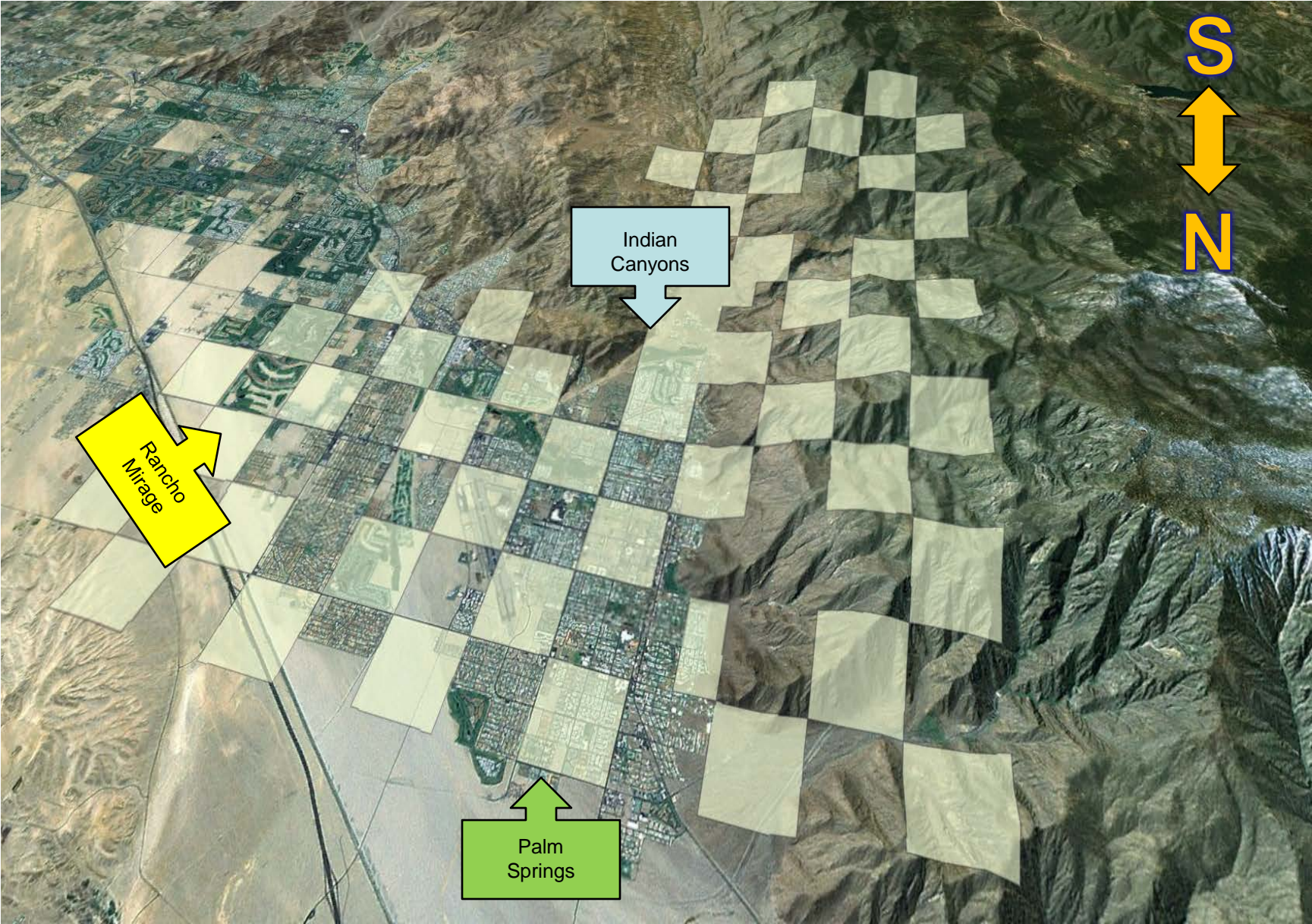


Solar/Wind Feasibility Study at Whitewater Ranch

Agua Caliente Band of Cahuilla Indians

- Tribal ancestors resided in the area surrounding the San Jacinto Mountains in the Southern California region for centuries.
- The Agua Caliente Reservation (approximately 32,000 acres) was deeded in trust by Federal Order in 1876 to the Agua Caliente Tribe.
- The Tribe was deeded the even numbered sections as the odd numbered sections were deeded to Southern Pacific Railroad in 1860; Creating a checkerboard reservation configuration.
- Portions of the cities of Palm Springs, Cathedral City and Rancho Mirage lie within the Agua Caliente Indian Reservation.

Agua Caliente Indian Reservation



Project Overview

- With prior DOE support the Tribe developed a Strategic Energy Plan in 2006; assessed the feasibility of solar energy at various locations on the reservation in 2009; which has led to the current feasibility study to combine wind and solar for a proposed 10 MW project at Whitewater Ranch
- The Whitewater Ranch property possesses both strong insolation and excellent wind class resources, making the property an ideal location for a combined solar/wind project.

Project Location

- Whitewater Ranch is an ideal location for a combined wind/solar project.
- The 217 acre property is the western gateway of the Coachella Valley
- The San Geronio pass is already a prime location for wind turbines



Project Objectives

A scenic landscape featuring a river flowing through a valley. In the background, there are rolling hills and mountains under a clear sky. A single wind turbine is visible on the right side of the river. The foreground shows rocky terrain and some vegetation.

- Thoroughly assess the wind/solar potential at the site with the intention of completing a 10 MW project.
- Based upon site assessment; determine the pertinent technology options.
- Select the optimal wind/solar technologies and develop viable project options.
- Develop detailed economic models for the projects identified with a goal of creating project-ready plans for wind/solar renewable financing and implementation.

Project Partners

- Tribal staff worked with Red Mountain Energy Partners throughout the prior solar feasibility study and has continued work with Red Mountain throughout the current solar/wind feasibility process.



Project Status

MET Tower Install

- Karbon Zero installed the 60 meter NRG XHD MET tower on August 23rd, 2013.
- Tower was tested upon install and has been consistently receiving wind data.
- Wind resource is rather strong at this site as we expected.
- Some small engineering and permitting requirements caused slight delay in the installation timeline.



Project Status

Solar Technology

- Currently assessing various technologies to determine best resource for a proposed install of 4MW to 8MW of Solar.
- Transmission/Interconnection at the site is a concern, but we continue to seek out solutions through various local utility programs in addition to PPA options within our immediate vicinity.



Other Project Activities

- **Western Area Power Administration (WAPA)** – The Tribe currently receives a 1MW annual allocation of power from the Parker/Davis Hydroelectric Dams. As part of the agreement with WAPA, the Tribe will receive this power allocation for the next 14 years.
- **Water and Energy Resource Authority (WERA)** - The goal of this entity is to manage ongoing water and energy resources in a more efficient manner. WERA has proven to be a useful coordinating entity for all Tribal energy and water related issues.
- **Desert Cities Energy Partnership (DCEP)** – The Agua Caliente Tribe continues to play a vital role in energy efficiency, conservation and renewable energy development within the Coachella Valley.

A member of the WERA committee represents the Tribe on DCEP, a partnership representing the Tribe and other local municipalities, which guides policy on energy efficiency throughout the Coachella Valley.

Future Plans

- **The Agua Caliente Tribe continues to assess energy options (both renewable use and manufacturing) that can be incorporated into the Tribe's Overall Strategic Energy Plan.**
- **Stewardship of the land and efficient use of resources in the desert region are critical to continued prosperity of the Tribe for future generations (water rights litigation).**
- **As the economy strengthens in the Coachella Valley the Tribe must consider other potential development options.**
- **Staff in process of assessing solar shaded parking installation at one of our facilities and possible distributed generation option for several Tribal sites.**
- **QUESTIONS?**