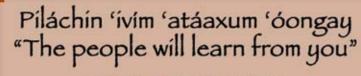
Tribal Energy Program Review

Denver, CO

November, 2012

By: Erica Helms-Schenk, Environmental Director

Soboba Energy Efficiency and Conservation Project

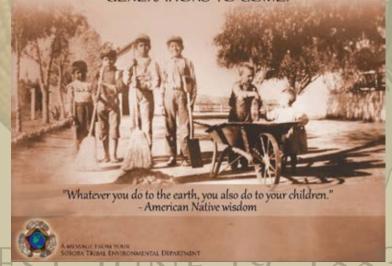


LEAD BY EXAMPLE

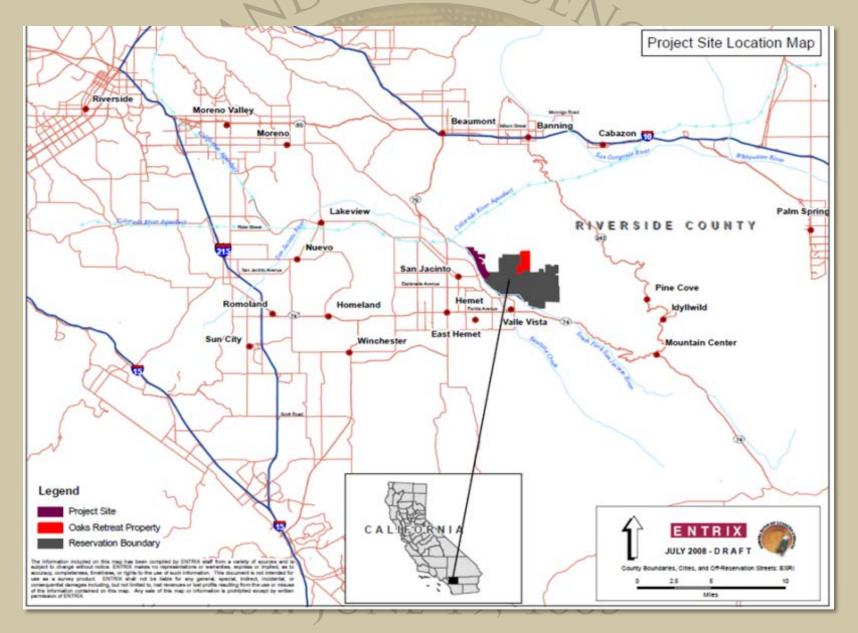
Teach the young these important tips:

- CONSERVE WATER AND ELECTRICITY
- NURTURE THE EARTH
- RECYCLE, REDUCE and REUSE

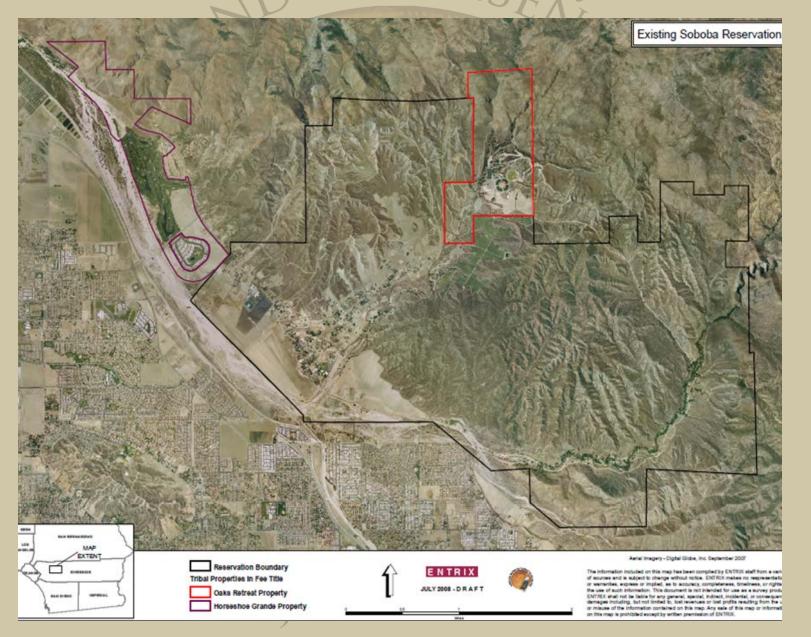
BY INSTILLING THESE SIMPLE LESSONS IN OUR YOUTH YOU ARE ENSUREING A FUTURE FOR GENERATIONS TO COME.



Soboba Band of Luiseño Indians



Soboba Band of Luiseño Indians



Soboba Band of Luiseño Indians



Our Champions – Who is Involved?

Gerald Wilson & Brian McDonald – our SCE Representatives

Soboba Tribal Council

IT - Steven Nino

Public Works – Ken McLaughlin and Summer Willis Soboba Tribal Environmental Department



Project Goals and Objectives

- 1) Compose an energy vision statement for the Soboba Tribe to include the Tribe's desire for a 5% reduction in energy usage per year over the next 5 years
- 2) Compose a five year action plan including "supply side" and "demand side" energy reduction projects
- 3) Begin a community outreach campaign to address the energy reduction goal

Vision Statement

"We will better our children's future by not being wasteful in our lives. To accomplish this, we will create within our operations those habits that inspire individual and organizational decisions that lead directly to reducing energy use, water, use, and waste production at our buildings and facilities. Always keeping in mind the cultural and traditional practices of the reservation."

Progress to Date

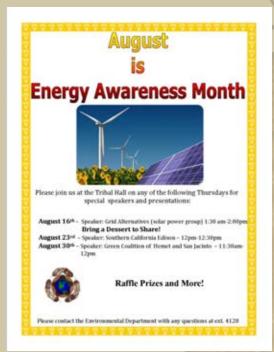
- □ Layout and composition of 5 Year Plan has begun.
- ☐We have composed our vision statement.
- ☐ Basic numbers for power usage for Administration, the schools, Public Safety and the Tribal Hall are all benchmarked so we have a place to begin comparisons.
- We have broken down each area into component parts, as far as energy usage goes, to understand where we can begin our conservation and efficiency measures.
- We have researched the possibilities of behavior changes and the use of basic technology to reach out to our community and advocate energy conservation.

Progress to Date

- We have had an energy conservation campaign going on through colorful e-mail posters and tips as well as community outreach activities such as "Energy Awareness Month" and an "Energy Fair". Our first update figures show decreased energy usage in two of our four benchmarked buildings!
- ☐ Research for changes/retro-fits for the lighting are well under way. Installation costs, rebates and ROI figures are being established

- ☐ The first remodel/retro-fit (Tribal Hall) since the inception of an energy savings program has begun.
- SCE did an analysis of one of our larger well pump motors and showed us what we could save by upgrading. We will shortly begin evaluating all 9 of them to get our best savings.

Community Outreach Campaign





Grid Alternatives Presentation









More Community Outreach

Carbon Dioxide (CO₂) Emissions Facts

Easy conservation tips for home and at work



- Adjust your water heater. Changing the temperature from 140 to 120 degrees F will keep 478 pounds of CO; out of our atmosphere annually and insulating that water heater will conserve another 1,000 pounds.
- If you're not using it, unplug it or turn it off. This works at home or at work and could annually save us all about 1,250 pounds of CO₁ emissions, each!
- Use a clothesline instead of a dryer. This can be a savings of 701 pounds of CO₂or more depending on how much hundry you have.
- Eat locally grown, unprocessed food. Doing so just once a week could keep 5,000 pounds of CO₂ out of our environment (this includes processing, packaging and transportation of goods).

Soboba Tribal Environmental Department













Our First Retro-Fit

- ☐ Tribal Hall being refurbished
- ☐ All new Energy Star appliances
- ☐ Fluorescent tube lighting (old T-12) replaced with CFL
- New A/C duct work and added insulation
- ☐ Energy savings: Lighting, CFL's 75% more efficient and Energy Star appliances at least 20% more energy efficient!
- ☐ Rebate applications filled and submitted





Possible Future Projects

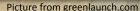




Exciting new technology: Coolerado.

Possible solar projects for offices and Tribal Members' homes







Picture from google.com/images

LED street lighting with solar panels



Picture from walkerenergysolutions.com



Picture from http://www.unvlt.com/nema_retrofit.html

Retro-fit schools and offices with energy efficient LED lighting

Lessons Learned

- ☐ The engagement of employees in energy saving and conservation efforts is tricky! Some efforts, like recycling are easy, yet changing the thermostat is met with quite a lot of resistance.
- ☐ The use of technology for energy management and conservation is less costly and more easily accomplished than behavior change.
- ☐ By incorporating the use of surveys for our Tribal Members we found interest in sustainable energy was much higher than we anticipated and we obtained some very useful feedback

Next Steps

- ☐ Incorporate the plan
- Seek funding through government grants and Tribal contributions
- ☐ Seek technical expertise for implementing our projects



EST. JUNE 19, 1883