

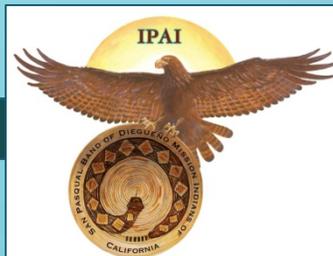


# San Diego Tribal Energy Collaborative

DOE Presentation – November 2016

# San Pasqual General Information

- San Pasqual Indian Reservation was established by Presidential decree in 1910
- The San Pasqual Indian Reservation is located in northeastern San Diego County, California, near Valley Center
- The San Pasqual Indian Reservation is two miles north of the Rincon Band of Mission Indians, and is nearby several other Indian Reservations including Pauma, Pala, La Jolla, Santa Ysabel, Mesa Grande, Los Coyotes, and Pechanga among others



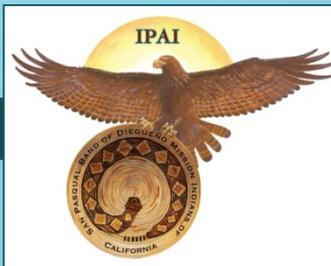
# San Pasqual Land and Acreage

- The Reservation encompasses approximately 2,956 acres
- Approximately 2,100 acres of trust land and 856 of fee land
- San Pasqual is considered a “checkerboard” Reservation, as it does not occupy one contiguous land mass
- The San Pasqual Reservation is divided into three Districts: A, B, and District C



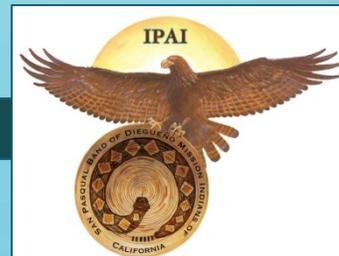
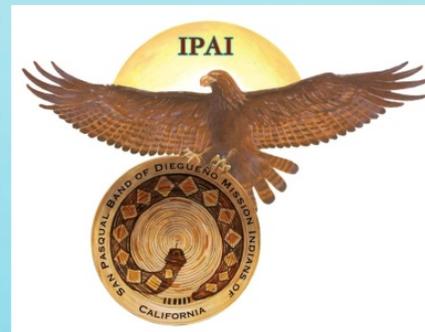
# Tribal Demographics

- Current enrolled Tribal Membership consists of approximately 250 Tribal members and over 1,200 lineal descendants
- The Reservation population is between 1400 - 1600 total residents, occupying about 335 homes
- The majority of homes and residents on the Reservation currently reside in Districts A and B, with a small population and clusters of homes on District C

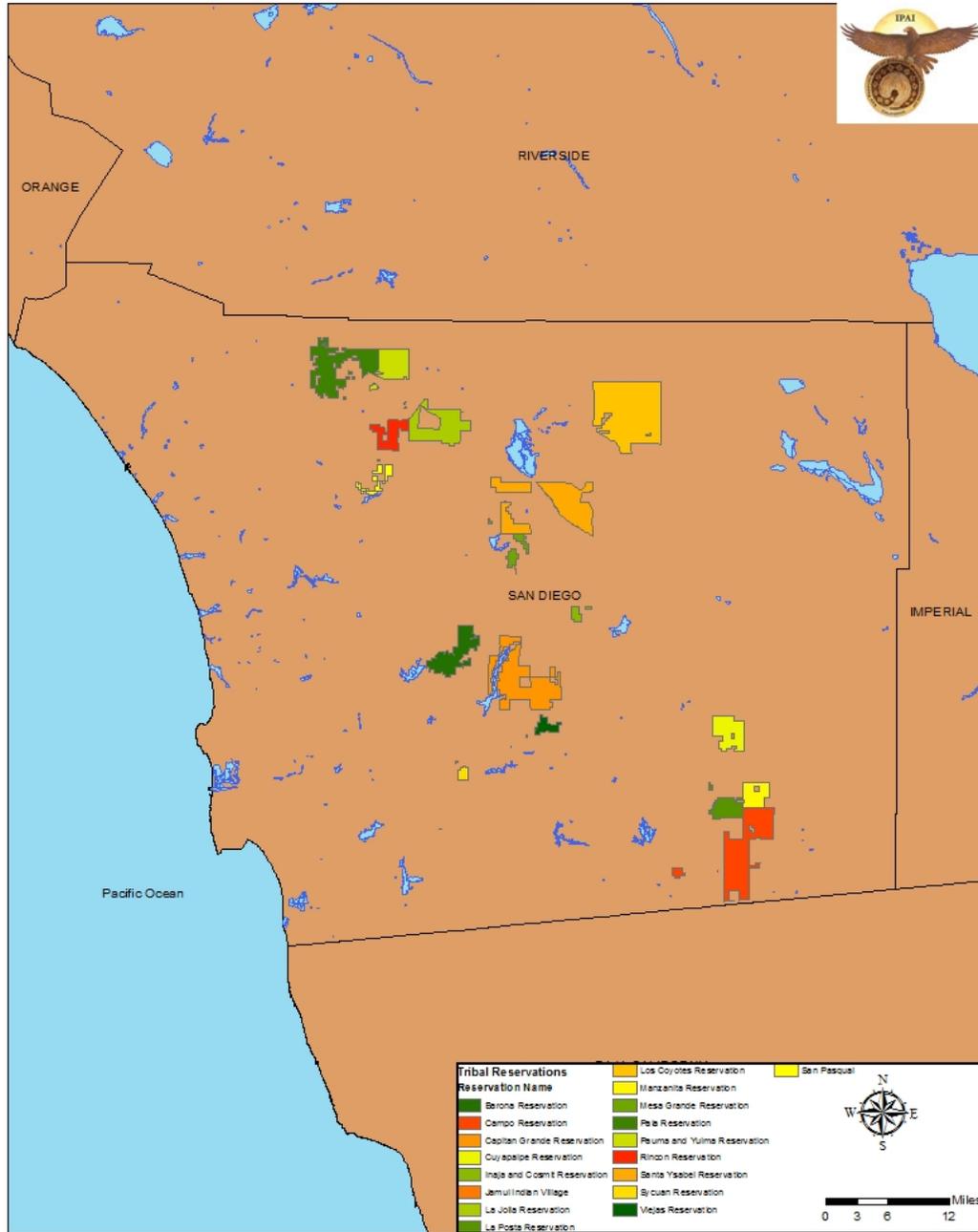


# Project Partners

- La Jolla Band of Luiseno Indians
- Mesa Grande Band of Mission Indians
- San Pasqual Indian Band of Kumeyaay Indians
- GRID Alternatives (non-profit)



# San Diego County Tribal Nations



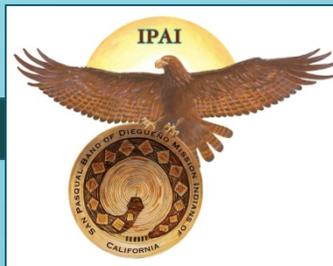
18 Tribal Nations in San Diego County

San Diego County has more Tribal Nations than any other county in the US



# Project Description

- The Project consists of designing, installing, inspecting, and interconnecting 42 grid-tied, solar electric systems, totaling at least 170 kW rated capacity
- 40 qualified existing low-income single-family homes located within the San Pasqual, La Jolla, and Mesa Grande reservations, which will provide at least 50% savings in displaced electricity
- As well as install two grid tied systems for the San Pasqual tribal education facility and the La Jolla tribal community center
- Community volunteers and Tribal job trainees will assist with the installations, gaining valuable hands-on experience



# Project Outcomes

- 42 grid-tied, solar electric systems, totaling at least 170 kW rated capacity
- Generating over \$1.8M worth of power for low-income families over their lifespans
- Eliminating an estimated 3,750 tons of greenhouse gas emissions
- Provide hands-on solar installation training to at least 20 Tribal community volunteers and job trainees
- Homeowners will be educated on energy efficiency and renewable energy

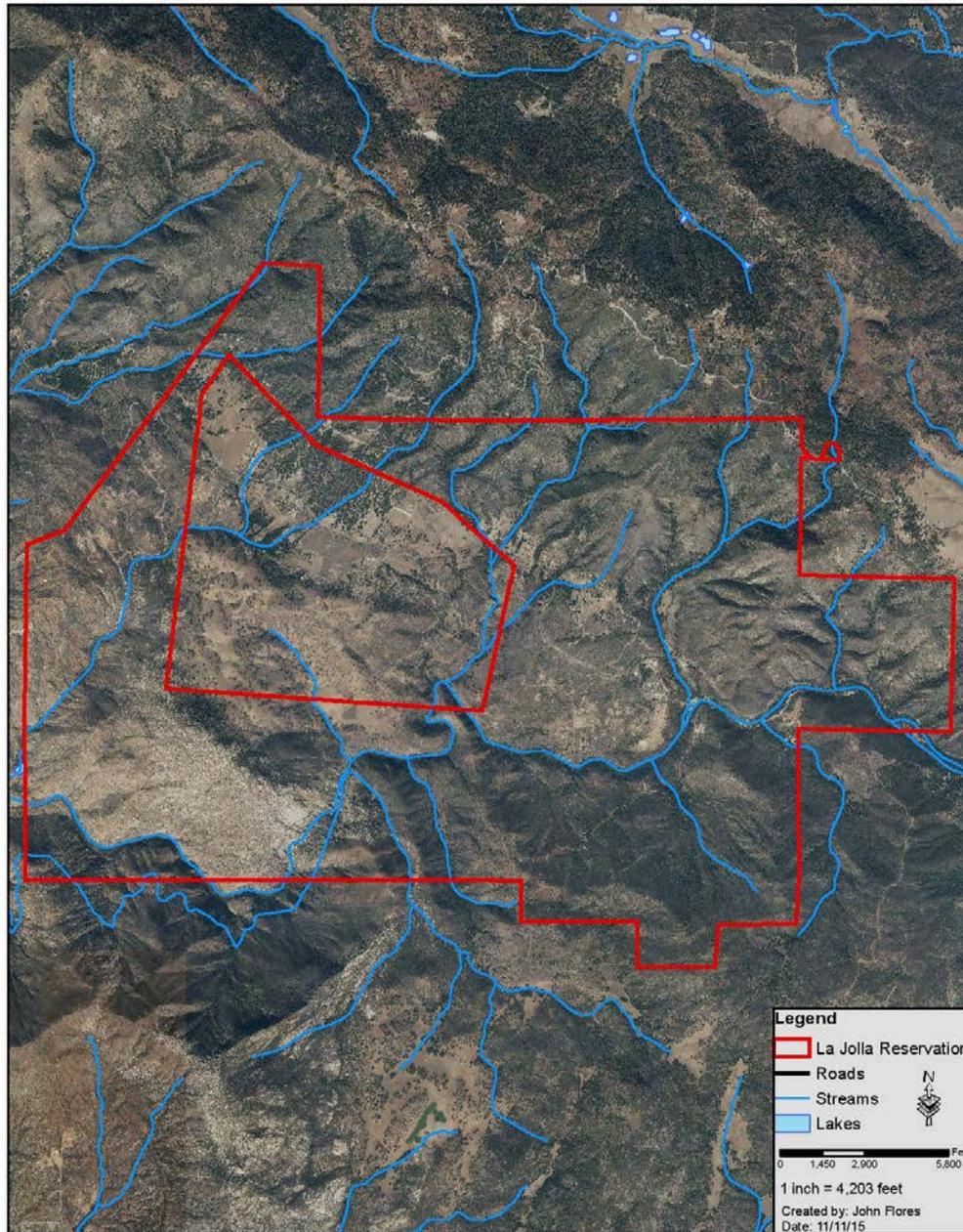


# Further Details

- Not “off the grid”
- Net metering – still tied into the grid
- No battery backup – any power outage results in no electricity to the home
- Homeowners see a 35% to 75% reduction in their electrical usage
- 3<sup>rd</sup> party inspector verifies all work completed by GRID before the system can be energized



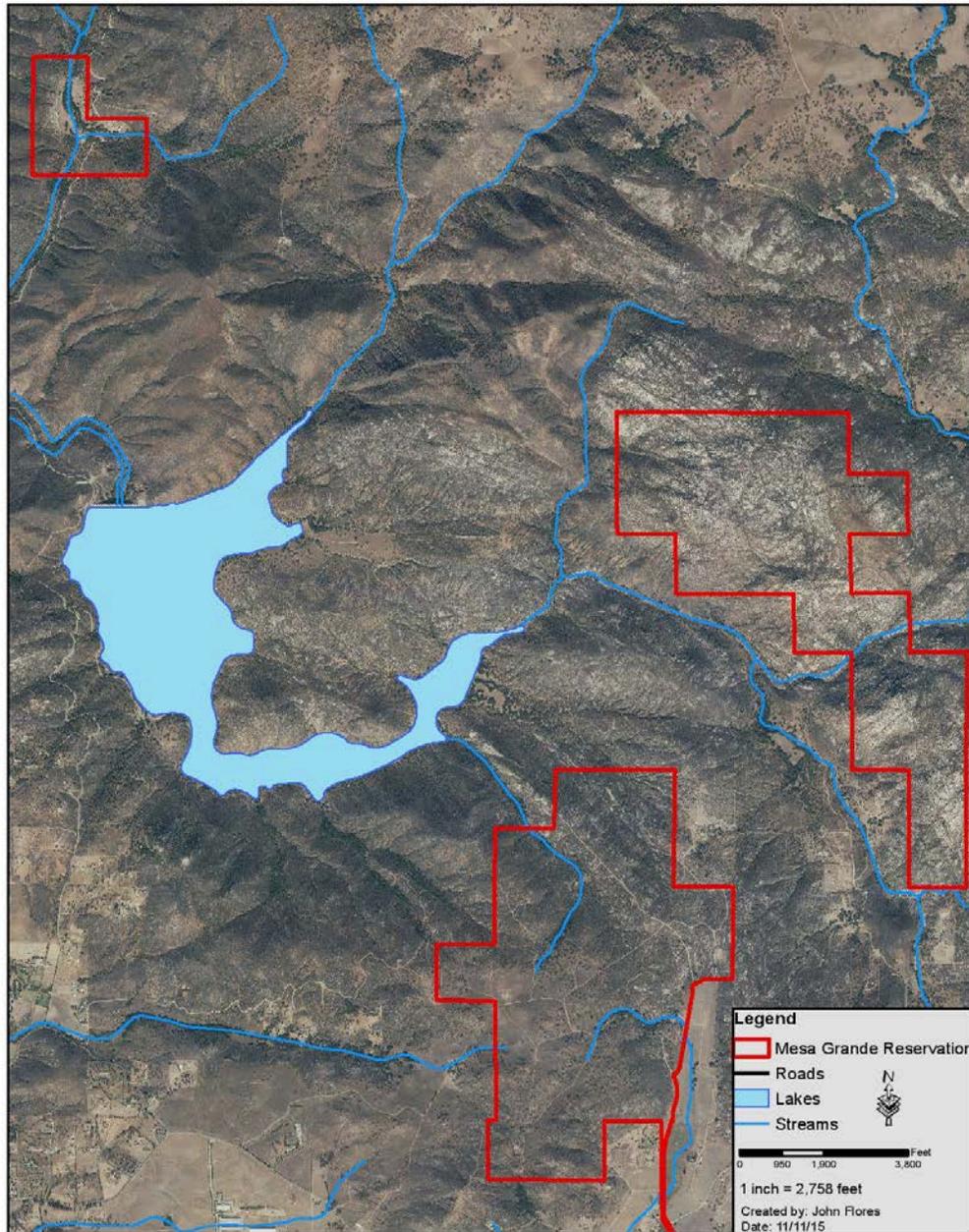
## La Jolla Reservation



# La Jolla Reservation



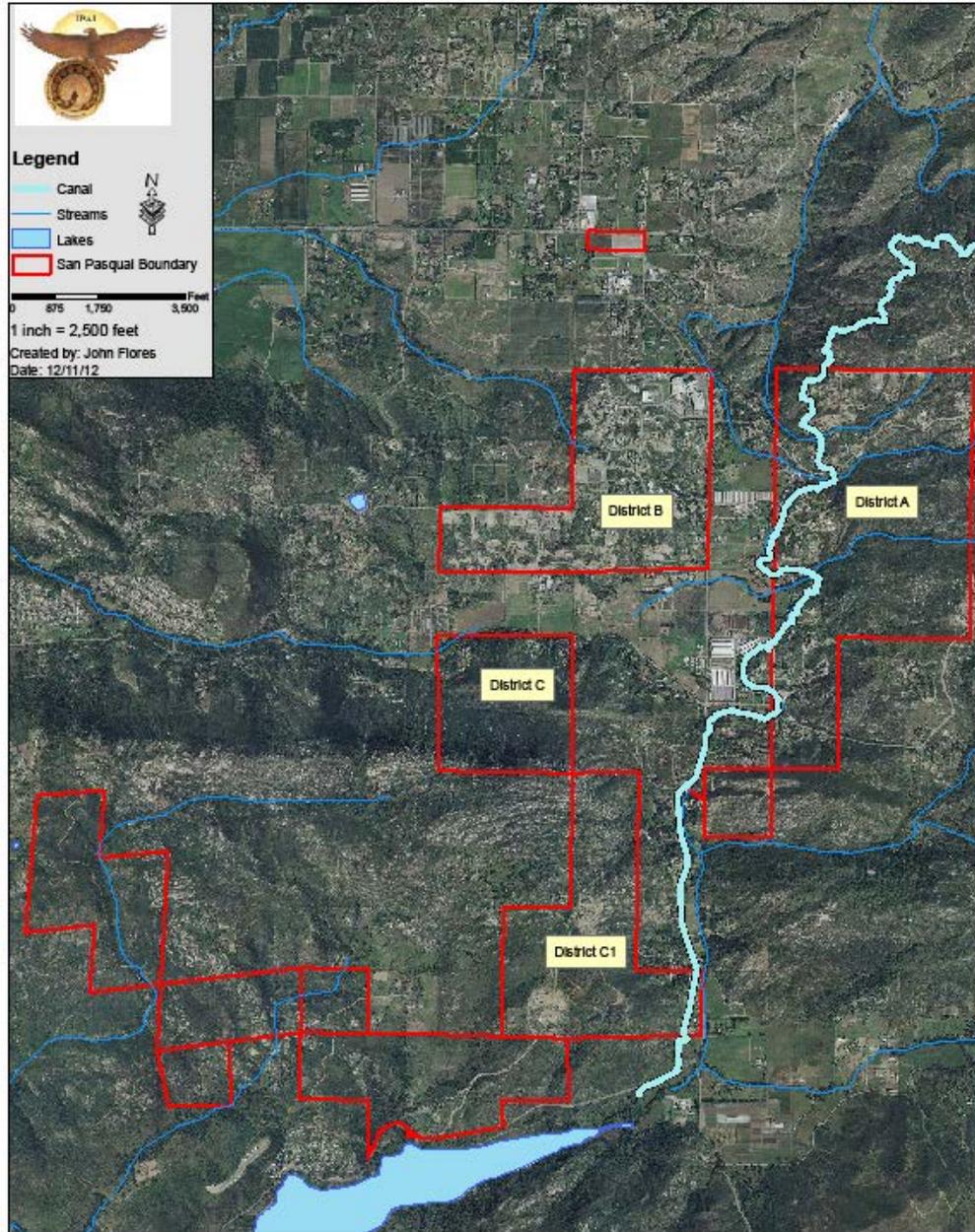
## Mesa Grande Reservation



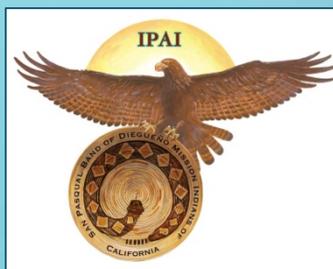
## Mesa Grande Reservation



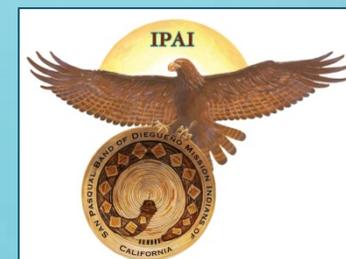
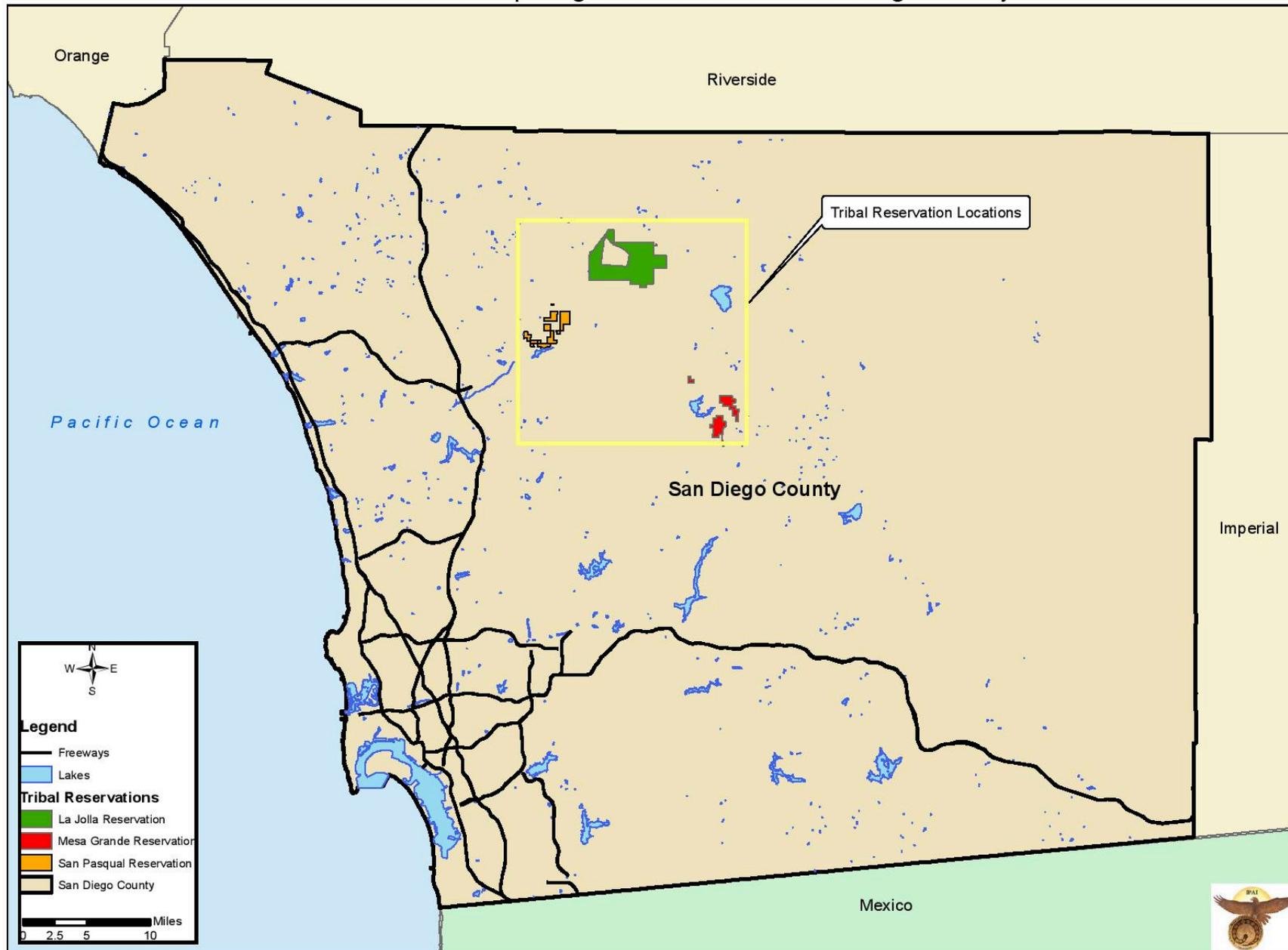
# San Pasqual Reservation



San Pasqual  
Reservation

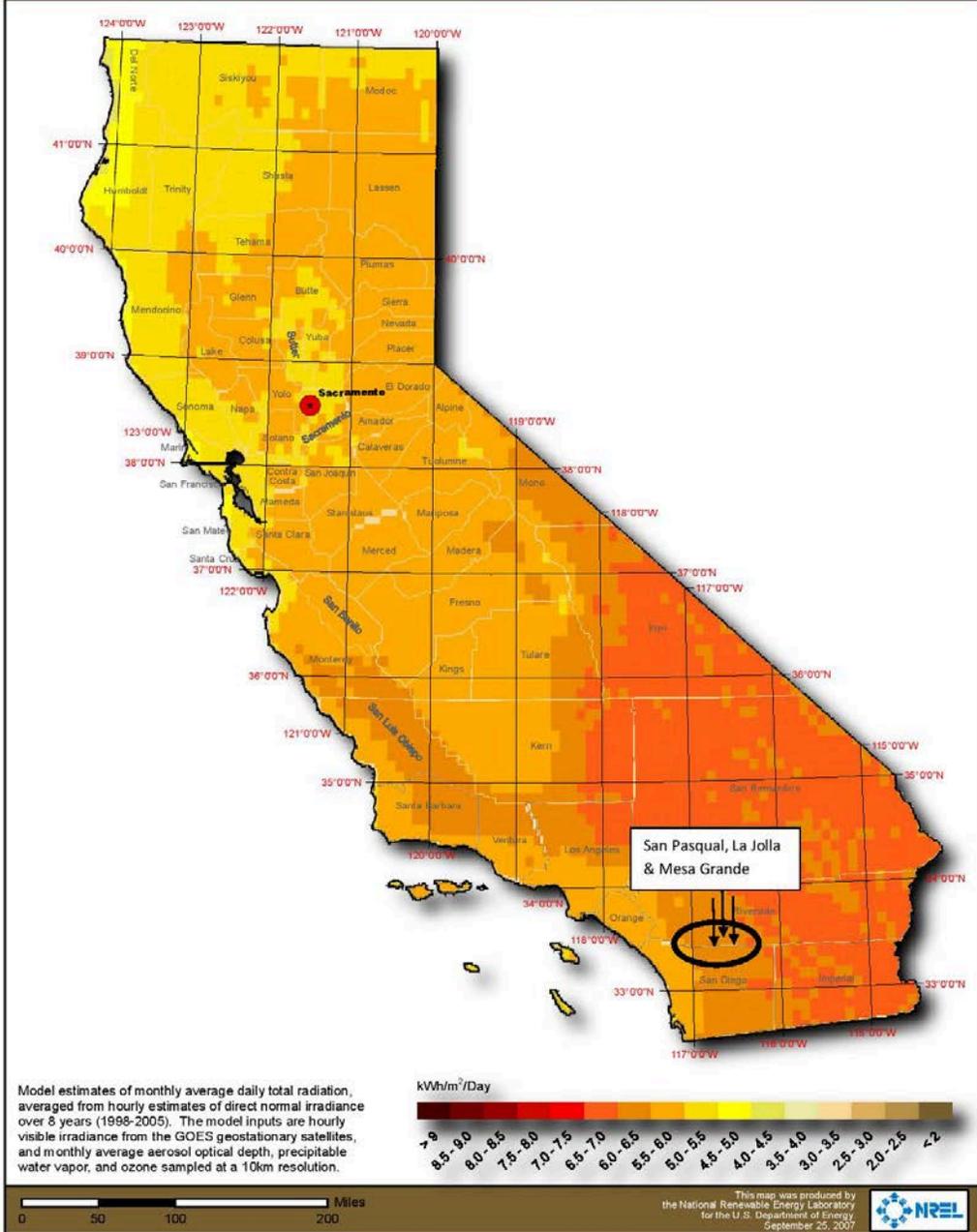


# Location of Participating Tribal Nations in San Diego County



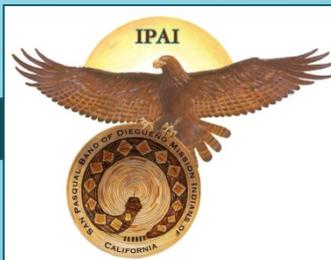
# Global Solar Radiation at Latitude Tilt - Annual

## California



# San Pasqual & GRID Partnership

- Working with GRID Alternatives to provide installation of photovoltaic systems to low income homeowners at no cost
- Working with GRID since June 2011
- 335 homes on the San Pasqual Reservation
- First installation was completed in August 2011
- Since completed 44 installations on the San Pasqual Reservation

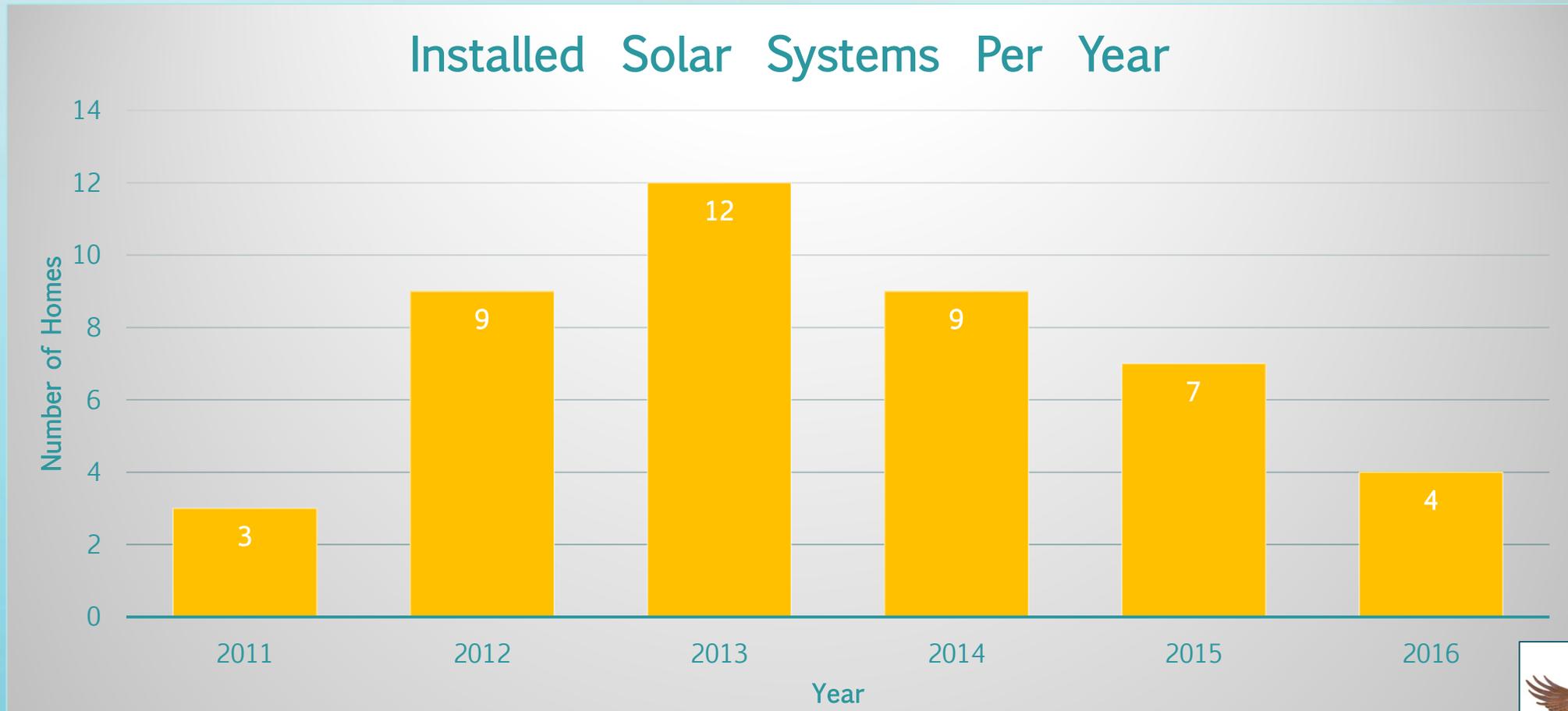


# Solar Projects on San Pasqual

- 44 homes with solar through GRID Alternatives
  - Cash value of over \$880,000
- 5 additional homes with solar through private companies
- Installed 3 residential solar systems with GRID Alternatives Solar Spring in 2016 (Arizona State) and 6 in 2015 (University of Michigan & Claremont Mckenna)



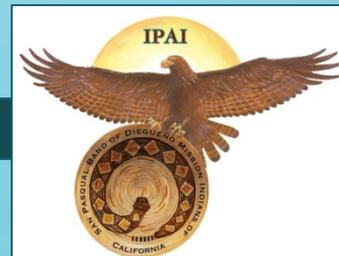
# Solar Installed from 2011 – 2016 (San Pasqual)



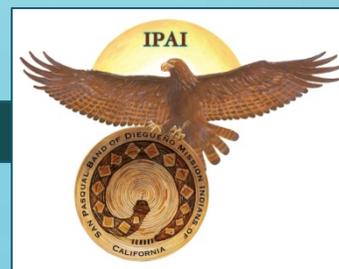
# Solar Spring Break 2016



# Home Installation



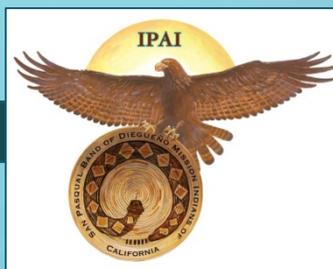
# Home Installation



# Home #1



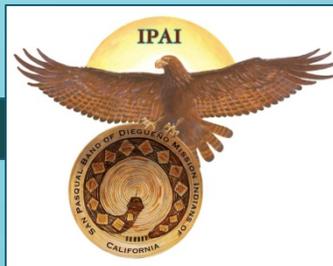
# Home #1



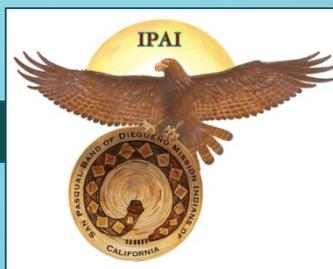
# Home #1



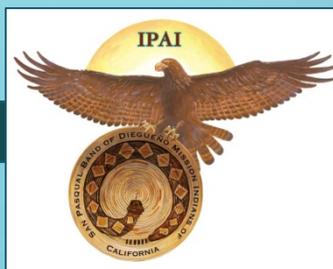
# Home #2



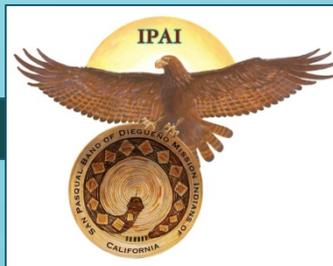
# Home #2



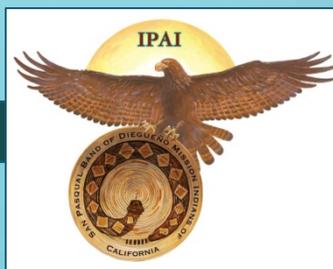
# Home #3



# Home #3



# Home #3





# Kumeyaay Environmental Times

The Environmental & Domestic Water Department

VOLUME 4 ISSUE NO. 5

If you suspect a water or septic leak or would like to have your septic mapped please do not hesitate to call the Environmental Department so we can come and inspect.

**Transfer Station Hours**  
Monday - Friday  
7:30 am - 2:30 pm  
CLOSED Weekends & Holidays

- John Flores, Environmental & Domestic Water Manager at 760-651-5141  
johnf@sanpasqualtribe.org
- Desiree Morales-Whitman, Environmental Manager at 760-651-5142  
desireem@sanpasqualtribe.org
- Melissa Morales, Environmental Coordinator at 760-651-5143  
melissam@sanpasqualtribe.org
- Roland Escarrega, Water Master
- Louie Morales, Water Technician

Bi-monthly newsletters help us to constantly educate and provide environmental updates to the community .

# Reducing Water Usage Drought Friendly Lanscapes

During the past year San Pasqual's Environmental and Water Departments have promoted different ways to reduce water usage in and around your home. Throughout the year we have seen a great response, many homeowners have taken advantage and put to use the free faucet aerators and shower heads provided by SDG&E. But during California's current drought status and with Governor Brown directing the statewide mandatory water reduction we as a community need to continue in our efforts to reduce daily water usage.



Next Issue look for 10 simple steps to composting

10 step to reducing water usage

1. TAKE SHORTER SHOWERS, INSTALL HIGH EFFICIENCY SHOWER HEADS
2. TURN OFF THE FAUCET WHEN BRUSHING TEETH
3. WATER YOUR LAWN ONLY WHEN IT IS DUE
4. USE A BROOM TO CLEAN DRIVEWAYS AND SIDEWALKS
5. AGREE TO WALKWAYS TO TRY TO SAVE WATER
6. ONLY WASH FULL LOADS OF LAUNDRY
7. RINSE THE DISHWASHER ONLY WHEN FULL
8. THE LOWER THE PRESSURE, THE BETTER
9. TRY TO USE WATER SAVING TOILETS
10. PLANT CALIFORNIA FRIENDLY TREES AND PLANTS

Don't forget to stop by the Water Department to pick up your Water Saving High Efficiency Shower heads and Faucet aerator pack. For questions call John Flores at 760-651-5141

Shower heads and Faucet aerator pack are available at all SDG&E Water Saving Centers.

There are many great websites with helpful tips and examples on how Californians are saving water such as;

- [www.saveourwater.com](http://www.saveourwater.com)
- [www.socalwatersmart.com](http://www.socalwatersmart.com)
- [www.wateruseitwisely.com](http://www.wateruseitwisely.com)
- [www.watersmartcheckup.org](http://www.watersmartcheckup.org)

On top of the water reduction information some websites have information on Water Smart Landscaping.

[www.landscapemakeover.watersmart.org](http://www.landscapemakeover.watersmart.org)

Provides information on upcoming classes that provide instruction from industry professionals, that will educate you on how to develop a landscape makeover plan that works for your yard and climate.

A large part of water reduction efforts are now focused on landscapes and many cities including Valley Center now have mandatory reductions on irrigation. A fun way you can start saving on water usage would be to take out some of your water dependent grass and plants and creating a drought friendly landscape by using California native plants.



Many of the Native plants on our reservation are drought tolerant and have adapted to the dry climate and tuff soil we have so they are perfect to start your drought friendly landscape. Now I'm not saying to let the weeds grow wild but rather to use our natural resources in a manner that fits you. Using the same native plants and resources around your home design your landscape around your family.

Pathways and patio areas can be made out of River Rock, Flagstone, Gravel, Boulders or sitting wall blocks instead of grass. In areas where the kids play that we usually prefer grass in maybe try wood chips or artificial turf.

A few colorful and attractive native plants:

- ♦ Lavender
- ♦ Sage
- ♦ Agave
- ♦ Small succulents
- ♦ Acorus
- ♦ Liriope
- ♦ Rosemary Tuscan Blue
- ♦ Mexican Feather Grass
- ♦ Date Palm
- ♦ Golden Shrub Daisy

Install rain barrels with drip irrigation to the plants and areas that need the most water, such as gardens.

Creating a native friendly landscape will not only be relaxing and visually pleasing but water friendly. It will reduce your usage significantly and save water for the important things in your life.

Next Issue look for summer water saving tips

To add your self to the e-newsletter mailing list please send your name and email address attached with the message going green to [spenvironmental@sanpasqualtribe.org](mailto:spenvironmental@sanpasqualtribe.org). You may also check out past newsletters on the San Pasqual website by going to [www.sanpasqualbandofmissionindians.org](http://www.sanpasqualbandofmissionindians.org)



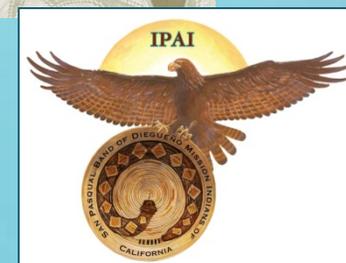
10 Steps to Conserving Water

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Shower Heads supplied by SDG&E as part of Home Energy and Water Saving Efforts.



SDG&E  
A Sempra Energy company





**The Environmental & Domestic Water Department**

- John Flores, Environmental & Domestic Water Manager at 760-651-5141 johnf@sanpasqualtribe.org
- Desiree Morales-Whitman, Environmental Manager at 760-651-5142 desireem@sanpasqualtribe.org
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**Transfer Station Hours**

MONDAY - 7:30am - 4:00pm  
 TUESDAY - 7:30am - 4:00pm  
 WEDNESDAY - 7:30am - 4:00pm  
 THURSDAY - 7:30am - 4:00pm  
 FRIDAY - 7:30am - 4:00pm  
 SATURDAY - CLOSED  
 SUNDAY - CLOSED

For information call 760-651-5143



For those not in attendance La Jolla and Pauma Earth Day 2015 was a great success. There was a lot of fun for the family and very helpful information on Climate Change and ways that we can help lower our carbon footprint. There were a lot of organizations in attendance including many Tribal Environmental Departments that were providing information on all the latest environmental topics and handing out cool and useful environmentally friendly products. San Pasqual Environmental Department hosted a booth focused on reduce, reuse and recycling skills by introducing our k-cups for the garden project. Booth visitors were taught simple everyday steps to recycling and reuse of products no longer desired and participated in planting seeds in recycled K-Cups. Booth guest also received an insulated reusable shopping bag.

Other cool giveaways included reusable water bottles, totes, emergency flash lights and whistles. Children participated in fire safety training, coloring contests, games and activities. If you were not able to attend don't forget to check out the upcoming events for more fun filled family events.



## Upcoming Events

**LOS COYOTES EARTH DAY 2015**

SATURDAY MAY 16  
11:00am - 3:30pm

LOS COYOTES INDIAN RESERVATION CAMPGROUND  
WARNER SPRINGS, CA 92086

OPEN TO THE PUBLIC

Bring a blanket, bring a chair and enjoy the festivities

Questions? (760) 782-0712

No Alcohol/No Drugs

GAMES FOOD PRIZES

**20th Traditional Indian Health Gathering**  
May 23, 24, 2015

"Honoring Culture and Wellness"

Events: • Crafts • Health Screenings • Acupuncture • Massage Therapists • Chiropractor • Podiatrist • Youth Activities • Information Booths • Speakers • Drum Group • Men and Women Swears • Bird Singers • Bear Dancers

Launch and Dinner will be provided

Traditional Gathering will be held at the Pala Rey Youth Camp  
5 miles east of Pala  
Pala, California 92059

## COMMUNITY NOTICE

Attention San Pasqual Resident, the Environmental Department in collaboration with RCAC will be mapping and inspecting all septic systems on the reservation as part of a Community Wide Septic System Management Plan.

The first phase requires collecting information on existing septic systems this includes;

- locating and mapping
- general description of the system
- capacity
- lines locations footage

Mapping will take place prior to the inspection starting Monday April 20th, 2015 and will be ongoing throughout the next few months. No appointment required. If you wish to schedule for mapping due to pets or systems located in a gated area please call Melissa Morales at 760-651-5143.

Appointments are required for inspections, to schedule please call Melissa Morales at 760-651-5143. All remaining appointment times will be assigned.

Maintaining septic systems on tribal land is a priority. Together we can take steps to ensure that our families and neighbors, water resources, natural habitats, and personal property are protected from the dangers of septic system failure. For questions or concerns please feel free to call John Flores at 760-651-5141 for more information.

rabbit  
brush rabbit 'ephar.  
cottontail rabbit hellyaaw.  
jackrabbit kunyaaw.  
sage rabbit 'ephar.

Next Issue look for Earth Day Activities for Kids

Don't forget to stop by the Water Department to pick up your **free** Water Saving High Efficiency shower heads and faucet aerator pack.

For questions call John Flores at 760-749-3200 Ext. 405

Shower Heads supplied by SDGE as part of Home Energy and Water Saving Efforts.

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# Questions and Comments

Thank you

John Flores – Environmental Director  
Phone: 760 – 310 – 6697  
Email: [johnf@sanpasqualtribe.org](mailto:johnf@sanpasqualtribe.org)

