Soboba Band of Luiseño Indians

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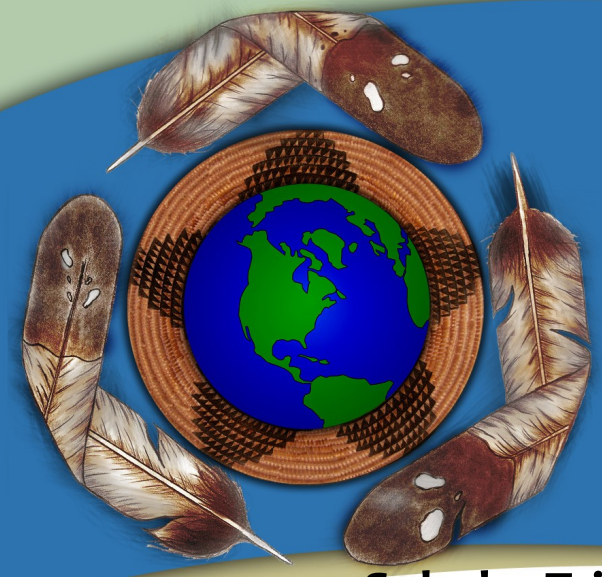

Cham Tema

"Our Land"

Soboba Tribal Environmental Department

The Soboba Band of Luiseño Indians' Tribal Environmental Department is committed to protecting, restoring, and enhancing natural resources on the Soboba Reservation

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Reducing Waste

In 2010, the average person threw away 4.43 pounds of trash per day. Only 34% was recycled leaving over 165 million tons to be sent to the landfill. Reducing the amount of waste we produce can have large impacts on the environment in areas such as energy use, pollution, and resource conservation. The first step should be to reduce the amount of products and material you use, which eliminates waste by requiring less to be made. The next step is to reuse the products you have so new ones are bought. And the last step should be to recycle whatever can't be reused instead of throwing it away.

Reduce the amount of packaging

- Some packaging is designed just to make a product attractive on the store shelf and is not necessary. When choosing between two similar products, select the one with the least unnecessary packaging. At the grocery store, consider whether it is necessary to purchase items like vegetables in prepackaged containers when they can be bought unpackaged.

- Let clerks know when it's not necessary to double wrap a purchase.
- Consider large or economy-sized items for household products that are used frequently, such as laundry soap, shampoo, baking soda, pet foods, and cat litter. These sizes usually have less packaging per unit of product. For food items, choose the largest size that can be used before spoiling.
- Consider whether concentrated products are appropriate for your needs. They often require less packaging and less energy to transport to the store.

Consider reusable products

- A sturdy mug or cup can be washed and used time and again. Many people bring their own mugs to work, meetings, and conferences.

- Sturdy and washable utensils and tableware can be used at home and for picnics, outdoor parties, and potlucks.
- Look for items that are available in refillable containers. For example, some bottles and jugs for beverages and detergents are made to be refilled and reused, either by the consumer or the manufacturer.
- When possible, use rechargeable batteries to help reduce garbage and keep toxic metals found in some batteries out of the waste stream. Another alternative is to look for batteries with reduced toxic metals.
- When using single-use items, remember to take only what is needed. For example, take only one napkin or ketchup packet if more are not needed.

Sell or donate items

- Opt for used and "irregular" items that are less expensive than new or "first-quality" items, and using them will keep them from being thrown away.
- Donate or resell items to thrift stores or other organizations in need. Donors sometimes receive tax deductions or even cash. These organizations typically take everything from clothes and textiles to appliances and furniture. All should be clean and of respectable quality. Sell secondhand items at fairs, bazaars, swap meets, and garage sales.
- Give hand-me-down clothes to family members, neighboring families, or the needy. Consider acquiring used clothing at thrift or consignment shops.
- Where appropriate, encourage area merchants to donate damaged goods or food items that are still edible to food banks, shelters, and other groups that care for the need.

Nonpoint Source Pollution Prevention

Nonpoint source pollution gets into water through run off. Even though the exact locations of nonpoint source pollution cannot be identified, scientists know that certain environments and operations produce a high volume of pollution. Listed below are some strategies that urban and suburban areas use to decrease nonpoint source pollution:

- **Buffer strips** are strips of grass located between and around impervious paving materials such as parking lots and sidewalks, and a body of water. The buffer strip absorbs soil, fertilizers, pesticides, and other pollutants before they can reach the water.
- **Retention ponds** capture runoff and stormwater. Sediments and contaminants settle out of the water when they are trapped in the retention pond.
- **Constructed wetlands** are a recent innovation in which an area is made into a wetland; the land is then used to slow runoff and absorb sediments and contaminants. The constructed wetland also provides habitat for wildlife.

- **Porous paving materials** are used in parking lots and highways. The porous pavement allows rainwater and stormwater to drain into the ground beneath it, reducing runoff. In some cases, there is also a stone reservoir underneath the pavement to allow filtration of the water before it reaches the groundwater.
- **Sediment fences**, or knee-high black fabric fences, are often used at construction sites to trap large materials, filter sediment out of rainwater, and slow runoff.

This information and more can be found at the National Oceanic and Atmospheric Administration's nonpoint source education website: http://oceanservice.noaa.gov/education/tutorial_pollution/welcome.html

What is Dangerous about Dumping?

Physical Hazards. The health risks associated with illegal dumping can be significant. Areas used for illegal dumping may be easily accessible to people, especially children, who are vulnerable to the physical and chemical hazards posed by wastes.

Fire. Neighborhoods have been evacuated and property damage has been significant because of dumpsites that caught fire, either by spontaneous combustion, or more commonly, by arson.

Flooding. Illegal dumping can impact drainage, making areas more susceptible to flooding when wastes block ravines, creeks, culverts, and drainage basins.

Contamination. Rain and water runoff from dumpsites containing chemicals can contaminate wells and surface water used as sources of drinking water.

Crime. Dumpsites serve as magnets for additional dumping and other criminal activities.

Mosquitoes. Dumpsites with scrap tires provide an ideal breeding ground for mosquitoes, which can multiply 100 times faster than normal in the worm, stagnant water standing in scrap tire casings. Sever illnesses, including encephalitis and dengue fever, have been attributed to disease-carrying mosquitoes from scrap tire piles.

Rodents. Decomposing garbage can provide food and habitat for deer mice and other rodents. Rodents can be carriers of both the hantavirus and plague.

For additional information, visit the EPA Waste website. http://www.epa.gov/waste/index.htm

Soboba Reservation next to the Sports Complex

Test Your Water Smarts

1. True or false? Watersheds are located mainly in mountainous regions with high rainfall.

2. Most of the pollutants entering our waters come from the following sources:

   A. Wastewater treatment plants

   B. Runoff from fields and streets

   C. Factories along rivers

3. True or false? Students can join organizations to help monitor their waters.

4. True or false? Dirt, bacteria, and nutrients are the most common pollutants in our waters.

5. True or false? Leaves should be raked down a storm drain so they can decompose in the stream.

6. True or false? To test if your toilet is leaking, you can squirt a couple drops of food dye in the top of the tank and wait to see if the dye shows up in the toilet bowl.

7. Nutrients that enter our waters come from the following sources:

   A. Leaking septic systems
   B. Excess fertilizers washing off lawns
   C. Pet waste
   D. All of the above

8. What percentage of rivers and streams assessed in the most recent national water quality report scored a GOOD rating, meaning the waters fully supported their designated uses?

   A. 10%
   B. 32%
   C. 65%
   D. 93%

Answers:

1. F, we all live in a watershed
2. B
3. T
4. T
5. F, decomposed material uses up the oxygen in water
6. T
7. D
8. C

If you have any questions on information in the newsletter or any other environmental concerns contact:

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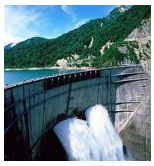
Renewable Energy Sources

Solar -photovoltaic (PV) materials and devices convert sunlight into electrical energy, and PV cells are commonly known as solar cells. PV systems are already an important part of our daily lives. Simple PV systems provide power for small consumer items such as calculators and wristwatches. More complicated systems provide power for communications satellites, water pumps, and the lights, appliances, and machines in some homes and workplaces.

Wind-uses the energy in wind for practical purposes such as generating electricity, charging batteries, pumping water, and grinding grain. Most wind energy technologies can be used as stand-alone applications, connected to a utility power grid, or even combined with a photovoltaic system. For utility-scale sources of wind energy, a large number of turbines are usually built close together to form a *wind farm* that provides grid power. Stand-alone turbines are typically used for water pumping or communications.

Water -innovative technologies using waves, currents



and tides generate electricity from water. Hydropower, or hydroelectric power, is the most common and least expensive source of renewable electricity in the United States today. Hydropower technologies have a long history of use because of their many benefits, including high availability and lack of emissions.

Biomass -breaks down organic matter to release stored energy from the sun. The process used depends on the type of biomass and its intended end-use. There are many types of biomass-organic matter such as plants, residue from agriculture and forestry, and the organic component of municipal and industrial wastes.

Geothermal-tapping the heat within the earth, geothermal energy provides electricity and efficient heating and cooling.

Hydrogen and Fuel Cells-hydrogen is an energy carrier that can be produced using renewable energy. Fuel cells use hydrogen to produce electricity.