



Environmental Protection Department

Our Mission is to protect, monitor, restore, and regulate Morongo's natural resources, honoring and protecting all life, land, and traditions and enhancing tribal sovereignty. We will promote environmental awareness and environmentally considerate actions by exemplifying environmental stewards, fostering collaborative relationships, expanding education and outreach activities, and continuing to enrich and develop our programs.

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Seasonal Photo Contest

Check out these amazing images from the Morongo Reservation and surrounding area.



The Morongo Environmental Protection Department would like to congratulate

**Halie Skuza,
Morongo Realty**

for winning 1st place in the Summer Seasonal Photo Contest with the photo titled **"Millard Canyon"**

The winner received a \$50.00 gift card to a local business.

**Fall Entries
are due
December 1st**

5 photos were submitted. Photographers remained anonymous and all employees who had access to a computer were allowed to vote for their favorite photo.

Congratulations to **Mark Pullen, TANF** who submitted the Runner-Up photo **"Mighty Bird of Prey"**.



Submit your photos for a chance to win a gift card to a local retailer!

Submissions need to be original photographs taken between September 1 and November 30, 2016 within the Reservation or the surrounding San Gorgonio Pass and can be anything related to the environment. Tribal members, descendants, community members, and employees are all welcome to participate! To submit your photo for the photo contest, upload your pictures at:

www.morongonation.org/content/environmental-seasonal-photo-contest Or email photos and a description to: environmental_department@morongon-sn.gov

If you need assistance uploading your photo or you have any questions about the photo contest, please contact the Environmental Department at 951-755-5128.



California's Trees are Stressed Out

Written by: Kimberly Miller, Environmental Specialist



During the most recent drought, much attention has been given to irrigation restrictions, wells going dry, farm water use, and the needs of fish like salmon and Delta smelt. One thing that seemed to pass under the radar until relatively recently is the health of California's trees.

Tree mortality is a big problem

The U.S. Forest Service estimates 66 million trees died statewide since 2010. While occasional die offs occur, they have not been seen on this magnitude. Many individual stressors are combining to be too much for trees to handle at once. Climate change is affecting temperatures and precipitation patterns. Slow growing trees do not adapt to these changes very well. Climate change also affects wildfire occurrence and intensity. Drought puts extra pressure on trees already trying to cope with warmer temperatures. A tree that is not getting enough water is much more likely to succumb to other stressors than one that has access to plenty of water. Bark beetles are another significant factor. While bark beetles are a natural part of any forest, the weakened trees are resulting in a significantly increased amount of successful attacks. Since trees don't have the resources to put up as much defense, the beetles are able to infest more trees, reproduce in greater numbers, and spread out to more areas.



Tree die offs affect us all

Trees are beneficial in the wild and in urban areas. Trees improve air and water quality. They provide habitat for wildlife. Trees provide shade for other plants, streams, and homes. They reduce soil erosion, slow stormwater runoff, and help recharge groundwater. In residential and urban settings, trees also add value to homes and neighborhoods. If a tree dies, it can take decades for a new tree to provide these same benefits.

While many reports on tree mortality focus on the Sierra Nevada mountains, examples of tree death are apparent close to home. In Millard Canyon, the alders that make up the riparian corridor have died off beginning in the lower, drier, and warmer parts of the canyon and the mortality is creeping northward. This has occurred as the water table dropped (from less rain/snowmelt, warmer temperatures, and possibly more groundwater use) and the tree roots are not able to get to sufficient amounts of water.

What you can do

Although no one can stop drought and we won't be able to save all trees in the forests, there are ways each of us can help ease some of the other factors affecting tree health. Firstly, if you have trees at your house, make sure you are giving them enough water to make it through drought years. Slowly and deeply water trees, mulch, and don't over-prune trees during times of water stress. Use caution to prevent wildfires. Take precautions when driving near dry brush/grass, avoid sparks from vehicles or power equipment, and properly maintain your campfire in a responsible area. Buy firewood where you plan to burn it. Moving firewood can also move tree pests (including bark beetles) into an area where they weren't before, exposing new trees.

For more information visit:

<http://www.fs.usda.gov/main/catreemortality/home>, <http://firewood.ca.gov/>,
and <http://saveourwater.com/save-our-water-and-our-trees/>



**Save Our Water
and Our Trees!**

Recycling Right at the Morongo Casino Resort and Spa

Written by: Dana Morey, Environmental Supervisor

Contamination in the recycling bin, including non-recyclables, food, and liquids, has resulted in decreased recycling rates and rebates for the Casino. In fact, several loads of mixed recyclables from the Casino were turned away from the recycling center and sent to the landfill due to food and liquid contamination. Beginning the week of May 9, the Casino Mixed Recycling Program was discontinued and the Casino transition to a simplified, source segregated recycling program.



CASINO RECYCLE SORT



BOTTLES AND CANS

Plastic bottles, aluminum cans, and green, clear, and brown glass bottles.



CARDBOARD

Cardboard boxes and cartons.



MIXED PAPER

Office paper, magazines, and newspaper collected from hotel rooms and select offices.



WAREHOUSE PLASTIC FILM

Plastic wrap and plastic film from the Casino warehouse

There is often a lot of confusion over what is and is not recyclable, especially in the hospitality and food service industry. The new simplified recycling program for the Casino is easier to follow, reduces staff confusion, and ensures the Casino's recyclables are clean and easily recyclable. In all locations, glass, plastic, and aluminum beverage containers are sorted out of trash and recycling bins, and cardboard is collected. Mixed paper and plastic film are collected from select locations.

Although the Casino is collecting less types of materials, the simplified recycling program will be more sustainable over time. Scrap value for recycle materials has declined over previous years and contamination in the

recycling bin has increased because of confusion over what can and cannot be recycled. Both of these contribute to increased costs associated with recycling both for the Casino and for local recycling facilities. By separating the materials and keeping them clean, the Casino's recycling rebate will be maximized, ensuring the recycling program continues to help both the planet and the bottom line.

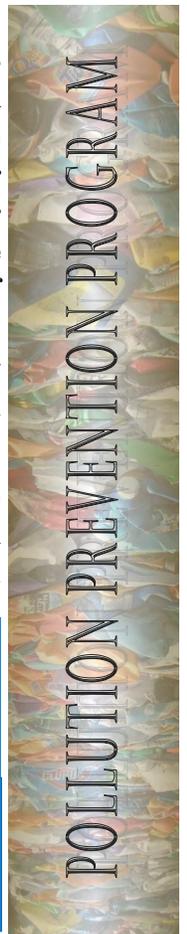
Please note, all other locations on the Morongo Indian Reservation including your home recycle cart will continue to offer the commingled recycling program where all recyclables can be placed into one bin. Please recycle right and follow these tips to cut down on harmful contamination in your bin:

- ⇒ No food or liquids and please rinse food containers
- ⇒ If it is smaller than your hand, put it in the trash. (no plastic forks, spoons, straws, k-cups, etc.)
- ⇒ Not sure if it is recyclable, put it in the trash bin



Contents are sorted for recycling.

Can't find a recycling bin at the casino?
Rest assured that most of the casino trash cans in public areas are sorted for recycling!



Guest Article: Small Changes—Big Water Savings

Written by: Keith Nielsen, Morongo Finance Department

While there are many ways to save water and money, here are a few simple suggestions.

IN THE KITCHEN: While rinsing dishes, run the water at less than half of the full volume. They will not rinse any faster with more water volume. If washing dishes by hand, do not run the water the whole time you are washing them. Fill a dish pan or a large bowl from your kitchen about half full. Wash the dishes on the garbage disposal side of the sink and place them in the other side to rinse them all at once, again at less than half of the full volume. Using the pan or bowl also allows one to remove it from the sink to rinse food scraps from the dishes that you missed earlier. If you have a dishwasher, it will most likely use much less water than you will by washing your dishes by hand.

IN THE BATH: A proper shower will use much less water than a bath. Not a believer? If you have ever filled a large tub you know that the hot water will run out before the tub is full. That does not happen in a proper shower which proves that less water is used in a shower. Install a shut off valve on your shower head (or shower hose). Using a cloth over the fittings and a pliers if needed, unscrew the shower head. Use Teflon tape from the plumbing section of the hardware or home improvement store on the threads of the water supply pipe and the shut off valve. Screw on the shut off valve, then screw the shower head on. By adjusting the valve, use ½ or less of the full water volume only while wetting down or rinsing off. The rest of the time, while shampooing or scrubbing, turn the shut off valve to off. The water will still trickle, which is plenty of water to keep your hair wet while shampooing and your wash cloth or scrunchy wet while bathing. Set the shut off valve back to half or less of the full water volume to rinse yourself and the shower stall or tub area. Another tip; Wet your toothbrush then turn the water OFF. Brush your teeth as long as you wish, THEN turn the water on to rinse your mouth and your toothbrush.

Environmental High School Intern Program

Written by: Jessica Southard, Administrative Assistant

Every year, the Environmental Protection Department hosts a summer High School Internship. The selected interns are given the opportunity to explore professional work experience in the Environmental Field. They work with each of the Environmental Specialists in their specific fields, often taking a hands on approach to learning.

This year's interns were Joseph Waters and Agnes Guassac, who are both students at the Morongo School. The interns are asked to prepare a report and presentation on an area of the environment that interests them. Joseph presented a well laid out plan for "Vermicomposting on the Reservation", and encouraged the residents on Morongo to create their own vermicomposting bin. Agnes presented a thorough study of the "Indoor Air Quality at Malki Museum" and it's importance in keeping the artifacts at Malki preserved.

We are excited to see where our interns will go in the future and wish them much success!



Joseph Waters and Agnes Guassac with the Environmental Protection Department team.



Secondhand Smoke and Indoor Air Quality

Written by: Pamela Atcitty, Environmental Specialist II

What is secondhand smoke?

Secondhand smoke is a mixture of the smoke given off by the burning of tobacco products, such as cigarettes, cigars, or pipes, and the smoke exhaled by smokers. Nonsmokers breathe in the same toxic chemicals in these tobacco smoke as the smokers do, with similar effects. Secondhand smoke is also called environmental tobacco smoke (ETS) and exposure to secondhand smoke is sometimes called involuntary or passive smoking.



How is secondhand smoke harmful to our indoor air quality and health?

The supply of clean air is regarded as one of the most important basic factors for human health and wellbeing. In consequence, polluted air is a great threat to human health and is considered as a major health problem, especially the quality of indoor air. The condition of indoor air quality is not only a concern because people spend most of their time indoors, but also because the indoor concentration of pollutants is often much higher. Secondhand smoke contains more than 7,000 substances, several of which are known to cause cancer in humans or animals. Secondhand smoke or ETS often produces levels of carbon monoxide and other toxins well above accepted standards for human exposure. In addition to breathing in secondhand smoke when people smoke, harmful chemicals stick around long after smoking ends because they are absorbed by drapes, linens, furniture, and clothes, which can then be easily re-emitted back into the air you breathe. Secondhand smoke can also move between rooms of a home and between apartment units, having very little barriers. For decades, it is well documented that secondhand smoke is harmful to human health and causes premature death and disease to the non-smoking population. Children exposed to secondhand smoke have an especially increased risk for acute respiratory infections, sudden infant death syndrome, more severe asthma, and ear problems. In the adult population, exposure to secondhand smoke is associated with acute coronary heart disease and lung cancer. Healthy individuals are at risk from secondhand smoke, but the following populations are at even greater risk: fetuses and newborns, children, and people with asthma or other respiratory conditions. Secondhand smoke is a very serious form of indoor air pollution in the US alone, as it causes about 3,000 lung cancer deaths a year, compared to less than 100 lung cancer deaths per year from traditional forms of outdoor air pollution.

What can we do to prevent illnesses from secondhand smoke?

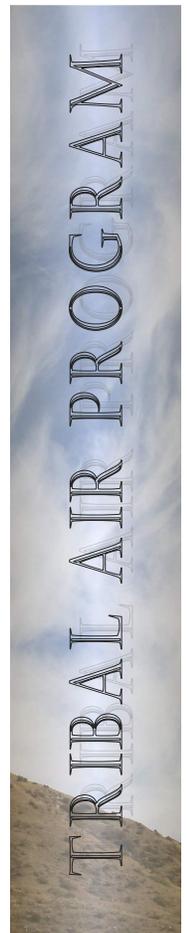


Secondhand smoke is one of the easiest indoor air pollutants to control. By simply removing the source (cigarettes, cigars, pipes), you eliminate the problem. Increasing ventilation and filtration are not viable options to clear the air. There are no mechanical devices capable of removing all of the particles and gases found in secondhand smoke. Separating smokers and non-smokers is also ineffective. The U.S. Surgeon General's report on involuntary smoking concluded that "the simple separation of smokers and non-smokers within the same air space may reduce, but does not

eliminate, the exposure of non-smokers to ETS or secondhand smoke." There is only one way to eliminate secondhand smoke from indoor air; remove the source.

Here are a few quick tips to removing the source:

- prohibit smoking in your home
- have family members or guests smoke outdoors
- if you or a family member smoke, consider quitting – contact The Lung Association at 1-888-566-5864 for information on smoking cessation programs
- work with other parents and family members to help promote the concept of smoke-free homes



An Overview of Climate Change

Written by: James Payne, Environmental Director

Almost every day you hear it in the news: global warming and climate change. What exactly do they mean? Are we affected by it? What will be the result? Let's begin by describing what each one means.

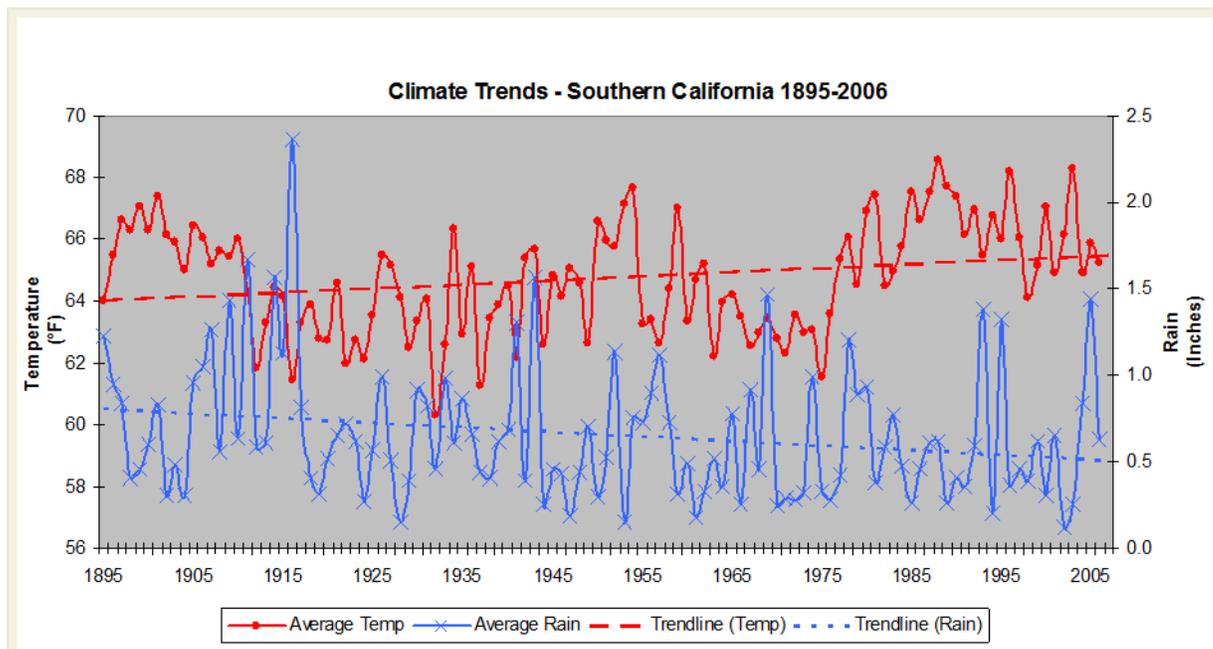
Global warming refers to the concept that the earth as a whole has had a comparative increase in its atmospheric temperature, primarily since the 18th century. Climate change is a broader term which means that the local climate of an area, which encompasses temperature, precipitation, humidity, wind, etc, has varied from expected or "normal" conditions. The two conditions obviously are related to each other, for if you warm an area higher than previous values (global warming), you can change expected local weather patterns (climate change).

Climate change is of concern to all. Modifications of the environment, even ones that may seem slight, can have considerable impacts. For example, over a period of 100 years, a plant that no longer receives the moisture it "normally" does is replaced by a more drought tolerant plant. This impacts the species of plant eaters that would otherwise eat those plants. This in turn affects the meat eater predators that eat the herbivores and so forth and so on. Perhaps you have heard some of the Elders tell of different plants and animals that were abundant in their youth but now they are less prevalent or even gone... The simple, illustrative chain of events could happen anywhere, from Antarctica to Southern California.

Take a look at the chart below, this documents the changes that have occurred since 1895 in both the amount of precipitation and the temperature. The charts are referencing a large area of Southern California of which Morongo Reservation is a part. Comparing the two 20 year periods of 1895-1915 and 1986-2006, you can see that the temperature has increased approximately by 1.07 °F and precipitation has decreased by over 30%. This is further evidenced by the trend line on the graphs.

Whether or not the trends will continue depends on a multitude of factors. Human's interaction with the environment in the past has been primarily a gluttonous one. It has been to take without giving, to reap without sowing; only recently have we recognized our mistakes. Is it too late for the effects of these actions to be remedied? Only time will tell the consequences to plant and animal communities, revealing if present efforts can ease climate change.

GIS/COMPLIANCE ASSISTANCE



Household Chemical Labels

Written by: Jon Castillo, Environmental Technician

We use household chemical products on a daily basis. They can range from soaps, oils, paints, cleaners, pool chemicals, and even pesticides such as Raid. Chemical products can be hazardous if not handled properly or stored properly.

You should always read the product label on every household chemical, a label can tell you if the product is Flammable, Corrosive, Poisonous, or Radioactive. A label will tell you how to use your product safely and what to wear such as gloves or long sleeves. Some product labels will have caution symbols for warning about hazards, such as the chart below.



A label will also tell you how to store your product. Some products must never be stored in the same cabinet together. If the chemicals leach or leak they can accidentally mix together and can cause a very serious hazard. For example:

Bleach and ammonia if combined will result in a harmful gas that targets the respiratory system. Pool chemicals and herbicides if combined can cause a gas, fire or explosion.

A label will have statements such as “CAUTION keep out of reach of Children or pets” and emergency response instructions if the product label is not followed or in the event of an accident. These labels will also have a phone number to call for first aid assistance if you, a child, or pet has inhaled, ingested, or absorbed a chemical into their body.

It is extremely important to keep labels on inside and outside household chemicals. In the event of an emergency, first responders need to be able to read the product label; he or she may save a life just by knowing what chemical caused the incident.

If you have a chemical incident Call 911 for emergency help. If you really don't think it's that bad, then at least call Poison Control for advice on first aid procedures and handling the after-effects of exposure. The number for Poison Control is:1-800-222-1222.

When household chemicals are no longer in use, the label will inform you of where or how to dispose of your product. This ensures that your product won't be thrown in the trash, sewer, or ground. Products that are disposed of improperly can harm human life and the environment. In general, no household chemicals should never be disposed of by dumping down the drain or placing in any trash or recycling bin. All household chemicals should be brought to a Household Hazardous Wastes Collection Event. To prevent hazardous household waste, buy less chemicals, use them up, and recycle the empty containers!



Compressed Gas



Flammable



Oxidizer



Poisonous



Toxic



Biohazard



Corrosive



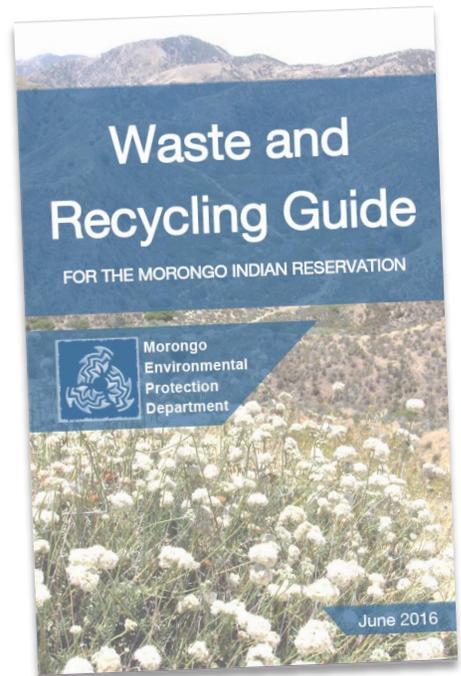
Reactive

PRECAUTIONARY STATEMENTS: CAUTION: KEEP OUT OF REACH OF CHILDREN. Avoid contact with eyes and skin. If product gets in eyes, flush with water for at least 15 minutes. If on skin, wash with soap and water. May cause skin irritation in rare cases. If irritation persists, contact a physician. If swallowed, call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Recycle Right!

Did you get a copy of the new *Waste and Recycling Guide*? You can view a copy online at

<http://morongonation.org/images/pdf/WasteRecyclingGuide-OnlineView.pdf>



If you would like to receive electronic versions of the Morongo Environmental Protection Department's Quarterly Newsletter and information on other Environmental Events, sign up at www.morongonation.org/content/environmental-newsletter-email-signup or email epd@morongo-nsn.gov and request to be added to the list! Prefer a copy mailed to you, no problem! You can sign up at www.morongonation.org/content/newsletter or email us at epd@morongo-nsn.gov



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