



# Cahuilla Band of Indians

## Cahuilla Tribal Environmental Protection Office

52701 CA-Highway 371 Anza, CA 92539

### December Newsletter



#### In this Issue...

**Let's Talk About  
CTEPO Updates  
Important Dates & Events**

**Let's Learn About  
Melting Ice & A Warming  
Planet**

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#### CTEPO Updates!

Tis the last month of 2024! For CTEPO, this year has flown by! We have had so many new exciting projects and opportunities that we have been so grateful to explore.

This last month, alone, was jam packed! We had many meetings to attend and worked on various projects for the department that are to come to fruition in the new year.

November was a time to get out in the field! Jake, Jason and Alyssa took a trip down to Pechanga to visit the Tribe's Cultural Nursery and various environmental sites. We really appreciated the opportunity to learn from Pechanga and are so happy they welcomed us to help inform our own projects here at Cahuilla.

In November, we also climbed Cahuilla Mountain (for the second time) to collect more information on biodiversity and the environment. This time we brought Lorrie along with us and started a fun new collaboration with Cultural! Check out some pictures from our trek in this newsletter or find them on CTEPO's new Instagram page.

Throughout the month we also served as support to Admin as we all gear up for the holidays. We cleaned up a bin, picked up turkeys, and attended the Family Fall Festival!

It has been one of our busier months of the year! We enjoyed the challenges and are prepared for more! CTEPO wishes you all a very happy holidays and all to come in 2025!

# Winter Calendar

## DECEMBER 2024



SUN MON TUE WED THU FRI SAT

1 2 3 4 5 6 7

8 9 10 11 12 13 14

15 16 17 18 19 20 21

22 23 24 25 26 27 28

Christmas Eve Christmas

29 30 31  
New Year's Eve



## FEBRUARY 2025

SUN MON TUE WED THU FRI SAT

2 3 4 5 6 7 8

9 10 11 12 13 14 15

16 17 18 19 20 21 22

23 24 25 26 27 28

President's Day



## JANUARY 2025

SUN MON TUE WED THU FRI SAT

5 6 7 8 9 10 11

12 13 14 15 16 17 18

19 20 21 22 23 24 25

26 27 28 29 30 31

1 New Year's Day

20 Martin Luther King Day



## MARCH 2025

SUN MON TUE WED THU FRI SAT

2 3 4 5 6 7 8

09 10 11 12 13 14 15

16 17 18 19 20 21 22

23 24 25 26 27 28 29

30 31

## Winter Wonderings

December 11th is International Mountain Day. Mountain ecosystems contain a quarter of all land animals.

The Geminid Meteor Shower occurs every December. It is the most active shower of the year. However, the near full moon expected at this time will add a significant light source to the sky and may make it difficult to view this year's event.

The Winter Solstice is the shortest day of the year and will occur this year on December 21st.



Tomorrow is December 1st



## You Snow You Wanna Laugh

What does the gingerbread man put on his bed?  
**A cookie sheet!**

What do you call it when a snowman ignores you?  
**The cold shoulder.**

If a winter fox lost his tail, where would you go to buy him a new one?  
**A retail store.**

# **CTEPO**

## **Instagram**



**@CTEPO\_CBOI**

**Check out CTEPO's Instagram Page to  
keep up with all things Cahuilla  
Environmental!**



# The Cryosphere in Crisis

## What is the cryosphere?

The cryosphere is everything that can be considered the "frozen world."

This includes:

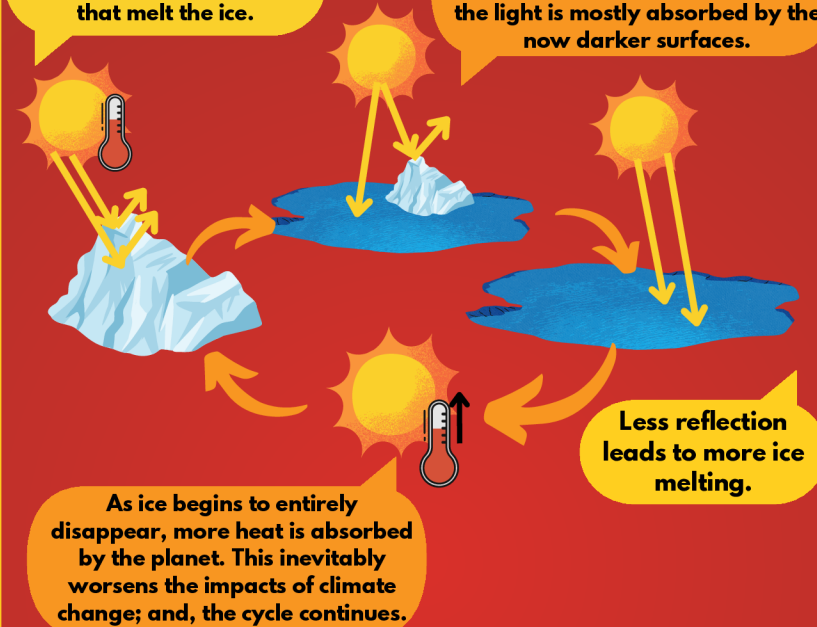
- Ice Sheets
- Ice Caps
- Glaciers
- Snow
- Permafrost



## A Vicious Cycle

Climate change causes unusually high temperatures that melt the ice.

With a significant portion of the ice now gone, there is less reflective area on the Earth's surface. Instead, the light is mostly absorbed by the now darker surfaces.



## Arctic Species Impacted by Climate Change

- Arctic Fox
- Beluga Whale
- Lemming
- Muskox
- Narwhals
- Orcas
- Polar Bears
- Red Knot
- Reindeer
- Saimaa Ringed Seal
- Walrus

## The Earth Grieves for the Cryosphere

As the Earth grows warmer and the cryosphere begins to melt, the whole planet suffers. A melting cryosphere is the catalyst to a series of concerning environmental consequences across the globe.

- **Melting ice leads to rising sea levels and changing water cycles.**
  - This threatens the purity of a significant reserve of freshwater.
  - Coastal cities and habitats will be endangered by changes to global water cycles.
- **Decreasing albedo (the reflectivity of a surface) leads to the planet absorbing more heat from the Sun than it did before.**
- **Less ice leads to dangerous changes to the habitat of many species and the ecosystem, itself.**

## How to Save the Cryosphere

The best thing we can do for the cryosphere is to definitively address climate change and try to live as sustainable of a life as possible. Human activity is taxing on the environment in many ways. Melting ice is just the first of many symptoms of a sick planet.

If we can prevent the further warming of the planet, we may be able to stop the rapid degradation of the cryosphere and protect a habitat and resource that proves crucial to all life.

With our best interests in mind, the cryosphere, a fundamental component to the planet's being, is more than worth saving.







## How They Work

Electric Vehicles (EV) run off of energy generated by a lithium-ion battery rather than the gasoline that we use in a traditional vehicle.

This means that instead of filling the car up at the gas station, you would charge this battery to run your vehicle.

An EV can drive up to 400 miles on a single charge, depending on the size of the car's battery and the conditions of the drive.

There are three levels to charging:

**Level 1-** Charging from a traditional outlet (110 volts) will usually take 40 to 50 hours.

**Level 2-** Charging from an adapted outlet (220 volts) will charge in 4 to 10 hours. These can be installed in your home to allow you to charge your car overnight.

**Level 3-** DCFC chargers are the most expensive to use but charge the quickest in about half an hour.

Similar to your phone, the vehicle battery's capacity to charge will deteriorate over time, lasting approximately 8 to 20 years.

## California's Plan

By 2035, California intends for all new vehicles sold in the state to be "zero-emission" vehicles with a limited number of hybrids available in the market.

This is an effort to curb emissions related to automobile travel. Electric vehicles do not use gasoline and use little oil. They do not produce tailpipe emissions and are also considerably more efficient.

However, their batteries are currently fairly expensive to produce (~\$15,000/battery). It is expected with the projected increase in demand, production of these batteries will advance and the cost of buying an electric vehicle will be nearly equivalent in cost as buying a regular car.

It is important to note, EV batteries require a significant amount of lithium, which must be mined. Sourcing and using lithium can be rather taxing on the environment. Thus, the production and disposal of these batteries comes with its own set of environmental consequences.

Overall, it is believed that Electric Vehicles will be the solution to the carbon crisis resultant from the use of fossil fuels. In the coming years, with the right technologies and adaptations to California's electric grid, EVs will become an increasingly more prominent form of transportation throughout the state.

## Finances of EVs

**Electric Vehicles can cost anywhere from \$30,000 to \$110,000.**

You can get up to \$7,500 in rebates for purchasing a qualifying new electric vehicle or \$4,000 for a qualified used electric vehicle.

## Resources

### California's Plan

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### Cost

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# Pictures from the Peak



Autumn  
Edition



## ACROSS

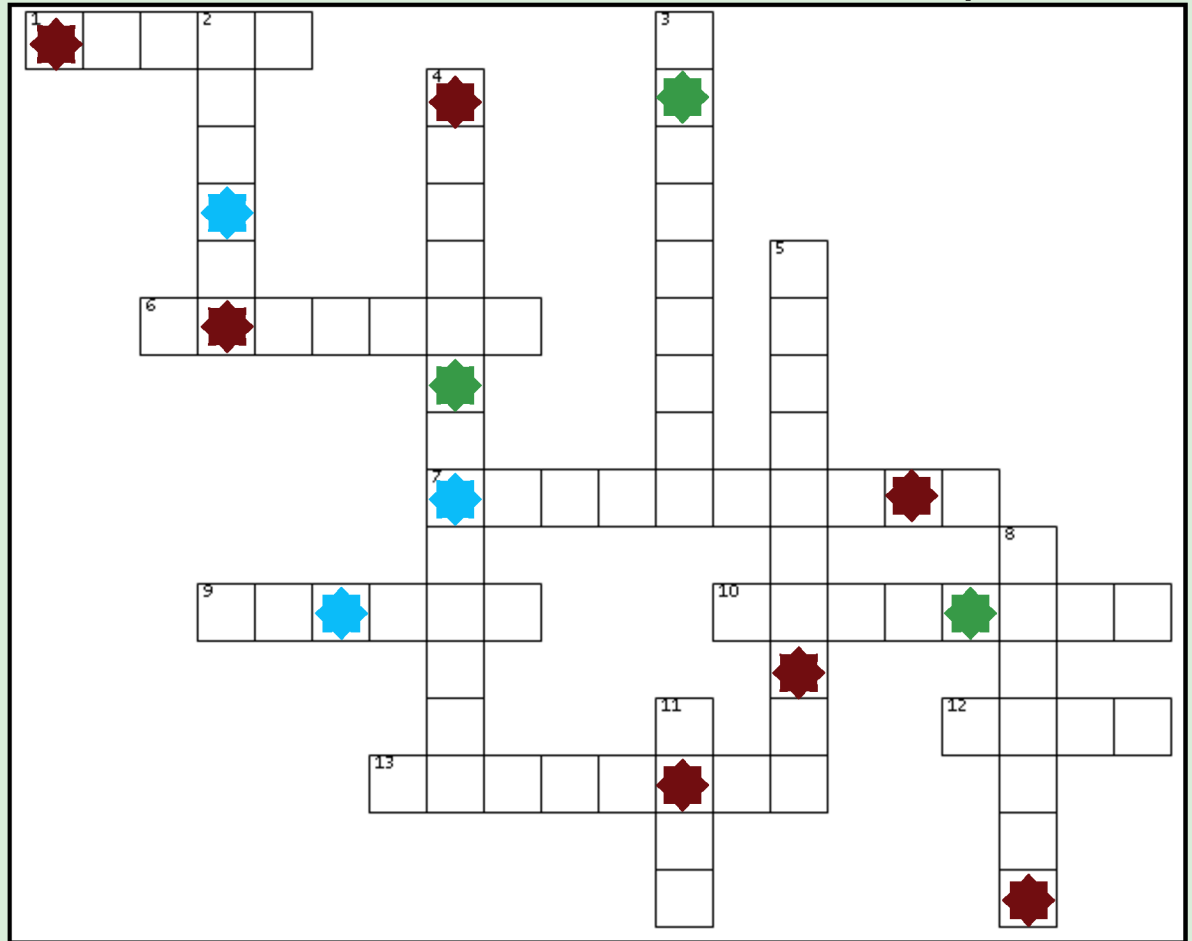
1. This type of bear that lives in the Arctic could be extinct by 2100.
6. Cities that are threatened by the planet's rising water
7. The frozen world
9. \_\_\_\_\_ Ringed Seal; a species affected by changes to the cryosphere.
10. The unicorn of the sea
12. Ice has a \_\_\_\_\_ albedo
13. Another word for this animal is Caribou

## DOWN

2. This refers to the reflectivity of a surface
3. As ice melts, \_\_\_\_\_ rise
4. A disappearing cryosphere is caused by this
5. Currently the cryosphere acts as a reserve of this precious resource
8. Melting cryosphere is the loss of key \_\_\_\_\_ for many species.
11. Water reflects \_\_\_\_\_ light than ice

## Crossword

Solve the puzzle and use the stars to unscramble the Secret Message. The first Tribal Member to call in with the correct answer will win a prize!



## Secret Message

\_\_\_\_\_

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