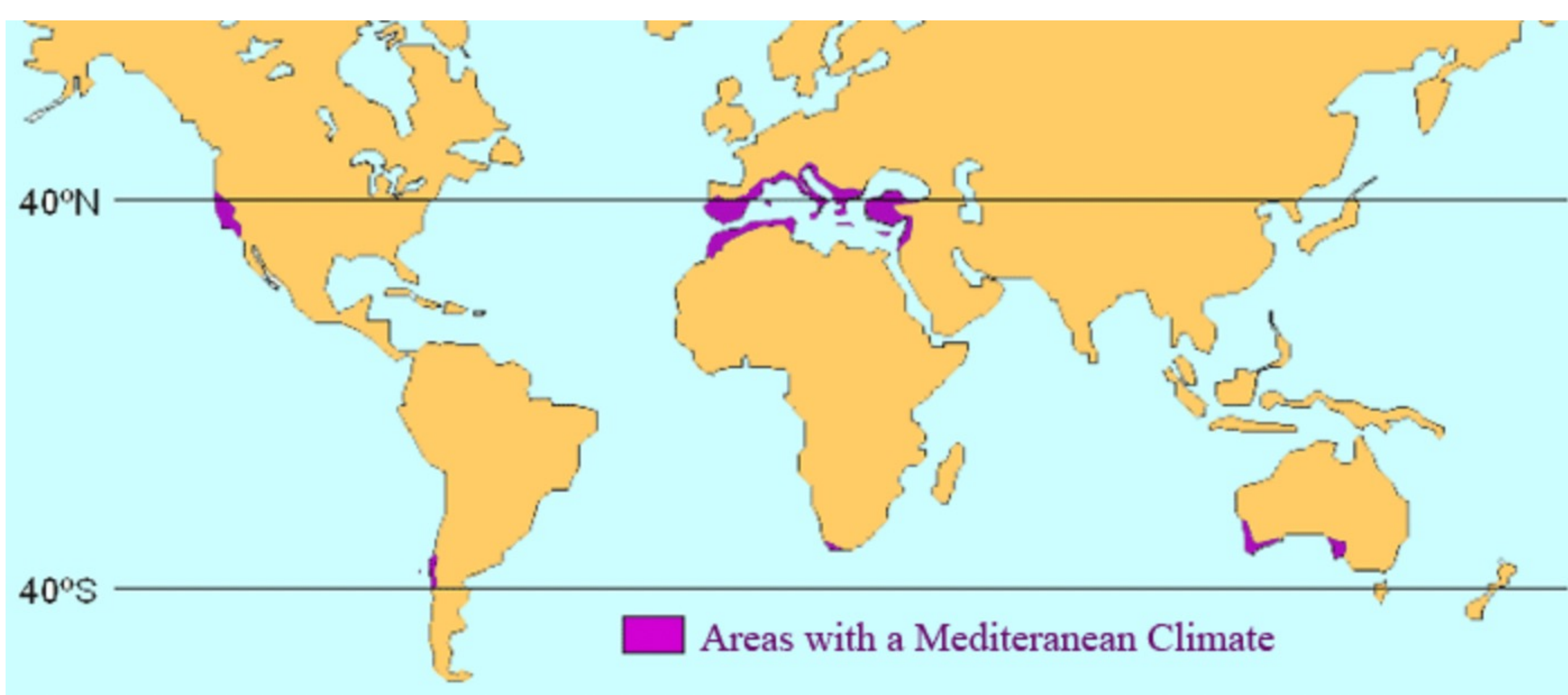


# Central Coast Natural Wonders

## What's so special about Nipomo?

Bill Waycott  
CNPS



There are few areas on the globe where climates like the one we have in California exist. These are characterized by dry, hot summers and cool, wet winters. Collectively, the climate of these areas are known as Mediterranean Climates. These regions occur between 35° and 40° north and south of the equator on west facing continents.



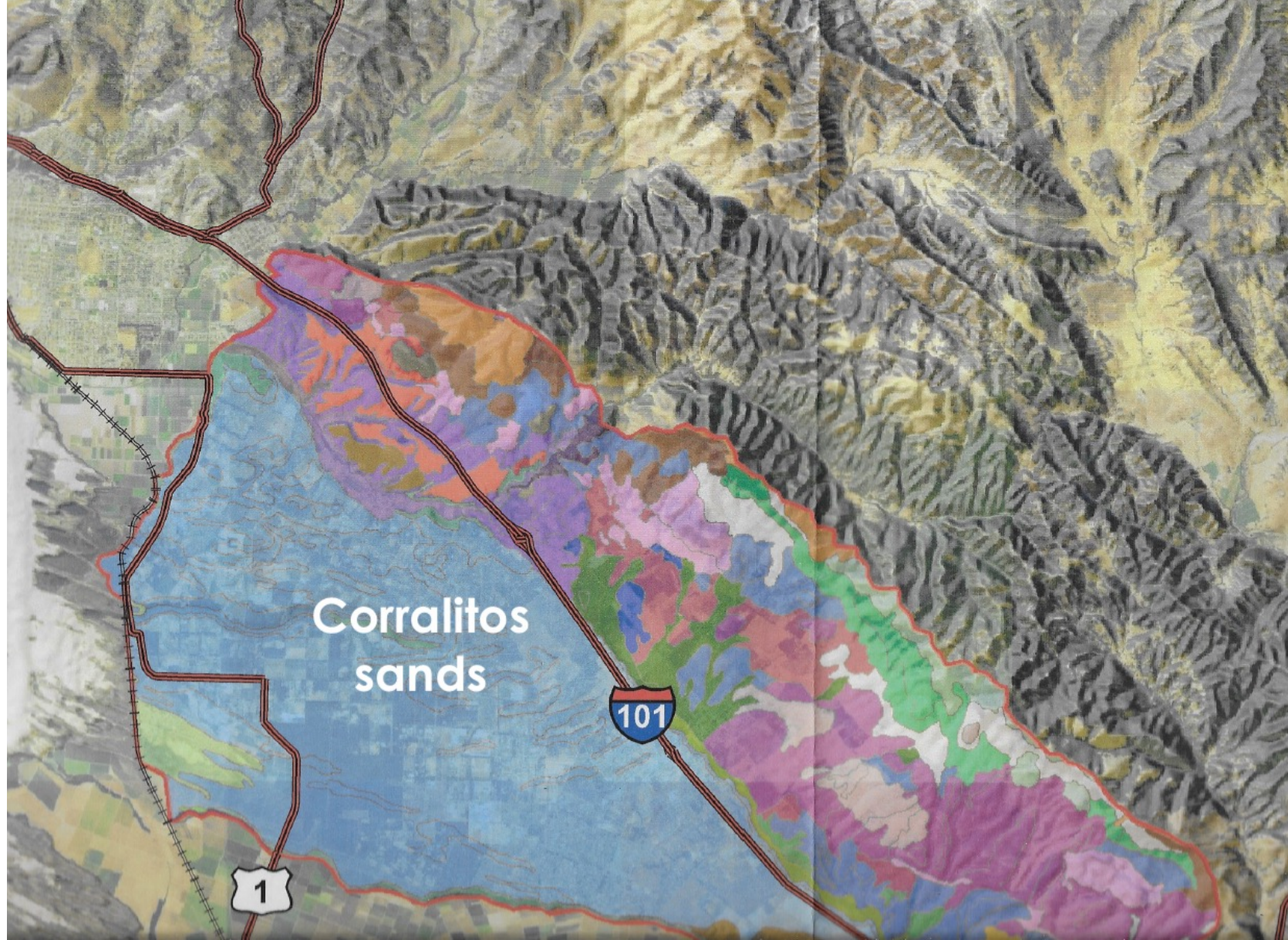


Within the Mediterranean climatic area of North America, the region roughly located between 35° and 40° north of the equator is known as the California Floristic Province, located between southern Oregon and northern Baja California.



San Luis Obispo County is located squarely within the California Floristic Province. Of the 6,000 plus plant species that occur within California, roughly 2,000 of those are found in San Luis Obispo Co. Thus, this county has a very rich diversity of native plants that stretch from high humidity areas around Cambria to dry areas near the Carrizo Plain, virtual deserts.





The Nipomo Mesa is famous for its sandy soil, known as Corralitos sands, which stretch from the dunes west of Highway 1 to the Highway 101 corridor. These sands were deposited during the most recent ice ages, roughly 13,000 years ago, blown on shore from the ocean by strong winds.





As this area has become hotter and drier over thousands of year, the resultant vegetation is now a mixture of chaparral and oak woodland, which was the predominant landscape when the Europeans first arrived.





Although almost all of the chaparral and oak habitat is now gone from the Nipomo Mesa, there are still massive coast live oaks to be found in the Nipomo Regional Park.





A typical maritime chaparral habitat in Nipomo Regional Park.





Beneath the chaparral one finds several mosses and lichens thriving on the soil surface.





And, there is the ever-present lace lichen cascading from oak branches. In fact, coast live oaks are known to support over 200 other species of fauna and flora, making each tree a diverse community of interdependent life forms.

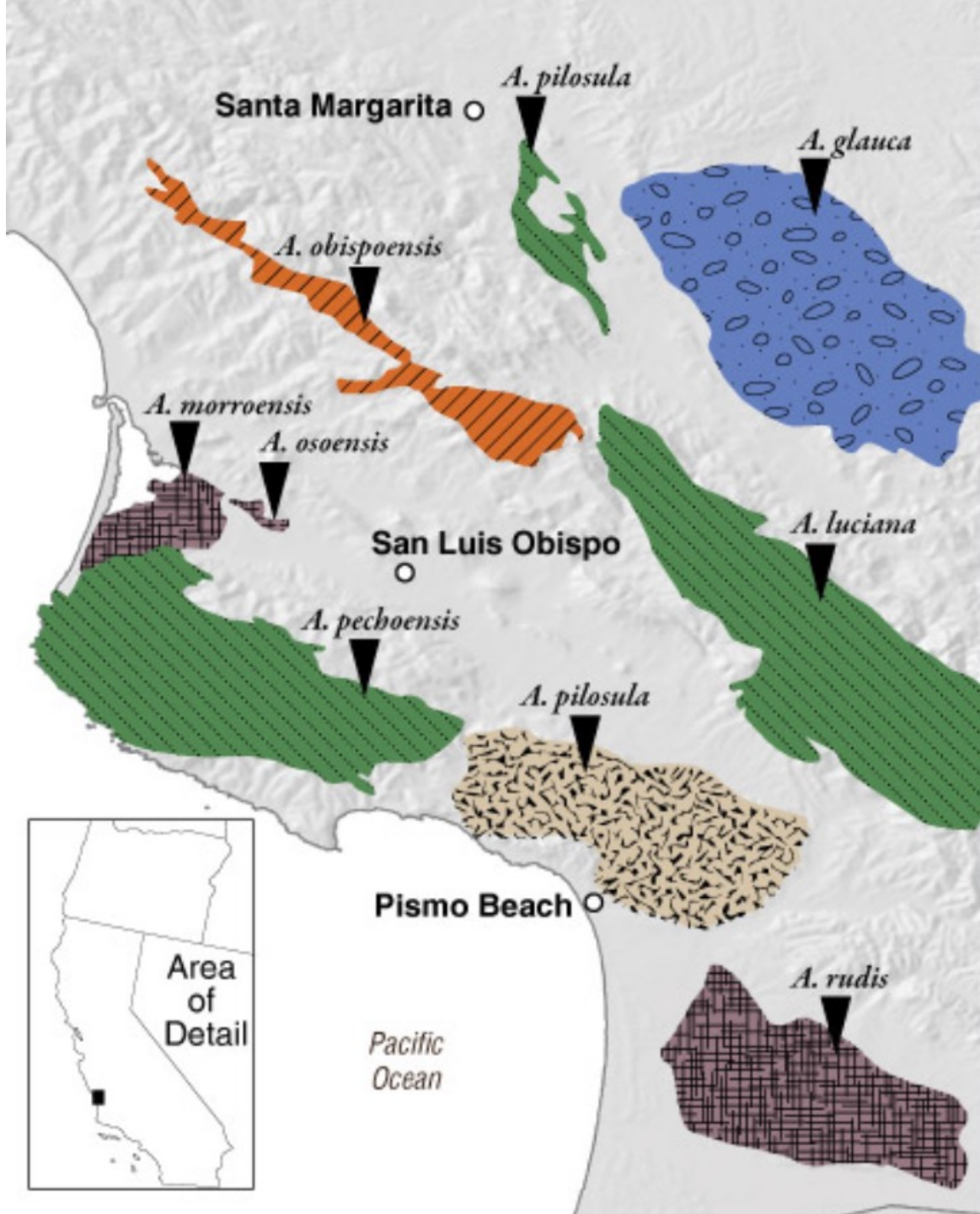


# Some of the plants on the Nipomo Mesa are rare!

- Nipomo manzanita – *Arctostaphylos rudis*, ranked 1B.2
  - rare, threatened, or endangered in California
- Nipomo ceanothus – *Ceanothus impressus*, var. *nipomensis*, ranked 1B.2
  - rare, threatened, or endangered in California
- Pismo clarkia – *Clarkia speciosa*, subspecies *immaculata*, ranked 1B.1
  - very rare, threatened, or endangered in California
- Sand almond – *Prunus fasciculata*, variety *punctata*, ranked 4.3
  - limited distribution in California



Manzanitas of the Central Coast – there are 15 manzanita species that occur between San Simeon and Lompoc, of which 11 occur nowhere else in the world.



Around the City of San Luis Obispo, there are 8 different manzanita species, each restricted to a unique soil type. Some are only on clays, some on sands, some on shales, and others on granite-based soils. The Nipomo manzanita, *Arctostaphylos rudis*, is seen here in the lower right corner, occurring on Corralitos sands (purple color).



*Arctostaphylos rudis* Jeps. & Wiesl.  
Sand mesa manzanita, Shagbark manzanita

*Arctostaphylos rudis* is a **shrub** that is **native** to California, and endemic (limited) to California.  
California Rare Plant Rank: **1B.2** (rare, threatened, or endangered in CA  ).



The Nipomo manzanita, *Arctostaphylos rudis* is endemic to the Central Coast. It is most abundant on the Burton Mesa near Lompoc, but there are a few occurrences remaining near Nipomo.





In its early years, this manzanita grows low, no more than 4 inches off the ground. Note a shoe at the bottom, for scale.





As this manzanita matures, it forms a large shrub, up to 5 feet tall by 15 feet wide.





Many manzanitas are characterized by smooth, red bark (on left). However, the Nipomo manzanita is one of a few species with shredded, grey bark (on right).





The fruit of the Nipomo manzanita resemble small, red apples, hence the name "manzanita", meaning little apple in Spanish.





At maturity, these manzanitas can reach the size of an oak tree, likely hundreds of years old.





At other locations, this manzanita never exceeds more than four feet tall. This makes the giant and ancient relics still growing on the Nipomo Mesa extremely rare. Extremely rare because they are so large and old, and also because there are so few left standing – due to wide-spread development of private property on the Mesa. (Photo: Pt. Sal)





The Nipomo mesa ceanothus is ranked as rare, found only in southwest San Luis Obispo County and western Santa Barbara County.





The Pismo clarkia is ranked as extremely rare, as it is found only in southwest San Luis Obispo County.



The sand almond is ranked as rare, found only in southwest San Luis Obispo County and western Santa Barbara County.



# We have a Nipomo Mesa native vegetation crisis

- Old plants in the Regional Park
  - no new seedling development
  - the old plants are unable to reproduce successfully
- A lack of awareness of the ancient sustainable practices used by local indigenous peoples
- A lack of periodic fire
  - historically most chaparral landscapes in California have burned on an average of every 30 to 50 years.
- The use of vegetation removal which results in invasive weed populations
  - examples: Veldt grass from South Africa, Saharan mustard from North Africa
- A falling water table due to over-draft
- No habitat left to preserve!





No new seedling development





Old plants having trouble growing new vegetation



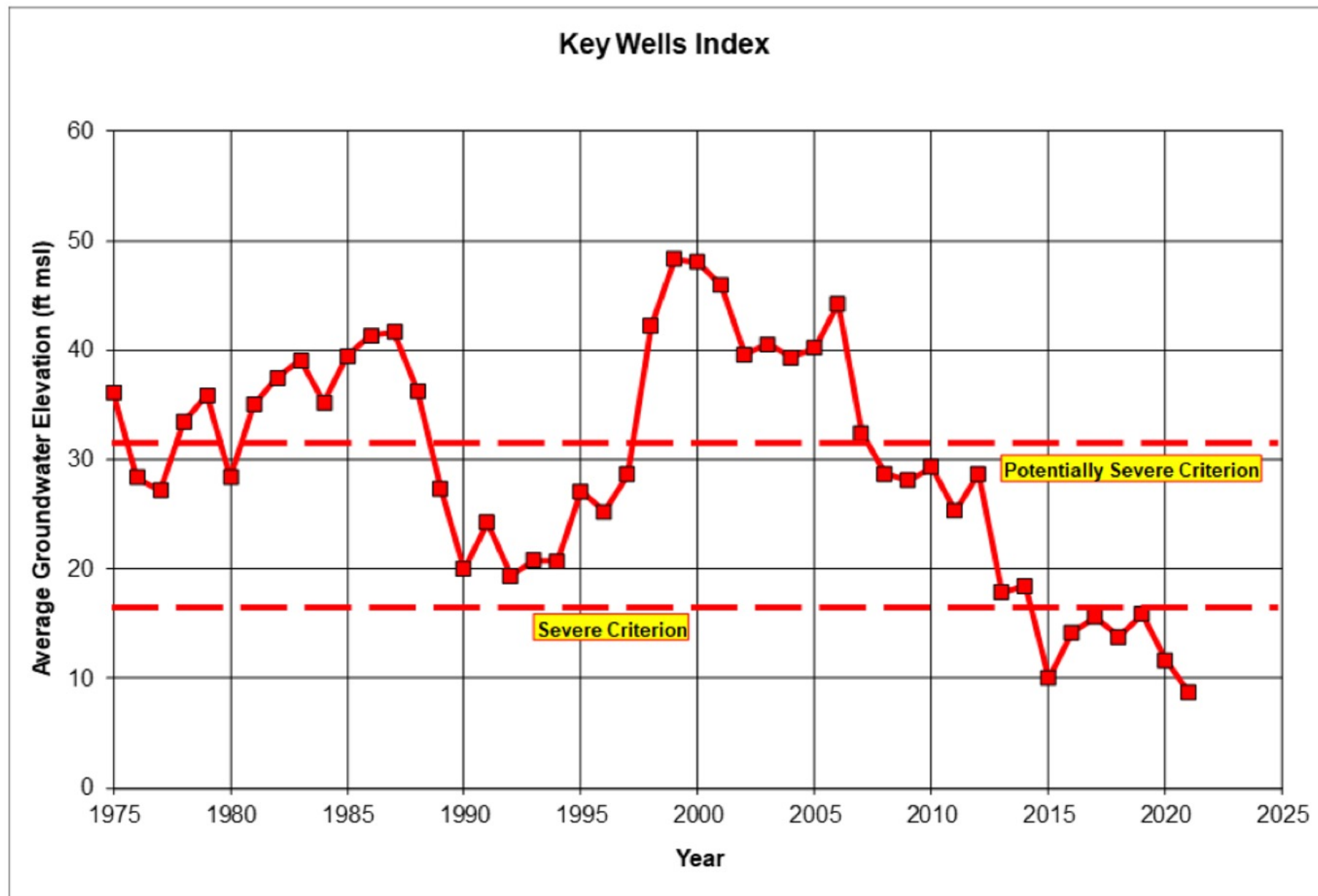


Where chaparral has been removed (above), invasive weeds come in such as Veldt grass from South Africa (right).



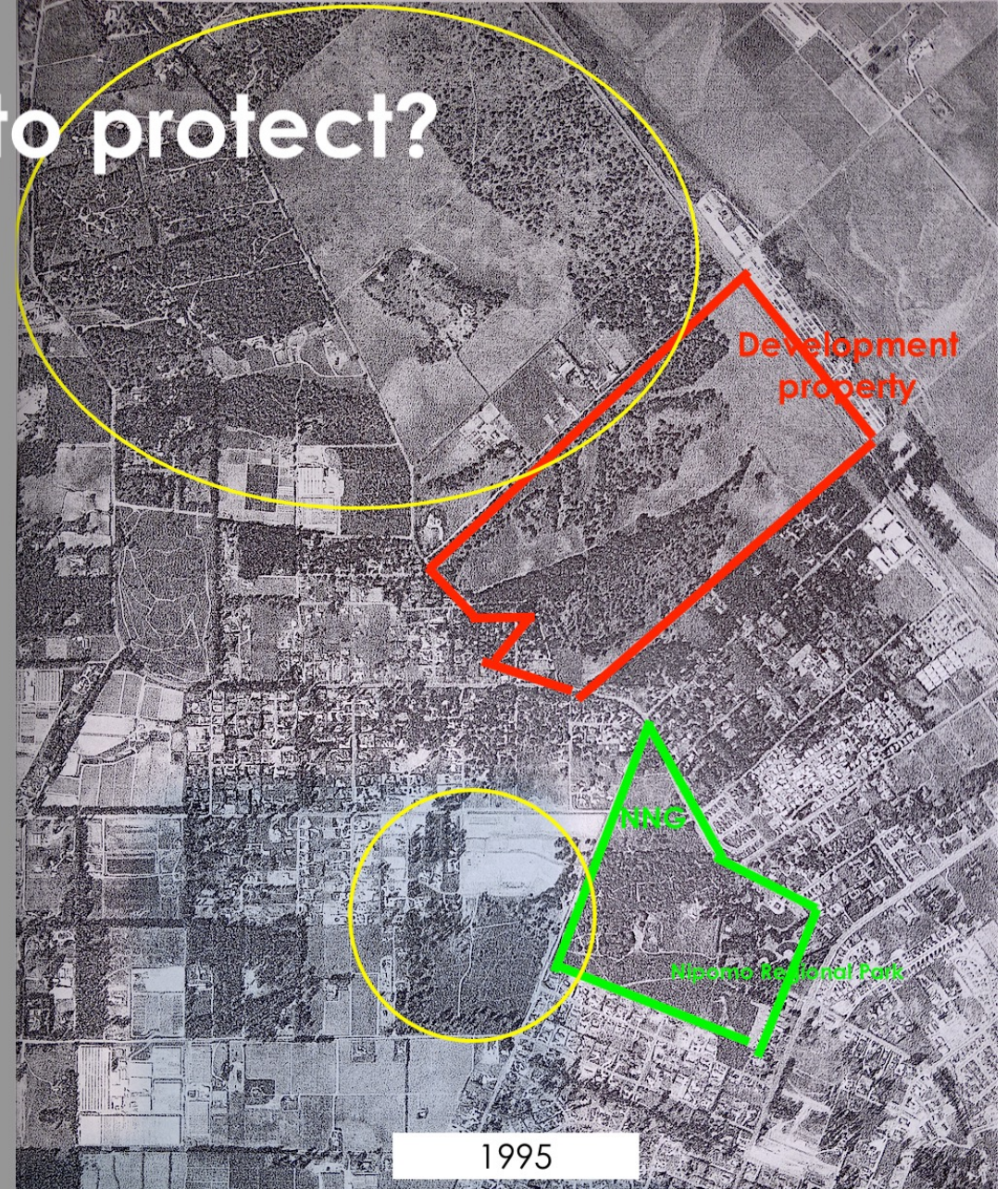


A new weed, just in the last five years – Saharan mustard



The water table in Nipomo Mesa area wells has reached "Severe" in 2015.





Nipomo Mesa development between 1995 and 2022. Yellow circles show recent oak removal; red polygons show the planned development area of the Dana "Reserve"; green polygons show the Nipomo Regional Park.



## Take Home Message:

Some of the earliest manzanita fossils are found in Western Nevada, between 13 and 15 million years old. They are from leaves that look like the Nipomo manzanita, *Arctostaphylos rudis*. An *A. rudis*-like ancestor could well have been the manzanita in the fossil. Over the past 13 or so million years, it is quite apparent that manzanitas have migrated westward to the coast. Its shreddy bark may be a primitive trait in the family. This suggests that *A. rudis* is a paleo-endemic relict that has likely persisted in the foggy, warmish, sandy soils of Nipomo for millions of years. In fact, of all the presumed paleo-endemics in this genus, *A. rudis* as a species may well be the last of this early lineage.

Time is running out!

