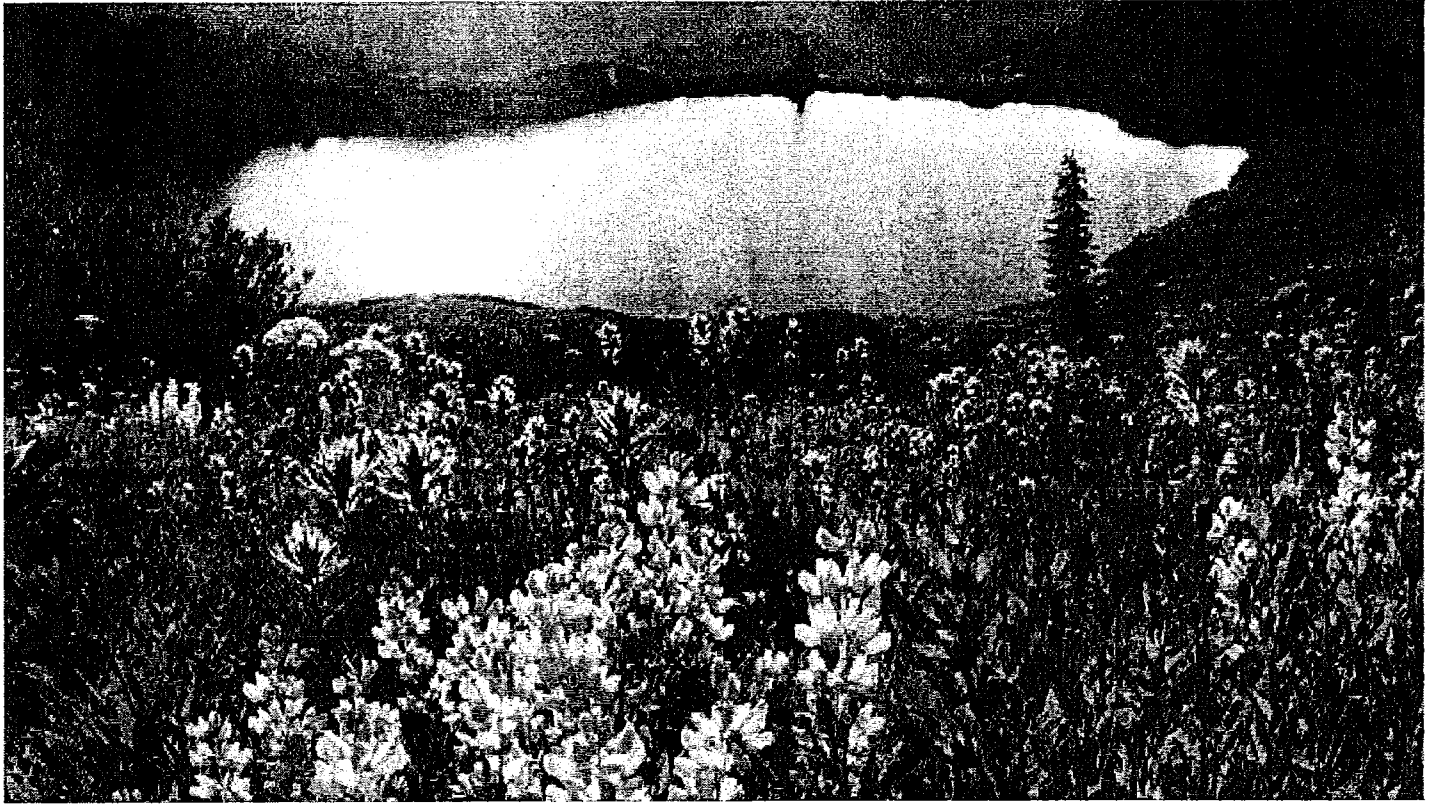


After years of dry weather, California's drought status is finally lifted

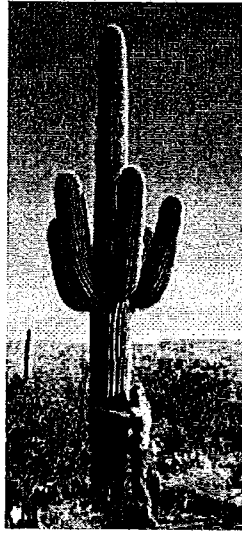
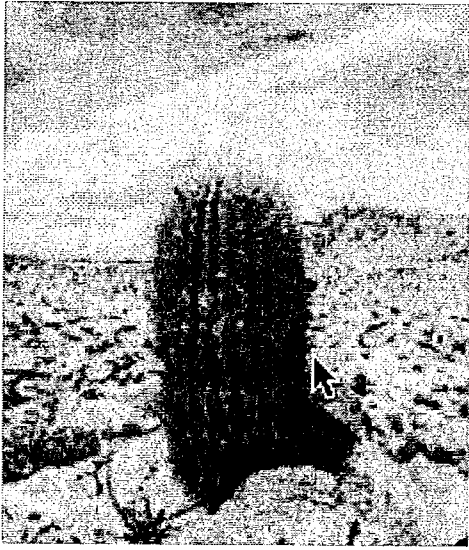


LOS ANGELES, California — Bright green hills, surging rivers and the snow-wrapped Sierra Nevada mountains had already signaled what Governor Jerry Brown made official Friday: The long California drought is over.

Brown issued an order that lifts the drought emergency in all but a handful of counties located in San Joaquin Valley. Some communities there are still coping with dried-up wells.

He also made it clear that the need for water conservation continues.

“This drought emergency is over, but the next drought could be around the corner,” Brown said in a statement. “Conservation must remain a way of life.”



Sunny Winter Weather Was A Major Cause

Five years of relentlessly sunny winter weather took a toll on California. In a move that showed the seriousness of the threat, Brown ordered a 25 percent cut in water use in cities across the state. Californians came close to meeting it by taking shorter showers, flushing less and accepting when restaurants did away with the once-obligatory glass of water. Cacti took root in yards where lawns once flourished.

The Sierra Nevada mountains, now buried in snow, will be streaked for decades with miles-long brown patches of pine trees that the drought weakened for beetles to kill. Years of low river flows pushed imperiled native fish closer to extinction.

Hundreds of thousands of acres of farmland went unplanted. In California's Central Valley, water tables – the area under the ground that is normally saturated with water – plunged. Farmland sank as growers pumped ever more groundwater to make up for lost irrigation deliveries.

Faucets were spitting air in small farm towns with empty wells.

Overall, however, this intricately plumbed state proved to be surprisingly strong in the face of what, by some measures, was the worst drought on record.



Pistachios



Almonds

California Handled The Drought Very Well

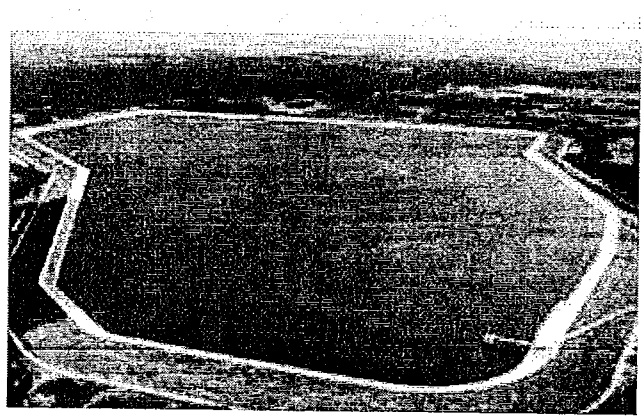
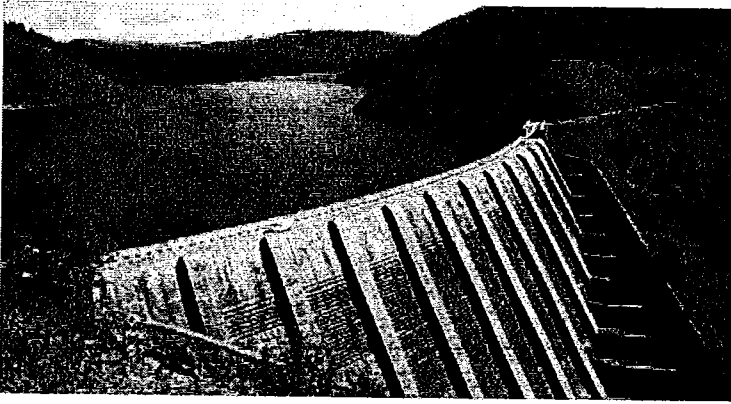
“We did remarkably well,” said Jay Lund, director of the University of California, Davis Center for Watershed Sciences.

Agriculture is the state’s biggest water user. Despite water shortages, the farming industry enjoyed record revenues in 2012, 2013 and 2014 thanks to soaring nut and dairy prices. Especially thousands of acres of almond and pistachio trees.

Though drinking water had to be trucked to some rural communities, the effect in most city areas was mainly limited to people boasting about every drop they saved. They might scold wasteful neighbors.

The water shortages barely put a dent in the state economy.

“How much reduction in the gross domestic product of California occurred because of a 25 percent reduction in urban water use? Almost nothing!” Lund exclaimed. “Nobody has even bothered to calculate it, it’s so small.”



Reserving Water In case Of An Emergency

Every major drought teaches California water lessons.

In the wake of the last prolonged drought, from 1987 to 1992, the Metropolitan Water District of Southern California constructed a big reservoir in Riverside County to boost regional reserves. Those regional reserves helped carry Southern California through this drought.

In recent decades, water districts expanded recycled water programs and promoted indoor conservation with money-back rebates for water-thrifty appliances. That kept a lid on demand for water even as California's population grew.

“In the late '80s drought, we learned how much we can save indoors. In this drought we learned how much we can save outdoors,” said Felicia Marcus, chairwoman of the State Water Resources Control Board, which had the prickly task of enforcing the urban cuts.

Cacti Instead Of Grassy Lawns

Nudged by generous rebates from water districts, homeowners ripped out their shriveled lawns and replaced them with drought-tolerant native plants.

Californians have changed how they think, Marcus said. It's “not just about watering use but what makes for a beautiful outdoor ornamental landscape,” she said.

Even more profound was the state's willingness to finally join the rest of the Western states in regulating groundwater use. A 2014 law requires regional agencies, over the course of the next two decades, to develop and implement plans to stop the over-

pumping that has depleted the vast Central Valley aquifer, which is California's biggest reservoir. The Central Valley is also the state's major agricultural hub.

“Lo and behold, (the state) noticed this and said, ‘Oh, we can’t keep doing this forever,’” Lund said. “It was only the third year of the drought and we got a groundwater law.”

Storms Started Bringing Relief Last Year

The formal end to the drought emergency in most of the state won't have much of a practical effect because the urban cuts were significantly relaxed last year. El Nino storms in Northern California had loosened the drought's grip and big reservoirs began to refill.

This year, a procession of atmospheric rivers — bands of atmospheric vapor that blow in from the Pacific Ocean — finished off the drought. Statewide reservoir storage is above average. The statewide snowpack on April 1 was the seventh-highest on record, going back to 1950.

Statewide precipitation from October through March was not far behind the record wet year of 1983.

Conserving Water Is Still Important And Expected

But with climate change expected to heighten the typically dramatic swings in California weather, the Brown administration is adopting plans to embed conservation in the state's water habits. A ban will continue on wasteful practices such as hosing down driveways or watering in the rain.

The state water board is developing water budgets for urban agencies that will go into effect in 2021. They will be more flexible than the drought cuts and will take into account local factors such as summer temperatures, evaporation rates and population.

But the board will give each urban water district a number for how much water it can use every year. How the agencies meet that target will be up to them. If they fall short, in 2025 the board can start demanding conservation steps.

Stubborn as this drought was, “it won't be our last or longest in the years to come,” Marcus said.

1. _____ What is the status of the drought emergency in California?
 - A. It has improved, but it is not over.
 - B. It is the worst it has ever been
 - C. The drought is over. It rained a lot
 - D. There never was a drought in California

2. _____ Even though the drought is over, why does the governor of CA want to continue conserving water.
 - A. There could be another drought right around the corner.
 - B. The water that California has is of very low quality
 - C. The human population in California is rising and they will need more water
 - D. There is a lot of wildlife in California which drinks a lot of water.

3. _____ When the drought started 5 years ago what weather factor started the drought.
 - A. A lack of snow
 - B. Sunny weather
 - C. A lack of fog
 - D. Windy Weather

4. _____ Governor Brown wanted the people of CA to reduce their water consumption by what percent to reduce the effects of the drought.
 - A. 25%
 - B. 50%
 - C. 75%
 - D. 100%

5. _____ To reduce water consumption the governor wanted people to do which of the following things.
 - A. Not water animals and not water lawns
 - B. Stop skiing on snow and drinking coffee
 - C. Take shorter showers and flush toilets less
 - D. Not fill swimming pools and stop crop irrigation

6. _____ Many people had watered their lawn before the drought. When the people stopped watering their lawns what started growing in their lawns.
 - A. Cactii
 - B. Corn
 - C. Palm Trees
 - D. Almonds

7. _____ _____ What 2 types of nut trees are an important part of agriculture in the part of California where the drought occurred. These needed to be irrigated during the drought.
 - A. Walnut
 - B. Pistachio
 - C. Almond
 - D. Hickory

8. _____ What did California build so they can save water in case there are more droughts.
- A. Water towers B. Reservoirs C. Irrigation systems D. Waterless toilets
9. _____ In the parts of California that were very dry and people had to water their lawns a lot to keep the grass alive, what did people replace the grass in their lawns with.
- A. Native plants that can survive a dry climate
B. Green carpet that looks like grass
C. Fake plastic grass that never needs mowing
D. Sand that has been painted green
10. _____ What environmental phenomenon do scientists think will make California have more bad droughts in the future.
- A. Acid Rain B. Holes in the ozone layer C. Climate Change D. Melting glaciers

