

Drought remains despite storms

Many S.D. County reservoirs are low

By Bruce Lieberman

UNION-TRIBUNE STAFF WRITER

January 2, 2005

No one is about to begrudge a good rainstorm, but it's going to take many more to end San Diego County's seven-year drought, forecasters and water experts say.

The crisp air, rain-soaked soil and greening hillsides are fleeting signs of the storm system that barreled across Southern California during the final week of 2004.

The rain deluged Southern California with plenty of headaches. Flash floods, mudslides, heavy winds, traffic accidents and lost power were all signatures of a typically powerful system originating in the Gulf of Alaska.

"All this rain is great, but it doesn't cure the drought," said John Liarakos, a spokesman with the San Diego County Water Authority. "It's going to take several years of seasonal rainfall like this before we get back to what we call a normal situation."

Weather forecasters were not encouraging last week.

The region's big but infrequent rain engine, El Niño, is a no-show again this winter. Warming of surface waters in the equatorial Pacific off South America, a prerequisite for the weather pattern that brings a steady stream of storms to Southern California, is weak at best, according to the Climate Prediction Center at the National Weather Service.

"There's no tendency one way or the other . . . toward a dry or wet season," said Brad Doyle, a forecaster with the service in San Diego.

For Southern California, it means this winter is expected to bring storm fronts originating in the North Pacific. The weather pattern usually brings an average of 10 inches of rain to San Diego County from July 1 to June 30. But that total could be more or less depending on the vagaries of winter weather.

By 4 p.m. yesterday, weather instruments at Lindbergh Field showed that it had received 9.33 inches halfway through the rainfall year.

Rain levels are above normal for this time of year because of an unusually wet October, Doyle said.

Lindbergh Field receives .77 inches of rain in an average October. This year October storms dumped 4.98 inches of rain at the airport. In a typical December, the average rainfall there is 1.73 inches. In contrast, 4.01 inches fell last month.

The last El Niño to visit San Diego County was during winter 1997-98. Its storms dropped 17.78 inches of rain at Lindbergh Field.

El Niño episodes are invariably followed by several years of drier and cooler weather. The pattern, called La Niña, is fueled by a cooling of surface waters in the equatorial Pacific off South America.

Rainfall data provide the strongest evidence of Southern California's drought.

After getting heavy rainfall during the 1997-98 El Niño season, Lindbergh Field received a paltry 6.72 inches of rain during the next 12-month period. That was followed by 5.78 inches in 1999-2000, 8.61 inches in 2000-01, 3.02 inches in 2001-02, 10.62 inches in 2002-03 and 5.18 inches in 2003-04.

The prolonged dearth of rainfall, reflected throughout the West, has resulted in a severe drought – one that scientists at the U.S. Geological Survey described in a June report as the worst in probably 500 years. Annual flows on the Colorado River, which San Diego County taps for imported water, were the lowest on record from 2001 to 2003.

In San Diego County, several years of below-average rainfall have parched many of the county's reservoirs. Before last week, 12 of the county's 26 reservoirs were less than half full and four of them had less than one-tenth of their capacity.

The city of San Diego operates nine reservoirs with a total capacity of about 415,000 acre-feet of water. As of Wednesday, there was only 154,144 acre-feet of water in them, according to Tedi Jackson of the San Diego Water Department.

An acre-foot is equal to about 326,000 gallons, enough to cover a football field in one foot of water. About two households use that much water in a year.

Some reservoirs are really low.

Morena Reservoir, on the remote eastern slope of the Laguna Mountains northwest of Campo, can hold 52,207 acre-feet of water. By Wednesday, after most of last week's storm system had passed the county, only about 3,200 acre-feet of water filled it.

East of Palomar Mountain, Lake Henshaw spreads across flat, grazing land near Warner Springs when it is full. It has now fallen to about 5 percent of its capacity.

"(The rain has) been a drop in the bucket," Jackson said.

Last week's downpour did impart some dramatic, if short-term, benefits.

A December drenching can spur flowers to bloom and vegetation to green and grow. The vegetation sustains insects, birds, reptiles and mammals over a cold winter.

"In an arid region like San Diego, water is the kiss of life," said Philip Unitt, a biologist at the San Diego Natural History Museum who manages the institution's collection of bird and mammal specimens.

During a trip to Camp Pendleton on Thursday, Unitt said he saw wildflowers blooming that don't ordinarily flower at this time of year. They included the Cleveland's shooting star, or *Dodecatheon clevelandiia*, a delicate and slender wildflower with white, yellow and purple petals.

In Balboa Park's Florida Canyon, Unitt spotted blooming wart-stem-lilac, or *Ceanothus verrucosus*, a shrub with flourishes of small white flowers.

Everything up the food chain responds to thriving vegetation, from insects and birds to rodents and larger mammals. Groundwater recharged by rains will be critical to the health of animals stressed by protracted drought. Among them are bighorn sheep in Anza-Borrego Desert State Park, which rely on watering holes in the rugged mountains and canyons there.

Late last week, the rainfall had fueled a preview of Anza-Borrego's annual spring flower season, which peaks in mid-March.

"There are tiny green sprouts just about everywhere you look," said Brian Cahill, a spokesman for the state park.

"Most are wildflower seedlings that are going to put on a terrific show."

■ Bruce Lieberman: (619) 293-2836; bruce.lieberman@uniontrib.com

© Copyright 2004 Union-Tribune Publishing Co