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## WINTER WEATHER: Trends point to dry winter San Jose Mercury News – 9/25/07

By Julie Sevrens Lyons, staff writer

After last year's bone-dry winter, it wouldn't be surprising if many California water managers resorted to doing rain dances.

They'd better keep dancing.

Using one of the best scientific crystal balls available, weather experts say a moderate La Niña is developing. That's a weather system typically associated with minimal rain in the Southwest and above-average precipitation in the Pacific Northwest.

La Niña can be a mixed bag in the Bay Area, but has meant below-average rainfall totals more often than not.

National drought experts - who say every part of California is already either "abnormally dry" or experiencing moderate to extreme drought - agree that many parts of the state could be in for a long, dry winter.

If California gets a normal amount of rain - or even slightly less than normal - many cities will still likely have a sufficient water supply. But if the rainfall is light, comes too early, or if the Sierra - whose melted snowpack each spring is one of the state's primary water sources - doesn't get enough snow, it could push some regions squarely into a severe drought. Then strict water rationing would no doubt have to be implemented.

"It's a little early to panic, but people ought to be thinking about it. We certainly are," said Bill Kocher, director of the Santa Cruz City Water Department, which in May restricted hours for watering lawns.

"It could turn out to be marvelous or it could turn out to be absolutely horrendous," he said. "We're planning for horrendous, but we're hoping for marvelous."

But La Niña patterns can be unpredictable, meteorologists say. And while San Diego might see little rain and Seattle could end up getting soaked, they might not. And it's even more difficult to say how San Jose and San Francisco will fare this winter because they're smack in the middle.

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"We really don't know," said Maury Roos, chief hydrologist for California's Department of Water Resources. "But the clues we have suggest it will be a little bit on the dry side."

La Niña - the word means "little girl" in Spanish - occurs when the ocean water is cooler than normal in the tropical Pacific, impeding the formation of clouds and tropical thunderstorms. Its impact is greatest close to the equator.

During the last true La Niña, in 2000-2001, the Bay Area saw less rainfall than usual. But two years earlier another La Niña left the region wetter than normal. The reverse was true for Los Angeles. In 2000-2001 there was above-average rainfall; in 1998-1999 there was less.

Jan Null, an adjunct professor of meteorology at San Francisco State University, has charted all the known La Niña patterns as well as the resulting rainfall totals and determined that historically they have led to below-average rainfall locally. But this year, "I don't see anything in these forecasts that would make me want to reach into my wallet and make a bet on *any* of these scenarios," he said.

Save for a few holdout agencies such as the Scripps Institution of Oceanography in San Diego, scientists are now almost uniformly agreeing that a La Niña is under way. Pointing to unusually cold water temperatures in the tropical Pacific Ocean - temperatures that have been dramatically dropping in recent weeks - researchers say that La Niña conditions are present and mild but will strengthen during the next few months.

La Niña isn't the only unpredictable weather system.

Last winter, El Niño - often associated with torrential rain - was in play, and everyone knows how that turned out.

Los Angeles experienced its driest year on record. In April, the Sierra Nevada had just 40 percent of its typical snowpack. And hills up and down the state turned into kindling.

Even though La Niña conditions are developing and could bring extra rain to some places, it doesn't look so promising in Southern California. "Longrange temperature outlooks are still showing much of the West with a better-

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than-normal chance of above-normal temperatures," said Brian Fuchs, a climatologist with the National Drought Mitigation Center in Lincoln, Neb. If that occurs, the Sierra Nevada might again receive too little snow, he said.

And don't let the Bay Area's recent rainfall fool you. The rainfall was not extraordinary for the month of September - and "it's not a harbinger of things to come," Null said. "There is no statistical correlation between September and October rain and the rest of the season."

Overall, the state's water supply is still good. California's reservoir storage stood at about 85 percent of normal at the end of August, compared with about 120 percent one year earlier.

"That's down, although I wouldn't consider that drought level," said hydrologist Roos. "But if we get another dry winter, it certainly will be."

The state's water picture became even more complicated earlier this month when a federal judge decided to protect a tiny endangered fish by reducing the amount of water that can be pumped from the Sacramento-San Joaquin River Delta. The waterway provides drinking water to 25 million Californians.

Experts at the drought mitigation center are hopeful that La Niña conditions will bring rain to some areas that could really use it, including parts of Idaho and Montana that have been plagued by wildfires in recent weeks. But California remains a crapshoot.

And that has many water managers nervous.

Said David Nahai, president of the Los Angeles Department of Water and Power Commission: "It's a very worrisome picture." # http://www.mercurynews.com/healthandscience/ci 6991737