

In California oasis, ample water leads to waste

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A view of an LPGA event at the Mission Hills Country Club in Palm Springs, California in 2011. Set in the Coachella Valley southeast of Los Angeles, the famously well-heeled town sits atop a huge aquifer able to provide for the 400,000 residents of the region's 10 towns.

An oasis in the California desert, Palm Springs says it is committed to saving water -- but not before filling its swimming pools and tending to its dozens of verdant golf courses.

Set in the Coachella Valley southeast of Los Angeles, the famously well-heeled town known as a refuge for retired Hollywood stars sits atop a huge aquifer able to provide for the 400,000 residents of the region's 10 towns.

Despite its parched setting and baking temperatures, the valley plays host

to regular golf competitions and the Indian Wells tennis championship, as well as one of America's biggest [music festivals](#).

For now, the aquifer -- an underground layer of rock containing some 50 billion cubic meters (1.7 trillion cubic feet) of [water](#) -- meets the valley's daily needs, 16 percent of which goes to keeping the roughly 100 local golf courses green.

But with the ample water supply comes waste.

An average household in Palm Springs consumes some 1,233 cubic meters (43,542 cubic feet) of water a year, twice as much as the average US home, which itself uses one of the highest figures worldwide.

"When you compare (us) to other places in the state, our number is high, we know this," said Heather Engel, communications director for the Coachella Valley Water District, in an interview with AFP.

But "our consumption is going down. In recent years people are becoming more conscious and aware of the need to conserve water."

It may take more than a change in attitude to truly make a difference, according to experts.

Noah Garrison, a lawyer and analyst at the [Natural Resources Defense Council](#), points to landscaping as a [fundamental problem](#).

"We are in a desert or [Mediterranean climate](#), and yet we have huge expanses of lawns, golf courses (and) other areas that require vast amounts of water," Garrison said.

"Landscaping in general in Southern California doesn't make sense for the climate we are in," he added.

"In order to make sure that we are able to meet our water needs in the future, we need to be smarter about the way we use water now."

While the aquifer is a key source of water for Palm Springs, the district also pumps water from the Colorado River and ice from surrounding mountains to top up its supplies and stop subsidence in the valley, which has sunk 20 centimeters (eight inches) in the last 15 years.

Some steps have been taken to promote conservation.

The district has implemented water-saving measures, including pricing that penalizes waste.

It also runs three recycling plants that treat waste water for some 16 major clients, including golf courses, but such efforts come with high pumping costs.

Richard Mogensen, general manager of Desert Willows Golf Resort, said proper infrastructure was not yet in place to encourage more clubs to use recycled water.

"The challenge is that they haven't developed the full infrastructure of piping throughout the whole valley to get more clubs on it," he said. "It takes money."

Without an economic incentive, it therefore remains unlikely that [golf courses](#) -- which on average use up to 1.2 million cubic meters (42.4 million cubic feet) of water a year -- will choose recycled supplies.

Another challenge to increasing supplies of recycled water is the fluctuating nature of Palm Springs tourism, which provides a major source of revenue, Engel said.

In summer, when temperatures are at their most punishing and tourist numbers at their lowest, not enough waste water is produced. And in winter, the high season for tourism, there is less need to recycle because it rains.

Garrison, meanwhile, said California as a whole has seen increasingly long periods of drought in recent years and warned that this does not bode well for the future.

"There are a lot of indications that we are going to see drier conditions in the future -- we're going to see less water availability, and that's something that we need to prepare for."

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