

In a region that imports water, much goes to waste

Southern California laid miles of pipe and tunneled through mountains to import water. But it also built a storm drain system to quickly get rid of rainfall. The contradiction played out again this week.

Bettina Boxall, Los Angeles Times, 12-24-10

It is one of the Southland's enduring contradictions. The region that laid pipe across hundreds of miles and tunneled through mountains to import water also built an extensive storm drain system to get rid of rainfall as quickly as possible.

That's exactly what happened during the last week, when tens of billions of gallons of runoff that could lessen the region's need for those faraway sources were dumped into the Pacific. Enough water poured from Los Angeles streets to supply well over 130,000 homes for a year.

As Southern California's traditional water supplies diminish under a variety of pressures, all that runoff sheeting across sidewalks and roads into the maws of storm drains is finally getting some respect.

"This isn't wastewater until we waste it," said Noah Garrison, an attorney with the Natural Resources Defense Council who co-wrote a 2009 paper on capturing and reusing storm water.

The report concluded that the region could increase local supplies by an amount equal to more than half of Los Angeles' annual water demand by incorporating relatively simple water-harvesting techniques in new construction and redevelopments. These include installing cisterns and designing landscaping to retain runoff and let it seep into the ground.

Los Angeles is poised to adopt an ordinance that takes a step in that direction. Most new and redeveloped commercial, industrial and larger apartment projects would have to be designed to capture the runoff generated by the first three-quarters of an inch of rain. New single-family homes would have to install a rain-harvesting device, such as a rain barrel or a hose that diverts water from gutters to landscaping.

But the proposed rules would save only a fraction of the city's runoff. "If we're able to convince people to do it on their own, there's so much more" that can be captured, said Los Angeles Public Works Commissioner Paula Daniels. "The really important thing to do is unpave and change the texture of Los Angeles."

Water-quality regulations, which are clamping down on runoff pollution, are another big impetus for changing attitudes. In South Los Angeles, the city is converting a former bus depot into a nine-acre wetland park that will retain and filter runoff, keeping contaminants out of the L.A. River.

"I believe we will be able to start changing the footprint of the city to make it more water-friendly and hopefully look at storm water as a resource and a benefit," said Adel H. Hagekhalil, assistant director of the L.A. Bureau of Sanitation.

The storm system dumped copious amounts of snow — at least 10 to 12 feet and in some spots far more — in the Sierra Nevada, washing away vestiges of a three-year drought that ended last year. Statewide, 61% of the snowpack, or snow water content, normally measured on April 1 is already on the ground. Storage at most

major reservoirs is well above average for this time of year. Dam operators have been releasing water to make sure they have enough space for inflow later in the season.

Managers are cautioning that snow and rain usually taper off in early winter under the La Niña weather conditions expected this year. "The characteristics, unfortunately, of La Niña are generally a pretty good start and then a frequent lapse. Quite often January, February do not measure up," said Frank Gehrke, chief of the California Cooperative Snow Surveys Program.

But even if they don't, state hydrologist Maury Roos said California has been so thoroughly soaked this month that the year's water supplies will probably be above average.

In the Eastern Sierra, which supplies Los Angeles with a portion of its water, some Department of Water and Power stations have registered eye-popping measurements. At Independence, precipitation as of Tuesday was 549% of the norm for this time of year. Some areas were buried under snow depths usually not seen until the end of the winter.

James McDaniel, the DWP's senior assistant general manager, said the snowpack at Mammoth Pass had shot up to the levels of 1982-83, one of California's wettest winters. "We'll need more storms later in the season to build on that," he said, adding: "There's no denying this is a great beginning to the season."

The Metropolitan Water District of Southern California, which imports water from Northern California and the Colorado River, is refilling local reserves that had dwindled to levels that forced the agency to cut sales to member agencies.

"I think we're feeling a lot more comfortable about the availability of water supplies," said Debra Man, the MWD's assistant general manager. Still, she said the agency was not ready to scratch allocations that have reduced demand by more than 20%. "I think we're going to wait and see what January, February and March look like."

McDaniel also said L.A. would wait until winter's end before deciding if it would lift the water rationing imposed during the three-year drought. "Statewide storage has recovered well," he said. "But the piece of the puzzle that is not where we'd like to see it is the Colorado River," a source stuck in a long-term drought.