

Green waste: Another drought casualty

By George
Hostetter

Fresno Bee reporter George Hostetter demonstrates how the city of Fresno's Regional Wastewater Reclamation Facility on Jensen Avenue will soon begin dispensing water to those who will come get it. THEFRESNOBEE

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Fresno officials expect to collect less green waste — lawn clippings, tree trimmings, shrubbery prunings — as California struggles through a fourth straight year of drought.

“Less watering — less growth,” Public Utilities Director Thomas Esqueda says.

The result could be a blow to City Hall’s efforts to meet state guidelines for solid-waste recycling and landfill deliveries.

At the same time, city officials are close to unveiling a service at the wastewater treatment plant that would make available an almost limitless supply of water safe for landscape irrigation (but not drinking).

The hope is that Fresnoans will use the water to irrigate their greenery at home, saving potable (drinkable) water and helping the city meet the state’s strict new water-conservation mandates.

Get this: Every drop from this new source is free — as long as you haul it away.

“There was a time in our Central Valley when we took our water supply for granted,” says Steve Hogg, head of the wastewater treatment plant. “Water was plentiful and inexpensive, so there wasn’t a lot of incentive to utilize supplies such as recycled water.

“But now water is scarce and precious. The incentive is there.”

Fresno: Three-bin city

Fresno got serious about recycling in the 1990s.

The days of throwing disposable diapers, old newspapers and piles of leaves in the same trash can came to an end. Local landfills couldn’t handle such a load forever.

Fresnoans soon got used to the weekly routine: Green waste in one bin, household recyclables in another, garbage in a third.

Civic virtue wasn’t the only reason. Sacramento regulators were threatening to fine cities \$10,000 a day if they failed to cut the flow of trash to landfills in half. Transforming green waste from landfill fodder to something beneficial like compost was deemed pivotal to success.

Fast forward to the 21st century.

Mark Oldfield, spokesman for the state Department of Resources, Recycling and Recovery (CalRecycle), says the key yardstick now is how much trash a city takes to a landfill per person per day.



Fresno in the course of a year must take no more than 6.6 pounds of trash per person per day to the landfill to be in compliance. In 2013, the most recent year for statistics, Fresno took 4.1 pounds of trash per person per day.

Fresno passes the test with flying colors, Oldfield says.

At the same time, Oldfield says, the state has non-mandatory recycling goals. Ideally, he says, Fresno would take no more than 25% of all the solid waste it collects per year to the landfill.

Here is where the drought and Gov. Jerry Brown's executive order requiring Fresno to cut its water consumption by 28% this year come into play.

Brown is keen on curtailing residential landscape watering. California is notorious for its sea of suburban lawns. The governor would love to see that turned into a puddle.

This leads to Fresno's ratio dilemma.

Recyclables accumulate at a fairly steady pace. So, too, does the usual household garbage. But what happens if the production of green waste (turned by private vendors into things like compost and mulch) shrinks?

The answer: Fresno sends a higher percentage of the total solid waste collected annually to the landfill — precisely what Sacramento doesn't want.

Yet, it's Sacramento that's forcing Fresno and other cities to dramatically curtail the outdoor watering that leads to green waste.

The result: Government's right hand doesn't know (or doesn't care) what its left hand is doing.

Fresno has seen a dramatic drop in green-waste collections. The city collected 84,320 tons of green waste in 2010, compared to 72,894 tons in 2014. That's a decline of nearly 14%.

This period coincided with the arrival of residential water meters and a resurgence in City Hall's water-conservation programs.

Jerry Schuber, head of the city's solid-waste division, says Fresno falls short of the state's 75% recycle-25% landfill goal. He says the current ratio is about 64%-36%. He says the stricter watering rules could cut the diversion rate (percentage of total solid-waste collections diverted to recycling) to the low 60s.

Esqueda says he doesn't expect any grief from trash regulators.

The expected reduction in green waste "is going to ding us on our diversion," Esqueda says. "But I think we can make a case to the state — 'Hey, we've got a drought going on.'"

Take heart, gardeners

But there is hope for Fresno's green thumbs. A water district in the Bay Area shows how.

The Dublin San Ramon Services District, east of Oakland, started a program last summer that lets residential customers take up to 300 gallons of recycled water per visit free of charge.

"It's exciting," district Operations Manager Dan Gallagher says. "At the same, it's a challenge to keep up logistically."

About 500 residential customers signed up during the last seven months of 2014, Gallagher says. Another year of drought and a round of even tougher restrictions are goosing business this year. As many as 30 new customers are now signing up per day. About 500 customers came through the treatment plant's gates on a recent Friday, Gallagher says.

Nearly 900,000 gallons were given away in the first four months of 2015.

“The challenge has been handling all the traffic,” Gallagher says. He notes that employees, deliveries to the plant and recycled-water customers use the same gate.

The water gets three levels of treatment, then is disinfected.

Gallagher says people go through a brief process before getting water for the first time. A customer fills out an application/agreement. The do's and don'ts for using recycled water are explained. For example, don't drink it or use it in a swimming pool.

Containers must be at least one gallon in size and have lids.

Commercial customers can get several thousands gallons per load. They pay \$10 per load, regardless of size.

“I was pretty skeptical in the beginning,” Gallagher says of the residential program. “I thought we'd get a handful of people. But it really took off.”

The program had eight fill stations for residential customers last year. There now are 18 stations. Gallagher says he has plans to build another 10.

Gallagher says district officials had two reasons for giving the water away to residents. First, no one wanted to be bothered with making change — 20 or 25 gallons might cost a few quarters. Second, the district wanted to show its thanks to people making the extra effort to conserve potable water.

Residential customers also can get a sign for their yards that tells the world their green lawn is the result of using recycled water.

“They can feel good about their yard that looks great,” Gallagher says. “And they don't have to worry about neighbors who get the wrong idea.”

Come and get it

Fresno water officials are moving fast to get their own water giveaway program going.

The wastewater treatment plant's Hogg says Fresno's water isn't exactly like the supply in the Dublin San Ramon district. Fresno's program will use extracted water — water that has received several levels of treatment, is allowed to percolate into the aquifer, then is pumped to the surface.

It's safe, clear water perfect for the lawn and garden, Hogg says.

Fresno is moving on three complementary paths to deal with the current drought and the longer-term threat of water insecurity.

The first, which dominated City Hall politics for much of the past two years, is an overhaul of the potable water network. The big-ticket item is construction of a surface water treatment plant in southeast Fresno. This and other improvements will cost an estimated \$429 million. Water rates are going up to pay for everything.

This project will take years to finish. But the promise is a water-rich Fresno when normal rains return.

The second path is construction of a delivery system for recycled water. The plan is to deliver as much as 25,000 acre-feet annually to every corner of Fresno. Most of the water would be used on large areas of green space — parks playgrounds, medians. Here, too, the finish line is some years away.

The third path is the stop-gap measure of free extracted water.

The wastewater treatment plant about eight miles west of downtown gets on average about 60 million gallons of sewage per day. That's about 67,000 acre-feet per year. People have to take baths and go to the bathroom. The sewer farm will always get its deliveries.

Hogg's challenge is finding somewhere to put all the treated water. The city and Fresno Irrigation District have had an exchange agreement that takes some pressure off the treatment plant's system while helping the region's farmers.

But the lake beneath the treatment plant remains stubbornly big. Hogg says he's got to get rid of some of his high-quality treated water or the day will come when his percolation ponds stop working as designed.

This leads to another drought-caused dilemma. Fresno is full of people threatened by government with fines if they don't dramatically curtail their irrigation of greenery with potable water. Those same people, by paying their water bills, own all the treated water causing such headaches to the wastewater treatment plant.

How does City Hall move that water in a safe, consistent, economical and fair manner to the people living just a few miles to the north and east?

Esqueda and Hogg have several ideas.

The creation of a fill station similar to the one in the Dublin San Ramon District is the first step. Hogg says he hopes to have a station for commercial customers in operation by the end of May. He says the residential station should open by mid-June.

The rules are a work in progress, Hogg says. But, he adds, it's likely residential customers at first will fill out an application similar to one at the Dublin San Ramon district.

Another possibility is using city water trucks, holding as much as 4,000 gallons, to haul extracted water to parched city parks.

City officials also are studying whether it makes sense to haul large amounts of water to spots throughout the city. These water trucks in essence would be temporary fill stations. Residential customers might be charged a small fee (perhaps three cents per gallon) to recover the city's labor and transportation costs.

In this scenario, a residential customer would pay \$3 for 100 gallons — about 800 pounds of water to be hauled home in the family mini-van.

The drought, Hogg says, figures to spur the Valley's storied grit and initiative.

"We must do everything we can to save our potable water," he says.

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