

City Hall moves fast on Recharge Fresno water project

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Fresno officials on Tuesday will open bids to build a huge water treatment plant, hitting another milestone in what is shaping up as the biggest capital works project in City Hall history.

But Fresnans in the end could remember all this construction not as a feat of stunning proportions, but as a key step in government's sweep to complete regulation of California's most precious resource – water.

A packed house was in attendance at the Recharge Fresno water forum at Oraze Elementary School on Oct. 13, 2004. MARK CROSSE Fresno Bee Staff Photo

Public Utilities Director Thomas Esqueda says he expects as many as nine firms to submit spending plans to build a surface water treatment plant in southeast Fresno.

“Reliable, resilient, sustainable – that’s our goal” for Fresno’s water system, Esqueda says.

The plant’s expected cost is in the \$160 million range. Esqueda says his staff will begin reviewing the bids on Tuesday. A recommendation is slated to go to the City Council on Nov. 19. Groundbreaking should come in late February or early March.

That almost certainly will be a show of memorable proportions.

Fresno in August 2013 embarked on an 18-month political war when a divided council voted to raise rates to pay for an ambitious upgrade to the city’s water system.

Mayor Ashley Swearingin said the complex issue came down to saving Fresno’s aquifer in order to save Fresno. Critics, led by former Fresno County Supervisor Doug Vagim, said the job could be done better and for less money if only City Hall would stop manipulating the people’s emotions.

Events unfolded in often bewildering fashion. Five were of prime importance:

- The historic drought showed no signs of dying.
- The council repealed the new rates, putting the project on hold.
- The council approved new rate hikes, re-energizing the project.
- City Hall went on a conservation kick that got everyone’s attention.
- Sacramento lawmakers and regulators moved aggressively to bring order to California’s chaotic water policy.

Still, Fresnans can be forgiven if it all seems monumentally confusing.

Let’s see. It’s OK for some to water on Wednesday, but not at 11 a.m. There’s free extracted water at the sewer farm, but not after 7 p.m. There’s a tiny fish somewhere who is the water king. Farmers are suffering, but farm sales are up. My water rates have skyrocketed, but my water use must plummet. Make a mistake, get a fine.



On and on it goes like this, not just in Fresno but across California.

There will be a pipe 60 inches in diameter bringing water from the Friant-Kern Canal into Fresno's northeast surface water treatment plant.

In a quest for at least partial clarity, here is a brief look at four important water challenges facing Fresno in general and the Public Utilities Department specifically:

River water bonanza

"Recharge Fresno" is the name for the \$429 million water system upgrade approved by the council in February.

The new surface water treatment plant in southeast Fresno, able to handle 80,000 acre-feet of river water at full build out, is the marquee piece.

Fresno already has a smaller treatment plant in the northeast part of town now delivering drinking water at the rate of 30,000 acre-feet a year.

An acre-foot is about 326,000 gallons. A typical Fresno family of four used to go through an acre-foot of water per year. That same family now uses about 40 percent less.

Fresno wants to use all 180,000 acre-feet of surface water (San Joaquin and Kings rivers) it has rights to in a decent rain year. But, for several reasons, the city can't. The biggest is lack of plants to treat the water before it gets to kitchen taps.

The plants in northeast and southeast will someday enable Fresno to handle 110,000 acre-feet a year. Fresnoans use 120,000 to 130,000 acre-feet a year.

There will be a pipe 72 inches in diameter bringing water from the Kings River into Fresno's southeast surface water treatment plant.

This means two things.

First, Fresno with both treatment plants will be close to supplying almost all its needs with surface water.

Second, Fresno will use the remainder of its river allocations to replenish the aquifer. Deposits to the underground supply will far exceed withdrawals.

There are other parts to the \$429 million Recharge Fresno project.

The city will build a pipeline to carry water from the Friant-Kern Canal to the northwest treatment plant. Expected cost \$23 million.

The city will build a pipeline to carry water from the Kings River to the southeast treatment plant. Expected cost: \$75 million.

The city will build pipelines from the southeast plant to customers in the city. Expected cost: \$55 million.

All these projects are funded with low-interest state loans. No local match is required.

The city also will refurbish its existing water infrastructure.

"By this time next year, all of the major elements of the Recharge Fresno plan will be under construction," Esqueda says. "We will be flying. It will be amazing."

Recycling mother lode

They're already flying at the wastewater treatment plant west of town.

Work is underway on the first phase of what Esqueda calls the "tertiary treatment disinfection facility." In essence, a big chunk of Fresno's wastewater will get a high-level dose of treatment and disinfection.

Now, the sewer farm has been doing something close to this for decades. Officials let the water percolate into the ground. Thousands of acre-feet are pumped back to the surface every year for farmers.

The sewer farm is sitting on a huge underground lake at the same time it gets a drought-resistant supply of new water.

The new disinfection plant is the start of Fresno's ambitious "purple pipe" recycled water system. Esqueda says the plant should be substantially finished in mid-2016.

There are two key features to the system.

First, the city will build pipes to take the water to just about all parts of Fresno. The pipes (in phases) will head up the west side of Highway 99 to Roeding Park, getting there perhaps by October 2016. They will continue west of 99, cross the highway into northwest Fresno and push into north-central Fresno.

At pretty much the same time, purple pipes will wind their way into the downtown area and south/southeast Fresno.

We're just starting.

Public Utilities Director Thomas Esqueda on all the changes coming to Fresno's water system

The water isn't for drinking. But it's fine for landscape irrigation, especially for the big users that make for cost-effective distribution. In other words, parks, cemeteries, public green space.

The second key feature is what city officials call "scalping" plants. These are relatively small, enclosed sewage-treatment plants placed in strategic spots around town. After all, why send every gallon of that sewage eight miles out of town, then pump the treated stuff back into town, when scalping plants can deliver the same drought-busting product?

And these plants aren't tiny. Esqueda says one will be built near Granite Park in the Cedar Avenue/Dakota Avenue area. Capacity: 3.5 million gallons a day.

Fresno could have two such plants in operation by mid-2019.

This elaborate recycled-water system could ultimately cost in the \$400 million range (to be covered substantially by low-interest state loans) and deliver 25,000 acre-feet of water, taking even more pressure off Recharge Fresno's equally elaborate potable water system.

Power talks

While wrestling with all this, City Hall is trying to make sense of two big laws from Sacramento.

The Sustainable Groundwater Management Act aims to do exactly what the name states.

The aquifer is a life-saving source of water beloved by the Great Central Valley's residents for 150 years. But its ease of use makes it easy to abuse. The Groundwater Act allows creation of local agencies charged with planning the best use of "sustainable" aquifers.

Of course, the fact that such authority comes from the state strongly suggests these agencies won't be completely independent.

Then there is Senate Bill 88. This new law says the State Water Resources Control Board can order a water system in good shape to provide service to a water system in bad shape that serves a disadvantaged community.

It's no secret that the San Joaquin Valley has many small, rural, disadvantaged communities struggling even in good times to get enough clean drinking water. The trials of these residents have caught the attention of politicians and the media.

Some of these communities are near Fresno.

City officials are adding up all these factors and trying to figure out what it means.

- Everyone hopes the rains return.
- Fresno, the largest city in the Great Central Valley, is blessed with generous river-water allotments.
- Fresno has done a fine job of changing its water-consumption habits.
- Fresno is moving fast (thanks to state help) to build a superb surface-water treatment and distribution system.
- Fresno is moving fast (thanks to state help) to build a superb recycled-water treatment and distribution system.
- Fresno is moving fast to replenish what already is a remarkably large aquifer right beneath its feet.
- Many people (among them minorities and the poor) near Fresno aren't so lucky in the clean- and plentiful-water sweepstakes.
- The state government's fundamental purpose is to bring fair and equitable policy to the management of public assets, be they air or, in this case, water.
- Sacramento, through the Sustainable Groundwater Management Act and SB 88, has powers it never had before.

"There are some individuals who have theorized this is part of some grand plan for the state to get control of all the water resources and make the calls for who gets what, where, when, how and prices," Esqueda says. "We haven't fallen into that category of thinking. We're just so focused on getting this (Recharge Fresno project) right. Let's get this reliable, resilient, sustainable system. We're doing it because the law requires it. We're doing it because it's in the best interests of the city."

At the same time, Esqueda says, there is no denying that the old days of water consumption are gone forever.

"I've heard there were times when you could get a shovel and dig anywhere in the Valley and there it was — water," Esqueda says. "Now it's different. You have to change your strategy."

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