

California Looks to the Desert as Cadiz Proposes Tapping Aquifer

Peter Waldman, Bloomberg News Service, 3-6-14

California is parched. The state's worst drought in decades has left its reservoirs half-naked, if not skeletal. Officials say 17 communities could run out of drinking water this summer; some are considering mandatory rationing; and 500,000 acres in the state may be left fallow.

For the first time in its 54-year history, the California State Water Project -- the world's biggest plumbing network and the way millions of state residents get hundreds of billions of gallons of water -- is essentially shutting down. In 2012 the project moved 815 billion gallons of fresh water from Northern California's rivers to 25 million people and a million acres of farmland in the arid central and southern parts of the state. Last year, the driest on record, the system delivered 490 billion gallons, down 40 percent. This year, the planned water distribution is zero.

Two-thirds of California's 38 million people and most of its \$45 billion farm products depend on snow-melt from the Sierra Nevada and Rocky Mountain watersheds, imported via thousands of miles of pipelines, canals, and the Colorado River. Although snowfall is up this winter in the Rockies, precipitation in both mountain watersheds has been going down over the last 14 years, raising scary questions for the nation's most populous state: What if drought is the new normal? Where will California find the water it needs?

Scott Slater is convinced the solution lies underneath the Mojave Desert, Bloomberg Businessweek reports in its March 10 issue. His company, Cadiz Inc. (CDZI), wants to tap an aquifer beneath 34,000 acres of the eastern Mojave and sell the water to suburbs and subdivisions in the Los Angeles Basin.

Sole Mission

Cadiz, whose only mission is to sell the desert water, has teamed up with a public water agency in southern Orange County in an audacious proposal to pump 16.3 billion gallons a year toward the coast. Some of it will flow 200 miles from the aquifer. The water will travel through a 43-mile pipeline that Cadiz wants to build along a railroad spur, then merge into the Colorado River Aqueduct into Los Angeles.

Several politicians, ranchers, and environmentalists call Cadiz's proposal ludicrous. "How can a private company come out here and drain an entire basin of its groundwater for L.A.?" asks Ruth Musser-Lopez, an archaeologist in the Mojave town of Needles, Calif., 60 miles east of Cadiz's land. "That took thousands of years to seep down from the mountains. Water is just way too precious in the desert to let them take it away."

Some potential beneficiaries of the plan are skeptical, too. "To take that water from the desert and use it to fill Mission Viejo's lakes? It's absurd," says Debbie Cook, the former mayor of Huntington Beach, Calif.

Shares Jump

Yet things have gotten dire enough that some Californians are ready to listen. During the week Governor Jerry Brown declared a drought emergency on Jan. 17, Cadiz's stock price jumped 23 percent, closing at \$8.61 a share on Jan. 21, a 15-month high. Slater, a water lawyer who was named Cadiz's chief executive officer last April, already has the necessary permit to pump from San Bernardino County, where the aquifer is located. He also has six utilities in the Los Angeles area eager to buy the desert water.

"The state needs projects like this," says Slater, 56. Tall and lanky with gray-specked blonde hair, he sits in the

company's 28th-floor headquarters overlooking downtown L.A. Prior to coming to Cadiz, Slater spent almost a decade representing the San Diego County Water Authority in the biggest farm-to-urban water transfer in U.S. history. He's written a two-volume textbook on California water law and has litigated some of the state's biggest water fights in recent years. In addition to running Cadiz, he remains a partner at Denver-based firm Brownstein Hyatt Farber Schreck LLP.

Wanted Molecules

Slater's confident his plan can work. "I want those molecules," he says. "We've harmonized uses in a way that's balanced and makes sense. This is an environmentally benign project that will help California overcome systemic water shortages." Cadiz hasn't earned a profit in 24 years and has yet to sell water. But it's been even longer since California had a drought like this.

Cadiz was founded in 1983 by British impresario Keith Brackpool and Mark Liggett, a mining geologist. They were looking for water sources that could be developed for farming and sale to California's burgeoning cities, says Timothy Shaheen, Cadiz's chief financial officer. After studying NASA images from space, Liggett persuaded Brackpool that the Fenner Gap, in the eastern Mojave, was the right spot.

Railroad Hamlet

Fenner Gap, where the aquifer lies, sits on the confluence of three watersheds spanning four desert mountain ranges. Cadiz bought a patchwork of plots from the railroads, amassing 34,000 acres in the Cadiz and Fenner valleys, plus 11,000 elsewhere in the Mojave. Cadiz took its name from the old railroad hamlet and valley just south of Fenner Gap, where an old Santa Fe railroad spur breaks southeast toward Parker, Arizona, and on to Phoenix. Santa Fe tankers used to supply fresh water from Cadiz Valley wells to silver, talc, and limestone mines in the area.

The company planted about 600 acres of grapes and citrus but had trouble making money, largely because of the expense of diesel to power the irrigation pumps, Shaheen says. The sole purpose became selling water. What Cadiz lacked in lemons, it made up for in juice. Spending personal money and cash raised from investors and lenders, Brackpool and Cadiz became big campaign contributors in California, giving to candidates in both parties, particularly former Governors Gray Davis and Arnold Schwarzenegger.

Politicians Employed

At various times, Brackpool hired Antonio Villaraigosa, a former state assembly speaker and L.A. mayor; Bruce Babbitt, a former U.S. secretary of the Interior; and Susan Kennedy, ex-chief of staff for Schwarzenegger. Former Democratic U.S. Representative Tony Coelho served on Cadiz's board.

Cadiz declined to make Brackpool, also 56, available for an interview. He remains chairman after ceding the CEO post to Slater and taking a 31 percent cut in base pay, to \$275,000 a year. He keeps racehorses in the U.S. and England and owns the Manhattan Country Club in Manhattan Beach. Brackpool was named chairman of the California Horse Racing Board by Schwarzenegger in 2010 and last year became CEO of the Santa Anita racetrack. Liggett is retired from Cadiz.

The company's last major water transport plan, conceived in the mid-1990s, called for storing excess Colorado River water under Cadiz lands, then selling it to coastal communities during droughts.

Met's Decision

Cadiz stood to make as much as \$20 million a year in revenue from the deal, which it pitched to the

Metropolitan Water District of Southern California. Known simply as the Met, the public agency based in Los Angeles distributed about 554 billion gallons of water to 19 million residents in Southern California last year, most of it imported from the State Water Project in Northern California and the Colorado River. After six years of development and controversy, the Met killed Cadiz's Colorado storage plan in 2002.

In the aftermath of the decision, Cadiz's stock tanked, but the company still paid Brackpool a \$233,000 bonus in 2002, on top of his \$500,000 salary. Lenders and investors covered the company's losses from 2003 through 2012 with multiple cash infusions, lured by the prospect of pumping water someday to L.A. Meanwhile, Brackpool received \$14.4 million from Cadiz in salary and stock over the 10-year period, according to Securities and Exchange Commission filings.

"I always wondered if this wasn't some sort of Ponzi scheme," says Cook, the former Huntington Beach mayor. She says she couldn't understand why Brackpool was paid so well for an incomplete project at an unprofitable company.

'Regulated, Audited'

Cadiz Vice President Courtney Degener strongly objects to Cook's musings, writing in an e-mail that Cadiz is "a regulated, audited, publicly traded company" and "information that unequivocally demonstrates that Cadiz is not a Ponzi scheme is readily available." Degener defended Brackpool's compensation as shareholder-approved and consistent with the long-term nature of the development.

In 2008, Slater, who had just joined Cadiz as general counsel, began repitching the company as a fresh water supplier. Because there's no excess flow in the Colorado any longer, he put off the storage component and rebranded, without irony, Cadiz's plan to pump the desert aquifer as a "conservation, recovery and storage project." Wells on the property will suck water from the underground rock formations and pump it through the 43-mile pipeline before it merges into the Met's aqueduct carrying Colorado River water from Arizona to the Los Angeles Basin.

Conservation Pumping

Slater says he wants to "conserve" the desert aquifer by pumping water out at a rate that's more than 50 percent faster than the aquifer naturally replenishes. As a result, the water table, or the level below the ground where the water lies, would drop as much as 80 feet.

That may not sound like conservation, but Cadiz consultants say pumping out the "temporary surplus" will reverse the aquifer's natural underground flow, keeping the water from migrating into a pair of nearby dry lakes, where it would evaporate. "Under state law, evaporation is waste. It's called 'unreasonable use,'" says Slater. "You don't let water leave the system if you can harvest it."

The Santa Margarita Water District in southern Orange County, Cadiz's partner in the project, wants to use some of that harvested water. Right now the area's water comes entirely from the Met, says Dan Ferons, the agency's general manager. Santa Margarita plans to co-develop the desert aquifer to reduce its dependence on the Met by "diversifying our portfolio," Ferons says. Cadiz has agreed to pay almost all development costs. The desert water isn't meant to facilitate new real estate projects; all planned expansion in the district has already been accounted for, he says.

'Paper Water'

Slater says the desert water bonanza won't feed unsustainable growth around L.A., but history suggests otherwise. In a 2009 report called "Paper Water," Orange County's civil grand jury lambasted Santa

Margarita's water planning. California law requires real estate projects with 500 or more units to get a "water supply assessment" from a water provider assuring it can service the new development. Santa Margarita's 2003 assessment for a 14,000-unit development called Rancho Mission Viejo was "based on a series of assumptions" about water availability "that have long since been superseded" by drought and other changes, wrote the citizens' watchdog group empaneled by the county. Rancho Mission Viejo is moving forward, while other proposals to build a toll road and housing on the county's southern coast remain held up by regulators.

Growth Questioned

"The desert aquifer is tied to growth on the southern coast. Why else would a small Orange County water agency do a project in the middle of the desert?" says Conner Everts of the Southern California Watershed Alliance. "We call these 'zombie water projects' -- projects that come back to life when people worry about drought. At some point California is going to have to make water a much more serious part of land-use decisions."

Past droughts have produced zombie proposals such as bringing icebergs from Alaska by barge and towing acre-size plastic bags filled with water from Northern California rivers. This time around critics are sneering at Governor Brown's \$15 billion plan to bore a pair of 30-mile tunnels east of Sacramento to channel Sierra Nevada runoff to critical agricultural land. The Poseidon desalinization proposal for northern Orange County, an area with plentiful groundwater and a successful water reuse program, also draws ridicule from Everts and other environmentalists, who say desalting seawater is expensive and emits greenhouse gases. "It's like Cadiz. These things just don't die," he says.

Rancher's Springs

In the Mojave National Preserve above Fenner Gap, cowboy-poet Rob Blair, 57, has been running cattle on about 400,000 acres of federal land since childhood. Five generations of his family have lived in the same house on the 7IL Ranch, the last ranchers left in the preserve. His dad, 87, still lives there; so does his son, Cody, 22, who helps run the ranch.

Blair is worried that although Fenner Gap is about 40 miles away and 1,000 feet below the ranch, pumping the aquifer could dry up the springs in the preserve that sustain his 400 cattle. The National Park Service, in written comments on the Cadiz project in 2012, said it's "likely" some springs in the preserve are connected to the aquifer, a claim that Slater says makes no scientific sense. The Park Service also said Cadiz's contention that the aquifer refills at the rate of about 30,000 acre-feet of water a year is "not reasonable and should not even be considered."

'No Margin'

Blair has seen it take three years for storm runoff in the distant Providence Mountains to reach some of his wells. "There's no margin for error," he says. "If they start pumping and our water drops, I go out of business. They got no business taking our water to waste on lawns and sidewalks and swimming pools."

Blair's ranch and the Mojave National Preserve are protected by strict limits mandated by San Bernardino County in permitting Cadiz's pumping plan, says Christian Marsh, the county's special counsel. The county signed off on the Cadiz project after extensive due diligence and only when Cadiz agreed to monitor its pumping's impact on springs and wells throughout the area, says Marsh. If the water table drops below 80 feet, all pumping must stop. "The only way you'll know how the system reacts is to start pumping," he says.

Blair is unconvinced. "Once they start pumping, it isn't coming back."

Customer-Led Review

Slater says he's hoping Cadiz will clear another hurdle in a few weeks, when a state judge in Orange County rules on whether it was appropriate for Santa Margarita, the project's co-developer and water customer, to lead the environmental review, rather than San Bernardino County, where the impacts will occur.

Senator Dianne Feinstein, who authored the bill that created the Mojave National Preserve in 1994 and sees the Cadiz pumps as a threat to one of her signature achievements, is keeping a close eye on the company. In January, the Democrat inserted a rider into a budget bill that bars the Department of the Interior from spending any money this fiscal year on reviewing the project for permits. "Severely drawing down the aquifer could damage that region of the Mojave Desert beyond repair," she wrote in an e-mail. "The bottom line is that right now we need more responsibility in how we use our water, not less."

Slater says he can be patient: "My 8-year-old son told me sometimes being cool means doing unpopular things."