#### **ENERGY & ENVIRONMENT** | THE PARCHED WEST

# Investors Are Mining for Water, the Next Hot Commodity

By NELSON D. SCHWARTZ SEPT. 24, 2015

CADIZ, Calif. — Gazing out of a turboprop high above his company's main asset — 34,000 acres in the Mojave Desert with billions of gallons of fresh water locked deep below the sagebrush-dotted land — Scott Slater paints a lush picture that has enticed a hardy band of investors for a quarter-century.

Yes, Mr. Slater admits, his company, Cadiz, has never earned a dime from water. And he freely concedes it will take at least another \$200 million to dig dozens of wells, filter the water and then move it 43 miles across the desert through a new pipeline before thirsty Southern Californians can drink a drop.



Drip-irrigated lemon orchards at the Cadiz water project in the Mojave Desert. Credit Monica Almeida/The New York Times

But tapping cash, as opposed to actual water, has never been a problem for Cadiz. "I think there's plenty of money out there," Mr. Slater said.

Real profits may be nearly as scarce as snow in the High Sierra, but Wall Street, as it is wont to do, smells profit as California endures its worst drought in decades.

"Investing in the water industry is one of the great opportunities for the coming decades," said Matthew J. Diserio of Water Asset Management, a New York firm that is a major backer of Cadiz. "Water is the scarce resource that will define the 21st century, much like plentiful oil defined the last century."

So far, though, this veritable Gold Rush has mostly turned up fool's gold.

Over the last decade, Cadiz has accrued \$185 million in losses, and revenue from the lemon groves and vineyards it owns in the Mojave has added up to only a trickle: \$7.1 million total since 2005.

To develop the project, the company burns through \$10 million to \$20 million annually, paying for a neverending battle in courthouses and conference rooms across California to win make-or-break government permits and to cover the salaries of its 10 full-time employees.

#### The Parched West

Articles in this series explore the impact of the drought that has hit states from the Pacific Coast to the Great Plains. Cadiz has generated that money by borrowing and regularly issuing more shares, prompting skeptics to wonder if it will ever actually deliver any water, much less any profits.

"It's a tough game," said John Dickerson, chief executive of Summit Global Management, a 20-year-old San Diego firm that invests in

water infrastructure companies, local water suppliers and water rights, both in the United States and overseas.



Scott S. Slater, the chief executive of Cadiz. Credit Monica Almeida/The New York Times

"Cadiz has promoted the dream and for years Wall Street has pumped optimistic paper water for Cadiz," he added. "But now the hard question for them is, "Where is your real water and when can we drink it?"

Other water ventures have also promised more than they have been able to deliver, at least so far. Obstacles abound in the forms of skeptical regulators, wary customers and implacably opposed environmental groups.

But some projects are finally nearing fruition. Near San Diego, the privately held Poseidon Water is getting ready to flip the switch on a new desalination plant that it built after 15 years of battling lawsuits filed by environmental groups and waiting for go-aheads from cautious regulators.

The drought, however, hasn't softened local opposition to private players like Cadiz or Poseidon entering California's water market. A main reason is money.

After Poseidon's new plant begins producing desalinated water late this year, the monthly water bill for a typical consumer in the San Diego area will rise by about \$5, to \$80, according to the San Diego County Water Authority.



Drip-irrigated lemon trees and vineyards are so far producing the project's only revenue. Credit Monica Almeida/The New York Times

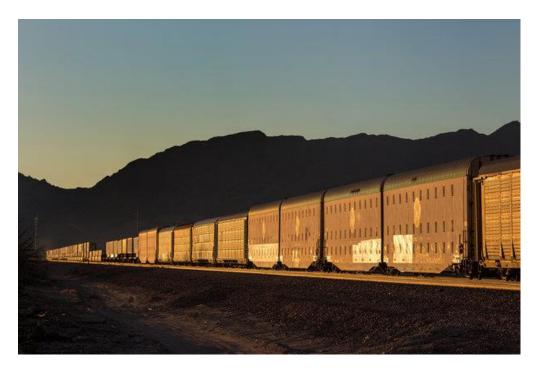
Located on the grounds of a power plant in Carlsbad facing the Pacific Ocean, the facility should produce as much as 50 million gallons of drinking water a day, if not more, expanding the region's water supply nearly 10 percent.

Nonetheless, for Adam Scow, California director of Food and Water Watch, a nonprofit environmental group that opposes the desalination project, any private control over the water supply is too much.

"Water is a public trust, and it shouldn't be privatized," Mr. Scow said. "It can't be managed for the benefit of a few people like Poseidon's investors. The rates are unjustified."

Poseidon officials reject arguments from critics like Mr. Scow that they are taking advantage of consumers.

"The Carlsbad desalination project is a true public-private partnership," said Andrew Kingman, executive vice president at Poseidon Water. "Poseidon's role in the project is that of a service provider. The Water Authority doesn't have any payment obligations for the water until it is converted and delivered, and thereafter has full control over its use."



Cadiz plans to construct a 43-mile pipeline along the railroad tracks to carry water from the eastern edge of San Bernardino County to thirsty cities to the west.

Monica Almeida/The New York Times

Indeed, despite fears that Wall Street is making money off the drought, so far it has mainly been Poseidon's investors who have been on the losing end. The company's first return on its investment is not expected until next year, after years on the drawing board. A similar Poseidon project up the coast in Huntington Beach is still mired in the permitting process.

"It took more than a decade of struggle to get the Poseidon project permitted, not the kind of experience to make for happy investors," Mr. Dickerson said. "This may well discourage potential investors in future desalination projects in California."

But for those with a long enough time horizon, water may ultimately prove to be a good investment.

"Water has been taken for granted, but reliable access is no longer guaranteed," said Disque D. Deane Jr., a Wall Street veteran who runs Water Asset Management with Mr. Diserio. "It will be seen as an asset class that will be allocated in portfolios like health care stocks or energy or real estate."

Their firm now oversees more than \$500 million for pension plans, sovereign funds and wealthy families, and their flagship fund has generally outperformed global stock market benchmarks since inception in 2006. Assets at Impax Asset Management, a London-based firm that also focuses on water, have doubled to \$1.8 billion over the last two years.

While some projects may be more far-fetched than others, experts involved in the business insist there's nothing wrong with making a profit selling water.

"It takes money to process, treat and move water, but now water itself is becoming increasingly valuable in the West," said Steve Maxwell, a veteran industry consultant who is based in Boulder, Colo.

"It doesn't make any difference whether it's a public agency or a private company that manages your water, the prices are going up," he added. "It's not because of municipal inefficiency or corporate greed. It's because we're running out of water."

Many investors are looking for less risky ways to make money in the water business. Rather than wade into bruising battles over water rights or developing new supplies only to face accusations of trying to profit off the drought, investors like Simon Gottelier of Impax are focusing on companies that supply infrastructure to water utilities and industrial users, not the water itself.

"As long-term investors focused on managing a 'sleep at night' fund, we are reticent about water rights companies because of how emotive the issue can be," Mr. Gottelier said. "We don't want to make investments in companies that become a subject of ire from farmers or generate headlines."



Disque Deane Jr., sitting, and Matthew J. Diserio are major backers of Cadiz. Credit Sasha Maslov for The New York Times

For Impax, that means there is appeal in stocks like Xylem, a maker of pumps, filtration equipment, and water treatment and testing supplies. Other Impax holdings might include makers of reverse osmosis membranes, like those at the heart of Poseidon's new desalination plant, which Mr. Gottelier visited in June.

He sees California's water shortage not just as a driver of demand for the individual companies in his portfolio, but also as a spur to individuals and institutions wanting in on the water trade but not ready for moonshots like Cadiz.

"There has been a dramatic increase in real and potential investor appetite," Mr. Gottelier said. Much of the cash flowing into Impax is from institutional clients in Europe, where for-profit water systems have a long history, in contrast to the United States.

Back in the Mojave, in a trailer alongside a sun-baked airstrip built by Cadiz, Mr. Slater likes to show visitors a video of what appears to be an underground river 400 feet below the sand and sagebrush. As the temperature hovers at 95 degrees outside, the sight of all that crystalline, cool water conjures up visions of an imaginary oasis shimmering in the distance, drawing wanderers ever deeper into the desert.

But Mr. Slater insists it is within reach.

"Our expectation is that we're going to turn dirt next year," he promised. "We've never said before that this is the year. We're saying it now."

Correction: September 24, 2015

An earlier version of this article misspelled the name of an executive at Water Asset Management. He is Disque D. Deane Jr., not Disque D. Dean Jr.

#### PARCHED WEST SERIES

A version of this article appears in print on September 25, 2015, on page B1 of the New York edition with the headline: Mining for Water. <u>Order Reprints</u> Today's Paper|Subscribe