## Water shortages are a bank problem

By Jon Prior, American Banker, October 2019

https://www.americanbanker.com/news/what-will-drive-bank-lending

Recent studies offer a dire outlook for water levels in drought-prone states. Here's why that's worrying news for lenders

Cashmere Valley Bank, based a little more than two hours outside of Seattle, had never considered the water supply as a credit-risk factor.

The \$1.5 billion-asset bank had been busy financing land development around the Suncadia resort when the state's restrictions on well digging took effect in 2009. Officials at the Department of Ecology were trying to head off water shortages during future droughts, and their efforts touched off years of wrangling over restrictions on water use and how they impact real estate and rural developments.

Cashmere Valley Bank had financed 15 to 20 projects that had their water consumption restricted. Some even had wells already dug but couldn't use them. Property values collapsed from about \$200,000 to \$20,000, said Greg Oakes, Cashmere Valley Bank's chief executive. Borrowers began walking away. The bank lost between \$5 million and \$10 million on the deals. "They were basically a dry piece of ground," Oakes said.

The U.S. as a whole has relatively low water-related stress, according to recent data from the World Resources Institute. But some states will be facing more drastic water shortages than others, meaning banks with high concentrations of business in these areas could be facing larger risks. Five states face "high" levels of stress where researchers with the institute estimate farmers, business and municipalities draw more than 40% of their available supply each year on average.

"Such a narrow gap between supply and demand leaves countries vulnerable to fluctuations like droughts or increased water withdrawals, which is why we're seeing more and more communities facing their own 'Day Zeros' and other crises," the researchers wrote in discussing cities reaching the point of turning off their taps.

By 2071, half of the 204 water basins in the U.S. may not have enough to meet monthly demands, according to a study published earlier this year by researchers with the U.S. Forest Service. Researchers said that farms will have to adapt the most if water-shortage crises are to be avoided. Irrigation takes up an estimated 75% of water demand in the U.S. Slight reductions in irrigation could be enough to prevent shortages, but the researchers estimate that some freshwater basins will need to see cutbacks by more than 30% to avoid problems.

For ag banks, this is less of a surprise, but the problem looms for a broad range of commercial banks, too. "We have been taking the issue of water shortages very seriously for a decade," said Ciaran McMullan, the CEO of Suncrest Bank in Visalia, Calif. "The alarm is being sounded to those who are not steeped in the issues that come with the availability of water."

The \$931 million-asset bank has a branch in Porterville, Calif., in the San Joaquin Valley. During the state's drought earlier this decade, wells in nearby East Porterville ran dry, and the community's problem

attracted international attention. Many residents were forced to leave, leaving their property and sometimes their mortgages behind.

Steve Baker, a hydrogeologist, has been going around the country asking for meetings with banking executives to discuss how they can navigate any restrictions governments will put in place and ways they can safeguard against the kinds of problems Cashmere Valley Bank ran into. Back in the 1980s, he raised concerns early about what responsibility lenders would have when they took back property with heavy pollution problems. As the costs of cleanups skyrocketed, Baker found himself at the top floor of some of the country's largest banks.

He is now flagging a study published in July by University of California, Santa Barbara researchers. They found that drilling deeper wells -- a stopgap measure many in dry areas turn to when water is in short supply -- is unsustainable. At certain depths, it becomes too expensive to drill and the water turns saline anyway, Baker said. Restrictions are inevitable as sources of fresh water run out. This will not just hurt ag banks but lenders financing developments in rural areas that have been experiencing a boom in building, he said. "We will see more issues," Baker said. "And it can be described in a loss of money. Lenders writing 10-year, 15-year, 30-year mortgages right now, they really need to be paying attention."

McMullan at Suncrest has inserted special stipulations into the bank's underwriting criteria when considering whether to make a loan, such as annual pump tests and determining how many water sources a borrower can draw upon. Oakes at Cashmere Valley Bank in Washington said it took similar steps Examiners at California's Department of Banking consider water shortages among the risks banks there must "identify, measure, monitor and control," a spokesman for the agency said in an email.

Oakes said regulators are "asleep on this issue." A clearer picture of the water shortage problem may come into focus next year when a landmark federal government assessment of renewable resources, required each decade, is due."I don't think there are a lot of non-ag banks thinking about water," McMullan said. "But if you're doing one- to four-family construction loans, you'd want to know if further development will be challenged by a lack of water supply."