Amid drought, Texas legislators look for ways to boost frack-water recycling

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Texas oil and gas drillers are recycling more water, but state lawmakers want them to go further to protect rural areas that have been struggling with a historic drought.

Two of the biggest operators in the Permian Basin in West Texas have stopped using fresh water for drilling and hydraulic fracturing, and a third is working on plans to use treated wastewater from municipal sewage plants, according to testimony at a joint meeting of the state House Natural Resources and Energy Resources committees.

Committee members said they want better data to track how much water is recycled. They also want to know how to prod smaller oil and gas companies to recycle water.

"Everybody doesn't have the wherewithal and everybody doesn't have the permits or the land to make it work," said Rep. Jim Keffer (R), chairman of the Natural Resources Committee.

Texas is producing more oil and gas than it has since the 1970s, thanks to the boom in shale oil and gas, which typically requires hydraulic fracturing. The process, sometimes called fracking, requires millions of gallons of water per job.

At the same time, 43 percent of the state is in moderate to exceptional drought, according to the Texas Water Development Board. Fracking doesn't use a large percentage of water statewide, but it has an outsized effect in some rural areas of the state.

The mining business, which includes oil and gas extraction, uses more than 20 percent of the water in 14 counties, said Ryan Sitton, a member of the Texas Railroad Commission. In Dimmit County, which is in the heart of the Eagle Ford Shale field, more than 40 percent of water use goes to mining, said state Rep. Tracy King, who represents the area.

The Railroad Commission, which regulates the state's energy industry, wrote rules in 2013 aimed at giving companies an incentive to recycle water for hydraulic fracturing. The commission, though, doesn't keep records on how much water is recycled, relying instead on estimates from the Texas Water Development Board.

"How do you measure success?" asked Rep. Rafael Anchia, a Dallas Democrat.

There are some bright spots. Texas has about 2.7 billion acre-feet of brackish water that can be used for hydraulic fracturing, replacing the fresh water. Also, the cost of recycling water from hydraulic fracturing is coming down.

Fasken Oil & Ranch Ltd., which is drilling on 165,000 acres outside of Midland, stopped using fresh water for fracking in 2014, instead using a combination of brackish and treated water, Jimmy Carlile, one of the ranch's managers, testified.

Apache Corp. is also using a combination of brackish and recycled water to fracture its wells in the Permian Basin. Pioneer Natural Resources Co., which is the biggest operator in West Texas, is working on a plan to buy wastewater from the city of Midland.

The committee didn't discuss any specific legislation, and there were few ideas for new proposals. Oil producers who spoke said the Railroad Commission's light-handed approach has helped them develop their own recycling programs.

"We've got to be able to do this so that it's cost-effective," said Cal Cooper, who oversees water recycling at Apache as manager of special projects.