Water handlers have advice for local operators

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The move by Permian Basin operators from using fresh water in their drilling and fracturing operations to recycling and reusing water has gained steam.

Executives with three water-focused service providers offered some thoughts and advice at this week’s Executive Oil Conference.

“What I’m excited about is that, especially in the Permian Basin, water recycling has become mainstream,” said Brent Halldorson, chief executive officer of Fountain Quail Water Management LLC.

There is no question disposal wells are under stress and fresh water is not plentiful, he said.

Disposal wells are being looked at as a cause of a swarm of earthquakes in North Texas and Oklahoma. But disposal wells are an important piece of the industry puzzle, Halldorson said.

But the Permian Basin is leading the way in recycling, he said.

“There's been an evolution. Costs have dropped, reliability has increased, we’re able to use more complicated, more saline water,” Halldorson said.

Operators are finding water recycling is more cost-effective when disposal fees, transportation and storage costs are considered, said Rob McClain, director, project development with Select Energy Services.

Clane LaCrosse, founder, president and chief executive officer of Bosque Systems LLC, cautioned that the economics have to work. His company is starting four pilot projects in the Permian Basin, he reported.

He said “it’s music to my ears to hear operators talk about how they want to cut costs, how they want to push service companies to cut costs. That creates opportunities for us.”

He cautioned that operators looking to use a lot of brackish water, especially from the Santa Rosa formation, to make sure ownership of the various water rights is not an issue. Another issue is how the
aquifers interact, since pulling water from one aquifer could impact another.

“Make sure you study the hydrogeology to the best you can,” he advised.

McClain agreed there are technological issues. “That’s where companies like ours come in,” he said. The three encouraged operators to develop water quality specifications, from removing iron from the water to specifying how much total suspended solids should be removed and asking that bacteria be killed.

None of them believes recycling should be mandated but should be incentivized and praised the recent Railroad Commission rules and make recycling easier.

Water recycling is not a big part of the Permian Basin oil fields, but has tremendous potential, said Halldorson.

“With all the grand plans from operators, they can get the rigs, they can get the personnel, but can they get the water?” he asked.

“This area is the world leader in how to reuse water. People all over the world are looking to this area,” LaCrosse said.