

## GOING DEEP

*People are still drilling for **water**, but it takes money — and permits*

By JENNIFER WILSON THE GAZETTE

Getting **water** straight from the earth takes more than digging a really deep hole. It requires permits from the state, heavy-duty equipment and thousands of dollars. The result: **water** from underground aquifers that doesn't need to be treated.

Before crews start drilling a well, landowners first need a state permit. The permits vary depending on how you'll use the **water**, said Tommy Fletcher of Fletcher Drilling, based in Palmer Lake.

Residential users can drill two types of wells: "household use only" or "domestic," Fletcher said.

Household-use-only wells prohibit residents from using **water** outside, Fletcher said. That means no **watering** lawns, caring for thirsty horses or washing cars.

"Their **water** needs and their usages are minimal," Fletcher said.

Domestic wells allow residents to install sprinkler systems and use **water** outside.

Two other types of wells, commercial and irrigation wells, provide **water** for businesses and farms, Fletcher said.

It typically takes six to eight weeks for the state to approve a well permit. Well-permit applications, which cost \$100 to file, can be downloaded online at [water.state.co.us/pubs/forms.asp#III](http://water.state.co.us/pubs/forms.asp#III).

The location and type of well determines how deep Fletcher drills. Most residential wells inside the Denver Basin go 300 to 400 feet deep, Fletcher said.

The Denver Basin includes the Dawson, Denver, Arapahoe and Laramie-Fox Hills aquifers, all underground sources of **water** for an area stretching from El Paso County to Weld County.

Outside the Denver Basin, in places such as Woodland Park, Florissant and Cañon City, crews drill through granite and sandstone until they hit **water** — typically 400 to 600 feet down.

Drilling through rock costs about \$22 per foot, and drilling through the clay and silt above the basin costs about \$10 to \$12 per foot, Fletcher said.

The state limits the output of a residential well to 15 gallons per minute, he said.

For a 300-foot well outfitted with a pump system, Fletcher would charge \$5,500 to \$7,500, he said.

Supplying well **water** to hundreds of homes gets a little more pricey.

The Donala **Water** and Sanitation **District**, which serves about 2,700 homes in Gleneagle and beyond, recently drilled the **district's** 14th well, **district** manager Dana Duthie said.

This well, drilled inside Fox Run Regional Park, goes 2,080 feet deep, Duthie said.

After getting **water** rights and well permits from the state, which could take a year, the drilling starts. Crews need about an acre of land to work with.

"It's a big process. It takes a lot of equipment, a lot of pipe laid out on the ground," Duthie said. "This is one humongous rig."

Drilling 24 hours a day, the project took six months, he said. It puts out 600 to 650 gallons per minute.

Cost to drill, including pump? About \$650,000.

The **water** is pure enough to drink, but extra iron and manganese in the **water** gives homeowners' laundry a rusty hue.

"We treat it mainly for that reason, to get the iron out of it," Duthie said.

## PROTECT OUR WELLS

Most **water** users live inside a city or **water district**, connecting to pipes shared by thousands of other residents. When you use well **water**, you're on your own.

That's where Protect our Wells comes in.

Since 2002, this organization has given a united voice to hundreds of individual well owners in the Pikes Peak region, from Calhan to the Tri-Lakes.

"We serve as an advocacy group for private well owners in the Denver Basin," said Protect our Wells president Sandra Martin.

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POW seeks to educate its 500 to 750 homeowners in part by monitoring these aquifers to see how much **water** people are using, Martin said.

"So that we actually do know what the usage is, what the levels are," she said.

POW members also stay on top of housing developments that would affect the area's groundwater supply, she

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said.

"It's not that we want to come off as being anti-development. That's not our position at all," Martin said. "We do want responsible development."

Protect Our Wells will meet at 7 p.m. March 26 at Woodmen Valley Chapel at Marksheffel and Woodmen roads. For more information about the group visit [www.protectourwells.org](http://www.protectourwells.org).

**Colorado Water Courts:**

[www.courts.state.co.us/supct/supctwaterctindex.htm](http://www.courts.state.co.us/supct/supctwaterctindex.htm)

**Colorado Water Congress:**

[www.cowatercongress.org](http://www.cowatercongress.org)

**Colorado Division of Water Resources:**

[water.state.co.us](http://water.state.co.us)

**Colorado Well Water Contractors Association:**

[www.cwwca.org](http://www.cwwca.org)

**Protect Our Wells:**

[www.protectourwells.org](http://www.protectourwells.org)



**DAVID BITTON, THE GAZETTE** - Fletcher Drilling employees Tommy Fletcher, left, and Michael Jennison drilled a 360-foot deep **water** well at a home site in the Black Forest area last week.

