

## Carbonate aquifers low in contaminants: USGS

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WASHINGTON — Carbonate aquifers, which provide more groundwater for drinking water than any other type of bedrock aquifer in the United States, are typically low in contaminants, the US Geological Survey (USGS) reported in a June 26 [press release](#) summarizing the results of a new USGS study.

Carbonate aquifers are underground rock layers typically consisting of limestone or dolomite, and some can contain caves or cause sinkholes. Much of Florida, for instance, is underlain by these aquifers, and the large Edwards-Trinity aquifer is beneath Texas. Carbonate aquifers supply 20 percent of the groundwater used for drinking in the United States.

The USGS noted that radon and nitrate were among the few contaminants with elevated concentrations in samples taken in its study from water wells drilled into carbonate aquifers. Nitrate was the most commonly detected contaminant sampled in these aquifers at concentrations above its federal maximum contaminant limit (for nitrate: 10 parts per million), the USGS said. Nitrate exceeded that standard in 5 percent of sampled wells.

USGS said the types of contaminants found in carbonate aquifers are closely related to land use, such as the use of fertilizers, pesticides and volatile organic compounds (VOCs).

The agency tested for 151 chemical constituents or physical properties in 1,000 water wells across 20 states. The study, *Factors affecting water quality in selected carbonate aquifers in the United States 1993-2005*, is available [online](#).