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The Oregonian's recent article about ground water (*Cascades Hide a Mother Lode of Water, October 20, 2008*) was off the mark in its assertion that there is a vast, previously unrecognized and unused reservoir of ground water underlying the Oregon Cascade Range. In truth, ground water in the Cascade Range is well understood and, for the most part, already spoken for.

The large regional ground-water system in the Cascades, and its importance to stream flow in adjacent basins, has been known to scientists and water-resource managers for many decades. Hydrologists recognized over 80 years ago that ground water in the young lava of the Cascade Range was responsible for the stable year-round flow of rivers in adjacent basins, including the Deschutes and Metolius Rivers, as well as critical tributaries of the Klamath and Willamette rivers.

Further, the concept of a "secret stockpile" of water that "someone, someday may want to use" is not only incorrect, but troubling because it implies that ground water in the Cascade Range is not already being used. In reality, ground water from the Cascades supplies much of the flow to major streams on both sides of the range, and, consequently, is already being relied upon by communities, irrigators, and important aquatic ecosystems. This is the same water people on both sides of the mountains have been working to manage for decades. For example, most Oregonians are familiar with the intense competition for water in the Klamath Basin. What is not as widely known is that much of the water flowing into Upper Klamath Lake originates as ground water from the Cascades. Additional use of ground water in the Cascade Range would diminish discharge to streams and exacerbate the water-supply problems that so many are working to resolve. In this sense, ground water in the Cascade Range is already spoken for, since most streams adjacent to the mountains are already fully appropriated.

Nor is the Cascade Range ground-water system immune to drought. The article states that despite eight years of drought, the Cascade Range aquifer system "is still brimming." In fact, ground-water storage in the Cascade Range and discharge of ground water to streams diminishes in response to drought. Ground-water levels in wells in the Cascades dropped as much as 20 feet during the most recent drought and have only partially recovered. Late season flow of ground-water fed streams adjacent to the range, such as the Metolius River, dropped as much as 30 percent during the last drought.

State and Federal water resource agencies already factor Cascade Range ground water in their management strategies. The U.S. Geological Survey and Oregon Water Resources Department have several past and ongoing projects that characterize ground-water flow in and adjacent to the Cascade Range, and have developed robust computer models to quantify its interactions with streams and lakes in the adjacent basins. Additional study of the Cascade Range aquifer system is certainly warranted, but characterizing it as newly discovered and unused misleads the public into thinking it is an untapped resource ripe for development without consequence to stream flows and existing water uses.