



City of Flagstaff

News Release

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For Immediate Release

### **City of Flagstaff drills first water well in 12 years**

FLAGSTAFF, Ariz – The city of Flagstaff will soon add a new well to their inventory. Drilling of a second groundwater well at Fort Tuthill County Park began February 22, 2021.

Drilling this well is part of the city's mid-to-long term water policy and the subsequent ten-year capital plan initiated after the 2002 drought left Upper Lake Mary reservoir nearly dry, resulting in water shortages throughout the city. This is the first of five wells in the plan to add resiliency to the city's water supply and serve as a safety net against climate change and resulting drought, forest fires or infrastructure failure. Groundwater wells are the core producers of city water, averaging 65% of the city's potable water supply since 1950. They tap into the C-aquifer at an average depth of 1000 feet below land surface with the bottom of most wells exceeding 2000 feet.

The city has drilled over 30 groundwater wells to the Coconino, or C-Aquifer over the last 65 years. The first deep well, Woody Mountain Well #1, was drilled by Flagstaff's Perry family in 1954. The last well was drilled in 2009, when a series of wells were established to strengthen the city's growing need for water.

The location of this well is strategic. A geophysical study pointed to the first Ft. Tuthill well drilled in 2009, and the city was rewarded with its highest-producing site at 1,300 gallons per minute. Even though Ft. Tuthill #2 is expected to perform similarly, locating wells is still not a fool-proof science and dry wells are not uncommon.

The drilling contractor, Boart Longyear of Salt Lake City, is employing a more-efficient technology that saves money and produces a straighter well. The innovative drilling system effectively seals off any cracks or caverns encountered along the way and does not require the circulation of drilling water. Water loss to the cracks in the rock would require large underground open spaces that must be filled with concrete to plug the gaps. This is a costly solution and is not an issue using this method. The well will be drilled to a depth potentially reaching 2500 feet below land surface to capture the maximum amount of available water. The drilling team expects to reach the aquifer at about 1300 feet.

This well is anticipated to provide a flow rate of at least 250 gallons per minute, and as high as 1,200 gallons per minute, augmenting the southwest area of Flagstaff's distribution system.

While the city's overall water supply will benefit from the resources provided by this and future wells, the cost is paid for using capacity fees, paid by new developments for their water connections. It does not impact user rates.

Follow the drilling project through the story map, on the Capital Improvement Page on the city's website at <https://www.flagstaff.az.gov/4237/Capital-Improvement-Map>.

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