

**DEPARTMENT of the INTERIOR**news release

BUREAU OF RECLAMATION

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For Release May 24, 1979CENTRAL ARIZONA PROJECT CONSTRUCTION MILESTONE

Secretary of the Interior Cecil D. Andrus has announced the excavation of the 6.8-mile-long Buckskin Mountains Tunnel is expected to be completed on Thursday, May 24. The tunnel, located near Parker, Ariz., is a major feature of the Central Arizona Project

The Buckskin Mountains Tunnel is a vital link in the 190-mile-long Granite Reef Aqueduct and the planned 58-mile-long Salt-Gila Aqueduct. They are to convey a yearly average of 1.2-million acre feet of Arizona's entitlement to Colorado River water into central Arizona. The water will come from Lake Havasu and supply the Picacho Reservoir in Pinal County, beginning in 1985.

The proposed Tucson Aqueduct, which will provide for the delivery of Colorado River water to Pima County and the Tucson metropolitan area, is scheduled for operation in 1987. Until then, these areas will continue to use surface waters as their primary water source. Growth in population and industrial and agricultural development has resulted in dependence on ground water as a second source of supply with depletion outpacing natural replenishment.

In February 1975, the Department awarded a \$58 million contract to the J. F. Shea Company, Inc., of Walnut, Calif., for the construction of the Buckskin Mountains Tunnel, the largest single contract to date on the project.

The Shea Company employed machine-boring and lining the tunnel with precast concrete segments, the first time this construction method has been used on work being performed for the Bureau of Reclamation.

A TBM, or tunnel boring machine, built for the Shea Company by the Robbins Company of Seattle, Wash. began boring in May 1976.

Moving uphill about 5 feet in elevation each mile during its 6.8-mile trip from the tunnel outlet to the tunnel inlet, the TBM has literally ground out approximately 600,000 cubic yards of complex volcanic rocks.

The concrete lining erected immediately behind the TBM is composed of 28,500 quarter segments, 5 feet wide, weighing about 2 tons each. With the concrete lining in place, the inside diameter of the tunnel is 22 feet. It will carry up to 3,000 cubic feet of water per second.

The TBM progressed through the Buckskin Mountains ahead of its projected schedule. It advanced a record of 150 feet in one 24-hour period, and a total of 625 feet in one week during the summer of 1978.

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