

Schnabel Engineering Recommends Earthen Dam at Ragged Mountain Reservoir

RWSA has announced the potential for millions of dollars in cost savings by constructing a new dam at the Ragged Mountain Reservoir from earth instead of roller compacted concrete. Schnabel Engineering, who was retained by RWSA to provide a preliminary design for a new dam to increase the storage at Ragged Mountain Reservoir, has concluded that an earthen dam can be constructed at a cost of \$20 to \$27 million. This would be significantly less cost compared to Schnabel's estimate for a concrete dam on the Ragged Mountain site.



Photo Courtesy of Tailwheel Basics, LLC

Earlier preliminary design and cost estimates called for a roller compacted concrete dam because available information of the site, before deep and costly geotechnical borings were conducted, suggested limited soil with rock outcrops near the ground surface. However geotechnical investigations by Schnabel revealed that subsurface conditions were far more suitable for the construction of earthen dam than originally thought. In addition, Schnabel has determined that on-site soils are suitable for construction of the dam, making this option even more cost-effective.

“When we hired Schnabel we were persistent in pushing for attaining the goals of the community, which is a fine line balance between a very safe and secure dam that provides the long-term water supply, and one at the best cost we can get,” notes RWSA Executive Director Tom Frederick. “I think Schnabel has been successful at getting us there, and I commend their performance.”