



Location: Rifle, CO

Year: 2000 to 2002

Construction Dollar Value: \$3M

Owner: City of Rifle

Contact: Charlie Stevens, Utility Director, 970-625-6272

Key SGM Staff: Louis Meyer, PE; Jeff Simonson, PE; Blaine Wright; Ron Mittleider; Bill Swigert, PE, SE

Subconsultants and their project roles: HP Geotech, Yeh & Associates (Geotechnical Engineers)

Client Benefits

- Improved fire protection capabilities
- Sufficient water storage to serve new growth areas on multiple fronts
- Full monitoring capability through integration with central SCADA system

Challenges

- SGM successfully guided the West Tank waterline project through a significant Colorado Department of Transportation (CDOT) permitting process to allow the line to follow the shortest alignment along a state highway and minimize construction cost
- The Northeast Tank project involved a re-working of the City's pressure zones on Graham Mesa. This required extensive modeling, plus close coordination with City staff and the contractor during construction and startup

SGM has planned, designed, and oversaw construction of three major potable water storage facilities for the City of Rifle in the past 10 years. The City's Northeast Tank and Airport Tank projects emanated from the need to provide sufficient water storage for rapidly developing parts of the City. The West Tank project was constructed to extend the City's system to provide much-needed potable water to an outlying area whose groundwater supply was compromised by the Department of Energy activities. Each of these projects had its own unique challenges, which SGM and the City successfully overcame to site, permit, design, construct, and put into operation the three facilities. Improvement elements common to each, include level measurement instrumentation and telemetry, fencing, access roads, and site grading and drainage. Each project also involved hydraulic modeling and significant buried pipeline design/construction components.

Project Elements

- Northeast Tank
 - Year: 2003
 - Capacity/type: 1.0 MG, glass-fused to steel, bolted
 - Water line(s): 14,000-LF of 14"-diameter PVC
 - Other: New pressure zone created using 5 new PRV stations
- Airport Tank
 - Year: 2000
 - Capacity/type: 1.0 MG, welded steel
 - Water line(s): 5,000-LF of 12"-diameter PVC
- West Tank
 - Year: 2002
 - Capacity/type: 0.60 MG, welded steel
 - Water line(s): 12,000-LF of 12"-dia. PVC; 6,000-LF of 8" PVC
 - Other: Altitude valve vault