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## WATER RESOURCES SUPPLY DECISION SUPPORT SYSTEM FOR SANTA FE COUNTY

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INTERA is currently working with Santa Fe County, New Mexico, to develop a regional groundwater availability model and decision support system (DSS) to assist the County in evaluating potential well locations for new water supply sources. The groundwater availability model will be used as part of a site suitability analysis DSS using multi-attribute utility theory (MAUT) to determine potential supply well locations. Using a geographic information systems (GIS) approach, the DSS will identify potential supply well locations for the County that minimize impacts (and hence proximity) to existing supply wells, streams, and springs, while maximizing proximity to existing infrastructure, population centers, and areas of favorable geology and land ownership using a MAUT approach. As a final step, potential supply well locations will be evaluated using the groundwater availability model to further refine the location alternatives to identify the most promising ones. This approach will provide County decision-makers and the public with a structured, scientifically defensible, and unbiased method of identifying potential supply well locations.

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