

# Multi-disciplinary Analysis of a New Mexico Cold Water Tufa Spring Mound

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## **PURPOSE OF STUDY**

Around the Blue Hole sinkhole near Santa Rosa, New Mexico, there are a variety of sinkholes and springs that have not been studied. Approximately one mile from Blue Hole on a ranch, there is a significant multi-acre karst depression with three springs and sinkholes in it. Near it, there is a tufa spring mound. The mound is not associated with another spring or lake, but it precipitates even though others in the area do not. The researchers aim to perform a basic analysis of the springs located on the ranch near Blue Hole.



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## **STUDY UNDERWAY**

- The researchers will perform a geospatial analysis, along with basic field hydrological and geochemical measurements.
- A core sample from the spring mound will be analyzed for its depositional history and its present and paleo hydrological sources.
- The water and recent tufa will be examined to determine the role microbial activity plays in deposition.
- Other nearby springs will be analyzed if necessary to determine why this particular mound spring precipitates and others do not.

## **BENEFITS**

- This study will provide information about the hydrology of Santa Rosa, New Mexico, which is poorly studied.

