

RICO GEOTHERMAL COALITION

Exploring Geothermal Potential in Rico, Colorado

Supporting Rural Decarbonization & Cultivating Small-Town Resilience

COMMUNITY CONTEXT

Rico, Colorado is a historic mountain town of fewer than 300 residents, perched at 8,827 feet in the San Juan Mountains. Incorporated in 1879 as a silver mining hub, even today, Rico lacks natural gas infrastructure. Residents rely almost entirely on propane and wood for heat, and a single power line subject to frequent outages delivers electricity to the town.

THE OPPORTUNITY

Below Rico's surface lies significant potential for energy independence. Artesian boreholes drilled decades ago reveal a hot water resource north of town, and recent investigation points to a second hydrothermal anomaly to the south. Geologic features indicate a substantial, untapped geothermal reservoir that could offer Rico energy resilience and greater economic agency.

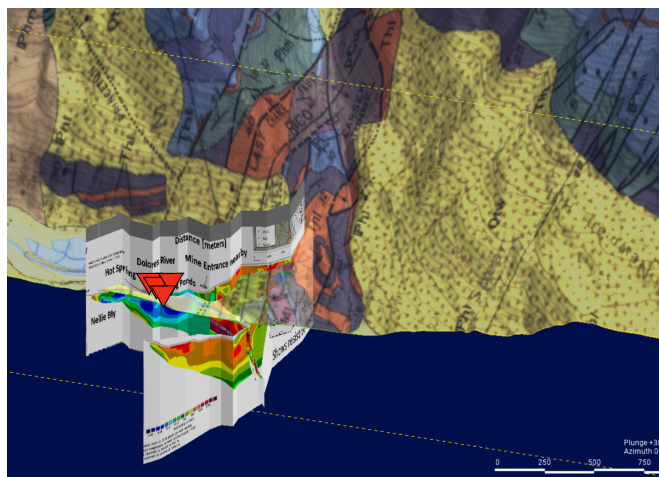
The [Rico Geothermal Coalition \(RGC\)](#), formed in 2022, is exploring Rico's geothermal resource, researching feasibility of a district heating system that would use a thermal energy network (TEN) to heat the town's homes and structures (~215 buildings). If this potential is realized, Rico would be the smallest Colorado town to implement such a system, providing a replicable model of community-led geothermal development.

PROGRESS TO DATE

Phase 1 (2024): Funded by a \$100K [Colorado Energy Office](#) grant, [Teverra](#) — a subsurface geoscience and engineering firm — built a 3D integrated model of Rico's geothermal system synthesizing geology, temperature measurements, geophysical surveys, geochemical analysis, and historic observation.

Teverra developed two conceptual fluid-flow models, both targeting the natural porosity and fracture networks in two promising rock formations: the **Leadville Limestone** and the **Hermosa Formation**.

Phase 1 results confirmed these formations as viable reservoir candidates. This research will help RGC pinpoint a favorable location for a test well, reducing financial and technical risk.



Teverra's modeling of Rico's geothermal resource

Phase 2 (2025–ongoing): A \$200K Colorado Energy Office grant funds the drilling of a monitoring well (80–350m depth) north of town and initial district heating network design.

KEY NUMBERS

<300

Residents

~215

Buildings

115°F

Surface expression temp

248–284°F

Est. reservoir temp

5–30 gpm

Surface expression flow rate

\$300K

Funding secured

(Phase 2, continued) Drift Consulting Solutions will manage test well drilling, and the data collected will refine the model and inform next-phase construction decisions.

COMMUNITY SUPPORT

A 2025 town-wide survey (30% participation) showed strong interest in geothermal development, contingent on cost and preserving Rico's character:

61% interested in geothermal heating for their home

71% favor geothermal for commercial & municipal buildings

77% support integrating geothermal w/other town excavation work

Nearly 60% of residents rely on propane as their primary heat source; 23% rely on wood. Over 30% report their heating system resiliency is questionable when Rico loses power.

VISION

A successful Phase 2 opens the path to a locally-sourced, community-owned energy asset. The project could eliminate dependence on imported propane, generate revenue through a heat-distribution model, support workforce development via new economic opportunity, and serve as a blueprint for rural geothermal initiatives.

FINANCIALS

Phase 1 was made possible by a \$100K grant from Colorado Energy Office, which also provided \$200K for Phase 2. Drilling and validating a monitoring well in alpine terrain is a capital-intensive undertaking. Phase 2 requires an additional \$170K to complete. We are actively seeking funding for the next implementation phases- A comprehensive TEN system design, production well, district heating utility development and construction.

PARTNERS

Teverra LLC · Colorado Energy Office · Western Colorado University · Drift Consulting Solutions · Town of Rico · Clear Energy Economy for the Region (CLEER) · Bedrock LLC · San Miguel Power Association · EcoAction Partners · Rico Land Collaborative · National Laboratory of the Rockies · Honest Architecture LLC

"The characteristics of the Rico geothermal system are well aligned with the requirements of a community-scale Thermal Energy Network. TEN systems prioritize moderate temperatures, reliability, and distributed heat extraction — making them particularly suitable for low- to medium-temperature geothermal resources."

— Daniel Alonso Torres, Principal Geoscientist, Teverra LLC

AUTHORS



Clean Energy Economy for the Region (CLEER) works to accelerate the transition to a clean energy economy, increase energy independence, and reduce our contribution to climate change. CLEER seeks and supports collaborative opportunities for research, education, advocacy, and implementation of resource efficiency Projects.

RICO GEOTHERMAL COALITION

Rico Geothermal Coalition (RGC) is a volunteer-driven, community-first organization working to transition the town to clean, local geothermal energy. A team of local residents, architects, geologists, and educators are the driving force behind this initiative — focused on keeping the resource in the hands of the community it serves.