



CITY OF ANGELS PO Box 667, 200 Monte Verda St. Suite B, Angels Camp, CA 95222 P: (209) 736-2181

DATE: October 7, 2025

TO: City Council

FROM: Aaron Brusatori, P.E., City Engineer

RE: APPROVAL OF TASK ORDER 9 – GROUNDWATER EXPLORATION FOR SECONDARY WATER SOURCE

RECOMMENDATION:

Adopt Resolution No. 25-73 authorizing the City Administrator to execute Task Order 9 with Lumos & Associates, Inc. for groundwater exploration services in an amount not to exceed \$282,000.

BACKGROUND:

The City of Angels Camp currently relies on a surface water diversion through the Utica Water and Power Authority (UWPA) flume system for its municipal water supply. In 2001, the Darby Fire destroyed large portions of the UWPA flume, temporarily cutting off water to over 10,000 residents in Murphys and Angels Camp. During reconstruction, emergency measures were required to restore service.

Recognizing the risk to water reliability from wildfire, drought, and climate change, the State of California passed Senate Bill 552 (2021), requiring small water systems (those with fewer than 3,000 service connections) to develop a secondary water source. The City of Angels Camp falls within this definition and must comply with SB 552 requirements.

To address this mandate and improve water supply resilience, the City requested a proposal from Lumos & Associates, Inc. to conduct groundwater exploration as a potential secondary water source.

DISCUSSION:

Lumos & Associates submitted a proposal dated August 21, 2025 outlining the scope of work to identify groundwater resources for the City. The proposed work includes:

- Task 1 – Desktop Research & Geologic Reconnaissance (\$12,000)
- Task 2 – LiDAR/Ortho Survey & Field Investigation (\$50,000)
- Task 3 – Surface Geophysical Surveys (\$35,500)
- Task 4 – Preliminary Data Analysis & Technical Memorandum (\$16,500)
- Task 5 – Permitting Support (Time & Materials, Est. \$9,500)
- Task 6 – Test Well Drilling Program (Time & Materials, Est. \$131,000)
- Task 7 – Final Data Analysis & Technical Memorandum (\$27,500)
- Task 8 – Reimbursables (T&M)



The total project cost is estimated at \$282,000. Deliverables include technical memoranda, geologic analysis, and exploration drilling results to determine the feasibility of developing a groundwater production well for the City's secondary supply.

FISCAL IMPACT:

The estimated not-to-exceed cost of \$282,000 will be funded from the City's water enterprise fund for Capital Expansion. Staff will pursue available state and federal funding sources to offset local costs.

ATTACHMENTS:

1. Proposal Task for groundwater exploration services in an amount not to exceed \$282,000
2. Draft Resolution No. 25-73
3. Budget Adjustment Form

