

Preserving Cultural Resources on the Santa Fe National Forest: A Collaboration between Federal Archaeologists and Volunteers

By: Jana Comstock, Archaeologist, Santa Fe National Forest (2019)



Historic Forest Service Telephone Line Survey

In the early days of the Forest Service, fires like the Big Burn in 1910, which swept across 3 million acres in Washington, Idaho and Montana, made a strong case for the need for better communication in the backcountry. The Forest Service tried multiple methods – including carrier pigeons – but when it came to protecting the forest from catastrophic fire, few were as successful as the telephone. Starting in 1906, single bare wires were strung between trees to connect ranger stations and lookouts across the Santa Fe National Forest. The Forest Service used what was called a grounded-circuit line, essentially, a system with a telephone line extended between two phones – and with a wire buried into the ground at each phone. The average Forest Service telephone line could handle a total of 10 to 20 phones connected on a line unit that did not exceed 50 miles in length. Wire was attached to each *tie tree* (usually ponderosa pines) by an insulator made of non-conducting material. The Hemingray No. 9 domed blue glass insulator was the initial insulator of choice. Then around 1916, the Forest Service switched to a porcelain split knob insulator (white or brown). The insulators were attached to *tie trees* by wood pins, wood brackets, wire staples, metal hooks, and wire rings. The telephone lines were built and maintained Forest Service personnel, permittees, and Civilian Conservation Corps crews. The Forest Service telephone line infrastructure lost funding in the early 1940s after the United States became involved in World War I. This once expansive infrastructure still remains today in the form of ceramic and glass insulators and wooden brackets attached to *tie trees*, blazes carved into trees, wire lying on the ground or still attached to trees, Historic maps documenting the line routes, and daily Forest Ranger diaries documenting constructing or maintenance to these lines.

Volunteers Janie and Peter O'Rourke: Janie O'Rourke's interest in the Historic Forest Service telephone lines began during runs along Forest Service trails around Los Alamos, New Mexico when she noticed insulators attached to trees. Janie's interest in local history and the outdoors led her to begin documenting these trees and artifacts and studying the history of the Forest Service telephone system. Her husband, Peter O'Rourke joined her in this endeavor after he retired from the Los Alamos National Laboratory in 2001. **The team has volunteered their time and documented Historic telephone lines across the Santa Fe National Forest for over 18 years. Together, they have inventoried an incredible 4,500 tie trees and associated artifact locations across the forest.** The pair has also documented Historic Forest Service cabins, lookouts, and other infrastructure, completed oral history interviews of retired Forest Service personnel and local residents, researched and investigated Historic agency records, and completed four written reports of their extensive work.

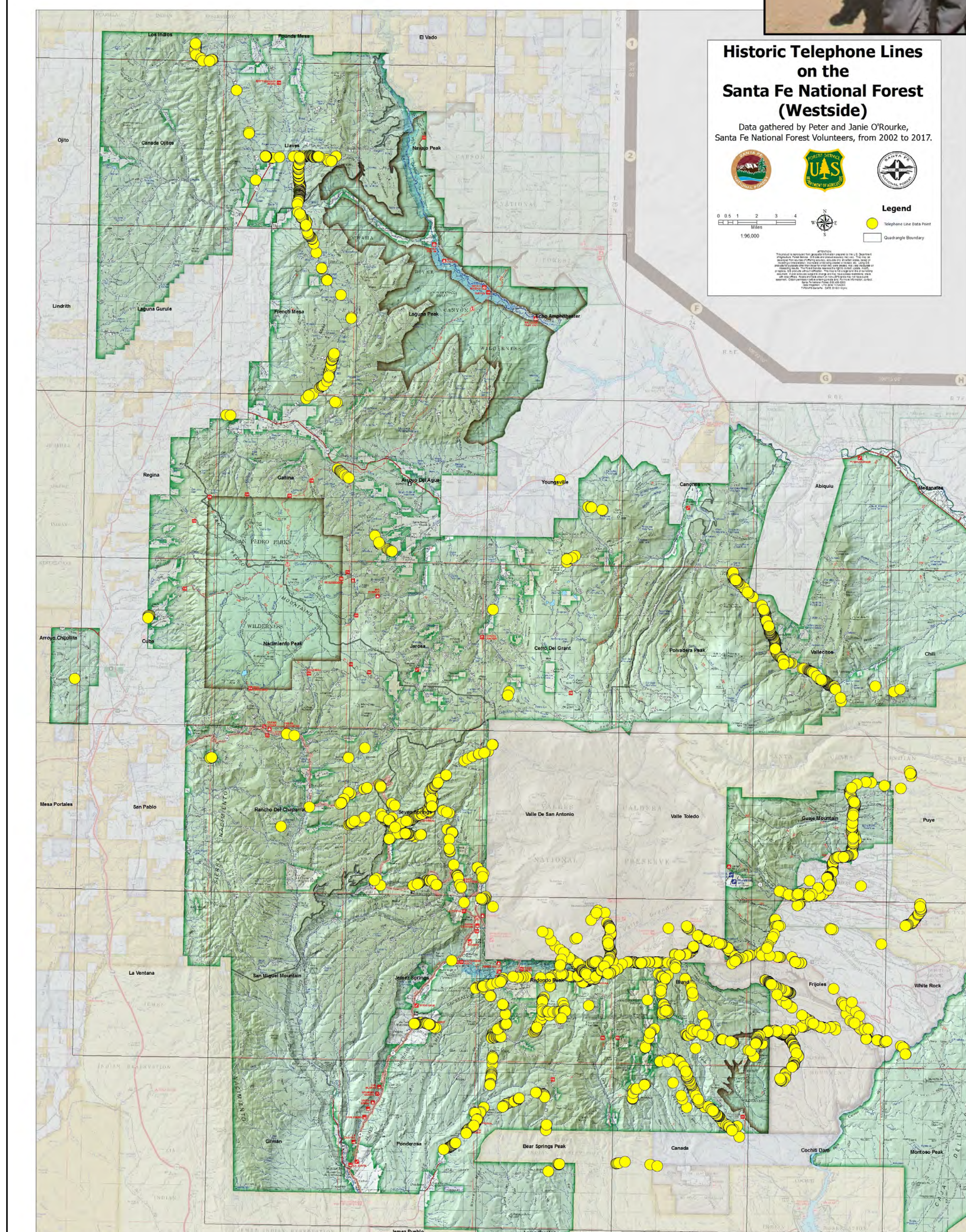


Figure 4. Historic telephone lines mapped by volunteers Janie and Peter O'Rourke on the west side of the Santa Fe National Forest.

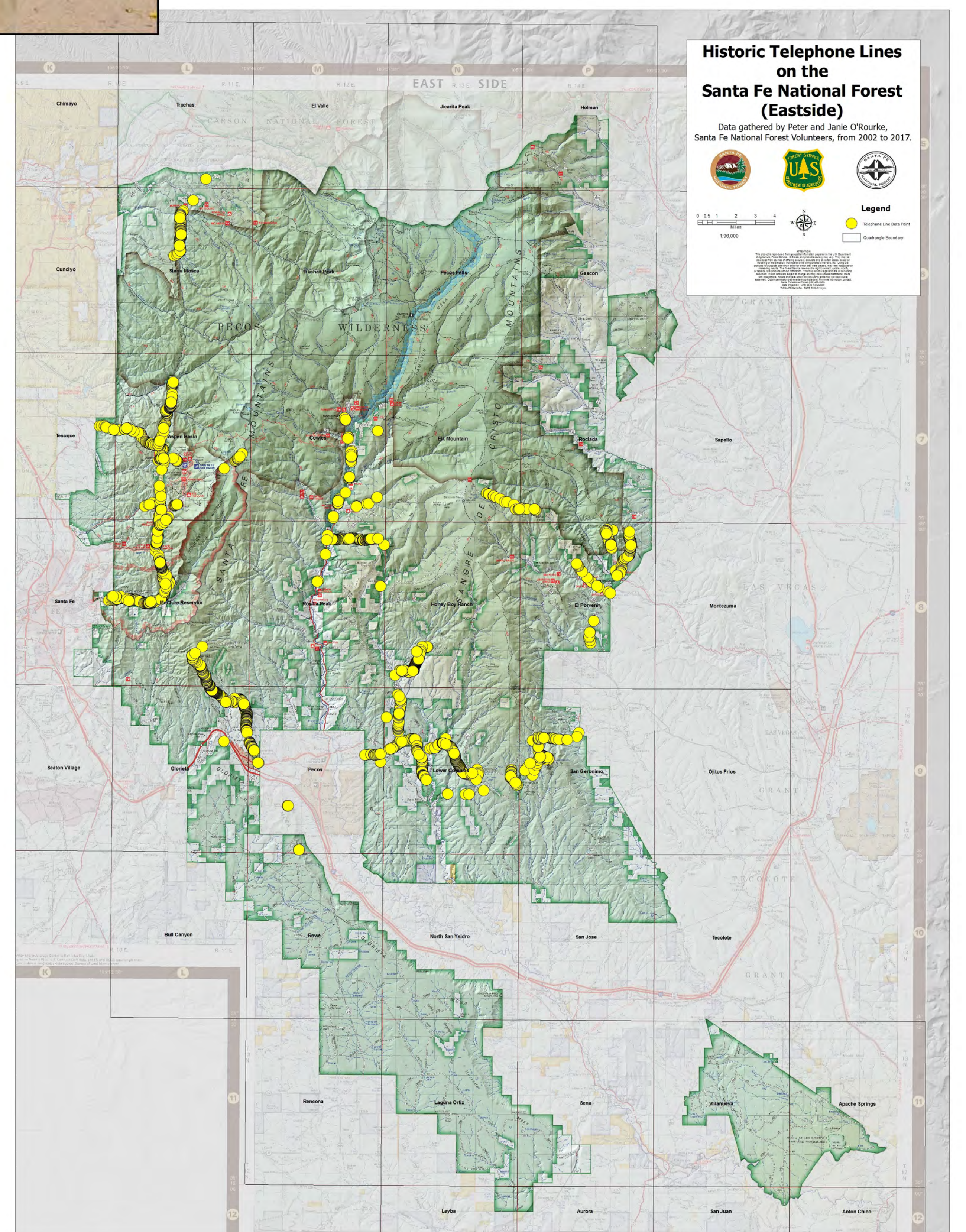


Figure 5. Historic telephone lines mapped by volunteers Janie and Peter O'Rourke on the east side of the Santa Fe National Forest.