

Chapter 1. Purpose of and Need for Action

1.1 Introduction

Record drought in the southwestern United States continues to threaten municipal water supplies with severe shortages. The Town of Hagerman, New Mexico, is dependent on groundwater for its municipal water, with approximately 99 percent of its water supplied by groundwater pumped from two existing wells located within the town (Figure 1). These wells range in depth from 900 to 1,000 feet and pull water from the San Andres limestone aquifer of the Roswell Artesian Basin. Prolonged periods of drought and unregulated irrigation withdrawals have a negative impact on groundwater levels, often requiring the need for deeper and more expensive wells. The drought is forecast to continue and may be very long, based on the historic record. Support for drought emergency well drilling was authorized by the U.S. Congress in Title 1 of the Reclamation States Emergency Drought Relief Act of 1991.

1.2 Background

The Town of Hagerman's two existing wells are not sufficient to supply a consistent source of good quality water. During summer as the aquifer water level drops, the Town's primary well does not supply enough water to meet demand. The Town's backup well has extremely poor water quality. A new well is needed to supplement the Town's municipal water supply in case of emergency. The extreme fluctuation in ground water levels and the lack of surface water sources in the area make a reliable ground water source extremely important.

1.3 Proposed Action

The Federal action addressed in this Environmental Assessment (EA) would be the funding and development of a municipal groundwater well for the Town of Hagerman. The proposed drought emergency water well would be drilled by a private contractor, licensed to drill water wells in the State of New Mexico, for the U.S. Department of the Interior Bureau of Reclamation (Reclamation). The Town of Hagerman has obtained the necessary permit to drill an exploratory water well from the New Mexico Office of the State Engineer (NMOSE). The proposed project is located on city-owned land near the intersection of Petree Road and Shoshoni Road in Chaves County, New Mexico. The legal description of the well site is: SW 1/4 of Section 21, Township 14 South, Range 26 East, N.M.P.M. The project site is located near Buffalo Valley, just a couple of miles west of the Pecos River. The project elevation is approximately 3,465 feet above sea level. The proposed well would tie into the existing municipal water system with a 3.0-mile pipeline (Figure 1).

1.4 Purpose of and Need for Proposed Action

The purpose of the proposed action is to provide a supplemental source of municipal water for the Town of Hagerman to fully utilize their existing water rights by providing additional capacity and operational flexibility during a drought emergency. The project is needed due to the severe drought now gripping the southwest United States and the potential for the drought to continue for the indeterminate future.

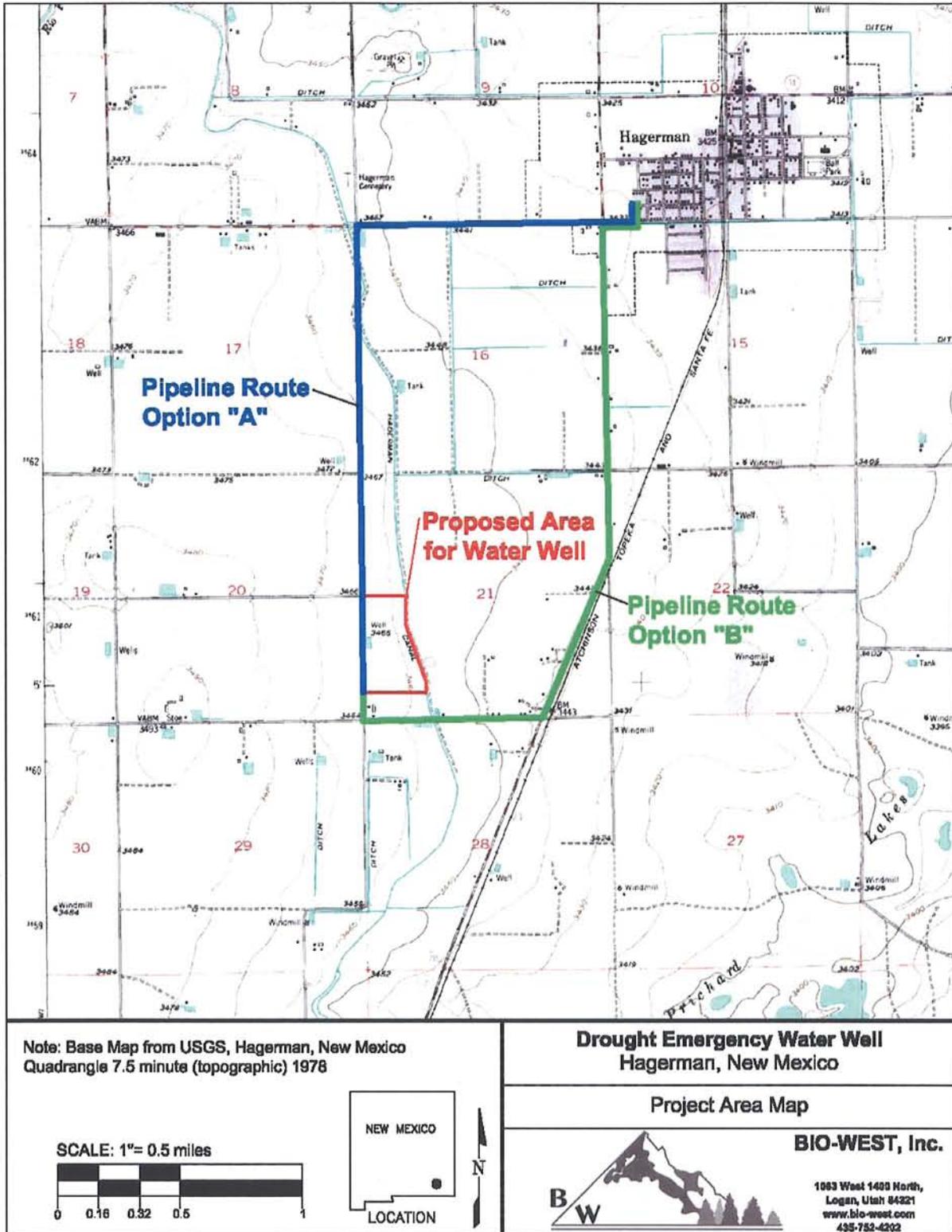


Figure 1. Hagerman Drought Emergency Water Well Project Area Location Map.