

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 City of Eunice, New Mexico, is dependent on groundwater for its municipal water, with nearly all of its water supplied by groundwater pumped from six existing wells located approximately 20 miles north of the city (Figure 1). These wells range in depth from 130 to 200 feet and pull water from the subsurface aquifer in the Ogallala Formation of the Lea County Underground Water Basin. Prolonged periods of drought 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.

1.2 Background

Two of the City of Eunice's six wells have low pumping rates and are seldom used. Five of the six wells range in age from 37 to 45 years and are considered to be in the later part of their useful lifecycle, which spans from 30 to 70 years on average (JSAI 2007). A new well is needed to supplement the City's municipal water supply in case of emergency. Precipitation in the area averages 14 inches per year, but may vary from less than 9 inches for several consecutive years to over 25 inches. The seasonality of the precipitation and the lack of surface water sources in the area make a reliable ground water source extremely important (JSAI 2007). 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.

1.3 Proposed Action

The Federal action addressed in this Environmental Assessment (EA) would be the funding and development of a municipal groundwater well for the City of Eunice. 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 City of Eunice will obtain the necessary permit to drill a water well from the New Mexico Office of the State Engineer (NMOSE). The proposed project is located on State-owned land approximately 3 miles west of the City of Hobbs in Lea County, New Mexico. The legal description of the well site is: SW 1/4 of Section 25, Township 18 South, Range 37 East, N.M.P.M. The project site is located in the Hobbs Oil Field. The project elevation is approximately 3,665 feet above sea level. The proposed well would tie into the existing Eunice municipal water system with a 1.2-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 City of Eunice 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.

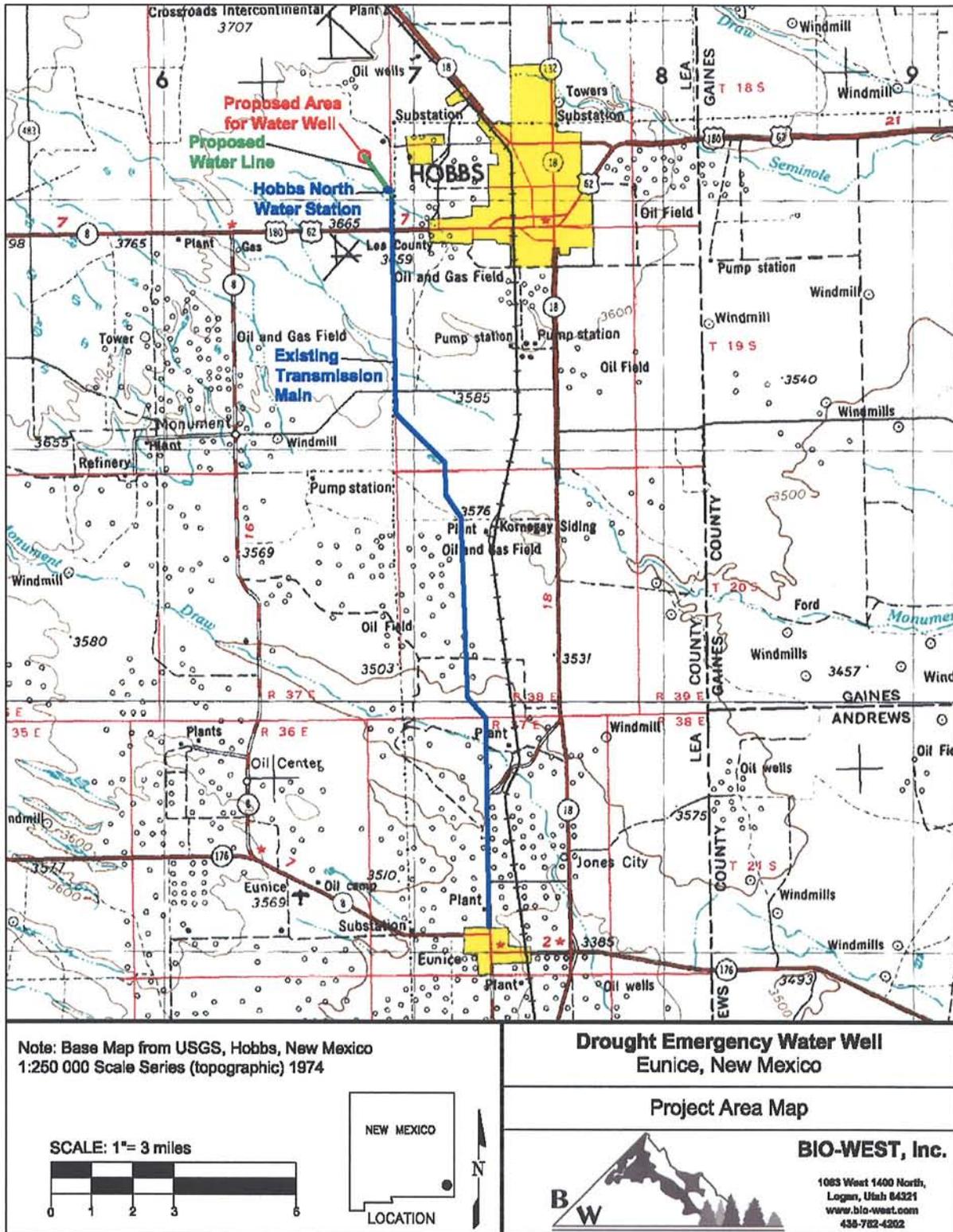


Figure 1. Eunice Drought Emergency Water Well Project Area Location Map.