

## II. INTRODUCTION

The Department of Energy (DOE) is accelerating its nuclear waste transportation planning in an attempt to meet a 2012 deadline set for the opening of the proposed Yucca Mountain Nuclear Waste Repository. DOE has considered the construction of a rail corridor route through Eureka County - the "Carlin Spur" - leaving the Union Pacific main line at Beowawe in Eureka County and running southwest through Crescent Valley, as an alternative for waste transport. While in 2005 the DOE selected an alignment leaving the main Union Pacific tracks at Caliente, in Lincoln County, as the only route currently to be studied for rail transportation to Yucca Mountain, there still is a possibility that the Carlin route might be used if the Caliente route proves unfeasible

DOE has indicated that transportation of nuclear waste will be conducted with a combination of rail and highway routes. Eureka County has three federal and state highways that potentially could be used for truck transport of nuclear waste to Yucca Mountain, either as a normal truck route or as an alternative route if the main route becomes unusable due to accidents, weather conditions, traffic congestion, construction or other road closures. A Union Pacific main railroad line also passes through northern Eureka County.

The DOE indicates that a further, more detailed examination of the impact of transportation of nuclear waste to Yucca Mountain will be carried out. Meanwhile, questions remain regarding the potential impacts of the transportation alternatives, and Eureka County continues to carry out its own impact assessment efforts to address some of these questions.

In 2001, consultants for Eureka County prepared an *Impact Assessment Report on Proposed Shipments of Spent Nuclear Fuel and High-Level Radioactive Waste Through Eureka County, Nevada*. This report examined the following items:

- Potential impact of construction of the "Carlin Spur" rail corridor;
- Potential impact of regular operation of nuclear waste shipments along the corridor; and
- Potential impacts of accidents with release of radioactive materials on the human and natural environment of Eureka County

The *Impact Assessment Report* identified and analyzed many potential impacts. It also, however, identified an ongoing need to obtain and analyze further information in certain key areas. Since the 2001 report, Eureka County has been working to fill these information gaps.

In 2004, consultants for Eureka County prepared a *Rail Corridor Impact Study* that gathered and evaluated detailed, on-the-ground information about current and historical land use, potential historical resources, ground water, flood plains, existing wells and proposed wells in the vicinity of the potential Carlin Spur. The potential effect on air quality during construction and operation of the potential Carlin Spur was also examined.

This report expands on those existing previous reports by examining current use and operations of the three State and Federal highways, and one railroad main line that pass through Eureka County, including traffic volumes, accident statistics, physical conditions, weather effects, operations and the regulatory structure, so that potential areas of delay, hazard, and other conditions that might affect nuclear waste transport may be identified. See Exhibit 1, on the following page, for a location map.

In addition, a Phase I Cultural Study to identify historical and archeological resources potentially affected by the rail route has been carried out. The Cultural Study has been presented to Eureka County in a separate document.