Eagle River Station
Wildlife Impact Report

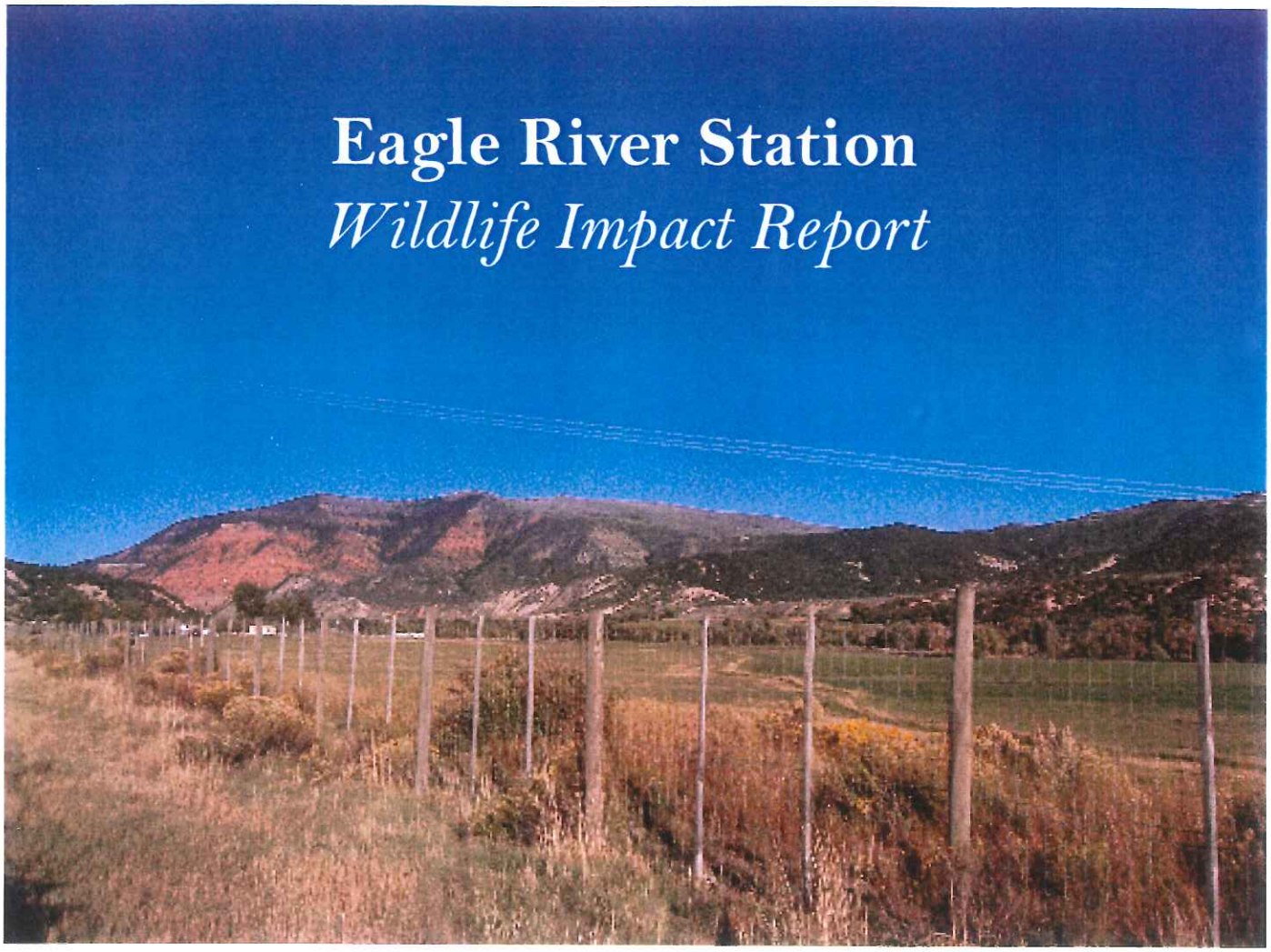

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Table of Contents

I. Introduction..... 1
II. Timing of Development..... 2
III. Public Plans and Policies..... 2
IV. Environmental Setting..... 2
V. Wildlife Use..... 3
VI. Impacts to Wildlife..... 4
VI. Recommendations..... 4

Figures

Figure 1: Location of the project in Colorado
Figure 2: Wildlife fencing on Interstate 70.
Figure 3: Wildlife underpass at project site.
Figure 4: Wildlife underpass at mile marker 150.
Figure 5: Mule deer range in vicinity of the property.
Figure 6: American elk range in vicinity of the property.

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I. Introduction

This Wildlife Impact Report has been prepared to assess the proposal of TRINITY RED Eagle Development LLC to develop a commercial shopping center in Eagle County on agricultural land adjacent to Interstate 70. In 2006, the Colorado Division of Wildlife's Area Wildlife Manager responded to the proposal with comments regarding use of the proposed site by American elk (*Cervus elaphus*) and mule deer (*Odocoileus hemionus*). As a result of concerns about wildlife movement through the area, this report focuses on the current use of the site by and the anticipated impacts on these two species.

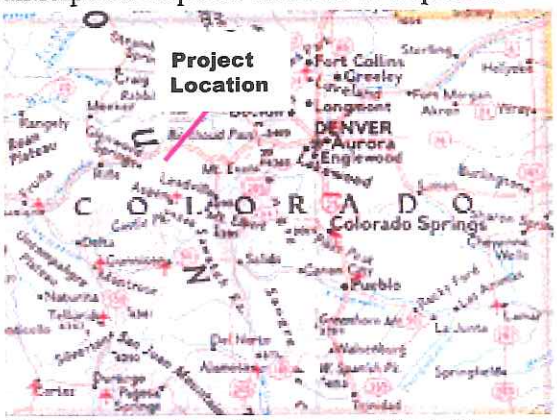

Figure 1: Location of the proposed Eagle River Station in Colorado.

II. Project Location and Setting

The project site is 100 acres located in Eagle County, Colorado, just south of Interstate 70 near mile marker 147. The property is bordered immediately to the north by Interstate 70 and to the south by Highway 6. Both serve as access to the property. Land to the west is commercially developed. To the east lies an agricultural field zoned PUD Resource.

From 1990 to 2000, Eagle County was the 10th fastest growing county in the U.S., and during this time, the population doubled. It is expected that the County's population will exceed 50,000 in 2007 and is expected to reach 88,000 by 2030. This growth will increase the need for facilities within the County, such as housing, basic services, and roads.

III. Project Description

Eagle River Station is a mixed-use Planned Unit Development (PUD) that is under review by the town of Eagle. It will be located on 88 acres of land to the east and contiguous to the existing industrial park on Chambers Avenue in Eagle. An additional 12 acres or so of land will be used to install an interchange on the eastern side of the project and construct a spur road connecting I-70 and U.S. Highway 6. The property has received PUD Zoning Plan approval from the town allowing a maximum of 647,000 sq. ft. of commercial space and 581 dwellings. The core of the project is a "life-style center" encompassing a wide boulevard with sidewalks, retail shops, meeting places, sidewalk cafes and pathways with historic markers, all of which support Eagle River Station's tag line, "Shop, Dine, Play." About 20 acres of the site will be devoted to open space and parks. A high percentage of the residential units will be workforce and affordable housing.

In addition to the life-style center there will be junior anchors which are defined as large department, general merchandise or specialty electronics stores.

II. Timing of Development

Construction of the center and the interchange is expected to begin late summer 2008 after final Town of Eagle approvals.

III. Public Plans and Policies

Eagle Area Community Plan and Eagle River Station

According to the 2005 Eagle County Master Plan, Eagle River Station is located in an area designated as Town Center and approved for development. The Station is also located within the Eagle Area Community Plan Growth Boundary. Some land to the north is identified for future residential growth, as is land to the south. The parcel immediately to the east is designated a Resource Zoning and allows for construction of one home.

While the County recognizes the growth occurring within its borders, protection of wildlife is also included as a "core value" in the master plan. The County is described as "a place where natural ecosystems are preserved and maintained in order to assure the health and well-being of local wildlife populations." With respect to mule deer and American elk, the County recognizes the need to "preserve winter range, provide open migration routes and manage local herds to maintain a sustainable population."

IV. Environmental Setting

Most of the proposed development site is an agricultural field located on a terrace above the Eagle River. The field is operational, and hay is produced and processed annually. Hay may be stored on the site, and hay stubble remains in the field during the winter months. This property has been sold to the Red Mountain Ranch Partnership LLLP, and farm operations will cease in March 2008. A smaller portion of the property is used for storage of equipment and materials, a landscaping business, and a home site. Buildings and storage are clustered on the northern portion of the property, adjacent to Interstate 70.

Because the field has been used for agricultural purposes for a number of years, there are no native grasses present. A drainage does exist on the eastern portion of the property, but because of haying operations, does not host plant species that might be dependant on seasonal water availability.

South of the proposed project site is the Eagle River, which flows west to the Colorado River. Known for its excellent fishing, the River also supports a rich riparian habitat that is used by a variety of wildlife, including elk and mule deer. Vegetation south of the river is predominately sagebrush shrubland, and winter range for both elk and deer is present. To the north of the project site, the habitat is similarly characterized by sagebrush and steep hillsides. Despite the aridity of the sagebrush habitat, the northern slopes also provide important forage for elk and mule deer, as well as winter range.

V. Wildlife Use

1. General Use

The project site itself does not offer any critical habitat to wildlife populations and use of the site by elk and mule deer is limited. However, the seasonal availability of alfalfa and the location of the property result in its use for forage and as a movement corridor between winter ranges to the north and south, particularly by elk. According to Colorado Division of Wildlife, approximately 200 elk use the property sporadically from November through February, likely attracted by the alfalfa. It is uncertain if the elk come from the north or south, if they are from different herds, or if the herds mix.

Figure 2: *A fence bordering I-70 to the north and south restricts wildlife movement.*

2. Wildlife Movement

Wildlife do move through the project site, but because of the property's location between two primary roadways (Interstate 70 and Highway 6), movement is limited. Roads are known to act as barriers to wildlife movement, bisecting wildlife populations and constraining the movements of many species. Studies of elk show that while they may tolerate disturbance, they do avoid roads, particularly where cars are traveling at high speeds.

Elk movement across I-70 is further impeded by the presence of a fence located on both the north and south sides. Erected in the 70's, the fence is designed to prevent wildlife from accessing the Interstate and to reduce auto-wildlife collisions. Wildlife movement across I-70 is facilitated by underpasses. Located at mile markers 147 and 150, these underpasses are concrete structures that span both east- and west-bound lanes. The culvert at mile marker 147 leads directly to the project site, but CDOW believes that the underpass to the east (mm 150) is more heavily used.

Elk may prefer the pass to the east because it is located in an area that has no surrounding development and natural vegetation, mostly grasses, growing up to the entrance. Access to the culvert is relatively undisturbed. Studies of how mid- and large-sized mammals cross highways indicate that they do not cross randomly, but

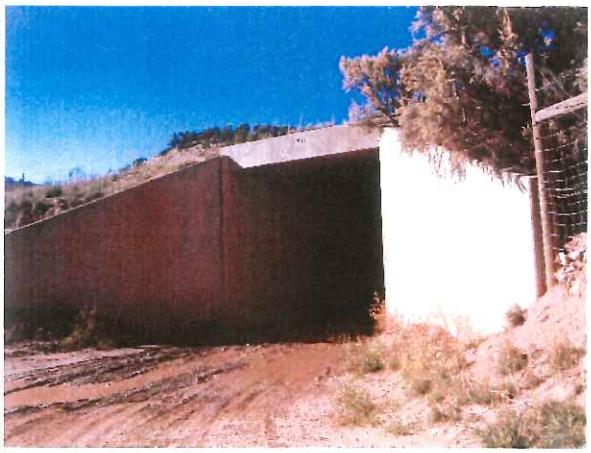

Figure 3: An underpass at mile marker 147 allows wildlife access to habitats to the north and south of I-70, as well as direct access to the project site.

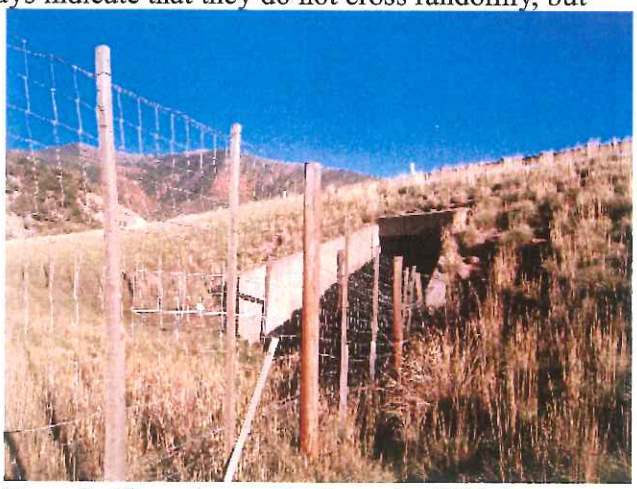

Figure 4: The underpass at mile marker 150 is less disturbed by human activity than the underpass at mile marker 147.

choose to cross at specific locations based on characteristics of both the road and the landscape. At the project site (mm 147), the culvert access on the south side of I-70 is located on a dirt road used by a landscaping business. To access the culvert from the south, elk must pass through the business operations and/or a home site. The north side of the culvert is used as storage for construction materials and appears to receive regular vehicle traffic. Vegetation is sparse, and materials are stacked close to the culvert entrance. Thus, while the underpass at mile marker 147 is used by elk, its use appears to be secondary to that at mile marker 150.

VI. Impacts to Wildlife

Development of Eagle River Station will have no significant impact on wildlife in the area. This conclusion is based on the information detailed in this report and summarized below:

- Elk and mule deer use of the property is currently sporadic and limited;
- Elk and mule deer use of the site may be due to the availability of alfalfa in the field. Neither species depends on the area for calving or winter and summer range, nor is it an extensively used movement corridor.
- Wildlife movement through the property is already restricted by commercial development to the west of the property, and a wildlife fence to the north;
- The project site is not identified as critical range for mule deer or elk.

Though impacts to deer and elk are not significant at the proposed project site, both species will be affected. It is important to consider the situation beyond the boundaries of the proposed project, so that the needs of wildlife are considered. Impacts to wildlife will include:

- Fewer options for movement from north to south in the Eagle Valley. Wildlife, particularly larger species, will be forced to access habitats north and south of Interstate 70 and Highway 60 via underpasses to the east, as the underpass at mile marker 147 becomes more restricted. Maintenance of movement corridors to the east will become more critical.
- Less bottom land available to wildlife in Eagle County. The valley floor also offers habitat, an easy movement corridor from east to west, and lower elevation foraging sites during extreme winters. In addition, it is uncertain when and why elk use the agricultural field. While biologists may not be able to determine the purpose of the use, development of the site may remove access to temporary bedding sites, forage or other resources.
- Increased wildlife collisions on Interstate 70 and Highway 6. Wildlife collisions are on the rise in Colorado. Development in the Eagle Valley, particularly along major travel routes such as I-70, will likely result in more traffic and a greater number of wildlife-auto collisions. Colorado Department of Transportation is addressing this concern by installing additional wildlife fencing along I-70 in the vicinity of the proposed Eagle River Station.

VII. Conclusions and Recommendations

The proposed Eagle River Station will be developed on property identified for commercial development by the Town of Eagle. No critical wildlife habitat exists on the property. American elk and mule deer are only known to use the site infrequently for bedding and forage and move through the area to access habitats to the north and south. To protect north-south wildlife movements, it is recommended that growth boundaries identified in the Eagle Area Community Plan be maintained.

The Eagle Area Community Plan not only proposes a growth boundary to the east, but also expresses the need for wildlife conservation. To effectively manage County growth and wildlife simultaneously, the growth boundaries should be respected and considered paramount. Both the Eagle Area Community Plan and the Eagle County Comprehensive Master Plan have clearly expressed the development methods that most benefit wildlife:

Broad development patterns and the cumulative impacts of incremental development on wildlife habitat and wildlife populations should be accounted for in the decision making process.

Urban development influences wildlife at two fundamentally different scales – the broad landscape scale and the more focused site scale. At the landscape scale, development influences the distribution, sur vival, and persistence of entire wildlife populations and communities. Wildlife habitat requires the right combination of physical features (i.e. topography, aspect, stream flow) and biological characteristics (i.e. vegetative cover, other animal species) needed to provide the necessary habitat types and travel routes. The focus at the larger landscape scale is to avoid wildlife impacts by directing development away from critical habitats. Areas of concern include: Migration Corridors, Highway Crossings, Winter Concentration Areas, Winter Range, Severe Winter Range, Staging Areas, Production Areas, and Nesting Areas.

Eagle Area Community Plan 2005

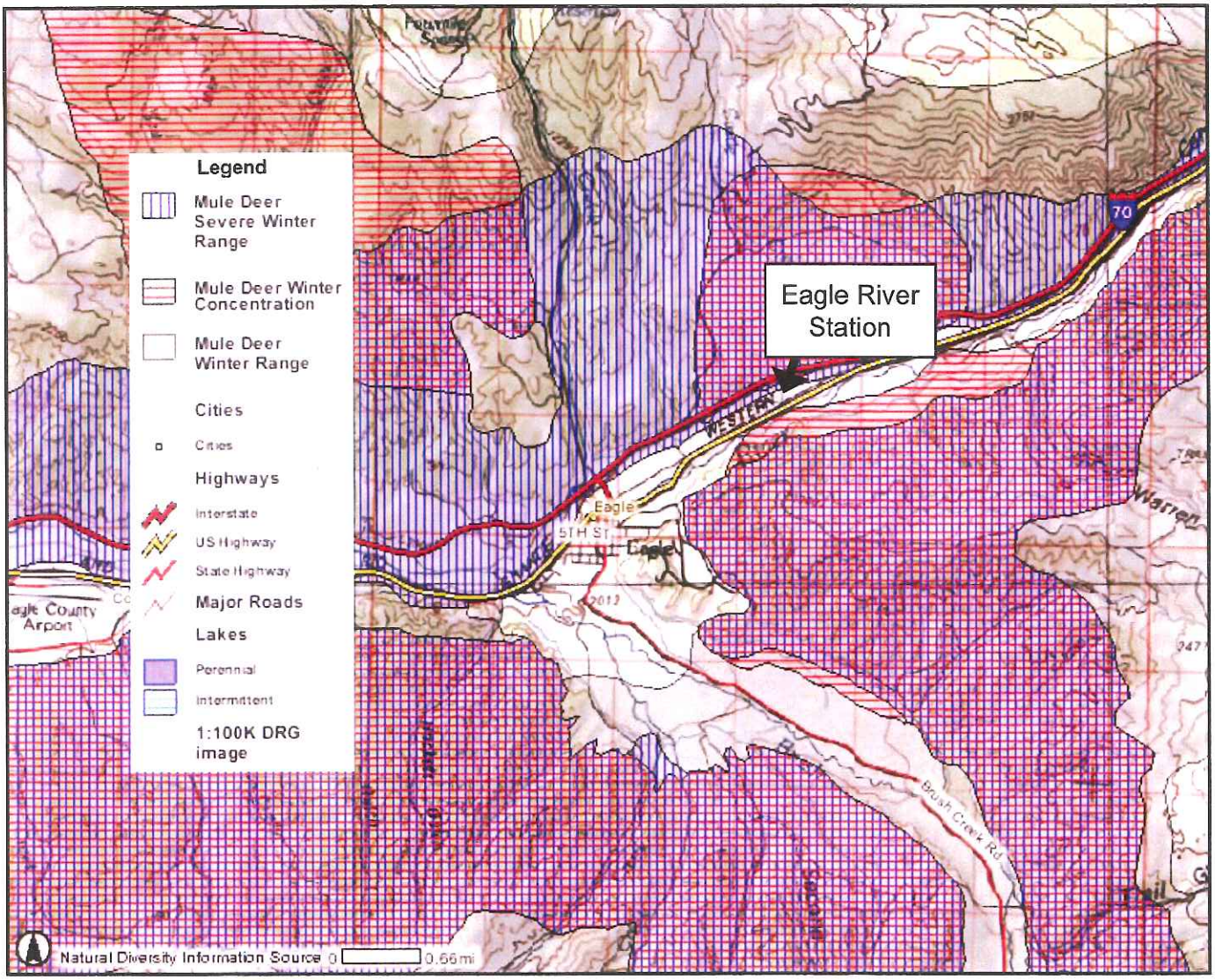

Figure 5: Mule deer activity in the vicinity of the project site.

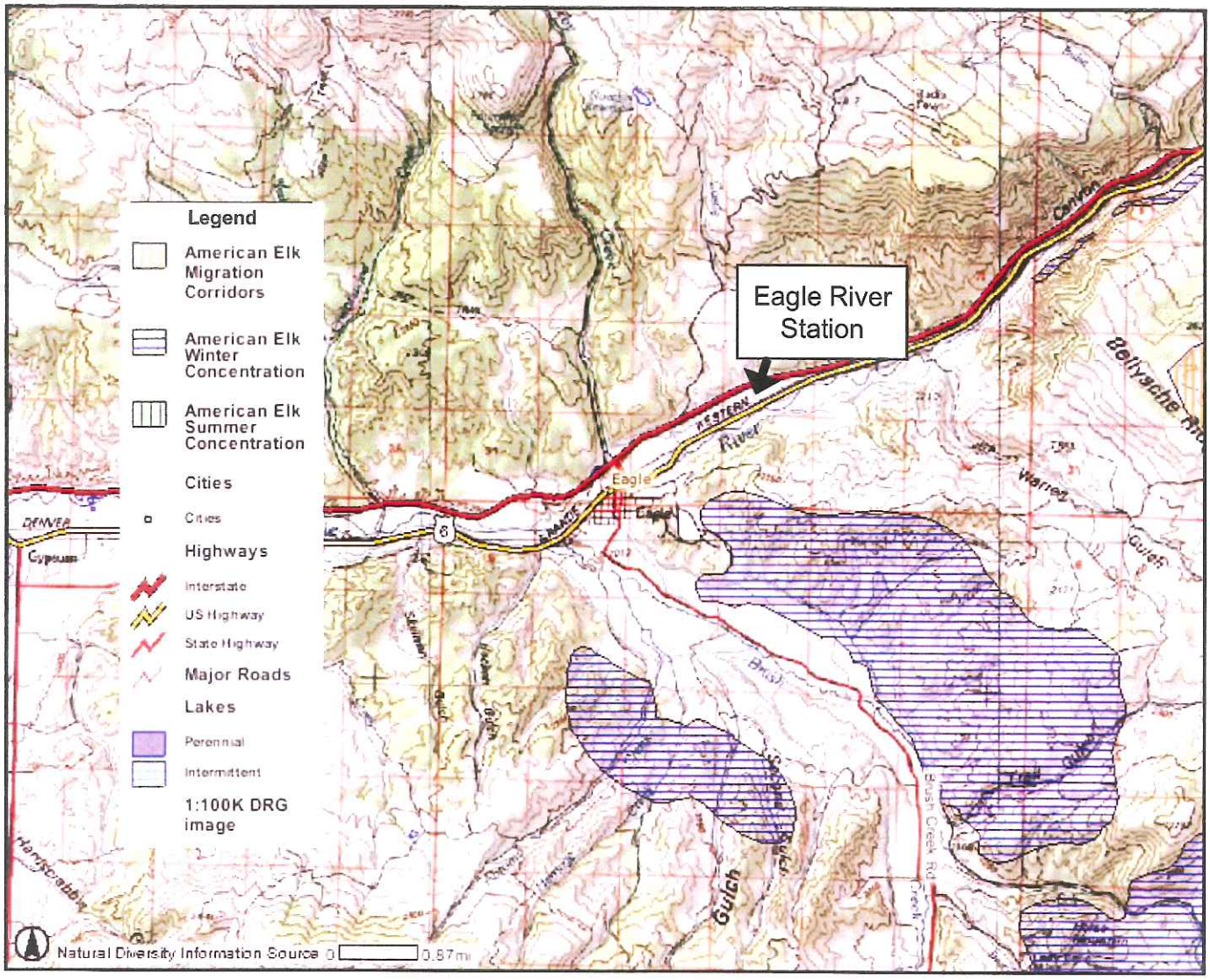

Figure 6: American elk activity in the vicinity of the project site.

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