

# US 93 Polson Corridor Study



## CORRIDOR SETTING DOCUMENT

### Prepared For:

Montana Department of Transportation  
Confederated Salish & Kootenai Tribes  
Lake County  
City of Polson

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## 1.0 Overview of Corridor Setting Document

The US 93 Polson Corridor Study near Polson, Montana in Lake County begins around Reference Post (RP) 56.5 and extends approximately 6.5 miles north to around RP 63.0. The US 93 Polson Corridor Study area boundary has been developed to identify corridor concerns and assess the feasibility of an alternate route to US 93 through the Polson community. The option of an alternate route to US 93 was brought forward in the 1996 US 93-Evaro to Polson Environmental Impact Statement (EIS).

The Corridor Study will look at improvement options, in terms of both short-range and long-range improvements, that will address the needs of the corridor, while also considering cost, feasibility and environmental impacts within the corridor. A figure showing the corridor study area is included herein as Figure 1-1.

This corridor setting document describes the existing corridor in preparation for future detailed analysis of technical conditions and environmental resources. This document is intended to be the “blueprint” for further investigation that will be made via the Existing and Projected Conditions Report. The Existing and Projected Conditions Report will provide for greater detail for all the items listed in this Corridor Setting Document.

## 2.0 Description of Corridor

The description of the corridor as contained in this section focuses on the existing roadway aspects of the corridor study area.

### 2.1 Roadway Aspects

- **Functional Classification**

US 93 is part of the National Highway System (NHS). US 93 is classified as (NHS) Rural Principal Arterial – Non-Interstate System. Arterials provide the highest level of mobility, at the highest speed, for long interrupted travel. The rural arterial network provides interstate and inter-county service. US 93 is a major north/south highway providing a vital regional link between Idaho and Canada. It also provides an important link between Missoula, Kalispell, and surrounding communities.

- **Right-of-Way and Jurisdictions**

US 93 is located primarily along private property, with the State of Montana maintaining the right-of-way along each side of the existing highway. Montana Rail Link has land ownership of three small parcels interspersed within the corridor study area. The Confederated Salish and Kootenai Tribes (CSKT) has jurisdiction as authority of the

Flathead River. The Federal Aviation Administration (FAA) has jurisdiction of the Polson Airport.

- **Geometrics**

The existing physical and geometric design criteria for US 93 will be evaluated for the study area boundary to identify areas that do not meet current MDT design standards. The Existing and Projected Conditions Report will investigate as-built drawings and identify specifications on lane width, passing percentage, and guardrail sites and identify whether the current conditions meet current MDT design standards. Whether or not bridge structures meet the specific design criteria for spanning a major river will be further identified in the Existing and Projected Conditions Report.

- **Traffic Data**

The following table shows traffic data for US 93 through the study area corridor. As shown in the following table, the average annual daily traffic was at its highest in 2004 and has decreased from 2007 to 2009.

Location	Average Annual Daily Traffic										
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
US 93, RP 58.5 (.5 mi S of MT 35)	9,080	9,510	9,280	9,910	10,210	10,780	10,780	10,760	10,230	9,740	9,600
US 93, RP 59.5 (.5 mi N of MT 35)	11,430	9,860	12,610	12,410	13,590	14,690	14,690	14,660	13,440	12,590	11,760
US 93, E of 8th St E in Polson	12,670	14,400	11,850	11,870	12,920	13,760	13,760	13,730	13,030	10,940	11,290
US 93, between 5 <sup>th</sup> East & 2 <sup>nd</sup> East in Polson	10,580	13,950	11,150	11,500	12,240	12,900	12,190	12,170	12,550	10,440	10,600
US 93 (2 <sup>nd</sup> Avenue), between Main & 1 <sup>st</sup> St East in Polson	10,150	10,970	10,570	10,890	11,570	12,190	8,010	7,990	11,120	8,790	8,140
US 93, either end of Flathead River Bridge in Polson	6,380	7,730	6,890	7,980	7,830	8,010	12,900	12,870	8,910	6,810	6,850
<i>Weighted Average</i>	<i>9,862</i>	<i>11,638</i>	<i>10,397</i>	<i>10,809</i>	<i>11,424</i>	<i>12,058</i>	<i>12,610</i>	<i>12,586</i>	<i>11,766</i>	<i>9,943</i>	<i>9,884</i>

Source: [MDT Traffic Data and Collection Analysis](#)

- **Safety**

Comprehensive crash and safety data will be obtained from MDT State Highway Traffic Office and examined to evaluate Polson crash data compared to other incorporated cities in Montana. The data will determine safety issues, concerns, and locations within the study area boundary.

- **Roadway Considerations**

The existing physical and geometric design criteria for US 93 will be evaluated within the study area boundary to identify areas that do not meet the current MDT design standards.

- **Horizontal Alignment**

The horizontal alignment of US 93 will have a major influence on traffic flow and safety.

- **Vertical Alignment**

The vertical alignment is a measure of elevation change of a roadway. The length and steepness of grades directly affects the operational characteristics of the roadway. The MDT Road Design Manual lists recommendations for maximum grades on principal arterials according to the type of terrain in the area.

- **Roadside Safety (Clear Zone)**

Clear zone considerations will be evaluated.

- **Pavement Width**

The existing pavement width and typical section will be evaluated.

- **Geotechnical**

A geotechnical investigation report will not be developed for this corridor study. Existing as-built drawings indicate the study area has no substantial geotechnical issues.

- **Drainage**

There are several irrigation ditches and canals located throughout the study area. There do not appear to be any hydraulics issues within the corridor study area.

- **Bridge Structures**

Throughout the corridor there are four bridges. These are located as follows:

RP 57.1, Structure No. P00005057+00641 (Pablo Feeder Canal)

RP 57.8, Structure No. P00005057+07611 (Wildlife Underpass)

RP 57.8, Structure No. P00005057+07612 (Wildlife Underpass)

RP 61.2, Structure No. P00005061+01811 (Flathead River Bridge)

- **Railroad**

The presence of Montana Rail Link within the corridor is a key factor in developing improvement options. Guidelines have been established in accordance with construction and development near railroad facilities. These will be evaluated as improvement options are evaluated.

- **Utilities**

Utilities existing throughout the corridor will be addressed in developing improvement options.

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Sources:

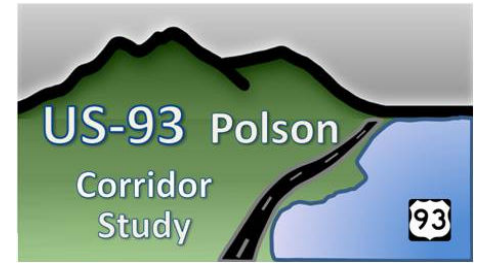
Aerial imagery courtesy of National Agricultural Imagery Program (NAIP); USDA 2009

Transportation network courtesy of Montana Department of Transportation (MDT); 2010.

Mile posts courtesy of Montana Department of Transportation.

**Figure 1**  
**Corridor Study Boundary**  
**US 93 Polson Corridor Study**

- Polson City Limit
- US 93
- MT 35
- Secondary 354
- Corridor Study Boundary
- Local Road
- Mile Post



## **2.2 Environmental Setting**

The study area environmental setting is an important aspect of this pre-NEPA/MEPA Corridor Study. The following items represent a preliminary list of potential environmental resources that will be further evaluated in the Existing and Projected Conditions Report.

- **Land Use and Ownership**

The corridor study area boundary has a predominant land use of rangeland, agriculture, and urban land. Land ownership within the study area is predominately private with scattered tracts of tribal, state, and federal land.

- **Development**

Future development is important to the corridor and improvement options that may be proposed. The zoning districts for the Polson City/County Planning Area were just updated in 2009. Zoning for lands located outside the Polson City Limits vary from rural residential to productive lands to highway commercial. Within the unincorporated areas of the Study Area Boundary, there are likely to be planned and or undeveloped, platted subdivisions to consider.

- **Surface Waters**

Polson is situated along the southern shore of Flathead Lake, the largest natural, freshwater lake in the western United States. Along the west side of the Mission Valley, the Flathead River flows from the south end of Flathead Lake to the confluence with the Clark Fork River. Approximately two miles south of Polson is the Pablo Reservoir/Pablo National Wildlife Refuge, a lake with wetlands providing habitat for birds and other wildlife. In addition, several irrigation canals are present within, and south of Polson.

- **Recreation**

An abundance of recreational activities exist within the study area, predominantly due to the presence of the Flathead Lake.

- **Tribal Concerns**

There are tribal concerns and resource issues (cultural, historical, economic and environmental) known within the study area. Archeological sites might be present along the Flathead River and elsewhere within the Study Area Boundary.



- **General Vegetation**

The study area is largely comprised of a short grassland prairie ecosystem with inclusions of willow, cottonwood, ponderosa pine, and mountain mahogany. The grasslands support livestock grazing, and have been tilled for small grain and hay production.

- **Wildlife**

The Pablo Reservoir / Pablo National Wildlife Refuge is located approximately two miles south of Polson. A lake and wetlands within this wildlife refuge provide habitat for birds and other wildlife. If an improvement option is forwarded during the project development process, a complete biological survey of the study area will be conducted in accordance with accepted.

- **Sensitive Species**

Species of Special Concern

A search of the Montana Natural Heritage Program species of special concern database revealed two mammal species (gray wolf and Townsend's big eared bat), five bird species (common loon, bald eagle, long-billed curlew, grasshopper sparrow, and bobolink), one fish species (bull trout), and three plant species (sweet flag, lake bank sedge, and scribner's panic grass) within or overlapping the study area.

Threatened and Endangered Species

The federal list of endangered and threatened species is maintained by the USFWS. According to the USFWS, Lake County has been documented to possess two threatened animal species (Grizzly Bear and Canada Lynx) and two threatened plant species (spalding's campion and water howellia).

- **Aquatic Resources**

Fish species abundantly/commonly occurring in the Flathead River and within the study area are the largescale sucker, northern pike, northern pike minnow, peamouth, redbside shiner, and westslope cutthroat trout. Species occurring rarely within this river stretch are the brown trout, largemouth bass, rainbow trout, slimy sculpin, and yellow perch (MFISH, 2010).

- **Wetlands**

The study area crosses the Flathead River, sits adjacent to Flathead Lake, and contains several other drainages and irrigation ditches. Scattered locations of freshwater emergent wetlands exist throughout the study area.

- **Air Quality**

The Study area is located within a designated non-attainment area for particulate matter with an aerodynamic diameter of 10 microns or less (PM10). Any improvement options forwarded from corridor study into project development will need to be evaluated to determine if the project is regionally significant according to the Federal Highway Administration letter of July 17, 2008.

- **Historic Properties**

Historic properties are properties included in the National Register of Historic Places (NRHP). There are seven registered historic places in Lake County; at least one of those is located within the study area. The Montana State Historic Preservation Office (SHPO) revealed 62 previously recorded historic properties within the Study area. Most of these historic properties are residences located within the City of Polson.

- **Noise**

If an improvement option is forwarded into project development, a noise study would be required to determine where noise-sensitive land uses are located, what existing noise levels those areas are experiencing, and to estimate what future noise levels will be as a result of the project. If the project was expected to change traffic volumes on other routes, then off-project routes should also be studied for noise impacts. In areas of residential development, noise impacts (existing or predicted) may need to be mitigated.

- **Farmlands**

Prime farmland, as well as farmland of statewide and local importance, exists within the Study area. Due to the large capacity of prime farmland within the corridor, there is potential for farmlands to be impacted as improvement options further develop.

- **Irrigation**

The study area contains a portion of the Flathead Irrigation District. There is an estimated 1,300 miles of canals and lateral ditches in the entire distribution system.

- **Section 4(f) and 6(f)**

There are twenty-two potential Section 4(f) sites. It should be noted there may be additional Section 4(f) sites located within the study area after a cultural resource

survey has been completed. According to Montana Department of Fish, Wildlife, and Parks Land and Water Conservation Fund list, there are eight Section 6(f) properties within the study area.

- **Floodplain**

Based on a review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps for Lake County, a delineated 100-year floodplain (Zone A) is located along the Flathead River and Flathead Lake throughout the study area.

- **Hazardous Waste**

The NRIS database has layers for tank sites and leaking tank sites which probably would be the most likely issue to come up regarding contamination within the study area.

- **Geology and Soils**

According to NRIS, the soil conditions within the study area boundary are consistent with the primary land use of grassland, crop, and pasture lands.

- **Noxious Weeds**

The following noxious weeds have been identified as present in Lake County: Leafy Spurge, Spotted Knapweed, Russian Knapweed, Dalmatian Toadflax, and Sulphur Cinquefoil. Spotted Knapweed is known to be present within the Study area. The Study area will need to be surveyed for noxious weeds during the project development process.

### **3.0 Conclusion**

Preliminary review of the existing conditions and corridor settings lead to a number of factors and issues that will be further identified and addressed in the Existing and Projected Conditions Report. The highway geometrics will be analyzed and confirmed whether current MDT design standards are met or if standards need to be updated with future improvement options. Safety issues and concerns will be addressed in future improvement options in order to increase traffic safety. Environmental concerns and issues will be explained in greater detail in the Existing and Projected Conditions Report in order to minimize environmental impacts with projected improvement options.

## 4.0 References

Code of Federal Regulations (CFR). 23 CFR Section 450.

Montana Department of Transportation. Draft Environmental Scan *Polson Corridor Planning Study*. Montana, 2010.

Montana Department of Transportation. 2000 Montana State Rail Plan Update. Montana, 2000.

Montana Fisheries Information System. 2010 <http://fwp.mt.gov/fishing/mFish/>

National Register of Historic Places. 2010 <http://www.nationalregisterofhistoricplaces.com/>