

Montana Department of Transportation

Biological Resources Report and Preliminary Biological Assessment

MDT Biologist: Paul Sturm *Paul Sturm*

Date: 7/23/2021

Project (Name, Number, UPN):

STPP 9-2(15)48

North of Augusta - North

UPN 9722000

Project Description:

The proposed project has been nominated to reconstruct and potentially realign US-287 (P-9) between RP 47.0 to 56.0.

The proposed project will upgrade an old portion of US-287 by providing improved alignment, a wider travel surface, and more forgiving roadside. The two-lane roadway will be widened to have 2' shoulders on each side of the 12' travel lanes. Potentially significant realignment of the roadway will be explored and implemented where it is feasible. The improvements will enhance roadway safety and improve the traveling conditions for local communities and the agricultural industry surrounding the area.

This section of roadway has been identified to be reconstructed due to the convergence of outdated design (e.g., no shoulders, curvilinear features, inadequate passing opportunities, etc.) and the poor interaction that these design features have with modern vehicles. A 28-foot width is proposed. Potentially significant horizontal and vertical realignment between RP 51.0 and RP 53.0 will be explored. Current snow drifting issues will be addressed as well with the perpetuation of existing and potentially new snow fence and/or wider ditches.

According to the Montana Heritage Program MapViewer database the land use of the area surrounding the project is 37% Human Land Use (35% Agriculture, 2% Developed), 54% Grassland Systems (54% Lowland/Prairie Grasslands), 2% Recently Disturbed or Modified (2% Introduced Vegetation), 2% Wetland/Riparian Systems (1% Floodplain/Riparian, <1% Open Water, <1% Depressional Wetland, <1% Herbaceous Marsh), 2% Forest and Woodland Systems (2% Deciduous Dominated Forest and Woodland), 2% Shrubland, Steppe, and Savanna Systems (Deciduous Shrubland), and <1% percent Sparse and Barren Systems (<1% Cliff, Canyon, and Talus and <1% Bluff, Badland, and Dune).

Project Location:

This project is in Teton County on US-287 north of Augusta. The roadway is functionally classified as a Primary Minor Arterial. The project was originally nominated to begin at RP 47.8, but it was decided during the field review to move the beginning of the project back to RP 47.0 to tie into where the canal bridge project (BR 9-2(10)47 – Constructed in 2006) ended. The project proceeds northeast, ending at RP 56.0. The project length is approximately 9.0 miles. There are two county roads that intersect the route within the project limits:

- At RP 50.3, 1st Rd. NW intersects the route on the east side of US-287 while Jacksons Corner Rd. W intersects the road on the west side.
- At RP 52.7, 3rd Rd. NW intersects the roadway on the west side.

There are no bridges within the project limits. The project is located 4.9 miles north of the Sun River bridge and just north of the bridge over the USRS canal.

Aquatic Resources

Wetlands

Do wetlands exist on or adjacent to the project? **Yes**

Wetland impacts anticipated? **Yes**

Wetland Discussion:

There are wetlands along the project associated with Basin Lake, several wetland swales, and depressional wetlands. Wetland impacts are expected due to the linear nature of the project and these wetlands cross or are located perpendicular to the roadway. Basin Lake is an isolated basin that has inlets but no outlets, and straddles the roadway, occurring on both sides of the road. Wetlands will be delineated, and wetland impacts will be quantified in the Aquatic Findings Report as the project progresses.

Streams

Do Streams exist adjacent to the project? **No**

Stream impacts anticipated? **No**

Stream Discussion:

There are no streams with a bed and bank that cross the roadway within the project limits. There are several intermittent streams that are indicated on topographic maps and in the National Hydrology Dataset maps; however, none of these locations have a defined bed or bank within the project limits. These drainage swales are located high up in the watershed and the drainage swales consist entirely of wetlands across the bottom of the swale.

Other Regulated Aquatic Resources (Irrigation features, lakes, etc.)

Do other regulated aquatic resources exist on or adjacent to the project? **Yes**

Are other aquatic resource impacts anticipated? **Yes**

Other Aquatic Resources Discussion:

There are several minor irrigation ditches, stock-dams, and Basin Lake located adjacent to the project. It is unknown at this time if the irrigation ditches or stock-dams will be impacted by the project. Basin Lake will be impacted by the proposed project as the existing roadway bisect the Lake. Basin lake is a shallow isolated basin with inlets but no outlets. It is likely that the entire lake will be classified as an emergent wetland area because the lake is very shallow throughout, and in most years the entire lake consists of emergent wetland vegetation and no significant areas of open water.

Biological Resources

Candidate, Proposed, Threatened, and Endangered Species (Endangered Species Act)

Are there listed species or designated critical habitat in the project's vicinity ([IPaC](#))? **Yes**

T&E Species or critical habitat determination of effect:

No Effect: ☒ Species: **Canada lynx (*Lynx canadensis*)**

May Affect: ☒ Species: **Grizzly bear (*Ursus arctos horribilis*)**

If there is a may affect determination, consultation will be completed with the USFWS during project development

T&E Discussion:

Grizzly Bear:

Occurrence in the Project Area

The project occurs on the border between Management Zone 1 and Management Zone 3 (US 287 between Augusta and Choteau appears to be the boundary between these zones) as identified in the Conservation Strategy for the Grizzly Bear in the Northern Continental Divide Ecosystem (USFWS 2019). Management Zone 1 is similar in concept to the 10-mile buffer delineated around the Recovery Zone under listed status within which demographic recovery criteria apply. The objective in Zone 1 is continual occupancy by grizzly bears but at expected lower densities than inside the Primary Conservation Area. Management Zone 3 primarily consists of private land ownership and agricultural uses. Grizzly bear occupancy is not actively discouraged, and grizzly bears will not be captured and removed from Zone 3 unless there are conflicts that can only be solved by capture and relocation or removal of the offending bear. Grizzly bears in Zone 3 will be primarily managed through conflict response.

Grizzly bears are known to use the project area throughout the spring, summer, and fall. Grizzly bears could cross the roadway along the entire project length. There is no documented grizzly bear vehicle mortality along this portion of US 287. The nearest known mortality caused by a vehicle is approximate 7 miles north of the northern terminus of the project on US 89 south of the town of Choteau, south of where the Teton River Crosses US 89.

There are lots of potential food sources year-round throughout the project area, both natural and anthropogenic in the form of early green up and calves in the spring, grain throughout the summer, and berries and fruit trees in the fall.

Analysis

In the project area, grizzly bears are present throughout the spring, summer and fall and are present in greater numbers than they were just over the past few years. Most of the grizzly bear activity in the project area occurs at night.

Bears are typically known to move more at night in the vicinity of highways and other human development and might be less likely to occur along the highway during the day when construction activities are on-going. However, with the increasing grizzly bear population, resulting increasing dispersal activities, and expected increased use of more marginal habitats, grizzly bears could occur within the project area at any time during the year, outside of hibernation.

The construction activity may affect a grizzly bear that happens to move through the project area during construction. This effect may result in a behavioral response in that the bear may choose to move around the project area during construction due to the disturbance and human activity.

Coordination Measures

Conservation measures, including the Conservation Measures for Work in Grizzly Bear Habitat special provision (attached), will be included in the project contract. Among other requirements, this provision restricts nighttime construction activity and requires the proper containment of attractants and that the Project Manager be notified of any carcasses observed in the project area during

construction. The Project Manager will coordinate to have the carcass removed from the area promptly.

Preliminary Effect Determination

The project as currently proposed will likely result in a ***May affect, Likely to Adversely Affect*** determination for grizzly bears. This will require formal consultation with the U.S. Fish and Wildlife Service as the project progresses.

Canada Lynx:

Occurrence in the Project Area

The following habitat description for Canada lynx was taken from the Montana Field Guide (Montana natural heritage Program): Canada lynx occur in the coniferous mountains of western Montana. East of the continental divide they typically are found in sub-alpine forests between the elevations of 5,413 and 7,874 feet. Primary habitat is dominated by sub-alpine fir while secondary habitat is often composed of Engelmann spruce, Douglas-fir, and/or lodgepole pine. Between these coniferous habitats, shrub-steppe vegetation types seem to be important linkage habitats. Canada lynx often avoid large, open habitat.

Canada lynx are not expected to occur in the project area due to lack of habitat.

Canada Lynx Designated Critical Habitat

Status. On November 9, 2005, the USFWS proposed designation of critical habitat for the contiguous United States' distinct population segment (DPS) of the Canada lynx. On November 9, 2006, the final rule designating lynx critical habitat in the contiguous United States was released. Critical habitat was revised on February 25, 2009. In total, approximately 39,000 square miles of habitat in Maine, Minnesota, Idaho, Montana, Washington, and Wyoming were included in the revised final rule. The USFWS once again proposed to designate revised critical habitat for the U.S. DPS of the Canada lynx and revise the boundary of the DPS on September 26, 2013. In September of 2014 the USFWS published the Revised Designation of Critical Habitat for the Contiguous United States Distinct Population Segment of the Canada Lynx and Revised Distinct Population Segment Boundary; Final Rule. This Final Rule excludes Critical Habitat on Tribal lands.

Occurrence in the Project Areas. There is no designated Critical Habitat for Canada lynx in the project vicinity. Due to the absence of designated critical habitat within the project vicinity, no impacts to Canada lynx Critical Habitat would occur.

Recommended Conservation Measures

None

Preliminary Effect Determination

There is no habitat for Canada lynx in the vicinity of the project. There is no Canada lynx Critical Habitat in the vicinity of the project. This project will have no effect to Canada lynx or Canada lynx Critical Habitat.

Montana Species of Concern (SOC)

Are there recorded occurrences in the project's vicinity? **Yes**

If Yes, which SOC species? **Ferruginous hawk (*Buteo regalis*) and McCown's longspur (*Rhynchophanes mccownii*)**

SOC Discussion:

There are records of Montana Species of Concern (SOC) within 2 miles of the project. The nearest record of ferruginous hawk nesting is approximately 2 miles west of the project limits. A family of McCown's longspur was observed at Basin Lake with young birds, leaving the observer to speculate that the nest was in the area. There are no recorded occurrences of nesting for either SOC immediately adjacent to the project within the project limits.

The potential exists for migratory birds, and bird SOC, to utilize habitat within and adjacent to the project area. The project may interrupt migration and feeding in the immediate project area during construction. There is ample habitat available for birds in the project area. While migratory species might be temporarily displaced from the project area due to construction activities, the impacts are anticipated to be minor and short-term. Any tree removal or trimming will be done outside the typical nesting season of April 15-August 15 to avoid potential impacts to nests that may be present. The special provisions, Migratory Bird Treaty Act Compliance-Vegetation (attached), will be included in the contract for this project to avoid potential impacts to any active nests.

This project will not cause a trend toward the listing of any Montana Species of Concern.

Wildlife Accommodation (WA) Needs and Opportunities

Are wildlife accommodation features or strategies being considered on this project? **Choose an item.**

WA Discussion:

Over the past 10 years, 2010-present, there have been 13 deer carcasses picked up by MDT maintenance forces along the project length. The carcasses are spread along the project length, with no clusters observed. The safety review as reported in the PFR notes 2 wild animal collisions between January 1, 2009 through December 31, 2018 (17 carcasses picked up by Maintenance over this same period). This is a small number of animal-vehicle collisions for this length of roadway.

Along the project length the topography is relatively flat, with a few drainage swales that provide some relief. There currently are no bridges along the project length, and there are no bridges planned for this project. The drainage through the project can be provided by relatively small diameter culverts that would not accommodate large mammals.

Due to the factors above no structures are proposed to be included with the project to facilitate animal passage through the right of way.

MDT Environmental requests that wildlife friendly fencing be proposed to landowners during right of way fencing negotiations where fence will be replaced or installed with this project. Where existing fencing is not present, Environmental requests that new fencing not be installed with the project.

Eagles (Bald and Golden Eagle Protection Act)

Are documented eagle nests located within ½ mile of the project? **No**

Eagle Discussion:

There are no documented bald or golden eagle nests located within ½ mile of the proposed project.

Migratory Birds (Migratory Bird Treaty Act)

Are migratory birds/nests anticipated to be impacted by this project? **Yes**

Migratory Bird Discussion:

The potential exists for migratory birds to utilize habitat within and adjacent to the project area. The project may interrupt migration and feeding in the immediate project area during construction. There is ample habitat available for birds in the project area. While migratory species might be temporarily displaced from the project area due to construction activities, the impacts are anticipated to be minor and short-term. No active nests will be impacted by the proposed project. Any tree removal or trimming will be done outside the typical nesting season of April 15-August 15 to avoid potential impacts to nests that may be present. The special provisions, Migratory Bird Treaty Act Compliance-Vegetation Removal, will be included in the contract for this project to avoid potential impacts to any active nests.

Sage Grouse (MT Executive Order 12-2015)

Does the project occur in designated sage grouse habitat? **No**

Is consultation with the Sage Grouse Program required by MDT: **No**

Sage Grouse discussion:

This project does not occur within greater sage grouse general or core habitat. No impacts to greater sage grouse or their habitat will occur with this project.

Vegetation and Noxious Weeds

Any disturbed areas shall be seeded with desirable plant species as soon as practicable after construction to reduce the spread and establishment of noxious weeds and to re-establish permanent vegetation.

Other Resource Considerations

None.

Special Provisions (attached)

CONSERVATION MEASURES FOR WORK IN GRIZZLY BEAR HABITAT

- A. Description. This project is located within bear habitat, adhere to the following requirements:
 - No construction activities are allowed between 8:00 pm and 6:00 am from April 1-June 30 and September 1-November 30.
 - Promptly clean up any project related spills, litter, garbage, debris, etc.
 - Camping is allowed in designated camping areas only.
 - Store all food, food related items, petroleum products, antifreeze, garbage, and personal hygiene items inside a closed, hard-sided vehicle or commercially manufactured bear resistant container.
 - Remove garbage from the project site daily and dispose of it in accordance with all applicable regulations.
 - Notify the Project Manager of any animal carcasses found in the area.
 - Notify the Project Manager of any bears observed in the vicinity of the project.
- B. Conduct project-related activities outside of construction limits in a manner which will not adversely affect federally listed species and/or designated critical habitat. Such measures include but are not limited to those listed in A. above.

- C. Method of Measurement and Basis of Payment. Work described in this provision is not measured for payment. Consider all costs associated with this provision incidental to performance of the work. Include the cost in the cost of other items.

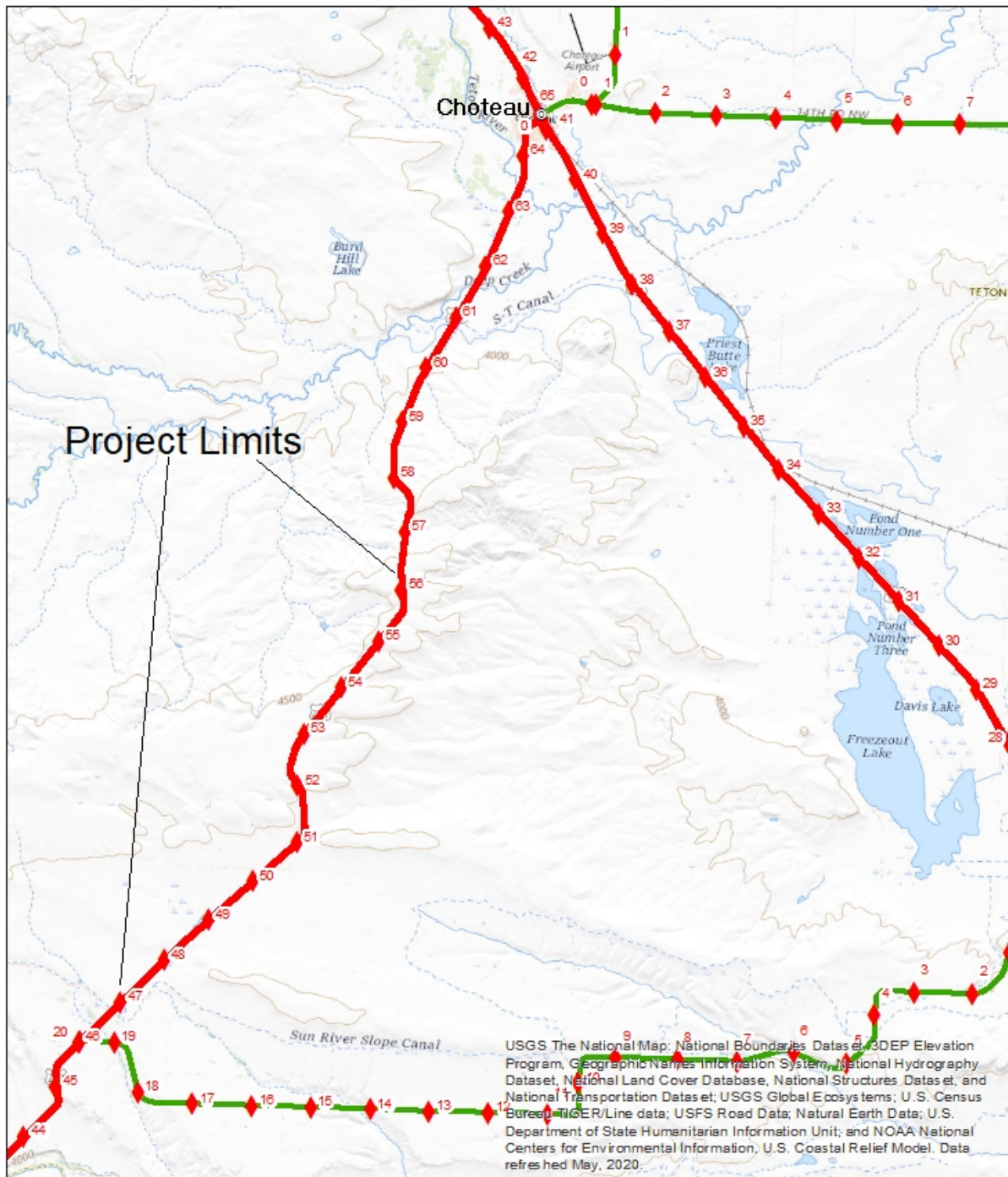
MIGRATORY BIRD TREATY ACT COMPLIANCE -VEGETATION REMOVAL [107] (ADDED X-X-XX)

Description. Suitable nesting habitat (trees and shrubs) exists for migratory birds within the construction limits.

Construction Requirements: Perform any required cutting of trees and shrubs outside the nesting season; between August 16th and April 15th. Remove only those trees and shrubs in direct conflict with the permanent construction limits. Do not remove, but trim trees and shrubs as necessary for equipment access and other temporary construction activities outside of the permanent construction limits.

Contact the Project Manager for coordination with the District Biologist with any questions regarding this special provision.

Method of Measurement and Basis of Payment. Work described in this provision is not measured for payment. Consider all costs associated with this provision incidental to performance of the work. Include the cost in the cost of other items.



Location Map
North of Augusta-North
RP 47.0-56.0

