

## MEMORANDUM

To: Joe Weigand  
MDT Missoula District Biologist

From: Jon Schick, CEP  
Environmental Planner, HDR Engineering

Date: January 26, 2022

Subject: **Addendum to Biological Resource Report and Preliminary Biological Assessment** (dated June 14, 2018)  
West of Missoula - NW  
STPS 263-1(28)6  
UPN 6141000

### **1.0 Introduction**

This memorandum provides an addendum to the Biological Resource Report / Preliminary Biological Assessment (BRR/PBA) that was completed on June 14, 2018 for the West of Missoula - NW project located on Secondary Route 263 (Mullan Road) from reference post (RP) 5.5 to RP 10.6 in Missoula County. Following the Alignment and Grade Review meeting in 2018, it was decided to add a 10-foot-wide shared-use path along the north side of Mullan Road within the current project limits. The purpose of this memorandum is to update the environmental information pertaining to the proposed project's potential effects on biological resources due to the expanded project scope, update recommended conservation measures where applicable, and identify changes that have since occurred in Endangered Species Act listed species.

The sections below provide updated information as applicable. If a certain section from the 2018 BRR/PBA is not included below, then the impacts previously described in the 2018 BRR/PBA remain valid and no new avoidance and minimization measures or mitigation is recommended. Version 2.3 of the MDT *Standard Specifications for Road and Bridge Construction* was released in September 2021 and references to applicable standard specifications are provided below for specifications that have been renumbered or revised.

### **1.1 Project Purpose and Background**

The Montana Department of Transportation (MDT) is proposing to reconstruct Mullan Road beginning at RP 5.5, approximately 0.5-mile southwest of the intersection with Deschamps Lane, and extending north to RP 10.6, just north of the intersection with Pulp Mill Road, to improve the roadway surface and overall safety of the roadway. The reconstruction would consist of widening the roadway shoulders, flattening the side slopes, improving the horizontal and vertical alignments, and upgrading the clear zone. In addition, the project would include guardrail replacement, upgraded pavement markings, signing, fencing, and the inclusion of a 10-foot-wide shared-use path for bicycle/pedestrian accommodations on the north side of Mullan Road. The project includes replacing one existing structure spanning an irrigation canal at approximately RP 7.3. The bridge is a 23-foot-long by 28-foot-wide steel span bridge built in

1970 that would be replaced due to the condition, age, and difficulty of widening the existing structure.

In March 2021, MDT and Missoula County executed an agreement to add the shared-use path to the project, which will run on the north side of Mullan Road for the length of the project. The shared-use path will have a typical section of 10-foot paved surface with 2-foot shoulders utilizing 4:1 side slope with no ditch section. Per the agreement, two bid packages will be prepared for the project including the shared-use path surfacing and pedestrian rail items as an alternate bid package. MDT has agreed to perform the grading, right-of-way acquisition, utility relocation, and culvert installation/extension as required to accommodate the shared-use path. Missoula County will be responsible to fund the surfacing and pedestrian rail components.

A project team meeting was held on January 21, 2022, to discuss the potential of reducing the shared-use path width from 10' to 8' to reduce impacts to aquatic resources. A preliminary evaluation determined that the reduction in impacts to wetlands and streams would be negligible. Further, it was determined that a 10' path (standard) should be the preferred option for the project and, under only certain constrained circumstances, should 8' be recommended. Additional discussion is included in Section 3.3.

## **1.2 Project Location and Limits**

The project is located in Missoula County and outside the urban limits of Missoula. The project is in Sections 4, 5, and 9 of Township 13 North, Range 20 West; Sections 30, 31, and 32 of Township 14 North, Range 20 West; and Sections 13, 24, and 25 of Township 14 North, Range 21 West, Montana Principal Meridian. See Attachment A for the project location and vicinity map.

## **2.0 Terrestrial Resources**

### **2.1 General Habitat and Vegetation**

#### **Potential Impacts**

With the addition of the shared-use path to the scope of the project, the overall project footprint and right-of-way requirements, as well as general vegetation impacts are increased from that described in the 2018 BRR/PBA. The shared-use path will increase impacts to roadside grasses and forbs and require removal of additional trees and modifications to some landscaped features on residential properties. More information on impacts to trees and landscaping is described in the *Activity 118 – Multi-Use Path Impacts* memorandum (HDR 2019).

#### **Avoidance and Minimization Recommendations**

No new or modified avoidance and minimization measures are recommended.

## **2.2 Noxious Weeds**

### **Avoidance and Minimization Recommendations**

The following standard specification is proposed to prevent and to minimize spread of noxious weeds.

- The MDT Standard Specification 208.03.5 Noxious Weeds will be included in the final construction bid documents. This specification includes the requirement of cleaning all equipment and vehicles prior to transport into the project area.

## **2.2 General Wildlife Species - Birds**

The following conservation measures are proposed to minimize project impacts on bird species and habitat.

- The Environmental Protection Specifications will be included in the final construction bid documents and include Migratory Bird Treaty Act Compliance – Structures Subsection 208.03.4A(2) to avoid and minimize potential impacts on migratory birds resulting from bridge work that may directly impact active nests. This subsection includes the following construction requirements:
  - It is permissible to remove non-active nests (without birds or eggs), partially completed nests or new nests as they are built (prior to occupation);
  - Conduct work that may impact active nests outside of the nesting season, typically between the dates of August 16 and April 15, and when no active nests are present; or
  - Install [approved] nesting deterrents prior to the nesting season.
- The Environmental Protection Specifications also include Migratory Bird Treaty Act Compliance – Vegetation Removal Subsection 208.03.4A(1) to avoid and minimize potential impacts on migratory birds resulting from vegetation removal. This special provision includes the following construction requirements:
  - Perform any required cutting of trees or shrubs between August 16 and April 15;
  - Remove only those trees and shrubs in direct conflict with the permanent construction limits; and
  - Where possible, do not remove, but trim trees and shrubs as necessary for equipment access and construction activities.

## **3.0 Aquatic Resources**

### **3.1 Waterways**

#### **Potential Impacts**

This increased width of the project will impact the hydraulic aspects of the project by requiring increased culvert lengths, possible increased size (opening) of culverts, relocation of waterways

and ditches, as well as floodplain encroachment. These potential impacts are further described within this section.

The proposed roadway improvements are estimated to impact approximately 1.4 feet of O’Keefe Creek and 38.4 feet of LaValle Creek due to extending the culverts carrying these waters, and with the shared-use path, the culvert lengths and corresponding surface water impacts increase by 18.7 and 12.9 feet, respectively. In addition, between Sta. 119+33 and 121+95, the shared-use path conflicts with the existing alignment of LaValle Creek for approximately 260 feet, thus requiring realignment of the creek to accommodate the additional width. Table 1 provides information on the estimated impacts (linear feet) to the two perennial streams located in the project area as a result of the roadway improvements and the addition of the shared-use path.

**Table 1: Summary of Proposed Impacts to Surface Waters**

Stream	Path Station Range	Impacts From Roadway Improvements (linear feet)	Additional Impacts From Shared-Use Path (linear feet)	Total Linear Feet of Preliminary Impacts to Individual Stream
O’Keefe Creek	45+24 – 45+43 LT	1.4	18.7	20.1
LaValle Creek	108+13 – 109+11 LT 119+33 – 121+95 LT	38.4 -	12.9 260	311.3

The increased width of the project corridor due to the shared-use path will require the previously proposed hydraulic crossings to be lengthened and potentially increased in diameter. Further hydraulic analysis will be required to identify the recommended culvert sizes. In addition to impacts to the hydraulic structures at O’Keefe and LaValle Creeks, relocation or modification of several irrigation ditches will be required to accommodate the increased width of the project footprint. The increased width of the project corridor further increases the project encroachment into the Zone A floodplain associated with LaValle Creek.

### 3.2 Wetlands

#### Potential Impacts

Additional wetland impacts are anticipated due to the expanded construction limits associated with the shared-use path. Based on the preliminary alignment and grade of the proposed roadway improvements, an estimated 0.60 acre of wetland impacts would occur. The multi-use path results in an additional 0.63 acre of wetland impacts, increasing the total project wetland impacts to from 0.60 acre to 1.24 acres. Table 2 below provides information on location and type of impact by wetland number.

**Table 2: Summary of Proposed Impacts to Wetlands**

Wetland	Station Range	Impacted Area from Roadway Improvements (acres)	Additional Impacted Area from Shared-Use Path (acres)	Total Area of Preliminary Impacts to Wetlands
WL-1	6+40 – 7+12 LT	0.01	-	0.01
WL-2A	45+21 - 45+43 LT	-	0.01	0.01
WL-3B	72+90 - 81+22 RT	0.08	-	0.08
WL-3C	81+55 - 89+88 RT	0.05	-	0.05
WL-3D	92+98 - 93+74 RT	0.02	-	0.02
WL-3E	96+71 - 97+31 RT	0.02	-	0.02
WL-4	64+94 - 71+42 LT	-	0.01	0.01
WL-5A	82+81 - 85+68 LT	-	0.02	0.02
WL-5B	82+77 - 82+91 RT	0.01	-	0.01
WL-6A	108+13 - 109+11 LT	0.01	0.04	0.05
WL-6B	107+88 - 109+53 RT	0.02	-	0.02
WL-7A	119+02 - 147+27 LT	0.17	0.55	0.73
WL-7B	112+28 - 119+35 RT	0.04	-	0.04
WL-8A	180+74 - 189+51 RT	0.17	-	0.17
<b>Total</b>		<b>0.60</b>	<b>0.63</b>	<b>1.24</b>

### 3.3 Avoidance and Minimization Recommendations

The following conservation measures are proposed to minimize project impacts on aquatic resources, including wetlands.

- Standard Specification 208.03.1 Water Pollution Control will be included in the final construction bid documents. This specification details the processes with which the contractor must comply to prevent or minimize pollution and control impacts on aquatic resources, including installation, inspection, and maintenance of standard best management practices (BMPs).
- Standard Specification 208.03.2 Aquatic Resource Protection will be included in the final construction bid documents.
- Standard Specification 208.03.3 Regulations and Permitting will be included in the final construction bid documents. This specification details the regulatory requirements that must be followed including compliance with the Montana Pollutant Discharge Elimination System (MPDES) General Permit.
- The design team will continue to avoid and minimize aquatic resource impacts to the extent practicable. Strategies to be evaluated include reducing the share-use path width from 10' to 8' in areas constrained by adjacent aquatic resources as well as minor alignment shifts. Avoidance and minimization measures will be documented by the design team as the project progresses.

### **3.4 Required Permitting and Potential Mitigation Requirements**

The types of environmental permits anticipated for the proposed project have not changed from that discussed in the June 2018 BRR. Preliminary impacts on aquatic resources have increased, however, based on the addition of the shared-use path, which will affect the level of stream and/or wetland mitigation that could potentially be required for the project. The proposed project may require compensatory stream mitigation based on the increased impacts to surface waters (i.e., creeks and irrigation). The design team will continue to evaluate design modifications that could reduce stream impacts as the project progresses.

With the addition of the shared-use path preliminary wetland impacts increase to an estimated 1.24 acres. Preliminary wetland impacts exceed the 0.5-acre threshold to qualify for a Section 404 Nationwide Permit (NWP) No. 14 – Linear Transportation Projects; however, the project could potentially be permitted using NWP No. 23 – Approved Categorical Exclusions for which there is no impact area threshold, or the project may require an Individual Permit.

Once final design is complete and construction limits established, impacts on aquatic resources would be quantified and described in greater detail in the Aquatic Resources Finding Report (AFR) and the Section 404 permit application. If stream compensatory mitigation appears necessary, HDR will include a debit/credit computation table as part of the permit application.

No change in the proposed compensatory mitigation strategy is necessary. Appropriate wetland mitigation would be determined at a later date during the Section 404 permitting process. Off-site mitigation may be accomplished through use of wetland credits from existing MDT wetland reserves. MDT has wetland mitigation reserves within the Lower Clark Fork watershed (Watershed #3) that would qualify for off-site mitigation locations. If USACE approval to use an MDT mitigation reserve cannot be obtained, MDT will need to purchase credits from an in-lieu fee program or private bank.

## **4.0 Preliminary Biological Assessment**

### **4.1 Methods**

The October 1, 2021 publication of Endangered, Threatened, Proposed and Candidate Species by Montana County available through the U.S. Fish & Wildlife Service's (USFWS) Montana Ecological Field Office (USFWS 2021) was reviewed to determine the federally listed species potentially occurring in Missoula County and compared to the list of species evaluated in the June 2018 PBA. Table 3 outlines the changes in Endangered Species Act (ESA) listings from the 2018 PBA and lists the previous and current effect determinations.

**Table 3: Current and Formerly Federally Listed Species Occurring in Missoula County, MT**

Common Name	Scientific Name	Current Status <sup>a</sup>	Change in Status Since June 2018 PBA	2018 PBA Effect Determination	Current Effect Determination
Grizzly Bear	<i>Ursus arctos horribilis</i>	LT	No change	No Effect	No Effect
Water Howellia	<i>Howellia aquatilis</i>	n/a	Delisted on Oct. 7, 2019	No Effect	n/a
Canada Lynx	<i>Lynx canadensis</i>	LT, CH	No change	No Effect	No Effect
Bull Trout	<i>Salvelinus confluentus</i>	LT, CH	No change	No Effect	No Effect
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	LT, CH	No change	No Effect	No Effect
Red Knot	<i>Calidris canutus rufa</i>	LT	No change	No Effect	No Effect
Wolverine	<i>Gulo gulo luscus</i>	n/a	Final ruling on Oct. 8, 2020 vacating proposed status	Not Likely to Jeopardize the Continued Existence	n/a
Whitebark Pine	<i>Pinus albicaulis</i>	P	Formerly a candidate species; Proposed listing published Dec. 2, 2020	Not Likely to Jeopardize the Continued Existence	Not Likely to Jeopardize the Continued Existence
Monarch Butterfly	<i>Danaus plexippus</i>	C	Not listed in Montana in 2018; currently a candidate species	--	Not Likely to Jeopardize the Continued Existence
<b>Source: USFWS 2021</b>					
<sup>a</sup> LT = Listed Threatened; CH = Critical Habitat; P = Proposed; C = Candidate					

## 4.2 Updated Preliminary Biological Assessment

For the federally listed grizzly bear, Canada lynx, bull trout, yellow-billed cuckoo, and red knot, the previous effect determinations rendered in the June 2018 PBA remain valid; the proposed project would have **no effect** on these species.

Of the federally listed species, grizzly bear warrant mentioning due to their range expansion and recent occurrences in the North Hills near Missoula. As reported by KPAX on October 29, 2021, the Montana Fish, Wildlife & Parks confirmed a grizzly sow and two cubs have taken up residence in the North Hills area of Missoula, which spans from Hellgate Canyon to the Wye area (KPAX 2021). Despite that grizzly bear populations in Missoula County continue to rise and the recent observation, Interstate 90 and substantial road and urban development present a formidable barrier between the proposed project and the North Hills and grizzlies are not expected to occur in the project action area. **No effect** on grizzly bears is expected to occur as a result of the proposed project.

The status of whitebark pine has changed from a candidate in 2018 and this species is now proposed for listing. As noted in the June 2018 PBA, suitable habitat for whitebark pine does not exist in the project area and the proposed project is **not likely to jeopardize the continued existence** of whitebark pine.

Monarch butterfly is currently a candidate species for which there are generally no Section 7 requirements. Habitat preferences include open places, native prairie, foothills, open valley bottoms, open weedy fields, roadsides, pastures, marshes, suburban areas, and rarely above treeline in alpine terrain during migration (MTNHP 2021a). This species has been documented in Missoula County on three separate occasions: July 2015, October 2014, and September 2012 (MTNHP 2021b). Suitable habitat is generally lacking within the project area. In addition, the few observations of monarch butterfly that have been documented in Montana occurred from July through November, which would be after vegetation clearing was completed for the project. The nature of the proposed project and anticipated vegetation impacts primarily affecting roadside vegetation and some trees and residential landscaping is not expected to affect monarch butterfly. The proposed project is ***not likely to jeopardize the continued existence*** of the monarch butterfly.

No additional conservation measures are recommended specific to federally threatened species. No additional future federal, state, local, or private actions of regional significance that are reasonably certain to occur have been identified within the vicinity of the proposed project and, therefore, no long-term cumulative impacts are anticipated.



## **References**

- HDR. 2019. Activity 118 – Multi-Use Path Impacts Memorandum. Prepared for West of Missoula – NW project, UPN 6141000. August 5, 2019.
- KPAX. 2021. FWP: Grizzly bears making a home in Missoula’s North Hills. Accessed at < <https://www.kpax.com/news/missoula-county/fwp-confirms-grizzly-bears-making-a-home-in-missoulas-north-hills>>. Accessed on December 7, 2021.
- MTNHP. 2021a. Montana Field Guides. Accessed at <<http://fieldguide.mt.gov/default.aspx>>. Accessed on December 7, 2021.
- MTNHP. 2021b. Natural Heritage Map Viewer. Generalized Observations. Accessed at <<http://mtnhp.org/mapviewer/>>. Accessed on December 7, 2021.
- USFWS (U.S. Fish and Wildlife Service). 2021. Montana Ecological Field Office Endangered, Threatened, Proposed and Candidate Species by Montana County. Published October 1, 2021. Accessed at <[http://www.fws.gov/montanafieldoffice/Endangered\\_Species/Listed\\_Species/countylist.pdf](http://www.fws.gov/montanafieldoffice/Endangered_Species/Listed_Species/countylist.pdf)>. Accessed on December 7, 2021.

### ATTACHMENT A: Project Area and Vicinity Map

