

Montana Department of Transportation
Missoula District
2100 West Broadway
Missoula, MT 59807

Missoula County Commissioners
200 West Broadway
Missoula, MT 59802

Re: Maclay Bridge Study Comments

Dear Commissioners:

As a long time resident of the Target Range area and daily user of the existing Maclay Bridge, I have strong concerns about its adverse effects on the Bitterroot River, public safety and ultimately its viability over time.

I believe it is important for you to know that contrary to public comments made by members of the Maclay Bridge Alliance – not everyone believes the existing bridge is acceptable and in fact many residents support construction of a replacement bridge on South Avenue where a County Right of Way already exists.

River morphology: Since 1982 I have lived adjacent to the bridge and have watched the river channel change dramatically over time. It is clear from historical photos, county records and our own experience that the bridge was not designed for the site and has required modifications over time. These modifications have included extensions to the main bridge, increasing the height of River Pines Road resulting in a levee constriction of flow, addition of bridge abutments in the channel exacerbating the flow constriction, rip rapping the west bank along River Pines Road and rip rap around the center pier. The net result has been the creation of a sizable whirlpool with channel scour under and downstream of the bridge, significant bank loss on the west side of the river, and significant sediment deposit upstream and around the bridge piers. Large “islands” and peninsulas have formed where insignificant sediment deposits existed in its early history. Because it is unknown whether the middle pier actually has footings or pilings under it – scouring and undercutting has occurred and raises a serious concern about its lifespan in addition to the potential effects on the river itself. I understand the MT Department of Transportation (MDOT) and Missoula County Office of Public Works have identified scour as an area of special concern in this area.

Public Safety: While I do not object to recreational use of the area under and around the old Maclay Bridge in general, I do have serious concerns for the public safety of swimmers, divers and drivers who use the area. There have been a number of deaths over the years associated with the current bridge from “jumpers” who climb the steel structure and jump into the scour hole under the bridge to others who have drown in the large whirlpool. Since we live so close by – the countless search and rescue efforts have had a sobering effect on our neighborhood as well as the devastating loss to many families. The ongoing vandalism, theft, human waste, garbage, littering, illegal parking and drug/alcohol use presents yet another public health & safety issue. Finally, the multiple vehicle accidents around the bridge due to the unsafe approaches on either side as well as the blind corner of North and Edwards have resulted in injuries and property damage every year. We have been personally impacted by vehicle accidents on the west side of the bridge that have damaged our

fence and interrupted phone service numerous times. The lack of pedestrian and bike lanes or shoulders on the west side of the bridge is an additional concern about public safety. Between the scouring and creation of the whirlpool as direct results of the bridge installation and the alignment problem on either side – I am surprised we have not seen litigation and liability issues surface as a result.

With so many people living on the west side of Maclay Bridge, the access for emergency vehicles is critically important. In 2011 the load limit was reduced to 11 tons as a result of Montana Department of Transportation inspection and bridge analysis. This resulted in restricted access for a period of time until an agreement was reached allowing tenuous access for emergency vehicles. I shudder to think of whether emergency response would have been quick enough for my 911 call several years ago if there had been no reasonable access allowed within several miles of our home.

Bridge Viability (Reliability): Emergency vehicles access as described above is both a public safety concern and an indicator of questionable reliability of the current structure. Starting with the uncertainty of the old bridge's original construction, the unknown foundation conditions, ongoing scouring and long term stability questions combined with projected traffic increase in the future – the reliability of the old existing bridge is questionable at best.

It is obvious and is substantiated in County records; the Maclay Bridge was not designed for its current location. Not only has it been augmented for length but we don't really know its origin or age. As discussed before the modifications that have been made have led to environmental problems in the river that will continue as long as the structure is there. As importantly however are the unintended consequences on the structure's reliability itself. We do not know (according to County records) whether the center pier has footings or piers below it and know it is of concern to the MDOT and County office of Public Works. We also know rip rap was added in the 1970s or 80s as a precautionary measure but clearly do not know with certainty whether the old bridge is sound and do not know when undercutting and scouring will lead to its failure in the future. There are hundreds of people who live on the west side of Maclay Bridge who need to go to work, shop, recreate and access services throughout Missoula. Reliable access across the Bitterroot is critical.

While the local Maclay Alliance has been very vocal on this issue, there are people in the area who support the construction of a new bridge on South Avenue for a multitude of reasons. My interest in writing to you is to ensure you and the Study Team that many of us share concerns about the existing bridge and its adverse effects on the Bitterroot River and public safety.

Please consider my comments in your analysis.

Olleke E. Rappe-Daniels