Assessment Of Road Decommissioning On Stream Habitat In The Flathead National Forest[AFS]

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The Flathead National Forest has almost 4000 miles of roads and a mandate to decommission nearly a quarter of the road infrastructure for grizzly bear security. In addition to this area being valuable for grizzlies, it is important for bull trout and westslope cutthroat trout. Although there are multiple studies demonstrating negative impacts of roads on fish populations (including bull trout), there is relatively little research examining which technique (e.g., gating, berming and revegetating) and what degree of decommissioning is necessary to improve stream habitat. The Flathead National Forest has decommissioned over 300 mi of roads, but has few watersheds where the entire area was decommissioned. We sampled 12 streams in the Hungry Horse and Spotted Bear Ranger Districts with four different watershed types (1) wilderness, (2) roads in use, (3) exclusively decommissioned roads, and (4) a mix of decommissioning (gated, decommissioned spurs, very little road use). Our goal was to address two questions. First, do forest roads have measurable impacts on stream habitat in our study site? If so, do streams with watersheds containing decommissioned roads demonstrate recovery and how important is decommissioning at the watershed scale? We performed habitat surveys, Wolman pebble counts, visual embeddedness estimates, and substrate coring in the summer and fall of 2004. There was high variability across streams regardless of

treatment. We found no differences in habitat measures (temperature, pool size and number, and LWD) between treatments, but there were differences in sedimentation.