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## **DIVERSION DAMS AND FISH PASSAGE – DON'T GIVE UP THE FIGHT!**

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The Tongue River, in southeastern Montana, is a major tributary to the Yellowstone River. Numerous Yellowstone River fish species utilize the Tongue River for spawning. However, diversion dams have limited fish migrations up this system. Through persistent efforts, measured in careers not years, fish passage around these diversion dams and complete removal of other dams is occurring. T&Y Diversion dam, constructed in the 1880s, is the first dam migrating fish encounter, and it is a complete fish barrier. During fall 2007, a fish bypass (named Muggli Bypass) was completed to allow fish passage around T&Y Diversion Dam. Fish sampling was conducted in 2008 to evaluate the success of this structure. A fyke net was utilized to sample fish that successfully navigated the complete length of the bypass channel. Electrofishing was conducted upstream and downstream of the diversion dam to compare relative abundances of fish in the river to those collected in the bypass. Nineteen fish species were successful in passing through the bypass during the sampling period and four additional species were collected in the bypass channel when it was block netted and drained. Comparatively, 29 fish species were collected downstream of the diversion dam. Electrofishing upstream of T&Y Dam found four species (freshwater drum, goldeye, smallmouth buffalo and western silvery minnow) which have never been documented upstream of the dam. In summary, the Muggli Bypass is a noteworthy success story.