Expected Changes To The Distribution, Abundance And Life History Expression Of Fishes Following The Removal Of A Montana Hydroelectric Dam

David A. Schmetterling. Montana Fish, Wildlife and Parks, 3201 Spurgin Road, Missoula, MT 59804, dschmetterling@mt.gov

Milltown Dam has fragmented the Clark Fork watershed since1907. Historically, fish used large, connected, ecologically and geographically distinct habitats spanning hundreds of kilometers to express different stages of their life histories. The dam as not allowed upstream fish passage, has limited downstream fish movements and created a reservoir that has fostered a population of exotic northern pike. Recent studies show the dam's continued affect on an enormous geographic scale. Milltown Dam annually impedes migrations of tens of thousands of fish, and data suggest that fish that migrate to the dam do not spawn once their migration is impeded. Native migratory fishes like westslope cutthroat trout and bull trout have been especially affected by the dam but their annual presence at the dam suggests the potential to reestablish fluvial life history forms and enhance local or up-river populations. Milltown Dam will be removed in the next few years and the watershed will once again regain connectivity. Biotic changes from dam removal will range from drastic local changes in species composition, fish densities, and unimpeded fish passage. However, on most scales, the changes will be subtle and offer populations more resilience and better expression of life history tactics.