

Sampling for Rocky Mountain Tailed Frogs in Overwhich Creek Post Rotenone Treatment

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Rocky Mountain Tailed Frogs (*Ascaphus montanus*) are widely distributed and relatively common west of the Continental Divide in small, high elevation streams with cobble substrates. Montana Fish Wildlife and Parks (MFWP) used the piscicide Rotenone to remove non-native Yellowstone cutthroat trout from the headwaters of Overwhich Creek in the Bitterroot Mountains near Lost Trail Pass in 2017, 2018, and 2019. Pre-treatment surveys for amphibians were not conducted in 2017 and 2018, but fisheries biologists anecdotally reported large numbers of Rocky Mountain Tailed Frog larvae dying during treatments, and that the number of tailed frogs appeared to decline after the first two treatments. Prior to the 2019 treatment, an MFWP and Montana Natural Heritage Program crew used kicknet surveys to sample twenty-three 10-meter stream reaches in the treatment area to document the number and age distribution of tailed frog adults, juveniles, and larval classes. This survey found all age classes distributed throughout the treatment area associated with cobble substrates, but densities appeared to be greatly reduced from those reported by fisheries biologists prior to the 2017 treatment. A caged study that measured survival of all age classes during the treatment indicated high mortality rates, but some larvae did survive. A 2020 repeat kicknet survey also showed all age classes to be widespread in the treatment area. Several more years of survey are needed to document recovery post-treatment in Overwhich Creek and more thorough pre- and post-treatment surveys are needed in other streams slated for Rotenone treatment where tailed frogs are present.