Aquatic Invasive Species Management in Western Montana - American Bullfrog and Common Snapping Turtle

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Invasive herptiles can negatively impact native aquatic species through competition for resources, predation, and introduction of pathogens. In response to public reports and the need for updated surveys on invasive herptile infestations west of the Continental Divide in Montana, we undertook a project to survey for and control common snapping turtles (*Chelydra serpentina*) and American bullfrogs (Lithobates catesbeianus). We used a GIS to map potential habitat for the focal species to prioritize efforts. We used targeted outreach to collect sightings and educate the public about invasive species. Once we had compiled relevant data, we conducted surveys to estimate the extent of current infestations. Concurrently, we conducted control operations to eliminate snapping turtles and bullfrogs from key areas. During June - September of 2021, we set 78 snapping turtle traps in 40 different water bodies for a total of 593 trap-nights. Trapping success was low, resulting in the removal of 11 snapping turtles and one nest containing 73 eggs. We conducted 110 nighttime calling surveys for bullfrogs and spent 11 nights removing bullfrogs from seven wetlands. Results suggest there is not a well-established breeding population of snapping turtles in west-central Montana, but a breeding population exists in northwest Montana. Bullfrogs in west-central Montana have not significantly expanded their range since the early 2000s, whereas bullfrogs have spread past a key dispersal pinch-point in northwest Montana and are expanding towards Ninepipes Reservoir and associated wetland complexes. We suggest specific, ongoing monitoring and removal efforts to address these invasive herptiles in key areas.