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The Big Sandy Crayfish (*Cambarus callainus*) is an endemic species to the Big Sandy River basin in the tripoint of WV, VA, and KY, that is federally listed on the Endangered Species Act. The species' habitat is heavily impacted by degradation and sedimentation resulting from intensive mining practices. To better understand the life history for the Big Sandy Crayfish, we are investigating movement patterns before, during, and after dam removal of a low-head dam in Clinchco, VA. Previous studies using radio telemetry examined some diverse movement patterns in contiguous bodies of water of the Big Sandy Crayfish and the Guyandotte River Crayfish (*Cambarus veteranus*). Our research will span over nine months to account for seasonal variability. Sixty individuals will be tracked in two-month increments across the three dam removal phases. This will be the first study to use this approach to examine crayfish movement in a fragmented habitat. Ongoing work focuses on monitoring crayfish movement during and after dam removal using radio telemetry.