



PROJECT BRIEF

College Hill Hydro Project Mussel Survey

BioSurvey Group performed a freshwater mussel survey for the proposed College Hill Hydroelectric Project at Kentucky River Lock and Dam 11. Several federally listed mussel species, including Round Hickorynut (*Obovaria subrotunda*), are known to occur in this reach of the Kentucky River, and a mussel survey was therefore required to obtain the regulatory permits for the project. The BioSurvey Group team conducted semi-quantitative and qualitative sampling downstream of the dam to evaluate mussel distribution and species composition. The survey yielded 180 live mussels of 12 species, and Round Hickorynut was the third most abundant species collected. Mussels were present on both sides of the river but were primarily associated with sand substrate at this site. Additional modeling is being conducted to determine how flow conditions may change during operation of the hydroelectric facility. Data from this survey can serve as a pre-construction baseline to assess whether the mussel community is being affected by operation of the hydropower facility.



Year: 2024

Dates: Oct. 7 - 8

Value: \$25K

Kentucky River, Madison County, KY