The purpose of this project was to restore critical habitat for freshwater mussels in Deer Creek, located in southern Ohio. This project was funded by the U.S. Fish and Wildlife Service, who has been active in protecting high-value waterways for threatened and endangered freshwater mussels.

EcoGro served as a contractor on a design/build team with Stantec to remove a low-head dam, which was a barrier to passage of both fish and mussels. The dam had effectively disconnected serviceable habitat and limited populations of several species of concern. As mussels are filter feeders, they prefer swift currents and water that is not burdened by silt or sediment. In addition, fish serve as hosts to complete the mussel's larval development and help transport an otherwise immobile population. In addition to loss of habitat and stream channel alterations, poor water quality and pollutants have killed off freshwater mussel populations that were once common throughout the Ohio River valley.

Biologist, engineers and scientists from Stantec oversaw operations of the dam removal, inventoried aquatic species and collected geomorphic data. Nine species of mussels and 34 species of fish were identified within the project area, with numerous species indicative of exceptional water quality. Information collected during this project was used to guide design of post-removal habitat features.

Additionally, the dam removal allowed for increased recreational use of the waterway. With the obstruction removed, canoes and kayaks are now able to use and enjoy this section of Deer Creek.

Project Reference: Contact EcoGro


Project Partners: U.S. Fish and Wildlife Services, Partners for Fish and Wildlife, Stantec, Ridgewater

> Key Features:
> Design/Build
> Dam Removal
> Freshwater mussel habitat
> Fish migration

