

# DAVIS CREEK STREAM RESTORATION PROJECT

In September of 2021, the restoration of Davis Creek began. The primary project goal was to create fish habitat and ultimately convert Davis Creek into a put-and-take trout fishery within Kanawha State Forest. The project goal was achieved by 1) the removal of the Ellison Pond Impoundment by means of lowering the Davis Creek Dam; 2) restoring the Davis Creek stream channel through the former Ellison Pond area; 3) stabilizing and enhancing sections of Davis Creek upstream of the former Ellison Pond; and 4) planting native vegetation within the floodplain and riparian buffer zone of Davis Creek. Below are some examples of in-stream structures utilized for the Davis Creek Stream Restoration Project.



J-hooks function as grade control structures in newly constructed stream channels. Additionally, J-hooks are engineered to direct stream flow and protect a single streambank. Scour pools created immediately downstream of J-hooks provide excellent fish habitat.



A log roller (foreground, under water) raises the bed elevation to impound water. Water flowing under a digger log (background) creates a scour pool. Together, these structures provide ideal deep-water habitat and staging areas for fish.



Toe wood revetments are designed to protect the outside of a bend in a stream channel and add roughness to the bank in order to slow down water in high flow events. Toe wood also have the added benefit of offering habitat for fish and aquatic insects.



Cross vanes function as grade control structures and, unlike J-hooks, protect both stream banks from erosion. The pictured cross vane contains added woody debris that attracts fish and aquatic insects.



A constructed riffle with embedded logs and brush functions as grade control for the reach. The embedded logs and brush offer habitat for aquatic insects that fish feed on throughout the year.