Focus ON THE FISHAMERICA FOUNDATION

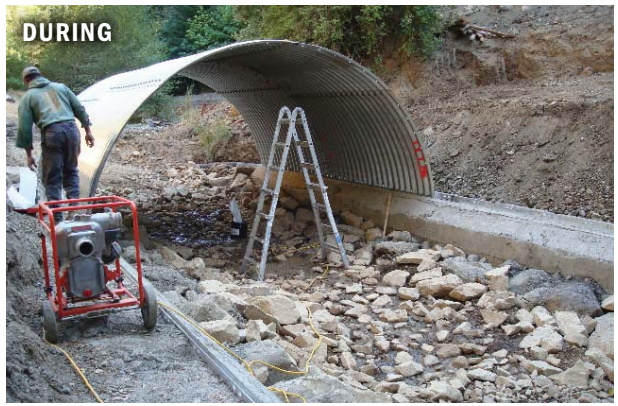
Enhancing Salmon and Trout Populations Through FishAmerica Foundation Partnerships

Two projects recently completed on opposite sides of the United States have opened more than three miles of unrestricted fish passage.

On the West Coast, as adult salmonids return to freshwater to spawn, they often encounter man-made barriers that prevent them from reaching prime spawning grounds. Often these barriers are culverts that are undersized or incorrectly positioned. By converting the culverts to bridges or arch culverts, the natural streambed is restored, allowing for passage of various species of sportfish including salmon and trout.

In the Northeast, less than 9 percent of the areas that historically supported brook trout are intact due to poor water quality and man-made fish barriers.

The undersized and degraded culvert at the mouth of Wolfe Creek blocked fish passage to upstream habitat for wild populations of steelhead and Chinook and Coho salmon.



The undersized culvert was replaced with a bottomless culvert arch. The natural stream bottom improved conditions for the steelhead and salmon populations in the Mattole River watershed.

Salmon Recovery Efforts in Northern California

Local group restores salmon habitat passage in the Mattole River watershed

The FishAmerica Foundation, in partnership with the National Oceanic and Atmospheric Administration (NOAA) Restoration Center, awarded $25,000 to the Mattole Restoration Council to improve fish passage along a tributary of the Mattole River in California's northern Humboldt County.

The Mattole River watershed is one of California's key watersheds for Chinook salmon recovery. The Mattole is one of the few large rivers in California without a dam, and the river boasts populations of wild steelhead and Chinook and Coho salmon. The project site is in the heart of the watershed's 26-mile steelhead fishing area. Catch and release is the policy for these waters.

The Mattole Restoration Council and project partners, including the California Department of Fish and Game, replaced an undersized culvert with a larger, bottomless arch culvert at the mouth of Wolf Creek. The bottomless arch culvert mimics a natural channel and provides fish passage conditions similar to those in adjacent streams. After the arch culvert was installed, the streambanks were seeded to restore the riparian buffer,

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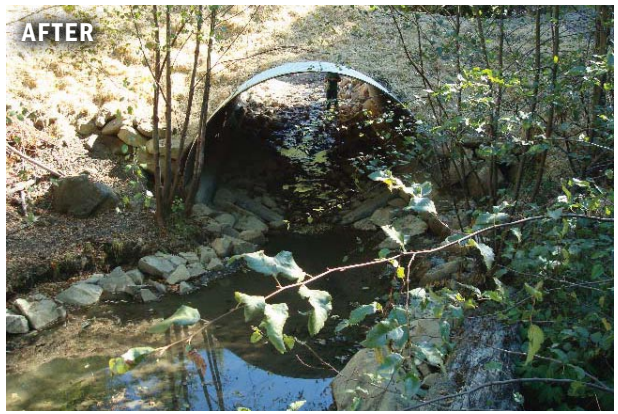


The newly restored stream channel along Wolfe Creek has improved fish passage to one mile of upstream habitat for sportfish species such as Chinook and Coho salmon.

providing natural cover to stabilize the streambanks, cool stream temperatures and provide a future source of large wood for in-stream habitat.

This project opened one mile of spawning and rearing habitat for salmonids including Coho, Chinook and steelhead.

Eastern Brook Trout Habitat Recovery in Western Maryland

Fish passage and habitat restored to Cash Valley Run along North Branch of the Potomac River

Through its partnership with the Chesapeake Bay Trust, the FishAmerica Foundation awarded nearly $28,000 to the Interstate Commission on the Potomac River Basin to restore fish passage to prime brook trout habitat in the Braddock Run watershed, a sub-watershed of the Chesapeake Bay.

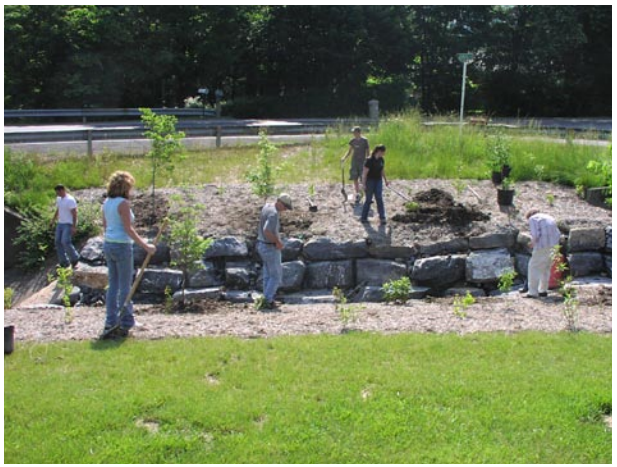
A prized sportfish, brook trout is the only freshwater trout species native to the Eastern United States. Historical land uses, however, have diminished its available habitat, and brook trout populations have declined due to poor water quality and fish passage barriers. In Maryland brook trout has lost 62 percent of its historic habitat.

The Interstate Commission on the Potomac River Basin, along with project partners including the Maryland Department of Natural Resources, restored passage to nearly two miles of valuable habitat along Cash Valley Run. The stream is an important spawning tributary in the Braddock Run watershed. The barrier at Cash Valley Run was a concrete channelized culvert blocking upstream fish passage for brook trout and other sportfish. Several surveys did not report brook trout above the barrier and a mile of reproductive habitat remained unavailable to the species.

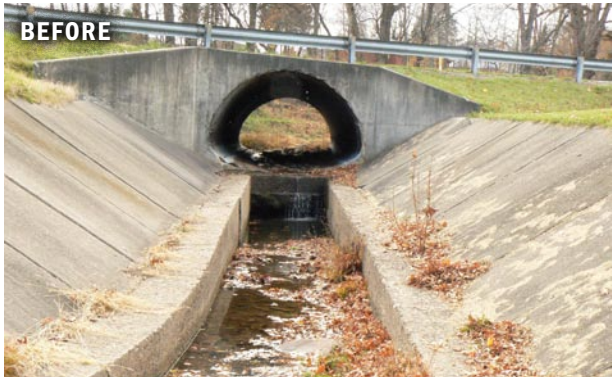
The project restored the natural streambed and stabilized the streambanks. The concrete was removed and replaced with a gravel streambed. The streambanks were stabilized using various sizes of rocks to create step pools that will provide the elevation needed for sportfish species at all life stages to pass through the culvert.

Volunteers from the community spent 40 hours planting native vegetation along the streambanks to improve the riparian buffers. These riparian buffers help shade the stream to provide cooler water temperatures as well as prevent sediments from the road from entering the stream. ■

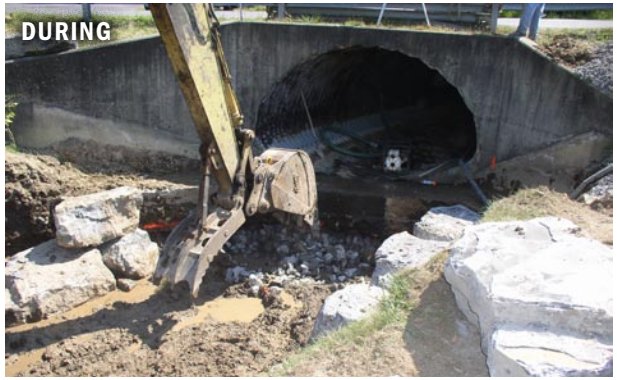
The Chesapeake Bay watershed is home to sportfish such as brook trout, bluefish and prized striped bass and to more than 15 million people. Recent estimates place the economic value of the bay and its watershed at nearly $700 billion.



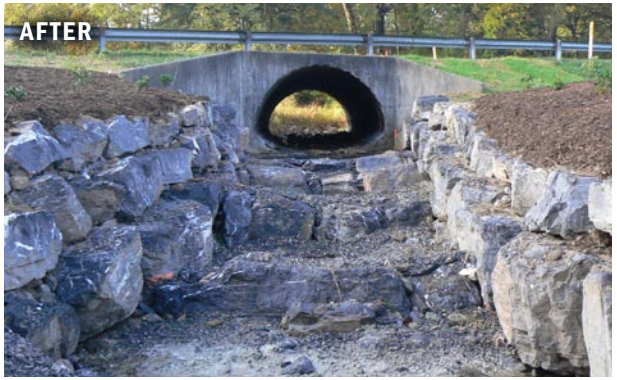
After the channel restoration, more than a dozen volunteers planted native vegetation along the stream bank to further stabilize the stream banks, provide cover to cool stream temperatures and create a source of large wood for future instream for fish habitat.



Cash Valley Run, in Western Maryland, was channelized and the streambed and stream banks were filled with concrete. The culvert created a complete barrier to fish passage and limited the available habitat for native brook trout.



Heavy equipment was used to remove the concrete streambed and stream banks, allowing brook trout to reach nearly two miles of critical upstream habitat and returning the stream to its natural historic flow.



Large boulders stabilize the stream banks and create step pools to allow year-round fish passage on Cash Valley Run for juvenile and adult brook trout.