New Hope for the Big Hole’s Imperiled Arctic Grayling Comes at a Critical Moment

BEAVERHEAD COUNTY, Montana—Western Rivers Conservancy and the U.S. Forest Service have permanently conserved the 200-acre Eagle Rock Ranch, returning a game-changing amount of clean, cold water to the Wise River and protecting vital habitat for fish and wildlife.

The Wise is a major tributary to the Big Hole River, one of Montana’s best known fly-fishing streams and one of the last remaining strongholds for fluvial Arctic grayling in the Lower 48. It is also an important source of cold water for the Big Hole and crucial to the survival of grayling, westslope cutthroat trout and mountain whitefish, as well as the non-native rainbow and brown trout for which the Big Hole is famous.

“The Big Hole is one of the great rivers of Montana, and right now the system needs all the clean, cold water it can get if we are to see Arctic grayling and trout in this system for generations to come,” said Kristen Thompson, Wisdom district ranger for Beaverhead-Deerlodge National Forest. “What we are doing with Western Rivers Conservancy is innovative, effective and delivering exactly what the Big Hole needs.”

WRC purchased Eagle Rock Ranch, along with its critical water rights—the upper-most major water rights on the Wise—in summer 2021. Since the acquisition, WRC has been holding the property while assembling the funding and partnerships needed to permanently protect it.

This summer, WRC conveyed the property to the Beaverhead-Deerlodge National Forest, allowing approximately 11 cubic feet per second (CFS) of water to be managed for the benefit of the Wise River and permanently protecting a swath of land that contains habitat for a diverse array of wildlife.

The water rights include 8.5 CFS directly from the Wise River that will be managed through an innovative approach by the Beaverhead-Deerlodge National Forest. The US Fish and Wildlife Service’s Montana Partners for Fish and Wildlife Program (PFW) worked cooperatively with the Beaverhead-Deerlodge National Forest and Western Rivers Conservancy to develop the innovative water management plan. When the river is running high in spring and early summer, the Forest Service will allocate the water to the meadow on the ranch, which grows wild hay for livestock and wildlife. The meadow will store and filter the water, keeping it clean and cold throughout the hot summer. That water will seep into the water table and migrate back toward
the stream over the course of the summer, while simultaneously irrigating the wild hay, which supports both area wildlife and livestock.

This means that in late summer, when flows are low in the Wise River, there will be cold-water return from the meadow via ground water, back into the stream. Additionally, when the river is low in the drier months (less than 35 CFS at the mouth of the Wise for seven consecutive days), the Forest Service will cease irrigating the meadow, and will divert water back into the Wise River to enhance in-stream flows.

PFW provides technical and financial assistance to private landowners to restore and enhance fish and wildlife habitat on their property. They have worked with many landowners in the valley to enhance stream flows in the Big Hole River. In support of this project, PFW is working with an adjacent landowner to install a new screw gate, measuring flume and fish ladder (replacing an older wooden headgate system). The new screw gate and measuring flume will allow for better control of water diverted from the Wise for irrigation and will help facilitate in-stream flow conservation efforts.

This is the second time Western Rivers Conservancy has partnered with federal agencies to create a split season approach to deliver water for fish when they need it most. The first was in 2014, when WRC pioneered a split season approach in Colorado that returned water in-stream to ensure year-round flows to the Little Cimarron River, an important tributary to the famed Gunnison River.

“The approach of strategically switching the water from irrigation to in-stream flow is going to be critical for keeping the Wise running clean and cold in late summer rather than low and warm,” explains Josh Kling, conservation director at Western Rivers Conservancy. “We are essentially storing water from spring runoff, so the Wise gets it later in the year when it is desperately needed—and then putting water directly in-stream whenever the river gets too low. This will be a huge benefit for fish in both the Wise and the Big Hole.”

Fluvial Arctic grayling depend on cold-water tributaries like the Wise for rearing. Unfortunately, conditions over the past few decades have negatively impacted grayling populations, making them candidates for listing under the Endangered Species Act. This has spurred local ranchers, farmers and conservationists to voluntarily pull together and improve conditions for the imperiled fish.

As a result of this work, the Big Hole’s fluvial Arctic grayling are one of the healthiest remaining populations at the southern extent of the species’ range, which highlights the importance of protecting the Big Hole tributaries and ensuring they remain clean and cold.

In addition to being one of the only river systems in the West with fluvial Arctic grayling, the Big Hole Valley is also an extremely important place for birds. Upstream of the Wise River confluence, the meandering nature of the Big Hole River creates extensive wetlands that support everything from sandhill crane and long-billed curlew to sage grouse, American kestrel,
killdeer and golden and bald eagle. These and other species rely on the open country of the Big Hole Valley, including places like Eagle Rock Ranch for nesting and migration.

This project is also a big win for recreation, as the Forest Service’s acquisition of the property will enhance public access to the National Forest on the east bank of the Wise River, thus expanding opportunities in the area for fishing and hiking.

This project is part of WRC’s broader conservation efforts in the Big Hole Valley to deliver more water for fish, preserve recreational access, and protect habitat for fish and wildlife. Roughly 22 miles southwest of Eagle Rock Ranch as the crow flies, WRC and the Forest Service are working to conserve the 317-acre Clemow Cow Camp in the headwaters of the Big Hole River. The property includes two miles of Big Hole tributary creeks and 2.77 CFS of water rights that will be managed for the benefit of fish.

*United States Department of Agriculture (Forest Service) funding for both the Eagle Rock Ranch and Clemow Cow Camp projects came from the Land and Water Conservation Fund (LWCF), which was created by Congress in 1965 as a bipartisan commitment to safeguard natural areas, water resources and cultural sites, and to provide recreation opportunities to all Americans.*

*This project was also made possible through generous funding and support from the Beagle Charitable Foundation, Cinnabar Foundation and Page Foundation.*

**CONTACT INFORMATION**

**Danny Palmerlee**  
Director of Marketing & Communications  
Western Rivers Conservancy  
503-241-0151  
dpalmerlee@westernrivers.org

**Kristen Thompson**  
Wisdom District Ranger  
U.S. Forest Service  
406-689-3243  
Kristen.thompson@usda.gov