

# Reconnecting Wild Trout Habitat in the Boulder-Jefferson Watershed

## Shaw Diversion Dam Removal Project Cardwell, MT



*The Shaw Diversion Dam on the lower Boulder River in southwest Montana is a barrier to fish migrating from the Jefferson River for thermal refugia and spawning. The dam's small fish ladder is frequently blocked by low and high flows or debris and does not allow passage for some life stages of fish.*

Rising in the mountains north of Butte, the Boulder River is the largest tributary to the Jefferson River downstream of the Beaverhead-Big Hole River confluence, providing a boost of cold water near the mid-point of the Jefferson's 83-mile length. The Boulder is a high-value coldwater fishery and contributes to agricultural production in Jefferson County. Dam removal will benefit wild trout spawning in the system. Also important, the Boulder averages 2°-4°F colder than the Jefferson River in August, providing critical thermal refugia for coldwater species in the summer.



### CHALLENGE & PROJECT SOLUTION

#### SHAW DIVERSION DAM REMOVAL PROJECT

The project area is north of I-90 near Cardwell, MT. On the Candlestick Ranch, the Shaw Diversion Dam and two smaller diversions deliver water to 233 acres of cropland. An inadequate fish ladder exists on the Shaw Dam and frequently clogs with debris, making it inaccessible to migrating trout. In addition, the aging infrastructure is getting more difficult to operate and regulate irrigation withdrawal. This project will alleviate infrastructure concerns by removing the diversions and provide an ecological uplift to the Boulder and Jefferson Rivers through stream restoration, water savings, and wetland development, while maintaining agricultural benefits.

**The Shaw Diversion fish ladder is woefully inadequate for fish access and is frequently clogged with woody debris and sediment.**

#### ON THE GROUND CONSERVATION

The project will remove the Shaw Diversion Dam and two smaller diversions and replace them with instream irrigation pumps that will benefit trout and agriculture. Significant data collection occurred at the site over the past three years. Planning, engineering, and design for the dam removal and stream restoration is underway. The partners anticipate project implementation in the fall/winter of 2026.

#### BUILDING COMMUNITY

The support and planning for this project involves the landowner - Golden Sunlight Mine, with complimentary support from Montana Fish, Wildlife & Parks, Natural Resource Conservation Service, the Montana Department of Natural Resource Conservation, and the L.R. Huckaba Ranch.



**5 +  
PARTNER  
ORGANIZATIONS**



## WHY PHILANTHROPIC SUPPORT IS NEEDED

Montana Trout Unlimited relies on individuals, businesses, and foundations to make up crucial matching funds for federal, state, and local grant awards. For this project, we are seeking to raise an additional \$300,000 to reconnect this important area of the Boulder-Jefferson watershed. Your gift can help save wild trout in the Jefferson watershed.

**“We are excited to partner with MTU in the removal of a diversion from the Boulder River. This collaborative effort will help to ensure a healthy and thriving fishery for future generations.”**

*-- Kristine Murphy,  
Golden Sunlight GM*



We are happy to discuss how we can best acknowledge your contribution--through a press release, signage at the project site, or by engaging our more than 5,000 members and supporters. Thank you for partnering with MTU to improve water quantity and quality, reconnect streams, and protect native species, now and for future generations.

## MONTANA TROUT UNLIMITED'S MISSION

**Our mission is to conserve, protect, and restore Montana's coldwater fisheries and their watersheds.**



To learn more about this project and how to support it, contact:

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## OUTCOMES WE CAN ACHIEVE TOGETHER



-  **Restore fish passage for thermal refugia and spawning.**
-  **7 CFS of cold Boulder River water savings over the current base flow of 28 CFS.**
-  **Eliminate fish entrainment in 3 irrigation ditches.**
-  **Reduce nutrient and sediment loading through the creation of beneficial wetlands.**
-  **Improve irrigation delivery to 233 acres of valuable crop land.**

## HIGH-LEVERAGE INVESTMENT

**This project enables MTU to use your contribution to secure additional dollars - 5:1 - by providing matching funds for substantial federal and state grant awards.**