

Environmental Learning Center Flow Restoration Project

BENEFITS

The City of Fort Collins, in partnership with Colorado State University, replaced a damaged diversion structure at the Environmental Learning Center (ELC) to keep water flowing through a small side channel of the Cache la Poudre River. This work was critical for maintaining a water right that keeps flows in the Poudre River for fish, wildlife, and recreation at the ELC.

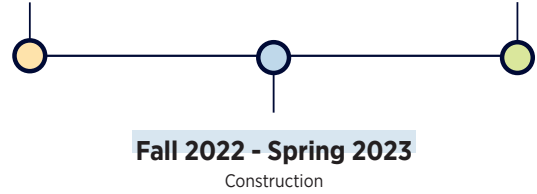
TIMELINE

2019 - 2021

Design & Permitting

2023 Onward

Operations and Revegetation
Adaptive Management



BENEFITS

FLOWS

Instream flows keep water in the river instead of diverting it for other uses and support our community's access to clean drinking water, recreation, wildlife, and fish. Rebuilding the structure at the ELC prevents approximately 10,000-acre feet of water annually from being diverted and will protect existing instream water rights. These flows are valued at approximately \$220 million and are invaluable for providing fish and wildlife habitat.

INVESTMENT

\$5,071,139



ELC willow planting volunteers.

DESIGN

The new diversion structure is called a riffle crest; the first one ever built on the Poudre River. A riffle crest is a line of boulders and cobbles that span the river channel raising the water level and allowing flows to be diverted through a headgate and pipe. The low-impact design, unlike most concrete diversions on the Poudre River, allows fish and sediment to pass through. These flows travel for approximately three quarters of a mile through a side channel of the river, then meet back up with the main stem of the Poudre River.



Large wood structure at the ELC.

RIVER HEALTH

This project included many restoration features to improve river health:

- A total of six acres were reconnected to the river's floodplain.
- Fish passage was restored when the old diversion was removed.
- A refuge pool funded by Colorado Parks and Wildlife was created for the rare, native Plains Topminnow.
- Large wood structures and brush trenches were installed to improve channel processes, retain organic matter, absorb the force of high flows and improve wildlife.



ELC Riffle Crest Diversion.

This project incorporated restoration features to improve river health. High banks that were cut off from the river were lowered to allow the river to access its floodplain. This will result in more native cottonwood and willow stands that provide wildlife habitat. Large wood structures and brush trenches were installed to slow water velocity, create fish habitat during high flows, and create pockets for native seeds to establish. The structures are engineered to withstand flood events and will look more natural over time as they collect wood and sediment.

CONTACT

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Auxiliary aids and services are available for persons with disabilities.

