Lower Elkhead Creek Restoration Project, Phase 1

Overview and Goals

Elkhead Creek is a large tributary to the Yampa River northeast of the town of Craig, with a drainage area of approximately 225 square miles. Since the late 19th century, Elkhead Creek's adjacent valley floor has been used for livestock grazing and hay production. In 1974, Elkhead Reservoir was constructed as an earthen-fill dam with a total capacity of 13,700-acre feet (AF) of water for industrial and recreational use. In 2006, the reservoir was enlarged for human supply and endangered fish flow management, which required raising the height of the dam 25 feet and created approximately 12,000 AF of new storage.

Lower Elkhead Creek – approximately nine miles in length from the Elkhead Reservoir dam outlet down to the confluence with the Yampa River – has experienced high to severe erosion and channel incision. Its transition from a healthy floodplain-connected creek to an incised, disconnected one is evident by steep vertical banks, lack of a riparian corridor and a water table 3-5 feet lower than it historically used to be. Landowners have been actively seeking solutions to improve the creek's ecosystem and maintain agricultural ways of life. A comprehensive plan that addresses the entirety of lower Elkhead Creek and all landowners' concerns is needed.

The goals of the proposed Lower Elkhead Creek Restoration Project are to 1) promote floodplain connectivity, 2) reestablish a native riparian corridor, 3) increase system resiliency to flooding, drought, and human activity, and 4) create healthier working lands in the Elkhead Creek valley. Phase 1 of this project (refer to attached maps) will focus on the first five miles of the creek directly downstream of the reservoir. By restoring more than 30 acres of riverine and riparian habitat, Phase 1 restoration efforts will help to a) stabilize the creek channel, b) protect and encourage local agriculture, c) provide tangible benefits to wildlife, and d) improve watershed health. Restoration efforts would include bank regrading, structural bank reinforcement (e.g., rock, logs, etc.), strategic planting of native riparian vegetation and adjusted land management.

On behalf of concerned landowners, Trout Unlimited (TU) is seeking support for Phase 1 restoration work on lower Elkhead Creek. TU works to conserve, protect and restore coldwater fisheries and their watersheds, and partners with landowners interested in improving agricultural operations and aquatic habitat. Phase 1 of the lower Elkhead Creek Restoration Project is expected to cost approximately $1.5 million, and project supporters include:

- Natural Resources Conservation Service
- U.S. Fish and Wildlife Service
- Colorado Parks and Wildlife
- Yampa/White/Green Basin Roundtable
- Colorado Water Conservation Board
- Colorado River Water Conservation District
- Tri-State Generation and Transmission Association, Inc.
- Nature Conservancy

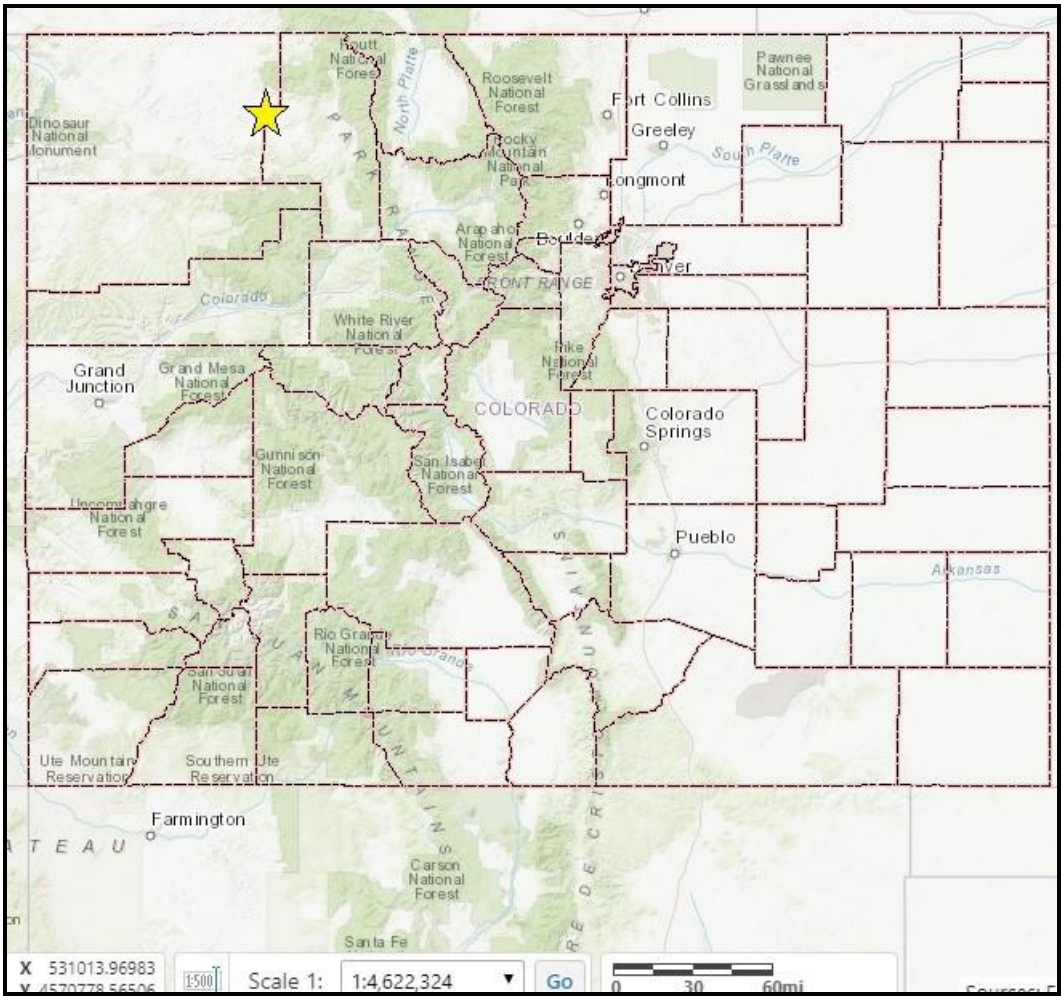


Photo 1. Location of Phase 1 project area within the state of Colorado.

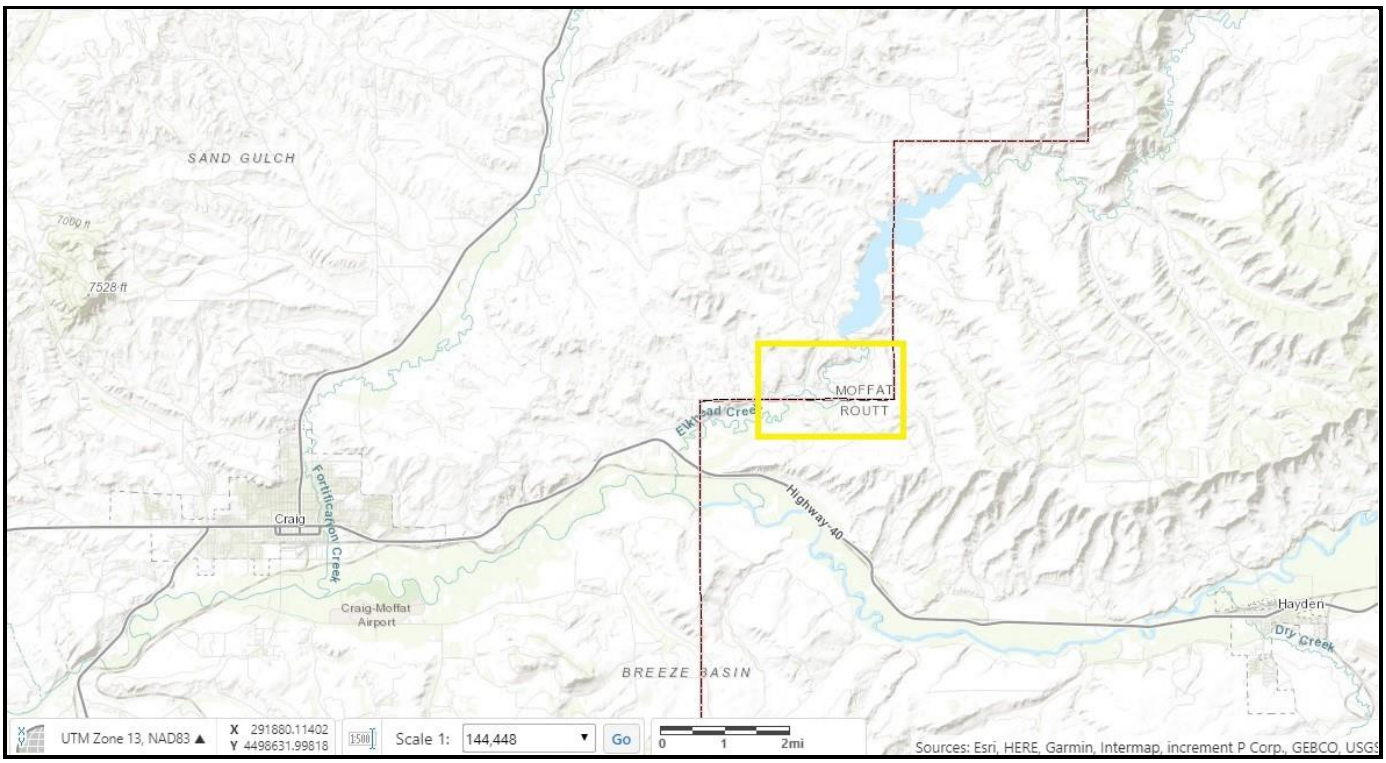


Photo 2. Location of Phase 1 project area, relative to the towns of Craig and Hayden, CO.

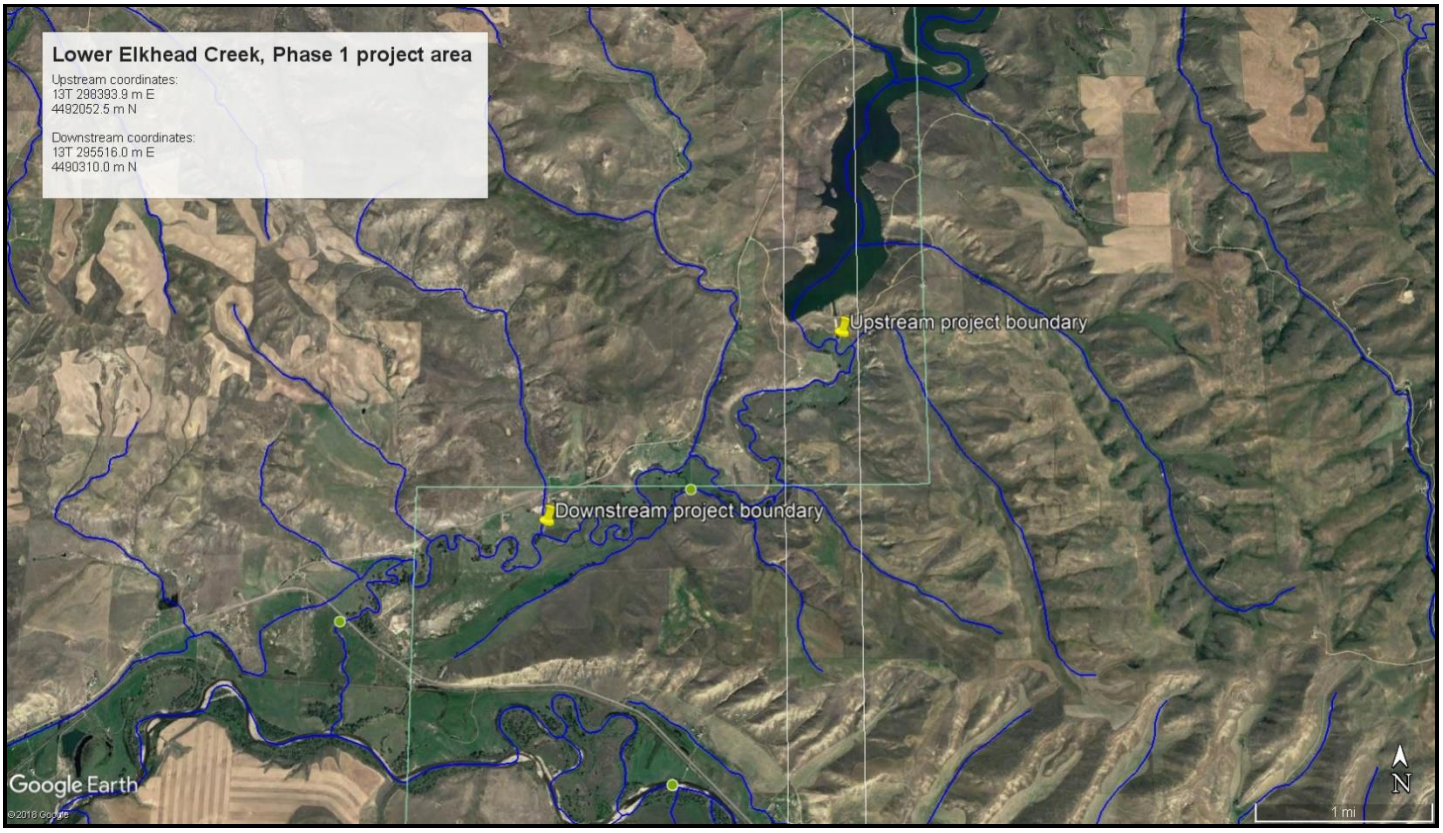
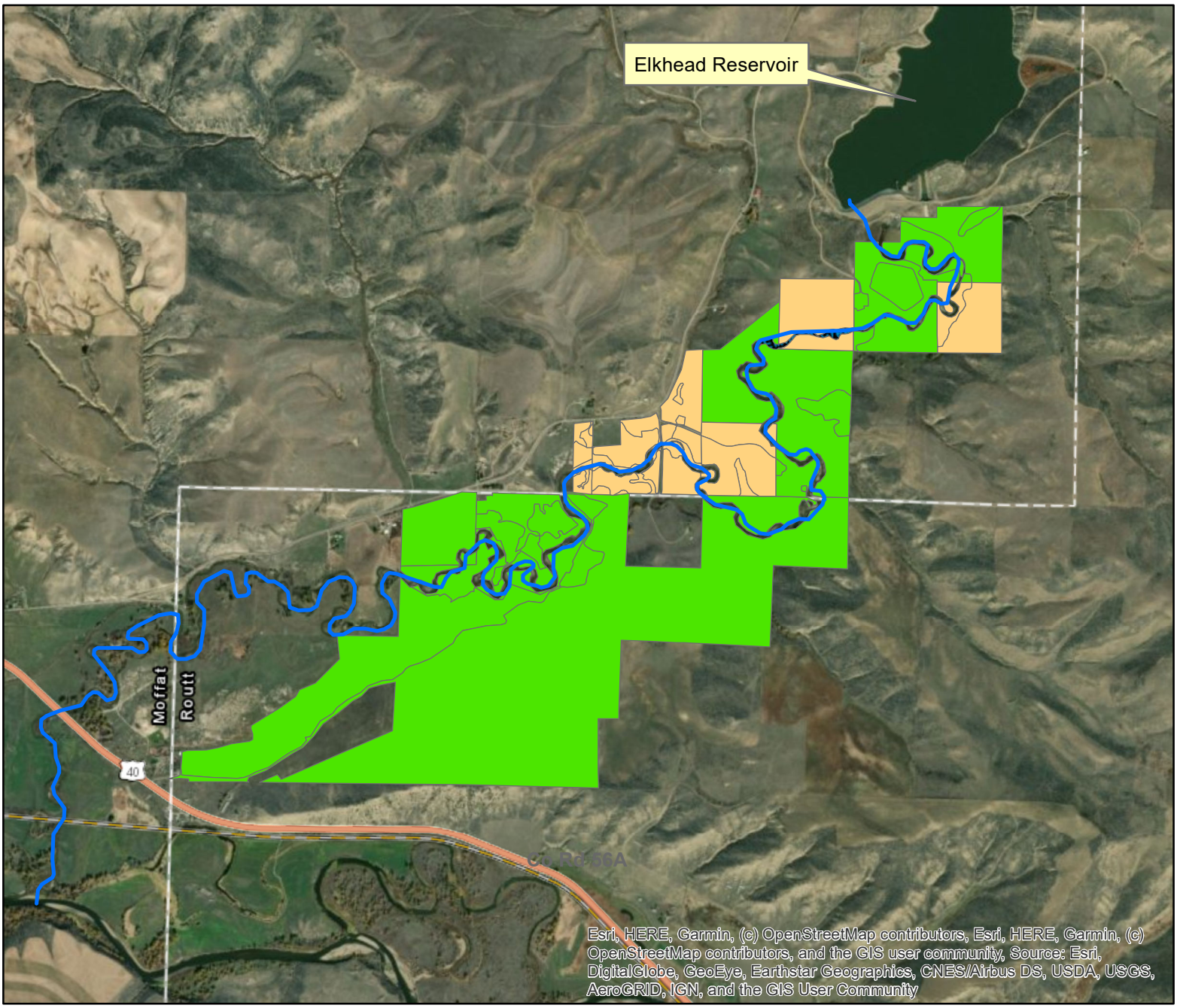


Photo 3. Upstream and downstream coordinates of the Phase 1 project area.

Lower Elkhead Creek Restoration Project
Phase 1

Date: 09/25/19
Counties: Moffat and Routt



Legend

- Surveyed
- Unsurveyed
- Elkhead Creek

N

0 0.25 0.5 1 Miles

Evidence of excessive bank erosion and habitat degradation on lower Elkhead Creek (photos taken with permission from private landowners, Spring 2018).

1. Steep vertical banks and floodplain disconnection.

2. Continued bank erosion and loss of bank stabilizing vegetation.

3. Looking upstream at the Elkhead Reservoir spillway and adjacent agricultural land.

4. Excessive erosion putting existing irrigation infrastructure at risk.

Yampa/White/Green BRT

Application: Project Budget Timeline	Section 3 of 3

Please fill out the following budget and budget timeline table. For the Basin/State SWRF Grant desired date please indicated when you would like your grant application heard by the CWCB board (please review the CWCB WSRF grant guidelines for these dates). For the matching funds please indicate the latest date a matching grant will be awarded.

BUDGET / GRANT TIMELINE			
Item:	**Amount:**	**Desired Date:**	**% of Total Project**
Basin WSRF Grant Amount	$50,000	November 2019	3.5%
State WSRF Grant Amount	$150,000	February 2020	10.4%
Matching Funds	$1,130,000	July 2020	80.0%
In - kind Match	$119,000	**NA**	
Project Total:	$1,449,000	July 2020	**100%**

Please fill out the matching funds table and add rows as needed. This table should list all matching cash provided by applicant, partners and other grants. The desired approval date column should list when the applicant will know if the funds are approved by other grantors. The final column should list if the funds are already secured, in process of being secured or will be requested after the Roundtables approval of funds.

Matching Funds/Grant and Timeline			
Matching Fund/Grant Entity	**Amount**	**Desired Approval Date:**	**Funds Secured/In process/Requested after Roundtable approval**
Applicant:	$5,000	September 2019	**Secured**
NRCS	$700,000 ($45k secured)	May 2020 - May 2021	**In progress**
U.S. Fish & Wildlife Service (Partners Program)	$5,000	December 2019	**Secured**
CWCB Watershed Restoration grant program	$100,000	March 2020	**In progress**
CPW Wetlands grant program	$150,000	October 2019	**In progress**
Tri-State	TBD	November 2019	**In progress**
Colorado River Water Conservation District	$5,000	December 2019	**In progress**
City of Craig	TBD	December 2019	**In progress**
The Nature Conservancy	TBD	December 2019	**In progress**
Private landowners	$65,000	May 2020	**In progress**
TOTAL:	$1,130,000		

Please fill out the In-kind Matching fund table describing who, amount and what the in-kind match is.

In-kind Match and Timeline		
In-kind Matching Entity	**Amount**	**Description**

Yampa/White/Green BRT

Applicant:	$4,000	Pre- and post-porject monitoring activities, organizing demonstration project field days and outreach, etc.
Private landowners	$9,000	Riparian vegetation harveting and/or establishment, fence building
NRCS	$105,000	Field work, surveying, engineered design work
TOTAL:	$119,000	