MEMORANDUM

To: CCBWQA Board of Directors
CC: Jane Clary, Wright Water Engineers, CCBWQA Technical Manager
From: Elysa Loewen, Pollution Abatement Project Manager
Date: July 17, 2025
Subject: Cherry Creek Upstream of Scott Ave – Project Summary

Project Background:

The Cherry Creek stabilization project upstream of Scott Avenue was identified and requested as a project by Douglas County in 2019. The project was also identified as a priority project as published in the Cherry Creek Major Drainageway Plan (November 2022) which included a site assessment of Cherry Creek in completed by Muller Engineering Company in 2020.

Muller was also selected to design the stream stabilization upstream of Scott Avenue in 2020, which was completed in 2023. Naranjo Civil Constructors was selected by the project team for construction.

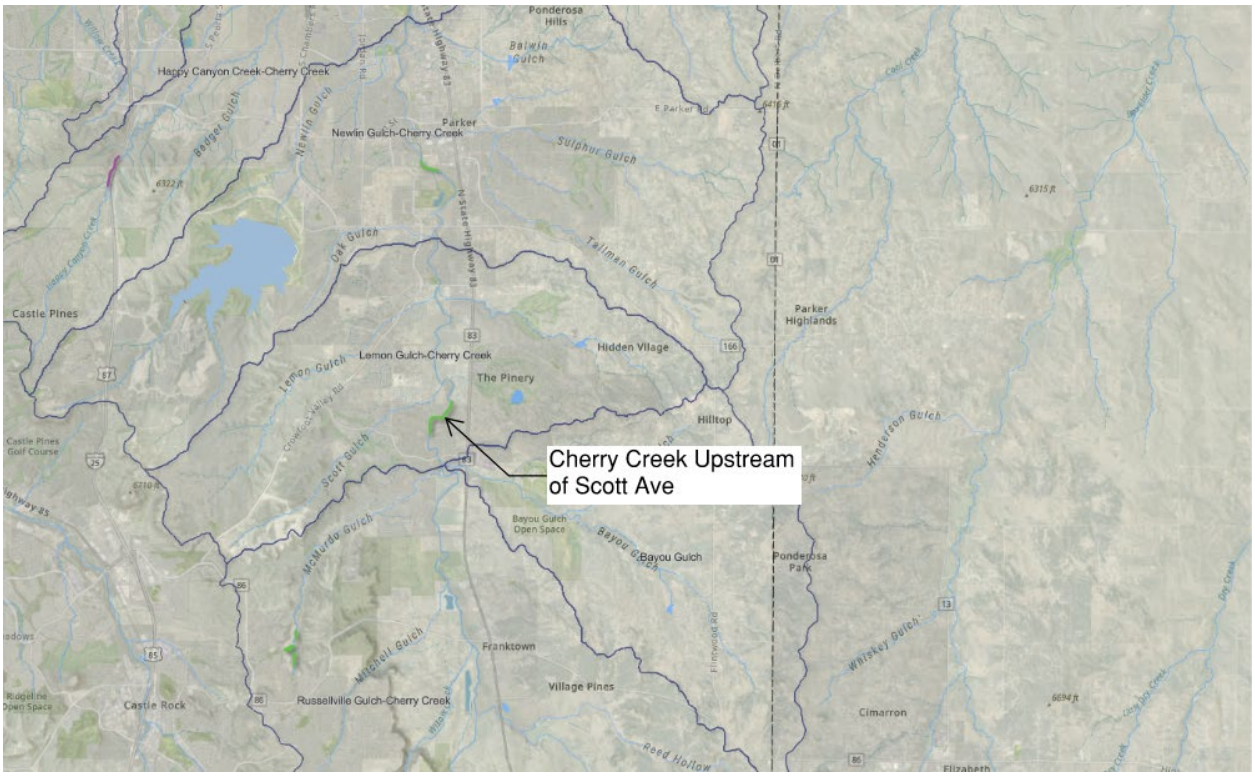

Figure 1: Project Vicinity Map (1 of 2)

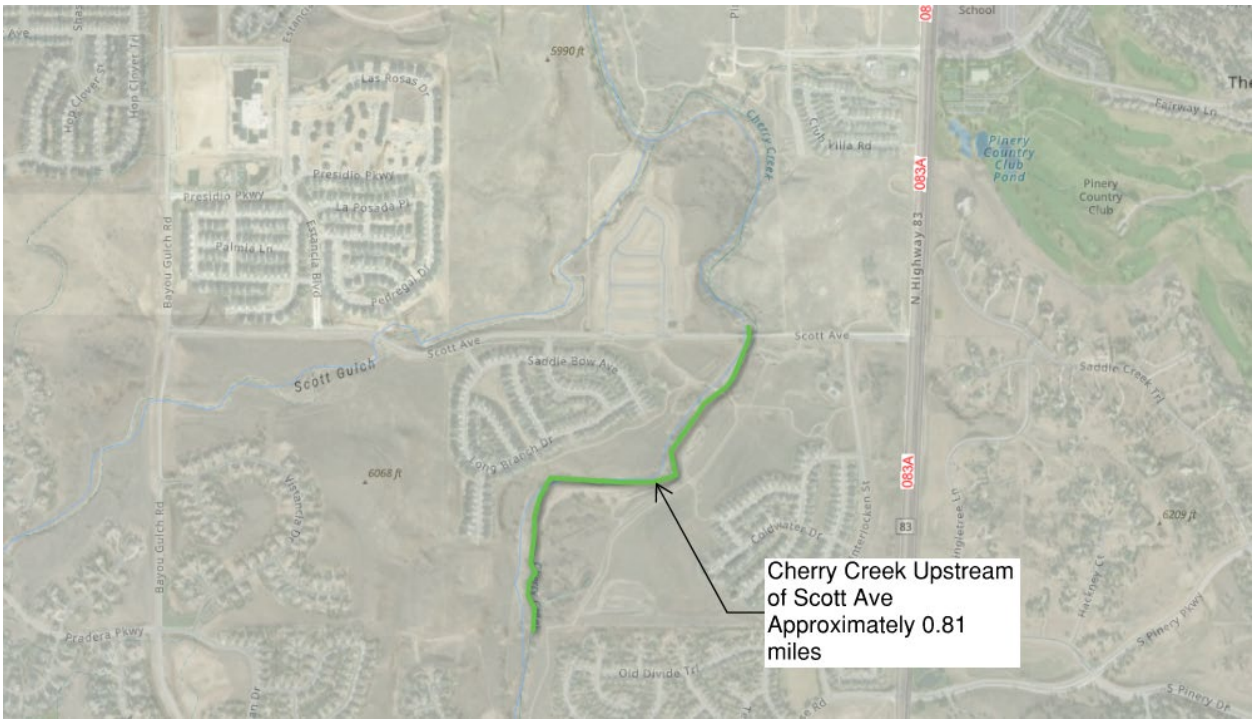

Figure 2: Project Vicinity Map (2 of 2)

Existing Conditions

Existing water quality conditions along Cherry Creek Upstream of Scott Avenue included narrow floodplain benches with an incised channel eroding channel with moderate disconnectivity and moderate vegetation density. The overall existing channel rating in the Cherry Creek Major Drainageway Assessment (2022) was considered a 2 (ranking of 1-5). The potential lift to water quality with improvements was estimated to increase water quality to a score of 4.8 (+3.0).

Priority 1							
	Com Val	Hydro	Hydra	Geom	Veg	WQ	Avg
Existing Rating	2	5	2.5	2	2	2	2.6
Potential Rating	5	5	4	5	5	5	4.8
Potential Lift	3	0	1.5	3	3	3	2.3

Figure 3: Cherry Creek Major Drainageway Plan - Cherry Creek at Scott Road Assessment

Figure 4: Existing Incised Channel (2020)

Figure 5: Existing Eroded Channel Bank (2020)

Design Approach

The design approach to stream water quality improvements was to utilize a higher functioning lower maintenance (HFLM) design approach to stabilize the active channel to prevent existing and future erosion, improve connection to overbanks to reduce channel shear stress and enhance riparian and upland vegetation.

Construction

Construction started in Fall 2024 and was substantially completed in May 2025.

Funding

The project was funded by Mile High Flood District (35%), Douglas County (41%) and CCBWQA (24%). This project was led by Mile High Flood District. The project total budget was $5.48 million and actual cost to date is $4.88 million.

Water Quality Benefits

The proposed stream restoration benefits the water quality in Cherry Creek and ultimately Cherry Creek Reservoir by reducing bank and bed erosion which immobilizes phosphorus in the adjacent soils. It is estimated that this 0.81-mile-long project will immobilize an estimated 73 pounds of phosphorus annually.

Summary

Water Quality Benefit of Phosphorous reduction ≈ Estimated 73 pounds of phosphorus per year
Total Budgeted Cost = $5.48 Million
Total Actual Cost*= $4.88 Million
Authority's Share = $1.309 Million
Engineer: Muller Engineering Company
Contractor: Naranjo Civil Constructors
*Based on costs incurred to date

Enclosure: Post Project Photos

Post Project Photos

Figure 6: Cherry Creek Looking Downstream at Upstream Project Limits (Courtesy of Naranjo Civil Constructors)

Figure 7: Central Portion of Cherry Creek Project Looking North (Courtesy of Naranjo Civil Constructors).

Figure 8: Cherry Creek at Downstream Limits of Project (Courtesy of Naranjo Civil Constructors)