Apple Valley River Restoration Project

Project Narrative

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Prepared for:

the Watershed Center

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LEFT HAND EXCAVATING

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Introduction & Background

The Watershed Center is implementing a design/build ecological restoration project on North St. Vrain Creek and hired Left Hand Excavating and their team, including Biohabitats, to design and construct the project. This project is the result of coordination between The Watershed Center (TWC); Boulder County Parks & Open Space (BCPOS); surrounding landowners; and regional partners including City of Longmont, Colorado Parks and Wildlife (CPW), St. Vrain and Left Hand Water Conservancy District (SVLHWCD), Town of Lyons, and Trout Unlimited (TU).

Funding is provided by the Colorado Department of Public Health and Environment (CDPHE) 319 Nonpoint Source Project Grant, Colorado Water Conservation Board (CWCB) Watershed Restoration Wildfire Ready Watersheds Program, Natural Resources Damage (NRD) Program Assessment Funds, and local partners including the St. Vrain Left Hand Water Conservancy District (SVLHWCD) and St. Vrain Anglers chapter of TU. Collectively, these funding sources support the following activities:

- control nonpoint source pollution, including post-fire sedimentation
- achieve and maintain beneficial uses of waters such as conditions for fish and wildlife and municipal and agricultural water quality
- reduce the impacts of post-wildfire hazards (e.g. debris flows, erosion, flooding) on values at risk (homes, infrastructure, water resources)
- restore and/or enhance aquatic habitat for recovering fish populations impacted by the April 2021 tanker spill on this stretch of North St. Vrain Creek

Prioritization of this project occurred through a collaborative process involving partners from across the St. Vrain watershed. Local partners, including BCPOS, City of Longmont, CPW, SVLHWCD, Town of Lyons, and TU, worked together to identify projects that address shared watershed priorities such as improving fish and wildlife habitat, enhancing water quality, and reducing future wildfire and flood impacts to communities and water resources.

Within that shared framework, this site emerged as a high-priority location because it lies within the reach impacted by the 2021 tanker spill and contains open floodplain with potential for habitat enhancement. Notably, the spill caused a fish kill extending more than four miles downstream and had significant impacts on local residents. Community members, including neighbors in Apple Valley, expressed their desire to see settlement funds used to support ecological recovery in the affected corridor. Project goals, and the actions needed to achieve them, were developed collaboratively to reflect multiple perspectives, meet community needs, and deliver lasting ecological benefits.

This project proposes to further restore floodplain function through more frequent channel overtopping, improving the site's hydrologic connection with the creek. The goals of this project are as follows:

- increase ecological and geomorphological complexity
- improve resilience of the North St. Vrain Creek corridor and associated water resources upstream of communities, with consideration for flood, drought and high wildfire risk

- protect and improve permanent and temporary aquatic habitat within an undeveloped floodplain
- improve fish population recovery following the 2021 tanker spill
- improve ecological conditions for fish, wildlife, and water quality

Resilience and habitat will be attained through a process-based design approach that focuses on overall corridor function, particularly floodplain processes including more frequent inundation, infiltration, and expansion of riparian vegetation. The project will strategically lower parts of the floodplain to allow more frequent flow activation during runoff or different flood events; provide multiple elevational zones that support various riparian communities; and create additional complexity, including low-tech process-based restoration features (LTPBR) (e.g., wood, beaver mimicry, vegetation) for improved habitat. An additional goal is to complete the project efficiently and cost effectively within the established timeframe.

Work to date includes the following: The Watershed Center and the design/build team developed concept drawings; completed field visits; held a community meeting; coordinated with project partners, including BCPOS; and developed the draft plans. BCPOS, landowners, neighbors, and project partners have reviewed and provided feedback on the concept drawings and draft plans. Construction is expected to begin in September 2026 with an estimated duration of 12 weeks. Additional planting may occur in Spring 2027.

This narrative accompanies the 30% draft design drawings, which include the following items:

- Cover Sheet
- General Notes
- Sheet Index
- Existing Conditions (2 sheets)
- Proposed Conditions (2 sheets)
- Details (3 sheets)
- Stormwater Management Plan (2 sheets)
- SWMP Details
- Planting Plan (2 sheets)
- Planting Schedules and Details

Project Description

Impacted Parcel Information

The parcels that will be impacted by this project are listed below in Table 1.

Table 1. Apple Valley River Restoration Parcels

PARCEL ID	PHYSICAL ADDRESS	OWNER ID
120113000009	18976 N ST VRAIN DR UNINCORPORATED	COUNTY OF BOULDER
120113000010	923 APPLE VALLEY RD UNINCORPORATED	DUST JERRY C & SHARON D
120113000026	18972 N ST VRAIN DR UNINCORPORATED	COUNTY OF BOULDER

Site access from Highway 36 is through an additional property: Parcel 120100000028, 1164 APPLE VALLEY RD UNINCORPORATED, M+JB HOLDINGS LLC.

Design

The focus of this project is to restore natural floodplain processes by allowing North St. Vrain Creek to access the floodplain more frequently. Improved hydrologic connectivity would be accomplished through strategic grading in critical locations that allow overtopping to occur almost every year (during typical seasonal high flows). Floodplain activation appears to occur at flow levels somewhere between a 10% to 4% chance (or 10-year to 25-year) event, which has not been reported since the 2013 floods. Proposed grading is shown on Proposed Conditions sheets 6 and 7. The material to be excavated will likely be a mixture of sand, gravel, and cobble material. Excavation will lower the ground to connect existing flow paths and create additional low areas that allow for varying hydrologic regimes and habitat types. Proposed waste areas for the material are shown in the plans and described further in the Grading section below.

Wood features of various forms, such as log grade control, beaver mimicry structures, and downed logs, will be placed in various areas to provide and enhance habitat, as well as add roughness that helps slow water velocity, and deposit sediment and nutrients.

The design leaves much of the floodplain undisturbed and makes use of existing topographical features as much as possible.

Revegetation Plan

There are two native seeding zones, upland and riparian, for our revegetation planting plan. The design includes planting groups of shrubs consisting of clusters of five species each. Exact numbers of shrubs are not yet set and will be determined after further discussion. The planting plan balances active seeding and planting with natural plant establishment that is anticipated in the lower parts of the graded floodplain, focusing on soil stability and a natural level of diversity without being overly crowded or complex. Also, we anticipate that field adjustments to the planting zones and plant placement will be necessary to best fit the restored areas. The planting plan is shown on sheets 14 to 16.

There are proposed depressional areas where cottonwood and willow poles/whips will be installed. In addition, the project team will selectively salvage and transplant willow clumps and small shrubs and trees. Any uplands disturbance, such as staging areas, will be seeded and mulched with the upland seed mix. The Watershed Center will conduct maintenance, including weed control and monitoring of vegetation, for three years.

Erosion Control

Work will take place September through November, when creek flows are low. Sediment control BMP's will be used (see plan sheets 11 to 13). Erosion control logs will be placed between the creek and the downgradient edge of grading areas and soil stockpiles, and a vehicle tracking pad will be placed at the site entrance. Tracking onto the highway will be monitored and cleaned if needed. Also, staging and stockpile areas will be located outside of the regulatory floodplain.

Grading

The project will balance the site work and minimize material transport as much as possible. Overall, the design team anticipates a total of approximately 600 cubic yards of cut material and 600 cubic yards of fill material. We will not import any fill material and will not export any cut material to areas outside of this project. (All fill material will be re-purposed cut material or spoiled nearby.) We anticipate placing excess cut material in designated areas in a manner that blends with the existing topography. Some of the material will be used to build up the ground within existing drive and utility access easements, which are shown on the plans (sheets 6 and 7).

Utilities

There are overhead power lines and two power poles on site, which are shown on existing conditions sheet 5; the City of Longmont is the owner. The City also has an abandoned water delivery pipeline that crosses under the southwest part of the site. There are no other known public utilities on site. There is an abandoned well associated with the demolished home site shown on sheet 5. There was also a septic system associated with the house that had been demolished. Its approximate location is also shown on sheet 5.

Traffic Control, Haul Routes, Access Points & Staging Areas

Project access will be off a private drive accessible from a pull-off along Highway 36. The access and staging area are shown on the Stormwater Management Plan sheets (sheets 11 and 12).

Permitting in Progress

The project's interaction with Boulder County Land Use Planning started with the LISU Pre-Application conference meeting that was held on February 23, 2026. Dana Yelton from Boulder County Land Use Department, The Watershed Center, and members of the design/build team (Left Hand Excavating and Biohabitats) were in attendance. Following the meeting, Dana confirmed that all fees would be waived for the Limited Use application if the County was a co-signer, and she agreed that Signed Participation Agreements were acceptable in lieu of title work. We submitted the Historic Preservation Request form to the County Historic Preservation Planner on February 23, 2026.

In addition, the project team is coordinating with the U.S. Army Corps of Engineers for the Section 404 permitting process, including a pre-application meeting on February 4, 2026. We also met with the U.S. Fish and Wildlife Service (USFWS), who, as part of the NRD funding process, has prepared a Biological Opinion and Section 106 report, which is currently under review. Closer to construction, the project team will obtain CDOT, CDPHE stormwater, and Boulder County stormwater permits for the project.