Valle Vidal Aquatic Organism Passage Project

La Cueva Creek AOP



Turner Creek AOP



Fisheries Division









Project Contacts



Alyssa Radcliff Fisheries Biologist Carson National Forest Alyssa.Radcliff@usda.gov



Juliet Smith Northern NM Project Manager juliet.smith@tu.org



Corey Webster Fish Habitat Coordinator Corey.Webster@dgf.nm.gov

Fisheries Division



Project Location

- Carson National Forest, Questa Ranger
 District, Valle Vidal Unit
- Taos County
- 20 miles southeast of Costilla, NM on Forest RD 1900

Fisheries Divis



Project Background

- Carson National Forest has partnered with Trout Unlimited to complete designs.
- NMDGF will purchase fish passage structures for both locations
- Construction Start Fall 2025
- Duration- 2 months





Current Conditions

- Current culverts prevent fish passage to and from Costilla Creek
- Native fish present in both creeks
- No non-native species in both creeks due to previous restoration efforts
- Public angling for Rio Grande Cutthroat Trout

Fisheries Division

Turner Location





La Cueva Location

Project Purpose

Finish Connectivity in Costilla Watershed

- Mimicking Natural Channels:
 - Replicate the physical characteristics of the natural stream within the crossing structure, including channel dimensions, substrate, and bed material.
- **Promote fish passage:**
 - By replicating natural stream conditions, stream simulation aims to ensure that fish and other aquatic organisms can easily navigate through the structure.
- Restoring Ecological Processes:
 - Stream simulation strives to restore ecological processes, such as sediment transport, debris passage, and hydraulic conditions, within the passage structure.
- Reducing Maintenance Needs:
 - Stream simulations are designed to have larger sizes, which decreases the likelihood of plugging and overtopping, ultimately reducing long-term maintenance needs.

Fisheries Division



Fish Passage Structure Design

La Cueva Creek: 19'-0" Span, 6'-1" Rise Aluminum Structure Plate Box fish passage structure with HL-93 Loading, R2 Shell Type, and Full Metal Invert. 40.75 linear feet

Turner Creek: 13'-10" Span, 5'-5" Rise Aluminum Structural Plate Box fish passage structure with HL-93 Loading, R2 Shell Type, and Full Metal Invert. 36.25 linear feet

Fisheries Division





Project Summary-Estimated Cost \$225,000

- Purchase fish passage structures for La Cueva Creek and Turner Creek
- Delivery and staging of both structures.



Fisheries Division