

**COLORADO**Colorado Water
Conservation Board

Department of Natural Resources

Colorado Water Conservation Board

Water Plan**Water Project Summary**

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| Name of Applicant | Trout Unlimited - National |
| Name of Water Project | Illinois and Willow Creek Restoration Project |
| Grant Request Amount | \$351,106.50 |
| Primary Category | \$351,106.50 |
| <i>Watershed Health & Recreation</i> | |
| Total Applicant Match | \$55,220.00 |
| <i>Applicant Cash Match</i> | \$25,220.00 |
| <i>Applicant In-Kind Match</i> | \$30,000.00 |
| Total Other Sources of Funding | \$151,500.00 |
| <i>UGRWCD</i> | \$1,500.00 |
| <i>Gordon and Betty Moore Foundation</i> | \$100,000.00 |
| <i>UGRWCD</i> | \$50,000.00 |
| Total Project Cost | \$557,826.50 |

Applicant & Grantee Information

Name of Grantee: Trout Unlimited - National
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Organization Contact: Jesse Bryan
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Organization Contact - Alternate: Tanner Banks
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Grant Management Contact: Jesse Bryan
Position/Title: Central Colorado AML Project Manager Email: jesse.bryan@tu.org
Phone: 385-290-0165

Description of Grantee/Applicant

Trout Unlimited (TU) is the nation's largest cold-water conservation organization with approximately 150,000 volunteers and roughly 277 employees nationwide, working to protect, reconnect, restore and sustain America's fisheries. TU's volunteers and their local chapter groups work on a variety of initiatives that meet the unique needs of their watersheds.

Type of Eligible Entity

- ☐ Public (Government)
☐ Public (District)
☐

- ☒ Public (Municipality)
- ☐ Ditch Company
- ☐ Private Incorporated
- ☐ Private Individual, Partnership, or Sole Proprietor
- ☒ Non-governmental Organization
- ☐ Covered Entity
- ☐ Other

Category of Water Project

- ☐ Agricultural Projects
Developing communications materials that specifically work with and educate the agricultural community on headwater restoration, identifying the state of the science of this type of work to assist agricultural users among others.
- ☐ Conservation & Land Use Planning
Activities and projects that implement long-term strategies for conservation, land use, and drought planning.
- ☐ Engagement & Innovation Activities
Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website.
- ☒ Watershed Restoration & Recreation
Projects that promote watershed health, environmental health, and recreation.
- ☐ Water Storage & Supply
Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging existing reservoirs to restore the reservoirs' full decreed capacity and Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap.

Location of Water Project

Latitude 38.782850
 Longitude -106.488850
 Lat Long Flag Precise coordinates: Project coordinates are readily definable and precisely define the location of the project
 Water Source
 Basins Gunnison
 Counties Gunnison
 Districts 62-Upper Gunnison River

Water Project Overview

Major Water Use Type Environmental
 Type of Water Project Design / Engineering
 Scheduled Start Date - Design 1/1/2026
 Scheduled Start Date - Construction
 Description
 The Willow and Illinois Creek Restoration Project is a comprehensive planning and design initiative led by Trout Unlimited to restore ecological and hydrologic function in two impaired tributary systems within Taylor Park, Colorado. This project directly supports the Colorado Water Conservation Board (CWCB) Water Plan by prioritizing watershed health, aquatic habitat improvement, climate resilience, and collaborative water management.

The project focuses on two primary objectives: (1) the removal of approximately 70,000 cubic yards of legacy dredge spoils from Willow Creek to reestablish natural geomorphic processes across the two miles stream corridor within the HOA, and (2) the reconnection of 0.67 miles of Illinois Creek to its historic floodplain, upwards of 60 acres, to restore hydrologic function, improve aquatic habitat, and enhance flood attenuation. These actions will help reverse decades of degradation, improve sediment continuity, expand floodplain water storage, and increase habitat complexity essential for coldwater fisheries.

The planning effort will integrate hydrologic and geomorphic modeling, engineering design, stakeholder engagement, and coordinated water administration considerations. A competitive Request for Proposal (RFP) process will be used to procure engineering services, ensuring the selection of the most experienced, innovative, and costeffective partner.

Collaboration is central to this project. Trout Unlimited, working closely with the Upper Gunnison River Water Conservancy District (UGRWCD), Gunnison County, Colorado Parks & Wildlife, the U.S. Forest Service, and other community stakeholders, will ensure all design decisions protect senior water rights, enhance watershed resilience, and support the longterm ecological and social values of the Taylor Park basin.

UGRWCD led the development of an initial geomorphic assessment, funded by a Stream Management Planning grant through CWCB, of the Upper Gunnison Watershed identified Willow Creek and Illinois Creek as areas of concern. Trout Unlimited has used the available data from this assessment, along with additional ontheground field review and desktop analysis, to further evaluate existing channel conditions, hydrologic alteration, sediment deposition, and floodplain disconnection. This combined understanding confirms the need for the targeted restoration actions described in this proposal.

Trout Unlimited, in partnership with local stakeholders, has undertaken preliminary investigations to understand the geomorphic conditions and restoration needs of Willow Creek and Illinois Creek. An initial desktop assessment has been completed for both project areas, providing baseline information on channel form and existing impairments. This assessment confirms that legacy dredge impacts, channel incision, and floodplain disconnection are limiting ecological function and degrading aquatic habitat.

These findings reinforce the need for a holistic, processbased restoration strategy that restores natural channel geometry, reestablishes floodplain connectivity, stabilizes streambanks, and improves habitat for coldwater fisheries. A thorough geomorphic assessment will serve as a foundation for engineering design, permitting, and the development of a longterm restoration vision that aligns with CWCB Water Plan goals.

A comprehensive planning and design effort is required to:

- Address major geomorphic instability and habitat degradation.
- Restore natural hydrologic function and floodplain connectivity.
- Incorporate rigorous water rights evaluation in collaboration with UGRWCD.
- Provide detailed design documents that enable implementation-phase grant applications.
- Support long-term stewardship and climate adaptation within the Taylor Park basin.

Without intervention, these systems will continue to degrade, increasing ecological and administrative challenges. This grant allows the project team to generate the necessary engineering, modeling, and stakeholder framework to advance toward construction.

Illinois Creek Project - Trout Unlimited will take the lead in developing the Illinois Creek conceptual designs independently and is requesting minimal support for this reach at this time. This approach is intended to build trust and landowner support for this reach to ensure strong long term partnerships. As a result, the primary

engineering and design focus—and the majority of associated design funding requested in this application will be directed toward the Willow Creek Restoration Reach.

Goals & Objectives

Goal: Restore hydrologic, geomorphic, and ecological function of Willow Creek and Illinois Creek while ensuring protection of senior water rights.

Objectives

1. Conduct hydrologic, geomorphic, and sediment transport analysis.
2. Engineer dredge spoil removal for ~70,000 cubic yards in Willow Creek.
3. Develop floodplain reconnection design for 0.67 miles of Illinois Creek.
4. Protect senior water rights through active coordination with UGRWCD.
5. Use a competitive RFP and bid process to select experienced engineering partners.
6. Advance 60% and 90% design deliverables.
7. Conduct robust stakeholder engagement and integrate public and partner feedback.

Task 1: Stakeholder Engagement

Coordinate with landowners, partners, and regulatory agencies to ensure the project is feasible, supported, and aligned with watershed-scale restoration goals. Stakeholder collaboration is a central component of this project.

Engagement includes:

- UGRWCD: hydrologic model review, water rights protection, administrative alignment.
- Gunnison County: land-use coordination and access planning.
- Colorado Parks & Wildlife: fishery, habitat, and biological considerations.
- USFS & Federal Agencies: permitting coordination.
- Local community & conservation organizations: angling groups, recreation users, landowners.

TU will host periodic coordination meetings, site visits, and design workshops to ensure shared ownership of outcomes.

Task 2: Technical Approach & Methodology

Hydrologic & Geomorphic Assessment

Conduct hydrologic and hydraulic modeling to inform design decisions, evaluate geomorphic responses, and prepare required materials for local, state, and federal permits.

- Collect new survey and topographic data.
- Integrate LiDAR and REM analysis.
- Model flows using 1D/2D hydraulic models.
- Assess floodplain connectivity and sediment transport.

Engineering and Design

A competitive Request for Proposal (RFP) process will be used to select an engineering consultant. Criteria will emphasize creativity, experience in mountain stream restoration, cost-effectiveness, and strong modeling capabilities. Deliverables will include refined conceptual designs, developed alternatives, and prepared engineering-level designs to support cost estimating, permitting, and future construction.

Design phases include:

- Conceptual alternatives development.
- Detailed spoils removal for Willow Creek.
- Grade control, riffle, habitat structures, and bank treatments.
- 60% and 90% engineered design deliverables.

Permitting

The project will require a coordinated permitting strategy to ensure compliance with federal, state, and local regulations. The permitting phase will begin early in design development and continue through final engineering to minimize delays. Key permitting components include:

- Federal Permits: - USACE Section 404 Permit: Required for dredge and fill activities associated with spoil removal, floodplain grading, and channel modifications.
- NEPA Compliance: Triggered when federal lands or federal permits are involved. TU will coordinate with the U.S. Forest Service and other federal agencies as needed.
- State Permits: - CDPHE Section 401 Water Quality Certification: Required to ensure that the project meets state water quality standards. - Stormwater Construction Permit (SCP): Required if ground-disturbing activities exceed one acre during construction.
- Local Permits: - Gunnison County Permits: May include floodplain development review, land use authorization, access agreements, and environmental health requirements.

Task 3: Monitoring and Project Management

This task ensures that the Willow and Illinois Creek Restoration Project is implemented efficiently, transparently, and with the scientific rigor necessary to support design development, permitting, and long-term restoration success. Activities will be led by Trout Unlimited with coordination across all project partners.

Project Management & Coordination

- Oversee day-to-day project operations, schedule management, and contractor coordination.
- Facilitate regular technical meetings with UGRWCD, engineering consultants, Gunnison County, CPW, USFS, and other partners.
- Track scope, performance metrics, and budget status to ensure timely completion of all tasks.
- Maintain clear communication with stakeholders through progress meetings, field visits, and review of draft deliverables.

Monitoring & Data Collection

- Collect updated topographic, hydraulic, and geomorphic field data to support engineering design refinement.
- Integrate available LiDAR, REMs, legacy survey data, and hydrologic datasets.
- Document existing channel geometry, sediment deposition zones, floodplain connectivity, and areas of active erosion.
- Conduct targeted site monitoring throughout the design phase to validate assumptions and refine alternatives.
- Reporting & Documentation
 - Prepare quarterly progress summaries consistent with CWCB reporting requirements.
 - Compile technical memoranda documenting monitoring results, modeling updates, and engineering refinements.
 - Maintain an organized project file including meeting notes, field observations, permitting correspondence, and draft design submittals.
 - Deliver a final task summary outlining accomplishments, findings, and remaining needs for implementation.

Measurable Results

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|--------|---|
| 14,000 | New Storage Created (acre-feet) |
| | New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive |
| | Existing Storage Preserved or Enhanced (acre-feet) |
| | New Storage Created (acre-feet) |
| | Length of Stream Restored or Protected (linear feet) |
| | Length of Pipe, Canal Built or Improved (linear feet) |

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|--|---|
| | Efficiency Savings (dollars/year) |
| | Efficiency Savings (acre-feet/year) |
| 100 | Area of Restored or Preserved Habitat (acres) |
| | Quantity of Water Shared through Alternative Transfer Mechanisms or water sharing agreement (acre-feet) |
| | Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning |
| 1,000 | Number of Coloradans Impacted by Engagement Activity |
| Other | |
| Willow Creek Coordinates: 38.782850, -106.488850 | |
| Illinois Creek Coordinates: 38.875341, -106.557768 | |

Water Project Justification

TU presented Taylor Park priority projects to the Gunnison Basin Roundtable in March of 2025 to be included in future Basin Identified Project (BIP) updates and to inform watershed stakeholders of TU's shared interest in the restoration of Taylor Park headwater streams. The attached communication from Upper Gunnison River Water Conservation District (UGRWCD) ED Sonja Chavez, who has committed to adding both Willow and Illinois Creek to the updated BIP list, includes a letter of support, an in-kind match, and a potential cash match for the upcoming UGRWCD grant cycle.

This application demonstrates strong alignment with CWCB Water Plan Grant criteria through its collaborative, science-based, and feasibility-driven approach. The effort is guided by a diverse stakeholder group—Trout Unlimited, local landowners, Gunnison County, the Upper Gunnison River Water Conservancy District, Colorado Parks and Wildlife, and the U.S. Forest Service, and municipal users—all of whom will participate in design review, project priorities, and project coordination, and outcomes to benefit Taylor Park source water. This inclusive structure ensures that watershed interests are represented and that participation remains open to all partners.

The project aims to restore natural ecological and geomorphic processes by re-establishing hydrologic connectivity, improving channel stability, enhancing riparian vegetation, and supporting cold-water fisheries. Broad regional support demonstrates community commitment and ensures alignment with local and state resource objectives.

The proposed design and implementation pathway is both financially and technically feasible, and TU intends to support this deliverable with a competitively procured qualified engineering team, confirmed landowner participation, and matching contributions that meet state match requirements. The engineering and modeling tasks build on prior watershed-scale assessments and planning efforts, ensuring the design is grounded in existing data and analyses.

Finally, all recreation-related components—such as improved angler access—are developed to avoid ecological harm and instead improve stream function, habitat resilience, and long-term watershed health.

Below are examples of specific goals from the Colorado Water Plan the project aligns with specific partner actions.

1. Thriving Watersheds – Partner Actions

- Implement locally driven watershed restoration projects that improve river health, floodplain function, and sediment processes.
- Advance multi-benefit nature-based solutions such as floodplain reconnection, riparian restoration, and

hydrologic function recovery.

- Develop and execute Stream Management Plans (SMPs) and watershed assessments that inform restoration design and flow needs (using the CWCB funded SMP geofluvial assessment).
- Enhance aquatic habitat and cold-water fisheries through channel reconstruction, sediment management, and riparian improvements.
- Support local watershed partnerships that integrate water users, landowners, conservation organizations, and agencies.
- Address legacy impacts (e.g., dredge spoils, incision, altered hydrology) through targeted restoration actions.

2. Resilient Planning – Partner Actions

- Promote climate-resilient watershed design using data-driven modeling and geomorphic assessment.
- Develop implementable restoration designs (30–90% engineering) to prepare projects for construction funding.
- Use hydraulic, hydrologic, and geomorphic modeling to support future permitting and adaptive management.
- Strengthen community preparedness for hydrologic variability by restoring natural attenuation, storage, and channel resilience.

3. Vibrant Communities – Partner Actions

- Engage local governments, water districts, and state/federal partners in collaborative project development.
- Integrate restoration with local recreation and open space values while improving ecological function.
- Provide science-based planning support that benefits local water administration (UGRWCD) and resource agencies (CPW, USFS).
- Increase public awareness and support for watershed stewardship through stakeholder workshops and site visits.

4. Shared Vision & Collaborative Capacity – Partner Actions

- Strengthen cross-jurisdictional collaboration between TU, UGRWCD, Gunnison County, CPW, USFS, landowners, and community stakeholders.
- Promote transparent project planning processes, including RFP-based engineering selection and open stakeholder involvement.
- Leverage diverse funding sources including CWCB, private match, in-kind contributions, and potential CRSC support.
- Build long-term partnerships for implementation, monitoring, and adaptive management across the Taylor Park basin.

Related Studies

No Related Studies provided

Taxpayer Bill of Rights

No Tax Bill of Rights provided