COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Last Updated: July 2019

## Colorado Water Conservation Board

**Water Plan Grant Application**

## Instructions

To receive funding for a Water Plan Grant, applicant must demonstrate how the project, activity, or process (collectively referred to as "project") funded by the CWCB will help meet the measurable objectives and critical actions in the Water Plan. Grant guidelines are available on the CWCB website.

If you have questions, please contact CWCB at (303) 866-3441 or email the following staff to assist you with applications in the following areas:

| | |
|---|---|
| Water Storage Projects | Anna.Mauss@state.co.us |
| Conservation, Land Use Planning | Kevin.Reidy@state.co.us |
| Engagement & Innovation Activities | Ben.Wade@state.co.us |
| Agricultural Projects | Alexander.Funk@state.co.us |
| Environmental & Recreation Projects | Chris.Sturm@state.co.us |

**FINAL SUBMISSION: Submit all application materials in one email to *waterplan.grants@state.co.us* in the original file formats [Application (word); Statement of Work (word); Budget/Schedule (excel)]. Please do not combine documents. In the subject line, please include the funding category and name of the project.**

## Water Project Summary

| | |
|---|---|
| Name of Applicant | Lincoln Hills Cares |
| Name of Water Project | Replicable Youth-Driven Innovation Engine to Help Make the South Platte River Swimmable and Fishable |
| CWP Grant Request Amount | $43, 340 |
| Applicant Funding Contribution: Cash Match | $43,341 |
| Total Project Cost | $86,681 |

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| Applicant & Grantee Information | |
|---|---|
| Name of Grantee(s) | Lincoln Hills Cares |
| Mailing Address | 2590 Welton Street #279 Denver, Colorado 80205 |
| FEIN | 81-4552726 |
| Organization Contact. | Shane Wright |
| Position/Title | Fundraising/Program Development |
| Email | shane@lincolnhillscares.org |
| Phone | 303-815-7613 |
| Grant Management Contact | Shane Wright |
| Position/Title | Fundraising/Program Development |
| Email | shane@lincolnhillscares.org |
| Phone | 303-815-7613 |
| Name of Applicant (if different than grantee) | |
| Mailing Address | |
| Position/Title | |
| Email | |
| Phone | |

| Description of Grantee/Applicant |
|---|
| Provide a brief description of the grantee's organization (100 words or less). |
| Lincoln Hills Cares develops the next generation of young leaders through outdoor education and recreation, cultural history exploration, and workforce advancement. Our programs empower youth who may not otherwise have the opportunity, due to economic, social or family circumstances.<br><br>We aim to fulfill our mission through ongoing environmental education, preservation practices and unique programming. LHC strives to provide innovative experiences through focused programs and curriculum. Lincoln Hills traces its beginnings to 1922 when it was established as the country's only western resort accessible to African-Americans. |

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| Type of Eligible Entity (check one) | |
|---|---|
| | **Public (Government):** Municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient. |
| | **Public (Districts):** Authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises. |
| | **Private Incorporated:** Mutual ditch companies, homeowners associations, corporations. |
| | **Private Individuals, Partnerships, and Sole Proprietors:** Private parties may be eligible for funding. |
| X | **Non-governmental organizations (NGO):** Organization that is not part of the government and is non-profit in nature. |
| | **Covered Entity:** As defined in Section 37-60-126 Colorado Revised Statutes. |

| Type of Water Project (check all that apply) | |
|---|---|
| | Study |
| | Construction |
| | Identified Projects and Processes (IPP) |
| X | Other: STE(A)M/Citizen-Science Youth Innovation Engine |

| Category of Water Project (check the primary category that applies and include relevant tasks) | | |
|---|---|---|
| | | |
| | Water Storage - 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..<br>*Applicable Exhibit A Task(s):* | |
| | Conservation and Land Use Planning - Activities and projects that implement long-term strategies for conservation, land use, and drought planning.<br>*Applicable Exhibit A Task(s):* | |
| X | Engagement & Innovation - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website.<br>*Applicable Exhibit A Task(s):* | |
| | Agricultural - Projects that provide technical assistance and improve agricultural efficiency.<br>*Applicable Exhibit A Task(s):* | |
| | Environmental & Recreation - Projects that promote watershed health, environmental health, and recreation.<br>*Applicable Exhibit A Task(s):* | |
| | Other | Explain: |

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| Location of Water Project | |
|---|---|
| Please provide the general county and coordinates of the proposed project below in **decimal degrees**. The Applicant shall also provide, in Exhibit C, a site map if applicable. | |
| County/Counties | City and County of Denver and other cities and counties that are beneficiaries of the waters of the South Platte River Basin |
| Latitude | |
| Longitude | |

| Water Project Overview |
|---|
| Please provide a summary of the proposed water project (200 words or less). Include a description of the project and what the CWP Grant funding will be used for specifically (e.g., studies, permitting process, construction). Provide a description of the water supply source to be utilized or the water body affected by the project, where applicable. Include details such as acres under irrigation, types of crops irrigated, number of residential and commercial taps, length of ditch improvements, length of pipe installed, and area of habitat improvements, where applicable. If this project addresses multiple purposes or spans multiple basins, please explain.<br>The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, Other Funding Sources/Amounts and Schedule. |

Lincoln Hills Cares (LHC) in partnership with El Laboratorio and Colorado State University seek funding to support our Environmental Careers and Education Pathways Program for Colorado's Underrepresented Youth. The program is focused on water education and the protection and restoration of the South Platte River.

Technically, the whole program is an innovation engine that brings together teams of underrepresented high school and college youth in a replicable summer program characterized by:

- Radical integration of culturally sensitive citizen science with hands-on project-based learning
- Focuses on protecting and restoring rivers for the people, and on the "One Water" sustainability paradigm
- Meaningful engagement and interaction between our youth water solution-makers, community, decision-makers, and subject matter experts
- Regained wonder of nature and of Colorado's rivers by underserved youth who often lack access to safe and meaningful outdoor experiences.

By "radical integration of culturally sensitive citizen science" we mean conducting a co-created process that engages the residents and stakeholders of the Globeville Elyria Swansea (GES) neighborhoods in citizen science activities. This would be analogous to a Level 4-Extreme Citizen Science co-created process under Hacklay, 2013. Specifically, our 5 iterative innovation workshops would cover all of the tasks (1-5) under Table 1 below.

Table 1. Co-Created Process to Engage Local Community in Citizen-Science Activities.

| Co-Created Workshop Tasks | Level 4 Extreme Citizen Science | Level 3 Participatory Science | Level 2 Distributed Intelligence | Level 1 Crowdsourcing |
|---|---|---|---|---|
| 1. Define of research question/problem | ✓ | ✓ | | |
| 2. Generate solutions through innovation process | ✓ | ✓ | | |
| 3. Adopt priority areas for gathering information and river restoration | ✓ | ✓ | | |
| 4. Disseminate information to local community and regulatory agencies | ✓ | | ✓ | ✓ |
| 5. Analyze results and adopt next steps related to further inquiries and actions | ✓ | | ✓ | |

Levels 1-4 from Haklay, Mordechai (Muki). 2013. 'Citizen Science and Volunteered Geographic Information: Overview and Typology of Participation'. In Crowdsourcing Geographic Knowledge:Volunteered Geographic Information (VGI) in Theory and Practice.

*Cultural sensitivity in stakeholder engagement*

Elyria Swansea has one of the highest Latino populations in any neighborhood in Denver at 84%. Globeville's population is about 68% Latino. The GES neighborhoods possess a strong cultural identity centered on family and community. Residents have identified as top priority having a built environment that supports healthy lifestyles and opportunities of connecting with nature, especially for children and youth. The "culturally sensitive" component of "radical integration of culturally sensitive citizen science" means that we will strive to engage with GES neighborhood residents and stakeholders in culturally sensitive ways (mindful of language and cultural barriers and values).

Students participating in the program will:

- Gain a broader perspective on environmental careers and educational opportunities by working with subject matter experts on real projects
- Have transformative, nature-based experiences solving river and water management problems important to local communities
- Be exposed to a wide and deep professional water network that can connect them to future projects, education, and jobs
- Be better prepared and motivated to apply to colleges and graduate schools because of enriched project-based STEAM coursework
- Gain 21st century learning and career skills—such as teamwork, communications, creativity, and critical thinking—that can motivate them to stay in school and be leaders in their schools, professions, and communities.

**Youth-Led Solution-Making Engine for the South Platte River, Colorado**
The project will generate from 1-4 citizen science projects and/or water solutions for the riparian habitats and neighborhoods that are part of the Urban South Platte River Corridor ecosystem in Denver, Colorado. The citizen science proposals will be codeveloped with local neighborhood residents and stakeholders. , and will be presented at the annual Colorado State University-National Western Center Youth River Festival in Denver to be held in August of 2020 at Herond Pond/Heller/Carpio-Sanguinette Park. The youth-led River Festival is the capstone project for 20 youth that will be employed and participating in this project.

**Viable Fundable Innovative Solutions**
Based on the metrics and solutions that our students have already achieved in our Summer 2019 pilot Pathways program with El Laboratorio and Colorado State University, we are confident of producing within 6 months at least 1-2 fundable project proposals generated by our students. Importantly, we assume that some of the fundable student projects will result in real-world benefits that will actually create new jobs and environmental leadership opportunities to help students pay their way through College.

| Measurable Results | |
|---|---|
| To catalog measurable results achieved with the CWP Grant funds, please provide any of the following values as applicable: | |
| | New Storage Created (acre-feet) |
| | New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive |
| | Existing Storage Preserved or Enhanced (acre-feet) |
| 2 miles | Length of Stream Restored or Protected (linear feet) |
| | Efficiency Savings (indicate acre-feet/year OR dollars/year) |
| 4 acres | Area of Restored or Preserved Habitat (acres) |
| | Quantity of Water Shared through Alternative Transfer Mechanisms |
| | Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning |
| 1,000 | Number of Coloradans Impacted by Engagement Activity |

| | | |
|---|---|---|
| 100 | Other | Community-wide river restoration Volunteers |
| 140 | | Riparian trees planted |
| 4 acres | | Invasive river species removed |
| 2 | Other | Iterative 1-day **innovation workshops** with neighborhood leaders, youth, and scientists to identify research questions/issues/goals. |
| 3 | Other | Iterative 1-day **innovation workshops** to design & refine innovative research strategies and solutions and provide training for student teachers |
| 1 | Other | 1-day **post implementation/field work worksho**p to analyze results and determine next phase inquiries and actions |

## Water Project Justification

Provide a description of how this water project supports the goals of Colorado's Water Plan, the most recent Statewide Water Supply Initiative, and the applicable Roundtable Basin Implementation Plan and Education Action Plan. The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers).

The proposed water project shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan Framework for State of Colorado Support for a Water Project (CWP, Section 9.4, pp. 9-43 to 9-44;)

**Colorado Water Plan (2015)**
This proposal advances the following goals of the Colorado Water Plan:

Critical Action Plan (Chapter 10)
Chapter 10 of the Colorado Water Plan describes each of Colorado's water values
And high-impact actions culled from a broader set of actions found throughout
the plan.

| Priority Value | Comment: |
|---|---|
| 1. Colorado's Water Plan values a strong environment that includes healthy watersheds, rivers, streams, and wildlife | a. Many of the outputs and outcomes of the project advance a healthy South Platte watershed and River, and healthy wildlife and human neighborhoods along the urban South Platte River corridor |
| | |
| Priority Measurable Objectives | |
| 2. Conservation: Colorado's Water Plan sets a measurable objective to achieve 400,000 acre-feet of municipal and industrial water conservation by 2050. | a. Water education is a foundational component of municipal and industrial water conservation plans in Colorado and the US. Based on the solutions generated by the Summer 2019 Pathways pilot program, we expect many of the solutions generated |

| | |
|---|---|
| | by our students to focus on municipal water conservation education and municipal water conservation policy.<br>b. Assuming the sky is the limit for our students, our project may also generate new high-impact water conserving technologies and strategies for the municipal sector in Colorado. |
| 3. Land Use: Colorado's Water Plan sets a measurable objective that by 2025, 75 percent of Coloradans will live in communities that have incorporated water-saving actions into land-use planning. | a. Based on the priority topics and some of the solutions generated by the Summer 2019 Pathways pilot program, we assume that the issue of equity, clean water/water conservation, and land use development will be front and center in the development of many of the solutions of the innovation engine.<br>b. Some of our solutions can help bring more clarity to important yet generally overlooked strategies to advance equity when water saving actions are incorporated into land use planning. |
| 4. Education, Outreach, and Innovation: Colorado's Water Plan sets a measurable objective to significantly improve the level of public awareness and engagement regarding water issues statewide by 2020, as determined by water awareness surveys. Colorado's Water Plan also sets a measurable objective to engage Coloradans statewide on at least five key. water challenges (identified by CWCB) that should be addressed by 2030 | |

South Platte Basin Implementation Plan (Metro Basin Roundtable, South Platte Basin Roundtable, 2015)
Conservation Education Programs

This proposal also advances critical projects and methods adopted by the South Platte Basin Implementation Plan:

4.3.1 Conservation Projects and Methods
4.3.1.2 Municipal Conservation Plans in Colorado
4.3.1.2.1 Conservation Plan Components

Water education is considered a foundational pillar of municipal water conservation plans by SWSI, the and well-documented M&I Best Practices. Accordingly, all of the municipal water education solutions that we expect will be generated by our students will advance the municipal water conservation planning components that are priority projects and methods under the South Platte Basin Implementation Plan.

## Related Studies

| Please provide a list of any related studies, including if the water project is complementary to or assists in the implementation of other CWCB programs. |
|---|
| |

| Previous CWCB Grants, Loans or Other Funding |
|---|
| List all previous or current CWCB grants (including WSRF) awarded to both the Applicant and Grantee. Include: 1) Applicant name; 2) Water activity name; 3) Approving RT(s); 4) CWCB board meeting date; 5) Contract number or purchase order; 6) Percentage of other CWCB funding for your overall project. |
| |

| Taxpayer Bill of Rights |
|---|
| The Taxpayer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect your application. |
| |

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| Submittal Checklist | |
|---|---|
| X | I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract. |
| Exhibit A | |
| X | Statement of Work(1) |
| X | Budget & Schedule(1) |
| X | Logic Model/Evaluation and Reporting Metrics |
| | Engineer's statement of probable cost (projects over $100,000) |
| X | Letters of Matching and/or Pending 3rd Party Commitments(1) |
| Exhibit C | |
| | Map (if applicable)(1) |
| | Photos/Drawings/Reports |
| | Letters of Support (Optional) |
| | Certificate of Insurance (General, Auto, & Workers' Comp.) (2) |
| | Certificate of Good Standing with Colorado Secretary of State(2) |
| | W-9(2) |
| | Independent Contractor Form(2) (If applicant is individual, not company/organization) |
| Engagement & Innovation Grant Applicants ONLY | |
| | Engagement & Innovation Supplemental Application(1) |

(1) Required with application.
(2) Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.

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# ENGAGEMENT & INNOVATION GRANT FUND SUPPLEMENTAL APPLICATION

## Introduction & Purpose

Colorado's Water Plan calls for an outreach, education, public engagement, and innovation grant fund in Chapter 9.5.

The overall goal of the Engagement & Innovation Grant Fund is to enhance Colorado's water communication, outreach, education, and public engagement efforts; advance Colorado's water supply planning process; and support a statewide water innovation ecosystem.

The grant fund aims to engage the public to promote well-informed community discourse regarding balanced water solutions statewide. The grant fund aims to support water innovation in Colorado. The grant fund prioritizes measuring and evaluating the success of programs, projects, and initiatives. The grant fund prioritizes efforts designed using research, data, and best practices. The grant fund prioritizes a commitment to collaboration and community engagement. The grant fund will support local and statewide efforts.

The grant fund is divided into two tracks: engagement and innovation. The Engagement Track supports education, outreach, communication, and public participation efforts related to water. The Innovation Track supports efforts that advance the water innovation ecosystem in Colorado.

## Application Questions

*The grant fund request is referred to as "project" in this application.

| Overview (answer for both tracks) |
|---|
| In a few sentences, what is the overall goal of this project? How does it achieve the stated purpose of this grant fund (above)? |
| This project serves to address priority municipal water education and water conservation gaps surrounding the urban South Platte River corridor and the neighborhoods and ecosystems that benefit from the South Platte River. Specifically, the project will make the urban South Platte River corridor in the area of the National Western Center a real world citizen science and innovation laboratory for underrepresented youth and 21st Century environmental leaders. |
| Who is/are the target audience(s)? How will you reach them? How will you involve the community? |
| We plan to anchor our youth innovation engine in the Globeville, Elyria and Swansea communities which are some of Denver's oldest neighborhoods, settled in the 1880s around metals smelting and railroad yards. The construction of Interstates 70 and 25 in the 1960s severely impacted these neighborhoods, isolating them from each other and from other parts of Denver. Air, noise and odor pollution from the highways, railroads and heavy industry has created physical challenges to residents' everyday health. Other barriers to good health include lack of access to a grocery store for over 10,000 residents and poor quality sidewalks, bike lanes and access to parks and recreation facilities along the South Platte River. Today the neighborhoods are predominantly Latino and Chicano and possess a strong cultural identity centered on family and community. Residents have identified as top priority having a built environment that supports healthy lifestyles and opportunities of connecting with nature, especially for children and youth.<br><br>The local environmental/public health results of the project will include the following outcomes:<br>● Young environmental leaders and river stewards become citizen-scientists with a voice in |

stormwater management and urban ecosystem planning.
- Underrepresented youth and community members co-create the design and implementation of data gathering activities and strategies to better understand water conservation and improve water quality.
- Citizen science activities have broad based community support and positively affect local residents by improving natural habitat areas of the urban South Platte River identified by residents as priority restoration areas.

Additionally, the local community will be benefitted by the following project outputs:
- 20 youth jobs
- 140 trees
- 4 acres of open space restored
- 4 acres invasive species removal in local watershed
- 2 stream sites sampled and monitored
- 2 miles of riparian restored
- 100 resident volunteering in local habitat restoration and water quality protection activities
- 1,000 local residents educated on healthy rivers and clean environment.

Describe how the project is collaborative or engages a diverse group of stakeholders. Who are the partners in the project? Do you have other funding partners or sources?

The project plan will incorporate to the extent possible the following needs and opportunities identified by local community residents in the official Neighborhood Plans of Globeville, and Elyria and Swansea*:*

Water Quality/Stormwater
- Solve the issue of difficult and non-intuitive entry points to the South Platte River Trail.
- Address drainage and flooding stormwater-related problems in the Globeville-Utah Junction Basin because of lack of adequate infrastructure.
- Exposure to pollution in surface water occurs either by ingestion or through skin contact with the water. The South Platte River often has poor water quality.
- Use existing park areas without affecting existing uses to incorporate water quality treatment features, such as wetlands, to restore wildlife habitat along the river or in Heron Pond.

Habitat Restoration
- Plant trees to beautify their space and to filter harmful particulates from the air.
- Improvements in all parks to make them safer, more accessible and usable.
- Balance open space and park programming needs with water quality opportunities.
- Explore opportunities for green infrastructure within open spaces along South Platte River.
- Encourage ariverside conditions and experiences that further activate and attract visitors to the riverfront and existing parks. These include passive and active recreation experiences, natural and developed edges, public gathering spaces, and destinations to attract regional visitors.

Colorado State University Environmental Careers and Education Pipeline
- Limited employment opportunities.
- There is a unique opportunity related to the National Western Center for Denver Public Schools and Colorado State University to collaborate on a new approach to education. (Elyria Swansea residents)
- Tap collaborative opportunities with Colorado State University through the establishment of educational programs in the area in partnership with the National Western Center. (Globeville residents)

River Festival
- Support existing public festivals bringing community together & look for more opportunities.

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Sources: City of Denver, Globeville Neighborhood Plan, 2016 Update
City of Denver, Elyria Swansea Neighborhood Plan, 2015

Describe how you plan to measure and evaluate the success and impact of the project?

**a. Environmental Results-Outputs/Outcomes (Logic Model):** See *Logic Model-Lincoln Hills Cares* document submitted as an "Other Attachment"

**b. Performance Measurement Plan** –A 50% progress report and a final report will be submitted to update the Project Officer. The reporting will evaluate whether the committed activities and outputs (see Logic Model) are met by the project.

The project manager will use the Milestone Schedule and Project Performance Timeline to weekly track and monitor the performance and progress of the project's Tasks 1-6 activities and outputs.

**c. Sustainability Plan and Community Vision** Project partners will seek input from the project's Community Advisory Committee for the best ways to coordinate planning and implementation of the project and identify future next steps of the initiative in alignment with community planning and visioning processes and relevant community committees and working groups. The project will also seek to advance goals and strategies identified in: City of Denver, Globeville Neighborhood Plan, 2016 Update; City of Denver, Elyria Swansea Neighborhood Plan, 2015. Importantly, the final report will include a Sustainability Plan and Vision for moving the project forward for the next 3 years.

What research, evidence, and data support your project?

City of Denver, Globeville Neighborhood Plan, 2016 Update
City of Denver, Elyria Swansea Neighborhood Plan, 2015
(see relevant sections above)

Describe potential short- and long-term challenges with this project.

The major challenges of our Summer 2019 pilot pathways program has been the timing of the funding received for the Summer project was not able to cover most of the critical project planning work conducted during the months of April and May prior to Summer. Having planning funds available by early 2020 would be ideal for this project.

Please fill out the applicable questions for either the Engagement Track or Innovation Track, unless your project contains elements in both tracks. If a question does not relate to your project, just leave it blank. Please answer each question that relates to your project. Please reference the relevant documents and use chapters and page numbers (Colorado's Water Plan, Basin Implementation Plan, PEPO Education Action Plan, etc.).

## Engagement Track

Describe how the project achieves the education, outreach, and public engagement measurable objective set forth in Colorado's Water Plan to "significantly improve the level of public awareness

and engagement regarding water issues statewide by 2020, as determined by water awareness surveys."

The project will implement best in class photo elicitation protocols to measure the increased water awareness resulting from the education activities.

Describe how the project achieves the other measurable objectives and critical goals and actions laid out in Colorado's Water Plan around the supply and demand gap; conservation; land use; agriculture; storage; watershed health, environment, and recreation; funding; and additional.

Chapter 10 of the Colorado Water Plan describes each of Colorado's water values and high-impact actions culled from a broader set of actions found throughout the plan.

| **Priority Value** | Comment: |
|---|---|
| Colorado's Water Plan values a strong environment that includes healthy watersheds, rivers, streams, and wildlife | a. Many of the outputs and outcomes of the project advance a healthy South Platte watershed and River, and healthy wildlife and human neighborhoods along the urban South Platte River corridor |
| **Priority Measurable Objectives** | |
| Conservation: Colorado's Water Plan sets a measurable objective to achieve 400,000 acre-feet of municipal and industrial water conservation by 2050. | a. Water education is a foundational component of municipal and industrial water conservation plans in Colorado and the US. Based on the solutions generated by the Summer 2019 Pathways pilot program, we expect many of the solutions generated by our students to focus on municipal water conservation education and municipal water conservation policy.<br>b. Assuming the sky is the limit for our students, our project may also generate new high-impact water conserving technologies and strategies for the municipal sector in Colorado. |
| Land Use: Colorado's Water Plan sets a measurable objective that by 2025, 75 percent of Coloradans will live in communities that have incorporated water-saving actions into land-use planning. | a. Based on the priority topics and some of the solutions generated by the Summer 2019 Pathways pilot program, we assume that the issue of equity, clean water/water conservation, and land use development will be front and center in the development of many of the solutions of the innovation engine.<br>b. Some of our solutions can help bring more clarity to important yet generally overlooked strategies to advance equity when water saving actions are incorporated into land use planning. |

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| |
|---|
| Describe how the project achieves the education, outreach, and public engagement goals set forth in the applicable Basin Implementation Plan(s).<br>South Platte Basin Implementation Plan (Metro Basin Roundtable, South Platte Basin Roundtable, 2015)<br>Conservation Education Programs<br><br>This proposal advances critical projects and methods adopted by the South Platte Basin Implementation Plan:<br><br>4.3.1 Conservation Projects and Methods<br>4.3.1.2 Municipal Conservation Plans in Colorado<br>4.3.1.2.1 Conservation Plan Components<br><br>Water education is considered a foundational pillar of municipal water conservation plans by SWSI, the and well-documented M&I Best Practices. Accordingly, all of the municipal water education solutions that we expect will be generated by our students will advance the municipal water conservation planning components that are priority projects and methods under the South Platte Basin Implementation Plan. |
| Describe how the project achieves the basin roundtable's PEPO Education Action Plans. |
| The solutions and leadership development generated by our youth innovation engine for the South Platte River, together with the River Festival that will be the capstone project for the Summer Program, can help advance the following objectives of the **South Platte Basin Roundtable Education Action Plan** (2016-2018):<br>• Recruit new basin roundtable members and committee members to enhance effectiveness, diversity and participation<br>• Create materials and assist Phreatophyte committee in education outreach to Basin Landowners<br>• Develop Partnerships with Colorado State University<br>• Use our Colorado State University-National Western Center Youth River Festival as one of the three annual events to display of roundtable content and BIP/State Water Plan efforts. |

| Innovation Track |
|---|
| Describe how the project enhances water innovation efforts and supports a water innovation ecosystem in Colorado. |
| |
| Describe how the project engages/leverages Colorado's innovation community to help solve our state's water challenges. |
| |

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| |
|---|
| Describe how the project helps advance or develop a solution to a water need identified through TAP-IN and other water innovation challenges. What is the problem/need/challenge? |
| |
| Describe how this project impacts current or emerging trends; technologies; clusters, sectors, or groups in water innovation. |
| |

COLORADO
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## Water Plan Grant - Exhibit A

| Statement Of Work | |
|---|---|
| **Prepared Date:** | **01/27/2020** |
| **Name of Grantee:** | **Lincoln Hills Cares** |
| **Name of Water Project:** | **Replicable Youth-Driven Innovation Engine to Help Make the South Platte River Swimmable and Fishable** |
| **Funding Source:** | **CWCB Water Plan Grant: Engagement and Innovation** |

**Water Project Overview:**

Lincoln Hills Cares (LHC) in partnership with El Laboratorio and Colorado State University seek funding to support our Environmental Careers and Education Pathways Program for Colorado's Underrepresented Youth. The program is focused on water education and the protection and restoration of the South Platte River.

Technically, the whole program is an innovation engine that brings together teams of underrepresented high school and college youth in a replicable summer program characterized by:

- Radical integration of culturally sensitive citizen science with hands-on project-based learning
- Focuses on protecting and restoring rivers for the people, and on the "One Water"sustainability paradigm
- Meaningful engagement and interaction between our youth water solution-makers, community, decision-makers, and subject matter experts
- Regained wonder of nature and of Colorado's rivers by underserved youth who often lack access to safe and meaningful outdoor experiences..

Students participating in the program will:

- Gain a broader perspective on environmental careers and educational opportunities by working with subject matter experts on real projects
- Have transformative, nature-based experiences solving river and water management problems important to local communities
- Be exposed to a wide and deep professional water network that can connect them to future projects, education, and jobs
- Be better prepared and motivated to apply to colleges and graduate schools because of enriched project-based STEAM coursework
- Gain 21st century learning and career skills—such as teamwork, communications, creativity, and critical thinking—that can motivate them to stay in school and be leaders in their schools, professions, and communities.

**Youth-Led Solution-Making Engine for the South Platte River, Colorado**

The "icing of the cake" will be the generation of 10-12 water solutions for the riparian habitats and neighborhoods that are part of the Urban South Platte River Corridor ecosystem in Denver, Colorado. The solutions will be presented at the annual Colorado State University-National Western Center Youth River Festival in Denver to be held in August of 2020 at Herond Pond/Heller/Carpio-Sanguinette Park. The River Festival is the capstone project for the 60 youth participating in the Pathways program, and is planned and run by the student themselves.

**Viable Fundable Innovative Solutions**

Based on the metrics and solutions that our students have already achieved in our Summer 2019 pilot Pathways program with El Laboratorio and Colorado State University, we are confident of producing within 6 months at least 1-2 fundable project proposals generated by our students. Importantly, we assume that some of the fundable student projects will result in real-world benefits that will actually create new jobs and environmental leadership opportunities to help students pay their way through College.

**Project Objectives:**

This project serves to address priority municipal water education and water conservation gaps surrounding the urban South Platte River corridor and the neighborhoods and ecosystems that benefit from the South Platte River. Specifically, the project will make the urban South Platte River corridor in the area of the National Western Center a real world citizen science and innovation laboratory for underrepresented youth and 21st Century environmental leaders.

We plan to anchor our youth innovation engine in the Globeville, Elyria and Swansea communities which are some of Denver's oldest neighborhoods, settled in the 1880s around metals smelting and railroad yards. The construction of Interstates 70 and 25 in the 1960s severely impacted these neighborhoods, isolating them from each other and from other parts of Denver. Air, noise and odor pollution from the highways, railroads and heavy industry has created physical challenges to residents' everyday health. Other barriers to good health include lack of access to a grocery store for over 10,000 residents and poor quality sidewalks, bike lanes and access to parks and recreation facilities along the South Platte River. Today the neighborhoods are predominantly Latino and Chicano and possess a strong cultural identity centered on family and community. Residents have identified as top priority having a built environment that supports healthy lifestyles and opportunities of connecting with nature, especially for children and youth.

The local environmental/public health results of the project will include the following outcomes:

- Young environmental leaders and river stewards become citizen-scientists with a voice in water management and urban ecosystem planning.
- Underrepresented youth and community members co-create the design and implementation of data gathering activities and strategies to better understand water conservation and improve water quality.
- Citizen science activities have broad based community support and positively affect local residents by improving natural habitat areas of the urban South Platte River identified by residents as priority restoration areas.

## Tasks

**Task 3 —Innovation**

Description of Task:

Project team will design, plan and facilitate an innovation process with local youth and community members that will result in the local community members adopting citizen science priorities and co-creating a citizen science project.

Method/Procedure:

| Tasks |
|---|
| Task 3 will use the following method:<br><br>During the Summer of 2020 (June-August): 6 full days of iterative citizen science workshops covering the following outputs and outcomes:<br><br>• 2 1-day iterative workshops where workshop participants develop and adopt research question/s.<br>• 3 1-day iterative workshops where workshop participants design and refine citizen science priorities and plan.<br>• 1 day workshop where workshop participants analyze results and next questions and steps. |
| Deliverable: |
| Guidance for our project will be led and developed by the youth and community advisory council. |

| Tasks |
|---|
| **Task 4 —River Restoration** |
| Description of Task: Conservation and Education |
| Method/Procedure: |
| This Task will follow the following method:<br><br>LHCs and El Laboratorio will facilitate 3 iterative 2-hour workshops with a South Platte River Youth Advisory Council that will be convened as part of this project. Youth Council members will work with local leaders, decision-makers and natural resource managers to identify, plan and implement two community-wide restoration events along the urban South Platte River Corridor by August 30, 2020.<br><br>Youth and local residents will then facilitate the two community-wide restoration events with local community volunteers.<br><br>This foundation and partnership with youth and community will for the base of our summer immersive experience and Water Festival. |
| Deliverable: |
| • 140 trees planted<br>• 4 acres of open space restored<br>• 4 acres of invasive species removal from local watershed<br>• 2 stream sites sampled and monitored<br>• 100 residents volunteering in local habitat restoration and water quality protection activities |

## Tasks

**Task 5 —Colorado State University-National Western Center Youth River Festival**

Description of Task:

A youth-led river festival is planned and produced.

Method/Procedure:

This Task will follow the following method:

LHCs in partnership with CSU and El Laboratorio will facilitate the production of a youth-led River festival in the Globeville neighborhood by August 31, 2020 where, among other things, local GES community residents, stakeholders, and decision-makers will be invited to help verify and refine the citizen science priorities and projects developed in the innovation process by community residents and others (Task 3). Two youth innovation fellows from the local community will help co-lead the planning, design, and on-site production of the River Festival.

Deliverable:

2d Annual Colorado State University-National Western Center Youth River Festival occurs in the Globeville neighborhood in August 2020, impacting more than 1,000 people.

This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work.

## Reporting Requirements

**Progress Reports:** The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues.

**Final Report:** At completion of the project, the grantee shall provide the CWCB a Final Report on the applicant's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

The CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

## Payment

Payment will be made based on actual expenditures and must include invoices for all work completed. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

Project costs not covered by this or other grants are the responsibility of the grantee. [ Project costs that are eligible for CWCB funds will be disbursed at the following percentages: xx% Water Plan Grant funds to xx% matching funds.] – NOTE: **DELETE THIS NOTE AND THE INFO IN BRACKETS IF YOU DO NOT HAVE MATCHING FUNDS.**

Costs incurred prior to the effective date of this contract are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this contract must be provided to CWCB in hard copy and electronic format as part of the project documentation.

## Performance Measures

Performance measures for this contract shall include the following:
(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit B. Per Water Plan Grant Guidelines, the CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.
(b) Accountability: Per Water Plan Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Water Plan Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.
(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.
(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

## Water Plan Grant
## Budget and Schedule - Exhibit B

**Prepared Date:** 1/31/2020

**Name of Grantee:** Lincoln Hills Cares

**Name of Project:** Replicable Youth-Driven Innovation Engine to Help Make the South Platte River Swimmable and

**Project Start Date:** 2/17/2020

**Project End Date:** 2/16/2021

| Task No. | Task Description | Task Start Date | Task End Date | CWCB Grant Funding Request | Match Funding | Total |
|---|---|---|---|---|---|---|
| 3 | Innovation | 5/15/2020 | 9/15/2020 | $14,447 | $14,447 | $28,894 |
| 4 | Restoration | 5/15/2020 | 9/15/2020 | $14,447 | $14,447 | $28,894 |
| 5 | Water Festival | 5/15/2020 | 9/15/2020 | $14,446 | $14,447 | $28,893 |
| | | | **Total** | $43,340 | $43,341 | $86,681 |