



**COLORADO**

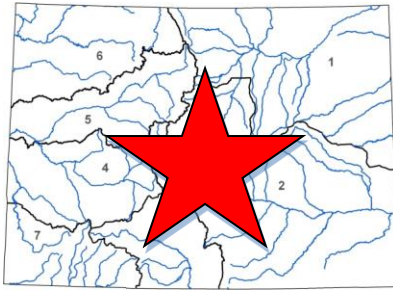
Colorado Water  
Conservation Board

Department of Natural Resources

## Tackling Wicked Problems in Water + Climate 10.10.10/Colorado Nonprofit Development Center

November 2019 Board Meeting

### Water Plan Grant Application



L O C A T I O N	
County/Countries:	Statewide
Drainage Basin:	All

D E T A I L S	
Total Project Cost:	\$623,750
Water Plan Grant Request:	\$250,000
Recommended Amount:	\$72,000
Other CWCB Funding:	\$90,000 (WSRF Pending)
Other Funding Amount:	
Applicant Match:	\$283,750
Project Type(s):	Study, Other
Project Category(Categories):	Engagement & Innovation
Measurable Result:	300-1100 Coloradoans Impacted by Engagement Activity

10.10.10 is a project of the Colorado Nonprofit Development Center (CNDC), a non-profit organization, which “develops and delivers unique programs presenting wicked problems to the public, volunteers, and successful serial entrepreneurs”. 10 recruited, diverse, experienced entrepreneurs spend 10 days learning about 10 wicked problems in a specific sector. The wicked problems 10.10.10 targets are “systemic problems requiring attention and solution, though not adequately addressed by government, large organizations or institutions”. The recruited entrepreneurs, “validators” (subject matter experts) and “ninjas” (temporary team members) focus on wicked problems through a developed and enhanced collaborative innovation ecosystem tackling wicked problems without the barriers of organizational silos.

The applicant is seeking to “tackle” wicked problems with Water and Climate over the next three years and will utilize the XGenesis/10.10.10 process (explained below) to the problems selected with CWCB, Metro Roundtable, Water Foundry (international water advisors), corporate and foundation sponsors and subject matter experts, know to the process as *validators*. Recruited prospective CEOs will focus on wicked problems in water, climate; expanding the scale of Colorado stewardship activity including water efficiency, water quality, support for long-term, sustainable balance between future urban, agricultural, recreational and environmental needs in rivers and water supply.

The following are the steps in the xGenesis/10.10.10 process:

- Step 1 - convening subject matter experts and stakeholder advisory boards to map the complex system of water and the identified targeted wicked problems for the programs and beyond along with an initial network map that identifies causal loops and their attributes.
- Step 2 - identifying implementation priorities, policy needs, and individual enterprise implementation steps.
- Step 3 - isolating wicked problems that require entrepreneurs to develop new solutions.
- Step 4 - recruiting and training of 30-50 “Ninja” volunteers focused on mapping the selected wicked problems and determining the opportunities to create market based approaches to tackle the wicked problems.
- Step 5 - convening the “Big Reveal” and Finale programs with 300-500 attendees hearing problem advocates pitch wicked problems in water, climate and the integration of the two.
- Step 6 - enhancing the “Colorado innovation ecosystem” focused on water and climate.

Funding Recommendation: Staff is recommending a grant of \$72,000 from the Engagement and Innovation category of funding. This is approximately 11% of the project costs. Because of more demand than funds available, the recommended funding is \$175,000 less than the requested amount. The applicant is seeking additional CWCB funding through the Metro and South Platte Roundtable WSRF process as well as continually seeking other private funding for this project.



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## 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  
Conservation, Land Use Planning  
Engagement & Innovation Activities  
Agricultural Projects  
Environmental & Recreation  
Projects

Anna.Mauss@state.co.us  
Kevin.Reidy@state.co.us  
Ben.Wade@state.co.us  
Alexander.Funk@state.co.us  
Chris.Sturm@state.co.us

**FINAL SUBMISSION:** Submit all application materials in one email to

**[waterplan.grants@state.co.us](mailto: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	10.10.10, a project of Colorado Nonprofit Development Center
Name of Water Project	Tackling Wicked Problems in Water + Climate
CWP Grant Request Amount	\$250,000
Other Funding Sources _____	\$125,000
Other Funding Sources _____	\$90,000 Metro Roundtable Water Supply Reserve Fund WSRF (requested)
Other Funding Sources _____	\$ In Kind matching: 10 entrepreneursX10 days X \$800 (\$100X 8 hrs/day)=\$80,000 40 Ninjas X 12days X\$800=\$384,000 20 ValidatorsX5 days X \$400= \$40,000.= \$504,000 in-kind matching
Applicant Funding Contribution	\$ 283,750
Total Project Cost	\$623,750



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Applicant & Grantee Information	
Name of Grantee(s) 10.10.10, a project of the Colorado Nonprofit Development Center	
Mailing Address 789 N. Sherman St. Ste. 250, Denver, CO 80203	
FEIN 84-1493585	
Organization Contact Melinda Higgs	
Position/Title President and CEO	
Email mhiggs@cndc.org	
Phone 720-855-0501 ext. 224	
Grant Management Contact Jeffrey Nathanson 303.870.4975	
Position/Title President, 10.10.10	
Email jeffrey@101010.net	
Phone 303.870.4975	
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).	
10.10.10, a project of Colorado Nonprofit Development Center (CNDC), develops and delivers unique programs presenting wicked problems to the public, volunteers, and successful serial entrepreneurs. 10 recruited, diverse, experienced entrepreneurs spend 10 days learning about 10 wicked problems in a specific sector. The wicked problems 10.10.10 targets are systemic problems requiring attention and solution, though not adequately addressed by government, large organizations or institutions. Serial entrepreneurs, validators (subject matter experts) and ninjas (temporary team members) focus on wicked problems through a developed and enhanced collaborative innovation ecosystem tackling wicked problems without the barriers of organizational silos.	

Type of Eligible Entity (check one)	
<input type="checkbox"/>	<b>Public (Government):</b> 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.
<input type="checkbox"/>	<b>Public (Districts):</b> Authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises.
<input type="checkbox"/>	<b>Private Incorporated:</b> Mutual ditch companies, homeowners associations, corporations.



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	<b>Private Individuals, Partnerships, and Sole Proprietors:</b> Private parties may be eligible for funding.
X	<b>Non-governmental organizations (NGO):</b> Organization that is not part of the government and is non-profit in nature.
	<b>Covered Entity:</b> As defined in <a href="#">Section 37-60-126 Colorado Revised Statutes</a> .

Type of Water Project (check all that apply)	
X	Study
	Construction
	Identified Projects and Processes (IPP)
X	Other

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.. <i>Applicable Exhibit A Task(s):</i>	
	Conservation and Land Use Planning - Activities and projects that implement long-term strategies for conservation, land use, and drought planning. <i>Applicable Exhibit A Task(s):</i>	
X	Engagement & Innovation - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website. <i>Applicable Exhibit A Task(s):</i>	
	Agricultural - Projects that provide technical assistance and improve agricultural efficiency. <i>Applicable Exhibit A Task(s):</i>	
	Environmental & Recreation - Projects that promote watershed health, environmental health, and recreation. <i>Applicable Exhibit A Task(s):</i>	
X	Other	Explain: Tackling wicked problems identified and targeted by CWCB through entrepreneurial endeavors

Location of Water Project	
Please provide the general county and coordinates of the proposed project below in <b>decimal degrees</b> . The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Countries	Denver Metro/Colorado statewide
Latitude	



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Longitude	
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### 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.

The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, Other Funding Sources/Amounts and Schedule.

10.10.10: Water + Climate programs 2020, 2021 and 2022 will utilize the XGenesis/10.10.10 process to explore wicked problems selected with CWCB, Metro Roundtable, Water Foundry (international water advisors), corporate and foundation sponsors and validators. Recruited prospective CEOs will focus on wicked problems in water, climate; expanding the scale of Colorado and national stewardship activity including water efficiency, water quality, support for long-term, sustainable balance between future urban, agricultural, recreational and environmental needs in rivers and water supply.

The steps: 1. Convening validator/stakeholder advisory boards to map the complex system of water and the identified targeted wicked problems for the programs and beyond along with an initial network map that identifies causal loops and their attributes. 2. Identifying implementation priorities, policy needs, individual enterprise implementation steps 3. Isolating wicked problems that require entrepreneurs to develop new solutions. 4. Recruiting and training 30-50 Ninja volunteers focused on mapping the selected wicked problems and determining the opportunities to create market based approaches to tackle the wicked problems. 5. Convening the "Big Reveal" and Finale programs with 300-500 attendees hearing problem advocates pitch wicked problems in water, climate and the integration of the two. 6. Enhancing the Colorado innovation ecosystem focused on water and climate.

### 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)
	Length of Stream Restored or Protected (linear feet)
	Efficiency Savings (indicate acre-feet/year OR dollars/year)
	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
300-1100	Number of Coloradans Impacted by Engagement Activity



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	Other	Explain: 10.10.10 Convenes two public programs, the “Big Reveal” and Finale with 300-500 attendees or more each, hearing problem advocates pitch wicked problems in water, climate and the integration of the two. There are 10 prospective CEOs, 40-50 Ninjas and 20-40 Validators that participate in the program. We also use social media to inform the public of our progress during our program.
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### 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's Water Plan Section 9.5 Outreach Education and Public Engagement Actions section (pg. 9-61)**

**3. Improve the use of existing state resources: CWCB:**

*Will work with stakeholders to identify water challenges that Colorado's innovation community could help solve, develop an award program, and engage Coloradans in the challenge:*

*Will work with Colorado's innovation community, education and outreach experts, research institutions...to address Colorado's water challenges with innovation and “outside the box” creativity.*

**Volume1 Analysis and Technical Update to the Colorado Water Plan (Preliminary Release) July 2019 \_\_\_\_\_**

**2.2.1 Incorporating Climate Change into Scenario Planning (page 11)**

*Through an iterative effort with the CWCB, basin roundtables, and the IBCC, three composite climate scenarios were incorporated into the planning scenarios. Of the five planning scenarios, three include some level of stressed future climate change (Cooperative Growth, Adaptive Innovation, and Hot Growth). \_\_\_\_\_*

**Climate.** Factors reflecting increases in IWR due to a potentially warmer and drier future climate were applied in the Cooperative Growth, Adaptive Innovation, and Hot Growth scenarios. Background on climate adjustments are provided in Sec on 2.2.1. \_\_\_\_

**Emerging Technologies.** Emerging agricultural technologies will play a significant role in future water use. Instrumentation, automation, and telemetry have improved irrigation efficiency and scheduling in many areas of Colorado and will likely continue to improve into the future. Efficiency improvements in delivery and application of water through drip irrigation, more efficient sprinklers, ditch lining, or enclosing open ditches (or additional adoption of these technologies) may reduce water supply shortages and/or reduce the amount of water diverted or pumped. Innovations in crop hybrids have resulted in more drought-tolerance while preserving or increasing yields. Two adjustments were made to provide perspective on the potential effect of these emerging technologies in the five planning scenarios:

*o Sprinkler Development. The South Platte and Arkansas Basins have*





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*experienced significant conversion of food irrigation (less water efficient) practices to center-pivot sprinklers and drip irrigation systems (more water efficient) for the past several decades. Discussions with stakeholders in the basin indicated a continued likelihood of this development to varying degrees in the five planning scenarios.*

*o Technological Innovations. The Adaptive Innovation planning scenario narrative contemplates future technological innovations that mitigate potential climate change related increases in irrigation demand and decreases in supply. To implement this narrative in the agricultural diversion demand methodology, the impact of contemplated technological innovations was translated as reductions to IWR and improved water delivery efficiencies.*

Colorado's Water Plan enables a balanced strategy of conservation and reuse; alternative agricultural transfers; environmental and recreational projects; and municipal, industrial, and agricultural projects. The major trends in water are digital (data acquisition and analytics, AI) and "one water"—water reuse and recycling. 10.10.10 and Water Foundry will recruit validators and corporate sponsors that will aid participating prospective CEOs in the development of market based solutions that focus on these themes. We will explore new technologies like air moisture capture, aquifer recharge. New business models developed by 10.10.10 prospective CEOs might enhance and aid in tackling these problems.

Innovation, unlike water doesn't just flow with gravity. It doesn't happen often in government or large enterprise. Several problems in water and climate are wicked problems. They are not easily tackled and resolved. Without a process to understand and unpack wicked problems, to reveal hidden opportunities for entrepreneurs to create market based ventures, they will focus on more easily resolved opportunities. Water and Climate issues are part of complex adaptive systems that hold wicked problems in place and obscure easily accessible market based opportunities.

Without a focused effort to establish an innovation ecosystem targeting water and climate wicked problems, entrepreneurs will not be drawn to this area of opportunity. The more apparent the opportunity the better. Without a systematic process to explore wicked problem, finding the points of leverage and opportunity entrepreneurs are more inclined to develop another dating app instead of a consumer accessible water quality monitoring process for example.

**We deliver impact ventures:** We don't need our best and brightest to build another app. The world needs them to grapple with Wicked Problems, which are too often left to governments, nonprofits, industrial giants and research institutions. Government, large organizations and institutions though will not solve these problems alone. We need new perspectives. We need outsiders with different points of view. We need serial entrepreneurs. The market is hungry for new businesses that deliver return on investment and benefit to the community, society and the world.

10.10.10 has a market tested process to unpack and map wicked problems that educates the public and inspires entrepreneurs to action. For each 10.10.10 program through the X Genesis process, we convene talent and expertise from numerous groups to map and 'unpack' the wicked problems and identify potential market-based solutions. Our "Validators" (domain experts) are large enterprise, potential partners in bringing novel technologies to market, investors interested in the potential return on investment (ROI) and NGOs seeking a sustainable process to foster their missions.

By design, these aggregated groups offer participating entrepreneurs frictionless access to unique resources. These prompt entrepreneurs to identify an "unfair advantage" – something they need to find and create a sustainable business and the leverage points within a complex system that might allow their business to survive and thrive despite the system's tendency to ignore or even eliminate the proposed solution.



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10.10.10 has been an active participant with TAP-IN since its inception. In fact, we are listed as a resource on the website. We recognize, due to limited CWCB staff bandwidth, TAP-IN has been somewhat dormant of late. 10.10.10 has demonstrated its unique capacity to develop innovation ecosystems through the recruitment of validators, ninjas and prospective CEO. The work product of the system and network mapping process will present evergreen resources for the innovation ecosystem to explore wicked problems and identify points of leverage uncovered in the process that are opportunities for market based solutions. (see Engagement and Innovation section below)

The State Water plan sets an objective to identify five water challenges that Colorado's innovation community could help solve by 2030, and to engage Coloradans along the way. In 2017, TAP-IN shared a total of 18 challenges with Coloradans. These might serve as the initial list of wicked problems that the 2020 program might map with the CWCB, Roundtable participants and validators. Once completed these will be presented to the recruited 10.10.10 prospective CEOs for the proposed programs.

### 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.

#### System mapping the complex system of water conservation Network mapping

The Colorado Lieutenant Governor's Office on behalf of the Office of eHealth and Innovation ("OeHI") and Zoma Foundation contracted with X Genesis LLC for a similar process to convene representatives of key stakeholder groups throughout the healthcare continuum to develop initial system and network maps of care coordination and its relationship to the complex system of health.

<https://costateoehi.kumu.io/colorado-care-coordination-project-overview>

We propose a similar system mapping process focused on the causal loops of the targeted wicked problems in water and climate. The mapping will focus on the causal loops (including balancing loops which maintain the status quo and reinforcing loops which promote growth or decline.)

10.10.10 has proposed to the Metro Roundtable Water Supply Reserve Fund (WSRF) a system mapping project to partially match and integrate with this CWCB Water Plan Grant proposal. With the resulting system maps, we will conduct a series of 10.10.10 Water + Climate programs in 2020, 2021 and 2022 matching support from X Genesis and other sponsors. The system mapping process will target priority problems identified by the CWCB, the Metro Roundtable and other validators.

This proposal will enhance system map components for CWSB priorities statewide. The resulting system map will identify points of leverage and target wicked problems to be presented to prospective CEOs (serial entrepreneurs) in the upcoming 2020 10.10.10 Water + Climate program. It will additionally present opportunities to the broader innovation community while enhancing the Colorado innovation ecosystem connections focused on water and climate and educate and engage the public.

A network map will be initiated to begin the process of identifying key stakeholders in the water and climate innovation ecosystem in Colorado, nationally and internationally. A similar process will be developed and implemented for each of the programs 2020, 2021 and 2022.

In addition, Will Sarni of Water Foundry has published Digital Water Transformation: The Promise of Artificial Intelligence, February 26, 2019, Medium.





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Will is a seasoned author and has written numerous books and additional articles and continues to present on subjects such as the value of water, innovations in digital water technology, the circular economy, and the energy-water-food nexus. He is the author of:

CORPORATE WATER STRATEGIES

THE WATER TECH BOOK

BEYOND THE ENERGY-WATER-FOOD NEXUS

WATER STEWARDSHIP AND BUSINESS VALUE

CREATING 21ST CENTURY ABUNDANCE THROUGH PUBLIC POLICY INNOVATION

He is currently working on: "DIGITAL WATER: New Technologies for a More Resilient, Secure and Equitable Water Future." Will is a Board Member of FloWater, Project WET as well as a Project Board Member of 10.10.10, plus Founder and Chairman of WetDATA.org

### 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	
	I acknowledge the Grantee will be able to contract with CWCB using the <a href="#">Standard Contract</a> .
Exhibit A	
	<p>Statement of Work<sup>(1)</sup></p> <ol style="list-style-type: none"> <li>1. Convene validator/stakeholder advisory boards to map the complex system of water and the identified targeted Wicked Problems for the programs and beyond along with an initial network map that identifies the key actors and their attributes.</li> <li>2. Identify implementation priorities, policy needs, individual enterprise implementation steps.</li> <li>3. Isolate wicked problems that require entrepreneurs to develop new solutions.</li> <li>4. Recruit and train 30-50 Ninja volunteers focused on mapping the selected wicked problems and determining the opportunities with the prospective CEOs to create market based approaches to tackle the wicked problems.</li> <li>5. Recruit 20-30 validators, practitioners and individuals with deeply rooted passion to solve these problems. Validators help entrepreneurs over the 10-day program (and beyond) by sharing informed perspective of the problem area, market, and more.</li> <li>6. Recruit 10 prospective CEOs, diverse, proven serial entrepreneurs able to articulate a vision, recruit and retain top talent and raise capital.</li> <li>7. Convene the “Big Reveal” and Finale programs with 300-500 attendees hearing problem advocates pitch wicked problems in water, climate and the integration of the two.</li> <li>8. Enhance the Colorado innovation ecosystem focused on water and climate through meetups, workshops, newsletters and informational emails.</li> </ol>
	Budget & Schedule <sup>(1)</sup>
	Engineer’s statement of probable cost (projects over \$100,000)
	Letters of Matching and/or Pending 3 <sup>rd</sup> Party Commitments <sup>(1)</sup>
Exhibit C	
	Map (if applicable) <sup>(1)</sup>
	Photos/Drawings/Reports
	Letters of Support (Optional)
	Certificate of Insurance (General, Auto, & Workers’ Comp.) <sup>(2)</sup>
	Certificate of Good Standing with Colorado Secretary of State <sup>(2)</sup>
	W-9 <sup>(2)</sup>
	Independent Contractor Form <sup>(2)</sup> (If applicant is individual, not company/organization)



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Engagement & Innovation Grant Applicants ONLY	
	Engagement & Innovation Supplemental Application <sup>(1)</sup>

(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)?

10.10.10 and X Genesis work with a small army of volunteers to support 10.10.10’s programs. This support takes the form of a proven venture generation process and a panoply of services. Each program is designed to educate and inspire entrepreneurs to take action, encouraging each of them to create new, market-based ventures that tackle solving one of the presented wicked problems. As the programs develop, we create and enhance a flourishing innovation ecosystem of validators, ninjas and experienced entrepreneurs (see below). These entities, enabled by common interest to tackle wicked problems that matter, collaborate while fostering competitive advantage rather than maintaining a position of siloed, solitary entities in market segments.

Our first program on Infrastructure and Water convened in October 2017 producing two thriving early-stage ventures—Spout targeting water quality monitoring and UpSuite targeting innovation ecosystem infrastructure. Together, the six programs so far, have inspired ten companies that have raised almost \$13 million dollars in private investment and now employ over 100 employees.

Our programs are grounded in addressing the world’s wicked problems in health, water, food, learning, infrastructure, waste, security and climate. Wicked problems defy simple definition. They exist within complex adaptive systems that are resilient and resistant to change. Organizations within these systems are constrained in their ability to frame and develop solutions. Unless they become engaged and supportive, they may suppress otherwise viable solutions developed by others.

10.10.10 harnesses the power of successful entrepreneurs, bringing together the public, organizations,



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Overview (answer for both tracks)
institutions and thought leaders to drive innovation ecosystems and develop viable, market-driven solutions to drive change and do good.
Who is/are the target audience(s)? How will you reach them? How will you involve the community?
<p>For each 10.10.10 program through the X Genesis process, we have developed a recruitment and training system to convene talent and expertise from numerous groups to map and 'unpack' the wicked problems and identify potential market-based solutions. Prior to each program, we solicit participation of validators, hold meetups of our broader community and Ninja training programs to recruit participants and volunteers.</p> <p>By design, these aggregated groups offer participating entrepreneurs frictionless access to unique resources. This prompts entrepreneurs to identify an “unfair advantage” – something they need to find and create a sustainable business and the leverage points within a complex system that might allow their business to survive and thrive despite the system's tendency to ignore or even eliminate the proposed solution. Simultaneously these resources develop into a cohesive ecosystem network that if fostered and encouraged is available for the broader Colorado community. With the creation of unique and viable startups we interest both corporate enterprises interested in partnership with new innovations and investors interested in return on investment. Private investment amplifies the initial sponsorship dollars.</p> <p><b>Validators:</b> a community of about 20 experts, practitioners and individuals with deeply rooted passion to solve these problems. Validators help entrepreneurs over the 10-day program (and beyond) by sharing informed perspective of the problem area, market, and more. Representatives from the Colorado Water Conservation Board, Denver Water, Imagine H2O, the Nature Conservancy, Hydro Venture Partners, AECOM, AWWA, Gates Family Foundation, and the Walton Family Foundation and many important local and national organizations have served as Validators.</p> <p><b>Serial Entrepreneurs:</b> We leverage the speed, focus and capability of proven entrepreneurs (<b>Prospective CEOs</b>) to address wicked problems. Therefore, we recruit 10 successful, serial entrepreneurs with a proven track record. We seek individuals. They are able to articulate a vision, recruit and retain top talent and raise capital. They know how to create successful businesses. We prize diversity – geographic, gender, race, experience, background and perspective. At the time we invite them to participate, they want to start another venture but have not decided what that venture will be. We provide a “founder due diligence” process, helping them identify opportunities, mitigate risk and improve outcomes. Moreover, we engage them in starting a venture <i>that matters</i>.</p> <p><b>Ninjas and Sprinters:</b> We surround our Prospective CEOs with volunteer professionals. “Ninjas” have diverse skill sets and backgrounds in marketing, law, finance, software engineering, UX/UI design and more. They are an ad hoc, temporary “founding team.” Sprinters facilitate an opportunity generation process designed to answer critical business questions – including design, prototyping and testing ideas with final users, customers. We recruit 30-50 Ninjas and Sprinters.</p> <p><b>The Public:</b> We invite the public to our two major programs, the “Big Reveal” and Finale programs with 300-500 attendees hearing problem advocates pitch wicked problems in water, climate and the integration of the two. These two programs are also the venue where the public is educated about the targeted wicked problems with our systems maps that are on display at the program.</p> <p>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?</p>



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### Overview (answer for both tracks)

Entrepreneurs, private investors and markets give philanthropy and government agencies a lever with the power to move the world. 10.10.10 brings these players together and generates new ventures that address the world's wicked problems. We focus on the development of a repeatable, scalable model for new venture creation that identifies market based efforts to tackle these wicked problems. To our knowledge, there are no other organizations or models similar to 10.10.10. Our problem-first approach and focus on the pre-venture due diligence process are unique and have resulted in powerful results.

Each 10.10.10 program although funded and developed discreetly, has delivered collective insight on the value of focused ecosystems targeting solutions to wicked problems generated by the complex adaptive system (CAS) of health, water and infrastructure. Our mapping of the targeted CAS, wicked problems and validator recruitment, have developed a targeted collaborative network of resources inside and outside of the system. These iterations have provided value to these ecosystems from our 10.10.10 process and the impact those program networks and deliver value to the entrepreneurial ecosystem at large. 10.10.10 focused the Colorado digital health innovation ecosystem with our problems first process. 10.10.10's recruitment of key validators focused on supporting entrepreneurs, training ninjas in our opportunity generation and design thinking process and our recruitment of serial entrepreneurs has been a key factor in Colorado now being one of the leading digital health innovation hubs in the country. 10.10.10 and X Genesis are intent on utilizing this same process to target the innovation community on tackling the wicked problems of water and climate in Colorado.

Through our six iterations, 10.10.10 has organized these innovation community components into coherent and focused support resources for our launched companies and enhanced the interactions of the individual parts into a cohesive resource for the broader innovation ecosystem. The components we have aggregated also magnify our efforts and alliance partners like the Rockies Venture Club, now operating Rockies Impact Fund targeting investment with environmental, social or economic impact. These relationship aggregations have decreased the friction for prospective CEOs to access and utilize these resources.

We are focused, as we describe it, on the left side of the bow tie. We identify the knot in the bow tie as the seminal moment when an entrepreneur starts a venture. Most activities in the start-up process throughout the community focus on the venture after it is formed. From lean start-up methodology, business model generation, Incubators and accelerators like Tap-In, angel investments all focus on a created venture after inception are focused on the right side of the bow tie.

On the other hand, our program is distinctively focused on serial entrepreneurs before they start a venture, before the knot. We emphasize exploration of complex adaptive systems, wicked problems, founder due diligence, founder opportunity fit, and impact opportunity generation.

Our growing 10.10.10 network has been inculcated in our dissection and mapping of Complex Adaptive Systems (CAS), explorations of wicked problems and our blended process of design thinking and opportunity generation. These networks though initially ephemeral, have become evergreen and long lasting with each new iteration of our programs. These networks of Validators, ninjas and community resources have become significant and powerful resources for 10.10.10, our prospective CEOs, our funding sources, our host local communities and the national network of experts interested in solving wicked problems. In some cases we have connected elements of the ecosystem that have never been connected before. We introduce the ecosystem to a select group of vetted successful veteran entrepreneurs and ninjas.

We add a significant level of coherency and organization to a diffuse network of resources for startups in our host community. By targeting Wicked Problems, we add a focusing lens to aid impact ventures launch market based solutions to wicked problems. With our focus on problems we are able to recruit a significant network of





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Overview (answer for both tracks)
<p>validators and resources and breakdown the silos of separate agendas to foster a collaborative effort to solve common problems.</p> <p>10.10.10 has solicited support from several corporate and philanthropic sponsors. Final commitments will be in place by the CWCB Board meeting in November. 10.10.10 has received a commitment from X Genesis to match funds received from CWCB. We also have significant validator, problem advocate and ninja volunteer in kind contribution. (See X Genesis commitment letter)</p>
<p>Describe how you plan to measure and evaluate the success and impact of the project?</p>
<p>10.10.10 and X Genesis have the following KPIs (Key Performance Indicators):</p> <ul style="list-style-type: none"><li>● Prospective CEOs receive value from the process and program and would recommend the program to others.</li><li>● Each program inspires some number of prospective CEOs to start new ventures focused on a market-based solution to a wicked problem.</li><li>● The ventures started through the process and programs generate a return on capital for investors.</li><li>● The ventures started through the process and program generate social impact in relationship to one or more wicked problems.</li></ul> <p>We seek direct feedback through questionnaires from each of our participant cohorts (prospective CEOs, Ninjas, Validators, problem advocates). Our goal is to gain net promoter scores of 100 from each of the cohorts of participants (see below). We want to have each participant recognize the value of their participation was worthwhile. Now that they have participated, if asked again, would they participate again in a heartbeat? Would they recommend participation to others?</p> <p>We track formed companies, private investment attracted, jobs generated and economic impact generated by employment. (See below)</p>
<p>What research, evidence, and data support your project?</p>
<p>The sixth 10.10.10 health program was held April 2019, again sponsored by the Colorado Health Foundation, Rose Community Foundation and the Robert Wood Johnson Foundation. 10.10.10 successfully convened 10.10.10 Cities: Water and Infrastructure, October 2017 in Denver, supported in part by the Gates Family Foundation and the Walton Family Foundation. As a result, two new businesses were inspired by the 10.10.10 Cities: Infrastructure and water – Spout and UpSuite.</p> <p>Since 10.10.10's first contract in 2015 to the present, we have been fortunate to have received funding for six 10.10.10 programs focused on Wicked Problems in Health, water and infrastructure totaling \$1.7mm. With this funding we have been successful in delivering a program that has inspired the launch of ten companies. Eight are health related, one focuses on water and one company focuses on economic infrastructure. As a testament to the ability to lever private investment, together, they have attracted \$12,825,000 in new investment to tackle wicked problems in health, water and infrastructure, with an ROI of 6.72:1</p> <p>These ten companies have been launched, inspired to tackle wicked problems of interoperability and cyber security of patient health information (PHI), improved access, navigation and outcomes through healthcare, improved behavioral health for children, adults and seniors, monitoring and reducing toxic stress in children,</p>



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### Overview (answer for both tracks)

monitoring clean water and a marketplace for innovation co-working spaces. For our host community of Denver, along with matching sponsor funds with private investment, 70 new jobs have been created in Colorado with more projected. (With a low average of \$75,000/yr. in salary and low economic multiplier of 2.5) the recurring impact of salaries is an additional \$13,125,000 annual addition to Colorado's economic health while tackling the wicked problems targeted by these companies.

We continue to improve our programs. As listed above launched ventures, investment raised and employment are key metrics for our programs. We have recruited hundreds of validators, Ninjas and volunteers. Thousands of the public have attended our Big Reveal and Finale programs.

Our original goal was to generate one venture per program. Now, we expect to see a bump in numbers beyond the ~2 ventures we've seen come out of previous programs. Other success indicators include a boost in our prospective CEO net promoter score (to 100, the maximum score), a high number of prospective CEOs indicating an intention to start a new venture, a record number of ninjas (60+), and positive improvements in other program areas as indicated by participant feedback.

Our most recent satisfaction score assessments for our 2018 program, 81% of our participants reported in our post program evaluation stated that they would recommend the program to others. We are committed to enhance our participant satisfaction scores across our various cohorts. Our key audience are our prospective CEOs. We ask them to respond post program, regardless of whether they start a company or not, whether their 10 days of time invested in our program worthwhile? Would they do it again in a heartbeat? So far, we are 60 for 60.

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

1. Not attracting the right caliber of prospective CEOs
2. Not attracting a strong bench of Validators who are willing to provide substantial information to help CEOs identify a solution
3. Not attracting strong Ninjas
4. Not attracting sufficient sponsorship
5. Lack of interest in at least one of the 10 wicked problems
6. Failure to identify a clear path to a market-based solution for any of the wicked problems

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."



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### **Education, Engagement and Outreach**

We invite the public to our two major 10.10.10 programs, the “Big Reveal” and “Finale” programs each have between 300-500 attendees hearing problem advocates pitch wicked problems in water, climate and the integration of the two. These two program venues will educate and engage the public about the targeted wicked problems with our systems maps that are on display at the program. Special efforts will be made to include the public in developing and exploring the system maps and identify ways they might engage in solutions for water use efficiency. We target the public through a variety of media channels, including mainstream media, social media and our email and website and channel partners.

With the Basin E&O committees, we will identify and partner with other groups and/or entities, conducting water related public education and outreach activities. Several of these groups have previously participated as Validators in 10.10.10 Water and Infrastructure program in 2017.

Several of the identified organizations already active in education and outreach will be recruited to serve as marketing channel partners, potential validators and system mappers.

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.

The initial 10.10.10 focus will be on the South Platte Basin/Metro Roundtable. Though it is clear there is an opportunity to extend to other Colorado water basins to address common key elements that can be tackled by serial entrepreneurs through market based ventures.

Common opportunities to utilize the system and network mapping will be extended to priorities of the Arkansas and Colorado Basins. Our efforts will be iterative and we anticipate learning fast and improving as we move to develop our yearly programs. Our efforts to date have demonstrated the system mapping process develops a significant engagement of participants. If successful, this could become a way to enhance public outreach and engagement and enhance the development of the innovation ecosystem that is available to other basin roundtables.

Several of the basins have identified storage of surface and alluvial groundwater may offer opportunities to overcome evaporation losses. We will focus on recruiting validators and resources that will highlight opportunities like water use efficiency, agricultural water use technologies, water quality monitoring, new filtration technologies, digital integration (data acquisition and analytics, AI) and “one water”–water reuse and recycling.

From the Colorado Water Plan Chapter 3

*“Conjunctive use of surface water and alluvial groundwater, as well as use of alluvial aquifers for storage, offer opportunities to expand sustainable water use. Aquifer storage is generally considered to have fewer environmental effects, and water stored in alluvial aquifers is not subject to evaporation losses. Aquifer storage poses control and administrative issues that state agencies and water managers will need to address to ensure that other water rights are not injured.*

*Water quality will continue to be a challenge as entities divert more water for use and as point and non-point sources discharge to the basin’s waters. The salt content of soil and water in the South Platte River Valley, and sedimentation and erosion in parts of the basin, are likely to continue to increase over time, which will negatively affect the ability to use this water for agricultural and M&I purposes. Technological solutions are expensive and non-sustainable because of high energy demands and environmental issues associated with disposal of concentrated treatment residuals.*



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*The South Platte Basin is leading the state in M&I water-use efficiency. Efficient use of the basin's resources through water reuse and conservation is a critical step toward meeting future water needs. Nevertheless, increased M&I water-use efficiency will reduce the quantity of water available for agricultural and ecological practices and other uses, because M&I return-flows will diminish.*

*The urban environment is an important component of the quality of life for many South Platte Basin residents. Judgments about the value of the urban environment, including both the need to provide water for irrigated landscape and the vital benefits that landscape provides to citizens and the environment, make the discussions about water supply development needs all the more difficult."*

*"A major emphasis of the Arkansas Basin Roundtable was a public outreach program that aspired to reach all corners of the basin roundtable held a series of public meetings and provided information about Colorado's Water Plan and the BIP process. In addition to these public meetings, the annual Arkansas River Basin Water Forum served as a point for receiving major input into the BIP."*

**South Platte Basin Implementation Plan** Metro Basin Roundtable South Platte Basin Roundtable, April 17, 2015

#### *S.5.10 Research new technologies and strategies*

*Water quality is an ongoing issue for the South Platte Basin. A major concern is the ability to manage and treat lower quality water effectively, and then dispose of the waste products (brine) in a cost effective and environmentally sound way. One important component of the South Platte Basin Implementation Plan will be for the state to take a proactive role in investigating technologies capable of treating low quality water sources and disposing of waste products.*

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**Recommendations:** *Continue research and development of new strategies to address both the technical and regulatory constraints associated with treating low quality water and disposing of waste including direct potable reuse (DPR) and indirect potable reuse (IPR), developing an appropriate regulatory framework for these technologies, and promoting and monitoring research on relevant technologies to advance these objectives.*

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#### *S.5.8 Manage the risk of increased demands and reduced supplies due to climate change*

*The effects of climate change on water resource availability are very difficult to assess and the exact ways it will impact Colorado are unknown. Many South Platte water providers consider it irresponsible not to consider the potential for climate change in making water supply and demand projections.*

**Recommendations:** *The South Platte and Metro Roundtables recommend continued analysis of the potential for back-up supply, such as for east slope interruptible supply agreements. They also encourage additional research to disaggregate the basin's M&I supply gap to gather more specific data on the quantity, time, and geography of the gaps within each county.*

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#### **S.5.9 Facilitate effective South Platte communications and outreach programs that complement the state's overall program**

*A critical component in advancing the South Platte Basin Implementation Plan and Colorado's Water Plan will be a strategic focus on communication and education with stakeholders including water users, political leaders, and leaders of major businesses and industries throughout the state. Improving public understanding about the goals, needs, and plans of the state and the South Platte Basin will help to improve public acceptance of the need for innovative water rate structures, energetic conservation measures, and more integrated land use and water supply planning.*



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***Recommendations: Design and implement an intensive education, participation and outreach program designed to generate a lasting baseline of public awareness and support.***

*D. Adaptive Innovation: A much warmer climate causes major environmental problems globally and locally. Social attitudes shift to a shared responsibility to address problems. Technological innovation becomes the dominant solution. Strong investments in research lead to breakthrough efficiencies in the use of natural resources, including water. Renewable and clean energy become dominant. Colorado is a research hub and has a strong economy.*

Describe how the project achieves the education, outreach, and public engagement goals set forth in the applicable Basin Implementation Plan(s).

We are aware that a draft education and engagement plan for the Metro Roundtable is being developed by WEco in consultation with CWCB. The draft plan was to be circulated for input in July. The contractor has pushed back the timeline for the project, now to be completed by October. We will be pleased to coordinate our efforts with this finalized plan.

We are aware that updates from the Education Action Plan & Strategic Communications Plan are underway. Critical issues currently in the basin that need to be addressed over the EAP planning period are the Statewide Education Action Plan (SWEAP), South Platte Regional Water Development Concept (SPRWDC) and Technical Update (SWSI). The audiences the EAP will be targeting are academic, agriculture, environment & recreation and roundtables. The 2019 WSRF grant scope of work includes coordination and facilitation of SWEAP and SPRWDC, communication through website, press releases, fact sheets and flyers, outreach through orientation for new roundtable members and volunteers, maintain a list of organizations and media outlets and research video feasibility & budget.

#### **Education, engagement and Outreach**

Implement communications, and engagement programs on water projects and issues in the Metro area and South Platte Basin.

We invite the public to our two major 10.10.10 programs, the “Big Reveal” and “Finale” programs each have between 300-500 attendees hearing problem advocates pitch wicked problems in water, climate and the integration of the two. These two program venues will educate and engage the public about the targeted wicked problems with our systems maps that are on display at the program.

With the Metro Basin E&O Committee, we will identify and partner with other groups and/or entities, conducting water related public education and outreach activities. Several of these groups have previously participated as Validators in 10.10.10 Water and Infrastructure program in 2017.

The Metro Roundtable E & O Committee has identified several organizations already active in education and outreach that may serve as marketing channel partners, potential validators and system mappers: Colorado Watershed Assembly, Colorado Foundation for Water Education, Colorado WaterWise Council, Metro State College of Denver – OWOW, Cherry Creek Stewardship Partners, Denver Water, Aurora Water, City of Thornton-Utilities, South Metro Water Authority, Other water providers, Colorado Division of Water Resources, Special District Association, EPA, South Platte Greenway Foundation, American Public Works Association, America Water Works Association, Urban Waters Partnership, CSU Water Center, Colorado Water Quality Control Division, Colorado Stormwater Council, Ditch and Reservoir Company Alliance, CSU Extension Offices, Colorado Counties, Inc.

Describe how the project achieves the basin roundtable’s PEPO Education Action Plans.



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See above

### Innovation Track

Describe how the project enhances water innovation efforts and supports a water innovation ecosystem in Colorado.

Building an innovation ecosystem is not an easy task.

Boulder based, national venture capital investor and Startup thought leader, Brad Feld, Managing Director at Foundry Group and author of Startup Communities: Building an Entrepreneurial Ecosystem in Your City, has stated in interviews that the “last effort in building a startup community is the continuum of activities and events that engage the entire entrepreneurial stack: things that get first-time entrepreneurs together with experienced entrepreneurs, and investors and aspiring entrepreneurs, and people in big companies who want to work with startups.”

10.10.10, with its focus on wicked problems and public convenings, has shown that competitiveness is reduced and long term cooperation is increased among participating local and national validators and ninjas supporting serial entrepreneurs to tackle wicked problems. Through their experience with 10.10.10's system mapping and design thinking process these participants go on to provide support for the broader innovation ecosystem. 10.10.10 programs bring these components together to tackle wicked problems. 10.10.10's leadership were key drivers in the development of Colorado's health innovation ecosystem. With these insights, developed a process that Identified companies already in the state, mapped and convened them to determine their opportunities and needs.

Our proposed program will utilize the same process to identify and map the water innovation ecosystem components. A 10.10.10 network mapping process with the aid of CWCB will identify water and climate innovation companies already in the state, determine the available supporting facilities (suppliers, research facilities, funding sources, etc.), and discern the true needs of these companies and the challenges they face. Armed with this information, the innovation efforts can better determine the kinds of policies and incentives required to create a vibrant, prosperous, and sustainable water and climate cluster in Colorado.

Describe how the project engages/leverages Colorado's innovation community to help solve our state's water challenges.

#### **10.10.10 Mission Statement:**

To tackle the world's Wicked Problems through public education and engagement that inspires entrepreneurs to action

The 10.10.10 program is jointly produced by X Genesis and the 10.10.10 a project of the Colorado Nonprofit Development Center (CNDC). This series of 10.10.10 is supported by Water Foundry an international advisory and consulting organization focused on Water and Climate. Over a 12 month cycle, we:

- Listen to and learn from experts (nonprofits, businesses and individuals) to identify, define and understand Wicked Problems needing solutions
- Identify and recruit Validators who provide sector-specific, business or technology expertise
- Identify and recruit successful, serial entrepreneurs
- Implement a 10-day program and process that allows entrepreneurs, with Validator and Ninja help, to understand and dissect the problems and propose ideas for solutions





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### Innovation Track

Each 10.10.10 program targets market based solutions to tackle wicked problems. Our mapping of the targeted CAS, wicked problems and validator recruitment, develop a targeted collaborative network of resources inside and outside of the system. Each iteration adds value to these ecosystems through the enhanced systems maps that become part of the public commons, and increase dialogue and awareness about these wicked problems and our 10.10.10 opportunity generation process.

Each program enhances the network of validators willing to interact with the innovation community. Systems maps built with stakeholder engagement aid in identifying points of leverage to tackle wicked problems. Our process aids in uncovering new opportunities that deliver value to the entrepreneurial ecosystem at large. 10.10.10's recruitment of key validators focused on supporting entrepreneurs, training ninjas in our opportunity generation and design thinking process and our recruitment of serial entrepreneurs has been key components in aiding Colorado becoming one of the leading technology innovation hubs in the country. 10.10.10 and X Genesis are intent on utilizing these same processes to enhance the water and climate innovation community in Colorado.

Through our six iterations, 10.10.10 has organized these innovation community components into coherent and focused support resources for our launched companies and enhanced the interactions of the individual parts into a cohesive resource for the broader innovation ecosystem. These relationship aggregations have decreased the friction for prospective CEOs to access and utilize these resources.

We focus on the left side of the bow tie. Most activities in the start-up process through the community focus on the venture after it is formed. From lean start-up methodology, business model generation, Incubators and accelerators like Tap-In, angel investments all focus on a created venture after inception or the right side of the bow tie.

Our programs are distinctively focused on serial entrepreneurs before they start a venture. We emphasize exploration of complex adaptive systems, wicked problems, founder due diligence, founder opportunity fit, and impact opportunity generation.

Our growing 10.10.10 network has been inculcated in our dissection and mapping of Complex Adaptive Systems (CAS), explorations of wicked problems and our blended process of design thinking and opportunity generation. These networks though initially ephemeral, have become evergreen and long lasting with each new iteration of our programs. These networks of Validators, ninjas and community resources have become significant and powerful resources for 10.10.10, our prospective CEOs, our funding sources, our host local communities and the national network of experts interested in solving wicked problems. In some cases we have connected elements of the ecosystem that have never been connected before. We introduce the ecosystem to a select group of vetted successful veteran entrepreneurs and ninjas.

We add a significant level of coherency and organization to a diffuse network of resources for startups in our host community. By targeting Wicked Problems, we add a focusing lens to aid impact ventures launch market based solutions to wicked problems.

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?

10.10.10 and Water Foundry have been active participants with TAP-IN since its inception. In fact, 10.10.10 is listed as a resource on the TAP-IN website. We recognize, due to limited CWCB staff bandwidth, TAP-IN has been somewhat dormant of late. 10.10.10 has demonstrated its unique capacity to develop innovation ecosystems through the recruitment and engagement of validators, ninjas and prospective CEO. The work product of the system and network mapping process will present evergreen resources for the innovation



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Innovation Track
ecosystem to explore wicked problems and identify points of leverage uncovered in the process that are opportunities for market based solutions. (see Engagement and Innovation section above)
The State Water plan sets an objective to identify five water challenges that Colorado’s innovation community could help solve by 2030, and to engage Coloradans along the way. In 2017, TAP-IN shared a total of 18 challenges with Coloradans. These might serve as the initial list of wicked problems that the 2020 program might map with the CWCB, Roundtable participants and validators. Once completed these will be presented to the recruited 10.10.10 prospective CEOs for the proposed programs.
Describe how this project impacts current or emerging trends; technologies; clusters, sectors, or groups in water innovation.
<p>Each 10.10.10 program targets market based solutions to tackle wicked problems. Our mapping of the targeted CAS, wicked problems and validator recruitment, develop a targeted collaborative network of resources inside and outside of the system. Each iteration adds value to these ecosystems through the enhanced systems maps that become part of the public commons, and increase dialogue and awareness about these wicked problems and our 10.10.10 opportunity generation process.</p> <p>Each program enhances the network of validators willing to interact with the innovation community. Systems maps built with stakeholder engagement aid in identifying points of leverage to tackle wicked problems. Our process aids in uncovering new opportunities that deliver value to the entrepreneurial ecosystem at large. 10.10.10’s recruitment of key validators focused on supporting entrepreneurs, training ninjas in our opportunity generation and design thinking process and our recruitment of serial entrepreneurs has been key components in aiding Colorado becoming one of the leading technology innovation hubs in the country. 10.10.10 and X Genesis are intent on utilizing these same processes to enhance the water and climate innovation community in Colorado.</p> <p>Through our six iterations, 10.10.10 has organized these innovation community components into coherent and focused support resources for our launched companies and enhanced the interactions of the individual parts into a cohesive resource for the broader innovation ecosystem. These relationship aggregations have decreased the friction for prospective CEOs to access and utilize these resources.</p>



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Colorado Water Conservation Board
Water Plan Grant - Exhibit A

Statement Of Work	
Date:	August 1, 2019
Name of Grantee:	10.10.10, a project of the Colorado Nonprofit Development Center
Name of Water Project:	Tackling the wicked problems of Water + Climate
Funding Source:	Metro Roundtable (proposed)/Water Plan Funds/X Genesis Matching Funds/Volunteer In-Kind.
<b>Water Project Overview:</b>	
10.10.10 engages experienced entrepreneurs who are extrinsic to the systems within which wicked problems have become established. These entrepreneurs are the “outside agents” making breakthrough innovation possible. We identify problems that matter in a specific market segment like urban and rural water demand, supply, quality and efficiency. We engage stakeholders who understand the domain. Together we map the complex system that keeps the wicked problems in place and the network of key actors. We enlist problem advocates to present each of the wicked problems. We encourage and inspire entrepreneurs who understand how to build successful ventures to develop solutions that have societal impact and are attractive to investors. In short, we create the necessary conditions for effective entrepreneurial alchemy.	
<b>Project Objectives:</b>	
<ol style="list-style-type: none"><li>1. Systems and network maps developed of the complex system of water and targeted Wicked Problems</li><li>2. Implementation priorities, policy needs, individual enterprise implementation steps identified.</li><li>3. Wicked problems needing new entrepreneurial solutions isolated.</li><li>4. Thirty to fifty trained volunteers focused on working with the prospective CEOs to create market based approaches to tackle the wicked problems.</li><li>5. Twenty to thirty practitioners and individuals with deeply rooted passion to solve targeted problems recruited.</li><li>6. 10 prospective CEOs, diverse, proven serial entrepreneurs recruited, able to articulate a vision, recruit and retain top talent and raise capital.</li><li>7.The “Big Reveal” and Finale programs convened with 300-500 attendees hearing problem advocates pitch wicked problems in water, climate and the integration of the two.</li><li>8. The Colorado innovation ecosystem enhanced focused on water and climate through meetups, workshops, newsletters and informational emails.</li></ol>	

Tasks
<b>Task 1 – [System and Network mapping]</b>



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Tasks
<p>Description of Task: Systems and network maps developed of the complex system of water and targeted Wicked Problems</p>
<p>Convene validator/stakeholder advisory boards to map the complex system of water and the identified targeted Wicked Problems for the programs and beyond along with an initial network map that identifies the key actors and their attributes.</p> <p>We seek 'go to' validators for each wicked problem. The 'go to' validator will speak to specific problems as well as connect prospective CEOs to others who can help him/her understand the problem and then validate or invalidate solutions. These participants will be asked to aid in the wicked problem mapping process.</p> <p>Demonstrating the impact of the process, the Colorado Lieutenant Governor's Office, on behalf of the Office of eHealth and Innovation ("OeHI") and Zoma Foundation, contracted with X Genesis earlier in 2019 to convene representatives of key stakeholder groups throughout the healthcare continuum to develop initial system and network maps of care coordination and its relationship to the complex system of health (See Below). Utilizing the visualization tool of Kumu and system mapping experts we implemented these project components for OeHI, the Colorado eHealth Commission and Zoma Foundation to generate insight on the wicked problem of implementing Care Coordination throughout the Colorado healthcare delivery system focusing on the Medicaid population, their complex co-morbidities and including social determinant data. The system and network maps identified the key leverage points and enhanced insight on policy issues, enterprise initiatives and gaps that may be filled by entrepreneurs. The prioritized ranking of implementation steps and the identification of responsible stakeholders is supporting OeHI's efforts to implement care coordination throughout Colorado.</p> <p><a href="https://costateoehi.kumu.io/colorado-care-coordination-project-overview">https://costateoehi.kumu.io/colorado-care-coordination-project-overview</a></p>
<p>Method/Procedure:</p> <p>With the help of representatives from the Metro Roundtable and CWCB stakeholders we will identify key stakeholders to recruit to participate in both video calls and in person workshops to be held in the Metro Denver area. The stakeholder will convene to map the targeted wicked problems complex adaptive system of water to better understand the dynamic relationship between wicked problems in water and climate from those arising from public policy, infrastructure, pricing, access to data and information and extreme weather events. These factors result in inadequate resilience, security and sustainability of water and urban and rural communities. Identify potential high value/impact priority scenarios with a diverse sub group of actors and stakeholders who experience these wicked problems from different vantage points and are able to share their varied perspectives.</p>
<p>Deliverable:</p> <p>A System and network map of the key issues of the Metro Roundtable and the CWCB</p> <p>The Network map template will be available for distribution to innovation ecosystem resources and stakeholders to identify resources for the enhancement of the water and climate innovation ecosystem and the support of entrepreneurial ventures.</p> <p>The eventual map of the complex adaptive system of water + climate will be a key evergreen artifact output. Another key outcome will be a list of the initial list of 10 wicked problems that will be enhanced over the course of the subsequent program wicked problem targets and the enhanced list of key stakeholders and their resources that can be called on to support efforts to tackle the wicked problems.</p>



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Tasks
<b>Task 2 – [Implementation Priorities]</b>
Description of Task: Identify implementation priorities, policy needs, individual enterprise implementation steps. The process will result in an advanced assessment and further detailed analysis to prioritize wicked problem operational steps to the key opportunities and barriers facing implementation, funding, and scaling tech-enabled solutions within water systems.  <b>Identify opportunities for value-generating systems interventions.</b> The process will provide a set of prioritized policy, enterprise and innovation action steps, to provide challenge goals for participating water system components.
Method/Procedure: With the Metro Roundtable and CWCBC representatives we will identify points of leverage and key components to be addressed by key stakeholder groups.
Deliverable: A list of key points of leverage for prioritization and focus.

Tasks
<b>Task 3– [List of Targeted Wicked Problems]</b>
Description of Task: Isolate 10-15 wicked problems that require entrepreneurs and innovation ecosystem components to develop new solutions.
Method/Procedure:



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Once the list of 10-15 Wicked Problems are identified, a research process is conducted to determine key elements of the Wicked Problems

Deliverable:

10 Researched Wicked problem briefs to be provided to the participating Prospective CEOs, Ninjas and Validators





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Tasks
<b>Task 4-- [ Ninja Recruitment]</b>
Description of Task:  Recruit and train 30-50 volunteers focused on mapping the selected wicked problems and determining the opportunities to create market based approaches to tackle the wicked problems.  <b>Ninjas and Sprinters:</b> We surround our Prospective CEOs with volunteer professionals. “Ninjas” have diverse skill sets and backgrounds in marketing, law, finance, software engineering, UX/UI design and more. They are an ad hoc, temporary “founding team.” Sprinters facilitate an opportunity generation process designed to answer critical business questions – including design, prototyping and testing ideas with final users, customers. We recruit 30-50 Ninjas and Sprinters.
Method/Procedure:  We have both an on-line pre-program course on our process and key design thinking processes. With selection we hold two all day weekend training workshops to train Ninjas and sprinters in our system mapping, design thinking and opportunity generation process.
Deliverable:  30-50 recruited and trained Ninjas and Sprinters



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Tasks
<b>Task 5- [ Validator Recruitment]</b>
Description of Task: <p>5. Recruit 20-30 validators, practitioners and individuals, domain experts with deeply rooted passion to solve these problems. Validators help entrepreneurs over the 10-day program (and beyond) by sharing informed perspective of the problem area, market, and more.</p> <p><b>Validators:</b> a community of about 20 experts, practitioners and individuals with deeply rooted passion to solve these problems. Validators help entrepreneurs over the 10-day program (and beyond) by sharing informed perspective of the problem area, market, and more. Representatives from the Colorado Water Conservation Board, Denver Water, Imagine H2O, the Nature Conservancy, Hydro Venture Partners, AECOM, AWWA, Gates Family Foundation, and the Walton Family Foundation and many important local and national organizations have served as Validators previously.</p>
Method/Procedure: <p>Through a series of workshops recruited validators review the system maps and participate in enhancing the mapped wicked problems prior to the program. The Validators attend the Big Reveal and a Wicked Problem unpacking day long workshop on day two of the program.</p>
Deliverable: <p>List of 20-30 engaged Validators with signed agreement</p>



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Tasks
<b>Task 6– [Recruit 10 Prospective CEOs]</b>
Description of Task: Recruit 10 prospective CEOs, diverse, proven serial entrepreneurs able to articulate a vision, recruit and retain top talent and raise capital.
<b>Serial Entrepreneurs:</b> We leverage the speed, focus and capability of proven entrepreneurs ( <b>Prospective CEOs</b> ) to address wicked problems. Therefore, we recruit 10 successful, serial entrepreneurs with a proven track record. We seek individuals able to articulate a vision, recruit and retain top talent and raise capital. They know how to create successful businesses. We prize diversity – geographic, gender, race, experience, background and perspective. At the time we invite them to participate, they want to start another venture but have not decided what that venture will be. We provide a “founder due diligence” process, helping them identify opportunities, mitigate risk and improve outcomes. Moreover, we engage them in starting a venture that matters.
Method/Procedure:
We have developed a recruitment process, these are not individuals that would apply. They have too many opportunities coming their way for that. We identify entrepreneurs through our network, referrals, research on social networks like LinkedIn and Crunch Base. We are seeking individuals who have had success and are between opportunities.
Deliverable:
A ranked list of 10-20 recruited candidates ranked in two segments of invited and backup candidates.



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Tasks
<b>Task 7– [Convene Public Programs]</b>
<b>Description of Task:</b>
<p>Convene the “Big Reveal” and Finale programs with 300-500 attendees hearing problem advocates pitch wicked problems in water, climate and the integration of the two.</p> <p>The opening and closing events of a 12 day program aiding serial entrepreneurs find new opportunities to tackle targeted wicked problems with market based opportunities. Prior to the program the entrepreneurs arrive to start the program the morning of the Big Reveal and leave the morning after the Finale. In between, the 10 Prospective CEOs are housed and work at a common co-working space to work and meet with Ninjas and Validators.</p> <p>Our approach is unique. We are not an accelerator. We support successful entrepreneurs earlier, before they’ve even created a venture or settled on a particular idea. We are not an incubator: we do not supply the ideas that will become new ventures. Instead we engage entrepreneurs who plan to start new ventures and give them a context to discover the wicked problems that could form the basis of their next new opportunity.</p> <p><b>Bowtie Analogy:</b> The knot in the bowtie is when a new venture is created. The right side is where accelerators and investors operate, and is where the venture attracts capital, develops a customer base and drives further growth. If things go well, the entrepreneurs and the investors achieve an exit, a liquidity event and great ROI. We operate on the left side, before a new venture is formed. This side of the bowtie has received far less attention, yet it is critically important. It brings to new venture generation the power of due diligence to identify an opportunity, mitigate risk, make better decisions and improve outcomes.</p>
<b>Method/Procedure:</b>
<p>We start with the problem, providing early due diligence. Investors have demonstrated over many decades the value of a rigorous due diligence process. We provide for entrepreneurs a kind of “founder due diligence” approach that can help them achieve what we call “founder-opportunity-fit” – even before they start their new venture.</p>
<b>Deliverable:</b>



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10 serial entrepreneurs, 30-40 ninjas, 20 validators or more all focused on wicked problems in water and climate targeting issues of concern in Colorado.

Representatives of the CWCB, statewide roundtable participants and other thought leaders Interacting as validators in support of prospective CEOs.

Tasks
<b>Task 8- [Innovation ecosystem enhancement]</b>
Description of Task: Enhance the Colorado innovation ecosystem focused on water and climate
Method/Procedure: Through meetups, system and network mapping workshops, newsletters and informational emails.
Deliverable:

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Distributed system and network maps, an engaged and accessible innovation ecosystem focused on Water + Climate including participating validators and Ninjas.

### Budget and Schedule

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

### 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 applicant 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.

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.





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### 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

**Colorado Water Conservation Board****Water Plan Grant - Exhibit B****Budget and Schedule****Prepared Date:** August 1, 2019**Name of Applicant:** 10.10.10 A project of the Colorado Nonprofit Development Center**Name of Water Project:** Tackling Wicked Problems in Water + Climate**Project Start Date:** 1/13/20**Project End Date:** 12/31/20

Task No.	Task Description	Task Start Date	Task End Date	Grant Funding Request	Match Funding	Total
1	Validator/stakeholder mapping complex system	1/13/2020	3/31/2020	\$ 14,000	\$ 29,500	\$43,500
2	Identify implementation priorities, policy needs, individual enterprise implementation steps.	3/2/20	4/30/20	\$ 5,000	\$ 5,000	\$10,000
3	Isolate wicked problems that require entrepreneurs to develop new solutions.	4/1/20	5/29/2020	\$ 8,000	\$ 16,000	\$24,000
4	Recruit and train 30-50 Ninja volunteers	6/1/20	9/30/20	\$ 15,000	\$ 5,000	\$20,000
5	Recruit 20-30 validators	1/13/20	9/30/19	\$ 10,000	\$ 10,000	\$20,000
6	Recruit 10 prospective CEOs	3/2/20	9/30/20	\$ 20,000	\$ 12,000	\$32,000
7	Convene the "Big Reveal" and Finale programs	10/1/20	10/30/20	\$ 75,500	\$ 51,500	\$127,000
8	Enhance the Colorado innovation ecosystem focused on water and climate	6/1/2020	12/31/2020	\$ 44,500	\$ 10,000	\$54,500
	Direct Expenses Fiscal Sponsorship			\$ 35,000	\$ 12,600	\$47,600
	Direct Expenses			\$ 23,000	\$ 222,150	\$245,150
						\$0
						\$0
						\$0
<b>Total</b>				<b>\$250,000</b>	<b>\$373,750</b>	<b>\$623,750</b>



Ms. Megan Holcomb  
Mr. Ben Wade  
Colorado Water Conservation Board  
Water Supply Planning Section  
1313 Sherman St. Room 718  
Denver, CO 80203

Dear Megan and Mr. Wade,

I hope this letter finds you both well. Megan, as you know, X Genesis is a for-profit organization that operates in tandem with 10.10.10 – a project of the Colorado Nonprofit Development Center, a 501(c)3 organization. With the proposed events, we aim to tackle Wicked Problems, educate the public, and inspire and enhance the Colorado Innovation ecosystem. We are pleased CWCB is considering 10.10.10's proposal to map the complex system of water and focus serial entrepreneurs on Wicked Problems in water + climate. These are some of the most pressing issues for Colorado and our planet.

X Genesis is pleased to commit matching funds up to 50% of the requested funds to support 10.10.10's "Tackling Wicked Problems in Water + Climate" proposals to the Colorado Water Conservation Board. As this letter is submitted, I am on a national fundraising tour to meet with private investors around the country. Our intention is to have \$3.5 million funding committed and in place by the end of the year, with substantial funds in place by the third quarter. We currently have a verbal investor commitment for \$500,000. With funds in place, we will provide up to 50% matching funds for the Water Plan proposal and/or the 25% match for the Water Supply Reserve Fund (WSRF) Grant proposal.

As Jeffrey Nathanson has shared with you, 10.10.10 has concurrently approached several additional corporate and individual partners that are considering providing matching funds for the 10.10.10 Water + Climate programs. Funds raised from these partners will also be provided as matching funds for these proposals. Irrespective of the status of these funds, X Genesis will, with our successful fundraising, provide the necessary additional matching funds to support the series of programs in 2020, 2021 and 2022.

Please let me know if you have any questions. I look forward to meeting with you both soon.

Sincerely,

A handwritten signature in black ink, appearing to read 'Thomas K. Higley', with a stylized flourish at the end.

Thomas K. Higley  
Founder & CEO