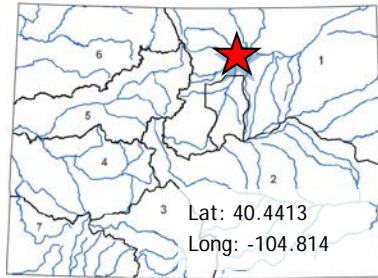




Water Plan Grant Application



| L O C A T I O N | |
|-------------------|--------------|
| County/Countries: | Weld |
| Drainage Basin: | South Platte |

| D E T A I L S | |
|--|----------|
| Total Project Cost: | \$55,466 |
| Water Plan Grant Request: | \$26,814 |
| Recommended amount: | \$26,814 |
| Other CWCB Funding: | \$0 |
| Other Funding Amount: | \$10,000 |
| Applicant Match: | \$18,652 |
| Project Type(s): Construction, Other | |
| Project Category(Categories): Environment and Recreation | |
| Measurable Result: 15,840 linear feet of restored stream, 80 acres of restored habitat, 25 miles of closed user-created routes | |

The Poudre Learning Center (PLC) is located on the Poudre River and provides low elevation cottonwood-willow riparian habitat within the Lower Cache la Poudre River corridor between Greeley and Windsor. The PLC hosts in excess of 40,000 members of the public annually, who visit the PLC in formal classroom trainings or informally while exploring the PLC campus. The PLC is co-sponsored by four local public school districts and an associated non-profit foundation, providing structured classes and teaching science-based material to meet the range of state educational standards, while also providing experiential learning concerning natural resource stewardship.



The proposed project will enable the PLC to develop and complete a phreatophyte eradication program on its 203-acre parcel on the lower Cache la Poudre River. The program will include felling and stump herbicide treatment on 60-100 Russian olive trees scattered throughout the site. Slash will be stacked outside the riparian zone and chipped for mulch on PLC revegetation sites, or if more appropriate, once adequately dried and conditions allow, slash will be burnt on site. Alternatively, slash without ripe olives may be stacked in small piles throughout the parcel to

provide shelter for wildlife and increase the roughness element for terrestrial habitat. The project will also include removal of a dense 15-acre stand of tamarisk using cut-stump technique or hand extraction followed, as needed, by herbicide application. On this site, tamarisk removal will be followed by site prep and revegetation with seed and/or appropriate plant stock. Stacking slash for burning and/or creating habitat piles as appropriate will be used for disposing of cut stock. Additionally, isolated tamarisk scattered near the streambank will be removed by hand extraction. Treatment sites will be monitored for two subsequent years, and regrowth of tamarisk and Russian olive will be eradicated immediately. Long term monitoring for tamarisk and Russian olive reinfestation will be included in the PLC site management plan. Following the PLC's mission of providing resource stewardship education to the community, PLC will self-fund beyond this grant request to create and implement educational efforts focused on invasive weed management as part of their curriculum offerings.

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 | Poudre Learning Center (PLC), Poudre Learning Center Foundation Board | |
| Name of Water Project | Phreatophyte Removal from Poudre Learning Center Riparian Habitat | |
| CWP Grant Request Amount | | 26,814 |
| Other Funding Sources _____ | | 10,000 |
| Other Funding Sources _____ | | \$ |
| Other Funding Sources _____ | | \$ |
| Applicant Funding Contribution | | \$18,652 |
| Total Project Cost | | \$55,466 |



Last Updated: July 2019

| Applicant & Grantee Information | |
|--|---|
| Name of Grantee(s) | Poudre Learning Center, Poudre Learning Center Foundation |
| Mailing Address | 8313 West F Street, Greeley Colorado 80631 |
| FEIN: | 81-0723214 |
| Organization Contact | Ryan Brennan |
| Position/Title | Poudre Learning Center Development Coordinator |
| Email | rbrennan@plcoutdoors.org |
| Phone | 970-352-1267 |
| Grant Management Contact | Larry Rogstad |
| Position/Title | Restoration Manager |
| Email | lrogstad@plcoutdoors.org |
| Phone | 970-666-0484 |
| 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). | |
| <p>The Poudre Learning Center (PLC) is a welcoming place in our community for people from all over to come, explore and learn about nature, and enjoy the magic of being outdoors. The PLC is co-sponsored by four local, public school districts with an associated non-profit foundation, providing structured classes on our 200 acre campus, teaching science based material to meet the range of state educational standards while also providing experiential learning, concepts and values concerning natural resource stewardship. For the approximately 40,000 students who visit PLC each year our goal is to get them outdoors so they may learn about, appreciate and steward natural resources. Additionally as a facility completely open to the public, PLC hosts thousands of informal visitors each year who come to walk our trails, observe wildlife and plants, fish our lake, explore over ½ mile of the lower Cache la Poudre River with its associated low elevation cottonwood-willow riparian habitat, enjoy mountain and prairie vistas with unequalled sunrises and sunsets, and most especially just experience the joy of being outdoors in a natural setting ten minutes from downtown Greeley. Our school building and new InStem lab hosts scores of events and meetings throughout the year, many of which are resource-related, and is a focal point for local community discussion on various resource-related topics, especially for envisioning effective stewardship of the lower Cache la Poudre River corridor and the associated bluff complex south of the River.</p> <p>Currently most PLC programming occurs on our 70 acre main campus south of the river. The 133 acre Hall-133 site, a former gravel extraction operation north of the Poudre and connected by the River to the south campus, was recently donated to the PLC so that we may significantly expand educational programming. The Hall-133 is currently the focus of an in depth planning effort, so that we may concentrate our current and future site restoration to maximize River function, riparian stewardship and public outreach for our future visitors.</p> | |

Last Updated: July 2019

| Type of Eligible Entity (check one) | |
|-------------------------------------|---|
| X | 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 |
| X | 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> |
| | 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> |
| X | Environmental & Recreation - Projects that promote watershed health, environmental health, and recreation. <i>Applicable Exhibit A Task(s):</i> |



Last Updated: July 2019

| | | |
|--|-------|----------|
| | Other | Explain: |
|--|-------|----------|

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 | Weld |
| Latitude | 40.4413 |
| Longitude | -104.8142 |

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.



Last Updated: July 2019

The proposed project will enable the Poudre Learning Center (PLC) to develop and complete a phreatophyte eradication program on its 203 acre parcel on the lower Cache la Poudre River. The program will include felling and stump herbicide treatment on 60-100 Russian Olive trees scattered throughout the site. Slash will be stacked outside the riparian zone and chipped for mulch on PLC reveg sites, or if more appropriate once adequately dried and conditions allowed burnt on site. Alternatively, slash without ripe olives may be stacked in small piles throughout the parcel to provide shelter for wildlife and increase the roughness element for terrestrial habitat. The project will also include removal of a dense 15 acre stand of tamarisk using cut-stump technique or hand extraction followed as needed by herbicide application. On this site tamarisk removal will be followed by site prep and revegetation with seed and or appropriate plant stock. Stacking slash for burning and or creating habitat piles as appropriate will be used for disposing of cut stock. Additionally isolated tamarisk scattered near the streambank will be removed by hand extraction. Treatment sites will be monitored for two subsequent years, and regrowth of tamarisk and Russian Olive will be eradicated immediately. Long term monitoring for tamarisk and Russian Olive reinfestation will be included in the PLC site management plan. Additionally, PLC is undertaking removal of 3-7 mature crack willow in the riparian zone and beyond parameters for this grant will be self-funding continuing efforts to manage leafy spurge, Canada and musk thistle throughout the property. Following our mission of providing resource stewardship education to the community, PLC will self-fund beyond this grant request to create and implement educational efforts focused on invasive weed management as part of our curriculum offerings.

These efforts are in line With PLC's goal of being a leader in science-based natural resource land management within the lower Cache la Poudre watershed. The PLC is located on the Poudre River and provides low-elevation cottonwood-willow riparian habitat within the Lower Cache la Poudre River corridor, between Greeley and Windsor Colorado. We host in excess of 40,000 members of the public annually who visit PLC in formal classroom training or informally while exploring the PLC campus. In accomplishing this effort PLC will be making extensive use of volunteer resources to provide public exposure concerning invasive management and provide public opportunity to move from awareness to action in resource stewardship efforts.

Management of invasive phreatophytes is encouraged in **The Platte Invasive Endeavor Plan for the South Platte Watershed** which encourages the removal of tamarisk stands followed by revegetation with desirable plants and the cutting-herbicide stump treatment for Russian Olive. House Bill 15-006 tasks CWCB to fund phreatophyte management through grants funding these control efforts. Located within the over-appropriated South Platte Basin, removal of invasive phreatophytes on the PLC will help reduce water consumption, diminish opportunity for these aggressive invasive plants to colonize new sites, will reduce competition with desirable plant species on the PLC and will increase wildlife habitat quality.

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) |
| 2,300 linear feet | Length of Stream Restored or Protected (linear feet) |
| | Efficiency Savings (indicate acre-feet/year OR dollars/year) |
| 203 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 |

Last Updated: July 2019

| | | |
|-----------|--|---------------------------|
| 10,000+ | Number of Coloradans Impacted by Engagement Activity | |
| 203 acres | Other | Explain: Habitat enhanced |

| Water Project Justification |
|---|
| <p>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).</p> <p>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;)</p> <p>The Colorado Water Plan, South Platte Basin Implementation Plan and Education Action Plans all speak frequently and eloquently to protecting, restoring and enhancing the riparian habitat within Colorado's watersheds, including the lower Cache la Poudre within the South Platte Basin, as a critical component of comprehensive, riparian management in our statewide approach for watershed Conservation (Sec. 6-6 Colorado Water Plan page 6.59).</p> <p>Invasive plant species compete with beneficial plant species, reduce cover, reduce forage value for livestock and wildlife, diminish esthetic value of riparian landscapes, and through increased water uptake and evapotranspiration, phreatophytic invasives including tamarisk, Russian Olive and crack willow in riparian areas and wetlands deplete in-basin water levels. The Colorado Water Plan (page 6-91) suggests that losses due to non-beneficial causes including phreatophytes with no agricultural value can cause up to 10% loss of water in our watersheds.</p> <p>To limit losses for critical water yields and fulfill Colorado resident's high standards for resource stewardship, The Colorado Water Plan, Critical Action Plan section 10-1 states that Colorado's water values drive the plan toward, 'a strong environment that includes healthy watersheds.' As such, the Action Plan Goal 3 (page 10-4) speaks to healthy watersheds, protection of desirable wetland plants, protecting and restoring Colorado's natural environment with the most effective tools available. Careful removal of phreatophytic invasives, especially when in relatively low density will enhance riparian and adjacent habitat and prevent spread and establishment of these invasives on neighboring properties within the lower Cache la Poudre and downstream. The Colorado Water Plan continues in Section 10-2 Measurable Objectives Goal F to advocate for enhanced watershed health as being, 'too critical to our "Colorado brand" not to have robust objectives.' Rightly, Goal H in the same section encourages new and innovative educational programming to improve public awareness and engagement on water issues. As the Poudre Learning Center will develop an educational messaging component within our phreatophyte removal project which will be presented to some of our 37,000 annual student visitors in a structured science-based lesson that fits within Colorado educational standards, we are an ideal entity to engage in this educational effort. Additionally, PLC staff frequently attend and present at local service club meetings, and in our public outreach we intend to bring the message of the need for management of invasive phreatophytes to these groups of highly engaged Coloradans, and moving from an 'awareness to action mode' we will enthusiastically recruit volunteers to assist on the ground in this project. Summarizing applicability of this project to the Colorado Water Plan, in removing the phreatophytes on our campus PLC will fulfill Action F (page 10.12) protecting healthy environments and promoting restoration of critical watersheds, Action H (page 10.13) incorporating associated educational programming promoting awareness of this watershed issue thereby meeting Additional Critical Action goal 3 (page 10.14) helping the lower Cache la Poudre to become a more resilient Watershed.</p> <p>While the South Platte Basin Implementation Plan is not as articulate as the Colorado Water Plan in recognizing the critical need to protect, restore and enhance habitat as part of the bigger picture in water conservation, it does mention it as a goal. In the Executive Summary Section 4.5.3.4.2 (page 4-70) this plan</p> |

Last Updated: July 2019

suggests the need to protect or enhance the environment through habitat restoration efforts. Although this section is specific to downstream portions of the South Platte, one can extrapolate the need applies to upstream tributaries, as all things including invasives do flow downstream in a watershed. Section 3.6 Environment and Recreation in the same document focuses on preservation and enhancement of the environment as being important to Colorado's economy, therefore additional projects should be considered including habitat restoration because Colorado residents appreciate natural resources and desire to maintain scenic and ecological values in Colorado (Section 4.1).

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.

Platte Invasives Endeavor Plan for the South Platte Watershed (2017) Counties of Denver, Adams, Boulder, Larimer, Weld, Logan, Morgan, Washington and Sedgwick. Provides definitive methods for management, removal and monitoring of phreatophytic, invasive plants.

House Bill 15-006, 17.35.5.5-116.5 directs Colorado Water Conservation Board to provide funding for phreatophyte management and control.

Native Plant Revegetation Guide for Colorado, October 1998, Colorado Natural Areas Program, CDNR

Weld County Comprehensive Land Use Plan, 2010, Section 22-4-210 Noxious Weeds Goals and Policies

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.



Last Updated: July 2019

In Process: CWCB Watershed Restoration Program, Watershed and Flood Protection Section grant:
Poudre Learning Center, Hall-133 Riparian restoration 60% Design Plan.
Grant approved by Colorado Water Congress at their January 28, 2020 meeting in Westminster, and is pending awaiting final contract sign-off

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.

N/A

Submittal Checklist

| | |
|---|--|
| | 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⁾ |
| N/A | Engineer's statement of probable cost (projects over \$100,000) |
| N/A | Letters of Matching and/or Pending 3 rd 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⁾ |

Last Updated: July 2019

(1) Required with application.

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

Last Updated: July 2019

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)? |
| While we are not seeking engagement or educational funding through this grant, it should be noted that PLC Will be creating educational programming meeting Colorado Standards and outreach programming for off site presentations. |
| Who is/are the target audience(s)? How will you reach them? How will you involve the community? |
| K-College Classes Outreach to local service clubs in the community |
| 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? |
| |

Last Updated: July 2019

| |
|--|
| Describe how you plan to measure and evaluate the success and impact of the project? |
| |
| What research, evidence, and data support your project? |
| |
| Describe potential short- and long-term challenges with 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." |
| |
| 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. |
| |
| Describe how the project achieves the education, outreach, and public engagement goals set forth in the applicable Basin Implementation Plan(s). |
| |

Last Updated: July 2019

| |
|---|
| Describe how the project achieves the basin roundtable's PEPO Education Action Plans. |
| |

| 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. |
| |
| 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. |
| |



Last Updated: July 2019

Colorado Water Conservation Board

Water Plan Grant - Exhibit A

Statement Of Work

| | |
|--|--|
| Date: | January 15, 2020 |
| Name of Grantee: | Poudre Learning Center, Poudre Learning Center Foundation |
| Name of Water Project: | Phreatophyte Removal from Poudre Learning Center Riparian Habitat |
| Funding Source: | Environmental and Recreational Projects |
| Water Project Overview: | |
| <p>Located within the floodplain and riparian corridor of the lower Cache la Poudre River, the Poudre Learning Center (PLC) will remove invasive, phreatophytic plants, including Russian olive, tamarisk, and crack willow from riparian portions of our 203 acre campus. Once removal has been completed PLC will monitor for re-growth and will immediately remove new plants as part of our long-term management of the site. As appropriate, PLC will conduct revegetation efforts to establish plant stands that will discourage future colonization of these sites by invasive plant species. We will use staff and volunteers to accomplish the work. Currently we are in Discussion with Volunteers for Outdoor Colorado, Wildland Restoration Volunteers and Weld Youth Corps to obtain their services on this project, which should reduce overall project cost. Additionally PLC will utilize our volunteer resources to further reduce costs.</p> <p>It is estimated that currently there are 60-100 Russian olive scattered throughout the campus, 5-7 mature crack willow with DBH exceeding 30 inches, and a fifteen acre dense stand of tamarisk including new growth up to mature plants exceeding 15 feet in height, in total we estimate 300-350 tamarisk plants on site. Additionally there may be a few tamarisk scattered along the river-bank. While we are not requesting funding for educational programming from CWCB or the Colorado Water Plan at this time, as a public educational facility serving the community, PLC will develop lessons meeting Colorado educational standards and outreach programming for off-campus presentations.</p> | |
| Project Objectives: | |
| <p>Total eradication of tamarisk, Russian Olive and crack willow on PLC grounds, with planting of appropriate cover vegetation to reduce opportunity for recolonization by invasive plant species.</p> <p>Short-term monitoring (2 years) and mop up</p> <p>Long-term (perpetuity) maintenance and continued eradication</p> <p>Educational programming for on-site K-college classes</p> <p>Educational outreach off-site to the community</p> | |



Last Updated: July 2019

| Tasks |
|---|
| Task 1 – [Name] |
| Description of Task: Locating, identifying, marking, photographing and recording location of individual and stands of crack willow, Russian olive and tamarisk |
| Method/Procedure: One person on foot, with hand-held GPS, and surveyors tape. Estimated 12-15 hours to complete the task, task to be completed on or before June 15, 2020. |
| Deliverable: Complete documentation of phreatophyte infestation so that work crews can easily find and remove the invasives. |

Last Updated: July 2019

| Tasks | |
|---|--|
| Task 2 – [Name] | |
| Description of Task: | |
| Using staff and volunteers, removal and slash processing of crack willow, Russian Olive and tamarisk | |
| Method/Procedure: | |
| <p>In consultation with the Weld County Invasive Coordinator and/or using methods prescribed in <u>Platte Invasive Endeavor Plan for the South Platte Watershed</u> and using staff and volunteers, PLC will cut and stump treat, cut, grub, fell or otherwise takedown all invasive phreatophytes on our campus. Mature Russian olives will be handled by three or four person crews including one chainsaw operator, two slash pullers and one herbicide mopper. It is estimated that crews will be able to process two Russian olive trees/hour. Depending on size of plant/clump and using three person crews, tamarisk will either be grubbed out of the ground, lopped and mopped with herbicide, or felled and stump mopped with herbicide. Slash will be stacked in upland site and as appropriate will be chipped for mulch, dried for burning next winter when weather conditions are appropriate and burn permits as needed have been obtained, or if appropriate will be placed in suitable small stacks for wildlife cover and increased habitat roughness. To prevent additional spread of seed Russian olive and tamarisk will be taken down before August 15. Crack willow because of their large size and crooked growth pattern may be considered hazard trees needing to be taken down by a professional arborist using a lift truck. The crack willow will be felled by a professional arborist, and limbed and bucked to long length boles by PLC crews and volunteers. If appropriate slash will be scattered on site and/or burned on site. tree boles will be scattered throughout the site to increase habitat roughness and site heterogeneity. All treated sites will be reseeded and photo documented.</p> | |
| Deliverable: | |

Last Updated: July 2019

Removal of all invasive plants on site with appropriate disposal of slash and woody boles, accompanied by stump treatment and reveg to prevent regrowth of invasive species.

Task 3 Description: Short and long-term monitoring of invasive sites.

Method and Procedure: Between April 30 and June 15 of the next two growing seasons after invasive removal occurs, PLC staff will visit and conduct a thorough inspection of all treatment sites to verify that regrowth of tamarisk, Russian Olive and crack willow is not occurring, and to assess the success of revegetation efforts. Any new invasive plants found will be removed immediately using appropriate techniques for species and location. As PLC staff works on the parcel regularly, periodic long-term monitoring and removal of regrowth will occur in perpetuity to assure that individual plants are removed before reaching the level of infestation.

Deliverable: Immediate removal of invasive tamarisk, Russian olive and crack willow on Poudre Learning Center property. Long-term control of invasives on the property. Reduction of invasive plant seed source on PLC and adjacent reaches of the lower Cache la Poudre watershed resulting in reduced loss of water in the watershed due to evapotranspiration.

Repeat for Task 3, Task 4, Task 5, etc.

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.

Last Updated: July 2019

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.

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.



Last Updated: July 2019

| | | | | | | | |
|---|--|--|--------------|-------------|----------------|----------------|--------------|
| CWCB Exhibit B Budget and Schedule Worksheet | | | | | | | |
| Prepared Date: | | 1/30/2020 | | | | | |
| Name of Applicant: | | Poudre Learning Center, Poudre Learning Center Foundation Board | | | | | |
| Name of Project: | | Phreatophyte eradication from Poudre Learning Center Riparian Zone | | | | | |
| Project Start Date: | | 5/15/2020 | | | | | |
| Project End Date: | | 6/30/2021 | | | | | |
| | | | | | | | |
| Task # | Task Description | | Start | End | Grant | Match | Total |
| | | | Date | Date | Request | Funding | |
| 1 | Cruise site, mark trees/bushes to be removed, 1 fte, 24 hours @\$27/hour | | 5/15/2020 | 05/22/20 | \$324 | \$324 | \$648 |
| 2 | Assemble safety equipment, hard hat, leather gloves, cutting chaps, safety eyewear, earplugs | | 5/15/2020 | 05/22/20 | \$500 | \$558 | \$1,058 |
| 3 | Obtain work equipment, 3 chainsaws, loppers, rakes, rope, herbicide, applicators etc | | 5/15/2020 | 05/22/20 | \$650 | \$1,300 | \$1,950 |



Last Updated: July 2019

| | | | | | | | |
|----|--|--|-----------|----------|----------|----------|----------|
| 4 | Secure Heavy Equipment, highlife truck, tractor with trailer, pickup truck, chipper | | 6/1/2020 | 07/30/20 | \$1,890 | \$5,670 | \$7,560 |
| 5 | Secure project onsite foreman, \$35/hour for 15, 8 hour days | | 6/1/2020 | 07/30/20 | \$3,200 | \$1,000 | \$4,200 |
| 6 | Hire professional arborist crew (one feller and two slash pullers) for 3-5 mature crack willow | | 6/1/2020 | 07/30/20 | \$2,250 | \$500 | \$2,750 |
| 7 | Hire and implement 10 person crew, 15 days to remove tamarisk and Russian Olive | | 6/1/2020 | 07/30/20 | \$18,000 | \$18,000 | \$36,000 |
| 8 | Follow up recon to check for and treat invasive regrowth | | 8/15/2020 | 09/30/20 | \$0 | \$300 | \$300 |
| 9 | Follow up long-term recon and treatment for invasive regrowth | | 5/15/2021 | 06/30/21 | \$0 | \$500 | \$500 |
| 10 | Routine Monitoring | | 7/1/2021 | PERP | \$0 | \$500 | \$500 |
| | | | | | \$26,814 | \$28,652 | \$55,466 |

CWCB Exhibit B Budget and Schedule Worksheet

Prepared Date: 1/30/2020

Name of Applicant: PoudreLearning Center, Poudre Learning Center Foundation Board

Name of Project: Phreatophyte eradication from Poudre Learning Center RiparianZone

Project Start Date: 5/15/2020

Project End Date: 6/30/2021

| Task | Task Description | Start Date | End Date | Grant Request | Match Funding | Total |
|------|--|------------|----------|-----------------|-----------------|-----------------|
| 1 | Cruise site, mark trees/bushes to be removed, 1 fte, 24 hours @\$27/hour | 5/15/2020 | 05/22/20 | \$324 | \$324 | \$648 |
| 2 | Assemble safety equipment, hard hat,leather gloves, cuttingchaps, safety eyewear,earplugs | 5/15/2020 | 05/22/20 | \$500 | \$558 | \$1,058 |
| 3 | Obtain work equipment, 3 chainsaws,loppers, rakes , rope, herbicide, applicators etc | 5/15/2020 | 05/22/20 | \$650 | \$1,300 | \$1,950 |
| 4 | Secure Heavy Equipment, highlife truck, tractor with trailer, pickup truck, chipper | 6/1/2020 | 07/30/20 | \$1,890 | \$5,670 | \$7,560 |
| 5 | Secure project onsite foreman, \$35/hour for 15, 8 hour days | 6/1/2020 | 07/30/20 | \$3,200 | \$1,000 | \$4,200 |
| 6 | Hire professional arborist crew (one feller and two slash pullers) for 3-5 mature crack willow | 6/1/2020 | 07/30/20 | \$2,250 | \$500 | \$2,750 |
| 7 | Hire and implement 10 person crew, 15 days to remove tamarisk and Russian Olive | 6/1/2020 | 07/30/20 | \$18,000 | \$18,000 | \$36,000 |
| 8 | Follow up recon to check for and treat invasive regrowth | 8/15/2020 | 09/30/20 | \$0 | \$300 | \$300 |
| 9 | Follow up long-termrecon and treatment for invasive regrowth | 5/15/2021 | 06/30/21 | \$0 | \$500 | \$500 |
| 10 | Routine Monitoring | 7/1/2021 | PERP | \$0 | \$500 | \$500 |
| | | | | \$26,814 | \$28,652 | \$55,466 |



LEGEND:

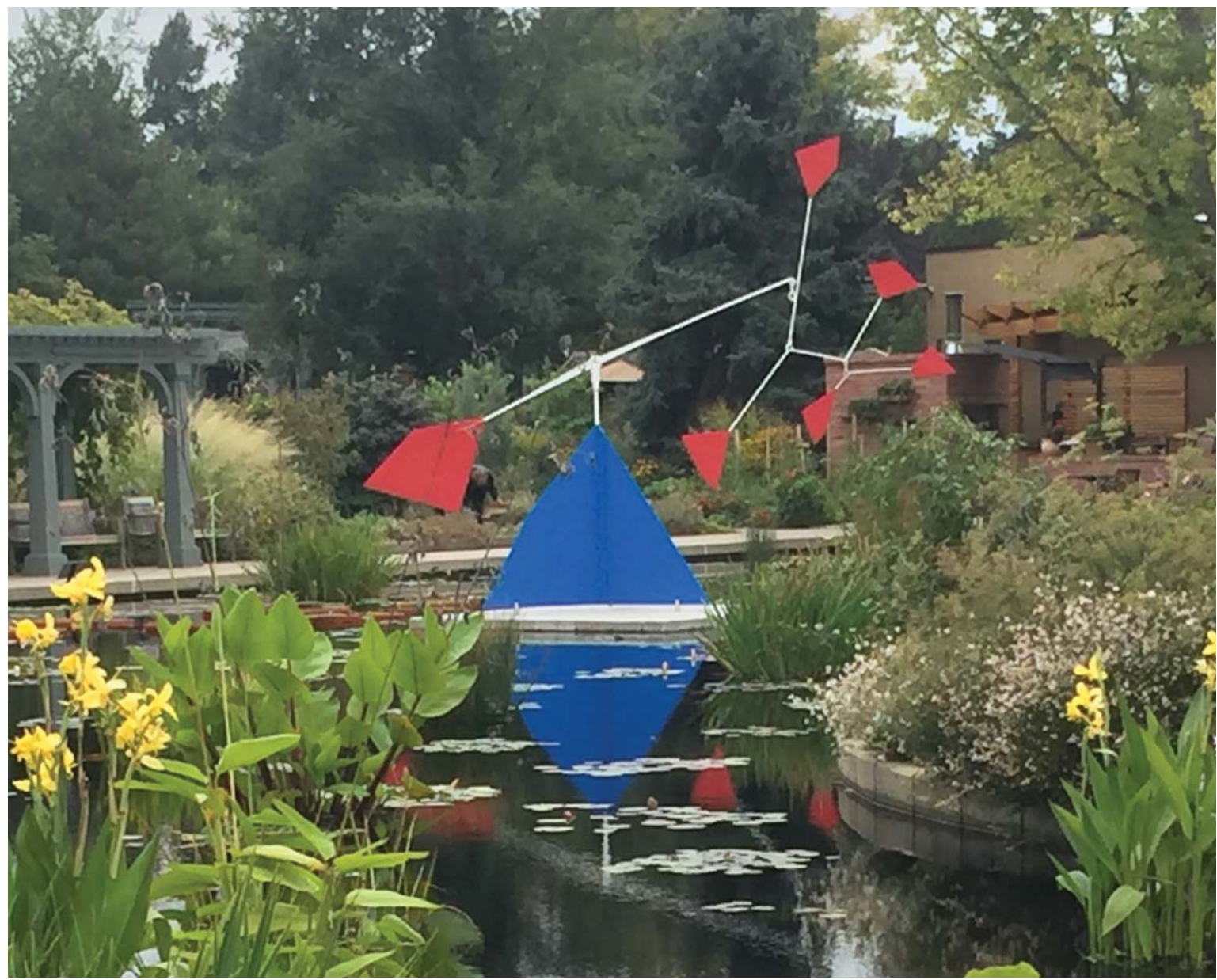
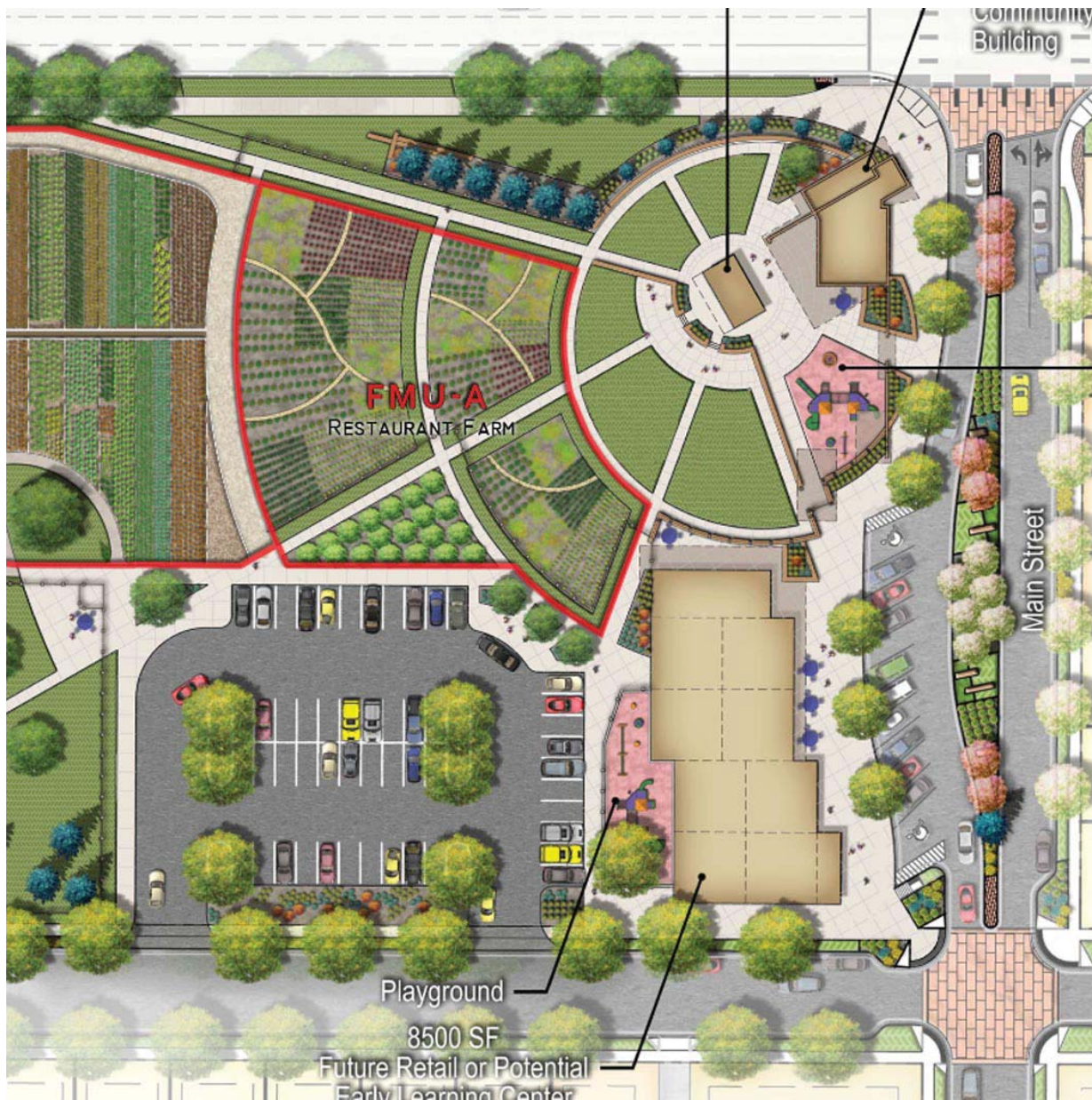
- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|-------------------------------|------------------------|------------------------------|------------------|------------------------------------|--|--|------------------------|--|--------------------------------|------------------|----------------------------|--------------------------------|---------------------|-----------------------|---------------------|-----------------------|------------------------------|--------------------|--------------|-------------------------|--------------------------------|-----------------------------------|-------------------------|-----------------------|----------------------|------------------------------|---------------------|---------------|----------------------------|-------------------------|----------------------|---|-------------------------------|--------------------------------|---|--|---------------------------------|---|---------------------|------------------|-------------------|---------------------|-----------------------------|---------------------------------------|-----------|--------------------------|---------------|--------------------|--------------------|
| ① Archery trail | ② Tee-pee camp with fire ring | ③ Main parking for 200 | ④ Parking for Retreat Center | ⑤ Retreat Center | ⑥ Convert existing pond to wetland | ⑦ Planted earthen berm to screen highway | ⑧ Existing Poudre Learning Center facility | ⑨ Maintenance building | ⑩ Experimental wholistic grazing paddocks and loafing shed | ⑪ Event deck at Retreat Center | ⑫ Firestien Farm | ⑬ Existing cattail wetland | ⑭ Eagle nesting site view area | ⑮ Canoe put-in site | ⑯ Canoe take-out site | ⑰ Point of interest | ⑱ Landscape screening | ⑲ Utility yard / gate access | ⑳ Restored prairie | ㉑ Turnaround | ㉒ Whitney Ditch lateral | ㉓ Highway "O" Street extension | ㉔ Road Under "O" Street extension | ㉕ Emergency access gate | ㉖ Existing south pond | ㉗ Existing west pond | ㉘ Existing emerging woodland | ㉙ Observation tower | ㉚ Event space | ㉛ New wetland #1, #2, etc. | ㉜ Improve oxbow wetland | ㉝ Single track trail | ㉞ 12' wide two track farm road / emergency access | ㉟ Main entry at existing gate | ㊱ New main exit / entry access | ㊲ Trailhead info station and Porto-pot-ty enclosure | ㊳ Demonstration farm kit and caretaker residence | ㊴ Improved naturalized drainage | ㊵ Experimental grazing / prairie fields | ㊶ Observation butte | ㊷ Farm kit field | ㊸ Trail underpass | ㊹ Wildlife overpass | ㊺ Passive solar warming hut | ㊻ Orchard and berry cropping hedgerow | ㊼ Zipline | ㊽ Equipment rental shack | ㊾ Food forest | ㊿ Main access road | 1 Special use area |
|-----------------|-------------------------------|------------------------|------------------------------|------------------|------------------------------------|--|--|------------------------|--|--------------------------------|------------------|----------------------------|--------------------------------|---------------------|-----------------------|---------------------|-----------------------|------------------------------|--------------------|--------------|-------------------------|--------------------------------|-----------------------------------|-------------------------|-----------------------|----------------------|------------------------------|---------------------|---------------|----------------------------|-------------------------|----------------------|---|-------------------------------|--------------------------------|---|--|---------------------------------|---|---------------------|------------------|-------------------|---------------------|-----------------------------|---------------------------------------|-----------|--------------------------|---------------|--------------------|--------------------|



MASTER PLANNING WORKSHOP
POUDRE LEARNING CENTER
COMBINED OPTION - GREELEY, CO



04/06/18



DEMONSTRATION FARM

ART IN THE LANDSCAPE

WARMING HUT / WILDLIFE BLIND



GROUP ACTIVITIES

ARCHERY TRAIL



FARM KIT RESIDENCE



OBSERVATORY



EXPERIMENTAL AGRICULTURE



VIEW FROM PICNIC SPOT

LEGEND DESCRIPTIONS

- 1. Archery trail**
This is an archery course which has some stationary as well as moveable targets depending on the desired result. There could also be a level flat graded range located in the restored prairie location to be determined.
- 2. Tee-pee camp with fire ring**
This proved a place to set the current and future tee-pee's. An aggregate base pad should be built 6" to 8" high to ensure long term drainage. The tee-pee's are to be arranged in a cluster with a fire ring in the middle. The cluster should be tucked into the existing cottonwood grove but visible at a distance from the main entry.
- 3. Main parking for 200**
Half of the parking lot is to be a permanent hard surface for everyday use, as well as double as the main access road to the retreat center. The other half is to be used as over flow for special events. This half to have a crusher fine finish surface.
- 4. Parking for retreat center**
The parking and main access road is to service as temporary of HC parking and loop road to serve mainly for drop-off/pick-up, maintenance and emergency vehicles. It can be a hard all-weather surface or crusher fines.
- 5. Retreat center**
This structure to provide temporary lodging for visiting groups as well as meeting rooms for special functions. It is located where the change in topography can provide grade access to the upper level and grade access to the lower level. It is a prominent point in the site to provide expansive views of the river valley. The south deck is a good gathering point for groups (or weddings) or could double as a stage for special performances with the audience arranged on the grass seating area.
- 6. Convert existing pond to wetland**
Partially fill in existing pond with variable heights. Plant with a large variety of species.
- 7. Planted earthen berm to screen highway.**
4' to 6' high earthen berm to screen cars in parking lot and mitigate road noise from 83rd Ave.
- 8. Existing Poudre Learning Center Facility**
To remain as classroom space, visitor center and administrative offices. Add renewable energy exhibit TBD. Other considerations include: taking advantage of regional trail, sell refreshment, café, information kiosk near trail.
- 9. Maintenance building**
Fenced maintenance yard and equipment shed for internal storage.
- 10. Experimental wholistic grazing paddocks and loafing shed**
Fence perimeter, install variable fencing for rotational grazing of a variety of livestock. Program to be developed.
- 11. Event deck at retreat center**
Concrete or stone surface for durability, just large enough for groups or doubles as a stage.
- 12. Firestein Farm**
Existing historic farm and Firestein's residence.
- 13. Existing cattail wetland**
Restore as required to enhance habitat diversity. Consider adding boardwalk across wetland for interpretation and access.
- 14. Eagle nesting site view area**
Consider adding information node.
- 15. Canoe put-in site**
Locate best access point on river, connect with trail.
- 16. Canoe take-out site**
Locate best access point, connect to single track trail.
- 17. Point of interest**
Removed downed branches, smooth out ground in shade of cottonwood. Excellent quiet contemplative spot.

- 18. Landscape screening**
Plant native tree and shrub hedgerow to screen maintenance yard from street and neighbors.
- 19. Utility yard / gate access**
Secure yard with lockable gate area for staff use only.
- 20. Restored prairie**
Regrade area as required to mimic predisturbance of site. Add organics, soil inoculants as required to restore and seed with native species mix.
- 21. Turnaround**
Pick-up and drop-off loop for retreat center functions and emergency vehicles only.
- 22. Whitney Ditch lateral**
Research practicality and availability of using this water.
- 23. Highway "O" Street extension**
Weld County proposed extension of this street is in planning stages. Numerous alternative routes have been studies. The alignment as drawn would bisect the property. The highway would have a very negative impact on any of the improvements and activities planned on either side of it. The largest environmental impact may be to the river itself.
- 24. Road under "O" Street extension**
It is very important to establish permanent access to all part of the property so that in the event of the highway being built you have not only legal access, but an unobstructed access in the form of an underpass or overpass to allow vehicular and pedestrian flow between both sides.
- 25. Emergency access gate**
At grade connection to "O" street.
- 26. Existing south pond**
Use pond fully, increase uses for waterfowl, as well as teaching boat safety.
- 27. Existing west pond**
Improve habitat by adding islands and keeping shallow, improve fish habitat by making deep section.
- 28. Existing emerging woodland**
Enhance by planting additional habitat species and cut single-track access trail.
- 29. Observation tower**
Create a beautiful but functional piece of architecture located on top of a hill. It will double as a daytime wildlife viewing area and a night sky observatory.
- 30. Event space**
Seating on a native 'lawn' space for viewing events on the deck/stage or passive use for a soft place to sit.
- 31. New wetland #1, #2, etc.**
Engage in wetland banking program to increase habitat as well as generate residual income for operational expenses.
- 32. Improve oxbow wetland**
Open up area on the upstream side to increase seasonal inundation of oxbow pond.
- 33. Single track trail**
Typical.
- 34. 12' wide two-track farm road / emergency access**
This can act as a main 'wide' trail for larger groups and double as an emergency service route for vehicles.
- 35. Main entry at existing gate**
Reuse existing curb cut and gate as a main way into and out of site.
- 36. New main exit / entry access**
Additional entry and gate to accommodate high vehicular traffic events.

- 37. Trailhead info station and Porto-potty enclosure**
Create a new trail head and convenience station for new users to the 133 acres.
- 38. Demonstration farm kit and caretaker residence**
The FarmKit™ is a constellation of products that combines a number of otherwise disparate elements and uses into one beautiful and functional core. It includes human habitat, agricultural field technologies, processing technologies, operational technologies, and local market integration tools. It is a turnkey solution for a growing population of aspiring agriculturalists.
- Agriburbia's proprietary structural design package combines a number of vital on-farm elements; greenhouse space for seedling and off-season production, processing space, a commercial-grade kitchen, off-season event space, living quarters for owners or seasonal employees, and a central control center for all on-site irrigation and production technologies. The FarmKit™ fulfills a wide array of programs in order to streamline the process of running a small farm business, especially one that involves value-added processing. In doing so, the FarmKit™ helps to facilitate the establishment of resilient local economies and cultural hubs.
- The FarmKit™ is also a valuable real-estate development tool. It can act as a powerful tool in attracting an increasingly large wave of food and culture-conscious homebuyers, businesses, and institutions to any given development project. In an atmosphere of shifting lifestyle tastes (primarily toward smaller living quarters and a connection to place), it provides both living and working space and can be customized to the needs of any given owner upon construction. In the context of a newly constructed or previously established residential setting, the FarmKit™ has the ability to create value for the entire community by establishing a local food source and various local economic development opportunities.
- The standard FarmKit™ structural package will be cost-competitive, flexible in programming, and will provide tangible benefit to multiple parties; as a sure-footed base of operations to any new farm owner/operator, and as a powerful economic and cultural attractor for project owners and the community at large.
- 39. Improved naturalized drainage**
Insure good drainage around new parking and roads. Create a decorative and natural feature.
- 40. Experimental grazing / prairie fields**
Further programmatic development as required.
- 41. Observation butte**
Build up hill to 8-10' above surrounding grade. Plant north side of butte with shade loving species.
- 42. Farm kit field**
Intensive agriculture demonstration.
- 43. Trail underpass**
In the event of the "O" Street extension across access. Ensure future access.
- 44. Wildlife overpass**
In the event of the "O" Street extension, ask county to build wildlife overpass to accommodate wildlife movement over new road if required.
- 45. Passive solar warming hut**
Build a temporary structure for use as warming hut for skating and wildlife observation 'blind'.
- 46. Orchard and berry cropping hedgerow**
- 47. Zipline**
- 48. Equipment rental shack**
For short term storage of rentable equipment.
- 49. Food forest**
- 50. Main access road**
- 51. Special use area**



MASTER PLANNING WORKSHOP
POUDRE LEARNING CENTER
COMBINED OPTION - GREELEY, CO

04/06/18