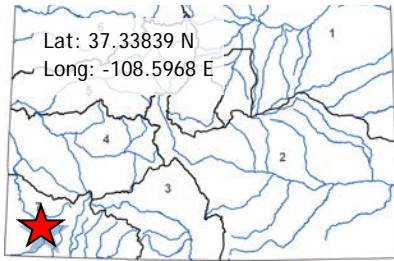




Water Plan Grant Application



L O C A T I O N	
County/Countries:	Montezuma
Drainage Basin:	Southwest

D E T A I L S	
Total Project Cost:	\$70,296
Water Plan Grant Request:	\$25,598
Recommended amount:	\$25,598
Other CWCB Funding:	\$
Other Funding Amount:	\$36,698
Applicant Match:	\$8,000
Project Type(s):	IPP
Project Category(Categories):	Conservation and Land Use/Agricultural/Environment and Recreation
Measurable Result:	200 af savings for 2019

Montezuma County Noxious Weed Department has mapped 482 miles of waterways and an additional 3,421 acres of pasture and wetlands infested with Russian olives, totaling 6,098 acres of infested land. The county has not mapped Salt cedar but it is estimated at infesting at least 100 miles of waterways or 600 acres of land within Montezuma County.

Montezuma County used data from published research studies to calculate the water loss from Russian olives and Salt cedars at approximately 4,800-acre feet or 1,564,086,849.6 gallons/year in Montezuma County. Southwest Colorado has been in extreme drought for a few years now, and water is one of their top scarce resources.

Montezuma County Noxious Weed Department (MCNWD) intends on hiring a two person seasonal crew to provide landowners and land managers within Montezuma County a feasible solution for Russian olive and Salt cedar management. MCNWD is requesting \$25,598 for the salary of one crewmember. The other crew member will be paid through the county and the landowners. The 2019 project goal is to treat about 250 acres of Russian olives and Salt cedar, which will result in the saving of about 200 acre-feet per year. The water savings of 200-acre feet will be used for agricultural crops, wildlife habitat, small acre gardens and livestock feed. Other benefits will be improving water quality by reducing Nitrogen amounts, reducing mosquito populations, reducing Carp habitat in creeks, reducing maintenance costs of ditches, and restoring wetlands and streambanks to their native habitat. The initial target areas for Russian olive and Salt cedar management are down the Dove Creek Canal, Uditch Canal, U Lateral, Lone Pine Canal, Garrett Ridge Canal, Hermana Ditch, Upper Arickaree, West Lateral Canal, Hartman Draw, Alkali Canyon, and all the small ditches that feed off these waterways.

The crew will carry out cut stump treatments on trees with a diameter at breast height (DBH) of 2" or larger. Trees with DBH of less than 2 inches will be foliar sprayed with herbicide via a backpack sprayer or atv sprayer. The two-person crew will be mapping their treatments as well as taking photo points for future monitoring, tracking how many trees were treated and their size. This will enable the County to estimate a more accurate water savings.

Last Updated: November 2018

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

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	Montezuma County Noxious Weed Department
Name of Water Project	Russian olive and Salt cedar Waterway Project
CWP Grant Request Amount	\$25,598
Other Funding Sources <u>County / Landowners</u>	\$25,598
Other Funding Sources <u>Applied for CDA grant for</u>	\$4,000
Other Funding Sources <u>Applied for SWCD grant</u>	\$7,100
Applicant Funding Contribution (county noxious weed administration costs)	\$7,000 in kind, \$1,000 cash
Total Project Cost	\$70,296



Last Updated: November 2018

Applicant & Grantee Information	
Name of Grantee(s)	Montezuma County
Mailing Address	109 West Main Rm 260
FEIN	84-6000-786
Organization Contact	Shak Powers
Position/Title	Montezuma County Administrator
Email	spowers@co.montezuma.co.us
Phone	970-565-0580
Grant Management Contact	Bonnie Loving
Position/Title	Montezuma County Noxious Weed Department Director
Email	bloving@co.montezuma.co.us
Phone	970-565-0580
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>Montezuma county has a total area of 2,040 square miles (5,300 km²), of which 2,030 square miles of land and 11 square miles is water.</p> <p>A large county, roughly 1/3 of its area is tribal land, 1/3 is federal land (administered by the National Park Service, the United States Forest Service and the Bureau of Land Management), and 1/3 private or state/county land. The county has the second largest reservoir in Colorado, McPhee Reservoir, many other large reservoirs, and hundreds of private lakes and ponds. Much of the county is irrigated cropland, and it produces fruit, large numbers of cattle and sheep, and beans. It is served by U.S. Highways 160 and 491 (formerly US 666), and by Cortez Municipal Airport.</p>	

Last Updated: November 2018

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.
	Non-governmental organizations (NGO): Organization that is not part of the government and is non-profit in nature.
	Covered Entity: As defined in Section 37-60-126 Colorado Revised Statutes .

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

Last Updated: November 2018

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/Countries	Montezuma County
Latitude	37.33839 N
Longitude	-108.5968 E

Water Project Overview
<p>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.</p> <p>The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, Other Funding Sources/Amounts and Schedule.</p> <p>Montezuma County Noxious Weed Department (MCNWD) intends on hiring a two person seasonal crew to provide landowners and land managers within Montezuma County a feasible solution for Russian olive and Salt cedar management. MCNWD is requesting \$25,598 for the salary of one crewmember. The other crew member will be paid through the county and the landowners.</p> <p>The crew will do cut stump treatments on trees with a diameter at breast height (DBH) of 2" or larger. Trees with DBH of less than 2 inches will be foliar sprayed with herbicide via a backpack sprayer or atv sprayer.</p> <p>The 482 miles of infested irrigation canals / ditches / natural waterways are owned by private landowners, where the water companies have no responsibility for weed management. The initial target areas for Russian olive and Salt cedar management are down the Dove Creek Canal, Uditch Canal, U Lateral, Lone Pine Canal, Garrett Ridge Canal, Hermana Ditch, Upper Arickaree, West Lateral Canal, Hartman Draw, Alkali Canyon, and all the small ditches that feed off of these waterways.</p> <p>Types of crops being irrigated with this water range from grass / alfalfa hay fields, corn, sorghum, wheat, sunflowers, to small organic farms. Non-crop areas being irrigated are typically for ranches raising forage for cattle and other livestock.</p>

Last Updated: November 2018

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)	
X	Length of Stream Restored or Protected (linear feet)	
X	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
X	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	
	Number of Coloradans Impacted by Engagement Activity	
	Other	Explain:

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>

Last Updated: November 2018

Montezuma County Noxious Weed Department has mapped 482 miles of waterways and an additional 3,421 acres of pasture and wetlands infested with Russian olives. Giving us a grand total of 6,098 acres of infested land. Salt cedar is in our project scope as well, however we have not mapped the Salt cedar, but we estimate it is infesting at least 100 miles of waterways or 600 acres of land within Montezuma County.

We used data from published research studies to calculate our water loss from Russian olives and Salt cedars and it came out to be 4,800-acre feet or 1,564,086,849.6 gallons/year in Montezuma County. Southwest Colorado has been in extreme drought for a few years now, and water is one of our top scarce resources. The heart of our county is in agriculture, if we continue to lose water, people will start losing their farms and way of life. It therefore is our duty to do whatever we can to conserve what little water we have.

Studies have also proven other negative aspects of Russian olives such as increased Nitrogen levels in the water, decreasing water quality and increasing algae. There have also been studies that found increases in Carp populations where Russian olives have taken over, which is a problem because Carp are non-native fish that push out our native fish populations. There have also been studies that show an increase in mosquito populations in Russian olive thickets versus native trees.

Other negative impacts Russian olives have is the debris they put into irrigation ditches and water. This increases the chances of clogging ditches and losing water from it flooding out at the clog site. This also attributes to higher ditch maintenance costs.

Colorado Water's Plan

Chapter 7 Highlights the importance of promoting watershed health to ensure Colorado's water future. Montezuma County Noxious Weed Department's project directly supports watershed health by improving water quality (reducing nitrogen level, reducing debris which decreases algae and increases O₂), promotes diversity (Russian olives reduce diversity by out-competing native vegetation such as grass forbs and trees), promotes magnitude of water systems (by decreasing debris in return reducing clogging and increasing natural water flow), as well as decreases fire hazard (Russian olives have tremendous natural die-off each year which is a fire hazard, fires effect streambank stability and increase sediment into water). The Colorado Water's Plan also promotes partnerships for improving watershed health. This project is promoting collaborative management within our entire community.

Lastly, the project supports Colorado Water's Plan by conserving water as a result of drought.

Statewide Water Supply Initiative

Last Updated: November 2018

With our growing population, the state needs to be pro-active with supply and demand. This relates to our project because we are reducing unnecessary water loss by invasive species in order to maintain that supply.

Roundtable Basin Implementation Plan

Montezuma County Noxious Weed Department's project fits within the Instream Flow Program because the project is essentially recovering imperiled species (by removing the invasive plants that are out-competing our native species), enhancing environmental and recreational economic values (by promoting a pristine ecosystem), protecting healthy environments, and protecting and restoring critical watersheds. Russian olives and Salt cedars are negatively changing our waterways; they are pushing out native plant and animal species, promoting mosquito's populations, decreasing water quality, and are overall changing the ecosystems completely.

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.

Russian olive Biology Identification Distribution Control by Robert Wilson and Mark Bernards Extension Weeds Specialists

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.

N/A

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

Last Updated: November 2018

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⁾
	Engineer's statement of probable cost (projects over \$100,000)
	Letters of Matching and/or Pending 3 rd Party Commitments ⁽¹⁾
Exhibit C	
X	Map (if applicable) ⁽¹⁾
X	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	
X	Engagement & Innovation Supplemental Application ⁽¹⁾

(1) Required with application.

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

Last Updated: November 2018

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)?
The 2019 project goal is to treat about 250 acres of Russian olives and Salt cedar, which will result in the saving of about 200 acre-feet per year. The water savings of 200-acre feet will be used for agricultural crops, wildlife habitat, small acre gardens, livestock feed, etc... Other benefits will be improving water quality by reducing Nitrogen amounts, reducing mosquito populations, reducing Carp habitat in creeks, reducing maintenance costs of ditches, and restoring wetlands and streambanks to their native habitat
Who is/are the target audience(s)? How will you reach them? How will you involve the community?
The targeted participants are private landowners with waterways located on their properties, from major canals / ditches to small ditches to wetlands. There will be a systematic approach to involving the landowners in this project. The goal is to notify landowners starting at the main water sources (McPhee Reservoir, and Narraguinne Reservoir. We will send information about the project to landowners from Pleasant View to highway 184, below 184 the landowners will be West of 491. There are 157 landowners in that section who have Russian olive problems along waterways and in wetlands. Depending how many interested properties contact us will dictate when we will move south and send another section of letters out. If we get 20 properties lined up for our crews we may wait until the end of April to send out the next patch of letters. If we get 40 properties we will wait a couple weeks longer to send the next batch of letters out.
The next batch of letters will be sent to landowners East of 491 and South of 184, including 150 landowners with mapped Russian olive. We will then proceed to McElmo Canyon, which has a list of 54 landowners. This area has a combination of Russian olives and Salt cedars.

Last Updated: November 2018

Overview (answer for both tracks)
<p>We will then move South of McElmo Canyon to the reservation boundary, this includes 136 landowners.</p> <p>After that section, we will move east towards Mancos, North of 160, in between 145 and 184. Our list has 77 property owners with mapped Russian olives.</p> <p>We are currently working on the landowner lists with mapped Russian olives east of 184, north of 160 to the county line, as well as south of 160 and East of Mesa Verde National Park. We will most likely have 100 landowners on each additional list of these mentioned areas.</p> <p>In total, we will have a list of about 750 landowners who have infestations of Russian olives and Salt cedars. We are anticipating we will only get to the second or third list by the time our summer is fully scheduled. The following years we will keep progressing through our lists, as well as repeating mail outs to landowners who did not participate in previous years, reiterating the importance of the project.</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>
<p>The project is targeted towards private landowners and/or private companies. Currently the BLM and USFS are active with Russian olive and Salt cedar management along the Dolores River, McPhee Reservoir, and one BLM owned section down McElmo Creek. So unless there comes a need for this service for public land management we will be just focusing on private lands in 2019.</p> <p>Montezuma County Noxious Weed Program has applied for grants through the Colorado Department of Agriculture, the Water Supply Reserve Fund Grant, and the Southwest Basin Grant.</p>
<p>Describe how you plan to measure and evaluate the success and impact of the project?</p>
<p>The two-person crew will be mapping their treatments as well as taking photo points so we can monitor the site in the future. On the documentation, paperwork the crew is required to fill out has a section which will track how many trees were treated as well as their size. This is enable us to estimate a more accurate water savings.</p>
<p>What research, evidence, and data support your project?</p>
<p>Russian olive Biology Identification Distribution Control by Robert Wilson and Mark Bernards Extension Weeds Specialists</p>
<p>Describe potential short- and long-term challenges with this project.</p>

Last Updated: November 2018

Overview (answer for both tracks)

I do not foresee any significant challenges. Our proposed project plan has solid framework and we are confident it will be successful.

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."

Water is a very scarce resource that we all need and therefore causes a lot of tension among farmers, ranchers, and landowners that rely on that water. It is very important that we all do our part in conserving water and being very efficient with our water use. Montezuma County is supporting our community by creating this project to assist our landowners and community by conserving our water and not letting invasive species displace what we could be using to grow our crops.

If landowners were aware at how much water these species were using and how much water we could potentially be saving I'm sure we would see a shift in these Russian olive and Salt cedar populations. One way to achieve this is to do as much public outreach as we can to educate the public.

Montezuma County Noxious Weed Program will be writing articles to local newspapers about the project and the benefits of managing Russian olives. We are also directly reaching out to the 750 landowners who have these species on their properties, and providing education about their impacts on the land, and how we can effectively mitigate that.

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.

Supply and Demand gap: This purpose of this project is to reduce unnecessary water loss in result of the drought and our high demand of water.

Conservation and Land Use: This project is long term to reduce the amount of water uptake from Russian olive and Salt cedar in an effort to conserve what little water we have. The drought situation is what spurred this project into action. We must do what we can to help conserve water, and 4,800 acre feet of water being taken up by invasive species is a significant problem.

Last Updated: November 2018

Agriculture: This project will improve water quality as well as will reduce clogs due to Russian olive and Salt cedar debris which will increase what system efficiency.

Storage: The more water we save up river the more potential the water has to make it downriver. Reducing clogs resulting in flooding is also an aspect of saving water for down waterway usage.

Watershed and Environmental Health: Russian olives and Salt cedars are listed as noxious weed species by the Colorado Department of Agriculture, deeming them to be injurious to agricultural or horticultural crops, natural habitats or ecosystems, or humans or livestock. Removing Russian olives will improve water quality by decreasing nitrogen levels caused by Russian olives, or salt caused by Salt cedars. Mosquito populations will decrease with the removal of their preferred habitat (Russian olives) which will decrease the probability of diseases spread via mosquitoes. Where fish populations are present in waterways, removing Russian olives will remove Carp's preferred habitat which will hopefully give native fish more habitat, instead of being chased off by the Carp.

Recreation: Along waterways where fishing is allowed, access will be improved by the removal of Russian olives and Salt cedars. It will also improve native fish habitat as mentioned earlier which will benefit recreationalists.

Funding: We are an eligible applicant since we are a county. We will match at least 50% of the project cost through both cash match and in-kind match.

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

The goals I found in the Southwest Basin Roundtable Public Education, Outreach, and Participation Education Action Plan are specific for the needs of the roundtable.

- Develop a fact booklet which describes the different organizations in southwest Colorado involved with water and the different uses of water, both consumptive and non-consumptive.
- Develop and present three workshops on the subjects of developing stream management plans, agricultural efficiencies, and land use planning and water.
- Provide copies of the CO water plan and southwest Basin Implementation Plan to interested entities and public libraries within the Southwest Basin.
- Provide educational material as necessary to support the Roundtable.

These honestly are not applicable to any project working on conservation of water; these goals are specifically goals for the roundtable. I would assume their overall goal is to educate landowners and water users on being responsible with how they are using water, as well as educate them on efficient methods of using water. In response to that assumed educational goal, I would think this project fits because we are educating the public and landowners on how much water uptake Russian olive and Salt cedars have as well as their effect on water quality and the ecosystem health.

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

The strategies in the Southwest Basin Roundtable's PEPO talk about how they will develop the booklet, getting different printing quotes, how it will be advertised and distributed. It then goes into their workshops, they will do a Developing Stream Management Plan workshop, Agricultural Efficiencies workshop, and a Land Use Planning and Water Workshop. They just discuss broad

Last Updated: November 2018

summary of what each workshop will encompass. They then talk about distributing the Colorado Water Plan and the Basin Implementation Plan to local libraries.

As mentioned earlier the Southwest Basin's plan is specific to things what their roundtable wants to accomplish not really what the roundtable wants to promote. I see a goal being they want to promote public awareness on conserving water and efficient methods of water usage. How I see my project achieving this goal is by educating the public of one way we can all work together to conserve water, by removing invasive Russian olives and Salt cedars. There are many different aspects to water conservation and this is one of those pieces that needs to be addressed.

Innovation Track
Describe how the project enhances water innovation efforts and supports a water innovation ecosystem in Colorado.
<p>These tree species were introduced into the United States as windbreaks, wildlife habitat, as well as for streambank restoration in the late 1800's. Like many things we have done in the past we did not fully study possible affects or outcomes from introducing exotic species. We have learned now that it was a mistake to introduce these species they are causing more harm than good.</p> <p>In 1996 the Colorado Noxious Weed Act came into place in 1990. I'm not sure if Russian olive was put onto Colorado Department of Agriculture weed list, but I know it was on the 2002 noxious weed list. By 2002 Russian olives and Salt cedars were well established along waterways throughout the United States.</p> <p>Currently Russian olives are on the Noxious Weed List B, designating it for control and suppression. Other counties / states have made tremendous efforts for the eradication of this species, however Montezuma County has been prioritizing different species for control and suppression / eradication.</p> <p>Due to the increased calls about Russian olive, received from the Montezuma County Noxious Weed Department, new Montezuma County Noxious Weed Department Director, as well as the impact of the drought, Russian olives were assessed and researched. It was decided that a Russian olive management plan needed to be developed for Montezuma County in an attempt to control and suppress the populations in an effort to conserve water and promote healthy ecosystems.</p> <p>So to answer this question, the management of Russian olives is innovative in Montezuma County. Management techniques have been fully studied by Montezuma County Noxious Weed Department and the most efficient and least damaging techniques will be used as described earlier in this application.</p>
Describe how the project engages/leverages Colorado's innovation community to help solve our state's water challenges.

Last Updated: November 2018

Innovation Track
<p>When it comes down to it we have to educate the water users in order to conserve water. We have our water officer who will ticket landowners for illegal use of water, however we don't have the man power to enforce that all landowners are not illegally using their water, and there is no enforcement on making sure they are using the most efficient methods possible. NRCS assists many landowners on improving their water systems to the most efficient means possible, but mainly the professionals who are managing land for a living are those who take advantage of efficient systems.</p> <p>They key to truly conserving water is to educate all landowners and water users on different ways to be efficient water users. This project understands we will not be successful unless we get the entire community involved with Russian olive management. The only way to do that is to take the first step, and this project is that first step. This project is providing the first feasible option there has been in this area to manage their Russian olives. This project is also the first public outreach project in this area to educate land owners and land managers of the effects Russian olives have on the water and water systems.</p>
<p>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?</p>
<p>The mission of TAP-IN (to convene Coloradans around water challenges to bring fresh voices and new approaches to the conversation and build a collaborative network across communities) fits beautifully with the project. The key to successful invasive weed management and water conservation is collaboration across the communities. This project is a creative approach to promoting management of these species for the greater good of our land and our people's water usage needs.</p> <p>The long-term goal of the project is to promote conservation of water across the entire county.</p>
<p>Describe how this project impacts current or emerging trends; technologies; clusters, sectors, or groups in water innovation.</p>
<p>As mentioned earlier I feel like once there is active management of Russian olives there will start to become a land stewardship trend. If my next door neighbor mows their grass and starts picking up trash in their right of way to make their property look nice, I then look at my yard compared to theirs, and I then will go out and mow my grass. As a landowner you want to represent that you take good care of your property. I feel the same thing goes with managing invasive species, especially when it is well known to the property owners that these species are depleting the water table and cause problems in irrigation systems.</p> <p>When people start managing their land for conservation it motivates neighbors to do the same.</p>

Contributing Entity	Amount and Form of Match (note cash or in-kind)
Montezuma County / Landowners	\$25,598 cash
Proposed funding from Water Plan Grant	\$25,598 cash
Montezuma County	\$7,000 Inkind
Proposed funding through Southwest Basin Grant	\$7,100 cash
Montezuma County	\$1,000
Proposed funding through Colorado Department of Agriculture	\$4,000
Total Applicant Match	\$33,598.00
Total Other Funding - Not Secured	\$11,100
Colorado Water Plan Grant Requested Amount	\$25,598
Total Project Cost	\$70,296

Description
one crew member \$15/hour plus benefits Work Dates: April 01, 2019 to October 31st, 2019
one crew member \$15/hour plus benefits Work Dates: April 01, 2019 to October 31st, 2019
Administrative Time (Bonnie Loving)
Vehicle maintenance, fuel (\$2,000) Herbicide (\$4,000) Chainsaws (\$700) Crew PPE (\$400)
Notification Letters - Public outreach - Advertising
Crew Training, Vehicle Use, Admin reimbursement

Last Updated: November 2018

Colorado Water Conservation Board	
Water Plan Grant - Exhibit A	

Statement Of Work	
Date:	1-29-2019
Name of Grantee:	Montezuma County Noxious Weed Department
Name of Water Project:	Russian olive and Salt cedar Waterway Management
Funding Source:	Montezuma County / Landowners / CDA? / CWC? / SWBG?
Water Project Overview:	
<p>Montezuma County Noxious Weed Department (MCNWD) intends on hiring a two person seasonal crew to provide landowners and land managers within Montezuma County a feasible solution for Russian olive and Salt cedar management. MCNWD is requesting \$25,598 for the salary of one crewmember. The other crewmember will be paid initially through the county and reimbursed by the landowners.</p> <p>The crew will do cut stump treatments on trees with a Diameter at Breast Height (DBH) of 2" or larger. Trees with DBH of less than 2 inches will be foliar sprayed with herbicide via a backpack sprayer or atv sprayer. There are many different situations that could occur during treatments, each will be dealt with on a case by case basis, in the most reasonable and safe manner available that includes limiting debris. In fact this project is designed to decrease the amount of debris going into the irrigation systems. Russian olives have a very high natural die off therefore resulting in heavy debris amounts. Trees will not be felled into ditches or the water. Some trees overhanging the water will have to be dealt with by both crew members in an effort to pull the tree onto the shore as it is being felled. These situations are case by case basis. Safety is always addressed prior to each job as well as during technician training. Safety is also evaluated on case by case basis.</p>	
Project Objectives:	

Last Updated: November 2018

- **Reduce Russian olive and Salt cedar populations along waterways in an effort to:**
 - **Conserve water.**
 - **Reduce nitrogen levels in water.**
 - **Reduce maintenance costs caused by debris of Russian olive and Salt cedar.**
 - **Reduce mosquito populations.**

Tasks
Task 1 – [Name]
<p>Description of Task:</p> <p>The crew positions will begin on April 1st, 2019 and end on October 31st, 2019. They will work 40-hour weeks and will receive county benefits. They will be paid \$15/hour; therefore, their yearly salary will be \$25,598 including benefits. Montezuma County Noxious Weed Department is requesting the Colorado Water Plan Grant to fund one employee’s salary while the other employee’s salary will be covered by the landowners portion.</p> <p>Task 1 would therefore be training of the crew once finances are secured, as well as notifying landowners of the project and sending educational materials about the negative impacts of Russian olive along waterways.</p>
<p>Method/Procedure:</p> <p>The two-person crew will be sent to the chainsaw class S212 for chainsaw certification. Montezuma County Noxious Weed Department director, Bonnie Loving, will then train for herbicide applications in order to get them qualified to be technicians. Depending on finances the crew might be sent to a spring training hosted by Colorado Weed Management Association for further classroom training.</p> <p>The strategic plan for contacting landowners is a six groups. The overall plan is to begin notifying landowners which mapped Russian olives / Salt cedars on their properties, that are located toward the main water sources (McPhee Reservoir and Narraguinnep Reservoir) and head down stream. The first set of notifications will be sent to landowners from Pleasant View to Highway 184, below 184 the landowners will be West of 491, this includes 157 landowners. Depending on how many properties contact us wanting to utilize our crew will dictate when the next batch will be sent.</p> <p>The next batch of letters will be sent to landowners East of 491 and South of 184, including 150 landowners with mapped Russian olive.</p> <p>We will then proceed to McElmo Canyon, which has a list of 54 landowners. This area has a combination of Russian olives and Salt cedars.</p>

Last Updated: November 2018

Tasks
<p>After that section, we will move east towards Mancos, North of 160, in between 145 and 184. Our list has 77 property owners with mapped Russian olives.</p> <p>The next two groups we have not completed the landowner list. The next group will be east of highway 184, north of 160 to the Montezuma / La Plata county line. The next group is south of 160 and East of Mesa Verde National Park to the Montezuma / La Plata county line. It is estimated there are 100 landowners on each of these two lists.</p> <p>In total, we will have a list of about 750 landowners who have mapped infestations of Russian olives and Salt cedars. We are anticipating we will only get to the third list by the time our summer is fully scheduled. The following years we will keep progressing through our lists as well as repeating mail outs to landowners who did not participate in previous years, reiterating the importance of the project.</p>
Deliverable:
<ul style="list-style-type: none"> - Training documentation. - Postage records for landowner notifications. - Excel spreadsheet showing scheduled properties.

Tasks
Task 2 – [Name]
Description of Task: Treatments
<p>Bonnie Loving will be scheduling and overseeing treatments of Russian olives by the two-person crew. Bonnie Loving will be closely supervising the first few jobs, while training crew how to correctly document the treatments as well as map the treated areas.</p> <p>Crews will conduct the work.</p> <p>Bonnie Loving will be billing within two weeks of each completed job in order to reimburse the county of crews salary and equipment and materials.</p>
Method/Procedure:
<p>Bonnie Loving will be in the field with the two-person crews off and on for the first few jobs to make sure crews are trained proficiently and ready to handle the work situations on their own. Job documentation includes, date, time, treatment location, customer contact information, applicator name(s), date of application, time of application, weather, temperature, wind, and site description. There is a section where the crew will keep a count of how many trees were treated within three different size categories, 2", 2-4", and over 4". The last section is record of herbicide used. The documentation covers all the Colorado Department of Agriculture required information.</p> <p>Crew Procedures:</p>

Last Updated: November 2018

Tasks
<p>The crew will do cut stump treatments on trees with a Diameter at Breast Height (DBH) of 2" or larger. Trees with DBH of less than 2 inches will be foliar sprayed with herbicide via a backpack sprayer or atv sprayer. There are many different situations that could occur during treatments, each will be dealt with on a case by case basis, in the most reasonable and safe manner available that includes limiting debris. In fact this project is designed to decrease the amount of debris going into the irrigation systems. Russian olives have a very high natural die off therefore resulting in heavy debris amounts. Trees will not be felled into ditches or the water. Some trees overhanging the water will have to be dealt with by both crew members in an effort to pull the tree onto the short as it is being felled. These situations are case by case basis. Safety is always addressed prior to each job as well as during technician training. Safety is also evaluated on case by case basis.</p> <p>Crews will fill out all necessary documentation for each job as well as map treated areas, including photo points.</p> <p>Billing: Bonnie Loving will keep an excel spreadsheet with properties treated including billed amount and whether or not it was paid. All invoices will be saved in a specific file for reporting.</p>
Deliverable:
<ul style="list-style-type: none"> - Data showing treated areas. - Estimated water savings. - Records.

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

Budget and Schedule
<p>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.</p>

Reporting Requirements
<p>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.</p>
<p>Final Report: At completion of the project, the applicant shall provide the CWCB a Final Report on the applicant's letterhead that:</p> <ul style="list-style-type: none"> • 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. <p>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.</p>

Last Updated: November 2018

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:

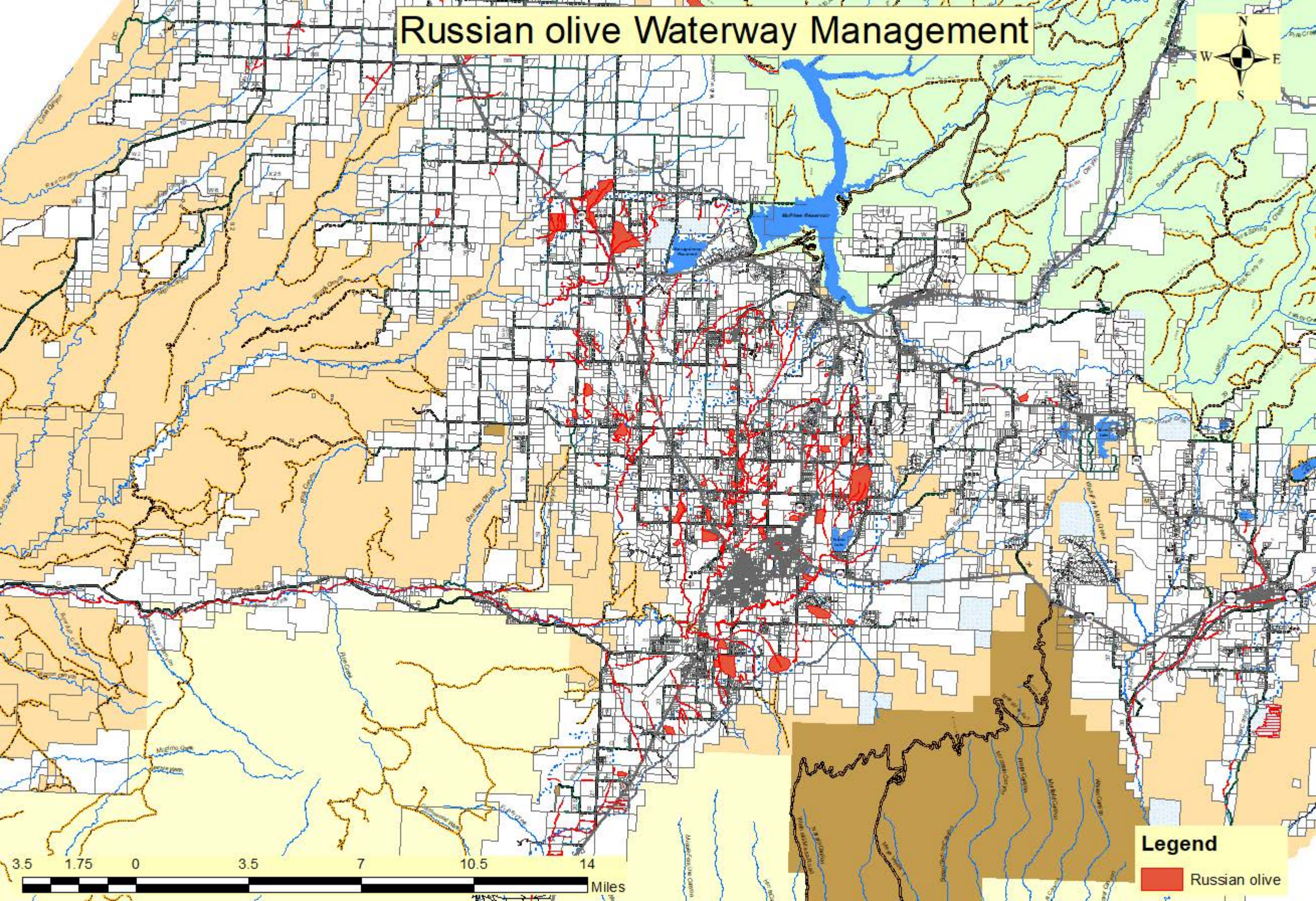
(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit B. Per Water Plan Grant Guidelines, 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.

Russian olive Waterway Management



Legend

■ Russian olive











© 2018 Google

Google Earth