25961 - 2026 YELLOWSTONE RIVER SALT CEDAR PROJECT

Application Details

Funding Opportunity:	25124-AGR Noxious Weed Trust Fund 2026 Local Cooperative-Continuing
Funding Opportunity Due Date:	Jan 6, 2026 11:59 PM
Program Area:	AGR Noxious Weed Trust Fund
Status:	Submitted
Stage:	Final Application
Initial Submit Date:	Jan 6, 2026 3:19 PM
Initially Submitted By:	Joe Lockwood
Last Submit Date:	
Last Submitted By:	

Contact Information

Primary Contact Information

Name:	Mr.	Joe	Middle Name	Lockwood
	Salutation	First Name		Last Name
Title:				
Email*:	glockwood@yellowstonecountymt.gov			
Alternate Email:	huskerlockwood@yahoo.com			
Address*:	3319 King Avenue East			
	Billings	59101	Montana	
	City	Postal Code/Zip	State/Province	
Phone*:	(406) 256-2708	Ext.		
	Phone			
	###-###-####			
Alternate Phone:	(406) 672-1084			
Fax:	###-###-####			

Organization Information

Name*: Yellowstone County Weed District

Organization Type*: County Government

Organization Website:

Address*: 3319 King Avenue East

Billings Montana 59101
City State/Province Postal Code/Zip

Phone*: (406) 256-2731 Ext.
###-###-####

Alternate Phone:

Fax: ###-###-####

Email address:

Alternate Email:

Project Information

Project Information

Enter the name of the person that will be giving the 15 minute presentation at the grant hearings.

Presenter for the Noxious Weed Trust Fund Hearings*: Joe Lockwood

Brief Project Description*:

Treating and mapping salt cedar infestations on the Yellowstone River in Yellowstone County. This project started in 2007 and is a continuing project.
This project started at the Stillwater/Yellowstone County line and is currently just west of the Bundy Bridge located just west of the Bundy Bridge near the Pompey's Pillar National Monument.

350 characters max.

Will there be an addition of new herbicides or acreages outside the original project area?

New Project Acres & Herbicides*: No

If you answered **"yes"**, please complete an Environmental Assessment Amendment (contact MDA 444-7882 for more information).

Total Acres in the project*: 0.00

Applying For:

Special General Funding*: No

If Yes, then describe how the project meets the funding requirements:

Go to **"Help"** for more information on the funding requirements.

Applying For:

Cooperative Forestry Assistance Funding*:	No	
If Yes, then describe how the project meets the funding requirements :		

Go to **"Help"** for more information on the funding requirements.
Click on Help for information on how to use the http://mtnhp.org/mapviewer website to find the center Latitude and Longitude of your project.

Center location of the project in Decimal Degrees, WGS84 or NAD83*:	46.0004 Latitude (##.####)	-108.0139 Longitude (-###.####)

Previous Funding

Previous Funding

MDA Grant Number	Amount Received
2007-060G	$10,500.00
2008-719T	$37,272.00
2009-041	$25,000.00
2010-068	$35,000.00
2012-015	$25,000.00
2013-026	$38,727.00
2014-021	$40,483.00
2015-066R	$40,000.00
2016-052	$40,328.00
2017-049	$43,000.00
2018-047	$45,100.00
2019-801X	$50,000.00
2020-040	$30,000.00
2023-024	$73,340.00
2024-HB01	$100,000.00
2025-18	$60,000.00
	$693,750.00

Project History-Continuing Grants

Previous Grant Information

Total Acres Treated*:	5030
Total Acres of Targeted Grazing*:	0

Total Number of Biocontrol Release Sites*: 2

Total Acres Revegetated*: 0

Total Project Acres Surveyed*: 11518

Project Achievements and Challenges*:

During the early years of the project, we were able to cover a few miles of river due to less tree density per acre compared to the highly dense populations that we are experiencing today. It may seem like we are progressing very slow during the last three project years but let me remind you that we are truly up against a very super invasive species that is spreading at an exponential rate downriver from where the current project has left off. To date we have covered approximately 58 miles of river corridor in Yellowstone County.
Challenges we faced this year compared to last year's project was having to go back on the previous contractor's work which required a lot of checking areas that were ineffectively treated. These areas were previously treated by Mason Industries during a time of serious legal issues surrounding the owner of the company which resulted in his hired help doing most of the spraying on the project area and it definintley showed that their treatment efforts were ineffective due to poor diligence. We hired Wright Company in 2023 and 2024 for those years salt cedar projects. Due to rechecking old project areas the treatment cost per acre drastically increased. Density of salt cedar infestation was another challenge as it was difficult to gauge the amount of product required in certain areas ahead of time.
Another challenge was treating a very dense infestation on an island in which we forded the channel with our UTV's to access the island. Additionally the challenge we had to overcome was inconsistency of the pre mixed totes. Overall, the project ran smoothly & efficiently as equipment & methods for access were improved over last year.

3,000 character max.
If you have multiple photos, attach a Word document with the photos and short descriptions of the photos.

Upload before photo(s)*: 2025 SALT CEDAR PHOTOS - DURING TREATMENT.docx
Click on the above icon to attach a file.

Upload after photo(s)*: AFTER PHOTOS FOR THE 2025 PROJECT WILL BE TAKEN IN 2026.docx
Click on the above icon to attach a file.

Cooperators

Cooperators

Cooperator Type	Cooperator's Name	Cooperator Commitment
BOR	Robert Thompson	Support
City	Nick Miller	Support
Other	Yellowstone River Parks Association	Support
Other	Yellowstone Conservation District	Support

Participation

Please indicate the percentage of landowners within the project boundary that are actively participating in this project (both receiving funding and not). Example: 20 landowners within in the project area and 10 are participating; enter as a decimal point 50 percent.

Landowner Participation *: 0.00%

Give a brief explanation of the percentage of participating landowners. Describe additional cooperation, working relationships, and support for this project. Example: The 10 participating landowners own 90% of project area.

Description of Participation*:

The following agencies have given their full support to the 2026 Yellowstone River Saltcedar Project; Bureau of Reclamation, Yellowstone Conservation District, Yellowstone River Parks Association. By having the support of these agencies we are able to tackle the difficult removal of Salt Cedar and Common Buckthorn.
The Yellowstone River Salt Cedar Project does not have landowner participation although some landowners along the river cooridor are battling noxious weeds using biocontrol or herbicide on specific species. A majority of the project work is done within the high water marks in the Yellowstone River cooridor in Yellowstone County. Some of the property in the river cooridor is privately owned that we treat during the project while most is unclaimed or not owned or owned by the State of Montana. YCWD does contract with FWP, DNRC, and BLM and some of the funding from these contracts goes towards the treatment of woody invasives.
2,000 character max.

Attach the project's signed cooperator interest form for all participating landowners. Please try to group letters into batches of 10 or more per file. If the file is too large or there are multiple files attach them in "Other Attachments". Here is a template of a Grant Cooperator Interest Form.

Signed cooperator interest form*: 2026 Letters of Support.pdf
Click on the above icon to attach a file.

Project Overview - Local Coop

Explain why the project area needs assistance from the Trust Fund for noxious weed control.

Need for Action*:

The purpose of this project is to continue an aggressive effort to eradicate the Salt cedar from the main channel of the Yellowstone River corridor, directly downstream from the 2007 - 2024 treatment locations. Salt cedar, which is a category 2 state listed noxious weed, is a priority concern within Montana and regionally; and scientifically the effort should be initiated at the upper ends of the affected watershed. Yellowstone County Weed District estimates that there are approximately 25,000 plus acres of Salt Cedar trees in the Yellowstone River corridor in Yellowstone County alone. The density of salt cedar that we are encountering is exploding at an exponential rate. The islands that we are monitoring and treating are larger than the island acreage that we monitored and treated during the early years of the project. The current treatment areas are densely populated with a lot of reseeding occurring within a few feet to several yards around current infestations. With these areas developing at the rate that they are I can only imagine that we are going to be dealing with super hight densities of salt cedar down river from where we are currently working. The rate at which the salt cedar is spreading inhibits YCWD from contributing all that is required for this daunting task without additional assistance from other sources.
3,000 character max.

Attach a project map with boundaries using google maps, the Montana Natural Heritage Program Map Viewer, or any other mapping resource. **Before you can add your map(s), you must complete all components of the Project Overview and click save.**

Project Map (w/ boundaries)*: Saltcedar2024mod.pdf
Click here to add attachment.

List the noxious weeds that are a high priority in the project and why management of these weeds is a priority for the state and/or project area within the county or counties.

High Priority Noxious Weeds*:

High Priority Noxious Weeds throughout the project area are Salt Cedar trees and Common Buckthorn trees. We have teamed up with Billings City Parks Dept. and the Yellowstone River Parks Association to battle the Common Buckthorn trees in the city parks and also ones found on private property throughout the city and outside city limits. Both of these species of trees create very dense monocultures thus choking out any native or desirable vegetation that could grown in these areas that are infested with these species. These monocultures are not friendly, alter water sources and represent a major seed source. Recreation and wildlife activity reduces to a minimum in areas that have seen no treatment. Each year as growth continues, fire hazards increase exponentially endangering native habitats.
Salt Cedar itself If left unchecked will clog most floodplain areas within the Yellowstone River Valley. This will increase flooding in other areas that have never experienced flooding, increase channel depth and erosion, and possibly alter river channel activity. As growth continues, areas where salt cedar trees can establish continues to increase due to the ever changing geomorphology of the river. Many stream beds have dried up and sources of salt cedar and poor vegetation growth are appearing in larger areas. Eliminating this plant will allow for more willows, cottonwoods and aspen growth, It will increase the ability for water usage for agricultural producers, recreation usage; improve desirable plant communities and wildlife will prosper.
2,000 character max.

Weed Management Plan

CWMA Background and Goals

Describe the CWMA: how was it developed, how is the group organized, how are participants receiving information and education, what type of outreach was/or is being done, and which, if any, alternative funding sources were identified?

Cooperative Weed Management Area (CWMA) Background*:

The Yellowstone River Salt Cedar Project was not developed as a cooperative weed management area when it started back in 2007. We do have cooperation from agencies that support the project becuase it directly benefits them and they do have ownership of land within the project areas. The success that we are having with our project has raised the awareness of woody invasive species and the detrimental effects that they have on local ecosystems. I feel it is important in the future to have separate funding available for Woody Invasive Species so that these important on the ground projects can be funded without the worry of no funding at all.
Yellowstone County Weed District plans on having future meetings with landowners within the project area as we move forward. These meetings will address the issue at hand and the severity of the infestations that we are treating. The cost of this project per acre is too high for these landowners to afford so that is why we are asking for funding through the Montana Noxious Weed Trust Fund to help fund a portion of the project. I would also like to make note that there are alot of state land parcels located throughout the riparian area of the Yellowstone River in Yellowstone County and the State of Montana needs to take note of this due to the fact they are non-compliant with Yellowstone County and non-compliant with their own state weed management plan.
2,000 character max.
Describe the CWMA goals, both short- and long-term, for the entire length of the project: Short-term (1-3yrs), Long-term (4-10yrs). Goals should explain how the project will create future healthy plant communities in the project area, and how the CWMA will become independent from grant funds in the future.

CWMA Goals*:

The Yellowstone River Salt Cedar Project has 4 main objectives; 1. **Protect Agriculture** - What is the number one important factor in agriculture? Water!!! Salt Cedar is called the Thirsty Tree, 1 solid acre of Salt Cedar can use up to 7.7 acre feet of water which is equivalent to 2.8 million gallons of water.Salt cedar can also take over valuable grazing lands thus reducing the economic profits for farmers and ranchers. With agriculture being the number one driver of the Montana Economy I feel its important to reduce this threat along the Yellowstone River in Yellowstone County. 2. **Prevent Flooding along the Yellowstone River** - Salt Cedar trees are a main threat to

the old oxbow floodplain areas along the Yellowstone River and if left unchecked these areas are going to become so infested with overgrowth of Salt Cedar infestations. These old oxbow areas act as relief valves during the high-water season thus reducing the chance of flooding elsewhere. The number of Salt Cedar trees that we are finding in these areas is incredibly astronomic and require a large amount of herbicide and man hours to control. 3. **Reduce the threat to native habitat and native species** - Salt Cedar infestations that become dense and saturated cause vegetation loss of your more desireable plant species and degradation of native habitats that are critical in maintaining a healthy functioning ecosystem. 4. **Reduce the potential for fire** - monocultures of salt cedar create dense brush like growth with lots of ground duff which is very flammable. Fires that occur in areas that are dense with salt cedar burn with the same types of fire behavior which is very characteristic of large forest fires.

2,000 character max.

Integrated Weed Management Tools

Row	Planned?	Describe Use
Prevention (washing equipment, using weed seed free products, limiting disturbance, etc.):	Yes	Bootbrush station already installed at Two Moon Park - current weed problems in Two Moon Park include Common Buckthorn, Salt Cedar, Leafy Spurge, Canada Thistle, Spotted Knapweed.
Describe which agents will be used and why this is the best management tool.		
Biocontrol Control (classic use of biocontrol agents):	Yes	Since the beginning of the Salt Cedar Project on the Yellowstone River in 2007 there has been some releases of Diorhabda elongata along the Yellowstone River in Yellowstone County. The first releases did not establish and the latest release which was made near Custer which is on the eastern side of Yellowstone County has yet to be determined how well they have established in that location.
Cultural Control (targeted grazing, tilling, hand pulling, burning, fertilization, revegetation, etc.):	No	
Chemical Control (list anything not in herbicide worksheet):	No	
Other (other methods being used):	No	Drone Spraying and Future Drone Monitoring - YCWD partnering with Adam Pedone

Additional IWM Information

If necessary, please describe any additional integrated weed management techniques being used, or expand on the selections in the table above.

Additional IWM Information:

Boot brush stations – YCWD is looking at teaming up with Billings City Parks and Recreation Dept. and Yellowstone River Parks Association about installing boot brush stations at the following areas; Phipps Park, Pow Wow Park, Dover Park, Joels Pond, and Blue Creek Fishing Access. Please refer to attached emails concerning the bootbrush stations.

Drone Monitoring (Recon) – YCWD is going to partner with Adam Pedone (Company Name) to do recon/monitoring and mapping with his mapping drone. Areas to be monitored will include past project areas and future project areas.

Salt Cedar Biocontrol – Current biocontrol areas are located near Custer, Montana in Yellowstone County however its not know if these release sites have benefited from the release of the diorhabda beetles. In the future release sites need to be located outside of the highwater areas in order to establish a viable population.
2,000 character max.

Monitoring Plan

Describe your monitoring plan for tracking the activities of this project, both for the grant year and into the future. Explain how the plan will determine the effectiveness of the project's noxious weed treatments. At a minimum, local cooperative projects must have a before and after photo to submit in the final report.

Annual Monitoring Plan*:

The new montioring plan is going to consist of going back to the initial starting point of the entire project and monitoring a 4 to 7 mile stretch of river corridor going down river and then moving to where the current project area is and monitoring a 4 to 7 mile stretch of river going up river towards the original starting point. The following year the contractor will go back up river and start monitoring from where he left off the previous year and move down river and then do the same on the other end where he left off the year before. We should be able to monitor a fairly big area this way. I also would like to implement some drone monitoring into this plan and i feel that would be able to speed up the monitoring program and actually save some time and labor involved. This new monitoring plan is definitely going to need some tweaking and we will learn as we go. I'm definitely open for suggestions on this.
We would also like to set up an 8 year monitoring program if possible however that depends on funding and student interest since this program would be run through Rocky Mountain College. The monitoring study would consist of a set of randomly selected sites (n=12-15) will be sampled each year for the first 3 years (n=36-45). New sites will be established in areas targeted for herbicide treatment in the fall. Sites will be revisited 1, 2, and 5 years post-spraying. Sampling sites (n=12-15 annually) will be divided into three hydrologic zones: the alluvium, the low terrace, and river islands. These hydrologic zones run parallel to the Yellowstone River and differ in inundation frequency, vegetation composition and structure, and salt cedar density (pilot study conducted 2022). Sampling will be conducted using the line-point intercept method with plot-level species inventory. Permanent transects will be established with rebar. A 10x25 m belt transect will be placed at each sampling site with the 10 m edge oriented perpendicular to the river/inactive channel. Photo points will be taken at the center point of each side of the transect (n=4). All vegetation within the transect will be identified to species. Line-point intercept data will be collected along the 25 m line running through the middle of the belt transect (parallel to the river/channel). Points will be taken every 0.5 m (n=50 points per transect). Vegetation height (height of the tallest plant part within a 30 cm diameter of the transect) will also be measured every 1.0 m (n=25 points per transect). Foliar cover (%), bare ground (%), basal cover (%), the vegetation composition (native vs invasive, graminoid vs forb, particular focus on Tamarix spp., Populus spp., and Salix spp.), and vegetation height will be compared between sites pre- and post-treatment with herbicide to determine the effectiveness of the herbicide application. Data will also be compared across hydrologic zones to evaluate the effectiveness of Tamarix treatments in different geomorphic-edaphic habitats. Visible signs of regrowth will be reported to the YCWD for potential spot treatments.
2,000 character max.
2,000 character max.
The Department of Agriculture utilizes the Early Detection and Distribution Mapping System (EDDMapS) to foster public noxious weed data sharing in all areas of the state. EDDMapS is a web-based data management system for reporting, storing, mapping, and retrieving invasive species data in the US. Data sharing helps to monitor noxious weed movement and create sound management strategies. Noxious Weed Trust Fund grant participants are required to share mapping data from each

project with EDDMapS. For information on sharing data click the link: https://www.eddmaps.org/tools/.

Describe the methods used to map noxious weed infestations in the project area.

Mapping Methods*:

During the salt cedar project all trees or areas that are treated are mapped during the treatment process. Wright Company's equipment is setup to map individual points even when hand line work is being done and map the entire area around an infestation of salt cedar. Yellowstone County Weed District uses the Outback Data Logging System and works jointly with their county GIS department to process data. The county equipment is not setup to map individual spray points when hand line work is being done.

2,000 character max.

Use EDDMapS to produce a weed infestation point map of the project area. Maps created using other software can be used as supporting documents to EDDMapS. File types can be JPG, PDF, or multiple project maps in a Word document.

Upload an EDDMapS weed infestation point map of the project area*:	Yellowstone Salt Cedar.png Click on the above icon to attach a file.

Management Plans

Weed Management Plans:	Click here to add attachment.

Plan of Work

Project Objectives

Time Period	Year	Activity Description
May	2026	Billings Arbor Day& Laurel Arbor Day - noxious weed education and ecology education with the Southcentral Area Weed Education Trailer on display - local 4th and 5th grade students attend arbor to learn about everything from natural resources to noxious weeds.
June	2026	Invasive Species in the Park at River Front Park in Billings - 7th grade students from Yellowstone County and Carbon County attend to learn about invasive species and Play, Clean, Go.
July	2026	Take a look at previous year's project area to determine herbicide effectiveness. Possibly start some early work on the project in past project areas and setup new photo points in the 2026 project area. Hire Wright Company for 2026 Salt Cedar Project.
October	2026	Begin 2026 Yellowstone River Salt Cedar Project and also work on photo points from last project area and tie them into new project area to illustrate project success
November	2026	Finish Salt Cedar Project and begin finalizing 2026 grant project and claims.

Education Events

Event Type	Planned?	Describe Event
Landowner meeting(s):	No	
Weed tours/floats:	Yes	Possibly arrange a tour of the project area from 2025 and the new area for 2026.
Spray days:	No	

Event Type	Planned?	Describe Event
News articles/Public information:	Yes	Possibly through the Northern Ag Network but not definite.
K-12 Students - weed education:	Yes	Yellowstone County Weed District Education Specialist will be visiting local schools; Shepherd, Broadview, Lavina, Lockwood, Billings Senior, Billings West, Billings Central, & Ben Steele.
Conference/meeting presentations:		Grant presentation for the Noxious Weed Trust Fund Council
Other education events:	Yes	NILE Education - October 2026, Arbor Day - May 2026

Herbicide Worksheet

Herbicide - Private Applicator

Active Ingredients	Application Rate	Herbicide Cost	Herbicide Additive	Additive Cost	Application Type	Weeds Treated	Acres Treated	Total Amount	50% Cost Share

No Data for Table

Herbicide - Commercial Applicator

Active Ingredients	Application Rate	Herbicide Cost	Herbicide Additive	Additive Cost	Application Type	Application Cost	Weeds Treated	Acres Treated	Total Amount	50% Cost Share

No Data for Table

Totals

If you have selected "Other-County Listed" as a weed to be treated in any of the sections above, click "Edit" (at top) and enter the name(s) of the County Listed weed(s) you are planning to treat. If more than one weed name is entered, separate each weed name with a comma.

Other-County Listed Weeds:

Total Acres Treated:	0.00	
Total 50% Share:	$0.00 Contracted Services	$0.00 Private Applicator

Revegetation Worksheet

Revegetation - Private Applicator

Seed Mixture Description	Pounds per Acre	Seed Cost per Acre	Application Type	Acres Reseeded	Total Amount	50% Cost Share

No Data for Table

Revegetation - Commercial Applicator

Seed Mixture Description	Pounds per Acre	Seed Cost per Acre	Application Type	Application Cost per Acre	Acres Reseeded	Total Amount	50% Cost Share
No Data for Table							

Seed Labels:

Attach seed label or equivalent document.: Click here to add attachment.

Total Acres

Total Acres Reseeded: 0.00

Total 50% Share: $0.00
ContractedServices
$0.00
Private Applicator

Budget

Budget

Expense Category	Grant Funds	Grant Funds Narrative	Match Funds	Match Funds Narrative
Contracted Services - non-Herbicide	$40,000.00	Contractor Labor	$40,000.00	Contractor Labor
Supplies & Materials - non-Herbicide	$0.00		$0.00	
Communications	$0.00		$0.00	
Travel	$0.00		$0.00	
Other Expenses	$0.00		$0.00	
Total	**$40,000.00**		**$40,000.00**	

Herbicide - Private Applicator

Expense Category	Grant Funds	Match Funds
Supplies & Materials - Herbicide	$0.00	$0.00

Herbicide - Commercial Applicator

Expense Category	Grant Funds	Match Funds
Contracted Services - Herbicide	$0.00	$0.00

Revegetation - Private & Commercial Applicator

Expense Category	Grant Funds	Match Funds
Revegetation	$0.00	$0.00

Expense Category	Grant Funds	Match Funds

Total Budget

Totals	Total Grant Funds	Total Match Funds
Total Budget	$40,000.00	$40,000.00

Additional Match Information

If your Herbicide or Revegetation match is actually less than the 50% shown, explain why in the box below.
If your Herbicide or Revegetation match exceeds the 50% shown, add the additional match amount to the Other Expenses Match Funds and Match Funds Narrative in the budget section above.

Herbicide/Reveg Match Information:

Herbicide does not need to be purchased for the project as of now due to the number of 250 gallon totes that did not get used for the 2025 project.

Provide a narrative describing planned additional and/or in-kind contributions for the project. Go to "Help" (at top) for more information.

Additional and/or In-Kind Contributions:

Yellowstone County Weed District will contribute office personnel, office equipment, supplies, and an applicator and machine if needed as an in-kind contribution to the project.

Other Attachments

Description	File Name	Type	Size	Upload Date
During Treatment Photos - 2025 Project	2025 SALT CEDAR PHOTOS - DURING TREATMENT.docx	docx	8 MB	12/03/2025 12:03 PM
EDDMapS - Project Area 2026	Document_241212_1517471212202412122024 1.pdf	pdf	1 MB	12/03/2025 12:02 PM
Emails to and from the Billings City Parks and Recreation Department and Yellowstone River Parks Association concerning areas where bootbrush stations should be installed at.	Bootbrush Emails.pdf	pdf	1 MB	01/06/2026 03:08 PM
Yellowstone River Salt Cedar Project Areas dating back to 2007.	2007to2022SaltCedarProjectAreas.pdf	pdf	1 MB	11/20/2025 03:32 PM