2026 On-the-Ground Project Application Form

General Information

Project Name: Hyde Ranch Fencing and Riparian Enhancement Phase 1

Applicant Name: Trout Unlimited

Is your organization registered with the Montana Secretary of State? Y

Explanation: Each applicant must be registered with the Montana Secretary of State to do business in the state of Montana. Registration with the Secretary of State may be completed via the following website: https://sosmt.gov/business/

Is your organization registered with the federal System for Award Management (SAM)? Y

Explanation: Each applicant is required to register with SAM. To register or check your organization's status, go to https://sam.gov/content/home. If you get an "Unsupported Browser" error, copy, and paste the link into a Google Chrome browser window.

Primary Contact: Connor Parrish | Title: Project Manager

Address: 627 E Peach St. | City: Bozeman | State: MT | Zip Code: 59715

Phone Number: 406-223-9331 | Email: connor.parrish@tu.org

Signature: Connor Parrish
Digitally signed by Connor Parrish
Date: 2026.02.19 11:27:09 -07'00'

Explanation: This is the person who DEQ would routinely contact to discuss project progress, billing, etc.

Signatory: Casey Hackathorn | Title: Montana State Director

Address: 312 N Higgins Ave, Suit 200 | City: Missoula | State: MT | Zip Code: 59802

Phone Number: 406-546-5680 | Email: casey.hackathorn@tu.org

Signature: DocuSigned by:
088BD32827E3481...

Explanation: This is the person who can legally sign contracts and other binding documents on behalf of the applicant (e.g., a board chair)
Note: The primary contact, signatory and landowner must sign the application. Signatures must be either signed electronically, or wet-signed, scanned and sent electronically.

Landowner Name: Max Jones, Hyde Ranch

Landowner Signature:

Landowner Name:

Landowner Signature:

Landowner Name:

Landowner Signature: Signed by:
Max Jones
257027B90F474B8...

Explanation: Landowner signatures are required. **Signing the application does not obligate the landowner to implement a project.** Instead, it is an indication that the landowner has read the application and agrees, in principle, with the project concept and goals.

Your organization's Unique Entity Identifier number (UEI #) | 051698132

Explanation: Each applicant is required to have a current UEI number. The UEI number replaces the old DUNS number. If your organization had a DUNS number, you should have received a notification from the federal government indicating that your DUNS number has been changed to a UEI number. If you did not receive this notification, or if you never had a DUNS number, you will need to go to the federal government's System for Award Management (SAM - https://sam.gov/content/home) to obtain your UEI number. DEQ recommends starting this process early as it is very time-consuming, requires providing documentation-sometimes with follow-up requests for additional information, and can take up to 2 months to complete. If you need assistance, you may contact the federal help desk at 866-606-8220 Monday-Friday 8:00 a.m. through 8:00 p.m. EST.

Does your organization have adequate liability insurance for the risks associated with your project? | Y

Explanation: Each applicant must have or obtain liability insurance coverage meeting the requirements stated in the Draft Sample Contract and/or requirements negotiated based on the appropriate level of risk associated with the project.

Describe the technical and administrative skills your organization will use to effectively and efficiently complete your proposed project(s).

Trout Unlimited (TU) is a non-profit working on restoration projects across the county. TU project manager, Connor Parrish, will lead this project with support from grant accountant manager, Catherine Redfern. Connor has 14-years of experience working in the field of fisheries including 8 years managing aquatic restoration projects. Catherine serves as the grant accountant for all TU employees across Montana.

Budget Form

Please fill out the On-the-Ground Project Budget Template (Excel file). Cells highlighted in yellow may be edited to fit the needs of your particular project. DEQ uses a template to construct nonpoint source grant contracts. The Budget Template contains tasks and typical deliverables that match up with the grant contract template. Please see the Example Contract and Scope of Work Template for a more detailed look at typical task requirements and deliverables.

Project Form

A separate Project Form (including providing separate attachments) must be submitted for each project included in your application. ¦ăŜ ŭKŜ ŦƧffƧøλуƎ ŜÈŀ·ΥǇƭŜă ŭƧ KŜƭǇ ŘŜŭŜ⑊ΥλуŜ øKŜу ŭƧ lump and when to split projects.

Splitting Examples (fill out multiple Project Forms)

- Stream restoration work occurring on two separate streams..
- Two projects with significantly different sets of project partners.
- Two projects that address substantially different pollution sources (e.g., one project move a corral off of a streambank, and another removes mine tailings, with both projects being on the same property).

Lumping Examples

- Contiguous stream restoration work spanning multiple land parcels.
- Three projects that address similar sources of pollution on a single land parcel (e.g., moving a corral off a stream, implementing a grazing management plan, and relocating a manure storage facility out of the floodplain, all on the same ranch)

Project Form

A separate Project Form (including providing separate attachments) must be submitted for each project included in your application

Project Name: Hyde Ranch Fencing and Riparian Enhancement

Required Attachments in Addition to This Form

- [x] Letter of support from the organization that created or sponsored the creation of the DEQ-accepted Watershed Restoration Plan or the Tribe that created the EPA-approved Tribal Nonpoint Source Management Plan (*if applicable)*.
- [x] Letter of support from EACH landowner associated with the proposed project area (*if applicable)*.
- [x] Budget Table (see Microsoft Excel Template).
- [x] **Detailed Project site map(s)** Attach a map or set of maps showing the location and size of proposed activity if a site has been predetermined. The map scale must be between 1:1,000 and 1:12,500. The map(s) must have an aerial photo background (e.g., USDA NAIP photography, Google Earth imagery, etc.). The map(s) must show the latitude, longitude, site name, and landowner for the activity site. The map(s) should also identify waterbodies affected by the pollution that the activity is designed to address. (*This is in addition to adding points of the project location to the website on page 4*).

Optional Attachments

Attach additional items and information that could help reviewers better understand your project. Information could describe public health risks, opportunities to leverage other funding sources, etc. However, application reviewers may have limited time available, and excessively long, optional attachments might not get reviewed. Do not attach copies of TMDL documents, TMDL implementation evaluations, Watershed Restoration Plans, Tribal Nonpoint Source Plans, or large comprehensive studies. The following attachments may be included. Please no more than 20 pages.

- [ ] Project Design Plans/Drawings
- [x] Preliminary Engineering Reports / Site Evaluations
- [ ] Landowner Agreements / Construction Permits / Floodplain Permits
- [x] Site photos
- [x] Additional Letters of Support
- [ ] Other:
- [ ] Other:
- [ ] Other:

Project Area

Please provide as detailed a description of the project area as possible.

List the counties in which the project will be located.

Gallatin County

List the 12-digit Hydrologic Unit Codes (HUCs), sometimes referred to as Sixth Code HUCS, in which the project will take place. Use the following link to help assist you in determining the HUCs: https://apps.nationalmap.gov/viewer/

HUC 12- 100200071505 (City of Three Forks-Madison River) and HUC 12- 100200081402 (Rey Creek)

Project Location Map

In addition to providing your own project site map, please go to the following website and follow the instructions to add your project location to the map.

https://gis.mtdeq.us/portal/apps/storymaps/stories/42f4a668285c4ef6aa94b1623f10df57

Connection to a Previous or Ongoing Project

Is this project tied to a previous or ongoing project? If so, please describe the connection.

Yes. This project is directly tied to ongoing and previously funded restoration and stewardship efforts in the Lower Madison River and Rey Creek watersheds. The Madison Watershed Restoration Plan identifies both water bodies as priorities and outlines restoration actions to address sediment, temperature, and riparian impacts. The Lower Madison River is listed by DEQ as impaired for sediment, temperature, and riparian alteration, while Rey Creek—though not formally listed—has documented sediment issues that are currently being addressed by local partners, including TU, MGTU, and FWP. One of the proposed projects is a wetland/sediment trap at the terminus of several irrigation ditches/creeks that flow into Rey Creek. Preliminary designs for the wetland/sediment trap have been completed and FWP is in communication with the landowner on the potential of implementing that project. Several of the ditches/creeks that cross the Hyde Ranch would flow into the proposed wetland/sediment trap. Fencing livestock out of these ditches would immediately reduce sediment inputs to Rey Creek and reduce maintenance on the proposed wetland/sediment trap when it is constructed.

The Jones family (Hyde Ranch) have a strong combination of education and experience with regenerative agriculture. The Joneses have already installed a couple stock water tanks and received a grant from Ranching for Rivers to help support fence construction. The Joneses are also working with NRCS to cost share fencing and stock water tanks on the eastern side of their property to reduce the impact of livestock on the land and its water resources. The Madison River Foundation (MFR) has secured $18k from Northwestern Energy's (NWE) WildTAC funding to support this grant application.

Project Purpose

Select the watershed restoration plan or tribal nonpoint source plan that your project will help implement (please type in if missing from list) (*Not required for HAB reduction projects)*

Madison Watershed Restoration Plan

Y — Letter of support from author, or if the author was contracted, the author sponsor, attached? *(If no, explain why below.)*

Because this project will also have positive impacts on the Lower Gallatin River and Rey Creek, there is also a letter of support from the Gallatin Watershed Council who is the author of the Lower Gallatin Watershed Restoration Plan.

IMPAIRMENT LISTINGS: Projects that address water quality impairments on Montana's 2020 List of Impaired Waters are preferred though not a requirement. Funding may be used for projects that protect waterbodies that are demonstrated to be healthy.

Waterbody name from the 2020 List of Impaired Waters	MADISON RIVER, Madison Dam to mouth (Missouri River)
Probable causes of impairment to be addressed	Listed as impaired for sediment, temperature, and alterations to riparian vegetation which is impacting aquatic life. This is due to current and historic land use activities including overgrazing.
Waterbody name from the 2020 List of Impaired Waters	MISSOURI RIVER, headwaters to Toston Dam
Probable causes of impairment to be addressed	Listed as impaired for sediment and total nitrogen which is impacting aquatic life.

HEALTHY WATERSHEDS: While project funding is prioritized to addressing known impairments, funding can be used to protect healthy waters from becoming impaired.

Name of healthy waterbody to be protected	Rey Creek
Description of identified threat	Rey Creek doest have an impairment listing on the DEQ website however several local partners (TU, MGTU, and FWP) are working on projects that would reduce sediment inputs due to the clear sediment issues in the stream. This is due to current and historic land use activities including overgrazing.
Name of healthy waterbody to be protected	Lower Gallatin River
Description of identified threat	The Lower Gallatin doest have an impairment listing on the DEQ website however the project would reduce sediment inputs due to the Lower Gallatin. The sediment inputs are due to current and historic land use activities including overgrazing.

Project Partners

Identify each of the project partners and describe their contribution to the project. Include landowners, land managers, project designers, funders, and your own organization. Indicate whether each partner, other than your organization, has provided a letter of support. (*Note: each landowner must provide a letter of support if project site(s) have been predetermined.*)

Landowner	Contributions to Project	Letter of Support Attached?
The Jones Family (Hyde Ranch)	In-kind: support with project planning, construction oversight, leading tours. Also will allow harvest of willow livestakes for riparian plantings.	☑
		☐
		☐
		☐

Project Partner	Contributions to Project	Letter of Support Attached?
Northwestern Energy	$18k in funding through a WildTAC grant secured by the Madison River Foundation. Also, technical support.	☑
Madison River Foundation	$18k in funding through a NWE WildTAC grant. Technical support, volunteer coordination, and potential additonal funding	☑
Gallatin Watershed Council	Technical support and volunteer coordination.	☑
Madison Conservation District	Technical support.	☑
Madison Gallatin Trout Unlimited	Volunteers and potentially some funding.	☑

Project Coordination and Planning Task

This task would include completion of all applicable planning tasks from the list below, as well as coordination and oversight of the efforts of all project partners.

Identify the status of the following project planning tasks, where applicable.

	Completed?	Copy Attached?	To Be Completed Pre-Contract (Oct 2026)?	To Be Completed as Contract Deliverable?
*Draft Project Designs	☐	☐	☐	☑
*Final Project Designs	☐	☐	☐	☑
Consultation With Potential Regulators	☐	☐	☐	☑
Necessary Permits	☐	☐	☐	☑
Cultural Resources Inventory *(if relevant)*	☐	☐	☐	☑
Other:	☐	☐	☐	☐
Other:	☐	☐	☐	☐
Other:	☐	☐	☐	☐

***See Call for Applications Section 5.1 for minimum design standards.*

Describe any additional project planning that *will have been completed prior* to execution of a contract (October 2026).

TU will continue to coordinate with the Joneses prior to contracting with DEQ. Northwestern Energy will have an archaeologist complete a cultural resources survey during 2026. These activities will allow for implementation during spring 2027.

Describe any additional project planning and coordination that will need to be completed after the execution of a contract (October 2026).

TU and the Joneses will request quotes from local fencing contractors and provide bid tours as needed.

Landowner Agreement Task

DEQ includes the following language in every nonpoint source contract involving on-the-ground activities:

Contractor shall submit signed landowner agreement(s) verifying that Contractor and DEQ staff may access the project site, at reasonable times and with prior notification, for the purposes of project planning, implementation, and post-implementation monitoring. The agreement(s) must ensure appropriate operation and maintenance of all structures, vegetation, and management measures for the life of the project (typically 10 years). If grazing will be allowed within the project area, the agreement(s) must include a sustainable management plan for livestock grazing, designed to protect and enhance riparian function. If a signed landowner agreement does not meet the above-stated minimum requirements, Contractor shall negotiate an amended agreement with the landowner that ensures appropriate operation and maintenance of all structures, vegetation, management measures, and includes a sustainable management plan for any livestock grazing for the life of the project (typically 10 years).

Identify the status of the following landowner agreement tasks, where applicable.

	Completed?	Copy Attached?	To Be Completed Pre-Contract (Oct 2026)?	To Be Completed as Contract Deliverable?
Draft Landowner Agreement(s)	☐	☐	☐	☑
Final Landowner Agreement(s)	☐	☐	☐	☑
Grazing Management Plan	☐	☐	☐	☑
Other:	☐	☐	☐	☐
Other:	☐	☐	☐	☐

Project Effectiveness Monitoring Task

If you will be conducting any on-the-ground implementation work, you will be required to complete the monitoring activities described in the task language below, as applicable. Describe below how you plan to determine the effectiveness of your project. Project effectiveness success criteria should be time-bound and assess each project objective quantitatively. Success criteria should clearly define adaptive management thresholds. Examples may include: a minimum 25% decrease in sediment/nitrogen/phosphorus load within 2 years; a 70% survival rate of containerized plantings after one year.

If you are applying for nonpoint source grant funding for project design only, and not for project implementation, you may either skip this task, or describe below which parts of this task you intend to complete:

TU shall develop a reasonable method or set of methods for evaluating and reporting on the effectiveness of the project in addressing water quality issues including:

-Establish longterm photo monitoring points. Pre- and post-construction photo point monitoring will be consistent with the "Oregon Watershed Enhancement Board Guide to Photo Monitoring" methodologies, or a similar published photo point monitoring method accepted by DEQ.
- Conduct pre-project BEHI surveys to estimate sediment load reductions
- Estimate the nitrogen load reductions (pounds/year) achieved through implementation of the proposed restoration activities
- Estimate the phosphorus load reductions (pounds/year) achieved through implementation of the proposed restoration activites
- Conduct vegetation mortality surveys to monitor the success of riparian plantings

Example Task Language

Contractor shall, in consultation with the DEQ Project Manager, develop a reasonable method or set of methods for evaluating and reporting on the effectiveness of the project in addressing water quality issues. Contractor shall complete a monitoring plan to guide monitoring activities. Contractor shall complete the following monitoring activities:

- *Estimate the sediment load reductions (tons/year) achieved through implementation of the proposed restoration activities and management practices.*
- *Estimate the nitrogen load reductions (pounds/year) achieved through implementation of the proposed restoration activities and management practices.*
- *Estimate the phosphorus load reductions (pounds/year) achieved through implementation of the proposed restoration activities and management practices.*
- *For projects designed to address pollution from pollutants other than nitrogen, phosphorus and sediment, evaluate and report on the effectiveness of the project in addressing water quality issues.*
- *Contractor shall collect data, as directed by the DEQ Project Manager, to be used in estimating sediment, nitrogen, and phosphorus load reductions (and for harmful algal bloom reduction projects, carbon sequestration/emissions reductions) achieved through implementation of restoration activities and management practices designed to address these pollutants.*
- *Use the following measures to evaluate the sustainability of restoration activities and management practices:*
    - *[Vegetation mortality rate.]*
    - *Pre- and post-construction photo point monitoring consistent with the "Oregon Watershed Enhancement Board Guide to Photo Monitoring" methodologies, or a similar published photo point monitoring method accepted by DEQ. The U.S. Forest Service provides additional photo point monitoring guidance in the "United Stated Forest Service Photo Point Monitoring Handbook".*
    - *[Riparian survey.]*
    - *[Other.]*

Please describe any additional monitoring you intend to do as part of the project.

At this time, no additional monitoring is planned beyond what is described above. However, TU will coordinate with DEQ staff to collect additional data as needed to be used in estimating project success. The contractor shall complete a monitoring plan to guide monitoring activities.

Project Implementation Task

Provide a d**etailed description of the solution you are proposing** to implement to address a nonpoint source pollution problem.

- Describe the practices you intend to design and/or implement to solve the problem (what, where, when, how much or how many).
- Describe the anticipated maintenance needs (what, where, who, how long).
- Refer to the minimum design standards in the Call for Applications.
    - *Please fill out this section to the best of your ability, even if you are only seeking funding for project design.*

The Jones family (Hyde Ranch) has a strong combination of education and experience with regenerative agriculture. They purchased the property and moved their family to the ranch to put their knowledge to use. One of the largest obstacles to rehabilitating the landscape is the lack of fencing, water gaps, and off-channel water to reduce impacts of cattle on aquatic resources. Between the Hyde Ranch and their state land leases they would like to reduce livestock access to approximately 4-miles of Madison River and 9 miles of streams/ditches. This includes major irrigation ditches such as Crawely and Spring Creek. To protect all of these waterbodies it will require a large a mount of fencing, water gaps, and stockwater tanks. Because of the large cost to install all of this infrastructure, TU plans to use a phased approach to work with the Joneses and other project partners (NRCS, FWP, MRF, and NWE). For Phase 1 (this proposal), TU will complete the following activities:

Phase 1 Activities (final locations to be determined):

- Install 6 miles of fencing along the Madison River and other streams/ditches.
- Install 6 hardened water gaps
- Install 6 stockwater tanks
- Install 1,000 willow livestakes

These activities will greatly reduce the impact of livestock on these waterbodies. The fencing and water gaps will protect sensitive riparian areas from over grazing and reduce bank trampling. Hardened water gaps will provide some water access to livestock at discrete locations and reduce sedimentation. The water gaps and fencing will also allow cattle to be rotated more frequently between pastures to reduce impacts on the uplands and streams/ditches. Fencing along the Madison River will remove a large water source for livestock. To offset this, 6 stockwater tanks will be installed which will also assist with rotational grazing. With livestock disturbance greatly reduced, TU will work with volunteers and project partners to plant willow livestakes (locations TBD). Livestakes will stabilize eroding stream banks, uptake excess nutrients, and provide shade to streams/ditches. There are already extensive cottonwood galleries along the Madison River. Excluding cattle from the riparian areas will allow these cottonwoods to expand. All fencing will meet or exceed the 35 ft riparian buffer requirement. The combination of all these actions will reduce sediment and nutrient inputs to the waterbodies.

During the life of the DEQ contract, TU will commit to assist with infrastructure maintenance and other adaptive management activities as needed. Over the long term the Jones family is committed to typical maintenance of fencing, water gaps, and stock water tanks. This includes repairing fencing that is damaged from tree fall or other impacts. If a catastrophic flood impacts the project and the repair cost are substantial, TU will work with other project partners to seek grant funding to ensure the longterm success of the project.

This grant would be Phase 1 of fencing along the streams/ditches on the Hyde Ranch. TU is using this phased approach due to funding availability. The Joneses are working with NRCS on fencing cost share to construct other interior fencing and potentially fence the remaining stream/ditch miles not included in Phase 1. However, if they cannot obtain/contribute funding to complete all the remaining fencing, TU will work with the ranch to identify other funding sources to complete a 2nd phase of riparian fencing. Phase 2 would include the remaining 7 miles of fencing along the streams/ditches. It is also important to note that while the streams/ditches carry water year round, they are used as ditches to convey water during irrigation season. As such, irrigators have a legal right to maintain these waterbodies to ensure continued delivery of water. For this reason, the best approach to address water quality in these streams/ditches is to restrict livestock access via fencing. Riparian plantings can be installed on one side of the stream to provide shade and bank stability while still allowing ditch users access for maintenance from the other stream bank.

Education, Outreach and Training Task

To get good projects on the ground, trained staff and board members and educated, enthusiastic landowners are required. To promote the development of future projects, DEQ encourages project sponsors to use up to $5,000 per project of funding to support training and conduct education and outreach. Example training topics might include: project management, public procurement, technical writing, GIS, water quality monitoring, web design, public speaking, human resource management, photo journalism, UAV (drone) piloting, financial management, and restoration techniques. Education and outreach activities might include targeted landowner outreach, conducting project site tours for local landowners, tabling at community events, holding a watershed festival, providing stipends and travel reimbursements for speakers and participants to attend a nonpoint source pollution prevention workshop, or generating articles for social media. The primary requirement for training and outreach is clearly explaining how the activity generates behavior change to address nonpoint source pollution. Funding may not be used to pay for food and beverages, or for honorariums and gifts.

Describe the education and outreach activities or training you will complete to promote behaviors or facilitate future efforts to reduce nonpoint source pollution. Additionally, identify the goals of the training/education and outreach activities.

TU will work with the Jones family to provide education and outreach opportunities. This will include project tours that highlight regenerative agriculture and the importance of managing livestock access to streams and sensitive riparian areas. One of the goals of the project is to demonstrate to the public and local landowners that livestock operations can coexist with fish and wildlife and reduce negative impacts on water quality. TU will commit to a final project tour which will invite neighboring landowners and project partners. However, it is likely that multiple additionally impromptu tours will occur throughout the life of the grant.

TU will also offer volunteers hands-on opportunities to get involved with plantings. TU will coordinate with the Madison-Gallatin TU Chapter and the Madison River Foundation to recruit volunteers and share educational materials. TU will also work with the Madison-Gallatin TU chapter to share project updates through our social media platforms and in annual updates to the local TU Chapters. There will be a minimum of 4 volunteer planting events.

Identify the specific target audience and method of delivery. Additionally, describe how the proposed training and/or education and outreach will increase local capacity and interest for addressing/promoting behavior change to reduce nonpoint source pollution.

The target audience will include the general public and local landowners. Specifically, TU and the Joneses hope to inspire other local landowners to implement future management activities on their own land that reduce impacts to water quality and fish/wildlife habitat. The Joneses are passionate about their ranch and very willing to highlight the anticipated success of this project and their regenerative agriculture practices.

Describe how you will evaluate the effectiveness of the proposed activities.

During tours and volunteer events TU will have attendees sign in which will allow us to track in-person education opportunities. During public presentations, TU will do their best to estimate the number of people who attend the presentations and provide photos of the event. Project Manager Connor Parrish already runs Instagram and YouTube accounts for TU. He will be able to report to DEQ the number or views, likes, shares, and comments on each video or social media post about the project.

Project Administration Task

Please use the task description below as a guide when calculating your budget for project administration. DEQ typically includes these requirements in every nonpoint source grant contract, with only minor variation. Funding applied to the Project Administration Task on each project must not exceed 10% of the total amount of funding requested, or $12,000, whichever is lower.

Example Task Language

Contractor shall oversee and be accountable for the completion of all tasks. Contractor shall maintain regular contact with the DEQ project manager. Contractor shall prepare and submit Status Reports, Final Reports and Attachment B Billing Statements according to the format and schedule described below.

Report Format

- *Contractor shall submit each Attachment B Billing Statement, Status Report and Final Report using the most current reporting guidance and templates provided by the DEQ project manager.*
- *Contractor shall ensure each Status Report and Final Report contains adequate documentation to justify accompanying reimbursement requests and match reporting, to the satisfaction of the DEQ project manager.*
- *Contractor shall ensure that the Final Report is a standalone document describing all contract activities and containing copies of all contract deliverables (even if the deliverables were previously submitted).*

Reporting Schedule

- *Status Reports: Due June 15th and December 15th of each year the Contract is in effect, and each time an Attachment B Billing Statement is submitted.*
- *Draft Final Report: Contractor shall submit a complete draft Final Report for DEQ review and comment at least 15 days prior to the contract expiration date.*
- *Final Report: Contractor shall submit a Final Report, addressing DEQ comments on the draft Final Report, on or before the Contract expiration date.*
- *Attachment B Billing Statements: Contractor shall submit an Attachment B Billing Statement with each Status Report, or Final Report submitted to DEQ while the Contract is in effect. To maintain cash flow, Contractor may submit interim Attachment B Billing Statements as frequently as monthly during the term of the Contract. However, each interim Attachment B Billing Statement must be accompanied by an Interim Report.*

Project Timeline

	4Q 2026	1Q 2027	2Q 2027	3Q 2027	4Q 2027	1Q 2028	2Q 2028	3Q 2028	4Q 2028	1Q 2029	2Q 2029	3Q 2029
Project Coordination and Planning Task	✔	✔										
Landowner Agreement Task	✔											
Project Effectiveness Monitoring Task		✔		✔				✔				✔
Project Implementation Task			✔				✔					
Education, Outreach and Training Task	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Project Administration Task	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

Co-Benefit Considerations

DEQ is committed to carrying out nonpoint source pollution reduction projects within engaged communities where the impact stretches beyond improving water quality. DEQ will award additional points in the scoring form where co-benefits extend beyond the project. Below are a few examples of how projects might exemplify co-benefits.

- Project will reduce economic hardship such as from livestock mortalities, cost and energy needs to treat municipal drinking and wastewater treatment, or loss of income from recreation
- Project will benefit underserved markets
- Project will improve or create equitable access to a clean and healthy environment
- Project planning included consultation with Tribal Nations
- Project will improve flood and drought resilience of the landscape
- Project impacts will benefit a downstream community and other natural systems (e.g., drinking water sources, human health, wildlife habitat, etc)

Please use this section to highlight co-benefits your project may have.

The proposed project will have additional benefits beyond just water quality. The Madison River and Gallatin Rivers are world class trout fisheries which support a thriving recreational economy. Trout are sensitive species that require clean/cold water and complex habitat. Addressing sediment/nutrient inputs and improving riparian habitat will help benefit these fisheries locally and up/downstream of the project area. Wildlife also heavily utilize the streams withing the project area. Wildlife such as migratory songbirds, ungulates, bears, small mammals, and many others depend on riparian areas at some point in their life cycle. Sandwiched between the project area are two FWP Fishing access sites. This project will improve fishing and hunting activities for the public who can access the Madison River and numerous islands below the high water mark. Additionally, the project will improve wildlife viewing and hunting on the neighboring state lands as wildlife move back and forth between private property and public land. Finally, by addressing water quality impairments, there will be downstream benefits to neighboring ranches and the local community.

BUDGET

2026 Nonpoint Source Pollution Reduction Application - On-the-Ground Project Budget Template

Project Title:	Hyde Ranch Fencing and Riparian Enhancement Phase 1							
Instructions	**Tasks and Potential Deliverables**	**Funding Request***	**Non-Federal Match****	**Other Funding*****	**Match Source**	**Match Secured? (Y/N)**	**Total Project Cost**	**Additional Information********
This task includes completion of all planning tasks and coordination and oversight of the efforts of all project partners. Provide a	**Project Planning**							
	Preliminary site investigation data and site maps	$ 1,160.00	$ 514.40		Landowner (In-Kind)		$ 1,674.40	two days of TU staff time, Match: 16 hrs. volunteer labor $32.15/hr. (source: independentsector.org/research/value-of-volunteer-time)
	Cultural Resource Survey			$ 5,000.00	Northwestern Energy	Y	$ 5,000.00	NWE funding held by the Madison River Foundation from a WildTAC grant
	Required Permits	$ 464.00					$ 464.00	8 hrs of TU staff time. Only permit is a 310 permit for installing water gap crossings
	Draft Project Designs	$ 464.00					$ 464.00	8 hrs of TU staff time.
	Final Project Designs	$ 464.00					$ 464.00	8 hrs of TU staff time.
	Procurement and Solicitation of Contractors	$ 464.00	$ 257.20		Landowner (In-Kind)		$ 721.20	8 hrs of TU staff time, Match: 8 hrs. volunteer labor $32.15/hr. (source: independentsector.org/research/value-of-volunteer-time)
	Travel	$ 220.00					$ 220.00	4 trips: 75 miles round trip with $0.725/mile= $55
	Total	$ 3,236.00	$ 771.60	$ 5,000.00			$ 9,007.60	
This task includes costs for developing and managing landowner agreements and developing grazing management plans as	**Landowner Agreements**							
	Draft Landowner Agreement	$ 464.00	$ 128.60		Landowner (In-Kind)		$ 592.60	8 hrs of TU staff time. Match: 4 hrs. volunteer labor $32.15/hr. (source: independentsector.org/research/value-of-volunteer-time)
	Final Landowner Agreement	$ 232.00	$ 64.30		Landowner (In-Kind)		$ 296.30	4 hrs of TU staff time. Match: 2 hrs. volunteer labor $32.15/hr. (source: independentsector.org/research/value-of-volunteer-time)
	Grazing Management Plan	$ 464.00	$ 257.20		Landowner (In-Kind)		$ 721.20	8 hrs of TU staff time. Match: 8 hrs. volunteer labor $32.15/hr. (source: independentsector.org/research/value-of-volunteer-time)
							$ -	
							$ -	
	Total	$ 1,160.00	$ 450.10	$ -			$ 1,610.10	
This task includes costs for developing and implementing a monitoring plan to evaluate effectiveness to	**Effectiveness Monitoring**							
	Draft Monitoring Plan	$ 928.00					$ 928.00	2 days of TU staff time.
	Final Monitoring Plan	$ 232.00					$ 232.00	4 hrs of TU staff time.
	Monitoring	$ 928.00					$ 928.00	2 days of TU staff time.
	Written Summary of all Monitoring Activities	$ 2,320.00					$ 2,320.00	5 days of TU staff time.
	Travel	$ 220.00					$ 220.00	4 trips: 75 miles round trip with $0.725/mile= $55
							$ -	
							$ -	
	Total	$ 4,628.00	$ -	$ -			$ 4,628.00	
This tasks includes all costs for implementation of the plans developed in the Project Planning task. If you are requesting funding for design only, leave this task blank. Provide a detailed budget and add a row if needed.	**Project Implementation**							
	Fencing	$ 92,880.00	$ 68,000.00		NW Energy WildTAC: $18k. Future Fisheries and/or Gallatin County Open Space: $50k	NWE WildTAC: Y, Future Fisheries and/or Gallatin County Open Space: N	$ 160,880.00	$110k for 6 miles of barbed wire fence installed ($3.5/ft), $50k bush clearing to accommodate fencing
	Water Gaps	$ 12,000.00					$ 12,000.00	$2k/water gap (6 total). Includes metal gates and rock to harden the crossing
	Stock Water Tanks	$ 60,000.00					$ 60,000.00	$10k/tank (6 tanks). Costs estimated from recently installed tanks on Hyde Ranch (see photos in attachemnts).
	Construction oversight/Labor	$ 4,640.00	$ 643.00		Landowner (In-Kind)		$ 5,283.00	10 days of TU staff time (oversight and plantings). Match: 20 hrs. volunteer labor $32.15/hr. (source: independentsector.org/research/value-of-volunteer-time)
	Landowner recommendation letter		$ 64.30		Landowner (In-Kind)		$ 64.30	Match: 2 hrs. volunteer labor $32.15/hr. (source: independentsector.org/research/value-of-volunteer-time)
	Livestakes		$ 2,000.00		Landowner (In-Kind)		$ 2,000.00	1,000 livestake cuttings.
	Volunteer Support		$ 3,858.00		In-Kind		$ 3,858.00	Match: 20 volunteers 6 hrs. each. volunteer labor $32.15/hr. (source: independentsector.org/research/value-of-volunteer-time)
							$ -	
	Total	$ 169,520.00	$ 74,565.30	$ -			$ 244,085.30	
This task includes costs to develop and improve organizational capacity and to incorporate education and Funding applied to Project Administration task must not exceed 10% of the total	**Education and Outreach**							
	Volunteer Coordination	$ 1,782.50					$ 1,782.50	TU Staff time
	Event/Tour Planning	$ 1,000.00	$ 514.40		Landowner (In-Kind)		$ 1,514.40	Match: 16 hrs. volunteer labor $32.15/hr. (source: independentsector.org/research/value-of-volunteer-time)
	Outreach/Publication materials	$ 2,000.00					$ 2,000.00	TU Staff time and materials
	Travel	$ 217.50					$ 217.50	4 trips: 75 miles round trip with $0.725/mile= $55
							$ -	
	Total	$ 5,000.00	$ 514.40	$ -			$ 5,514.40	
	Administration							
	Mid/Annual/Interim Reports and Billing Statements	$ 8,000.00					$ 8,000.00	
	Draft/Final Report and Billing Statement	$ 2,000.00					$ 2,000.00	
	Communication with DEQ	$ 2,000.00					$ 2,000.00	
							$ -	
							$ -	
	Total	$ 12,000.00	$ -	$ -			$ 12,000.00	
		Funding Request*	**Non-Federal Match****	**Other Funding*****			**Total Project Cost**	
	Grand Totals	$ 195,544.00	$ 76,301.40	$ 5,000.00			**$ 276,845.40**	

*Funding Request - Must not exceed $300,000 and must be at least $125,000 for harmful algal bloom reduction projects

**Non-Federal Match - Can include in-kind materials.

***Other Funding - Include federal match here, or, for example, other funding that is supporting the project but cannot be reported as match on this grant because it is matching another funding source.

****Additional Information - Use to specify non-federal match and other funding sources, or use to justify cost if needed (e.g., hourly rates, rental costs, etc.)

Match Required $ 21,727.11

LETTERS OF SUPPORT

Mrs. Hannah Riedl
Watershed Protection Section
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Dear Mrs. Riedl,
Our ethos as an operating ranch in the mountain west is to work in accordance with the natural landscape to promote its function in a way that not only sustains us but provides benefits for the broader community as a whole.

We aim to accelerate the value of our operation through our sharp focus in soil health and function, along with advancing water quality and quantity as we intend to manage our landscape with strong qualitative and quantitative ecosystem function goals in mind.

In short, we are laser focused on water cycling, soil health and nutrient densities. We have a keen understanding that our systems we operate within are complex, and how we manage our landscape has a unique and direct impact on our community.

We feel that in order to, promote vibrancy within our community, our agricultural operation provides an essential ingredient, to act as a platform, that aims to define sustainability for all. Our riparian areas of the ranch are especially important to us. For the first time in decades, we intend to hone the management of our riparian zones of this landscape in a manner that promotes the impressive vitality of the lower Madison River Valley.

Partners, such as Trout Unlimited and Madison River Foundation, are uniquely synergistic for us as we are able to unite under the same focused goal: "A healthy Madison River, that sustains a healthy ecosystem for all living things that utilize it's incredible energy."

We live, work, raise our family, and very occasionally play on this remarkable ranch that sits along approximately 3.5 miles of the Madison River. We are committed to our ethos, and the goals are of upmost importance to us not only for our family, but also for the community at large.

We are excited to deploy a management strategy, in partnership with Trout Unlimited and Madison River Foundation that will inherently increase the overall health and value of the Lower Madison River Valley.

Thank you for your consideration.

Max Jones, Hyde Ranch

Madison Conservation District
Local Common-Sense Conservation
222 E. Main Street Suite 2B | PO Box 606 | Ennis, MT 59729
406.682.3181

WWW.MADISONCD.ORG

Mrs. Hannah Riedl
Watershed Protection Section
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Dear Mrs. Riedl,

I am contacting you to provide the Madison Conservation District's (MCD) support for Trout Unlimited's (TU) application to Department of Environmental Quality's (DEQ) 319 non-point source grant opportunity. According to DEQ, the Lower Madison River is listed as impaired for sediment, temperature, and alterations to riparian vegetation which is impacting aquatic life and recreation. Additionally, Rey Creek, while not listed as impaired by DEQ, is also plagued by the same issues. As the author of the Madison Watershed Restoration Plan, MCD believes that TU's *Hyde Ranch Riparian Enhancement* project would help address impacts on the water quality and habitat of both streams.

The Lower Madison River is a popular recreational fishery and critical to fish and wildlife. The proposed actions of installing fencing and riparian plantings would help address the water quality and habitat impairments between two FWP Fishing Access Sites. Additionally, it's the belief of MCD that a restored Rey Creek would benefit the fisheries of the Lower Madison and Gallatin Rivers. Installing fencing and water gaps along irrigation ditches/streams that deliver water to Rey Creek would similarly help address water quality issues. For these reasons, MCD encourages you to fully fund the *Hyde Ranch Riparian Enhancement* project proposed by Trout Unlimited.

Sincerely,

Madison Conservation District Board of Supervisors

GALLATIN WATERSHED COUNCIL

February 19, 2026

Montana Department of Environmental Quality
Nonpoint Source Program
1520 East Sixth Avenue
Helena, MT 59620

Dear DEQ Nonpoint Source Program Committee,

The Gallatin Watershed Council welcomes the opportunity to provide our support for Trout Unlimited's (TU's) proposal to improve water quality in the Madison and Lower Gallatin Watersheds with support from the 319 Grant Program. The Hyde Ranch Fencing and Riparian Enhancement Project would address nutrient impairments that support stream health and improve water quality. Improvements proposed at this site would reduce sediment inputs to Rey Creek, a tributary to the Gallatin River, that has suffered from excess fine sediment, degraded riparian vegetation, and increased stream temperatures.

GWC developed the Watershed Restoration Plan for the Lower Gallatin Watershed and currently coordinates the Gallatin Water Collaborative, a group of over 45 local stakeholders working to unify efforts to protect, restore, and enhance water resources in the Lower Gallatin Watershed. TU's project goals are in alignment with the goals and direction of our watershed's WRP and Gallatin Water Collaborative.

We value TU's experience and knowledge in watershed conservation and commend their leadership on this important project. By leveraging partnerships between Trout Unlimited, the landowners, Montana Fish, Wildlife & Parks, and the Madison River Foundation, this project embodies the collaborative, science-based approach that DEQ 319 funding is intended to catalyze. We urge your full support.

Respectfully,

Holly Hill

Holly Hill
Executive Director
Gallatin Watershed Council

February 13, 2026

Mia Cignoni
Conservation Programs Manager
Madison River Foundation

Connor Parrish
Project Manager
Trout Unlimited

Dear Mia and Connor,

You recently submitted an application to our FERC-ordered Missouri-Madison Wildlife Technical Advisory Committee. The Committee is comprised of representatives of Montana Fish, Wildlife & Parks, US Forest Service, US Fish & Wildlife Service, US Bureau of Land Management and NorthWestern Energy. Each year the Committee reviews up to 25 proposals and makes a determination whether to fund based on available funding and how the proposed projects protect, mitigate and enhance fish and wildlife populations and habitat. I'm writing to inform you the Technical Advisory Committee has evaluated your application and voted to fund the *Madison River Riparian Fence* project in amount of $18,800. An additional $5,000 was approved by the Committee to perform a Cultural Resources Management inventory, report and submission to the Montana State Historic Preservation Office for concurrence.

For the past 26 years, NorthWestern Energy has provided funding for a variety of wildlife habitat projects in the Missouri-Madison river corridor between Hebgen Lake and Fort Peck Reservoir. We believe your project will help build a broader spectrum of wildlife habitat protection, mitigation and enhancement in the area.

Please notify me in advance of setting up a contract with Madison River Foundation that will transfer these funds in preparation for construction. In the meantime, please feel free to contact me if you have any questions. Best regards.

Grant Grisak
Fish Biologist - Hydro License Compliance
Grant.Grisak@NorthWestern.com
O 406-268-2299
C 406-403-1967
6700 Rainbow Dam Road
Great Falls, MT 59404

Mrs. Hannah Riedl
Watershed Protection Section
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Dear Mrs. Riedl,

I am contacting you to provide the Madison River Foundation's (MFR) support for Trout Unlimited's (TU) application to Department of Environmental Quality's (DEQ) 319 non-point source grant opportunity. According to DEQ, the Westfork Madison River is impaired due to elevated water temperatures which impact aquatic life and recreation. We believe that TU's *Westfork Madison Side Channel and Floodplain Restoration* project would help address this impairment by preventing a large headcut and overflow channel from becoming the primary river channel. If left in its current state, the river will eventually run through a large open field with no riparian vegetation. This would result in an incised stream channel completely exposed to the sun with no shade, high erosion rates, and little instream structure. The incised channel would also significantly drop the water table. The results of this would further contribute to the Westfork Madison's temperature impairment.

MRF believes that restoration actions are needed to prevent further water temperature issues and improve habitat for fish and wildlife. To demonstrate our commitment to this effort, MRF is prepared to provide up to $40,000 in match funding toward DEQ 319 grant requirements for this project. The Westfork Madison is a critical spawning and rearing tributary to the Madison River, and the project would benefit both the water quality and fisheries of the Madison and Westfork Madison Rivers. For these reasons, MRF encourages you to fully fund the *Westfork Madison Side Channel and Floodplain Restoration* project proposed by Trout Unlimited.

Sincerely,

Mia Cignoni
Conservation Programs Manager
Madison River Foundation
(413) 320-8004
mia@madisonriverfoundation.org

Montana Fish, Wildlife & Parks
Region 3 Headquarters
1400 S 19th Avenue
Bozeman, MT 59718

February 18, 2026

Mrs. Hannah Riedl
Watershed Protection Section
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Dear Mrs. Riedl,

Montana Fish, Wildlife & Parks (FWP) supports Trout Unlimited's (TU) application to the Department of Environmental Quality's (DEQ) 319 non-point source grant opportunity. The application includes specific measures to address water quality concerns in the Lower Madison and Gallatin watersheds. According to DEQ, the Lower Madison River is listed as impaired for sediment, temperature, and alterations to riparian vegetation, which are impacting aquatic life and recreation. Additionally, Rae Creek – a tributary of the lower Gallatin River - is affected by similar factors. FWP believes that TU's *Hyde Ranch Riparian Enhancement* project would help address impacts on the water quality and habitat of both streams.

The Lower Madison River is a popular recreational fishery and is critical to fish and wildlife. The proposed actions of installing fencing and riparian plantings along the Madison River would help address the water quality and habitat impairments between two FWP Fishing Access Sites. The proposed fencing and water gaps along irrigation ditches/streams that deliver water to Rae Creek would similarly help address water quality issues.

FWP has met with the Jones family, owners of the Hyde Ranch, and can attest to their intentions to be good stewards of the land and aquatic resources on their property. For these reasons, FWP encourages you to fully fund the *Hyde Ranch Riparian Enhancement* project.

For further questions or concerns, please contact the following FWP personnel.

Keith Wellstone, fisheries biologist (406-581-5568, keith.wellstone@mt.gov)
Jen Smitham, R3 comment coordinator (406-495-3262, jsmitham@mt.gov)

Thank you again for the opportunity to comment.

Sincerely,

Kelly Proffitt

Kelly Proffitt
Region 3 Supervisor

Mrs. Hannah Riedl
Watershed Protection Section
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Dear Mrs. Riedl,

My name is Jim Schonewise, and I am writing to you as Recording Secretary on the Board of Directors for the Madison-Gallatin chapter of Trout Unlimited (MGTU). I would like to relay MGTU's support for, and endorsement of, Trout Unlimited's (TU) application to a Department of Environmental Quality's (DEQ) 319 non-point source grant opportunity. According to DEQ, the Lower Madison River is listed as impaired for sediment, temperature, and alterations to riparian vegetation which is negatively impacting aquatic life and human recreation. Additionally, Rey Creek, while not listed as impaired by DEQ, can be said to be plagued by the same issues. MGTU believes that TU's *Hyde Ranch Riparian Enhancement* project would help address impacts on the water quality and improve habitat of both streams.

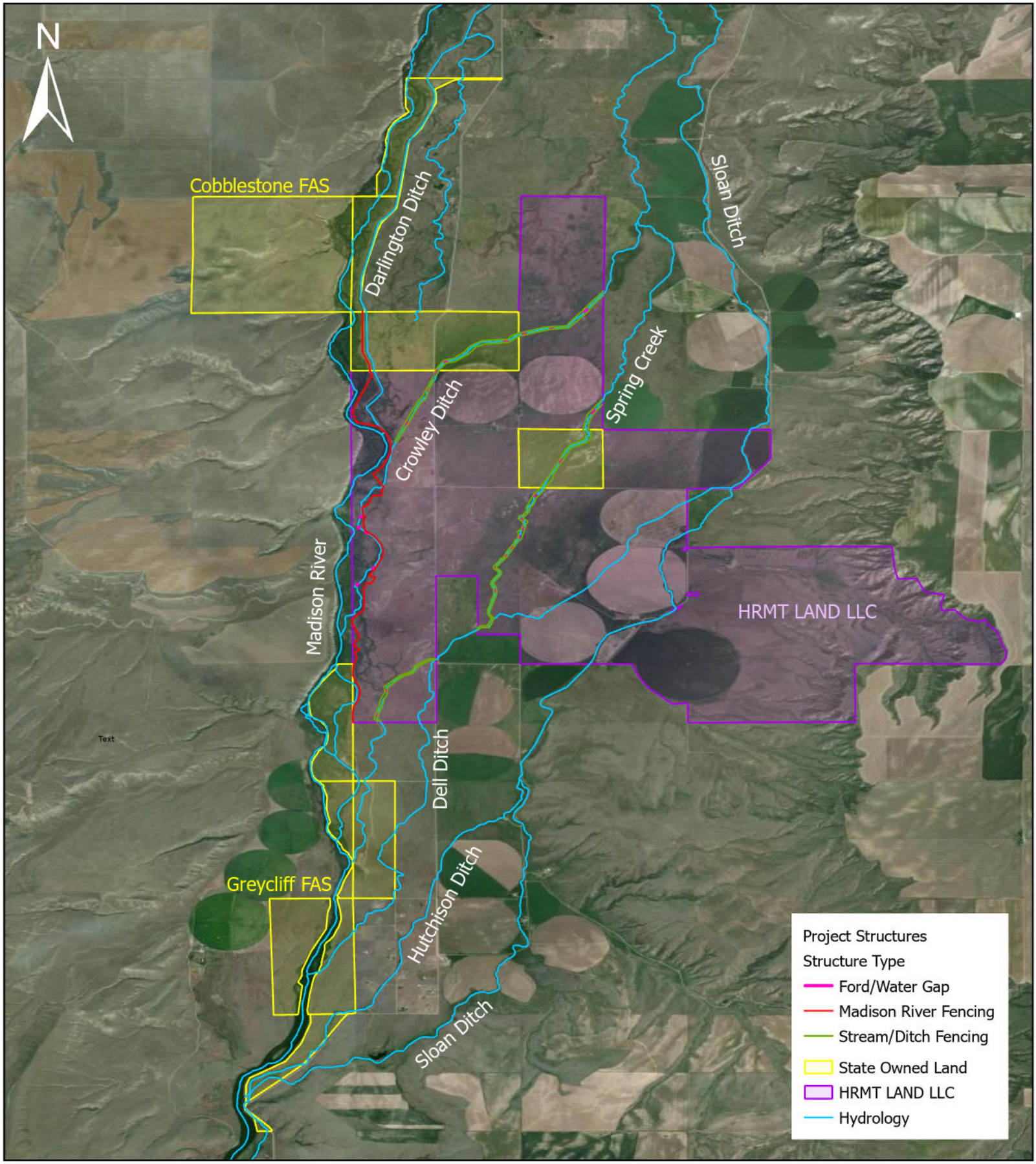
The Lower Madison River is a popular recreational fishery and critical to fish and wildlife. The proposed actions of installing fencing and riparian plantings would help address the water quality and habitat impairments between two popular FWP Fishing Access Sites. MGTU has been engaged for an extended period in efforts to support public and private collaboration to improve conditions around the Cobblestone FAS. Additionally, it's the belief of FWP that a restored Rey Creek would have a huge benefit to the fisheries of the Lower Madison and Gallatin Rivers. Installing fencing and water gaps along irrigation ditches/streams that deliver water to Rey Creek would similarly help address water quality issues. For these reasons, MGTU encourages you to fully fund the *Hyde Ranch Riparian Enhancement* project proposed by Trout Unlimited.

Thank you for your consideration and for the opportunity to support these important activities.

Sincerely,

/s/
Jim Schonewise
Recording Secretary
Madison-Gallatin Trout Unlimited
P.O. Box 52
Bozeman, MT 59771

MAPS/ DESIGNS

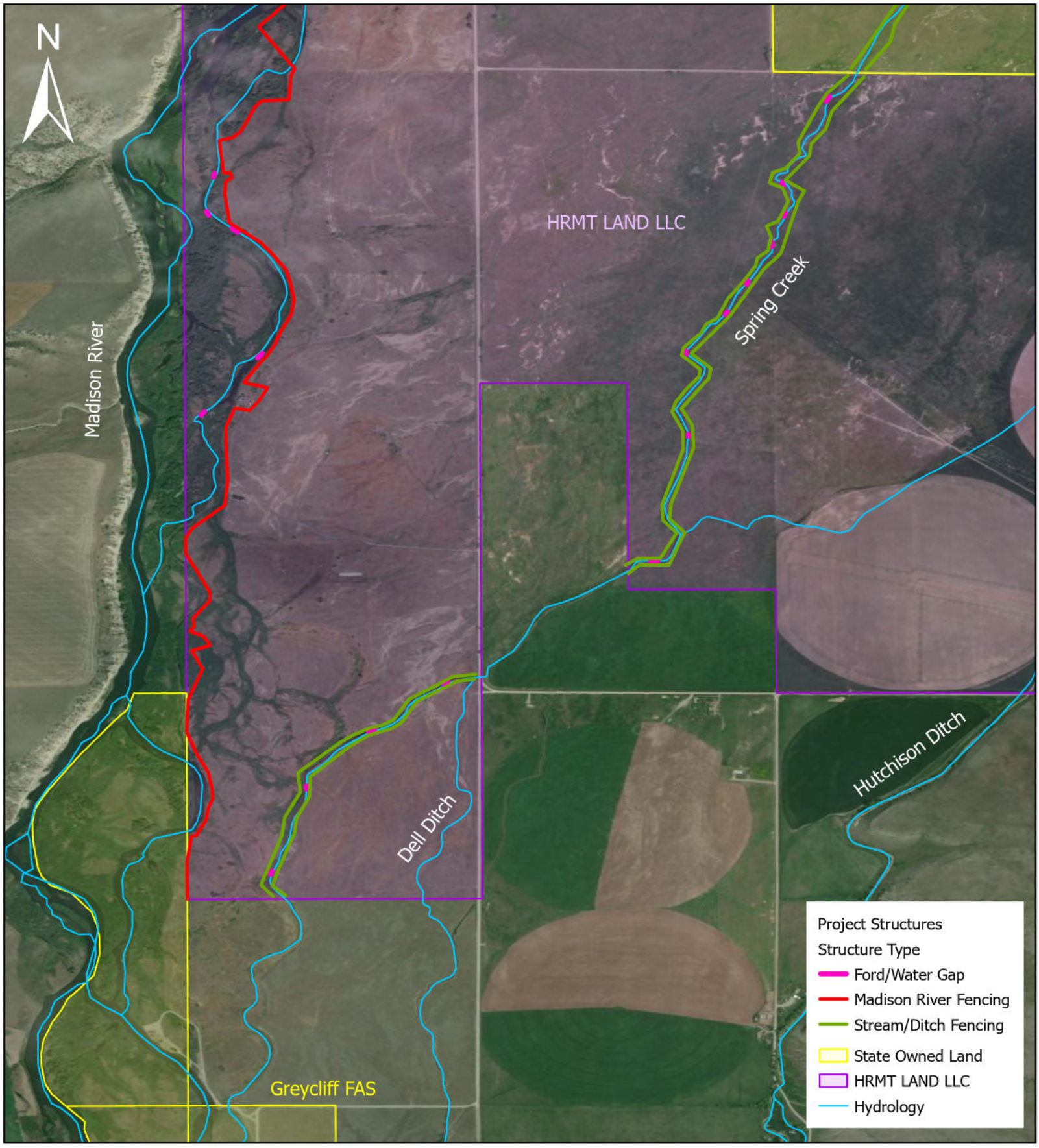


Hyde Ranch Fencing and Riparian Enhancement Project

45.747096, -111.513780

0 0.68 1.35 2.7 Miles

TROUT UNLIMITED

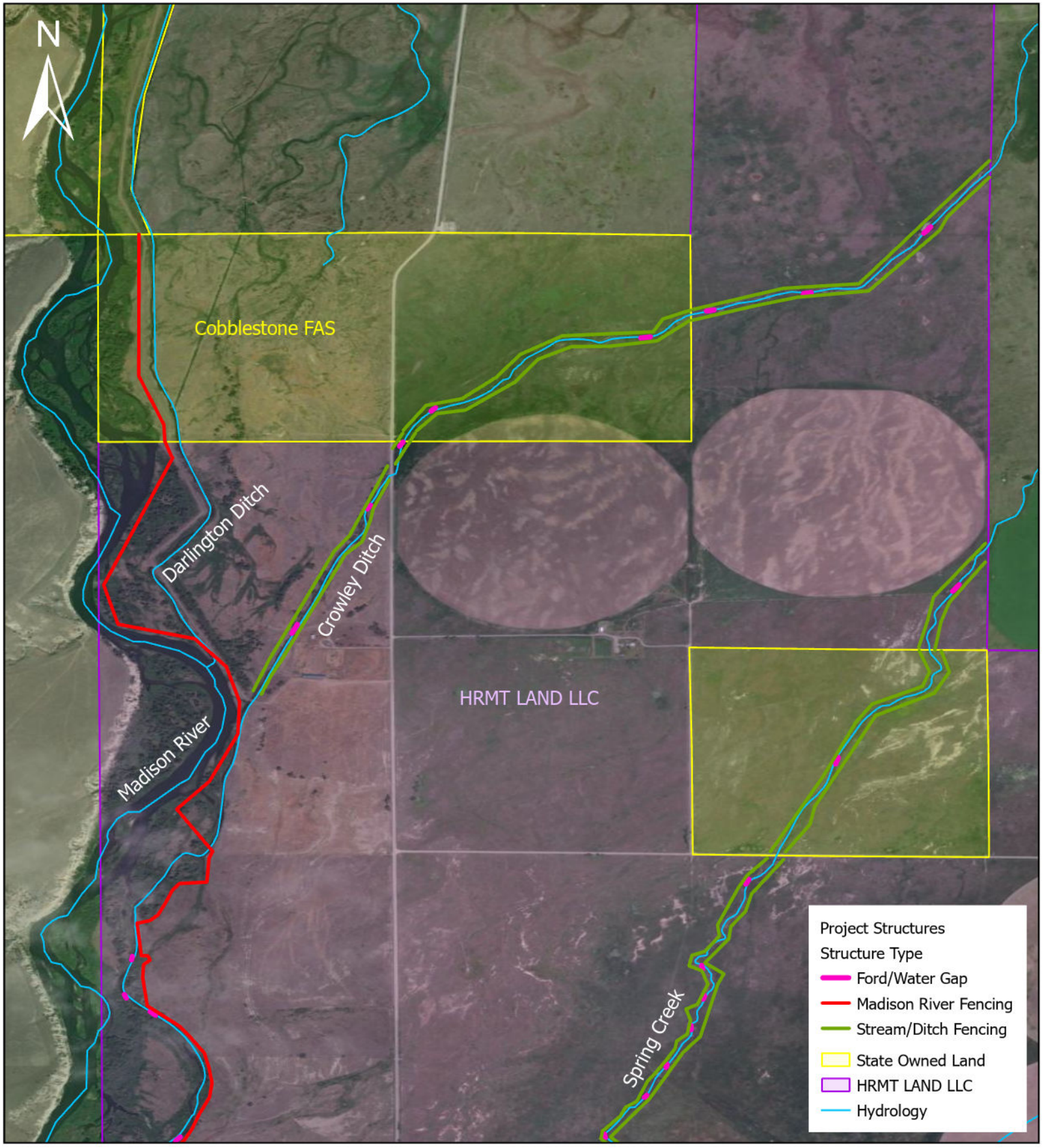


Hyde Ranch Fencing and Riparian Enhancement Project

45.747096, -111.513780

0 0.19 0.38 0.75 Miles

TROUT UNLIMITED



Hyde Ranch Fencing and Riparian Enhancement Project

45.747096, -111.513780

0 0.19 0.38 0.75 Miles

TROUT UNLIMITED

OTHER ATTACHMENTS

Hyde Ranch Fencing and Riparian Enhancement

Figure 1: Eroding stream banks caused by historic overgrazing along Spring Creek, a tributary to Rey Creek.

TROUT UNLIMITED

By Connor Parrish, Project Manager

Background

The Jones family purchased the Hyde Ranch, formerly the Climbing Arrow Ranch, during 2025. Previously the ranch was extremely overgrazed, which has significantly impacted the landscape and the waterbodies that flow throw it. The Hyde Ranch includes ~4 miles of riparian area along the lower Madison that is positioned between the Montana Fish Wildlife and Parks (FWP) Cobblestone and Greycliff Fishing Access Sites (FAS). The ranch also has several ditches and streams that cross the property, contributing water to the Madison River and Rey Creek (Gallatin River tributary). Livestock currently have unimpeded access to most of these water bodies, resulting in degraded riparian areas, increased stream temperatures, fine sediment inputs, and excess nutrient contributions. This is contributing to water quality issues that have been documented in a DEQ approved Watershed Restoration Plan (WRP). The Madison WRP mentions both Rey Creek and the Lower Madison River multiple times, identifying potential restoration actions for both water bodies in table 11 (page 39). This includes restoration actions that enhance riparian buffers. Additionally, the Lower Madison River is listed as impaired by Montana Department of Environmental Quality for sediment, temperature, and alterations to riparian vegetation which is impacting aquatic life. As for Rey Creek, it doesn't have an impairment listing on the DEQ website however several local partners (TU, MGTU, FWP, Beartooth Group) are working on projects that would reduce sediment inputs due to the clear sediment issues in the stream.

Figure 2: Rey Creek (above) is chronically plagued by fine sediment.

The Jones family have a strong combination of education and experience with regenerative agriculture. They purchased the property and moved their family to the ranch to put their knowledge to use. One of the largest obstacles to rehabilitating the landscape is the lack of fencing, water gaps, and water tanks to reduce impacts of livestock on aquatic resources. The Jones have already installed a couple stock water tanks (figure 7) and received a grant from Ranching for Rivers to help support fence construction however, collaboration with local entities could help them achieve their goals.

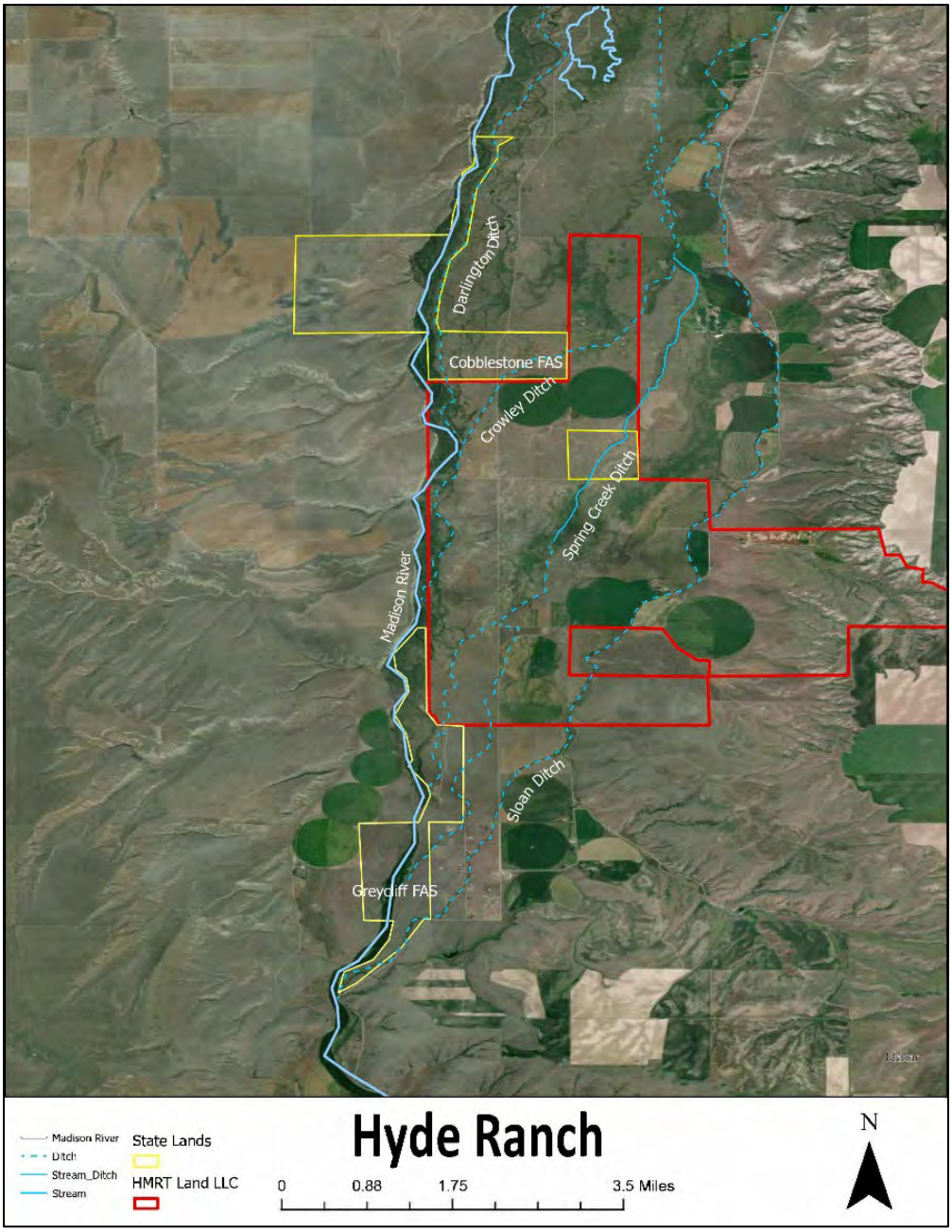


Figure 3: Map of the Hyde Ranch and neighboring public lands.

During 2025, the Jones family reached out to local conservation organizations to see if there was any interest in supporting their efforts. Staff from Trout Unlimited (TU), the Madison River Foundation (MRF), and FWP joined the Jones Family on two occasions to look at their property and discuss potential restoration opportunities. The Joneses are interested in fencing out most of the riparian area along the Madsion as well as fencing the streams/ditches, installing water gaps, and adding riparian plantings where possible (figures 4 and 5). All of these activities would greatly reduce fine sediment/nutrient inputs and allow the expansion of riparian areas which will provide shade for the streams. It is the belief of TU, MRF, and FWP that these results would have tangible

benefits to the stream and riparian ecosystems not just on the Hyde Ranch but to the public resources of the Madison and Gallatin watersheds.

Additional Photos

Figure 4: Two examples of water gaps that allow cattle access to streams while minimizing their ability to impact riparian areas and pollute streams.

Figure 5: Willow livestakes (left) and potted native plants (right) can be used in conjunction to increase species diversity and maximize the success of revegetation efforts.

Figure 6: Spring Creek as it flows through Hyde Ranch prior to joining Rey Creek.

Figure 7: One of the new stock tanks designed by Max Jones. The tanks are designed to be self-filling and resistant to freezing.

Figure 8: the Lower Madsion River along the Hyde Ranch.

Figure 9: One of several irrigation ditches that convey water diverted from the Madison River. Even outside of irrigation season they function as "stream ditches", flowing year-round due to groundwater inputs.