Henry's Fork Groundwater District
Flow Meter Telemetry Project

WaterSMART Small-Scale Efficiency Projects-January 2024
Funding Opportunity No. R24AS00059

Pumping Station with Flow Meter

APPLICANT:
Henry's Fork Groundwater District
350 North 6th West
PO BOX 15
Saint Anthony, Idaho 83445

PROJECT MANAGER:
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Date: January 10, 2024

Applicant Name: Henry's Fork Groundwater District-Category A Applicant

City, County, State: Saint Anthony, Fremont, Idaho

Project Manager:
Name: Aaron Dalling
Phone: 208-624-3381
Email: aaron.fmid@myidahomail.com

Project Funding Request: Small Scale Water Efficiency Projects- Total Cost $145,000.00. Henry's Fork Groundwater District is requesting 50% funding from Reclamation or $72,500.00.

Project Summary

Henry's Fork Groundwater District (HFGWD) is proposing to install telemetry equipment on 290 flow meters for groundwater diversions in our area. This will allow for real time-monitoring of groundwater diversions in our district. Currently this ground water diversion data is not available until the Idaho Department of Water Resources sends an employee out to read each meter at the end of the irrigation season and input the data on a website. By the time this process is complete it is usually December or January of the following winter. This is obviously too late to use the data to make in season decisions and adjustments.

Project Schedule

This project will take roughly 90 days to complete. If we can start in May of 2025 we will be done by July of 2025.

The project is not located on a federal facility.

Project Location

Attachment A provides the geographic locations of the proposed telemetry equipment installations on a map.
Attachment B provides the project boundaries, which encompasses the HFGWD and a partnering groundwater district, the Madison Groundwater District. The two groundwater districts combined make up the Idaho Department of Water Resources administrative Water District 100.

There are 290 groundwater diversion points we propose to install telemetry on throughout the project area which covers much of Fremont and Madison Counties in Idaho.

Nearest Towns

This project encompasses a large area. The major towns within the project area are Rexburg, Idaho and St. Anthony, Idaho.

Technical Project Description

Provide a comprehensive description of the technical aspects of your project, including the scope of work to be accomplished and the approach for the on-the-ground project. This description should provide detailed information about the project materials and equipment including what is currently installed and a description of the upgrade being made. Include in your description the necessary site preparation, removal of materials, motorized and rotating equipment required for installation, site laydown and mobilization areas, and areas impacted by construction. This section provides an opportunity for the applicant to provide a clear description of the technical nature and installation process of the project and to address any aspect of the project that reviewers may need additional information to understand.

Please do not include your project schedule and milestones here; that information is requested in response to the Evaluation Criterion C—Implementation and Results. In addition, please avoid discussion of the benefits of the project, which are also requested in response to evaluation criteria. This section is solely intended to provide an understanding of the technical aspects of the project.

Please note, if the work for which you are requesting funding is a phase of a larger project, please only describe the work that is reflected in the budget and exclude description of other activities or components of the overall project.

This project is simple in this regard. A device will be installed on each flow meter that will relay the information from the flow meters to a website. Groundwater District personnel will then have access to the data in addition to the individual irrigators.

There is no site preparation, removal of materials, or any other equipment required for installation.

Technical Proposal: Evaluation Criteria

The evaluation criteria portion should be addressed in the technical proposal section of the application. Applications should thoroughly address each criterion and any sub-criterion in the order presented below. **Applications will be evaluated against the evaluation criteria listed below.**

Evaluation Criterion A. Project Benefits (35 points)

Up to **35 points** may be awarded based upon evaluation of the benefits that are expected to result from implementing the proposed project. This criterion considers a variety of project benefits, including the significance of the anticipated water management benefits and the public benefits of the project. This criterion prioritizes projects that modernize existing infrastructure to address water reliability concerns, including making water available for multiple beneficial uses and resolving water related conflict in the region.

If the work described in your application is a phase of a larger project, only discuss the benefits that will result directly from the work discussed in the technical project description and that is

reflected in the budget, not the larger project.

Benefits to the Category A Applicant's Water Delivery System: Describe the expected benefits to the Category A applicant's water delivery system. Address the following:

Clearly explain the anticipated water management benefits to the Category A applicant's water supply delivery system and water customers. Consider:

- Will the project result in more efficient management of the water supply?

The groundwater districts (GWD's) have a total allocation each year and split up those allocations between individual irrigators. The problem has been we do not know if individuals or the GWD's as a whole are in compliance with allocations until after the fact. This project would allow us to monitor groundwater diversions in-season and manage accordingly. This project will inform better decision making in how we use our available water resources more efficiently.

- Where any conserved water as a result of the project will go and how it will be used?

Conserved water will stay in the aquifer for the benefit of other users including agriculture, cities and others.

Explain the significance of the anticipated water management benefits for the Category A applicant's water delivery system and customers. Consider:

- Are customers not currently getting their full water right at certain times of year?

Our GWD customers are not getting their full water right, as a result of the water call by the SWC and resulting Settlement Agreement.

- Does this project have the potential to prevent lawsuits or water calls?

This is a major component of this project. The GWD's are participants in a Settlement Agreement between the Surface Water Coalition (SWC) Canals in the Magic Valley and the GWD's on the Eastern Snake Plain Aquifer (ESPA). This Settlement Agreement is the result of a water call in the early 2000's the SWC canals made against groundwater users located on the ESPA. The SWC declared a breach of the agreement for the years 2021 and 2022 based on their belief that some groundwater districts had over diverted groundwater in those years. In nearly all the negotiations since that time, SWC has requested real time monitoring of groundwater diversions by the GWD's. If we can obtain funding to install telemetry on our existing flow meters, we can meet this request.

- What are the consequences of not making the improvement?

The consequence of not making the improvement is that we will not know how much water has been diverted by individual groundwater users or for the groundwater district as a whole until well after the irrigation season is complete.

- Are customer water restrictions currently required?

Yes, as a part of the Settlement Agreement we have a baseline allocation we can divert from the aquifer. This has required modified crop rotations and other efforts to conserve water. This project will help us monitor through the season when adjustments can still be made.

- Other significant concerns that support the need for the project.

The water call by the SWC on the groundwater users within the ESPA is one of, if not the largest water issue in Idaho. This project will benefit the negotiations and reduce overall conflict.

Broader Benefits: Describe the broader benefits that are expected to occur as a result of the

project. Consider:

Will the project improve broader water supply reliability at sub-basin or basin scale?

By installing telemetry both the GWD's and the individual irrigators will have access to real time data. This will improve their water use efficiency and could reduce overall irrigation, benefiting the overall water supply at the basin level.

- Will the proposed project increase collaboration and information sharing among water managers in the region? Please explain.

Yes, the primary purpose of this project is to increase collaboration and information sharing with the SWC Canals. If we are able to install the telemetry, we will have real time groundwater diversion data that we can share and monitor.

- Is the project in an area that is experiencing, or recently experienced, drought or water scarcity? Will the project help address drought conditions at the sub-basin or basin scale? Please explain.

The ESPA continues to decline. This reduces the return flows to the Snake River from the aquifer, see figure below. This project will help us monitor groundwater diversion better and make informed decisions to limit the amount of water diverted from the aquifer.

Figure 1. ESPA Volume of Water and Thousand Springs Discharge

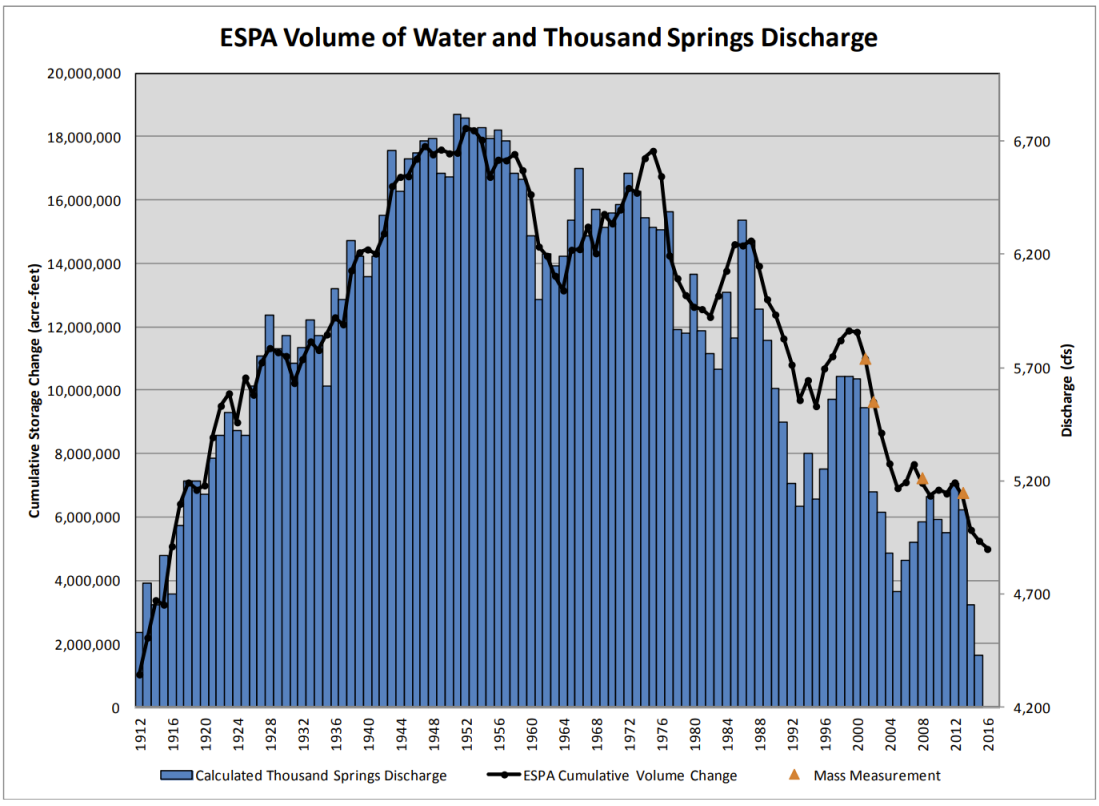


Chart Credit-Idaho Department of Water Resources

- Will the project benefit species (e.g., federally threatened or endangered, a federally recognized candidate species, a state listed species, or a species of particular recreational, or economic importance)? Please explain.

This project does not have a direct benefit to wildlife.

- Will the proposed project positively impacts/benefit various sectors and economies

within the applicable geographic area (e.g., impacts to agriculture, environment, recreation, and tourism)? Please explain.

This project will increase the water reliability for an irrigated agriculture economy that averages nearly 290 million dollars in crop sales per year in Fremont and Madison Counties, (2017 Census of Agriculture).

- Will the project complement work being done in coordination with NRCS in the area (e.g., the area with a direct connection to the districts water supply)? Please explain.

This project is not directly related to an NRCS project.

Evaluation Criterion B. Planning Efforts Supporting the Project (25 points) Up to **25 points** may be awarded based on the extent to which the proposed on-the-ground project is supported by an applicant's existing water management plan, water conservation plan, System Optimization Review, or identified as part of another planning effort led by the Category A applicant. This criterion prioritizes projects that are identified through local planning efforts and meet local needs. Note: Project specific planning and design for the project or other phases of the project are considered in Criteria C – Implementation.

Plan Description and Objectives: Is your project supported by a specific planning document or effort? If so, describe the existing plan. When was the plan developed? What is the purpose and objective of the plan?

This proposed project is the result of a year's worth of discussions in our board meetings and full membership meetings. This planning effort has been documented and developed as a means to help us better manage our available water supply to the greatest benefit of our membership.

We have brought this project before the Henry's Fork Watershed Council.

Plan Development: Who developed the planning effort? What is the geographic scope of the plan? If the planning effort was not developed by the Category A applicant, describe the Category A applicant's involvement in developing the planning effort.

The HFGWD Board of Directors have developed the plan. The Scope is the boundaries of the Henry's Fork and Madison Groundwater District boundaries.

Support for the Project: Describe to what extent the proposed project is supported by the identified plan. Consider:

- Is the project identified specifically by name and location in the planning effort?

This planning effort was developed specifically for the Henry's Fork and Madison Groundwater Districts.

- Is this type of project identified in the planning effort?

Yes, this is one of the projects identified within the plan to better manage our available water supply and properly mitigate injury to senior surface water right holders.

- Explain whether the proposed project implement a goal, objective, or address a need or problem identified in the existing planning effort?

One of our primary goals is to better manage our available water. Currently we do not know

how much water has been diverted until after the end of the irrigation season. Installing Telemetry on the flow meters will allow real-time monitoring and decision making.

- Explain how the proposed project has been determined as a priority in the existing planning effort as opposed to other potential projects/measures.

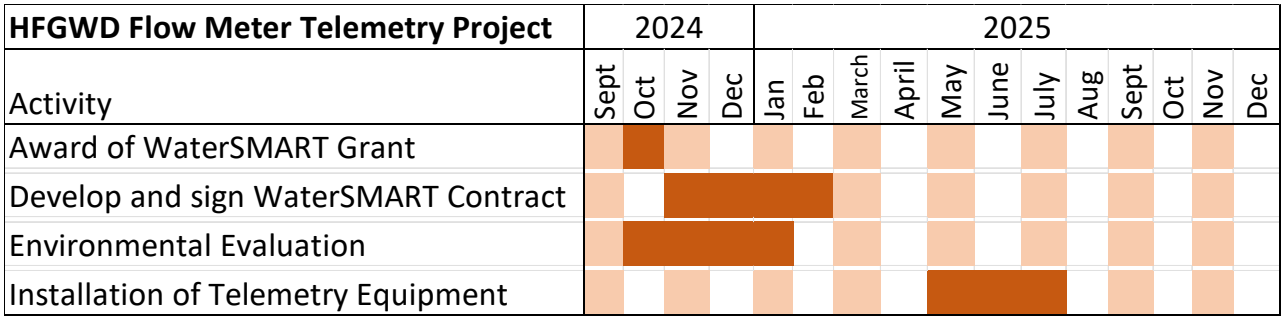
This project has been determined as a priority through countless discussions amongst our board members, other groundwater users, the SWC and even the Idaho Department of Water Resources.

E.1.1. Evaluation Criterion C. Implementation and Results (20 points)

Up to **20 points** may be awarded based upon the extent to which the applicant is capable of proceeding with the proposed project upon entering into a financial assistance agreement. Applicants that describe a detailed plan (e.g., estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates) will receive the most points under this criterion.

- Describe the implementation plan for the proposed project. Please include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates.

This project is simple from an implementation standpoint. We estimate it will take roughly 90 days to complete once we can start. A device will be installed on each flow meter that can relay the information to a website.



- Proposals with a budget and budget narrative that provide a reasonable explanation of project costs will be prioritized under this criterion.

This project is straightforward, a device to relay the information to the internet will be installed at each location. The device and installation cost is $500 per site.

Budget Narrative

Personnel

HFGWD has staff in place that will manage this project. This is a simple project and will not take excessive time for HFGWD personnel.

Fridge Benefits

See above.

Travel

None

Supplies

None

Equipment

None

Supplies

In budget table 1 below it details the supplies needed to complete the project. The installation of the device is included in the cost.

Budget Table 1. Supplies

Item	Quantity	Unit Cost	Total Cost
Flowmeter Monitor/telemetry	290	$500	**$145,000**

Contractual

None

Construction

None

Other

None

Indirect Cost

None

Budget Narrative Summary

A summary of the total cost of the project and proposed funding source is below in budget table 2.

Budget Table 2. Summary of Federal and Non-Federal Funding Sources

Funding Source	Funding	Percentage
HFGWD	$72,500.00	50%
WaterSMART	$72,500.00	50%
Totals	$145,000.00	100%

- Describe any permits and agency approvals that will be required along with the process and timeframe for obtaining such permits or approvals.

None

- Identify and describe any engineering or design work performed specifically in support of the proposed project. What level of engineering design is the project currently? If

additional design is required, describe the planned process and timeline for completing the design.

None

- Does the applicant have access to the land or water source where the project is located? Has the applicant obtained any easements that are required for the project? If the applicant does not yet have permission to access the project location, describe the process and timeframe for obtaining such permission. Sarcobatus1

We have access to each of the location's telemetry will be installed.

- Identify whether the applicant has contacted the local Reclamation office to discuss the potential environmental and cultural resource compliance requirements for the project and the associated costs. Has a line item been included in the budget for costs associated with compliance? If a contractor will need to complete some of the compliance activities, separate line items should be included in the budget for Reclamation's costs and the contractor's costs.

Yes, Reclamation staff believes this will be a simple project to review with a quick turnaround and little cost. They also stated they do not believe a consultation will be needed. Therefore, we have not included a line item for the budget.

E.1.2. Evaluation Criterion D. Nexus to Reclamation (5 Points)

Up to **5 points** may be awarded based on the extent that the proposal demonstrates a nexus between the proposed project and a Reclamation project or activity. Describe the nexus between the proposed project and a Reclamation project or activity, including:

Is the proposed project connected to a Reclamation project or activity?
If so, how? Please consider the following:

- Does the applicant have a water service, repayment, or operations and maintenance (O&M) contract with Reclamation?

No, there is no contract with Reclamation. HFGWD rents water from entities that hold reclamation contracts to mitigate groundwater use.

- If the applicant is not a Reclamation contractor, does the applicant receive Reclamation water through a Reclamation contractor or by any other contractual means?

HFGWD does not directly receive water from Reclamation but does rent water from Reclamation contractors as mitigation for groundwater use.

- Will the proposed work benefit a Reclamation Project area or activity?

With better management of groundwater resources, there could be less demand for renting water from Reclamation Contractors.

E.1.3. Evaluation Criteria E. Presidential and Department of the Interior Priorities (15 points)

Up to **15 points** may be awarded based on the extent that the project demonstrates support for the Biden-Harris Administration's priorities, including E.O. 14008: *Tackling the Climate Crisis at Home and Abroad* and E.O. 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government,* and the President's memorandum, *Tribal Consultation and Strengthening Nation-to Nation Relationships.* Points will be allocated based

on the degree to which the project supports the priorities listed, and whether the connection to the priority(ies) is well supported in the application. Only address the sub-criterion that are relevant to your project.

E.1.3.1. Sub-criterion No. E1. Climate Change

Points will be awarded based on the extent the project will reduce climate pollution; increase resilience to the impacts of climate change; protect public health; and conserve our lands, waters, oceans, and biodiversity. Address the following as relevant to your project.

Climate change has reduced the overall supply of water in the Upper Snake River. To better manage our available water supply we need to have measurement data readily available. This project will provide this data during the season when decisions are being made.

Combating the Climate Crisis: E.O. 14008: *Tackling the Climate Crisis at Home and Abroad*, focuses on increasing resilience to climate change and supporting climate- resilient development. For additional information on the impacts of climate change throughout the western United States, see: www.usbr.gov/climate/ secure/docs/2021secure/2021SECUREReport.pdf. Please describe how the project will address climate change, including the following:

- Please provide specific details and examples on how the project will address the impacts of climate change and help combat the climate crisis.

By having real-time flow measurement data available we can plan better during drought years or storm sequences.

- Does this proposed project strengthen water supply sustainability to increase resilience to climate change? Does the proposed project contribute to climate change resiliency in other ways not described above?

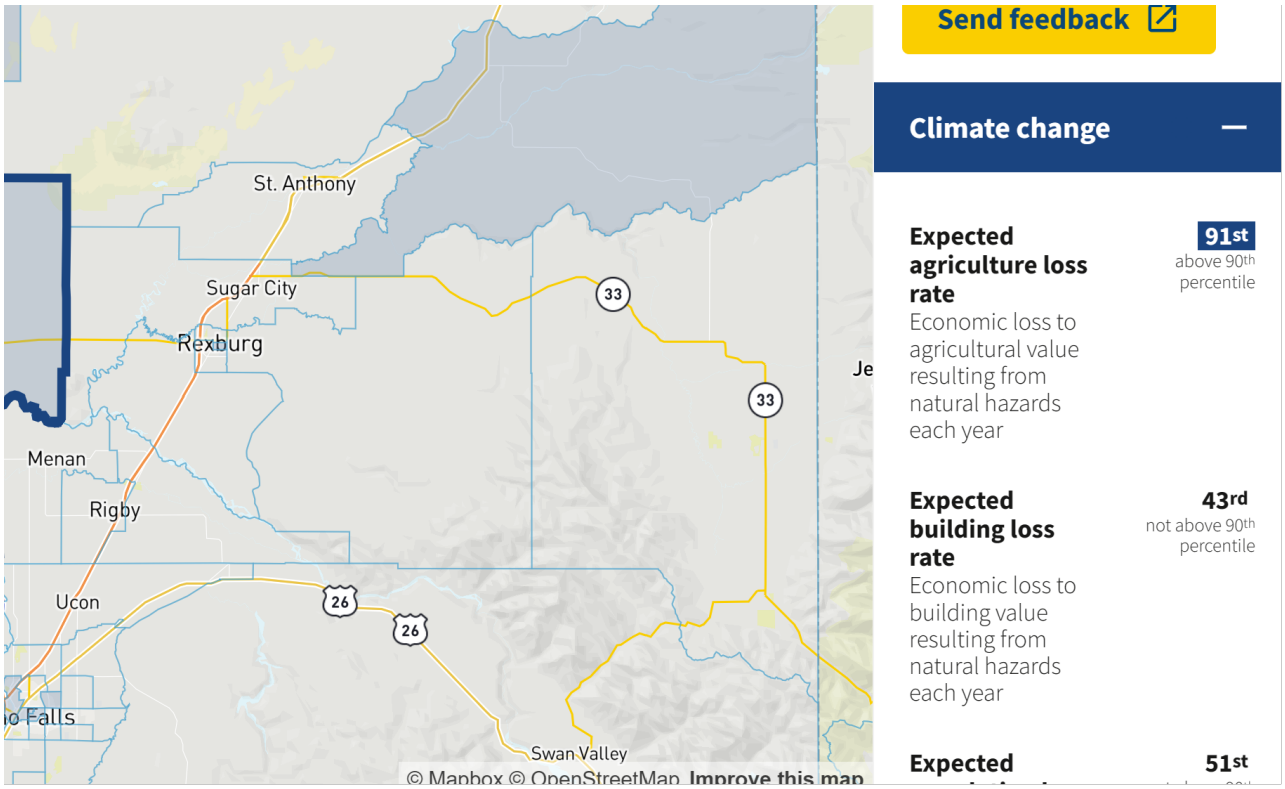
This project will provide better data. This data will allow groundwater users to make better cropping plans to combat potential issues caused by climate change.

E.1.3.2. Sub-criterion No. E2. Disadvantaged or Underserved Communities

E.O. 14008 and E.O. 13985 affirm the advancement of environmental justice and equity for all through the development and funding of programs to invest in disadvantaged or underserved communities. For the purpose of this criterion, Tribes and insular areas (Guam, American Samoa, the Northern Mariana Islands, and the Virgin Islands) are considered disadvantaged.

- Please use the White House Council on Environmental Quality's interactive Climate and Economic Justice Screening Tool, available online at Explore the map – Climate & Economic Justice Screening Tool (https://screeningtool.geoplatform.gov) to identify any disadvantaged communities that will benefit from your project.

A portion of the area this project supports is considered disadvantaged based on the screening tool. This area is above the threshold for agricultural losses due to climate change and overall income.



- If applicable, describe how the project benefits those disadvantaged or underserved communities identified using the tool. For example, does the project increase reliability of water supplies, improve water quality, provide economic growth opportunities, improve or expand public access to natural areas or recreation, or provide other benefits in a disadvantaged or underserved community?

This project will improve our ability to make good, sound management decisions. This will help us stretch our available water supplies. It will aid farmers in their decision making as they determine which crops they have available water to grow.

E.1.3.3. Sub-criterion No. E3. Tribal Benefits

Points will be awarded based on the extent to which the Project will honor the Federal government's commitments to Tribal Nations. The Department of the Interior is committed to strengthening Tribal sovereignty and the fulfillment of Federal Tribal trust responsibilities. The President's memorandum, "Tribal Consultation and Strengthening Nation-to-Nation Relationships," asserts the importance of honoring the Federal government's commitments to Tribal Nations.

- Does the proposed project directly serve and/or benefit a Tribe? Will the project improve water management for a Tribe?

No

- Does the proposed project support Tribal resilience to climate change and drought impacts or provide other Tribal benefits such as improved public health and safety by addressing water quality, new water supplies, or economic growth opportunities?

No

- Does the proposed project support Reclamation's Tribal trust responsibilities or a Reclamation activity with a Tribe?

No

Other Information

The following is a brief overview of NEPA, NHPA, and ESA. This information is only relevant to proposals that include measurement, monitoring, and field work. While these statutes are not the only environmental laws that may apply, they are the Federal laws that most frequently do apply. Compliance with all applicable environmental laws will be initiated by Reclamation concurrently, immediately following the initial recommendation to award a financial assistance agreement under this NOFO. The descriptions below are intended to provide you with information about the environmental compliance issues that may apply to your projects.

To allow Reclamation to assess the probable environmental and cultural resources impacts and costs associated with each application, all applicants should consider the following list of questions focusing on the NEPA, ESA, and NHPA requirements. Please answer the following questions to the best of your knowledge. If any question is not applicable to the project, please explain why. The application should include the answers to:

- Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.

There will be no earthwork associated with this project.

- Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?

No, we are not aware of any species or critical habitat in the project area.

- Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States"? If so, please describe and estimate any impacts the proposed project may have.

No, there is no impact to wetlands.

- When was the water delivery system constructed?

These water delivery systems were primarily constructed in the 1960's and 1970's.

- Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.

No, there will be no modifications to existing features.

- Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? *A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.*

No

Environmental and Cultural Resource Considerations

- Are there any known archeological sites in the proposed project area?

No

- Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?

No, any impact on these types of populations would be positive.

- Will the proposed project limit access to, and ceremonial use of, Indian sacred sites or result in other impacts on tribal lands?

No

- Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?

No

Henrys Fork Groundwater District
Resolution 2024-1

In the matter of the proposed WaterSMART application to USBOR for Telemetry within administrative Water District 100

Whereas, HFGWD applied for a WaterSmart Grant from the U. S. Bureau of Reclamation (BOR) in the amount of $72,500 to install telemetry equipment on existing flow measurement devices; and

Whereas, Idaho Code 42-5224, gives the board its powers and duties as board of directors, and

Whereas, the Henry's Fork Groundwater District has reviewed the WaterSmart Grant proposal and supports the grant application; and

Whereas, the Henrys Fork Groundwater District has agreed to supply the additional funding of $72,500 as the applicant in the grant proposal; and

Whereas, the Henrys Fork Groundwater District has the financial ability under Idaho Code 42-5233 to incur debt and assess for project; and

NOW, THEREFOR, BE IT RESOLVED that Henrys Fork Groundwater District authorizes application to the United States Bureau of Reclamation for a WaterSMART grant to install telemetry on measurement devices and authorizes Jeff Raybould, Chairman to enter into an agreement with the Bureau of Reclamation for the WaterSMART grant; and

Therefore, it be further resolved that the Henrys Fork Groundwater District agrees to the WaterSmart funds and will work cooperatively with the Bureau of Reclamation to meet established deadlines for entering into a cooperative agreement.

Dated this 8th day of January 2024.

Henrys Fork Groundwater District

By: Jeffery D. Raybould, Chairman

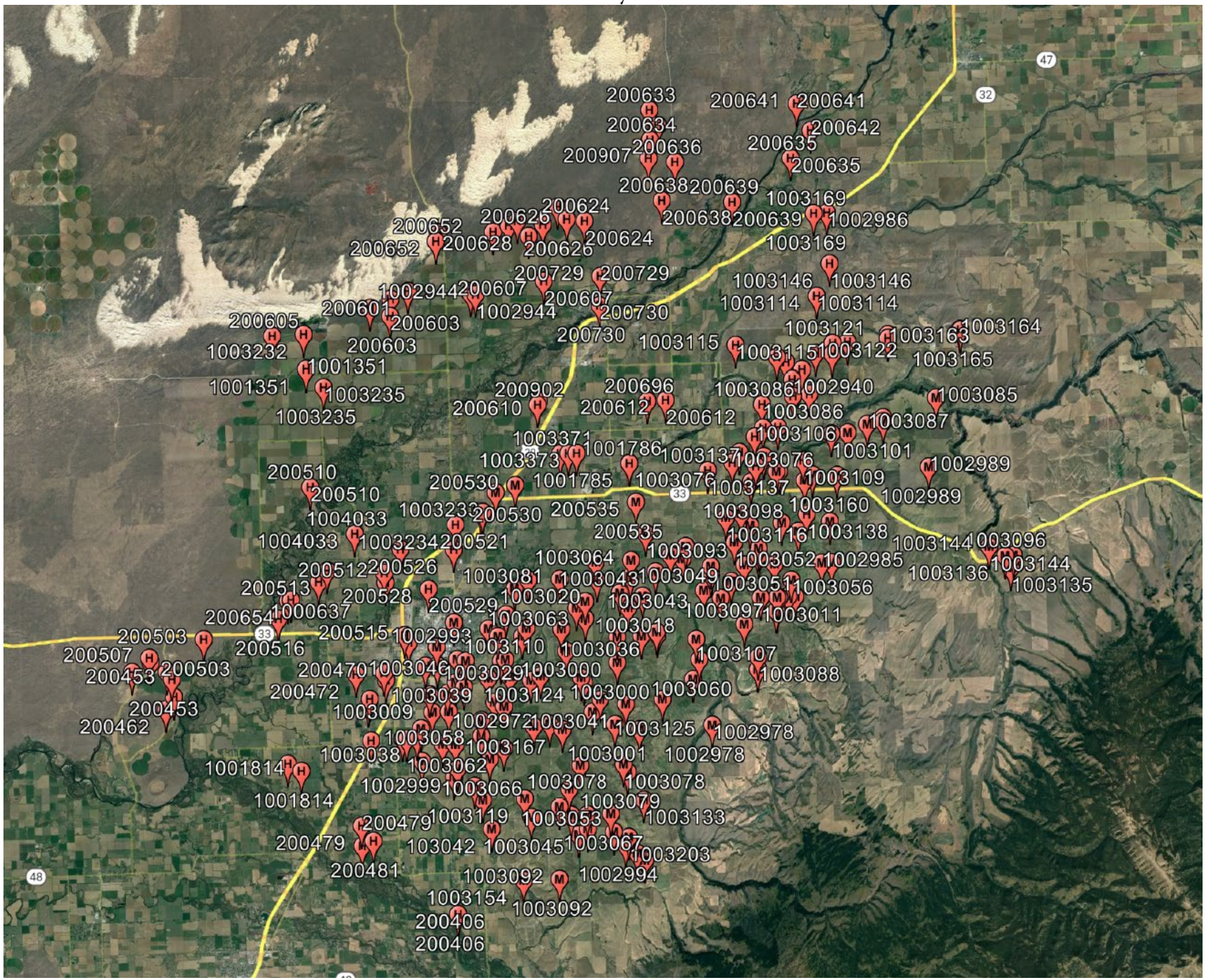
Henrys Fork Groundwater District

By: Aaron Dalling, Secretary

Attachment A

Flow Meter Telemetry Project

Flow Meter Locations by Identification Number



Attachment B

Project Boundaries