



**Upper Grande Ronde River Watershed Partnership
Place-Based Integrated Water Resources Planning
Owens/Helm Response Draft
January 15, 2025**

Dear Representatives Helm and Representative Owens:

Introduction

Thank you for your letter. The Upper Grande Ronde River Watershed (UGGRW) Partnership feels very supported by your kind words and helpful actions. The UGRRW Partnership has had a great 2024 and looks forward to continuing our momentum in 2025.

In 2024, we:

Completed

- March - Well Testing Flyer and Distributions
- April - Frequently Flooded Areas Field Trip
- June - Crop Tour Presentation for the Aquifer Storage and Recovery (ASR) Project
- July - Instream Flow Incremental Method (IFIM) Study for Grande Ronde River (Completed Oregon Watershed Enhancement Board [OWEB] Grant)
- August - Future Governance Options Memo
- November - Aboveground Storage Study (Draft Submitted to the Oregon Water Resources Department [OWRD])
- December - OWEB Strategic Action Plan (Completed OWEB Grant)

In Progress on

- American Rescue Plan Act (ARPA) Grant Work
- Hydraulic Study and Data Collection
- ASR Study (Catherine Creek and Union)

In 2025, we hope to:

- Install Lookingglass Stream Gauge
- Conclude the ASR Study
- Complete Additional Work on Built Storage Sites
- Complete Additional Work on IFIM Monthly Flow Targets
- Complete Additional Work on Hydraulic Modeling to Support a Potential Floodway Easement Project
- Improve Meeting and Outreach Scheduling
- Transition Conveners and Re-engage with the U.S. Forest Service (USFS)/Federal Partners
- Continue ARPA-funded Work

As we continue to work through our State-recognized Implementation Plan, we appreciate your offer of support through identification of a project in each of the following areas: capacity; data, monitoring, or analysis; water conservation; water supply; resilience; and outreach and education. We consulted our State-recognized Implementation Plan and Partnership and are pleased to present the following projects that we can accomplish in the next biennium (2025-2027) for your consideration.

Capacity

Capacity - Ongoing capacity needs to support the work of the collaborative, including for facilitation, project management, and agency participation.

- **Concept: Facilitation/Project Management Support** - Our Partnership success has been made possible through generous contributions from OWEB, OWRD, and others to allow for consistent meetings, notes, action items to be followed up on, and steady progress on our larger goals. We have made great strides in working together as a group and with external partners as well.
 - Reference to planning document(s) where the need or recommendation for the project(s) exists.
 - Upper Grande Ronde River Watershed Partnership. 2022. Place-Based Integrated Water Resources Plan. Union County, Oregon, USA.
 - Representative Helm and Representative Owens Water Package Outline, Theme: Informed Water Management, Topic: Place-Based Planning Fund and Implementation.
 - The expected benefits or outcomes of the project(s), including how it will provide benefits for multiple users or uses (instream and out-of-stream). Facilitation and project management support have been integral components for the UGRRW Partnership to complete successful projects. In working through our State-recognized Implementation Plan and spreadsheet, there are many small tasks needed to gain buy-in, develop the scope, and fund projects to benefit all users and uses.
 - The anticipated cost of the project(s). **\$40,000**. This would cover facilitation/project management costs for 2026-2027 to maintain current levels of support. This funding would cover approximately one year of current levels of support for the UGRRW Partnership. This includes approximately two meetings per month (either individual meetings, working group meetings, steering committee meetings, field trips, or stakeholder meetings). Each meeting is anticipated to take approximately five hours of facilitation support, including meeting preparation, facilitation, and follow-up on action items. This would also include ten hours of project management support (two to three hours per week), with tasks such as budget and contract management, subconsultant support, grant reporting/writing, and preliminary work to initiate and fund studies and projects.
 - The entity or group of entities that will oversee implementation of the project(s). Union County (Convener), Steering Committee, and the UGRRW Partnership.
 - The level of support for the project(s). High. There is general consensus among the UGRRW Partnership that our work is beneficial and should continue. This will allow for a baseline level of support to continue.
 - Any funding you are pursuing or expect to pursue for the project. Facilitation through 2025 is funded through our current ARPA grant. Previously, facilitation has been funded through OWRD and OWEB technical assistance grants. This funding request would cover facilitation from 2026-2027.

Data, Monitoring, or Analysis

Data, monitoring, or analysis - A project that will advance critical water data, monitoring, or analysis needs.

- **Concept: Phase II IFIM Monthly Flow Targets for Grande Ronde** - The State-recognized Implementation Plan identified a significant priority of the UGRRW Partnership to fill data gaps that hinder decision making and water management. A long-discussed and identified issue is the quantity and timing of water required for instream needs. Oregon Department of Fish and Wildlife biologists prioritized developing flow targets for important sections of Catherine Creek and the Upper Grande Ronde River. This project would cover two goals related to IFIM flow targets: 1) interpretive sign/flyer to share IFIM data from Grande Ronde River for general/non-technical audiences, and 2) development of monthly flow targets from the biologic curves that were previously developed through OWEB funding for critical reaches of the Grande Ronde River. These targets would be useful

for future (and ongoing) restoration work and would be validated through additional technical study improvements.

In summary, the project would include:

- Developing and proposing (starting the instream flow application process) monthly flow targets for each biologically significant reach (or hydrologic reach) within the Upper Grande Ronde River study area.
- General audience interpretive flyer or website on Upper Grande Ronde River IFIM
- Technical study improvements:
 - Integration of temperature into the IFIM results
 - Validation of the Upper Grande Ronde River IFIM results with observed spawning and rearing data
- [Reference to planning document\(s\) where the need or recommendation for the project\(s\) exists.](#)
 - Upper Grande Ronde River Watershed Partnership. 2022. Place-Based Integrated Water Resources Plan. Union County, Oregon, USA. (Quantifying instream demand to close data gaps identified in our State-recognized Implementation Plan).
 - Representative Helm and Representative Owens Water Package Outline, Theme: Informed Water Management, Topic: Water Data Gathering.
- [The expected benefits or outcomes of the project\(s\), including how it will provide benefits for multiple uses or uses \(instream and out-of-stream\).](#) Benefits of this work would be that the completed IFIM study would be immediately utilized to prepare monthly flow targets that could be used to preserve flows and also assess effectiveness and need for restoration projects. In addition, creating general audience interpretive material would allow for the information to reach a larger audience and potentially encourage new users to participate in the Partnership.
- [The anticipated cost of the project\(s\).](#) **\$35,000.** This would cover two goals related to IFIM flow targets: 1) interpretive sign/flyer to share IFIM data from Grande Ronde River for general/non-technical audiences (it is anticipated that this work would require scientific support as well as a graphic specialist; the cost for this work would be \$5,000), and 2) development of monthly flow targets from the biologic curves developed. These targets would be useful for future (and ongoing) restoration work. The cost for this work would be \$30,000, which would include five stakeholder meetings, preliminary and final monthly targets, and a memo validating the IFIM study, with temperature and observed spawning and rearing data integrated through additional modeling work.
- [The entity or group of entities that will oversee implementation of the project\(s\).](#) Union County (Convener), Steering Committee, and the UGRRW Partnership.
- [The level of support for the project\(s\).](#) High. There is general consensus among the UGRRW Partnership that instream flow targets and filling data gaps are important.
- [Any funding you are pursuing or expect to pursue for the project.](#) OWEB technical assistance grant funded the first portion of this IFIM study on the Grande Ronde River. The results of this study represent the optimum conditions for target species and life stages (flow targets). The next step is integrating the results with the larger context of water resources planning in the basin. This funding request would allow this next step to occur. Additionally, there have been questions expressed related to translating technical information generated from the IFIM study into concepts suitable for broader audiences to gain support for future actions.

Water Conservation

Water conservation - A project that would advance critical water conservation efforts to benefit both instream and out-of-stream needs.

- **Concept: Voluntary Floodway Easement Program** - The State-recognized Implementation Plan identified the significant potential for water conservation through water transactions and voluntary practices. However, as described elsewhere, data gaps exist that have prevented a comprehensive understanding of the most optimal

location for something like a levee setback or floodway easement. Currently, the Bureau of Reclamation (Reclamation) is completing a robust hydraulic modeling effort of the valley and including various scenarios for improvements such as levee setbacks, bridge improvements, and other structural changes. This concept would include utilizing the current Reclamation model runs, and requesting new ones to determine where floodway easements could be beneficial. The work would also include an analysis of past Natural Resources Conservation Service (NRCS) and other conservation programs, such as regional conservation partnership programs, to see what model might fit the UGRRW best. The initial work would include a grassroots approach of talking to a group of landowners (initially the concept will be presented the annual planning meeting that NRCS holds), and then Eastern Oregon University professors and students would be engaged to prepare and implement a survey to see what programs might be applicable and interesting to landowners. A memo would be prepared to summarize funding/program options and if there was enough interest (i.e., several large landowners or many smaller ones in one process) to proceed to the next steps. These findings would be integrated into a natural hazards mitigation plan.

- Reference to planning document(s) where the need or recommendation for the project(s) exists.
 - Upper Grande Ronde River Watershed Partnership. 2022. Place-Based Integrated Water Resources Plan. Union County, Oregon, USA. (Natural hazards).
 - UGRRW's OWEB Strategic Action Plan 2024.
- The expected benefits or outcomes of the project(s), including how it will provide benefits for multiple uses or uses (instream and out-of-stream). Voluntary floodway easements would provide benefits for flood reduction, farm health, river health, and aquatic life.
- The anticipated cost of the project(s). **\$50,000**. This would cover outreach and a memo describing funding/program options for an easement program.
- The entity or group of entities that will oversee implementation of the project(s). Union County (Convener), Steering Committee, and the UGRRW Partnership.
- The level of support for the project(s). High. There is general consensus among the UGRRW Partnership that voluntary work is critical to supporting floodplain resilience, reducing water use, and reducing flooding.
- Any funding you are pursuing or expect to pursue for the project. Currently, funding has been obtained for the Reclamation to model a variety of hydraulic scenarios to test the benefits of various activities in the floodplain including levee setbacks.

Water Supply

Water supply - A project that has the potential to increase water supply.

- **Concept: Phase II Aboveground Storage Study** - The State-recognized Implementation Plan identified water deficits during the late summer and fall in the UGRRW. A high priority strategy identified by the UGRRW Partnership was the evaluation of aboveground storage (both built and natural opportunities). The initial aboveground storage study funded through OWRD was completed in 2024. This study created an interactive webmapper of more than 200 concepts for exploration as well as generated more targeted lists of top storage concepts that underwent more detailed analysis. This analysis included conceptual renderings, conceptual costs, and a desktop analysis of ecological flows. Ultimately, the UGRRW Partnership may not have the support for the smaller reservoirs higher up in the watershed and has expressed interest in a fresh look at sites in the lower valley that were eliminated early. These lower valley sites could potentially provide benefits for storing water for use for irrigation in place of drawing water from streams during low flow periods. This study would not evaluate storage for flood control, although that is another area of interest.
 - Reference to planning document(s) where the need or recommendation for the project(s) exists.
 - Upper Grande Ronde River Watershed Partnership. 2022. Place-Based Integrated Water Resources Plan. Union County, Oregon, USA. (Aboveground storage strategy).

- The expected benefits or outcomes of the project(s), including how it will provide benefits for multiple uses or uses (instream and out-of-stream). Increased ability to manage water use in the basin. Storage has long been a method to assist with using water in different periods of time than when it is typically available.
- The anticipated cost of the project(s). **\$100,000**. This would cover two tasks. First, a series of three meetings in quick succession would allow for the UGRRW Partnership to focus on the results of the analysis of the top four sites from the original analysis and determine whether any of them would warrant additional review. This work would be summarized in a memo or cover letter to be attached to the final storage study and posted on the Union County website. The cost would be \$10,000 for this task. The second task would include a review of approximately 50 sites/concepts that were eliminated early in the study when using different objectives/criteria. This work will use different objectives and criteria to re-evaluate sites located in the lower valley that may have greater potential for storage of water during high winter flows for use in place of instream water rights during low flow months in late summer and fall. This work would include monthly meetings over a one-year period to maintain an active working group, dedicated consulting engineering support, and would be summarized in a report with next step recommendations. This work would cost \$90,000, or approximately 40 percent of the cost of the original study, because this Phase II work could utilize existing information from the previous study to expedite review and decision making.
- The entity or group of entities that will oversee implementation of the project(s). Union County (Convener), Steering Committee, and the UGRRW Partnership.
- The level of support for the project(s). Medium. Partners are concerned with improving flows and water quantity and quality but have not found a storage solution that would meet multiple use goals or that is widely considered technically feasible.
- Any funding you are pursuing or expect to pursue for the project. The first phase of the project was funded through OWRD; additional funding will be pursued through Reclamation's WaterSMART once a concept is developed.

Resilience

Resilience - A project that will increase your resilience in the face of natural hazards or other emergency conditions.

- **Concept: Groundwater Planning and Pilot Projects (La Grande and Starkey Experimental Forest** - The UGRRW Partnership has a goal to increase understanding of groundwater supply in the basin. This has been identified as a critical data gap for resilience to changing conditions related to flooding, drought, and water needs. It has been identified that the basin lacks sufficient coverage for a well network to adequately measure increases and decreases in different aquifers. Most valley wells are located in the alluvium and are well-connected to stream flow. Deeper wells are needed to understand how the regional groundwater table impacts stream flow and whether restoration has any effects, beneficial or otherwise, on regional aquifers. This concept would seek to better characterize the groundwater aquifers in the basin through 1) developing a groundwater study plan to be co-produced by a USFS hydrologist, OWRD, and the UGRRW Partnership, and 2) funding the construction of a deep well that has already undergone National Environmental Policy Act clearance adjacent to the Starkey Experimental Forest.
 - Reference to planning document(s) where the need or recommendation for the project(s) exists.
 - Upper Grande Ronde River Watershed Partnership. 2022. Place-Based Integrated Water Resources Plan. Union County, Oregon, USA. (Data gaps).
 - Representative Helm and Representative Owens Water Package Outline, Theme: Informed Water Management, Topic: Groundwater Sustainability Scorecard; Topic: Water Data Gathering.
 - 2023 Starkey and Upper Grande Ronde Allotment Management Plan Range Small Projects, USFS.
 - The expected benefits or outcomes of the project(s), including how it will provide benefits for multiple uses or uses (instream and out-of-stream). The study plan would increase understanding of

groundwater sustainability in the basin, allow for better planning related to use and conservation, and clarify the “next steps” for furthering groundwater research. The construction of the well on the Starkey Experimental Forest would allow for expansion of the groundwater well network in a unique way. There is currently one well on the Starkey experimental forest (approximately 600 feet in depth), and it would be beneficial to construct this second well for comparison and trend analysis. Furthermore, approximately 30 wells are planned for installation in the alluvial aquifer in the Starkey Experimental Forest for research, monitoring, and evaluation surrounding instream restoration. This deep well will help establish linkages of deep groundwater to numerous restoration efforts planned and in progress throughout the basin.

- **The anticipated cost of the project(s).** **\$200,000.** This would cover approximately \$20,000 for groundwater study plan preparation. This would include consultant time to obtain relevant data, look for implementable next steps and coordinate meetings. The deliverable would be a memo or short report documenting next steps and fundable actions. The remainder of the funding (\$180,000) would be used to fund the construction of the groundwater well adjacent to Starkey Experimental Forest. While trend analysis would not be expected in this biennium, it would be expected that updates could occur in the next biennium.
- **The entity or group of entities that will oversee implementation of the project(s).** Union County (Convener), Steering Committee, and the UGRRW Partnership will provide support for these efforts and lead the general groundwater study planning work. The well installation project would be managed by USFS Wallowa Whitman National Forest in collaboration with Starkey Experimental Forest research scientists (with support from OWRD and Grande Ronde Model Watershed).
- **The level of support for the project(s).** High. There is general consensus among the UGRRW Partnership that groundwater aquifers are not understood in the basin and more data are needed to support sustainable management of this resource. This question is also of high importance to on-going efforts around climate adaptation through aquatic and uplands restoration of tribal first foods.
- **Any funding you are pursuing or expect to pursue for the project.** The groundwater study (preliminary planning/set up) portion of this work is funded through ARPA; this additional funding would provide the means necessary for pilot project well development.

Outreach and Education

Outreach and education - A project that will increase public awareness or public participation in water management efforts.

- **Concept: Local Water Data Dashboard and Training** - The UGRRW Partnership has been in coordination with the Union Soil and Water Conservation District (SWCD) regarding Union SWCD’s water management portal <https://www.unionswcd.org/water-quality-and-quantity> . This concept would seek to provide funding to advertise for and provide space for two trainings on use of this system. The training would be aimed at local water practitioners utilizing data from a multitude of sources and seeking to compare and compile data (surface water, precipitation, evapotranspiration, etc.) in one location. It would also support the development of a template for other localities to utilize.

Summary

Water cycling (where water comes from, where it goes, how much, and when) is one of the most significant contexts for natural resource management at all scales, with impacts to agricultural profitability, wildlife and fish, community economics and cohesion, and climate. In the last decade, significant advances in the technology of water measurement, including remote sensing of evapotranspiration, have opened new opportunities for synthesizing and visualizing water data at multiple scales across time. The Union SWCD would like to extend and connect their existing water data portal at <https://www.unionswcd.org/water-quality-and-quantity> to local producers, conservation partners, researchers, and

citizens as a resource and as an open example or template for other conservation districts or groups concerned with water cycle function.

Problem

Condition or trend data in natural resources are fragmented among many agencies, programs, and specialties. Reasons for lack of trend data include multiple monitoring programs with different goals, though they often provide partial insight to larger trends. Researchers, experts, agricultural producers, and the public often understand carbon cycling, water cycling, or the work of sunlight energy differently. Sometimes there is a disconnect between the economics of agriculture and these larger issues.

Problem-solving and some programmatic approaches lead to a simple approach of managing threats. A larger vision or context for natural resource management sometimes is lost or even subverted (e.g., weed wars versus rangeland health and productivity, or threats from fire and flood versus soil health). The questions that people and organizations ask to develop solutions sometimes guarantee dysfunctional answers.

With these contexts, it is often difficult for the public, land managers, natural resource agencies, and districts to understand, manage, or detect trends in whole systems. These systems involve people, land, money, and the larger biogeochemical cycles such as sunlight-driven carbon and water cycling that form the context of soil health and natural resource management. It is also difficult to evaluate projects or programs except by piecemeal criteria.

Advances in technology provide new opportunities:

- Open-source, web-friendly, text-based GIS systems that expand the user base for local, georeferenced observations and data ([soilhealth.app](#) is an example, which is a web app for collaborative, local groups).
- Remote sensing, and Google Earth Engine for processing and visualizing the huge and growing catalog of remote sensing data in humanly intelligent ways.
- On land, it is now easier to measure water than carbon at a variety of spatial and temporal scales. (Farmers and ranchers are interested and more familiar with water and soil management but not so much with carbon or sequestration.) In most irrigated settings, somewhere between 40 and 100 percent of all water applied to a field leaves as evapotranspiration, and the new OpenET consortium now provides 30-meter data on evapotranspiration from six evapotranspiration models along with a weighted average, from 2009 on. The Farm and Ranch Management Support (FARMS) system is a new interface from OpenET designed to transform farm and ranch management through customizable report generation for fields and pastures.
- Cloud-based computing and data visualization platforms, such as Observable that allow 1) collaboration and transparency in many cases without costs, subscription fees, or loss of access to or control of data; and 2) combination of interactive and sometimes real-time data feeds from a variety of sources, enabling data synthesis across space, time, and program or project boundaries.

Different tools are intended and useful at different spatial scales. For example, OpenET is excellent for water insights on farm and ranch scales (tens and thousands of acres), along with providing larger contexts with maps. Google Earth Engine is more applicable at larger spatial scales such as watershed and subbasin (10,000 to 1 million acres).

- [Reference to planning document\(s\) where the need or recommendation for the project\(s\) exists.](#)
 - Upper Grande Ronde River Watershed Partnership. 2022. Place-Based Integrated Water Resources Plan. Union County, Oregon, USA. (Outreach and education goal and data gap integration goal).

- Representative Helm and Representative Owens Water Package Outline, Theme: Informed Water Management, Topic: Water Data Gathering.
- The expected benefits or outcomes of the project(s), including how it will provide benefits for multiple uses or uses (instream and out-of-stream). Increasing understanding of trend data related to flows in the UGRRW would provide enhanced ability for decision makers and scientists to manage water and improve conditions for all users.
- The anticipated cost of the project(s). **\$34,000**. This would cover renting space, advertising the training, funding the trainer, and developing the water data template. See the detailed budget below.

Water Data Dashboard Budget

Task	Unit Cost	Quantity	Subtotal
Presentation and discussion webinars for landowners and managers demonstrating the free FARMS tool from OpenET. This is for land managers who may be interested in this tool, with built-in report generation for scheduling or forecasting irrigation demand on a daily basis, either as a supplement to soil moisture sensors or as a substitute for them, enabling them to understand how much water their plants are consuming to optimize irrigation, sustain or improve yields, reduce operating costs, and collaborate on locally driven solutions to water challenges. Union SWCD personnel would complete this task.	\$2,000	4	\$8,000
Outreach to landowners and managers: One-on-one assistance with FARMS tool, on-site water infiltration tests and demonstrations, soil health discussions, pointers to current or historical water information. Union SWCD personnel would complete this task.	\$50	200	\$10,000
Data dashboard development: Outreach to researchers, agencies, and consultants for access to data sources, along with ideas and needs for presentation, visualization, and synthesis for geographic areas, projects, and some programs. Coding the dashboard, making changes, and refreshing data feeds. Union SWCD personnel would complete this task.	\$50	300	\$15,000
Meeting materials and supplies	\$1,000	1	\$1,000
TOTAL PROJECT			\$34,000

- The entity or group of entities that will oversee implementation of the project(s). The Union SWCD will lead, and the Union County (Convener), Steering Committee, and UGRRW Partnership will provide support.
- The level of support for the project(s). High. There is general consensus among the UGRRW Partnership that information sharing and providing information from many sources in one location is important to better understanding stream flows and water management.
- Any funding you are pursuing or expect to pursue for the project. The Union SWCD is supporting this work at its current level. This injection of funding would allow the UGRRW Partnership to spread the word regarding this existing resource and also fund the documentation process for a local water data template.

Thank you for your time and consideration. We appreciate this opportunity to advance projects that are most important to the UGRRW Partnership. Please let us know if you have any questions.

With gratitude,

UGRRW Partnership