To: Idaho Department of Water Resources,

My name is Greg Loomis. I have resided in Blaine County for over 40 years and have made a career of working in and around Silver Creek. I too, am a water user. As a fly-fishing guide of 40 years in our Valley, I have a deep passion and understanding of Silver Creek. For over 10 years I have been collecting extensive data on Silver Creek for the Silver Creek Annual Reports and I also created and administer the SaveSilverCreek.org web presence as a data repository for Silver Creek. I have also been a close observer of the Groundwater Model creation, Wood River Water Collaborative member and listen to most all of the water related meetings including the Big Wood River GWMA Advisory Committee meetings.

Idaho, Blaine County, the community, landowners and water users of this area are at a crossroads in water use. This year has proven to be a reality check on growth, drought and water use for this area. We rely heavily on agriculture and tourism, without both we all suffer and both, rely on water. This year brought on the need for cooperative, data driven management on our groundwater, I commend Director Spackman for addressing the issue that needed to be addressed concerning the connection of surface and groundwater in our Valley. This year will provide much needed data to confirm one way or the other, what many of us have anecdotally known for years. With the Groundwater-Flow Model created for our area being put to the test and data collection in full gear, we will learn that we need data driven cooperative water management moving forward in this drought riddled, over allocated and increasingly growing Valley. By expanding reliable data collection, adding new flow measuring stations downstream of the current USGS gauge, well monitoring and using the Ground Water Flow Model for example, can we effectively move forward with the appreciation and awareness of fluctuating climate changes and limited snowpack's.

I see in our future a need to hash out our differences and come to the realization that we need to alleviate the stress from all water user parties as much as possible through better water management. One tool for example, is using surface water to recharge Silver Creek that can deliver water to the lower watershed. I feel that through very specific targeted recharge using the tools we now have, combined with close observations from those who have seen how it can work, we could achieve this. We should now see that ground water well curtailment will work if we target certain wells that prove to impact Silver Creek directly. Widespread curtailment may work in extreme drought; however, we may see that we can be very target specific.

As a community we can (and should) make our water expensive in the upper Valley, where we can use a percentage of higher water costs combined with a small increase in local option taxes to the visitor to bank the monies to be spread out to the growers in drought years who are asked to not grow a crop and use their water. The monies collected can fill gaps in crop insurance or in manners deemed appropriate for their losses. Higher water costs in the upper Valley will also incentivize water conservation and increase awareness.

These are some ideas that I feel might be worthy of consideration. We need immediate action and solutions that we can agree on in order to mitigate losses, increase awareness and manage a stable, agreed upon, flow regime in Silver Creek and the Big Wood that will bring long term stability to our most valuable resource, water.

Thank you for your time,

Greg Loomis

(208) 720-4525

gloomis@flywaters.com

Big Wood Basin Groundwater Management Plan – Draft Outline of Elements (08.01.2021; LSchoen)

I. Objective:

A. It is the primary objective of this GWMP to improve, restore to health and conserve the Wood River basin aquifer, its mainstem rivers and their tributaries for the benefit of all citizens, water users and the environment of the basin.

II. Predicates:

- A. This Groundwater Management Plan (GWMP) is being developed within an established Groundwater Management Area (GWMA).
- B. Groundwater and surface water are managed on a time priority basis in accordance with the Idaho Constitution and statutes.
- C. Ground water and surface water are hydraulically directly connected in the Big Wood and Silver Creek sub-basins.
- D. IDWR & USGS technical Staff shall continue to refine the Groundwater Flow Model (GFM; "the Model") over time based on new information and technical improvements, as they become available.
- E. The GWMP shall have a term limit and shall be reviewed, evaluated, modified, revised or possibly terminated or not renewed subject to terms and conditions of agreement.

III. Measurement and Monitoring

- A. Identify and develop further (if needed) an optimized network of surface stream gauge sites and groundwater measurement stations, in addition to Snowtel sites
 - 1) to enable monitoring and enforcement
- a. monitoring in order to assess water levels against agreed performance benchmarks
 - b. monitoring in order to continue building databases
- 2) to enable ongoing study of correlations between surface and groundwater flows in respective water bodies.
 - 3) to enable predictive modeling of annual water availability
- 4) consider using the framework developed in Existing Water Resource Data Collection & Evaluation, Wood River Valley, by Ecosystem Sciences for Wood River Water Collaborative (under BuRec grant)

IV. Performance Benchmarks

A. Groundwater elevations

- 1. an acceptable range with a minimum level as measured at agreed monitoring stations shall be established
- a. groundwater elevations falling below the agreed minimum shall trigger further curtailment actions
 - 2. water levels shall not be managed solely to the minimum values

B. Surface minimum flows

- 1. to the extent that mitigation is permitted under this plan and any agreement is reached to allow for groundwater pumping outside of strict time priority management protocols, acceptable minimum flow rates as measured at agreed gauging stations shall be established
- a. surface water flow rates falling below the agreed minimum shall trigger further curtailment actions

V. Management

- A. Curtailment by time priority
- B. Other curtailment protocols
 - 1. managed rotations
 - 2. surface water and groundwater on different timelines
- C. Set-asides
- 1. rotations on inter- and intra- bases for particular properties or farm operations
 - 2. seasonal and longer-term retirement of acres
 - a. water and land conservation agreements
 - i. CRP, NRCS, other governmental
 - ii. TNCI, WRLT, other NGO
 - iii. other
 - 4. elimination of less efficient acres, eg. land under end-guns
 - D. Water use efficiency programs all parties
 - 1. Identify and pursue opportunities to improve water use efficiencies
 - a. in distribution, delivery, impoundment
 - 2. Identify and pursue loan and grant funding opportunities
 - a. cooperate and collaborate with IWRB, NRCS, others
 - E. Aquifer recharge
 - 1. retired acres; excess runoff; other opportunities?
 - 2. where?; new locations?
 - 3. agreements?
 - 4. the impact of ordinary seepage is recognized
 - F. Supplementation Snake River water
 - 1. Agreements & enforceable guarantees
 - 2. Funding
 - G. Recapture and redistribution of return flows
 - 1. subject to conditions and re-evaluation
- H. Groundwater pumping as a means of mitigation for groundwater diversions is prohibited

VI. Enforcement

- A. Funding for increased staff and related accommodations
- B. New authorizations, if needed
- C. Telemetry
- D. Attach conditionality to all wells operating with supplemental water rights
- E. Continue moratorium on new groundwater development
- VII. Community outreach, education and programming related to water scarcity and conservation (see also, IV.D., above) among all water users, including within cities

Addendum

- A. Other issues to be resolved
- 1. Shall the Director declare all or at least some of Basin 37 to be an Area of Common Groundwater Supply (ACGS)? Such a declaration does rest within his authority.
- 2. Shall conjunctive management per se be applied to all or at least some of the waters of Basin 37?

Wood River Land Trust 119 E. Bullion Street Hailey, ID 83333

The Nature Conservancy 116 N. 1st Avenue Hailey, ID 83333

Trout Unlimited 910 W. Main Street #342 Boise, ID 83702

Silver Creek Alliance P.O. Box 663 Picabo, ID 83348

August 19, 2021

RE: Recommendations on Development of Big Wood Basin Groundwater Management Plan

To Whom It May Concern, including the Idaho Department of Water Resources and Big Wood Ground Water Management Area Advisory Committee:

The Wood River Water Collaborative ("WRWC") is a grassroots effort which aims to address the challenges of water management in the Wood River basin for the multiple benefits of its economies, communities, and environment. Since 2015, the Wood River Land Trust, The Nature Conservancy, Trout Unlimited, and the Silver Creek Alliance have coordinated the WRWC to provide a forum for information exchange, thoughtful dialog, and the development of resources that help create and identify long-term, practical, place-based water management strategies. Together, the Wood River Land Trust, The Nature Conservancy, Trout Unlimited, and the Silver Creek Alliance offer the following recommendations to the Idaho Department of Water Resources and Big Wood Ground Water Management Area Advisory Committee, requesting that the ideas and concepts outlined below be integrated into the Big Wood Basin Groundwater Management Plan ("Management Plan"). These recommendations seek to balance the needs of water users, while also ensuring that the Management Plan encourages the health and sustainability of the watershed's valuable ecosystems, now and into the future.

Recommendations:

- 1. Objectives: We support the objectives set forth in the Final 2021 Term Sheet and recommend that they be incorporated into the Management Plan and, further, that the following objectives be added:
 - Ensure sufficient instream flows in the Big Wood River, Little Wood River, and Silver Creek to sustain recreational and agricultural based economies, communities, thriving fisheries, and the overall health of the Wood River watershed's ecosystems.
 - Manage the use of groundwater and surface water efficiently and effectively to ensure a sustainable aquifer over time.
 - Minimize the economic and environmental impacts from drought conditions by identifying and implementing appropriate drought planning strategies.
- 2. Annual Irrigation Season Water Use Planning & Predictive Modeling: The WRWC received funding through the Bureau of Reclamation for the creation of a surface flow prediction model tool, as well as an analysis of groundwater and surface water interactions in the Bellevue Triangle and Silver Creek. We recommend that both tools be adopted and used in the Management Plan to predict irrigation season water availability and adjust groundwater diversions based on target flows to Silver Creek and its tributaries.
- 3. Target Flows: We support the delivery of natural flow water as measured at Station 10 and support the creation of additional target flows within the Big Wood, Little Wood, and Silver Creek system that would meet both agricultural water needs and environmental flows. Target flow locations and flow volumes were previously discussed, in concept, among members of the WRWC and the District 37 Watermaster; more information can be provided upon request. In establishing suitable flow targets we recommend referencing the existing minimum streamflow rights established in the basin, and specifically recommend utilizing the diversion rates of the Silver Creek minimum stream flow water rights (water right nos. 37-7727, 37-7728, and 37-7849) as suitable flow targets for Silver Creek.
- 4. Implementation of Specific Water Management Practices: We recommend that the Management Plan establish a protocol based upon hydrologic modeling and predictive modeling efforts that seek to anticipate annual water supply, use, and availability that triggers the implementation of staged water management practices used to maintain the health of the aquifer, ensure sufficient stream flows, and mitigate for injury to senior surface water rights that rely upon natural flow on the Little Wood River. For example, there may be three protocols a wet, average, and dry year protocol each triggering the implementation of specific water management practices, some to greater degrees than others. We recommend that those water management practices include:
 - a. Consumptive Use Groundwater Volume Reductions: The groundwater districts may be responsible for reducing their proportionate share of groundwater diversions (however each deems appropriate, including the fallowing of acres) or securing an equivalent quantity of surface water that can be delivered, in time and quantity, through the entire

- length of Silver Creek to mitigate for depletions to the system resulting from continued groundwater withdrawal.
- b. Aquifer Recharge: Strategic aquifer recharge activities shall be implemented, utilizing available high flow water and in-priority surface water rights.
- c. Storage Water delivery: The groundwater districts may provide storage water, secured through private leases and delivered from American Falls Reservoir, for use to the extent needed to meet irrigation requirements of senior surface water users who can make use of such water.
- d. Groundwater Diversions to Support Instream Flows: During times of extreme drought, we support the use of temporary change applications, as was done in 2021, for the purpose of delivering groundwater from low response value wells directly into Silver Creek and its tributaries to satisfy senior surface water rights, as well as help alleviate high water temperatures and diminished water quality harmful to trout and other aquatic species.
- 5. Measurement and Monitoring: We recommend establishing mandatory measurement requirements of both groundwater and surface water sources. It may be appropriate to explore the use of telemetry, or other technologies, to streamline monitoring and reporting obligations associated with the Management Plan in order to reduce the burden on the Basin 37 Water Master, as well as foster partnership through increased transparency and accountability. The WRWC will coordinate with water users to identify monitoring and technology needs and continue to research funding opportunities.
- 6. Ground Water Levels: We recommend establishing a set of criteria to ensure that the efforts implemented through the Management Plan are stabilizing groundwater levels. This may be done by analyzing groundwater levels in mutually agreed upon wells, utilizing mutually agreed upon calculation techniques, and establishing suitable criteria to determine if the actions set forth in the Management Plan are, in fact, effective at stabilize groundwater levels.
- 7. Water Delivery Efficiency Projects: We support prioritizing and implementing projects that reduce the dependency on groundwater and improve surface water reliability. Irrigation efficiency projects are something that can, and should, be pursued throughout the basin. The WRWC will research funding opportunities for the prioritization and implementation of efficiency projects. Care should be taken to ensure that efficiency projects do not diminish incidental recharge resulting from ditch loss, thereby further exacerbating water supply shortages, and in no event should the implementation of efficiency projects result in the breaking out of new ground. It is anticipated that irrigation efficiency resulting from an upgrade or repair of irrigation delivery infrastructure shall provide for the continued delivery of the amount of water historically consumed, while the amount of water formerly diverted that is no longer required to deliver historically consumed water shall remain in the source of supply (i.e. river or stream).
- 8. Demand Reduction: It is recommended that on-farm water reduction measures be implemented, including irrigation equipment improvements (LESA systems, end-gun removal, pivot monitoring, and management software), crop transitions, soil health practices, and fallowing or retirement of marginal lands. Again, demand reduction strategies should be

- implemented throughout the entire basin. The WRWC will research funding opportunities for the prioritization and implementation of demand reduction projects.
- 9. Establish a Water Exchange: We recommend establishing an adaptive water market, local water bank, or "water exchange." The exchange would facilitate the development, sale, and long-term lease of water rights for the purpose of stabilizing and enhancing aquifer levels (through the retirement of groundwater rights, strategic aquifer recharge activities, and implementation of groundwater to surface water conversion projects), enhancing stream flows (by securing natural flow water rights used to satisfy target flows or fill existing minimum stream flow rights). Together these strategies will improve water availability throughout the basin, benefiting all water users.

Thank you for considering our recommendations. We look forward to further discussion on these topics in the coming weeks.

Sincerely,

Wood River Land Trust, The Nature Conservancy, Trout Unlimited, and Silver Creek Alliance