# BIG WOOD RIVER GROUND WATER MANAGEMENT AREA MANAGEMENT PLAN

FEBRUARY 2022

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#### I. INTRODUCTION

This document is the ground water management plan ("Management Plan") for the Big Wood River Ground Water Management Area ("BWRGWMA"). The Management Plan supersedes and replaces the *Management Policy for the Big Wood River Ground Water Management Area* issued on June 28, 1991, ("1991 Policy") in connection with the Idaho Department of Water Resources' ("IDWR") order designating the Big Wood River Ground Water Management Area ("Management Area Order"). The Management Area Order is in Appendix A.

#### II. BACKGROUND

The BWRGWMA includes that portion of the Big Wood River drainage upstream from Magic Reservoir, including the Camas Prairie aquifer system. The BWRGWMA also includes the upper Silver Creek drainage in the vicinity of Picabo, Idaho. A map of the BWRGWMA is included in this Management Plan as Appendix B.

The upper Wood River Basin hydrologic system is comprised of four main arterial streams: the Big Wood River, Silver Creek, the Little Wood River, and Camas Creek. "Aquifers underlying the Wood River Basin include the Camas Prairie aquifer system, the Wood River Valley aquifer system, the ESPA [Eastern Snake Plain Aquifer], and small local aquifers in the upper Little Wood River valley."<sup>1</sup> Appendix C contains a bibliography of documents characterizing the Wood River Basin hydrologic system.

The following three findings of fact from the Management Area Order summarize IDWR's reasons for establishing the BWRGWMA:

The surface and ground waters of the Big Wood River drainage are interconnected. Diversion of ground water from wells can deplete the surface water flow in streams and rivers. New ground water uses can also deplete available supplies for other users and affect basin underflow which presently accumulates in the Magic Reservoir.

There are a number of Applications for Permit to Appropriate Water pending before the department which propose additional consumptive uses of ground water within the Big Wood River drainage.

Injury could occur to prior surface and ground water rights including the storage right in Magic Reservoir if the flows of streams, rivers and ground water underflow in the Big Wood River Basin are intercepted by junior priority ground water diversions.

The primary management strategy in the 1991 Policy was to restrict the approval of new groundwater appropriations in the BWRGWMA. Under the 1991 Policy, IDWR has not approved new appropriations of groundwater for non-domestic consumptive uses within the BWRGWMA, unless the applicant

<sup>&</sup>lt;sup>1</sup> August 28, 2015, memorandum from Jennifer Sukow to Gary Spackman about "Hydrology, hydrogeology, and hydrologic data, Big Wood & Little Wood Water Users Association delivery calls, CM-DC-2015-001 and CM-DC2015-002.

mitigated for depletions that would injure senior surface and groundwater rights. These restrictions minimized new depletions of water in the BWRGWMA after 1991.

While the 1991 Policy limited the development of new groundwater appropriations in the BWRGWMA, water users remained concerned about the impacts of groundwater diversions on both groundwater and surface water sources in the Wood River Basin. Work to resolve the concerns largely paused while the Snake River Basin Adjudication ("SRBA") determined the elements of existing water rights, including those in the Wood River Basin. As the SRBA ended for non-de minimis water rights, the desire for conjunctive administration of surface and groundwater rights by priority came into focus in much of the SRBA area. In the Wood River Basin, IDWR responded by cooperating with the water users and with other agencies to bolster its ability to manage water resources. Items accomplished include:

- 2010 In cooperation with the U.S. Geological Survey ("USGS"), IDWR began a program to expand the existing hydrologic monitoring network in the Wood River Valley with the installation of four stream gages in the Wood River Valley.
- 2011 IDWR issued an order creating the Upper Wood Rivers Water Measurement District and requiring groundwater users to install measuring devices prior to the 2014 irrigation season.
- 2012 In cooperation with the USGS, IDWR began work on development and calibration of a numerical groundwater-flow model for the Wood River Valley, including Silver Creek and the Bellevue Triangle area.
- 2013 IDWR issued an order (a) combining water districts for the Big Wood River, the Little Wood River, and Silver Creek into Water District 37 ("WD37"); (b) adding groundwater rights from the Upper Big Wood River valley above Magic Reservoir and from the Silver Creek drainage to WD37; and (c) abolishing the Upper Wood Rivers Water Measurement District.
- 2015-2016 Groundwater users within the Wood River valley formed the South Valley Ground Water District ("SVGWD") and the Galena Ground Water District ("GGWD").
- 2016 USGS published a final report documenting version 1.0 of the Wood River Valley GroundwaterFlow Model.<sup>2</sup>
- 2019 IDWR published a final report documenting recalibrated version 1.1 of the Wood River Groundwater-Flow Model.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> Fisher, J.C., Bartolino, J.R., Wylie, A.H., Sukow, Jennifer, and McVay, Michael, 2016, Groundwater-flow model of the Wood River Valley aquifer system, south-central Idaho: U.S. Geological Survey Scientific Investigations Report 2016–5080, 71 p., http://dx.doi.org/10.3133/sir20165080.

<sup>&</sup>lt;sup>3</sup> Idaho Department of Water Resources, 2019, Groundwater-Flow Model for the Wood River Valley Aquifer System, Version 1.1, A. Wylie, J. Sukow, M. McVay, J. Bartolino, 39 p., https://idwr.idaho.gov/wpcontent/uploads/sites/2/projects/wood-river-valley/20190627-Groundwater-Flow-Model-forthe-Wood-RiverValley-Aquifer-System.pdf.

• 2019 – IDWR published a summary of groundwater conditions in the BWRGWMA.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> Idaho Department of Water Resources, 2019, Summary of Ground Water Conditions in the Big Wood River Ground Water Management Area, 2019 Update, Allan Wylie, 79 p., https://idwr.idaho.gov/wp-

Meanwhile, water users within WD37 pursued options to conjunctively manage water rights from hydraulically connected surface and groundwater sources in the Wood River Basin.

2015 – The Big Wood and Little Wood Water User's Association ("BWLWWUA") initiated two water right delivery calls pursuant to IDWR's Conjunctive Management Rules (IDAPA 37.03.11). - <u>The decision to</u> proceed under Rule 40 of the Conjunctive Management Rules was reversed by the District Court which held that Rule 30 was the proper procedure as no Area of Common Groundwater Supply had been established. On remandCiting procedural issues, IDWR dismissed the delivery calls in 2016.

- 2017 The BWLWWUA filed another water right delivery call pursuant to IDWR's Conjunctive Management Rules. <u>Determining that the BWLWWUA lacked standing to bring a delivery call, Citing</u> procedural issues again, IDWR dismissed the delivery call in 2017. No appeal was taken.
- 2018 through 2020 In an effort to avoid further conjunctive management water delivery calls or administrative actions, groundwater and surface water users within WD37 met informally to negotiate groundwater management and mitigation strategies.

In September 2020, the GGWD and SVGWD submitted a draft BWRGWMA groundwater management plan to IDWR. In October 2020, the BWLWWUA and Big Wood Canal Company ("BWCC") submitted a draft agreement proposing a plan for conjunctive management of groundwater and surface water rights in the BWRGWMA. In response to the two proposals, IDWR Director Gary Spackman ("Director") formed an advisory committee to draft a new management plan for the BWRGWMA. From the fall of 2020 through the spring of 2021 the advisory committee met approximately biweekly to learn from experts about the hydrology and hydrogeology of the Wood River Basin and to evaluate management plan options for the BWRGWMA.

On May 4, 2021, in response to severe drought conditions causing water supply shortages in the Wood River Basin, the Director initiated administrative proceedings for the Wood River Basin. On June 28, 2021, the Director issued an order curtailing junior groundwater rights in the Bellevue Triangle area of the BWRGWMA to increase the supply of water to senior water right holders in the Silver Creek and Little Wood River drainages. On July 8, 2021, the Director approved the groundwater users' mitigation plan and stayed the curtailment order. Prior to submitting the mitigation plan, the parties to the administrative proceedings -- including GGWD, SVGWD, and BWLWWUA -- signed a settlement document that included, among other things, a commitment to work with the advisory committee to submit a proposed groundwater management plan for the BWRGWMA to the Director by December 1, 2021. The advisory committee resumed meeting on August 9, 2021.

On February 10, 2022, the District Court on appeal from the Director's order affirmed the order in part and reversed it in part. The District Court held that the Director had the power to initiate the administrative proceeding under Idaho Code 42-327, a.g. in the absence of a delivery call and that the Conjunctive Management Rules did not supersede the Director's power to initiate administrative proceedings. The Court also held that the Director's order did not comply with the prior appropriation doctrine because no Area of Common Ground Water had been determined and because the order relied on depletion to the source and made no Material Injury determination. Formatted: Line spacing: Multiple 1.03 li

By January 2022 the advisory committee created negotiated the elements of the the Big Wood River Ground Water Management Area Advisory Committee Groundwater Management Plan Term Sheet ("Term Sheet") describing various agreed upon management and mitigation actions intended to "inform the development of a groundwater management plan pursuant to Idaho Code § 42-233b, support the delivery of water to senior surface water rights, support stream health, and improve and maintain aquifer health." A copy of the Term Sheet is attached herein as Appendix D.

Representatives of the following entities signed the Term Sheet: BWLWWUA, BWCC, SVGWD, GGWD, Sun Valley Company ("SVC"), City of Hailey, Water District 37B Ground Water Association ("WD37B GWA"), City of Bellevue, City of Ketchum, and Sun Valley Water and Sewer District ("SVWSD"). All of these entities are collectively referred to in this Management Plan as the "Term Sheet Parties" or "Parties." The Cities of Bellevue, Ketchum, and Hailey are collectively referred to in this Management

content/uploads/sites/2/publications/20190920-Summary-Groundwater-Conditions-Big-Wood-River-GWMA2019-Update.pdf.

Plan as the "Cities." SVGWD and GGWD are collectively referred to in this document as the "GWDs." The Cities, SVWSD, and SVC also prepared the *Cities/SVWSD/SVC Term Sheet RE: Big Wood River GWMA Management Plan* ("Cities-SVSWD-SVC Term Sheet") to further address their contributions to the Management Plan. The Cities- SVSWD-SVC Term Sheet is appended to the Term Sheet found in Appendix D.

#### III. RELEVANT LEGAL PROVISIONS

Idaho Code § 42-226 declares all groundwater within the state to be the property of the state and confirms the state's power to supervise the appropriation and allocation of groundwater within its boundaries.

Idaho Code§ 42-231 states:

[I]t shall be the duty of the [Director] to conduct investigations, surveys and studies relative to the extent, nature and location of the ground water resources of this state . . . . It shall likewise be the duty of the [Director] to control the appropriation and use of the ground water of this state . . . and to do all things reasonably necessary or appropriate to protect the people of the state from depletion of ground water resources contrary to the public policy expressed in this act.

Idaho Code § 42-233b states:

When a ground water management area is designated by the director of the department of water resources, or at any time thereafter during the existence of the designation, the director may approve a ground water management plan for the area. The ground water management plan shall provide for managing the effects of ground water withdrawals on the aquifer from which withdrawals are made and on any other hydraulically connected sources of water.

Idaho Code § 42-233b further states:

The director, upon determination that the groundwater supply is insufficient to meet the demands of water rights within all or portions of a water management area, shall order those water right holders on a time priority basis, within the area determined by the director, to cease or reduce withdrawal of water until such time as the director determines there is sufficient groundwater. Water right holders participating in an approved ground water management plan shall not be subject to administration on a time priority basis so long as they are in compliance with the groundwater management plan.

Idaho Code§ 42-223(4) states that a water right shall not be lost or forfeited if the reason for nonuse of the water is to comply with the provisions of a groundwater management plan.

Idaho Code§ 42-1805(7) authorizes the Director to suspend the issuance or further action on applications to appropriate water as necessary to protect existing water rights. Further, Rule 55 of the Department's Water Appropriation Rules (IDAPA 37.03.08) states that the Director may establish moratoriums, as necessary, to protect existing water rights.

#### IV. MANAGEMENT PLAN GOALS

This Management Plan replaces-supplements and expands on the existing Management Policy for the Big Wood River Ground Water Management Area, June 28, 1991. To the extend there is any conflict between the Policy and this Management Plan, this Management Plan controls. The main goal of the this Management Plan is "to manage the effects of groundwater withdrawals on the aquifers from which the withdrawals are made and any other hydraulically connected sources of water." Idaho Code § 42-233b. In doing so the parties have agreed upon management and mitigation actions that include, among other elements described herein, Another a goal of the Management Plan is to maintain a 32 cfs four-day moving average streamflow target from May 1 through September 30 at Station 10, Little Wood River near Richfield. The benefits of managing the effects of groundwater withdrawals and maintaining 32 cfs at Station 10 include supporting the supply of water for senior surface water rights, supporting stream health, and improving and maintaining aquifer health. This is a negotiated goal and no formal determination has been made by IDWR that this target is necessary to support the supply of water for senior surface water rights, stream health, or aquifer health or that water for all of these purposes is necessary or appropriate for a Management Plan in the absence of agreement of the Parties. For BWRGWMA groundwater users who participate in and abide by the terms of this Management Plan, adoption of the Management Plan establishes safe harbor from curtailment. Idaho Code § 42-233b.

#### V. WATER USE MANAGEMENT AND IMPLEMENTATION STRATEGIES

To achieve the goals of this Management Plan, the following long-termagreed upon three-year water use management and mitigation strategies or practices shall commence in 2022. Some practices are baseline actions implemented annually. Additional practices are implemented in response to water supply conditions. Some strategies shall be phased in over several years the three-year period to achieve Management Plan goals. None of the goals or the management and mitigation strategies and practices in the Management Plan are based on a formal determination or finding by IDW -R

1. BAS of need to protect individual water rights or a determination by IDWR of material injury to water rights.

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The mitigation strategies and practices required of the Ground Water Districts in this Management Plan may be treated by the Ground Water Districts as a "mitigation plan" within the meaning of that term in the Ground Water District statutes, Idaho Code 42-5201(13).

#### **<u>1. BASELINE MITIGATION ACTIONS</u>**

Within the BWRGWMA, most groundwater users, other than *de minimis* domestic and stockwater right holders, are represented by one or more of the following entities: the GWDs, the Cities, and WD37B GWA. Some non-irrigation groundwater right holders are not represented by any of the listed entities. Unless a particular group of groundwater users is identified, the term "groundwater users" refers to all groundwater users in the BWRGWMA, except for *de minimis* domestic and stockwater right holders whose diversions are not administered by WD37 or WD37B.

Groundwater users will accomplish the following actions every year regardless of the water supply conditions in the BWRGWMA.

#### A. Fallowed Acres within Ground Water Districts

A fallowed acre means an acre of land that has been irrigated using valid groundwater rights that will no longer be irrigated from either a groundwater or surface water source. The GWDs will fallow irrigated acres each year to achieve an annual or baseline level of reduction in groundwater consumptive use. Baseline fallowed acres may have water rights from a groundwater source only, or from both groundwater and surface water sources (mixed sources). Surface water sources may include the Big Wood River and tributaries, Silver Creek and tributaries, or springs tributary to those sources. The GWDs will fallow acres as follows:

- 1. At least 1,500 acres/yr. within SVGWD.
- 2. Up to 500 acres/yr. within GGWD.
  - a. Fallow at least 200 acres starting year one (2022) and increase up to 500 acres by year three (2024).
- 3. Conditions for Fallowed Acres:
  - a. Surface water rights from the Big Wood River and tributaries appurtenant to fallowed acres may be changed from irrigation use to managed aquifer recharge, subject to review and approval by IDWR. Surface water irrigation rights changed to groundwater recharge may continue to be diverted to canals or ditches and rediverted to recharge pits to maintain incidental recharge under the same water rights. Surface water rights must be in priority when used for recharge.
  - b. Surface water rights from Silver Creek and tributaries appurtenant to fallowed acres may be left in the natural stream channel and changed from irrigation use to mitigation by non-use, subject to review and approval by IDWR.
  - c. Location of fallowed acres may change from year to year during the first one to three years. Fallowed acres shall be identified by the end of year three (2024) and

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stabilized through the Conservation Reserve Enhancement Program ("CREP") or other long-term arrangement.

d. The GWDs shall identify the number and location of acres to be fallowed during each of the first three years, along with identification of appurtenant groundwater and surface water rights, to IDWR by April 25.

#### **B.** Groundwater Irrigation Season of Use Limits

- 1. Groundwater users will not irrigate before May 1 or after September 15.
- A Sept. 30 turn-off is authorized for specific circumstances, contingent on the water use being within individual groundwater user's reduction targets.<sup>5</sup> Examples of specific circumstances may include potato crops, pasture, or landscape nurseries.

#### C. Conservation, Infrastructure and Efficiency Fund ("CIEF")

 The Cities', SVWSD's, and SVC's contributions to the CIEF are expressed in the CitiesSVSWD-SVC Term Sheet. Condition no. 1 of the Cities-SVWSD-SVC Term Sheet states, in part:

Starting in 2022, and every year thereafter, by January 31 for the threeyear term of the GWMA Plan approved by the Director of IDWR, the Cities, SVWSD, and SVC each will contribute \$10 per acre-foot of their average annual non-irrigation groundwater diversions (based on a 5year rolling average of prior diversions) to an account known as the Conservation and Infrastructure, Efficiency Fund ("CIEF Fund"), as more broadly described in the GWMA Plan.

In all, the Cities-SVSWD-SVC Term Sheet lists eleven conditions for their participation in the Management Plan. The rest of condition no. 1 and conditions 2-11 are incorporated herein by reference. See Appendix E.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> Individual GWD water users will have assigned irrigation season pumping targets depending on forecasted water supply and recommended consumptive use reductions. For example, a user assigned a reduced seasonal pumping target of 200 AF who pumped only 175 AF by September 15, may pump up to 25 AF by September 30.

<sup>&</sup>lt;sup>6</sup> The Cities-SVWSD-SVC Term Sheet states on page 4: "The Cities, SVWSD, and SVC shall be subject to the terms set forth above [in the Cities-SVSWD-SVC Term Sheet] only upon their incorporation into a GWMA Plan approved by the Director of IDWR."

Due to timing of approval of this Term Sheet, the Cities-SVWSD-SVC Term Sheet, and the Management Plan, contributions to CIEF in 2022 by the Cities, SVWSD and SVC shall be made by April 15, 2022, and by January 31 each year thereafter.

- 2. Each year WD37B GWA shall contribute \$10,000 to the CIEF. In 2022, the contribution shall be made by April 15, 2022, and by January 31 each year thereafter.
- Each year other non-irrigation groundwater users who seek to participate in the Management Plan shall contribute \$10/AF of their withdrawals (using a five-year rolling average of prior annual non-irrigation groundwater diversions) to the CIEF.
- 4. CIEF funds will be used primarily for infrastructure improvements and other permanent measures that improve the efficiency of delivering senior water rights, protect groundwater levels, or increase surface water flows, and for purchasing storage water.
- CIEF funding decisions shall be approved by the CIEF Committee, which shall be comprised of an equal number of surface water right holders and groundwater right holders in Water Districts 37 and 37B who are elected/appointed in accordance with CIEF Committee bylaws, plus one representative of the Idaho Water Resource Board ("IWRB").
- CIEF Funds will be administered/held by the Wood River Resource Conservation and Development Council ("WRRCDC"). The WRRCDC resolution accepting this responsibility is attached as Appendix E.
- The CIEF Committee shall report on the following items to the BWRGWMA Advisory Committee, IDWR, and the IWRB by December 1 of each year: CIEF contributions and expenditures, CIEF Committee decisions, and the results of any actions taken by the CIEF Committee.
- 8. The CIEF Committee will investigate and engage in potential cost share opportunities as appropriate, including without limitation:
  - a. Potential State and Federal cost share.
  - b. Potential cost share through grants with assistance from non-governmental organizations ("NGOs").
  - c. Other cost share partners including water delivery entities, NGOs, etc.

#### **D. Snake River Storage Delivery**

Groundwater users will annually acquire and deliver storage water from the Snake River to the BWLWWUA. Storage water from the Snake River will be delivered via the Milner-Gooding Canal and injected into 1) the Little Wood River for re-diversion from the Little Wood River by BWLWWUA members holding senior priority water rights from the Little Wood River, and 2)

laterals within American Falls Reservoir District No. 2 ("AFRD2") for re-diversion by BWLWWUA members holding senior priority water rights from the Big Wood River. Delivery of this storage water will directly benefit holders of downstream senior surface water rights, thereby reducing some demand for delivery of available natural flow to fill downstream senior water rights. Any reduced demand for available natural flow downstream is intended to benefit holders of upstream senior surface water rights.

Storage water may be delivered during the irrigation season between May 1 and September 30, subject to Water District 01 (Snake River) storage water allocation procedures and available delivery capacity in the Milner-Gooding Canal. The amount of storage water delivery shall be as follows:

- 1. The amount of storage water delivery to the Little Wood River shall be 1,500 AF/yr. (1,755 AF/yr. total with 17% conveyance loss).
  - a. GGWD shall acquire the storage water and pay for it.
  - b. GGWD can market unused storage water after September 30.
- 2. The amount of storage water delivery to the Big Wood River shall be 913 AF/yr. (1,100 AF/yr. total with 17% conveyance loss).
  - a. GGWD shall acquire the storage water, which will be bought with CIEF funds (see item 1.C.).
  - b. Unused storage water can be marketed after September 30. Proceeds of any unused storage water purchased through the CIEF that is marketed at the end of the irrigation season shall return to the CIEF.
- 3. Water District 37 shall report annual storage water deliveries to the BWRGWMA Advisory Committee, IDWR, and IWRB each year by December 1. The report shall show the amount of water delivered to each user and the locations of delivery.

#### E. Stream Flow Target

A goal of the Management Plan is to maintain a 32 cfs four-day moving average streamflow target from May 1 through September 30 at Station 10 on the Little Wood River near Richfield. This flow target is intended to support delivery of senior surface water rights and both stream and aquifer health. The target allows for consumptive use of groundwater within the forecasted water supply tiers shown in Table 1, provided that the 32 cfs four-day moving average streamflow target is met. The target may be achieved by implementing the actions described in items 1.A and 1.B above and item 2 below. If the stream flow target is not met, additional consumptive use reductions beyond those identified in Item 2 or other mitigation actions will be required. Management and mitigation actions to support the stream flow target may include:

- Fallowing to reduce groundwater consumptive use based on April 1 Hailey KAF
- Partial season self-curtailment of groundwater consumptive use based on April 1 and/or June 1 Hailey KAF

- Partial season self-curtailment based on inadequate stream flows
- Partial or full-season water right transfers to supplement inadequate stream flows
- Partial or full-season non-diversion of in-priority surface water rights to supplement inadequate stream flows

The four-day moving average flow at Station 10 may drop below the 32 cfs target in extremely dry years due to lack of natural water supply and other compounding factors outside the control of the groundwater users. During these dry conditions, maintaining adequate stream flows are critical to prevent damage to the stream and injury to senior water rights. In such years, the mitigation actions described in this Term Sheet can be applied to achieve the 32 cfs target flow at Station 10. If application of the mitigation actions does not sustain the target flow, all users agree to cooperate to minimize lasting environmental damage by keeping as much water in the stream as possible.

Occurrences of flows less than 32 cfs at Station 10 after applying the management and mitigation actions described in this Term Sheet will trigger review of the analytic tools that predict allowable consumptive use of groundwater, with potential for modification of the tools and decision thresholds within the Management Plan to ensure more reliable flows in following years.

Actions to consider after each year during the first three-year period to maintain the stream flow target may include:

- Additional early season consumptive use reductions
- Changes in location or timing of partial season consumptive use reductions
- Management changes in use of upstream senior rights for short-term augmentation of flows at station 10.

The GWDs will submit a year-end report to IDWR by December 1 summarizing actions taken to maintain the stream flow target. Water District 37 will annually report surface water and groundwater deliveries as required by law.

#### F. Cloud Seeding

The Cities, SVWSD, and SVC will annually contribute \$3.60/AF of their respective five-year rolling average of prior annual non-irrigation groundwater diversions to cloud seeding projects undertaken by Idaho Power that directly benefit the Big Wood River Basin. These funds, payable to the WRRCDC, will be used only for specific cloud seeding projects approved by the CIEF Committee as discussed in Item 3 of the Cities-SVWSD-SVC Term Sheet, and in consultation with Idaho Power and IDWR.

2. ADDITIONAL MITIGATION ACTIONS IN DRY YEARS

The BWRGWMA Advisory Committee, with support from IDWR, will review the predicted or forecasted flow volume (April-September) for the Big Wood River gage station at Hailey (Hailey) as published by the Natural Resources Conservation Service (NRCS) and the Northwest River Forecast Center (NWRFC)<sup>7</sup>. If the average of the NRCS and NWRFC forecasted flow volume at Hailey is above 210 KAF, the water supply is deemed adequate, and no additional mitigation actions are necessary. In years where the forecasted flow volume is at or below 210 KAF, the GWDs will take additional management actions in accordance with the recommended forecasted water supply tiers shown in Table 1.

Table 1: Recommended forecasted water supply tiers and additional management actions

	Avg. of	Recommended	Mandatory
	Apr-Sep	Additional GWCU	Additional Storage
	Volume	Reduction (AF)	Water Delivery (AF)
Irrigation Season	Forecasts	Based on April 1	Based on June 1
Water Supply	(KAF)	Forecast	Forecast
Adequate	> 210	-	-
Dry	155 – 210	1,275	650
Very Dry	100 – 155	11,260	1,300
Extremely Dry	< 100	17,016	1,300

<sup>1</sup> Volume shown is limited to amount of delivery. Volume purchased must include additional 17% for conveyance loss (761 AF or 1,521 AF).

Actions taken when the forecast is less than 210 KAF at Hailey include:

#### A. Groundwater Consumptive Use Reductions within GWDs

- Using the Table 1 forecasted water supply tiers as a guide, the GWDs will implement additional, incremental groundwater consumptive use reductions through voluntary cuts in groundwater pumping. The GWCU reductions should be based on the average of NRCS and NWRFC April 1 forecasts at Hailey.
- The GWDs shall annually report groundwater use reductions, when required, to IDWR by December 1. Reporting should be coordinated with and verified by the Water District 37 watermaster.

#### B. Additional Snake River Storage Delivery

1. Additional Snake River storage water, up to 1,300 AF/yr. maximum (1,521 AF/yr. with 17% conveyance loss), shall be delivered to BWLWWUA members holding senior priority

<sup>&</sup>lt;sup>7</sup> The BWRGWMA Technical Working Group (TWG) recommends using the mean of the NRCS SWSI and NWRFC published forecasts for decision making in year 1 and until the WRWC model has been finalized. See "*Response to Request for Information from the BWRGWMA Advisory Committee – Prepared by the TWG, November 24, 2021.*" <sup>8</sup> On or after June 1, the volume forecast shall be the sum of the mean of the June-September 50% exceedance forecasts and the measured April-May discharge at the Hailey gage. If the sum, for example, is between 155 and 210 KAF, an additional 650 AF of storage water shall be delivered. If the sum is 155 KAF or less, an additional 1,300 AF of storage shall be delivered.

water rights from the Little Wood River (water injected to Little Wood River via Milner Gooding Canal and re-diverted from the Little Wood River by individual BWWLWUA members). The additional storage water delivery shall be based on the average of NRCS and NWRFC June 1 forecasts at Hailey.<sup>8</sup>

- 2. The additional Snake River storage water may be paid through the CIEF.
- The additional Snake River storage water delivery may occur during the irrigation season between June 1 and September 30 subject to Water District 01 Snake River storage water allocation procedures and available delivery capacity in the Milner Gooding Canal.
- 4. Additional storage water delivery shall be reported to the BWRGWMA Advisory Committee, IDWR and IWRB each year by December 1, consistent with the requirements stated in Item 1.D.3. of this Term Sheet.

#### VI. TERM

The term of this Management Plan is three (3) years and automatically expires on December 31, 2024. This Management Plan establishes practices for a three-year period. The targets and purposed of this Management Plan are not binding on any party after the end of the three-year term.

#### VII. ADAPTIVE MANAGEMENT POLICIES

IDWR and the Term Sheet signatories ("Parties") agree to the following adaptive management policies:

- Additional mitigation actions or measures, as determined by the Parties, may be implemented to
  augment the ability of the water users to meet the goals of the Management Plan. Such additional
  actions or measures shall not supplant the requirements of this Management Plan without the
  approval of IDWR.
- The Parties can discuss and mutually agree upon amendments to the Management Plan, subject to approval by IDWR. Approved amendments may be implemented from year to year during the three\_ year term of the Management Plan. For example, adjustments to the projected tiered groundwater consumptive use reductions may be possible following the first season of additional data.
- The Management Plan may be extended beyond December 31, 2024, by written consent of all the Parties and with approval by IDWR.

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 Nothing in this Management Plan shall be considered to moot the pending appeal in South Valley Ground Water District v. IDWR, Case No. CV07-21-00243, as a ruling from the court on appropriate and legally authorized management procedures is important to IDWR and all Parties for continued management of water rights in Basin37.

#### VIII. OTHER ACTIONS

The Term Sheet Parties agree to the following actions and policies:

- The Parties agree to petition IDWR to issue a moratorium order specific to the BWRGWMA. (Question—to what extent is this necessary in light of the ESPA moratorium order from 1993? Does it cover this area?)
- The Parties agree to support IDWR in initiating a computerized water right accounting program for the Big Wood River and the Little Wood River/Silver Creek systems beginning in the 2022 water year to quickly compute natural flow and storage water available for delivery during the irrigation season, similar to accounting programs used in other river basins of the state, including for example the Upper Snake River and Boise River Basins.
- <u>s.</u> The Parties agree to petition IDWR and the Idaho Water Resources Board (IWRB) to conduct a Camas Prairie aguifer study and to establish a Technical Advisory Committee to advise the development and completion of the study.

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- The Parties agree to petition IDWR and the Idaho Water Resources Board (IWRB) to conduct a Camas Prairie aquifer study and to establish a Technical Advisory Committee to advise the development and completion of the study.
- To the extent necessary, the Parties agree to petition IDWR to update the Wood River Valley Groundwater Flow Model before the end of the three-year management period so that the updated model can be used to evaluate the current measures. <u>IDWR has scheduled MTAC meetings on</u> beginning in March 2022 to begin this update.
- The Parties agree to evaluate a new flow gage at Susie Q Bridge and make recommendations to IDWR based on the evaluation.
- The Parties agree to petition IDWR and the Idaho Department of Fish and Game to remove beaver dams and relocate beavers on Silver Creek and Little Wood River below Sportsman's Access gage on Silver Creek, and down to Station 10 and Station 54 gages on the Little Wood River.
- The Parties agree to petition the IWRB for funding contributions to the CIEF.
- The Parties agree to collaborate with IDWR, the United States Geological Survey, Water Districts 37 and 37B, the Wood River Collaborative, or other entities to share, maintain and improve groundwater and surface water monitoring networks to supply accurate, representative data in support of existing or new hydrologic models or studies, and management of water resources within IDWR Administrative Basin 37.

#### IX. SAFE HARBOR

BIG WOOD RIVER GROUND WATER MANAGEMENT ARE MANAGEMENT PLAN – FEBRUARY 2022 PAGE 15

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The Management Plan establishes "safe harbor" from curtailment to participating groundwater users who are parties to this Term Sheet either individually or through a GWD or Association, and who implement their respective obligations as described in the Management Plan. See Idaho Code § 42233b.

#### X. NON-PARTICIPANTS

Implementation of the Management Plan does not mitigate for the groundwater pumping impacts of any groundwater users not participating in the Management Plan individually or through a GWD or Association, nor does it protect non-participant groundwater users from curtailment under any IDWR administrative process.

#### XI. ADVISORY COMMITTEE AND TECHNICAL WORK GROUP

The BWRGWMA Advisory Committee shall continue to assist IDWR with implementation of the Management Plan. The Advisory Committee should meet periodically to review the Management Plan goals and strategies and to ensure that the provisions of the plan are properly implemented. The Advisory Committee should frequently review the Management Plan and work with IDWR to update the plan as needed.

The Advisory Committee and IDWR have relied on a technical work group to review and analyze information and to recommend solutions to technical issues. The Advisory Committee and IDWR may continue to rely on the existing technical work group or form ad hoc technical work groups as needed.

Minutes of any meeting of the Advisory Committee shall be provided to IDWR.

## BIG WOOD RIVER GROUND WATER MANAGEMENT AREA MANAGEMENT PLAN

FEBRUARY 2022

# APPENDIX A

Order Designating the Big Wood River Ground Water Management Area June 28, 1991

#### BEFORE THE DIRECTOR OF THE DEPARTMENT OF WATER RESOURCES

#### OF THE

#### STATE OF IDAHO

IN THE MATTER OF DESIGNATING) THE BIG WOOD RIVER GROUND ) WATER MANAGEMENT AREA )

ORDER

This matter having come before the Director of the Idaho Department of Water Resources as a result of concern over the relationship between ground water pumping and the flow of surface streams in the Big Wood River drainage, the Director Finds, Concludes and Orders as follows:

#### FINDINGS OF FACT

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1. The Director of the Department of Water Resources has the responsibility to administer the use of ground water in the state of Idaho to protect prior rights and yet allow full economic development of the resource.

2. The surface and ground waters of the Big Wood River drainage are interconnected. Diversion of ground water from wells can deplete the surface water flow in streams and rivers. New ground water uses can also deplete available supplies for other users and affect basin underflow which presently accumulates in the Magic Reservoir.

3. There are a number of Applications for Permit to Appropriate Water pending before the department which propose additional consumptive uses of ground water within the Big Wood River drainage.

4. Injury could occur to prior surface and ground water rights including the storage right in Magic Reservoir if the flows of streams, rivers and ground water underflow in the Big Wood River Basin are intercepted by junior priority ground water diversions.

#### CONCLUSIONS OF LAW

1. Section 42-226, Idaho Code, declares all ground waters to be the property of the state, whose duty it is to supervise the appropriation and allotment of the same. One of the goals is to assure that early appropriations of ground water are protected in the maintenance of reasonable ground water pumping levels.

2. In order to determine whether withdrawals from the existing and proposed wells will have an adverse impact on prior water rights diverted from surface water and/or ground water, the

construction and use of additional wells in the area must be monitored and controlled.

3. Section 42-233b, Idaho Code, authorizes the Director of the Idaho Department of Water Resources to designate "ground water management areas" to allow increased management of the ground water resources.

4. The director of the department of water resources should designate a ground water management area for a portion of the Big Wood River basin upstream from Magic Reservoir and from which ground water pumping can have an effect on flows of streams and rivers in the basin.

#### ORDER

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NOW, THEREFORE IT IS HEREBY ORDERED that the following described area be included within and designated as the "Big Wood River Ground Water Management Area" pursuant to the provisions of Section 42-233b, Idaho Code:

Beginning at Magic Dam on Big Wood River and continuing eastward approximately one mile to the drainage divide at Rattlesnake Butte, which separates tributaries of the Big Wood River above Magic Dam from those below the dam, thence northward approximately three miles and eastward approximately fourteen miles along the divide to a point where the divide crosses the north-south section line common to sections 28, 29, 32 and 33, T1S, R20E,BM, which is near the NE corner of Section 32, T1S, R20E,BM., thence east approximately five miles to the divide separating Silver Creek tributaries from the upper Little Wood River basin, thence continuing in a counterclockwise direction along the entire topographic boundary of the upper Silver Creek and Big Wood River basins, including Camas Creek returning to the point of beginning at Magic Dam.

Attached to this order is a map identified as Attachment 1. which graphically shows the boundaries of the management area.

DATED this 28TH day of JUNE , 1991. KEITH

Director

#### MANAGEMENT POLICY

#### FOR

THE BIG WOOD RIVER GROUND WATER MANAGEMENT AREA

#### I. GENERAL

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A. Introduction

The Big Wood River drainage basin is located in southcentral Idaho within Blaine, Camas, Lincoln and Gooding Counties. In the approximate center of this basin is Magic Reservoir with a water storage capacity of 191,000 acre feet. This reservoir generally divides the basin into two distinct areas. The area upstream from the reservoir is herein referred to as the upper Big Wood River Basin.

The headwaters of Silver Creek are located east of the Big Wood River in the Bellevue Triangle. Silver Creek provides water to users who divert from the creek and from the Little Wood River to which it is tributary.

The upper Big Wood River Basin (including Silver Creek), particularly in Blaine County, is an area of continued economic growth and development. Water resource development to support some of this growth has occurred through transfers of existing water rights and new water appropriations.

B. Geohydrologic Characteristics of the Big Wood River Basin

The surface and ground water system in the upper Big Wood River Basin is interconnected. Diversion and use of water from a tributary stream or well will impact the total water supply available in the system. Downstream from Magic Reservoir, the river and ground water system are not as directly connected and there are other sources of water supply including canals bringing water from the Snake River and the Snake Plain ground water system. Magic Reservoir collects much of the water which moves through the upper Big Wood River Basin and which is not diverted and used upstream from that point. Except during periods of high runoff when Magic Reservoir fills and spills, the available water supply, both surface and ground water, upstream from Magic Reservoir is fully appropriated. Camas Creek and the Big Wood River are the major surface water tributaries upstream from Magic Reservoir.

Silver Creek is fed by numerous springs whose flows depend partly on percolating seepage resulting from Big Wood River irrigation diversion and use upstream in the Bellevue area. Ground water inflow contributes to the surface flow of Silver Creek and its tributaries from the headwaters to a point approximately two miles upstream of Picabo, where Silver Creek ceases to be a gaining stream.

Diversions of ground water in the Bellevue Triangle, and generally in locations hydrologically upstream from Picabo, will deplete the surface flow of Silver Creek. Prior water right holders who divert from the Little Wood River also depend on surface water flow from Silver Creek. Depletion of Silver Creek flow will injure these earlier-in-time right holders. Many of the Little Wood River right holders also receive storage water from Magic Reservoir.

#### C. Present and Proposed Uses

Approximately 73 applications for permit to appropriate ground water upstream from Magic Reservoir and in the upper Silver Creek area are pending before the Department of Water Resources. Protests have been filed with the department against some of these applications. Complaints have also been lodged that continued granting of permits to develop new ground water uses in the upper Big Wood River Basin is interfering with prior surface water rights.

#### D. Recent Declines

The water years 1987 to the present have been below average within the basin. As a result, Magic Reservoir has not filled to its capacity within that time period. It has been suggested that this has been caused, in part, by the diversion of water within the basin under water rights with priority dates later in time than the Magic Reservoir rights.

Many natural flow rights have been cut off because of insufficient surface water flows. Since the water supply of the basin is finite, any withdrawal and consumption of water which would otherwise contribute water to a surface water source, when the source is fully appropriated, will injure another water user.

Various estimates have been made of the quantity of water within the basin. The studies have not all agreed on the total quantity of water but all have generally agreed that the surface and ground waters of the area are interconnected and that withdrawal and use of water from either source will impact the total supply.

#### E. Past Department Designation

In 1980, the Director of the Department of Water Resources issued a policy memorandum by which he declared that the surface water of the Big Wood River upstream from Magic Reservoir was fully appropriated. Since that date, no new permits for consumptive purposes have been issued for the use of the river or any of its tributaries. The department has continued, however, to issue permits for the use of ground water within the watershed. It now appears that this policy must be changed with respect to new consumptive uses of ground water.

#### II. STATUTORY REQUIREMENTS AND AUTHORITIES

- A. Section 42-226, Idaho Code, declares all ground water to be the property of the state, and charges the state with supervising the appropriation and allotment of the same. One of the purposes of this is to assure that early appropriators of ground water are protected in the maintenance of reasonable ground water pumping levels.
- B. Section 42-233b., Idaho Code, authorizes the Director of the Department of Water Resources to designate a "Ground water Management Area" when the water supply in the area may be approaching conditions which could lead to designation as a critical ground water area.
- C. Section 42-237 a.g., Idaho Code, empowers the Director to prohibit or limit the withdrawal of water from any well during the period that he determines that water to fill any water right is not available.
- D. Policy 1F of the State Water Plan adopted by the Idaho Water Resource Board provides that "It is the policy of Idaho that where evidence of hydrologic connection exists between ground and surface water, they be managed as a single resource."

#### **III. MANAGEMENT POLICY**

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Management policies which could be used in connection with future use of water in the upper Big Wood River Basin include the designation of all or a portion of the drainage as a groundwater management area, a critical ground water area or to issue a moratorium on additional permits for development.

The designation of a ground water management area for the upper Big Wood River Basin is the preferred management policy. Under this policy, additional approvals of ground water for consumptive uses can be granted upon a showing by an applicant and a determination by the department that the water supply is adequate and other water rights will not be injured. After the water rights of the basin are determined in the Snake River Basin Adjudication, and a method for the co-regulation of surface and ground water rights has been determined, the Director may require record keeping and reporting and may also issue orders if needed to reduce or stop ground water diversions.

This management policy allows the processing of all pending filings. Most consumptive use applications will be denied unless the applicants can demonstrate there will be no injury or can provide acceptable mitigation to prior rights.

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The department will continue to consider the approval of applications for permit which propose non-consumptive uses, municipal uses, stockwater and domestic uses as defined in Section 42-111, Idaho Code. Domestic uses meeting the definition of Section 42-111, Idaho Code, are not subject to the application for permit filing requirements of Section 42-229, Idaho Code.

Section 42-111, Idaho Code, defines "domestic uses" as

- A. The use of water for homes, organization camps, public campgrounds, livestock and for any other purpose in connection therewith, including irrigation of up to one-half (1/2) acre of land, if the total use is not in excess of thirteen thousand (13,000) gallons per day, or
- B. Any other uses, if the total use does not exceed a diversion rate of four one-hundredths (0.04) cubic feet per second and a diversion volume of twenty-five hundred (2,500) gallons per day.

For purposes of this management policy, applications for ground water permits seeking water for multiple ownership subdivisions or mobile home parks will be considered provided each unit satisfies the definition for the exception of need to file an application for permit as described above.

while an incorporated city has wide latitude under state law to beneficially use its water rights for municipal purposes, any new large consumptive use within the municipal limits, such as irrigation of lands not associated with a dwelling, or irrigation of more than one-half acre associated with a dwelling, must be mitigated by the municipality.

The department will continue to accept and process new applications for permit and applications seeking amendment or transfer of existing water rights. Applications for amendment or applications for transfer which propose a change in the point of diversion from outside the ground water management area to within the area which would directly or indirectly result in the irrigation of new land will be treated as a proposed new appropriation of water.

Dated	this	28TH	day of		Æ		<u> </u>	1991.
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			Ī	R. KEITH Director	HIGGIN	5070		

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## BIG WOOD RIVER GROUND WATER MANAGEMENT AREA MANAGEMENT PLAN

FEBRUARY 2022

## APPENDIX B

Map of the Big Wood River Ground Water Management Area

Legend



## BIG WOOD RIVER GROUND WATER MANAGEMENT AREA MANAGEMENT PLAN

FEBRUARY 2022

## APPENDIX C

Bibliography of Reference Material Characterizing the Wood River Basin Hydrology and Hydrogeology

The following bibliography is reproduced from the August 28, 2015, memorandum from Jennifer Sukow to Gary Spackman about "Hydrology, hydrogeology, and hydrologic data, Big Wood & Little Wood Water Users Association delivery calls, CM-DC-2015-001 and CM-DC-2015-002", which is itself a useful summary of the hydrology and hydrogeology of the Wood River Basin.

- Bartolino, J.R., 2009, Ground-Water Budgets for the Wood River Valley Aquifer System, South Central Idaho, 1995-2004, U.S. Geological Survey Scientific Investigations Report 2009- 5016, 36 p., http://pubs.usgs.gov/sir/2009/5016/.
- Bartolino, J.R., 2014, Stream Seepage and Groundwater Levels, Wood River Valley, South Central Idaho, 2012-2013, U.S. Geological Survey Scientific Investigations Report 2014-5151, 34 p., 3 pl., http://pubs.er.usgs.gov/publication/sir20145151.
- Bartolino, J.R., C.B. Adkins, 2012, Hydrogeologic Framework of the Wood River Valley Aquifer System, South-Central Idaho, U.S. Geological Survey Scientific Investigations Report 2012-5053, 36 p., 1 pl., http://pubs.usgs.gov/sir/2012/5053/.
- Bartolino, J.R., S.V. Vincent, 2013, Groundwater Resources of the Wood River Valley, Idaho: A Groundwater-Flow Model for Resource Management, U.S. Geological Survey Fact Sheet 2013-3005, 4 p., http://pubs.usgs.gov/fs/2013/3005/pdf/fs2013-3005.pdf.
- Barlow, P.M., and Leake, S.A., 2012, Streamflow Depletion by Wells Understanding and Managing the Effects of Groundwater Pumping on Streamflow, U.S. Geological Survey Circular 1376, 84 p., http://pubs.er.usgs.gov/publication/cir1376.
- Brockway and Kahlown, 1994, Hydrologic Evaluation of the Big Wood River and Silver Creek Watersheds Phase I Final Report, Idaho Water Resources Research Institute, submitted to The Nature Conservancy, 52 p., http://savesilvercreek.org/Pdf\_files/hydrology\_phase1\_1994.pdf.
- Castelin, P.M., and S.L. Chapman, 1972, Water Resources of the Big Wood River-Silver Creek Area, Blaine County, Idaho, Idaho Department of Water Administration, 44 p., http://idwr.idaho.gov/WaterInformation/Publications/wib/wib28big\_wood\_riversilver\_creek\_area.pdf.
- Castelin, P.M., and J.E. Winner, 1975, Effects of Urbanization on the Water Resources of the Sun Valley-Ketchum area, Idaho, Idaho Department of Water Resources Water Information Bulletin No. 40, 86 p., http://idwr.idaho.gov/WaterInformation/Publications/wib/wib40sun\_valleyketchum\_area.pdf.
- Claire, J., 2005, Little Wood River Subbasin Assessment and TMDL, Idaho Department of Environmental Quality, 255 p., http://www.deq.idaho.gov/media/455151-

\_water\_data\_reports\_surface\_water\_tmdls\_little\_wood\_river\_little\_wood\_river\_entire.pdf. Frenzel, S.A., 1989, Water Resources of the Upper Big Wood River Basin, Idaho, U.S. Geological Survey Water Resources Investigations Report 89-4018, 47 p.,

Hopkins, C.B., J.R. Bartolino, 2013, Quality of Groundwater and Surface Water, Wood River Valley, BIG WOOD RIVER GWMA MANAGEMENT PLAN – FEBRUARY 2022 – APPENDIX C – PAGE 2

http://pubs.er.usgs.gov/publication/wri894018.

- South-Central Idaho, July and August 2012, U.S. Geological Survey Scientific Investigations Report 2013-5163, 32 p., http://pubs.er.usgs.gov/publication/sir20135163.
- Idaho Department of Water Resources, 2013, Enhanced Snake Plain Aquifer Model Version 2.1 Final Report, Idaho Department of Water Resources with guidance from the Eastern Snake Hydrologic Modeling Committee, 99 p., http://www.idwr.idaho.gov/Browse/WaterInfo/ESPAM/ESPAM\_2\_Final\_Report/.
- Jones, R.P., 1952, Evaluation of Streamflow Records in Big Wood River Basin, Idaho, U.S. Geological Survey Circular 192, 59 p., 1 pl., http://pubs.er.usgs.gov/publication/cir192.
- Kauffman, J.D., K.L. Othberg, 2007, Geologic Map of the Magic Reservoir East Quadrangle, Blaine and Camas Counties, Idaho, 1 pl., http://www.idahogeology.org/PDF/Digital\_Data\_(D)/Digital\_Web\_Maps\_(DWM)/magic \_res\_east\_dwm-82-m.pdf.
- Kauffman, J.D., K.L. Othberg, 2008, Geologic Map of the Magic Reservoir West Quadrangle, Blaine and Camas Counties, Idaho, 1 pl., http://www.idahogeology.org/PDF/Digital\_Data\_(D)/Digital\_Web\_Maps\_(DWM)/Magic \_res\_west\_DWM-100-m.pdf.
- Kramer, R., 2015, Watermaster's Report, Water District 37B, submitted to the Idaho Department of Water Resources, February 3, 2015, 5 p., http://idwr.idaho.gov/apps/ExtSearch/DocsImages/c4hf01\_.PDF.
- Lakey, K., 2015, letter to Idaho Department of Water Resources dated June 16, 2015, 8 p., provided in supplemental files accompanying this memorandum.
- Leake, S.A. and Barlow, P.M., 2013, Understanding and Managing the Effects of Groundwater Pumping on Streamflow, U.S. Geological Survey Fact Sheet 2013-3001, 4 p., http://pubs.usgs.gov/fs/2013/3001/.
- Leeman, W.P., 1982, Geology of the Magic Reservoir Area, Snake River Plain, Idaho, in B. Bonnichsen and R. M. Breckenridge, editors, Cenozoic Geology of Idaho, Idaho Bureau of Mines and Geology
   Bulletin 26, p. 369-376, http://geology.isu.edu/Geothermal/References/IGS/Leeman\_1982\_IGSBul26\_MagicRes. pdf.
  - http://geology.isu.edu/deotherniai/kererences/ids/Leeniai\_1562\_idsbuizo\_iwagickes. put.
- Loinaz, M.C., 2012a, Integrated Hydrologic Model of the Wood River Valley and Stream Temperature Model of the Silver Creek Basin, submitted to The Nature Conservancy, 39 p., http://www.savesilvercreek.org/Pdf\_files/silver-creek-model-report.pdf.
- Loinaz, M.C., 2012b, Integrated Ecohydrological Modeling at the Catchment Scale, Ph.D. Thesis, Technical University of Denmark, 41 p., http://orbit.dtu.dk/fedora/objects/orbit:113377/datastreams/file\_9891763/content.

- Moreland, J.A., 1977, Ground Water-Surface Water Relations in the Silver Creek Area, Blaine County, Idaho, U.S. Geological Survey Open File Report 77-456, 82 p., 5 pl., http://pubs.er.usgs.gov/publication/ofr77456.
- Panday, S., C.D. Langevin, R.G. Niswonger, M. Ibaraki, J.D. Hughes, 2013, MODFLOW-USG Version 1: An Unstructured Grid Version of MODFLOW for Simulating Groundwater Flow and Tightly Coupled Processes Using a Control Volume Finite-Difference Formulation, U.S. Geological Survey Techniques and Methods 6-A45, 66 p., http://pubs.usgs.gov/tm/06/a45/.
- Piper, A.M., 1925, Ground Water for Irrigation on Camas Prairie, Camas and Elmore Counties, Idaho, 53 p, http://www.idahogeology.org/PDF/Pamphlets\_(P)/p-15.pdf.

Ross, D.W., 1900, Biennial Report of the State Engineer to the Governor of Idaho, 1899-1900, Capital Printing Office, Boise, Idaho, p. 28-31, http://www.idwr.idaho.gov/Browse/WaterInfo/ESPAM/model\_files/Version\_2.1\_Current /Development\_Data/WaterBudget\_Validation/1902/Reports\_1890to1902ValidationData/ Biennial\_report\_of\_the\_State\_Engineer\_1900.pdf.

- Ross, D.W., 1902, Biennial Report of the State Engineer to the Governor of Idaho,1901-1902, Statesman Print, Boise, Idaho, p. 165-169, http://www.idwr.idaho.gov/Browse/WaterInfo/ESPAM/model\_files/Version\_2.1\_Current /Development\_Data/WaterBudget\_Validation/1902/Reports\_1890to1902ValidationData/ Biennial report of the State\_Engineer 1902.pdf.
- Schmidt, D.L., 1962, Quaternary Geology of the Bellevue Area in Blaine and Camas Counties, Idaho, U.S. Geological Survey Open File Report 62-120, 127 p., 12 pl., http://pubs.er.usgs.gov/publication/ofr62120.
- Skinner, K.D., J.R. Bartolino, A.W. Tranmer, 2007, Water-Resource Trends and Comparisons Between Partial-Development and October 2006 Hydrologic Conditions, Wood River Valley, South-Central Idaho, U.S. Geological Survey Scientific Investigations Report 2007-5258, 30 p., 4 pl., http://pubs.usgs.gov/sir/2007/5258/.
- Smith, R.O., 1959, Ground-water Resources of the Middle Big Wood River-Silver Creek Area, Blaine, County, Idaho, U.S. Geological Survey Water Supply Paper 1478, 61 p., 5 pl., http://pubs.er.usgs.gov/publication/wsp1478.
- Smith, R.O., 1960, Geohydrologic Evaluation of Streamflow Records in the Big Wood River Basin, Idaho, U.S. Geological Survey Water Supply Paper 1479, 68 p., 2 pl., http://pubs.er.usgs.gov/publication/wsp1479.
- Stearns, H.T., L. Crandall, W.G. Steward, 1938, Geology and ground-water resources of the Snake River Plain in Southeastern Idaho, U.S. Geological Survey Water Supply Paper 774, pp. 258-262, http://pubs.er.usgs.gov/publication/wsp774.

- Struhsacker, D.W., P.W. Jewell, J. Zeisloft, S.H. Evans, Jr., 1982, The Geology and Geothermal Setting of the Magic Reservoir Area, Blaine and Camas Counties, Idaho, B. Bonnichsen and R. M. Breckenridge, editors, Cenozoic Geology of Idaho, Idaho Bureau of Mines and Geology Bulletin 26, p. 377-393, http://geology.isu.edu/Digital\_Geology\_Idaho/papers/B-26ch6-4.pdf.
- U.S. Bureau of Reclamation, 2010, Draft Environmental Assessment for the Little Wood River Irrigation District Pressurized Pipeline Irrigation Delivery System, 91 p., http://www.usbr.gov/pn/programs/ea/idaho/littlewood/littlewoodriverea.pdf.

Walton, W.C., 1962, Ground-Water Resources of Camas Prairie, Camas and Elmore Counties, Idaho. U.S.

- Geological Survey Water-Supply Paper 1609, prepared on behalf of the U.S. Bureau of Reclamation, 57 p., 1 pl., http://pubs.er.usgs.gov/publication/wsp1609.
- Water Districts 7 & 11, watermaster reports for various years between 1920 and 1970, submitted to Idaho Department of Reclamation or Idaho Department of Water Administration. Bound volumes are available for inspection at the IDWR State Office. Scanned copies of 1920-1922 narratives by S.H. Chapman provided in supplemental files accompanying this memorandum.
- Water Districts 37 & 37M, watermaster reports for various years between 1971 and 2013, submitted to Idaho Department of Water Administration or Idaho Department of Water Resources. Bound volumes are available for inspection at the IDWR State Office.
- Wetzstein, A.B., C.W. Robison, C.E. Brockway, 1999, Hydrologic Evaluation of the Big Wood River and Silver Creek Watersheds Phase II, Idaho Water Resources Research Institute, submitted to The Nature Conservancy, 136 p. http://www.sscalliance.com/Pdf\_files/hydrology\_phase2\_1999.pdf.
- Young, H.W., 1978, Water Resources of Camas Prairie, South-Central Idaho. U.S. Geological Survey Water-Resources Investigations 78-82 Open-File Report, 34 p., http://pubs.usgs.gov/wri/1978/0082/report.pdf.
- Young, H.W., R.L. Backsen, K.S. Kenyon, 1978, Selected Hydrologic Data, Camas Prairie, South-Central Idaho. U.S. Geological Survey Open-File Report 78-500, prepared in cooperation with the Idaho Department of Water Resources, 70 p., 1 pl., link to digital version not currently available from USGS Publications Warehouse, scanned copy provided in supplemental files accompanying this memorandum.

Additional resources not referenced in the 2015 memorandum include the following:

- Fisher, J.C., Bartolino, J.R., Wylie, A.H., Sukow, Jennifer, and McVay, Michael, 2016, Groundwater-flow model of the Wood River Valley aquifer system, south-central Idaho: U.S. Geological Survey Scientific Investigations Report 2016–5080, 71 p., http://dx.doi.org/10.3133/sir20165080.
- Idaho Department of Water Resources, 2018, Wood River Groundwater Level Synoptic Fall 2018, Alex Moody, 20 p., https://idwr.idaho.gov/wp-content/uploads/sites/2/publications/20190809-Wood-River-groundwater-level-synoptic-2018.pdf.
- Idaho Department of Water Resources, 2019, Summary of Ground Water Conditions in the Big Wood River Ground Water Management Area, 2019 Update, Allan Wylie, 79 p., https://idwr.idaho.gov/wp-content/uploads/sites/2/publications/20190920-Summary-Groundwater-Conditions-Big-Wood-River-GWMA-2019-Update.pdf.
- Idaho Department of Water Resources, 2019, Groundwater-Flow Model for the Wood River Valley Aquifer System, Version 1.1, A. Wylie, J. Sukow, M. McVay, J. Bartolino, 39 p., https://idwr.idaho.gov/wp-content/uploads/sites/2/projects/wood-river-valley/20190627-Groundwater-Flow-Model-forthe-Wood-River-Valley-Aquifer-System.pdf.
- Idaho Department of Water Resources, 2019, Groundwater-Flow Model for the Wood River Valley Aquifer System, Version 1.1, Simulated Curtailment of Groundwater Use, Jennifer Sukow, 19 p., https://idwr.idaho.gov/wp-content/uploads/sites/2/projects/wood-river-valley/20190731-Report-WRV-V11CurtailSim.pdf.
- Idaho Department of Water Resources, 2021, Final Order in the Matter of Basin 37 Administrative Proceeding, Docket No. AA-WRA-2021-001, 38 p., https://idwr.idaho.gov/wpcontent/uploads/sites/2/legal/AA-WRA-2021-001/AA-WRA-2021-001-20210628-Basin-37-Final- Order.pdf.

## BIG WOOD RIVER GROUND WATER MANAGEMENT AREA MANAGEMENT PLAN

FEBRUARY 2022

## APPENDIX D

Big Wood River Ground Water Management Area Advisory Committee Groundwater Management Plan Term Sheet

#### BIG WOOD RIVER GROUND WATER MANAGEMENT AREA ADVISORY COMMITTEE GROUNDWATER MANAGEMENT PLAN TERM SHEET – 01/18/2022

#### **TERM SHEET PARTIES**

The Big Wood River Ground Water Management Area (BWRGWMA) Advisory Committee members represent the following parties who are signatories to this Term Sheet Agreement (Term Sheet): Big Wood and Little Wood Water Users Association (BWLWWUA), Big Wood Canal Company (BWCC), South Valley Ground Water District (SVGWD), Galena Ground Water District (GGWD), Sun Valley Company (SVC), City of Hailey, and Water District 37B Ground Water Association (WD37B GWA).

Additional signatories to this agreement include the City of Bellevue, City of Ketchum, and Sun Valley Water and Sewer District (SVWSD). The Cities of Bellevue, Ketchum, and Hailey are collectively referred to in this document as the Cities. SVGWD and GGWD are collectively referred to in this document as the Cities.

The Cities, SVWSD, SVC, BWLWWUA, and BWCC entered into a separate term sheet (Cities-SVWSDSVC Term Sheet) attached hereto as <u>Appendix A</u> and incorporated herein by reference. Portions of the Cities-SVWSD-SVC Term Sheet are summarized in the text of this broader Term Sheet. In the event of a conflict between the Cities-SVWSD-SVC Term Sheet and this Term Sheet, the terms of the Cities-SVWSD-SVC Term Sheet shall apply with respect to the parties thereto.

#### TERM SHEET PURPOSE

The Director of Idaho Department of Water Resources (IDWR) may approve a groundwater management area management plan to manage the effects of groundwater withdrawals on the aquifers from which the withdrawals are made and any other hydraulically connected sources of water. *Idaho Code* § 42-233b.

The purposes of the management and mitigation actions described in this Term Sheet are to: inform the development of a groundwater management plan pursuant to Idaho Code § 42-233b, support the delivery of water to senior surface water rights, support stream health, and improve and maintain aquifer health. The BWRGWMA Advisory Committee members agree that the water management actions and terms described herein shall be included in a Draft BWRGWMA Groundwater Management Plan (Management Plan) that shall be presented to the Director of IDWR.

#### **TERM SHEET ITEMS**

#### 1. BASELINE MITIGATION ACTIONS

Groundwater users will accomplish the following actions every year regardless of the water supply conditions in the BWRGWMA.

#### A. Fallowed Acres within Ground Water Districts

A fallowed acre means an acre of land that has been irrigated using valid groundwater rights that will no longer be irrigated from either a groundwater or surface water source. The GWDs will fallow irrigated acres each year to achieve an annual or baseline level of reduction in groundwater consumptive use. Baseline fallowed acres may have water rights from a groundwater source only, or from both groundwater and surface water sources (mixed sources). Surface water sources may include the Big Wood River and tributaries, Silver Creek and tributaries, or springs tributary to those sources.

The GWDs will fallow acres as follows:

- 1. At least 1,500 acres/yr. within SVGWD.
- 2. Up to 500 acres/yr. within GGWD.
  - a. Fallow at least 200 acres starting year one and increase up to 500 acres by year three.
- 3. Conditions for Fallowed Acres:
  - a. Surface water rights from the Big Wood River and tributaries appurtenant to fallowed acres may be changed from irrigation use to managed aquifer recharge, subject to review and approval by IDWR. Surface water irrigation rights changed to recharge may continue to be diverted to canals or ditches and re-diverted to recharge pits to maintain incidental recharge under the same water rights. Surface water rights must be in priority when used for recharge.
  - b. Surface water rights from Silver Creek and tributaries appurtenant to fallowed acres may be left in the natural stream channel and changed from irrigation use to mitigation by non-use, subject to review and approval by IDWR.
  - c. Location of fallowed acres may change from year to year during the first one to three years. Fallowed acres shall be identified by the end of year three (2024) and stabilized through the Conservation Reserve Enhancement Program (CREP) or other long-term agreement.
  - d. The GWDs shall identify the number and location of acres to be fallowed during each of the first three years, along with identification of appurtenant groundwater and surface water rights, to IDWR by April 25.

#### **B.** Groundwater Irrigation Season of Use Limits

- 1. Groundwater users will not irrigate before May 1 or after September 15.
  - a. Exception: Sept. 30 turn-off for specific circumstances, contingent on use being within individual groundwater user's reduction targets<sup>8</sup>. Examples of specific circumstances may include potato crops, pasture, or landscape nurseries.

#### C. Conservation, Infrastructure and Efficiency Fund (CIEF)

- 1. The Cities', SVWSD's, and SVC's contributions to the CIEF are expressed in the CitiesSVSWD-SVC Term Sheet, attached hereto as Appendix A.
- 2. Each year other non-irrigation groundwater users who participate in the Management Plan shall contribute to the CIEF:
  - a. \$10/AF of groundwater users' withdrawals (using a five-year rolling average of prior annual non-irrigation groundwater diversions).
  - b. Funds will be used primarily for infrastructure improvements and other permanent measures that improve the efficiency of delivering senior water rights, protect groundwater levels, or increase surface water flows, and for purchasing storage water.
- 3. Each year WD37B GWA shall contribute \$10,000 to the CIEF.
- 4. CIEF funding decisions shall be approved by the CIEF Committee (CIEF Committee), which shall be comprised of an equal number of surface water right holders and groundwater right holders in Water Districts 37 and 37B who are elected/appointed in accordance with CIEF Committee bylaws, plus one representative of the Idaho Water Resources Board (IWRB).
- 5. CIEF Funds will be administered/held by the Wood River Resource Conservation and Development Council (WRRCD).
- The CIEF Committee shall report on the following items to the BWRGWMA Advisory Committee, IDWR, and the IWRB by December 1 of each year: CIEF contributions and expenditures, CIEF Committee decisions, and the results of any actions taken by the CIEF Committee.
- 7. The CIEF Committee will investigate and engage in potential cost share opportunities as appropriate, including without limitation:
  - a. Potential State and Federal cost share.
  - b. Potential cost share through grants with assistance from NGOs.
  - c. Other cost share partners including water delivery entities, NGOs, etc.

<sup>&</sup>lt;sup>8</sup> Individual GWD water users will have assigned irrigation season pumping targets depending on forecasted water supply and recommended consumptive use reductions. For example, a user assigned a reduced seasonal pumping target of 200 AF who pumped only 175 AF by September 15, may pump up to 25 AF by September 30.

#### **D. Snake River Storage Delivery**

Groundwater users will annually acquire and deliver storage water from the Snake River to the BWLWWUA, as set forth below.

Storage water from the Snake River will be delivered via the Milner-Gooding Canal and injected to 1) Little Wood River for re-diversion from the Little Wood River by BWLWWUA members holding senior priority water rights from the Little Wood River, and 2) to laterals within AFRD2 for re-diversion by BWLWWUA members holding senior priority water rights from the Big Wood River.

Delivery may occur during the irrigation season between May 1 and September 30 subject to Water District 01 Snake River storage water allocation procedures and available delivery capacity in the Milner Gooding Canal.

The amount of storage delivery is as follows:

- 1. Little Wood River
  - a) 1,500 AF/yr. storage delivery (1,755 AF/yr. total with 17% conveyance loss)
    - i. Paid by the GGWD.
    - ii. The GGWD can market unused storage water after September 30.
- 2. Big Wood River
  - a) 913 AF/yr. storage delivery (1,100 AF/yr. total with 17% conveyance loss)
    - i. Storage water will be acquired by GGWD and paid by the CIEF (see item 1.C.) ii. Unused storage water can be marketed after
    - September 30.
      - a. Proceeds of any unused storage water purchased through the CIEF that is marketed at the end of the irrigation season shall return to the CIEF.
- 3. Accounting of Storage Water Delivery
  - a) Water District 37 shall report annual storage water deliveries to the BWRGWMA Advisory Committee, IDWR, and IWRB each year by December 1. The report shall show the amount of water delivered to each user and the locations of delivery.

#### E. Stream Flow Target

A goal of the Management Plan is to maintain a 32 cfs four-day moving average streamflow target from May 1 through September 30 at Station 10, Little Wood River near Richfield. This flow target is intended to support delivery of senior surface water rights and both

stream and aquifer health. Importantly, the target allows for consumptive use of groundwater within the forecasted water supply tiers shown in Table 1, provided that the 32 cfs four-day moving average streamflow target is met. The target may be achieved by implementing actions described in items 1.A and 1.B above, and item 2. below. If the stream flow target is not met, additional consumptive use reductions beyond those identified in Item 2 or other mitigation actions will be required.

Management and mitigation actions to support stream flows may include:

- Fallowing to reduce groundwater consumptive use based on April 1 Hailey KAF
- Partial season self-curtailment of groundwater consumptive use based on April 1 and/or June 1 Hailey KAF
- Partial season self-curtailment based on inadequate stream flows
- Partial or full-season water right transfers to supplement inadequate stream flows
- Partial or full-season non-diversion of in-priority surface water rights to supplement inadequate stream flows

The four-day moving average flow at Station 10 may drop below the 32 cfs target in extremely dry years due to lack of natural water supply and other compounding factors outside the control of the groundwater users. During these dry conditions, maintaining adequate stream flows are critical to prevent damage to the stream and injury to senior water rights. In such years, groundwater users shall apply the mitigation actions described in this Term Sheet to achieve the 32 cfs target flow at Station 10. If application of the mitigation actions does not sustain the target flow, all users agree to cooperate to minimize lasting environmental damage by keeping as much water in the stream as possible.

Occurrences of flows less than 32 cfs at Station 10 after applying the management and mitigation actions described in this Term Sheet will trigger review of the analytic tools that predict allowable consumptive use of groundwater, with potential for modification of the tools and decision thresholds within the Management Plan to ensure more reliable flows in following years.

Actions to consider after each year during the first three-year period to maintain the stream flow target may include:

- Additional early season consumptive use reductions
- Changes in location or timing of partial season consumptive use reductions
- Management changes in use of upstream senior rights for short-term augmentation of flows at station 10.

The GWDs will submit a year-end report to IDWR by December 1 summarizing actions taken to maintain the stream flow target. Water District 37 will annually report surface water and groundwater deliveries as required by law.

#### F. Cloud Seeding

The Cities, SVWSD, and SVC will annually contribute \$3.60/AF of their respective five-year rolling average of prior annual non-irrigation groundwater diversions to cloud seeding projects undertaken by Idaho Power that directly benefit the Big Wood River Basin. These funds, payable to the WRRCD, will be used only for specific cloud seeding projects approved by the CIEF Committee as discussed in Item 3 of the Cities-SVWSD-SVC Term Sheet, and in consultation with Idaho Power and IDWR.

#### 2. ADDITIONAL MITIGATION ACTIONS IN DRY YEARS

The BWRGWMA Advisory Committee, with support from IDWR, will review the predicted or forecasted flow volume (April-September) for the Big Wood River gage station at Hailey (Hailey) as published by the Natural Resources Conservation Service (NRCS) and the Northwest River Forecast Center (NWRFC)<sup>9</sup>. If the average of the NRCS and NWRFC forecasted flow volume at Hailey is above 210 KAF, the water supply is deemed adequate, and no additional mitigation actions are necessary. In years where the forecasted flow volume is at or below 210 KAF, the GWDs will take additional management actions in accordance with the recommended forecasted water supply tiers shown in Table 1.

	Avg. of Apr-Sep Volume	Recommended Additional GWCU Reduction (AF)	Mandatory Additional Storage Water Delivery (AF)
Irrigation Season Water Supply	Forecasts (KAF)	Based on April 1 Forecast	Based on June 1 Forecast
Adequate	> 210	-	-
Dry	155 – 210	1,275	650
Very Dry	100 – 155	11,260	1,300
Extremely Dry	< 100	17,016	1,300

Table 1: Recommended forecasted water supply tiers and additional management actions

<sup>1</sup> Volume shown is limited to amount of delivery. Volume purchased must include additional 17% for conveyance loss (761 AF or 1,521 AF).

Actions taken when the forecast is less than 210 KAF at Hailey include:

#### A. Groundwater Consumptive Use Reductions within GWDs

<sup>&</sup>lt;sup>9</sup> The BWRGWMA Technical Working Group (TWG) recommends using the mean of the NRCS SWSI and NWRFC published forecasts for decision making in year 1 and until the WRWC model has been finalized. See "*Response to Request for Information from the BWRGWMA Advisory Committee – Prepared by the TWG, November 24, 2021.*" <sup>3</sup> On or after June 1, the volume forecast shall be the sum of the mean of the June-September 50% exceedance forecasts and the measured April-May discharge at the Hailey gage. If the sum, for example, is between 155 and 210 KAF, an additional 650 AF of storage water shall be delivered. If the sum is 155 KAF or less, an additional 1,300 AF of storage shall be delivered.

- Using the Table 1 forecasted water supply tiers as a guide, the GWDs will implement additional, incremental groundwater consumptive use reductions through voluntary cuts in groundwater pumping. The GWCU reductions should be based on the average of NRCS and NWRFC April 1 forecasts at Hailey.
- 2. The GWDs shall annually report groundwater use reductions, when required, to IDWR by December 1. Reporting should be coordinated with and verified by the Water District 37 watermaster.

#### **B. Additional Snake River Storage Delivery**

- Additional Snake River storage water, up to 1,300 AF/yr. maximum (1,521 AF/yr. with 17% conveyance loss), shall be delivered to BWLWWUA members holding senior priority water rights from the Little Wood River (water injected to Little Wood River via Milner Gooding Canal and re-diverted from the Little Wood River by individual BWWLWUA members). The additional storage water delivery shall be based on the average of NRCS and NWRFC June 1 forecasts at Hailey<sup>3</sup>.
- 2. The additional Snake River storage water may be paid through the CIEF.
- The additional Snake River storage water delivery may occur during the irrigation season between June 1 and September 30 subject to Water District 01 Snake River storage water allocation procedures and available delivery capacity in the Milner Gooding Canal.
- 4. Additional storage water delivery shall be reported to the BWRGWMA Advisory Committee, IDWR and IWRB each year by December 1, consistent with the requirements stated in Item 1.D.3. of this Term Sheet.

#### 3. TERM AND ADAPTIVE GROUNDWATER MANAGEMENT PLANNING MEASURES

- A. This Term Sheet, and the term of the Management Plan if approved by the Director is three
   (3) years and automatically expires through no further action of the parties on December
   31, 2024.
- B. Additional mitigation actions or measures, as determined by the parties, shall be implemented to meet the targets and purposes of the Term Sheet and approved Management Plan.
- C. The parties can discuss and mutually agree upon amendments to an approved Management Plan subject to approval by IDWR. Approved amendments may be implemented from year to year during the three-year term of the Management Plan.

- D. The Term Sheet is the result of compromise among the parties. An approved Management Plan, based in part on this Term Sheet, may be extended or modified by written consent of all the parties and with approval by the Director of IDWR. For example, adjustments to the projected tiered groundwater consumptive use reductions may be possible following the first season of additional data.
- E. This Term Sheet and an approved Management Plan establishes management practices for a three-year period. By assenting to the terms and conditions of this Term Sheet, the parties stipulate that the targets and purposes of this Term Sheet and an approved Management Plan are not binding on any party after the end of the three-year term.
- F. Nothing in this Management Plan shall be considered to moot the pending appeal, as a ruling from the court on appropriate and legally authorized management procedures is important to the Department and all parties for continued management of water rights in Basin37.

#### 4. OTHER ACTIONS

- A. The parties agree to petition IDWR to issue a moratorium order specific to the BWRGWMA.
- B. The parties agree to support IDWR in initiating a computerized water right accounting program for the Big Wood River and the Little Wood River/Silver Creek systems to quickly compute natural flow and storage water available for delivery during the irrigation season, similar to accounting programs used in other river basins of the state, including for example the Upper Snake River and Boise River Basins.
- C. The parties agree to petition IDWR and the Idaho Water Resources Board (IWRB) to conduct a Camas Prairie aquifer study and to establish a Technical Advisory Committee to advise the development and completion of the study.
- D. The parties agree to petition IDWR to update the Wood River Valley Groundwater Flow Model before the end of the three-year management period so that the updated model can be used to evaluate the current measures.
- E. The parties agree to evaluate a new flow gage at Susie Q Bridge and make recommendations to IDWR based on the evaluation.

- F. The parties agree to petition IDWR and the Idaho Department of Fish and Game to remove beaver dams and relocate beavers on Silver Creek and Little Wood River below Sportsman's Access gage on Silver Creek, and down to Station 10 and Station 54 gages on the Little Wood River.
- G. The parties agree to petition the IWRB for funding contributions to the CIEF.
- H. The parties agree to collaborate with IDWR, the United States Geological Survey, Water Districts 37 and 37B, the Wood River Collaborative, or other entities to share, maintain and improve groundwater and surface water monitoring networks to supply accurate, representative data in support of existing or new hydrologic models or studies, and management of water resources within IDWR Administrative Basin 37.

#### 5. SAFE HARBOR

A Management Plan, if approved by the Director of IDWR, establishes "safe harbor" from curtailment to participating groundwater users who are parties to this Term Sheet either individually or through a GWD or Association, and who implement their respective obligations as described in an approved Management Plan.

#### 6. NON-PARTICIPANTS

This Term Sheet and subsequent Management Plan does not mitigate for the groundwater pumping impacts of any groundwater users not participating in the plan and it does not protect non-participant groundwater users from curtailment under any IDWR administrative process.

#### 7. PERFORMANCE

All items identified in this Term Sheet shall be included in a final Draft Management Plan that is submitted to the Director of IDWR.

The director, upon determination that the groundwater supply is insufficient to meet the demands of water rights within all or portions of a water management area, shall order those water right holders on a time priority basis, within the area determined by the director, to cease or reduce withdrawal of water until such time as the director determines there is sufficient groundwater. Water right holders participating in the approved groundwater management plan shall not be subject to administration on a time priority basis so long as they are in compliance with the groundwater management plan. *Idaho Code § 42-233b.* 

**BIG WOOD CANAL COMPANY** 

1/24/2022 LA.

Carl Pendleton Board Chair, Big Wood Canal Co

Date

BIG WOOD AND LITTLE WOOD WATER USERS' ASSOCIATION (BWLWWUA)

Cooper Brossy 1-25-2022

Cooper Brossy

Date

Representative, BWLWWUA

GALENA GROUND WATER DISTRICT

1/18/22

Pat McMahon

Date

Board Chair, Galena Ground Water District

SOUTH VALLEY GROUND WATER DISTRICT

1-21-2021 Date Kristy Molyneux

Board Chair, South Valley Ground Water District

SUN VALLEY COMPANY

Chin 01/25/2022

Corey Allen Sun Valley Co. Representative Date

WATER DISTRICT 37B GROUND WATER ASSOCIATION

William "Bill" Simon Date

Representative

Date

CITY OF HAILEY

Print Name and Title

Date

CITY OF BELLEVUE

Print Name and Title

Date

### CITY OF KETCHUM

Print Name and Title

SUN VALLEY WATER AND SEWER DISTRICT

1/18/2022 Jim Loyd Date

Chair, Sun Valley Water & Sewer District

APPENDIX A

#### CITIES/SVWSD/SVC TERM SHEET RE: BIG WOOD RIVER GWMA MANAGEMENT PLAN

This term sheet describes participation in a management plan for the Big Wood River Ground Water Management Area ("GMWA") by the Cities of Bellevue, Hailey, and Ketchum (collectively, the "Cities"), Sun Valley Water & Sewer District ("SVWSD"), and Sun Valley Company ("SVC") for a term of three years, upon which the plan shall be reevaluated by the parties. For purposes of Paragraph 10 below, the parties ("Parties") to this term sheet are Cities, SVWSD, SVC, Big Wood Canal Company ("BWCC"), and the Big Wood and Little Wood Waters Users Association ("BWLWWUA"). This term sheet shall be part of a GWMA Management Plan ("GWMA Plan") for Basin 37 and is not effective unless a GWMA Plan is adopted by the Director of IDWR. The Cities, SVWSD, and SVC do not waive any claims or defenses with respect to their respective water rights or water uses or their potential groundwater pumping impacts on surface waters.

This term sheet addresses the Cities', SVWSD's, and SVC's contributions to the GWMA Plan only for the Cities' and SVWSD's municipal water rights and SVC's commercial water right for snowmaking at River Run. A list of these water rights is included as Attachment 1. The Cities of Hailey and Ketchum are members of the Galena Ground Water District with respect to their irrigation water rights, and their irrigation under those rights would be addressed in any GWMA Plan applicable to Galena Ground Water District. Pursuant to Idaho Code Section 42-233b, the Cities', SVWSD's, and SVC's non-irrigation water rights will not be subject to administration on a time priority basis so long as the Cities, SVWSD, and SVC are in compliance with an approved groundwater management plan.

Aside from naturally occurring low snowpack and low runoff events, surface water diversions and agricultural irrigation groundwater pumping are the largest contributors to streamflow reductions in the Big Wood River, Silver Creek, and the Little Wood River. The Cities', SVWSD's, and SVC's pumping under their respective non-irrigation groundwater rights represents a small fraction of total groundwater pumping in the GWMA according to the Wood River Valley Groundwater Flow Model v. 1.1. These figures are summarized in Table 1 below:

Table 1					
Area/Entity	2016-2021 Average Annual GW Pumping (Acre Feet)	% of GWMA Model Domain	Source		
Total GWMA Pumping (1995-2014)					
WRV1.1 Model Area	47,525		Irr season GW CU / on-farm efficiency + Nov-Mar pumping		
Non-Irrigation Pumping by SVC, Cities, and SVWSD (2016-2020)					
Sun Valley Company	270.82	0.6%	WMIS No. 1000705		

Cities/SVWSD/SVC Term Sheet re: Big Wood River GWMA Management Plan P. 1 of 5

City of Bellevue	377.43	0.8%	WMIS Nos. 1000846, 1000847
City of Ketchum	3137.36	6.8%	WMIS Nos. 1000862, 1000863, 1000864, 1000865, 1000901, 1003175
City of Hailey	1606.62	3.4%	WMIS Nos. 1000850, 1000852, 1001308, 1001309, 1001310, 1001311
SVWSD	3101.22	6.5%	WMIS Nos. 1000868, 1000869, 1000870, 1000871, 1000872, 1000873, 1000874, 1000875, 1000883, 1001247, 1001267, 1001268, 1001346
Total	8493.45	17.9%	

After discussions with BWCC and BWLWWUA, there is consensus that there are few opportunities available at this time for the Cities, SVWSD, and SVC to mitigate their groundwater pumping impacts to the Big Wood River. The Cities, SVWSD, and SVC agree that limiting or reducing their groundwater diversions (and consumptive use) should be promoted to the extent practicable. After consultation with BWCC and BWLWWUA, the Cities, SVWSD, and SVC will participate in a GWMA Plan as follows:

1. Starting in 2022, and every year thereafter, by January 31 for the threeyear term of the GWMA Plan approved by the Director of IDWR, the Cities, SVWSD, and SVC each will contribute \$10 per acre-foot<sup>10</sup> of their average annual non-irrigation groundwater diversions (based on a 5-year rolling average of prior diversions) to an account known as the Conservation and Infrastructure, Efficiency Fund ("CIEF Fund"), as more broadly described in the GWMA Plan. The monies contributed to the CIEF Fund by the Cities, SVWSD, and SVC should be used for infrastructure improvements and other permanent measures and may be used for purchasing storage water. The first year's payment shall be based on the pumping volumes described in Table 1, above. Table 1 shall be updated annually to account for a continuing 5-year rolling average of prior diversions. When the Cities, SVWSD, and SVC make their contribution, they shall also provide to the GWMA Advisory Committee and the CIEF Fund Committee a short report detailing the Cities', SVWSD's, and SVC's respective non-irrigation rights and the measured withdrawals associated with those rights for the prior five years in order to explain the financial contribution to the CIEF Fund.

Cities/SVWSD/SVC Term Sheet re: Big Wood River GWMA Management Plan P. 2 of 5

<sup>&</sup>lt;sup>10</sup> This \$10 per acre-foot figure is based on a proposal by Carl Pendleton. The Cities, SVWSD, and SVC understand that \$10 per acre foot is the average annual amount Big Wood Canal Company shareholders pay in annual assessments based on reservoir releases.

2. Any projects or storage water purchases funded by the monies contributed to the CIEF Fund by the Cities, SVWSD, and SVC, as described above, shall be approved by the CIEF Fund Committee. The CIEF Fund Committee shall be comprised of an equal number of surface water right holders and ground water right holders in the Water District 37 who are

elected/appointed in accordance with the bylaws of the CIEF Fund Committee.

- 3. For the three-year term of the GWMA Plan, Cities, SVWSD, and SVC will annually contribute \$3.60 per AF<sup>11</sup> of their respective average annual non-irrigation groundwater diversions (based on a 5-year rolling average of prior diversions) to cloud seeding projects undertaken by Idaho Power that directly benefit the Big Wood River Basin, which funds will be used only for specific cloud seeding projects approved by the Committee (in consultation with Idaho Power and IDWR);
- Cities', SVWSD's, and SVC's contributions to the CIEF Fund and cloud seeding projects shall be recalculated each year based on the prior 5-year rolling average of non-irrigation groundwater diversions according to WMIS data or other data deemed reliable by the Committee;
- 5. Cities and SVWSD will continue to implement water conservation measures they deem reasonable and appropriate under their respective circumstances, such as, but not limited to: (i) promoting connection to municipal water systems for uses otherwise authorized under I.C. § 42111; (ii) adopting tiered rate structures to incentivize less water use; (iii) imposing timing and other restrictions for residential irrigation; (iv) enacting ordinances with maximum lot size and irrigated area targets for new development; and (v) approving development-specific conservation requirements;
- 6. Cities, SVWSD, and SVC will schedule a meeting with local environmental groups within 60 days of a full GWMA Plan being approved by the Director to investigate potential additional water conservation measures that could be implemented;
- 7. Cities, SVWSD, and SVC will investigate potential recharge projects to benefit the Big Wood River above Magic Reservoir, which projects may

Cities/SVWSD/SVC Term Sheet re: Big Wood River GWMA Management Plan P. 3 of 5

<sup>&</sup>lt;sup>11</sup> This \$3.60 per acre-foot figure is based on information provided by Idaho Power on the average cost per acre-foot of water produced from its cloud seeding program.

utilize existing water rights held by the Cities, SVWSD, and SVC as well as potential new appropriations of excess Big Wood River flows (i.e. flows existing in years that Magic Reservoir fills and/or releases water for flood control);

- 8. Cities', SVWSD's, and SVC's contributions to the CIEF Fund must be reevaluated each year by the Committee to ensure that future contributions are necessary for the purposes set forth in paragraph 2 above;
- 9. Cities, SVWSD, and SVC shall not be required to contribute to the CIEF Fund or cloud seeding projects following the termination of any GWMA Plan these terms are incorporated into;
- 10. Pursuant to Idaho Code Section 42-233b, Idaho Code Section 42-237a.g., and the *Rules for Conjunctive Management of Surface and Ground Water Resources*, IDAPA 37.03.11, the Parties agree that so long as the Cities, SVWSD, and SVC are in compliance with the measures set forth in this term sheet, the Cities', SVWSD's, and SVC's non-irrigation water rights will not be subject to delivery calls or administration on a time priority basis; and
- 11. Subsequent to any termination of a GWMA Plan these terms are incorporated into, Cities, SVWSD, and SVC shall proportionally be entitled to seek credit (as determined by IDWR) in the event of water rights administration or delivery calls for every additional acre-foot of water capable of delivery to senior surface water users attributable to cloud seeding they funded or infrastructure improvements or other permanent measures funded by the CIEF Fund. At such time a credit is requested, any party is entitled to contest the credit being awarded with the determination by IDWR in their sole discretion.

The Cities, SVWSD, and SVC shall be subject to the terms set forth above only upon their incorporation into a GWMA Plan approved by the Director of IDWR. No party shall be bound by this term sheet upon its termination on December 31, 2024.

The effective date of this term sheet is January 20, 2022.

Signatures Of Counsel On Following Page

Cities/SVWSD/SVC Term Sheet re: Big Wood River GWMA Management Plan P. 4 of 5

Approved as to form and content by counsel for the Parties.

W. Kent Fletcher Date Attorney for Big Wood Canal Company Cities/SVWSD/SVC Term Sheet re: Big Wood River GWMA Management Plan P. 5 of 5 DRAFT P. 5 of 5

## BIG WOOD RIVER GROUND WATER MANAGEMENT AREA MANAGEMENT PLAN

FEBRUARY 2022

# APPENDIX E

Wood River Resource Conservation and Development Association Resolution

## Wood River

# **Resource Conservation & Development**

141 7<sup>a</sup> Avenue East Gooding, Idaho 83330 208-934-5053

"Our mission is to marshal the resources of the Wood River RCLD Council and to collaborate with other organizations, partners, and individuals to enhance people's lives and the environment in Blaine, Camas, Gooding, and Lincoln Counties, Idaho by following our Annual Plan of Work"

Meeting February 3, 2022 Dinner 6pm Gooding Hotel B&B

Sponsor Members: Polly Huggins Carol Reagan Joy Cimmiyotti Diane Houser Carl Pendleton Joanne Rutler Terry Ruby Shelley Keen Tim Luke Pat McMahon Chris Johnson

Gooding Soil Camas County 4H Wood River RC&D City of Gooding Wood River Soil Water Lincoln County Commissioner Tri County CWMA IDWR IDWR Galena GWP Blaine SCD

Chair Polly Huggins opened the meeting at 6:05pm. Introductions were made.

The agenda was reviewed. There were no changes.

Treasurer's Report:

Terry Ruby reviewed the balance sheet for both the WRRC&D and Southern Idaho Bio Control.

Carl moved to accept the Treasurer's report as given. Chris seconded. The motion carried.

Correspondence: None.

**Minutes** The council minutes for January were reviewed.

#### Joanne moved to accept the minutes as presented. Carl seconded. The motion carried.

#### **Old Business:**

Carol Reagan talked about the multi-plex project proposal for a building on city donated land at the city park in Fairfield. The building would be for a year- round facility (the current building can only be used May-August). The time frame for the construction of the building is 3 years. There are individuals who want to contribute to the project. The Wood River RC&D would be the fiscal agent and fees for service would be sliding fees based on the size of the donation.

# Terry moved to accept the proposal as presented with the sliding fees. Diane seconded. The motion carried.

#### New Business:

Tim Luke from Idaho Water Resources gave a presentation of a proposed funding opportunity for the WRRC&D to be fiscal agent for funds from ground water users. He provided an in-depth discussion of the water program. The RC&D would set up two additional separate accounts for the funds: 1: SCIPE Infrastructure (snowpack enhancement \$3.60/acre foot).2. CIEF Infrastructure account (\$10.00/acre foot.) The sliding fees for service was discussed. The fees would be applied as the funds are received by the WRRC&D Council. The CIEF committee will make the final determination and request for funds disbursement (in writing with two signatures.) A quarterly report would be provided to the CIEF committee and IDWR Department representative to reflect funds received from the users. The management plan term sheet is a part of these minutes.

# Chris moved to accept the above proposal using the SCIPES sliding fee schedule. Terry seconded. The motion carried.

Carl Pendleton – Carl talked about January cloud seeding results.

#### Polly Huggins-

Polly reported to the council that the grant that Mike Peterson was writing would not be going through the RC&D at this time as it had to go through a city or county entity. He will re-submit next year and will try to get it accepted by the group to go through the RC&D. Other ideas were given for him to try such as the conservation district or Blaine Count Rec. Polly would give him a call and suggest that he try using either one of the programs.

Polly also provided the council with news on her health.

There being no further business Terry moved to adjourn the meeting at 7:30pm. Chris seconded. The motion passed.

The next meeting will be March 3, 2022 at the Gooding Hotel Bed and Breakfast