# Big Wood River Ground Water Management Area Draft Management Plan Framework [Date]

### Big Wood River Ground Water Management Area DRAFT Management Plan Framework

#### INTRODUCTION AND BACKGROUND

This document is the ground water management plan ("Management Plan") for the Big Wood River Ground Water Management Area ("BWRGWMA") issued pursuant to Idaho Code § 42-233b. The Management Plan supersedes and replaces the *Management Policy for the Big Wood River Ground Water Management Area* IDWR issued on June 28, 1991, ("1991 Policy") in connection with IDWR's order designating the Big Wood River Ground Water Management Area ("Management Area Order").

The 1991 Policy limited the processing and approval of water right applications for new consumptive uses of surface water and ground water in the BWRGWMA. This Management Plan maintains the restriction on new consumptive water uses and implements additional measures to manage the effects of ground water withdrawals on the aquifers within the BWRGWMA and on hydraulically connected sources of water.

#### **BACKGROUND**

The following three findings of fact from the Management Area Order summarize IDWR's reasons for establishing the Big Wood River Ground Water Management Area ("BWRGWMA"):

- 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.

The Management Area Order contained the 1991 Policy, which stated IDWR would not approve a new application for consumptive use unless the use proposed by the application would not injure existing water rights. Approvals of new applications to appropriate ground water for consumptive uses other than domestic largely ceased after issuance of the Management Area Order and the 1991 Policy.

Because of continued concerns about the impact of ground water diversions on both ground water and surface water sources in the Wood River Basin, IDWR, in coordination with the water users in the Wood River Basin, has initiated or addressed the following activities since issuance of the Management Area Order:

• 2010 – In cooperation with the U.S. Geological Survey, 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

- September 21, 2011 Issued order (a) creating the Upper Wood Rivers Water Measurement District, and (b) requiring all ground water users to install measuring devices prior to the 2014 irrigation season
- 2012 In cooperation with the U.S. Geological Survey, began work on development and calibration of a numerical groundwater-flow model for the Wood River Valley, including Silver Creek and ground water underlying the Bellevue Triangle
- September 17, 2013 Issued order (a) combining water districts for the Big Wood River, the
  Little Wood River, and Silver Creek; and (b) adding ground water rights from the Upper Big
  Wood River valley above Magic Reservoir and the Silver Creek drainage to the water district
  (Water District 37), and (c) abolishing the Upper Wood Rivers Water Measurement District
- February 2015 to June 2016 First conjunctive management delivery call by surface water users against ground water users dismissed on procedural grounds
- 2016 Published final report documenting version 1.0 of the Wood River Valley Groundwater-Flow Model (IDWR Ex. 2 at 14)
- March 2017 to June 2017 Second delivery call dismissed on procedural grounds
- 2018 through 2020 Proposals for Ground Water Management Plans submitted by ground water users to Director of IDWR
- 2019 Published final report documenting recalibrated version 1.1 of the Wood River Groundwater-Flow Model (IDWR Ex. 2 at 14)
- 2019 Published a summary of groundwater conditions in the BWRGWMA and a summary of Silver Creek Flow Measurements by IDWR staff between 2014 and 2018.
- 2020 Published a summary of seepage surveys by IDWR staff between 2017 and 2019 on Trail Creek near Ketchum.

In September of 2020, the Galena Ground Water District ("GGWD") and the South Valley Ground Water District ("SVGWD") submitted a rough draft proposal for a ground water management plan for the BWRGWMA. In October of 2020 the Big Wood/Little Wood Water User's Association ("BWLWWUA") submitted an alternate proposal for administration of water rights in the BWRGWMA. In response to the two proposals, IDWR Director Gary Spackman formed an advisory committee to draft a new management plan for the BWRGWMA. The twelve members of the advisory committee represent ground water users from GGWD, SVGWD, the Camas Prairie, and Wood River Valley municipalities and users of surface water from the Big Wood River, Silver Creek, and Little Wood River drainages. From the fall of 2020 through the spring of 2021 the advisory committee met approximately biweekly. At these committee meetings, analyses of the hydrology and hydrogeology of the Wood River Basin were

presented by experts and by those who had personally observed facts related to water availability and use.

On May 4, 2021, in response to severe drought conditions causing water supply shortages in the Wood River Basin, Director Spackman initiated administrative proceedings for the Wood River Basin. On July 1, 2021, , Director Spackman curtailed junior ground water 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, Director Spackman approved the ground water 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 ground water management plan for the BWRGWMA to the Director by December 1, 2021. The advisory committee resumed meeting on August 9, 2021.

#### **GEOHYDROLOGY OF THE BIG WOOD RIVER BASIN**

See Appendix C, 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."

Or

Copy/excerpt from the "Hydrology of the Wood River Basin" 6/28/2021 Final Order.

Include copy of Wood River Valley aquifer average annual water budget (1995-2014) at: <a href="https://idwr.idaho.gov/wp-content/uploads/sites/2/projects/wood-river-valley/20210805-AvgAnnualBudget">https://idwr.idaho.gov/wp-content/uploads/sites/2/projects/wood-river-valley/20210805-AvgAnnualBudget</a> WRV11.pdf

Include description of current aquifer conditions.

#### **DEFINITIONS (See Appendix A)**

#### **RELEVANT LEGAL PROVISIONS (See Appendix A)**

#### **GOALS**

This Management Plan, if properly implemented and adaptively managed, will:

Replace the existing IDWR Management Policy for the Big Wood River Ground Water Management Area, June 28, 1991.

Mitigate the effects of groundwater pumping on aquifers and senior surface water rights located on sources hydraulically connected to the aquifers. Mitigation strategies will also enhance stream flows and help alleviate high water temperature and diminished water quality in hydraulically connected water sources.

Manage the use of groundwater and surface water efficiently and effectively to ensure sustainable aquifers that support delivery of senior surface water rights and groundwater rights, and healthy riparian ecosystems in the Big Wood River (both above and below Magic Reservoir), Silver Creek, the Little Wood River and Camas Creek. (Combined and revised From Key Elements of a Holistic GWMP Suggested by BWLWWU & BWCC, 8/12/2 and NGOs Recommendations Objective 1c. dated 8/19/21.)

Protect existing surface and groundwater rights and water uses within the BWRGWMA, Water District 37, and Water District 37B.

Establish safe harbor from curtailment to groundwater users that divert groundwater within the BWRGWMA and Water Districts 37 and 37B who participate in and abide by the terms of this plan. (Similar to 2021 Term Sheet objective 1b and Goal 2 of Galena and South Valley GWDs [proposed] GWMP, 9/9/2020).

Minimize the impacts of water shortages on water users, the economy, and the environment. (Similar to 2021 Term sheet objective 1c. and NGOs Recommendations objective 1c. dated 8/19/21)

Identify, plan, and implement actions to stabilize or enhance groundwater levels in the Wood River Valley aquifer to minimize present and future impacts to holders of both surface water and groundwater rights. (Revised from proposed "Agreement between Participating Members of BWLWWUA & BWCC and Participating Members of Galena and South Valley GWDs, 10/01/2020).

Strategically augment the hydrologic data set for the Big Wood River Basin through the monitoring of groundwater levels, stream flows, and annual diversion volumes from both groundwater and surface water sources.

Organize the water users in the BWRGWMA so they can manage water supply issues locally, including implementation of certain management strategies identified in this Management Plan.

Increase reliability and enforcement of water use, measurement, and reporting within the BWRGWMA and Water Districts 37 and 37B. (Modified from objective 1d. from SWC-IGWA Settlement Agreement, 2015)

Ensure compliance with all elements and conditions of all water rights and ensure enforcement when there is not compliance. (Modified from objective 1e. from SWC-IGWA Settlement Agreement, 2015)

Continue moratorium on new appropriations of water from both groundwater and surface water sources within the BWRGWMA, but maintain similar limited exceptions described in the 1991 BWRGWMA Plan as described further in this plan.

#### WATER USE MANAGEMENT AND IMPLEMENTATION STRATEGIES

To achieve the goals of this Management Plan, the following long-term water use management and mitigation strategies or practices shall commence in 2022. Some practices are baseline actions implemented annually, while the magnitude of other actions change in response to water supply conditions. Some strategies shall be phased in over several years to achieve Management Plan goals.

#### Manage Groundwater Use Based on Predicted Annual Water Supply

Metric: Implement a predictive water supply method for use in 2022 and refine thereafter as needed. The current predictive water supply method is stated in Appendix D (methodology not yet developed).

Develop a method to forecast the annual water supply for surface water sources hydraulically connected to BWRGWMA aquifers. The method should be used to trigger implementation of staged qualifying water management practices to mitigate groundwater withdrawals from BWRGWMA aquifers, minimize shortages in water supply to senior surface water rights from sources hydraulically connected to the aquifers, and maintain stream flows and aquifer levels. The BWRGWMA Technical Work Group ("TWG") shall develop a method for review and approval by the Advisory Committee for implementation by December 1, 2022. The TWG should refine and improve the forecast method over time as needed.

The forecast methodology should predict and quantify the type of water year (example: above average, average, below average) by mid to late March of each year so groundwater users can plan water use and water mitigation decisions for the ensuing irrigation season. The forecast shall predict fill of Magic Reservoir and delivery of priority surface water rights in regulated areas of Water District 37 (Big Wood above Magic, Big Wood below Magic, and Silver Creek/Little Wood River) by comparing the forecasted water supply conditions to analog years in which Water District 37 delivery records are available. Selected historical analog years shall be used to estimate water supply shortages. The methodology may be updated to adjust the forecasted supply by July 1 each year to respond to changes in water supply conditions and modify water use or water mitigation practices accordingly.

Groundwater users may be allocated a volumetric annual groundwater consumptive use limit or reduction based on the predicted water supply and knowledge of water administration challenges in analogous years. Consumptive use volume limits or reductions may be proportioned based on locations within the BWRGWMA as shown in Table 1.

	Water Supply Year			
	Above Average Water Supply	Average Water Supply	Below Average Water Supply	
GWMA Area or River Reach	Volume Reduction <sup>1</sup>	Volume Reduction <sup>2</sup>	Volume Reduction <sup>2</sup>	
Big Wood River Abv Dry Beds	X AF	Y AF	Z AF	
Big Wood River Blw Dry Beds	X AF	Y AF	Z AF	
Silver Creek/Little Wood R	X AF	Y AF	Z AF	
Camas Creek Drainage	X AF	Y AF	Z AF	

<sup>&</sup>lt;sup>1</sup> Annual (on-going) baseline volume reduction

Table 1. Conceptual view of volume reductions based on location within BWRGWMA.

The holders of junior priority groundwater rights in the BWRGWMA may implement specific mitigation or water conservation practices and offsets during a low water supply irrigation season to address forecasted water supply shortages. The extent of water conservation practices and offsets implemented during a low water supply year may depend on severity of drought conditions. Water conservation practices and offsets are outlined in this plan. A conceptual view of forecast methodology applied to staged water management practices and offsets is presented in Table 2.

	Water Supply Year		
Qualifying Water Conservation or Volume Reduction Offset Activity	Above Average Water Supply	Average Water Supply	Below Average Water Supply
	Volume Reduction <sup>1</sup>	Volume Reduction <sup>2</sup>	Volume Reduction <sup>2</sup>
Fallow Irrigated Acres	X AF	Y AF	Z AF
Pivot End Gun Removal	X AF		
Irrig Season Reduction	X AF	Y AF	Z AF
Reduction by Crop Use	X AF	Y AF	Z AF
Water Use Conversion	X AF	Y AF	Z AF
Storage Water Delivery	X AF	Y AF	Z AF
Infrastructure/Efficiency Improvement Projects	X AF		
Recharge	X AF		
Cloud Seeding	X AF	-	
	ΣXAF	ΣΥΑΕ	ΣZAF

<sup>&</sup>lt;sup>1</sup> Annual (on-going) baseline volume reduction

Table 2. Conceptual view for implementation of water conservation practices based on forecasted water supply.

<sup>&</sup>lt;sup>2</sup> Additional/incremental volume reduction

<sup>&</sup>lt;sup>2</sup> Additional/incremental volume reduction

Note: Conservation/Offset activities listed are examples

#### A. Qualifying Groundwater Conservation Practices

#### **Consumptive Use Volume Reductions**

Metric: Starting 2022, and on an annual basis, reduce irrigation groundwater pumping by X percent. Reduce non-irrigation pumping by Y percent. Reduction of average pumping using baseline period 2016 thru 2020. Percent reductions may vary depending on location within the BWRGWMA.

The primary consumptive use strategies shall be fallowing irrigated land (for irrigation use) and reduced ground water pumping (for non-irrigation uses). Various qualifying offset practices may be implemented as alternatives to fallowing (for irrigation) and reduced pumping (for other uses) for a limited amount of the consumptive use reduction requirement in the BWRGWMA. Minimum or baseline reduction practices shall be implemented in years having above average water supply conditions. Additional reductions shall be implemented in years having average to below average water supply conditions. Additional reductions in dry years may be offset by other qualifying practices that are quantified on a one-for-one basis. For example, an additional 1 Acre-Foot volume reduction necessary in a dry year could be offset by delivery of 1 Acre-Foot of storage water from the Snake River, or by conducting 1 Acre-Foot of qualifying recharge, or paying 1 Acre-Foot of qualifying cloud seeding benefits.

Consumptive use reduction practices may vary depending on type of water use.

#### A. Irrigation Use

Groundwater irrigators within the BWRGWMA may reduce groundwater consumptive use by a specified percent of average over the five year baseline period 2016 through 2020. The specified percent reduction may apply to irrigated acres and total pumping within each groundwater district (Galena and South Valley) or other irrigation organization (example: Camas Groundwater Users). Groundwater districts or other irrigation organizations may require conservation or reduction management plans from individual members that are specific to their operations to accomplish the specified percent reduction goal.

Reduction of groundwater consumptive use may be achieved through the following practices:

- 1. Fallowing irrigated acres
  - a. Voluntary fallowing (MOUs)
  - b. Incentivize fallowing through CREP and matching contributions from GWDs or other groundwater user entities
- 2. Center pivot end gun removal
  - a. Prioritize pivots using a primary or supplemental groundwater source
  - b. Acres under end guns are permanently fallowed
  - c. Verification and monitoring is simple

 Irrigation system/equipment improvements (change sprinkler packages, install low elevation spray application (LESA) or drip irrigation equipment, incorporate pivot and soil monitoring practices to reduce demand, or other similar practices)

- 4. Planting crops requiring less water
- 5. Irrigation season reduction
  - a. Groundwater users will not irrigate sooner than [date] or later than [date]
  - b. Allow changes based on water supply conditions (further reduce season or relax baseline start/end dates depending on type of season)

#### B. Municipal Use

- 1. Achieve specified reductions phased-in over three years.
  - a. Reductions may be aided by metering and tiered pricing
  - b. Reductions may be aided by water re-use/reclamation
  - c. Other reduction strategies?

#### C. Other Water Uses

- 1. Achieve specified reductions phased-in over three years.
- 2. Individuals holding non-irrigation groundwater rights may join groundwater districts and participate in district-wide reduction program.

#### **Water Use Conversions**

Metric: Complete a sufficient number of water right/water use conversions by 2025 to increase stream flows by X cfs (or meet other targeted benchmarks like seasonal stream flows at specific gage stations, groundwater levels at selected wells/sites or other benchmarks as may be recommended by the Technical Work Group). Annually report conversions so cumulative impacts can be modeled or evaluated.

For the purpose of this Management Plan, water use conversions or conversion projects either change the nature of use of surface water irrigation rights to mitigation or recharge purposes or change the places of use of surface water irrigation rights to lands formerly irrigated with ground water. For example, certain senior priority surface water irrigation rights in the Bellevue Triangle may be changed to mitigation or groundwater recharge use. Irrigated lands under the same surface water rights are fallowed or retired. Water under the rights are delivered to the same canal/point of diversion and conveyed through the existing canal system and either injected directly to Silver Creek or a tributary of Silver Creek, or injected to a recharge facility having a short or limited retention time, thereby resulting in an increase to stream flows in both Silver Creek and the Little Wood River. A second water use conversion example may include a change in the place of use and point of diversion of one or more senior surface water irrigation rights from Silver Creek to one or more locations off the Little Wood River near Richfield or Shoshone.

Groundwater users in the BWRGWMA may collaborate towards the execution of water conversions aimed at reducing consumptive water use, enhancing or stabilizing aquifer levels,

and enhancing flows of surface water sources hydraulically connected to aquifers within the BWRGWMA. Water conversions may be implemented starting 2022, or ramp up over the following two to three years and continue annually long-term. Additional conversions may be implemented on individual dry years as needed in response to water supply shortages resulting from drought and as determined by the predictive water supply methodology.

Water conversions may include long-term lease or acquisition/sale of senior priority surface water rights (or portions thereof) located within the BWRGWMA that are rented for/transferred to mitigation or recharge purposes to increase flows of surface water sources such as springs and streams tributary to Silver Creek, or the Big Wood River above Magic Reservoir. Qualifying conversions require fallowing or retirement of irrigated land. Groundwater rights supplementing surface water rights identified for any long-term lease or acquisition/sale must be included in the conversion, and the lands subsequently idled. The original irrigated lands associated with such conversions must be fallowed during the lease/rental term, or fallowed pursuant to water right transfers involving changes of beneficial use from irrigation to mitigation or recharge.

Selection of water rights and lands shall be strategic to maximize increases to stream flows and aquifer levels. The Wood River Aquifer Model V1.1 may be used to evaluate proposed conversions.

The Galena and South Valley Ground Water Districts are well-positioned to identify and execute water conversions, but other BWRGWMA groundwater users, including cities or other entities, may participate in or contribute towards water conversions. Local water users or water interest entities may develop a local committee or exchange to help facilitate water conversions including identification and packaging of water supply bank lease/rental applications for review and approval by IDWR.

Similar water conversion approaches may be used to convert groundwater use to surface water use, but conversion opportunities are likely limited in the BWRGWMA since a majority of irrigated lands have both surface water and groundwater rights. The number of available senior surface water rights that are deliverable for a full irrigation season during low water years coupled with the high value of such senior water rights may further diminish surface water to groundwater conversion project opportunities.

#### **B.** Qualifying Consumptive Use Volume Reduction Offsets

#### **Storage Water Delivery**

Metric: Annually secure a minimum of X Acre-Feet of storage water from the Snake River for delivery to senior surface water right holders on the Big and Little Wood Rivers diverting downstream from the Milner-Gooding Canal. Secure additional storage water in drought years as needed in response to water supply shortages resulting from drought and as determined by the predictive water supply methodology.

Groundwater users within the BWRGWMA may secure a long-term private lease of some minimum amount of storage water from the upper Snake River system in Water District 01 to meet or offset impacts from pumping on hydraulically connected surface water sources used to satisfy senior surface water irrigation rights on the Little Wood and Big Wood Rivers located within the Big Wood Canal Company ("BWCC") and American Falls Reservoir District No. 2 ("AFRD2") service areas. Stored water is conveyed through the Milner-Gooding Canal operated by AFRD2, and delivered to holders of senior Big Wood and Little Wood River rights appurtenant to lands located below the Milner-Gooding Canal. Groundwater users within the BWRGWMA shall be responsible for any conveyance or wheeling costs charged by AFRD2 associated with actual delivery of stored water.

A minimum annual storage water supply for senior irrigation surface water right holders offers some water supply certainty from year to year regardless of annual water supply conditions. Additional storage may be obtained to offset shortages to senior surface water rights in years where low water supply is predicted.

#### **Managed Aquifer Recharge**

Metric: Develop a recommended plan by November 1, 2022 that identifies potential large recharge facilities to facilitate recharge when Magic Reservoir fills.

Implement strategic aquifer recharge activities, utilizing available high flow water when Magic Reservoir fills or is projected to fill, and in-priority surface water rights. Recharge activities must be implemented in accordance with appropriate water rights that include recharge as a beneficial use of water.

The BWRGWMA advisory committee, Water District 37, IDWR, TWG and other water users or water interest groups shall complete a recharge plan by November 1, 2022. The recommended plan should include possible location, conveyance structures, and sizing of recharge facilities, and other proposals that may convert deliverable priority surface water rights to recharge through water right transfers, water supply bank lease/rental arrangements or similar water transaction arrangements. High flow water, when available, may be diverted to recharge projects as a temporary water right approval pursuant to Idaho Code § 42-202A(5)(b).

#### **Cloud Seeding**

Quantified benefits from existing cloud seeding efforts may be considered and used as an offset for required volume reductions if a greater proportion of the costs are assumed by groundwater users or if cloud seeding efforts are expanded and paid for by groundwater users (example: cloud seeding could be expanded to the Camas Prairie/Water District 37B drainage area if not already included).

Consider periodic review of cloud seeding benefits and costs compared to benefits and costs of other mitigation strategies or projects that may be implemented under this Management Plan.

# Water Conservation and Infrastructure Efficiency, including Stream Channel Maintenance Projects

Groundwater users may contribute funds for infrastructure improvement projects that enhance the efficiency, resiliency, and sustainability of water supplies. Qualifying projects may include stream channel maintenance, canal and lateral piping, canal lining, or similar projects or measures. The BWRGWMA advisory committee should identify and prioritize projects, and include project timelines as part of this Management Plan.

Contributions or commitments can be made through water use entities such as GWDs, canal companies (example: BWCC), individual right holders (cities for example), or through voluntary user groups (BWLWWUA or Camas Groundwater Group). Contributions may be made as part of a cost-share arrangement among multiple entities or parties, including grant augmented funding from the Federal Government, Non-Governmental Organizations or the State.

Groundwater and surface water users in Water District 37 support funding of water stream channel maintenance projects including measures taken to assure flows between Sportsman's Access and Station 10 gages, including rodent control, bank stabilization, or other channel maintenance. The GWRGWMA advisory committee will meet periodically starting in 2022. The committee may identify, evaluate and plan additional water conveyance efficiency and stream channel maintenance projects that reduces water conveyance losses.

#### **MEASURING AND MONITORING**

#### Measurement and Monitoring of Surface Water and Groundwater Diversions

Metric: Key surface water and groundwater diversions on Silver Creek and tributaries need continuous monitoring and data collection to support Water District 37 water delivery and administration, and Management Plan objectives. Implement continuous monitoring and data collection on the following prioritized diversions/re-diversions by June 15, 2022, and other important diversions/re-diversions by June 15, 2023:

Insert a table, or refer to a list in an appendix.

The BWRGWMA advisory committee, Water District 37 watermaster, TWG, and IDWR shall coordinate to develop a broader plan for improved monitoring, data collection and reporting for other diversions in Water Districts 37 and 37B by January 2023, and implement plan by 2025.

The BWRGWMA advisory committee, Water District 37, IDWR, TWG and other water users or water interest groups shall explore the use of telemetry, or other technologies, to streamline

monitoring and reporting obligations in order to reduce the burden on the Basin 37 watermaster, as well as foster partnership through increased transparency and accountability. The groups will present a final plan by January 1, 2023, and complete implementation of the plan by the start of the 2025 irrigation season.

#### **Groundwater Monitoring and Benchmarks**

Metric: TBD

Establish a set of criteria to ensure that the efforts implemented through the Management Plan are stabilizing groundwater levels. Consider groundwater level benchmarks or targets in select or mutually agreed upon wells pursuant to recommendations from Technical Work Group.

#### Water Right Accounting in Water District 37

Metric: Groundwater and surface water users in Water District 37 support IDWR efforts to develop a water right accounting program for Water District 37 by 2024.

Water District 37 water users support development of a water right accounting program similar to programs developed in other basins and water districts (01, 11, 34, 63, and 65). Accounting will be prioritized for the Big Wood River below Magic Reservoir (including Magic Reservoir) and the Little Wood-Silver Creek systems to:

- Allocate available natural flow and determine water right priority cuts by computing river reach gains/losses;
- Track natural flow and storage delivery, groundwater injections/re-diversions;
- Adjust priority cuts based on actual use/demand.

#### **ADAPTIVE MANAGEMENT MEASURES**

If the water use management strategies outlined in this Management Plan are implemented but the metrics or benchmarks established by this Management Plan are not met, then additional water management and mitigation actions as outlined in this Management Plan and as recommended by the BWRGWMA Advisory Committee shall be implemented by groundwater users to meet the stated metrics or benchmarks.

#### **PERFORMANCE**

If the water use management strategies outlined in this Management Plan are not implemented, or if the metrics/benchmarks established by this Management Plan are not achieved through additional adaptive management measures, then the Director may curtail groundwater rights, starting with rights having the most junior priority dates, to achieve the necessary metrics/benchmarks specified in this Management Plan.

#### ADVISORY COMMITTEE AND TECHNICAL WORK GROUP

The Advisory Committee recommends that the Director hold a public meeting in the local area to present the Management Plan.

The Director formed the BWRGWMA advisory committee on October 28, 2020. The committee is comprised of groundwater and surface water users within the GWMA and Basin 37.

The Advisory Committee recommends that the Director authorize continuation of the Advisory Committee and the Technical Work Group to assist with implementation of Management Plan goals and strategies. The Advisory Committee should meet periodically to ensure that the provisions of the plan are properly implemented. The Advisory Committee should frequently review this plan and work with IDWR to update the plan as needed.

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

The Management Plan shall be reviewed at a minimum of every X years and modified as needed by the Advisory Committee. Any modifications to the Plan shall be submitted to the Director for approval.

#### **NEW APPROPRIATIONS**

The 1991 Policy restricted the issuance of new water rights in the BWRGWMA as follows:

- "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."
- "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."
- "[A]pplications 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."
- "While an incorporated city has wide latitude under state law to beneficially use it 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."

These restrictions minimized new depletions of water in the BWRGWMA after 1991 and contributed to aquifer stabilization throughout the BWRGWMA as compared to the pace of

ground water level declines prior to 1991.<sup>1</sup> For this reason, limiting new consumptive uses of water must remain a fundamental component of water administration in the BWRGWMA. Consistent with its authority stated in Idaho Code § 42-1805(7) and Rule 55 of the Department's Water Appropriation Rules (IDAPA 37.03.08), IDWR should suspend action on applications to appropriate water and the issuance of permits to appropriate water as necessary to protect existing water rights. The reissued temporary moratorium should include the following exceptions and restrictions:

- Moratorium does not apply to non-consumptive uses.
- Moratorium does not apply to applications that will have no effect on prior water rights because of their locations, insignificant consumption of water, or mitigation provided by the applicant to offset injury to other water rights.
- Moratorium does not apply to applications which, as determined by the Director, require
  consideration and approval to protect and advance the public interest irrespective of the
  general moratorium.
- Moratorium does not apply to domestic and stockwater rights that meet the definition of "domestic purposes" set forth in Idaho Code § 42-111.
- Municipalities, multiple ownership subdivisions, and mobile home parks??????

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<sup>&</sup>lt;sup>1</sup> The BWRGWMA is within IDWR Administrative Basin 37, which is subject to the 1993 Amended Moratorium Order in the Matter of Applications for Permits for Diversion and Use of Surface and Ground Water within the Eastern Snake River Plain Area and the Boise River Drainage ("ESPA Moratorium"). However, while the ESPA moratorium applies in the portions of Basin 37 not in the BWRGWMA, the moratorium does not change or affect the administration of any area that has previously been designated as a critical ground water area or a ground water management area, such as the BWRGWMA.

## APPENDIX A

#### Definitions and Relevant Legal Provisions

#### **Definitions**

<u>Acre-Foot (AF).</u> A volume of water sufficient to cover one (1) acre of land one (1) foot deep and is equal to forty-three thousand five hundred sixty (43,560) cubic feet.

<u>Big Wood River Ground Water Management Area.</u> That part of the Wood River Basin designated the Big Wood River Ground Water Management Area in the Order in the Matter of Designating the Big Wood River Ground Water Management Area dated June 28, 1991, and shown on the map in Appendix B of this plan.

BWRGWMA. Big Wood River Ground Water Management Area.

<u>Cubic Foot per Second (cfs):</u> A rate of flow approximately equal to four hundred forty-eight and eight-tenths (448.8) gallons per minute and also equals fifty (50) Idaho miner's inches.

<u>Director</u>. The Director of the Idaho Department of Water Resources.

<u>Ground Water District (GWD).</u> A district established pursuant to Idaho Code Title 42, Chapter 52.

<u>Ground Water Management Area.</u> Any groundwater basin or designated part thereof as designated by the Director pursuant to Section 42-233(b), Idaho Code.

<u>Groundwater</u>. Water under the surface of the ground whatever may be the geological structure in which it is standing or moving as provided in Section 42-230(a), Idaho Code.

<u>IDWR.</u> The Idaho Department of Water Resources.

IWRB. The Idaho Water Resources Board.

<u>Surface Water.</u> Rivers, streams, lakes and springs when flowing in their natural channels as provided in Sections 42-101 and 42-103, Idaho Code.

<u>Water District.</u> An instrumentality of the state of Idaho created by the Director as provided in Section 42-604, Idaho Code, for the purpose of performing the essential governmental function of distribution of water among appropriators under Idaho law.

<u>Watermaster.</u> A person elected and appointed as provided in Section 42-605, and Section 42-801, Idaho Code, to distribute water within a water district.

<u>Water Right.</u> The legal right to divert and use or to protect in place the public waters of the state of Idaho where such right is evidenced by a decree, a permit or license issued by the Department, a beneficial or constitutional use right or a right based on federal law.

#### **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 authorizes the Director to create a groundwater management area if he determines an area "may be approaching the conditions of a critical ground water area."

Idaho Code § 42-233b further provides:

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.

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 ground water management plan.

Idaho Code§ 42-223(4) provides 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.

## **APPENDIX B**

IDWR Order Designating the Big Wood River Ground Water Management Area

June 28, 1991

## **APPENDIX C**

Map of the Big Wood River Ground Water Management Area

## APPENDIX D

Predictive Water Supply Methodology