# Memorandum

From: Shelley W. Keen and Corey Skinner
To: BWRGWMA Management Plan Advisory Committee
Date: August 14, 2024
Subject: Concepts for BWRGWMA Management Plan Updates

## Introduction

IDWR staff generated this memorandum to facilitate, frame, and focus the ongoing discussions about updating the Big Wood River Ground Water Management Area ("BWRGWMA") Management Plan ("Plan"). The concepts listed in this memorandum are derived from our understanding of the BWRGWMA Advisory Committee ("Committee") deliberations, including the information presented to the Committee, in meetings from February through July of 2024. IDWR staff involved in drafting this memorandum think incorporating the listed concepts into the updated Plan will lead to effective management of the ground water and hydraulically connected surface water resources, consistent with Idaho Code § 42-233b, in the interest of water users. If the Committee adopts these concepts or a similar list of concepts, IDWR can begin updating the draft Plan to incorporate them. Quantification of target flow rates, storage water volumes, pumping reduction volumes, fallowed acres, etc., can be added following additional Committee deliberations informed by information supplied by the Technical Working Group.

## **Plan Goal**

- 1. Manage the aquifers in the BWRGWMA and hydraulically connected surface water sources to achieve flows in the Little Wood River and Big Wood River sufficient to significantly reduce the likelihood of a delivery call from holders of senior-priority surface water rights against holders of junior-priority ground water rights.
- 2. Manage "the effects of ground water withdrawals on the aquifers from which the withdrawals are made and any other hydraulically connected sources of water." Idaho Code § 42-233b.
  - Provide seasonal predictability of available surface and ground water supplies for all users such
    - that they can develop practical plans to optimize their use.
  - Establish safe harbor from curtailment under Idaho Code § 42-233b for BWRGWMA ground
    - water users who participate in and abide by the terms of this Management Plan.

## 1.

2.3. Avoid the term "Aquifer Health" and focus less on long term aquifer storage and more on the aquifers' impact on the supply of water in streams hydraulically connected to the BWRGWMA aquifers.

## **Flow Targets**

- 1. Retain a flow target at Station 10 on the Little Wood River<del>, but possibly vary it depending on forecasted or current water supply conditions</del>.
- 2. Establish target flows into Magic Reservoir on the Big Wood River, Camas Creek, and Willow Creek.
- 3. Require Galena GWD and South Valley GWD to implement management actions in dry years to maintain flows in the Big Wood River, Willow Creek, and the Little Wood River.
- 4. Require Camas Prairie ground water users to implement management actions in dry years to maintain flow from Camas Creek into Magic Reservoir.
- 5. Require the cities, Sun Valley Corporation, and Sun Valley Water and Sewer District ("Cities") to take concrete management actions in dry years to maintain Big Wood River flows. (Possible examples include reduced ground water pumping, paying others to fallow land, or increased CIEF contributions for Big Wood River projects.)

5.6. Provide a way for non-participants to "on-ramp"

## Make Regular Proactive Management Actions More Dependent on Water Supply Conditions and Less Dependent on Static Baseline Requirements

- 1. Retain the April 1 through September 30 forecast to establish whether a year is wet or dry and to trigger responsive management actions.
- 2. Include at least one wet year tier in the table of water supply dependent contributions.
- 3. De-emphasize baseline management actions, except for CIEF contributions and cloud seeding, in favor of variable management actions dependent on the water supply forecast or ground water levels (or both). Water supply forecasts are based on flows at the Hailey Gage. Ground water levels could be determined from a baseline groundwater level index in the Bellevue Triangle. (To illustrate this principle and frame discussions, IDWR staff prepared and attached a draft table that could replace Table 1 on page 11 of the current Plan.)
- 4. Adjust management actions once per irrigation season, perhaps on June 1, based on actual water supply conditions or ground water levels (or both).

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

- 1. Retain the CIEF.
- 2. Give the CIEF Committee the responsibility to acquire and pay for Snake River storage water.
- 3. Divide the CIEF into multiple funds Projects, Storage, Cloud Seeding, and possibly Fallowing Compensation.
- 4. Empower the CIEF to offer compensation for the fallowing of irrigated land to achieve Plan objectives.
- 5. Incorporate a mechanism to increase CIEF contributions over time to overcome economic inflation.

## **Storage Water**

- 1. Retain the requirement for ground water users to acquire and supply Snake River storage water to lower Little Wood River water users and lower Big Wood River water users.
- 2. Recognize that the need to acquire and deliver Snake River storage water is influenced by the implementation of the Condition 161 exchange.

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## **Irrigation Season**

- 1. Retain a delay in starting the irrigation season.
- 2. Retain the early irrigation shutoff.
- 3. Clarify the expected irrigation startup and shutoff dates for the Cities.

#### Fallowing

1. Define "fallowing" to allow for establishing a cover crop with early season or late season irrigation where surface water is not available.

#### Enforcement

1. Recommend that the Director issue an order pursuant to Idaho Code § 42-233b finding that in certain dry years the ground water supply in the BWRGWMA is insufficient to meet the demands of water rights within the BWRGWMA and instructing the watermasters of Water Districts 37 and 37B to curtail junior ground water rights not entitled to safe harbor through participation in the Plan via a GWD, Water District 37B Ground Water Association, the Cities, or CIEF contributions.