#### **BEFORE THE DEPARTMENT OF WATER RESOURCES**

#### OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATIONS FOR PERMITS FOR THE DIVERSION AND USE OF SURFACE AND GROUND WATER WITHIN THE SNAKE RIVER BASIN

AMENDED SNAKE RIVER BASIN MORATORIUM ORDER

#### SUMMARY

This order expands the existing Eastern Snake River Plain Moratorium to include consumptive use of all surface and ground water tributary to the reach of the Snake River between King Hill and Swan Falls Dam to protect existing water rights, including decreed minimum stream flow water rights. This order modifies certain exceptions related to domestic uses and clarifies the application of the non-consumptive use exception to municipal water use and domestic water use. This order also re-establishes a moratorium on the issuance of permits for new consumptive uses from surface and ground water tributary to the Snake River upstream from Milner Dam to protect existing water rights.

#### **PROCEDURAL HISTORY**

On May 17, 2022, Deputy Director Mat Weaver, while serving as acting director, issued the *Order Establishing Moratorium for the Big Wood River Ground Water Management Area* ("*Big Wood Moratorium*"). The order established a moratorium on the processing and approval of new and pending applications for permits to appropriate water from surface and ground water sources within the Big Wood River Ground Water Management Area ("BWRGWMA"). *Big Wood Moratorium*, at 7.

On October 21, 2022, Director Gary Spackman issued the *Amended Snake River Basin Moratorium Order* ("*Snake Moratorium*"). The order established a moratorium on the processing and approval of new and pending applications for permits to appropriate water from the Snake River upstream from Swan Falls Dam and all surface and ground water sources in the trust water area and the non-trust water area, subject to certain conditions. *Snake Moratorium*, at 27.

Several affected water users filed petitions challenging the two moratoriums. The petitions initiated contested case proceedings. The parties engaged in several joint, informal settlement conferences but did not reach a resolution.

Director Spackman held a joint prehearing conference on March 10, 2023. During the joint prehearing conference, the parties agreed that language found in both moratorium orders presents a common issue. Both orders state: "Applications for municipal water use and for domestic use from community water systems shall be considered fully consumptive." *Big Wood Moratorium*, at 8; *Snake Moratorium*, at 29. This issue is referred to as the "Fully Consumptive Issue" in this order.

Director Spackman noted his intention to consolidate the contested proceedings, with the understanding that each issue would be taken up consecutively. The parties did not object. Therefore, on March 31, 2023, the Director consolidated the contested proceedings for the *Big Wood Moratorium* and *Snake Moratorium* matters for hearing pursuant to IDAPA 37.01.01.555.

On August 30, 2023, certain Municipal Providers moved for partial summary judgment on the Fully Consumptive Issue. The Surface Water Coalition, South Valley Ground Water District, Galena Ground Water District, Big Wood and Little Wood Water Users Association, and Big Wood Canal Company opposed the motion.

On August 31, 2023, Director Spackman retired. Governor Little appointed Deputy Director Weaver to succeed Director Spackman as director of the Idaho Department of Water Resources ("Department"). Director Weaver assumed the position on September 1, 2023.

On October 12, 2023, Director Weaver denied the Municipal Providers' motion, and clarified the Fully Consumptive Issue:

[T]he issue for hearing is whether the Director's adoption of a policy to treat municipal and domestic uses as fully consumptive, given their potential to be fully consumptive, is appropriate.... The Director intends to receive and consider the evidence presented in support of and in opposition to amending the moratorium orders. The parties should expect the hearing to be an opportunity to persuade the Director to amend or retain the policy consideration that all new applications for municipal and domestic uses from community water systems shall be considered fully consumptive.

#### Order Denying Motion for Partial Summ. J., at 6.

On October 16–19, 2023, Director Weaver held an evidentiary hearing in this case. The Director heard testimony and admitted exhibits in support of and in opposition to the issues. At the conclusion of the hearing, the Director authorized the parties to submit simultaneous post-hearing briefs for the issues no later than close of business November 17, 2023. The parties timely submitted their closing briefs, and the Director took the matter under advisement.

#### **ISSUES AT HEARING**

#### The Fully Consumptive Issue

Because municipal and domestic uses may be rendered fully consumptive, the Director ordered in the *Snake Moratorium* that municipal and domestic uses "shall be considered fully consumptive" for purposes of future applications. As the Department's Eastern Regional Manager, James Cefalo, explained at his deposition, part of the rationale for the policy is that "it would be very difficult . . . to track the consumptive fraction of water uses for municipalities or even subdivisions throughout the state." *Bricker Aff.* Ex. 1, Cefalo Depo. Tr. 71:22–72:3. Mr. Cefalo also noted the policy addresses the Department's enforcement concerns should a municipality or subdivision, for example, change their effluent treatment method from a mostly nonconsumptive treatment to a mostly consumptive treatment:

If you have a subdivision that says, well, our drinking -- this is our drinking water so we're going to consider it mostly nonconsumptive, and we are recharging it through a rapid infiltration. And then all of a sudden that is not a viable option anymore and they have to land apply it and go to a mostly consumptive treatment, the department really has no enforcement ability to curtail that water use. Right? Because then you have a public health emergency. We can't shut people's drinking water off without creating problems.

Id. at 72:12–23. Mr. Cefalo continued:

I would say that our enforcement options become quite limited when we're starting to deal with drinking water for subdivisions that are already in existence, right? All of these homes have been built, all these people are drinking and using that water in their homes every day, it becomes very difficult to then say, well, your mitigation is-you have not mitigated for now this consumptive use because you're land applying, but we don't really have the power to shut off your drinking water.

*Id.* at 73:1–10. In light of these challenges, the Director adopted the fully consumptive policy for future applications for municipal and domestic uses.

As explained in the Order Denying Motion for Partial Summary Judgment, the issue at hearing was not whether municipal and domestic uses are fully consumptive but rather whether it was an appropriate policy for the Department to consider municipal and domestic uses to be fully consumptive, given their potential to be fully consumptive. *Ord. Denying Mot. for Partial Summ. J.*, at 3-4.

In opposition to the fully consumptive policy, the Municipal Providers argue in their posthearing brief that "the evidence presented at the hearing overwhelmingly showed that (a) municipal water use rarely (if ever) is fully consumptive, and (b) the Department can condition and administer new municipal water rights to ensure depletions are fully mitigated." *Mun. Providers' Post-Hr'g Br.*, at 2. The Municipal Providers offer several suggestions for how the Department could condition a water right as an alternative to the fully consumptive policy. Ultimately, however, the Municipal Providers request the language concerning municipal water use be amended to provide as follows:

Applications for municipal water use and for domestic use shall be evaluated on a case-by-case basis to determine whether the proposed use, or some portion thereof, is non-consumptive.

### Id. at 14.

In opposition to the proposal that the Department could condition permits rather than assuming consumptive use, the Surface Water Coalition argues in its post-hearing brief that additional conditions are inappropriate. *SWC Post-Hr* 'g *Br*., 8–9. In support of its position, SWC offers four arguments, which are based on the hearing testimony of Mr. Cefalo:

First, IDWR does not have the ability to change the material terms of a water right based upon its conditions. Second, the burden on IDWR from water rights processing is already great and would increase with additional conditions placed on water rights that would need subsequent approval and enforcement. Third, any change to a permit would require public notice, which would likely lead to protests, hearings, appeals, and complicated and burdensome legal challenges that are expensive and time consuming for IDWR. Fourth, new applicants and permit holders already do not always comply with IDWR conditions and enforcement of existing decrees, permits, and licenses is difficult. Currently IDWR does not have the ability to properly monitor and enforce heavily conditioned municipal water rights.

Id. The SWC requests the Director maintain the fully consumptive policy.

Based on the evidence and arguments presented in support of and in opposition to the fully consumptive policy, the Director finds it is necessary and appropriate to adopt an amended fully consumptive policy. As detailed in the third paragraph in the Order below, the Director will presume new municipal and domestic uses to be fully consumptive but will allow an applicant to submit evidence to rebut the presumption.

#### **Other Issues**

At the hearing, Department Eastern Regional Manager James Cefalo explained that some water users had raised concerns regarding certain definitions in the moratorium orders. Vol. I, Tr. p. 35–38. Mr. Cefalo agreed that the reference to "municipal water use" in the orders should be changed to "municipal purposes." He also agreed that the term "community water system" should be defined. He also suggested that references to "noncommunity water system" should be changed. The Director agrees that these changes should be made and will make changes to address these concerns.

### **Amended Final Order**

The Director has considered the record before the Department including the testimony of the witnesses, the exhibits admitted at hearing, and the arguments of counsel. The Director agrees that certain changes to the original order are necessary. The following findings of fact and conclusions of law are mostly verbatim from the original order, with the modifications discussed above.

### BACKGROUND

### Snake River Downstream from Milner Dam

The Idaho Water Resource Board ("Board") first established minimum stream flows at the USGS gauging station on the Snake River near Murphy ("Murphy Gage") in the 1976 Idaho State Water Plan.<sup>1</sup> In 1986, the Board amended the Idaho State Water Plan to increase minimum

<sup>&</sup>lt;sup>1</sup> Idaho Water Res. Bd., (1976). *The State Water Plan – Part Two* (p. 116). <u>https://idwr.idaho.gov/wp-content/uploads/sites/2/iwrb/1976/1976-State-Water-Plan-Part-2.pdf</u>

stream flows at Murphy Gage.<sup>2</sup> The 1986 Idaho State Water Plan also stated, "[i]t is the policy of Idaho that the ground and surface water of the basin be managed to meet or exceed . . . the minimum stream flows at Murphy gauging station."<sup>3</sup> The current Idaho State Water Plan also included the policy of managing Snake River basin water resources to meet or exceed the minimum stream flows at Murphy.<sup>4</sup>

Minimum stream flow water rights at Murphy Gage were decreed in the Snake River Basin Adjudication to the Board and Idaho Power Company. The Board holds decreed water rights 02-201, 02-223, and 02-224 for minimum stream flows in the Snake River at the Murphy Gage of 3,900 cfs (April 1 to October 31) and 5,600 cfs (November 1 to March 31). Idaho Power Company holds decreed water rights 02-100, 02-2032A, 02-4000A, and 02-4001A that also recognize and protect, in priority, average daily flows in the Snake River at Murphy Gage of 3,900 cfs (April 1 to October 31) and 5,600 cfs (November 1 to March 31), subject to subordination conditions.

Idaho Code § 42-203B(2) placed previously asserted Idaho Power Company hydropower water rights in excess of the minimum stream flows in a State administered trust, subordinating those hydropower flows to future water rights known as "Trust Water Rights."<sup>5</sup> Trust Water Rights are subject to curtailment if flows in the Snake River fall below the decreed minimum stream flow water rights.<sup>6</sup> Flow conditions in the Snake River have changed since 1986, reducing the availability of water for additional Trust Water Rights.

Preventing the further reduction of flows available to existing water rights—including decreed minimum stream flow water rights and Trust Water Rights—justifies the expansion of the Eastern Snake River Plain Moratorium.

## Snake River Upstream from Milner Dam

Since the early 1900s, the diversion and use of Snake River water and many of its tributaries above Milner Dam have been regulated because the demand for water exceeded the supply. In more recent years, the Department has created water districts for the purpose of measuring, regulating, and when necessary, curtailing diversion of junior ground water rights during times of water shortage for senior water rights holders.

<sup>&</sup>lt;sup>2</sup> Idaho Water Res. Bd., (1986). *Idaho State Water Plan* (p. 35). <u>https://idwr.idaho.gov/wp-content/uploads/sites/2/iwrb/1986/1986-State-Water-Plan.pdf</u>

<sup>&</sup>lt;sup>3</sup> Id.

<sup>&</sup>lt;sup>4</sup> Idaho Water Res. Bd., (2012). *Idaho State Water Plan* (p. 43). <u>https://idwr.idaho.gov/wp-content/uploads/sites/2/iwrb/2012/2012-State-Water-Plan.pdf</u>

<sup>&</sup>lt;sup>5</sup> A "Trust Water Right" is "[a] water right acquired pursuant to Idaho Code § 42-203B which diverts water first appropriated under hydropower water rights held in trust by the State of Idaho." Order Am. Final Unified Decree, at 2, *In re SRBA Case No. 39576* (Twin Falls Cnty. Dist. Ct. Idaho Jun. 25, 2015).

<sup>&</sup>lt;sup>6</sup> Mem. Decision and Order on Cross-Mots. for Summ. J., at 47–48, *In Re SRBA Case No.* 39576, No. 00-92023 (92-23) (Twin Falls Cnty. Dist. Ct. Idaho Apr. 18, 2008).

Declining water supplies in the Snake River Basin above Milner Dam have prompted delivery calls and additional demands for water administration from holders of senior water rights. A variety of administrative activities and judicial decisions have resulted in (a) expanding administration of existing ground water and surface water rights, (b) the periodic enjoinment of new water appropriations, and (c) greater scrutiny of new water right applications resulting in near cessation of new appropriations. The need to protect existing water rights justifies the reestablishment of a moratorium upstream from Milner Dam.

#### Response

The Director, having responsibility for the administration of the appropriation of the waters of the State of Idaho, the protection of rights to the use of water within the state, the protection of the public interest in the waters of the state, and the conservation of the water resources of the state, finds, concludes, and orders:

#### **FINDINGS OF FACT**

#### **Reference Locations**

1. The following locations on the Snake River are crucial to understanding the administration of water resources in the Snake River, the Eastern Snake Plain Aquifer ("ESPA"), and their tributaries:

- a. Milner Dam is located in south-central Idaho in Section 29, Township 10 South, Range 21 East, Boise Meridian.
- b. The USGS gauging station at King Hill ("King Hill Gage") (USGS 13154500) is located approximately 94 miles downstream from Milner Dam in Section 7, Township 5 South, Range 11 East, Boise Meridian.
- c. Swan Falls Dam is located approximately 92 miles downstream from the King Hill Gauge in Section 18, Township 2 South, Range 1 East, Boise Meridian.
- d. The USGS gauging station near Murphy ("Murphy Gage") (USGS 13172500) is located approximately 4 miles downstream from Swan Falls Dam in Section 35, Township 1 South, Range 1 West, Boise Meridian.

Each of these locations is shown on the map in Appendix A of this order.

2. The following areas are also crucial to understanding the administration of water resources in the Snake River, the ESPA, and their tributaries:

a. The "trust water area" is the area where ground water is presumed to be tributary to the Snake River between Milner Dam and Swan Falls Dam. The area is discussed in Rule 18 and shown in Appendix A of the Water Appropriation Rules (IDAPA 37.03.08).

b. The "non-trust water area" is defined in the January 6, 1993 Moratorium Order in the Matter of Applications for Permits for Diversion and Use of Surface and Ground Water within the Snake River Basin Upstream from Milner Dam the Non-Trust Water Moratorium ("Non-Trust Water Moratorium") by depicting it on a map. The map shows the non-trust water area to be that portion of the Snake River Basin in Idaho, including tributary basins, upstream from Milner Dam and not within the trust water area.

These areas are shown on the map in Appendix A of this order.

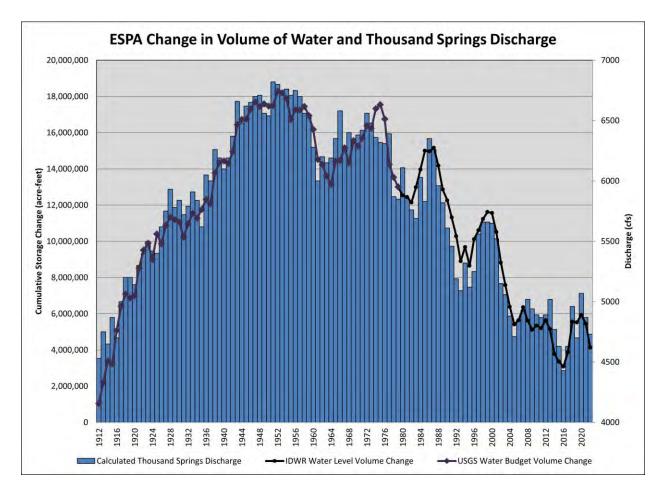
### Hydrology and Hydrogeology of the Snake River, ESPA, and Tributaries

### **Eastern Snake Plain Aquifer**

3. The ESPA underlies the Eastern Snake River Plain ("ESRP"), which encompasses an area of about 11,000 square miles from Ashton, Idaho in the northeast to King Hill, Idaho in the southwest.

4. The ESPA has been stressed by periodic drought, reduction in aquifer recharge due to changes in diversion and use of surface water throughout the basin, and by ground water pumping for irrigation and other consumptive uses. The following hydrograph depicts the total discharge from the ESPA through the springs along the Snake River from Milner Dam to King Hill from 1912 to the spring of 2022 (blue columns) and changes in total aquifer storage in the ESPA during the same period (black line).<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> McVay, M. (2022). *ESPA storage changes* [presentation to the Idaho Water Resources Board], Idaho Water Resource Board. <u>https://idwr.idaho.gov/wp-content/uploads/sites/2/iwrb/1-</u> Meetings2022/AquiferStabilizationCommittee-Meeting-2-22-Materials.pdf#page=34



5. Since 1952, there has been a long-term declining trend in ESPA ground water levels and the volume of water in aquifer storage. These trends result largely from the combination of the decreased incidental recharge associated with diversion of surface water onto the ESRP and increased consumptive ground water pumping. The Department estimates the ESPA lost approximately 14 million acre-feet (MAF) from aquifer storage during the period 1952 to 2022, an average reduction of approximately 200 thousand acre-feet per year (KAF/yr.).<sup>8</sup> Reduced aquifer storage in the ESPA and the corresponding reduction in ground water levels reduce the supply of water to senior water right holders by reducing the spring and base flow discharge to the Snake River needed to maintain stream flows.<sup>9</sup>

6. Recognizing the hydraulic connection between ground water in the ESPA and the Snake River, the Department developed a regional numerical ground water flow model ("ESPA model" or "ESPAM") to simulate depletions to the Snake River in various reaches caused by diversion of ground water for irrigation and other consumptive uses. The current version of the model is ESPAM2.2.

<sup>&</sup>lt;sup>8</sup> Id.

<sup>&</sup>lt;sup>9</sup> Barlow, P.M., & Leake, S.A. (2012). Streamflow depletion by wells—Understanding and managing the effects of groundwater pumping on streamflow (Circular 1376), U.S. Department of the Interior & U.S. Geological Survey (p. 84). <u>https://pubs.usgs.gov/circ/1376/pdf/circ1376\_barlow\_report\_508.pdf</u>

7. The ESPA model simulates how stresses applied to the ESPA affect flows in the Snake River and its tributary springs and streams. Modeled aquifer stresses include natural, incidental, and managed recharge, and withdrawal by consumptive ground water pumping. The model shows that ground water diversions from the ESPA reduce aquifer storage and reduce Snake River flows needed by senior water users.

8. Net recharge to the ESPA is derived primarily from precipitation and snowmelt in basins tributary to the ESRP. On the ESRP, based on the ESPAM2.2 average annual water budget for water years 1981–2018, only approximately 13% (1.0 MAF/yr.) of aquifer recharge is derived from the infiltration of precipitation. The remaining aquifer recharge is derived from tributary underflow of ground water (approximately 16%), tributary streamflow that seeps into the aquifer via losing streams (approximately 9%), and seepage resulting from diversions of surface water from the Snake River and other streams (approximately 63%).<sup>10</sup>

## **Basins Tributary to ESPA**

9. Streamflow originating in tributary basins recharges the ESPA through a combination of infiltration of water from losing streams and incidental recharge (canal seepage and on-farm infiltration) resulting from the diversion of surface water onto the ESRP. Consumptive use of ground water and surface water in basins tributary to the ESPA reduces inflow to the ESPA and Snake River via tributary streamflow or ground water underflow.

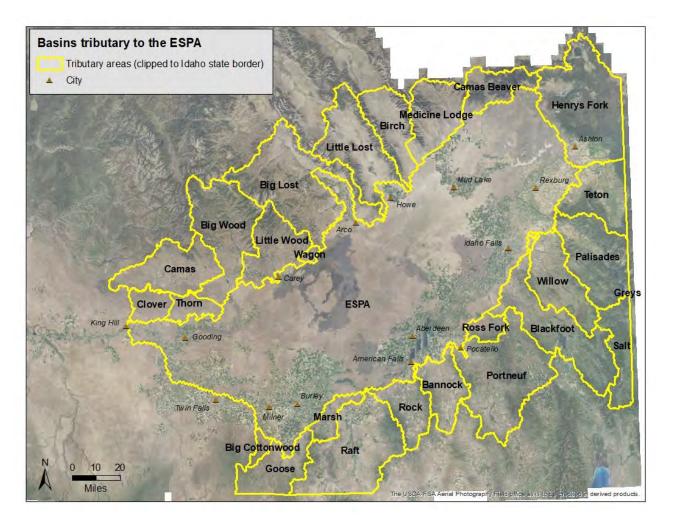
Consumptive use in the tributary basins reduces the water supply needed by senior surface water users reliant on the Snake River and springs emerging from the ESPA.

10. Collectively, the tributary basins provide an estimated 6.7 MAF/yr. of recharge to the ESPA, including approximately 1.2 MAF/yr. of ground water underflow, 0.7 MAF/yr. of infiltration of water from losing streams that flow out onto the ESRP, and 4.8 MAF/yr. of incidental recharge associated with diversion of surface water onto the ESRP. The following table shows the estimated annual average contribution of tributary basins to ESPA recharge during water years 1981 through 2018, according to ESPAM2.2. Tributary locations are shown on the following map.

https://research.idwr.idaho.gov/files/projects/espam/browse/ESPAM22\_Reports/ModelCalibrationRpt/ModelCalibration2\_Final.pdf

<sup>&</sup>lt;sup>10</sup> Sukow, J. (2021). *Model calibration report: Eastern Snake Plain Aquifer model version 2.2.* Idaho Department of Water Resources (p. 19).

Tributary Basin	Average ground water underflow (KAF/yr)	Average perched seepage (KAF/yr)	Average recharge incidental to irrigation diversions (KAF/yr)	Average contribution to ESPA recharge (KAF/yr)
Camas Creek (Basin 31)	269	68	19	356
Beaver Creek (Basin 31)	73	21	5	98
Medicine Lodge Creek (Basin 32)	8	28	9	45
Birch Creek (Basin 32)	93	17	8	118
Little Lost River (Basin 33)	275	25	22	321
Big Lost River (Basin 34)	80	138	92	310
Silver Creek, Wagon Creek, and Little Wood River (Basin 37)	51	116	32	199
Big Wood River and Camas Creek (Basin 37)	9	78	229	316
Thorn Creek (Basin 37)	6			6
Clover Creek (Basin 37)	8			8
Henry's Fork (Basin 21)	148		944	1,091
Teton River (Basin 22)	18		345	363
Palisades (Basin 23)	6	235 (Dry Bed)	2,800	3,042
Willow Creek (Basin 25)	27		27	55
Blackfoot River (Basin 27)	12		84	96
Ross Fork (Basin 27)	4		6	9
Portneuf River (Basin 29)	22		106	128
Bannock Creek (Basin 29)	21		16	37
Rock Creek (Basin 41)	40		13	53
Raft River (Basin 43)	30			30
Marsh Creek (Basin 45)			7	7
Goose and Big Cottonwood Creeks (Basin 45)	33		27	60



11. Consumptive use of surface water in tributary basins also reduces flow in the Snake River, both upstream and downstream of Milner Dam, by either reducing tributary streamflow, reducing infiltration of streamflow to the ESPA via losing streams, or by reducing incidental recharge associated with diversions of streamflow onto the ESRP. The timing and location of impacts on surface water supply is dependent on the timing and location of the diversion.

## **Perched Aquifers**

12. Several locally perched aquifers, often recharged largely by infiltration of irrigation water, are also tributary to the ESPA. In a study conducted during development of the Minidoka Project, perched ground water below the surface water irrigated portion of the project was observed to be an important source of recharge to the ESPA.<sup>11</sup> A more recent study on the age of irrigation water also indicates that incidental recharge from the Minidoka Irrigation District flows west and northwest in a perched aquifer before joining the ESPA, which generally flows

<sup>&</sup>lt;sup>11</sup> Crosthwaite, E.G., & Scott, R.C. (1956). *Ground water in the North Side Pumping Division, Minidoka project, Minidoka County, Idaho* (Circular 371), U.S. Department of the Interior & U.S. Geological Survey (p. 10). https://pubs.usgs.gov/circ/0371/report.pdf

southwest.<sup>12</sup> Perched ground water beneath the Burley Irrigation District is tributary to the ESPA by downward leakage at the edges of the perching beds and also discharges directly to the Snake River by lateral flow.<sup>13</sup>

13. A report documenting a recharge event on the Egin Bench in 2008 includes a literature review of several studies that conclude the perched aquifer system in the Egin Bench area contributes recharge to the regional ESPA by downward seepage and also contributes some discharge directly to the surface water system.<sup>14</sup>

14. Consumptive use of water from perched aquifers reduces the water supply needed by senior surface water users on the ESPA.

## Tributary Basins from Milner Dam to King Hill

15. The hydraulic connection between ground water in the Twin Falls area (south of the Snake River between Murtaugh Lake and Salmon Falls Creek) and the Snake River was documented by the Idaho Water Resources Research Institute during development of a ground water flow model on behalf of the City of Twin Falls.<sup>15</sup> Ground water in the Twin Falls model area is recharged by incidental seepage associated with surface water diversions, infiltration of precipitation, and ground water underflow from the Murtaugh area and tributary basins south of the model boundary.<sup>16</sup> Ground water discharge in the Twin Falls model area includes pumping withdrawals and discharge to springs and drains that are tributary to the Snake River between Milner Dam and King Hill. Ground water discharge from the Twin Falls area is approximately 10% of the ground water inflow to the Snake River between Milner Dam and King Hill.<sup>17,18</sup>

<sup>14</sup> Contor, B.A., Taylor, S.L., & Quinn, G.W. (2009). *Monitoring of Egin, Idaho recharge experiment, fall 2008* (IWRRI Technical Completion Report 2009-01), Idaho Water Resources Research Institute & Idaho Department of Water Resources (p. 37). <u>https://idwr.idaho.gov/wp-content/uploads/sites/2/publications/200906-OFR-Egin-Monitoring-Rpt-2008.pdf</u>

<sup>15</sup> Cosgrove, D.M., Johnson, G.S., Brockway, C.E., & Robison, C.W. (1997). *Geohydrology and development of a steady state ground-water model for the Twin Falls, Idaho area*. University of Idaho & Idaho Water Resources Research Institute (p. 98).

https://cdm17254.contentdm.oclc.org/utils/getfile/collection/idahowater/id/689/filename/iwdl-199703.pdf

 $^{16}$  *Id*.

<sup>&</sup>lt;sup>12</sup> Plummer, L.N., Rupert, M.G., Busenburg, E., & Schlosser, C. P. (2000). Age of irrigation water in ground water from the Eastern Snake Plain Aquifer, South-Central Idaho. *Groundwater*, Vol 38, No. 2, p. 272. https://doi.org/10.1111/j.1745-6584.2000.tb00338.x

<sup>&</sup>lt;sup>13</sup> Crosthwaite, E.G. (1957). *Ground-water possibilities south of the Snake River between Twin Falls and Pocatello, Idaho* (Water-Supply Paper 1460-C), U.S. Department of the Interior & U.S. Geological Survey (p. 127). https://pubs.usgs.gov/wsp/1460c/report.pdf

<sup>&</sup>lt;sup>17</sup> Kjelstrom, L.C. (1995). *Streamflow gains and losses in the Snake River and ground-water budgets for the Snake River Plain, Idaho and Eastern Oregon* (Professional Paper 1408-C), U.S. Department of the Interior & U.S. Geological Survey (p. 47). <u>https://pubs.usgs.gov/pp/1408c/report.pdf</u>

<sup>&</sup>lt;sup>18</sup> Sukow, J. (2011). Estimation of ground water contribution from the south side of the Snake River, Milner to King Hill: Eastern Snake Plain Aquifer model version 2. Idaho Department of Water Resources (p. 25). <u>https://research.idwr.idaho.gov/files/projects/espam/browse/ESPAM\_2\_Design\_Docs/SouthSideContribution/ESPAM2\_South\_GW\_Contribution\_Design\_Doc\_12282011\_renum.pdf</u>.

16. New consumptive uses of ground water or surface water in the Salmon Falls Creek, Rock Creek, and other tributary drainage basins south of the Snake River between Murtaugh Lake and Salmon Falls Creek will result in reduced discharge to the Snake River between Milner and King Hill. The Department calculates that approving the approximately 63 pending applications for diversion of ground water for irrigation, commercial, municipal, or industrial use in this area would deplete south side aquifer discharge to the Snake River between Milner Dam and King Hill by up to 42,000 AF/yr. (58 cfs).

### **Tributary Basins from King Hill to Swan Falls**

17. Aquifers tributary to the King Hill to Swan Falls Dam reach of the Snake River, both north and south of the river, are generally recharge limited. Ongoing water level declines in aquifer monitoring wells indicate that the rate of discharge exceeds the rate of recharge.

18. An early study of ground water resources in the Mountain Home Plateau, located west of King Hill, concludes that ground water is recharged mainly along the Bennett Mountain Hills.<sup>19</sup> The water table slopes downward to the Snake River Canyon, where ground water discharges to the Snake River. Ralston supports his conclusions by plotting ground water contours that depict a steep gradient toward the Snake River. Ralston's report states, "the water-level contours indicate that the Mt. Bennett Hills are the primary source areas for ground-water recharge for the entire study area, and that the majority of the discharge is to the Snake River."

19. Ground water contours, derived by a U.S. Geological Survey, support a conclusion that the ground water and the Snake River west of King Hill are hydraulically connected.<sup>20</sup> Newton shows ground water contours parallel to the Snake River both on the north and south sides with declining elevation toward the river; this indicates that the Snake River is an area of ground water discharge. Newton estimated ground water discharge to the Snake River between King Hill and Murphy in 1980 comprised about 4% of the total discharge at Murphy.

20. Two additional studies support the conclusion that ground water and surface water are hydraulically connected west of King Hill. Welhan presents several conceptual models on perched and regional-scale flow on the Mountain Home Plateau.<sup>21</sup> Tesch presents a water budget for an area of proposed housing development near the Danskin Mountains on the Mountain Home Plateau and states, "[u]nless inflow to the aquifer system in the study area is increased,

<sup>&</sup>lt;sup>19</sup> Ralston, D.R., & Chapman, S.L. (1968). *Ground-water resource of the Mountain Home Area, Elmore County, Idaho* (Water Information Bulletin No. 4), Idaho Department of Reclamation (p. 48). <u>https://idwr.idaho.gov/wp-content/uploads/sites/2/publications/wib04-gw-res-mthome-id.pdf</u>.

<sup>&</sup>lt;sup>20</sup> Newton, G.D. (1991). *Geohydrology of the regional aquifer system, Western Snake River Plain, Southwestern Idaho* (Professional Paper 1408-G), U.S. Department of the Interior & U.S. Geological Survey (figs. 3, 21). https://pubs.usgs.gov/pp/1408g/report.pdf

<sup>&</sup>lt;sup>21</sup> Welhan, J.A. (2012). *Preliminary hydrogeologic analysis of the Mayfield Area, Ada and Elmore Counties, Idaho* (Staff Report S-12-2), Idaho Geological Survey & University of Idaho (p.41). https://www.idahogeology.org/pub/Staff Reports/2012/StaffReport S-12-2.pdf.

mass balance requires that increased withdrawals will decrease outflow to the Snake River by an equivalent amount at steady state."<sup>22</sup>

21. The regional aquifer system in the northern Owyhee County area (the Department's Administrative Basin 51 and the southern portion of Basin 57) generally comprises deeper volcanic-rock geothermal aquifers, overlying sedimentary geothermal aquifers, and shallow cold-water aquifers. The volcanic and sedimentary geothermal aquifers serve as the primary sources for irrigation water with temperatures ranging from 85° F to more than 176° F. The cold-water aquifers are thin (less than 100 feet thick), laterally discontinuous, and provide minor volumes of water for domestic and stock uses. A representative study of ground water resources in the Bruneau Basin concludes that ground water generally moves from south to north toward the Snake River, discharging into overlying aquifers, or directly to surface water as springs and seeps. Berenbrock supports this with ground water contours that indicate a gradient from the highlands toward the Snake River in both the volcanic and sedimentary aquifers, and states: "Natural discharge from the study area consists of spring flow and underflow to the Snake River."

22. West of the Bruneau River Basin (Basin 57), ground water is recharged from the Owyhee Mountains, moves toward the Snake River, and discharges to overlying aquifers and surface water by springs and seeps.<sup>24</sup>

23. Additional support for a ground water-surface water connection west of King Hill (south of the Snake River) can be found in four studies: Piper, Geology and Water Resources of the Bruneau River Basin Owyhee County, Idaho, 1924; Littleton and Crosthwaite, Ground-water Geology of the Bruneau-Grand View Area Owyhee County, Idaho, 1957; Young and Whitehead, Geothermal Investigations in Idaho Part 2 an Evaluation of Thermal Water in the Bruneau-Grand View Area Southwest Idaho, 1975; and Young and Lewis, Hydrology and Geochemistry of Thermal Ground Water in Southwestern Idaho and North-Central Nevada, 1982. All of the studies present similar conceptual models on regional-scale flow in the Northern Owyhee County area that describe recharge in the highlands, ground water movement toward the Snake River, and discharge to surface water through springs and seeps.

24. Additional appropriations of ground water and surface water in the tributary basins—or from the Snake River itself—between the King Hill Gage and Swan Falls Dam will reduce the flow in the Snake River at Murphy Gage.

<sup>&</sup>lt;sup>22</sup> Tesch, C. (2012). *Sufficiency of water supply for water right application and transfers along the I-84 Corridor* [Memorandum], Idaho Department of Water Resources (p. 20). <u>https://idwr.idaho.gov/wp-</u>content/uploads/sites/2/legal/east-ada-contested-case/EADA-20120531-Consolidated-hearing-staff-memo.pdf.

<sup>&</sup>lt;sup>23</sup> Berenbrock, C. (1993). *Effects of well discharges on hydraulic heads in and spring discharges from the geothermal aquifer system in the Bruneau Area, Owyhee County, Idaho* (Water-Resources Investigations Report 93-4001), U.S. Department of the Interior & U.S. Geological Survey (p. 26). https://pubs.usgs.gov/wri/1993/4001/report.pdf

<sup>&</sup>lt;sup>24</sup> Ralston, D.R., & Chapman, S.L. (1969). Ground-water resource of Northern Owyhee County, Idaho (Water Information Bulletin No. 14), Idaho Department of Reclamation (p. 85). <u>https://idwr.idaho.gov/wpcontent/uploads/sites/2/publications/wib14-gw-res-owyhee-id.pdf</u>.

### Prior Administrative Actions Affecting the Snake River, ESPA, and Tributaries

### Snake River Basin Upstream from Milner Dam

25. Snake River water rights identifying points of diversion upstream from Milner Dam are administered separately from Snake River water rights identifying points of diversion downstream from Milner Dam pursuant to Idaho Code § 42-203B(2), and General Provision 4 for Basin 2 in the SRBA's *Final Unified Decree*. The median annual natural flow passing the Snake River at Milner for years 1990 to 2021 range from 0 cfs to approximately 3,500 cfs and the median annual volume is approximately 550 KAF. The flow past Milner Dam is reduced to zero during normal irrigation season operating conditions. When no Snake River flow passes Milner Dam, existing junior Snake River water rights upstream from Milner Dam are curtailed to satisfy senior Snake River water rights upstream from Milner Dam.

26. Junior surface water rights diverting water from the Snake River and tributary streams upstream from Milner Dam are curtailed every year and rely on storage water, if available, to maintain adequate supply throughout the year or irrigation season. Administration of surface water rights by priority is accomplished by Water District 1 and other water districts in the Snake River and tributary streams upstream from Milner Dam.

27. On January 6, 1993, the Director issued the Non-Trust Water Moratorium to prevent the approval of certain new applications to appropriate water in the non-trust water area. The order stated:

Ground water aquifers have been stressed by the reduction in natural recharge, from reduced recharge due to changes in diversion and use of surface waters throughout the basin and by the increased volume of pumping. As a consequence, ground water levels have fallen. The lowered water levels in the aquifers of the non-trust water area have resulted in numerous wells, often used for domestic and municipal water supply purposes, becoming unusable. Lowered ground water levels also reduce spring discharge needed to maintain stream and river flows.<sup>25</sup>

28. The Non-Trust Water Moratorium order contained language that "the moratorium shall be in effect on and after its entry and shall remain in effect until December 31, 1997."<sup>26</sup>

29. On August 15, 2013, the Department received a *Petition to Renew Moratorium Order for Non-Trust Water Area* from A&B Irrigation District, American Falls Reservoir District #2, Burley Irrigation District, Milner Irrigation District, Minidoka Irrigation District, North Side Canal Company, and Twin Falls Canal Company. The petition argued:

<sup>&</sup>lt;sup>25</sup> Moratorium Order, at 1, *In re Applications for Permits for Diversion and Use of Surface and Ground Water within the Snake River Basin Upstream from Milner Dam* (Idaho Dep't of Water Res. Jan. 6, 1993).

<sup>&</sup>lt;sup>26</sup> *Id.* at 5.

The same, if not worse, water supply conditions that gave rise to the 1993 moratoriums exist today. Ground water levels are stressed and lowered, and spring discharges are increasingly inadequate to maintain stream and river flows. Yet, since 1997, there has been no moratorium on new consumptive uses of water within the non-trust water area. . . . [T]he Non-trust Moratorium should be immediately renewed and should be extended indefinitely . . . .<sup>27</sup>

30. Following issuance of partial decrees of ground water rights in the ESPA, the Director established Water Districts 100, 110, and 120 to administer ground water rights by priority as needed to maintain water supplies to senior water rights.

### Snake River Basin Downstream from Milner Dam

31. Partial decree nos. 02-201, 02-223 and 02-224, decreed to the Board, together confirm water rights for an irrigation season minimum stream flow of 3,900 cfs and a non-irrigation season minimum stream flow of 5,600 cfs at the Murphy Gage on the Snake River. In parallel with the water rights of the Board, Idaho Power Company holds decreed water rights 02-100, 02-2032A, 02-4000A, and 02-4001A that recognize and protect, in priority, average daily flows in the Snake River at Murphy Gage of 3,900 cfs (April 1 to October 31) and 5,600 cfs (November 1 to March 31), subject to subordination conditions.

32. Idaho Code § 42-203B(2) placed Idaho Power Company hydropower water rights in excess of the minimum stream flows into a State administered trust, subordinating those hydropower rights to future water rights established pursuant to Idaho Code § 42-203C, known as "Trust Water Rights."<sup>28</sup> Trust Water Rights are subject to curtailment when average daily flows<sup>29</sup> at the Murphy Gage are below the decreed minimum stream flows.<sup>30</sup>

<sup>&</sup>lt;sup>27</sup> Pet. to Renew Moratorium Order for Non-Trust Water Area, at 2, *In re Applications for Permits for Diversion and Use of Surface and Ground Water within the Snake River Basin Upstream from Milner Dam* (Idaho Dep't of Water Res. Aug. 15, 2013).

<sup>&</sup>lt;sup>28</sup> A "Trust Water Right" is "[a] water right acquired pursuant to Idaho Code § 42-203B which diverts water first appropriated under hydropower water rights held in trust by the State of Idaho." Order Am. Final Unified Decree, at 1, *In re SRBA Case No. 39576* (Twin Falls Cnty. Dist. Ct. Idaho Jun. 25, 2015).

<sup>&</sup>lt;sup>29</sup> The partial decrees for Idaho Power Company's hydropower water rights and the hydropower water rights held in trust by the State define "average daily flows" as follows:

Average daily flows shall be based upon actual flow conditions; thus, any fluctuations resulting from the operation of Idaho Power Company facilities shall not be considered in the calculation of such flows. Flows of water purchased, leased, owned or otherwise acquired by Idaho Power Company from sources upstream of its power plants, including above Milner Dam, and conveyed to and past its plants below Milner Dam shall be considered fluctuations resulting from the operation of Idaho Power Company facilities. Fluctuations resulting from Idaho Power's operations are the sole exclusion to the rule that all flows actually present at the Murphy Gaging Station constitute actual flow conditions. Flows of water purchased, leased, owned or otherwise acquired by other entities are not considered fluctuations.

<sup>&</sup>lt;sup>30</sup> Mem. Decision and Order on Cross-Mots. for Summ. J., at 47–48, *In Re SRBA Case No.* 39576, No. 00-92023 (92-23) (Twin Falls Cnty. Dist. Ct. Idaho Apr. 18, 2008).

33. Applications for permit to appropriate trust water, i.e., applications for Trust Water Rights, may be approved if they meet criteria in Idaho Code § 42-203A and additional criteria established for trust water, including a determination whether the proposed use will significantly reduce the availability of trust water, *see* Idaho Code § 42-203C.

34. In 1990, the Department completed studies to estimate the impact of appropriations of trust water on Snake River flows and associated hydropower generation losses. Projected appropriations of trust water were based on undeveloped permits and applications in the trust water area totaling about 196,000 irrigated acres. The IDWR/UI Ground Water Flow Model, a precursor to ESPAM, simulated depletions due to trust water diversions over 60 years.<sup>31</sup> The studies resulted in a decision of the Department—*Memorandum Decision and Order*, dated November 7, 1990 ("1990 Evaluation of Significant Reduction Order"). The studies and order concluded that "[d]evelopment of 196,000 acres would reduce outflow by 87% of the new depletions in the 60th year. Other factors present in the dynamic system as large as the Snake Plain aquifer will have more effect on the discharge of the Snake River than decreases caused by this amount of new development."<sup>32</sup> The order concluded that the new appropriations of trust water would not cause a significant reduction in the water supply available for power production purposes.

35. After the 1990 decision, development of beneficial uses pursuant to existing undeveloped permits continued in the trust water area, and new applications for consumptive uses were processed and approved throughout the trust water area until 1992.

36. On May 15, 1992, the Director issued an order establishing a moratorium on the approval of new applications to appropriate surface water or ground water in the Snake River Basin upstream from the USGS gaging station on the Snake River at Weiser to protect existing water rights. Because Weiser is downstream from Swan Falls Dam, the moratorium included the entire trust water area. Meanwhile, development of beneficial uses pursuant to existing undeveloped permits continued in the trust water area.

37. On January 6, 1993, the Director amended the moratorium order to eliminate the area in the Snake River Basin upstream from Milner Dam (the non-trust water area) from the scope of the moratorium order.<sup>33</sup>

38. On April 30, 1993, the Director amended the moratorium order again. The amendment further reduced the size of the moratorium area, limiting it to just the trust water area of the Snake Plain Aquifer (and tributary aquifers) upstream from the King Hill Gage (hereinafter Eastern Snake River Plain Area) and the Boise River Drainage Area.

<sup>&</sup>lt;sup>31</sup> The Snake River Plain Aquifer Model ("SRPAM") preceded ESPAM. The Idaho Water Resources Research Institute published the documentation for SRPAM1.1 in 1999 and stated that prior to 1999 the model was referred to as the "IDWR/UI Ground Water Flow Model."

<sup>&</sup>lt;sup>32</sup> Memorandum Decision and Order ¶ 3, at 4, *In re Evaluating Whether Development of New Irrigated Acreage Will Cause a Significant Reduction in Trust Water Available for Power Production* (Idaho Dep't of Water Res. Nov. 7, 1990).

<sup>&</sup>lt;sup>33</sup> On the same day, the Director issued the Non-Trust Area Water Moratorium discussed in Finding of Fact 27.

39. In November 1994, the Director issued an *Order for Temporary Stay of Development and Notice of Formal Proceedings* in connection with certain permits within the trust water area for which proof of beneficial use of water had not been filed with the Department. Some of the affected permits are currently subject to an indefinite stay in the development period or suspension of action, prohibiting development.

40. On May 3, 1995, the Director amended the moratorium order again, removing the Boise River Drainage Area from the moratorium area.<sup>34</sup>

41. The April 30, 1993 amended moratorium order was issued to protect existing water rights impacted by drought, reduced recharge, and increased diversion demands in the Eastern Snake River Plain Area. The April 30, 1993 amended moratorium order is referred to as the Eastern Snake River Plain Moratorium.

42. In the 2009 Framework Reaffirming the Swan Falls Settlement, the State of Idaho and Idaho Power Company agreed to seek resolution of certain issues, including the development of means to enable the State of Idaho to ensure that the minimum flow water rights established at the Murphy Gage are maintained.<sup>35</sup>

43. In 2002, the Director established Water District 2 to administer surface water rights in the Snake River from Milner Dam to the Murphy Gage.

44. After the Snake River Basin Adjudication court issued partial decrees of ground water rights in the ESPA, the Director established Water Districts 130, 140, and 37B and incorporated ground water rights into Water District 37 to administer ground water rights by priority as needed to maintain water supplies to senior water rights.

45. If future Snake River flow rates at the Murphy Gage are less than the minimum stream flow water rights, some water right permits, licenses, and decreed water rights authorizing diversion and beneficial use of trust water (Trust Water Rights) will be subject to curtailment.<sup>36</sup>

## GWMAs and CGWAs in the Trust Water Area and Non-Trust Water Area

46. The Department established Critical Ground Water Areas ("CGWA") pursuant to Idaho Code § 42-233a or Ground Water Management Areas ("GWMA") pursuant to Idaho Code § 42-233b, in areas where ground water pumping for irrigation is significant and water levels have declined.

<sup>&</sup>lt;sup>34</sup> On May 3, 1995, the Director also issued a separate moratorium order exclusively for the Boise River drainage. See Amended Moratorium Order, In re Applications for Permits for the Diversion and Use of Surface and Ground Water within the Boise River Drainage Area (Idaho Dep't of Water Res. May 3, 1995).

<sup>&</sup>lt;sup>35</sup> See State of Idaho & Idaho Power Company. (2009). *Framework Reaffirming the Swan Falls Settlement* (p.5). <u>https://idwr.idaho.gov/wp-content/uploads/sites/2/legal/swan-falls-settlement/20090325-Framework-Reaffirming-the-Swan-Falls-Settlement.pdf</u>

<sup>&</sup>lt;sup>36</sup> Mem. Decision and Order on Cross-Mots. for Summ. J., at 47–48, *In Re SRBA Case No.* 39576, No. 00-92023 (92-23) (Twin Falls Cnty. Dist. Ct. Idaho Apr. 18, 2008).

47. In 2016, the ESPA GWMA was designated to address long-term declines in both aquifer water levels and discharge to the Snake River system. The ESPA GWMA includes most of the ESPA from the St. Anthony area in the east to King Hill in the west.

48. The Raft River Basin is tributary to the ESPA. Concerns over the potential effects of new and increased ground water use in the Raft River Basin resulted in the designation of the Raft River CGWA in 1963. Ongoing monitoring of water levels in the Raft River Basin indicate regional declining ground water level trends of 0.9 feet per year from 1966 to 1991 and 2.1 feet per year from 1991 to 2016.<sup>37</sup>

49. The Goose Creek and Big Cottonwood Creek Basins are tributary to the ESPA. Observed water-level declines and concerns over the potential effects of new and increased ground water use in the Goose Creek and Big Cottonwood Creek Basins resulted in the designation of the Goose Creek-Rock Creek CGWA in 1962. The boundaries of the CGWA were modified in 1967 to create three separate CGWAs in the basin (Artesian City, Oakley-Kenyon, and Cottonwood CGWAs). A fourth CGWA (West Oakley Fan CGWA) was added in 1982, resulting in a contiguous tract of CGWAs across the basin.

50. The Big Wood, Camas Creek, and Silver Creek drainages in Administrative Basin 37 are tributary to the ESPA. Concerns about the impact of ground water pumping in these drainages on senior priority surface water rights in Administrative Basin 37 led to the designation of the Big Wood River Ground Water Management Area ("BWRGWMA") in 1991. In May 2022, the Department established a moratorium enjoining the processing and approval of new and pending applications for permits to appropriate water from surface and ground water sources within the BWRGWMA.

51. The Blue Gulch and Cinder Cone Butte CGWAs were established for portions of aquifers that are tributary to the Snake River in the King Hill to Murphy reach. The Blue Gulch CGWA was designated in 1970 based on a report by Chapman and Ralston (1970), which stated that discharge was exceeding recharge. The Cinder Cone Butte area was declared a CGWA in 1981 because of declining ground water levels.

52. In the Milner to King Hill reach, GWMAs were established for portions of two aquifers experiencing declining artesian pressures and water temperatures. The Banbury Hot Springs GWMA was established in 1983. The resource was declared a GWMA because of declining artesian pressures and concerns about potential over-utilization, and a moratorium on new ground water rights has been established. The Twin Falls GWMA was established in 1984 based on concern that the thermal system was approaching a critical condition, and a moratorium on new water rights for use of the thermal-artesian ground water source was established. While these two aquifers are tributary to the Snake River, the extent of the connections is not well known and may be minimal compared to other aquifers tributary to the Snake River. Nevertheless, water-level declines in these aquifers negatively impact flow in the Snake River.

<sup>&</sup>lt;sup>37</sup> Amended Final Order Re: Management Program and Curtailing Expansion Rights, at 9, *In re Expansion Ground Water Rights in the Raft River Critical Ground Water Area* (Idaho Dep't of Water Res. Sep. 24, 2016).

53. GWMAs were established for portions of two aquifers that are tributary to the Snake River in the King Hill to Murphy reach. In 1982, following the establishment of the Cinder Cone Butte CGWA, the Mountain Home GWMA (which surrounds the Cinder Cone Butte area) was designated because of declining ground water levels. The Grand View-Bruneau GWMA was designated in 1982 because of increased and projected increases in ground water withdrawal and declines in spring flows from the geothermal aquifer system. The extent of the connection between the Grandview-Bruneau GWMA geothermal aquifer and the Snake River is not well known. Nevertheless, water-level declines in these aquifers negatively impact flow in the Snake River.

## <u>Delivery Calls by Holders of Senior Priority Surface Water Rights Against Holders of</u> <u>Junior Priority Ground Water Rights</u>

54. Starting in the 1990s, several water users holding water rights authorizing diversion of water from the Snake River and tributary springs filed petitions for delivery calls against junior priority water rights pumping ground water from the ESPA. Some of these petitions for delivery calls seeking curtailment of pumping by junior priority water rights have resulted in curtailment orders, mitigation plans to compensate for depletion caused by pumping, and protracted legal proceedings before the Department and in the Courts of the State of Idaho. Some of these contested cases remain pending before the Department and the Courts.

55. The surface water delivery calls can be divided into two groups: (a) holders of senior priority surface water rights authorizing diversion of water from springs emitting from the Snake River Canyon between Milner Dam and King Hill, and (2) holders of senior priority surface water rights authorizing diversion of water from the Snake River from Lake Walcott to the Milner Dam.

## Milner Dam to King Hill

56. The springs emitting from the Snake River Canyon walls in the Milner Dam to King Hill reach are the primary source of water for a variety of beneficial uses of water, including aquaculture, irrigation, hydropower, and other municipal, domestic, and commercial uses. The spring flows also sustain flows in the Snake River below Milner Dam and sustain the decreed minimum flow water rights at Murphy. Additional appropriation of ground water and surface water will deplete flows from the springs and reduce water available for diversion by holders of existing water rights.

57. After the delivery calls and significant litigation, ground water districts representing holders of junior ground water rights acquired title to many of the senior priority spring flow water rights and implemented innovative mitigation plans to supply adequate surface water to other holders of senior priority water rights authorizing the diversion of spring flows in the Milner Dam to King Hill reach of the Snake River. The acquisition of the senior priority spring rights was costly.

58. Additional appropriation of ground water would deplete spring flows needed to satisfy the spring flow water rights held by the ground water districts. In addition, further

depletion of spring flows will jeopardize the ability of the ground water districts to mitigate for depletions caused by existing ground water diversions.

## Lake Walcott to Milner Dam

59. In 2005, a delivery call was filed by seven irrigation delivery entities holding senior priority water rights to divert surface water from the Snake River from Lake Walcott to Milner Dam. The Snake River in the Walcott to Milner reach derives a portion of its flow from springs that discharge to the Snake River and its tributary streams between the Near Blackfoot and Minidoka gaging stations. These spring flows are depleted by diversions authorized by junior priority ground water rights.

60. After protracted litigation, the Department issued a *Methodology Order* that requires an annual analysis of hydrologic conditions, prediction of water supply to the Snake River, and a corresponding prediction of whether the holders of senior priority surface water rights will suffer an irrigation demand shortfall.<sup>38</sup>

61. Based on the annual predictions, and additional adjustments during the irrigation season, holders of junior priority ground water rights must mitigate for the predicted demand shortfall, or their diversion of ground water will be curtailed. The extent of curtailment is established by the severity of the predicted demand shortfall and a corresponding priority cut date.

62. In 2015, because of the specter of significant, predicted demand shortfall, and the threat of thousands of acres being curtailed resulting from an early priority cut date, the holders of senior priority surface water rights and junior priority ground water rights executed a settlement agreement ("Settlement Agreement").<sup>39</sup>

63. The Settlement Agreement required that the ground water users reduce ground water diversions by 240 KAF annually or conduct recharge for a combined conservation action. The Settlement Agreement identified 19 wells for which ground water levels are measured annually. The measurement of ground water levels in the 19 wells are combined into a composite ground water level value referred to as the Sentinel Well Index. Target increases in the Sentinel Well Index were established for 2020, 2023, and 2026.

<sup>&</sup>lt;sup>38</sup> Since the original methodology order was issued on April 7, 2010, there have been multiple revisions to this order—the current version was issued on July 19, 2023. *See* Final Order Regarding Methodology for Determining Material Injury to Reasonable In-season Demand and Reasonable Carryover, *In re Distribution of Water to Various Water Rights Held by or for the Benefit of A&B Irr. Dist., American Falls Reservoir Dist. #2, Burley Irr. Dist., Milner Irr. Dist., Minidoka Irr. Dist., North Side Canal Co., and Twin Falls Canal Co. (Idaho Dep't of Water Res. April 7, 2010); Sixth Final Order Regarding Methodology for Determining Material Injury to Reasonable In-Season Demand and Reasonable Carryover, <i>In re Distribution of Water to Various Water Rights Held by or for the Benefit of A&B Irr. Dist., Munidoka Irr. Dist., North Side Canal Co., and Twin Falls Canal Co.* (Idaho Dep't of the Benefit of *A&B Irr. Dist., Miner Irr. Dist., American Falls Reservoir Dist. #2, Burley Irr. Dist., American Falls Reservoir Dist. #2, Burley Irr. Dist., North Side Canal Co., and Twin Falls Canal Co., Idaho Dep't of the Benefit of <i>A&B Irr. Dist., Miner Irr. Dist., Minidoka Irr. Dist., North Side Canal Co., and Twin Falls Canal Co., and Twin Falls Canal Co., No.* CM-DC-2010-001 (Idaho Dep't of Water Res. July 19, 2023).

<sup>&</sup>lt;sup>39</sup> Surface Water Coalition & Idaho Ground Water Appropriators, Inc. (2015). *Settlement Agreement Entered into June 30, 2015 Between Participating Members of the Surface Water Coalition and Participating Members of the Idaho Ground Water Appropriators, Inc.* <u>https://idwr.idaho.gov/wp-content/uploads/sites/2/legal/swc-igwa-settlement/SWC-IGWA-Settlement-20150630-SWC-IGWA-Settlement-Agreement.pdf</u>

64. Although not a component of the Settlement Agreement, the Board committed to recharging the ESPA with an annual average of 250 KAF of surface water.

Year <sup>40</sup>	Water Board Recharge (KAF)	Irrigation Year	IGWA Conservation (KAF)	Sentinel Well Index <sup>41</sup>
2015-2016	67	2015		-8.72
2016-2017	318	2016	200	-9.00
2017-2018	536	2017	513	-7.37
2018-2019	364	2018	303	-6.63
2019-2020	519	2019	364	-6.13
2020-2021	194	2020	289	-5.57
2021-2022	158	2021	131	-6.28
		2022		-7.62

65. The following table summarizes the Board's recharge efforts, IGWA's combined conservation actions, and the corresponding Sentinel Well Index values.

66. During 2017 and 2019, precipitation was plentiful and spring runoff in the Snake River was substantial. In 2017, rain fell on snow across much of the ESRP, flooding fields during the spring. Much of the standing water percolated into the ground and contributed greater than average recharge to the ESPA. Infiltration of precipitation on non-irrigated lands to the ESPA in water year 2017 was estimated to be 160% of the 1981 through 2021 average. In 2019, infiltration of precipitation on non-irrigated lands to the ESPA was estimated to be 120% of average. Seepage from losing streams tributary to the ESPA also contributed approximately 170% of average in 2017 and approximately 130% of average in 2019.

67. From the spring of 2017 through the spring of 2020, ground water levels across the ESPA increased and the Sentinel Well Index correspondingly increased. In April 2020, the Sentinel Well Index was -5.57, exceeding the 2020 target of -8.72.

68. In 2020 and 2021, ground water levels across the ESPA decreased in response to lower natural recharge, lower incidental and managed recharge of surface water, increased crop irrigation demand, and increased ground water pumping. In 2020 and 2021, recharge from infiltration of precipitation on non-irrigated lands was approximately 60% and 50%, respectively, of the 1981 through 2021 average. Seepage from losing streams tributary to the ESPA was an estimated 70% and 60% of the average in 2020 and 2021, respectively. By April 2022, the Sentinel Well Water Level Index had dropped to -7.62. In April of 2023 the Sentinel Well Level Index dropped further to -8.97, a value that missed the April 2023 Sentinel Well Index target of -3.9 by 5.07. Progress towards meeting the April 2026 Sentinel Well Index target will be dependent on future reductions in ground water consumption, as well as the future climate, which affects crop irrigation demand and the water supply available for natural, incidental, and managed aquifer recharge.

<sup>&</sup>lt;sup>40</sup> Recharge volumes are reported from August 1 through July 31.

<sup>&</sup>lt;sup>41</sup> The Sentinel Well Index is calculated based on April 1 ground water level measurements. Increasing negative values correspond with declining water levels for the sentinel wells.

## Current Conditions in the Snake River, ESPA, and Tributaries

## **Pending Water Right Applications**

69. Ground water pumping from the ESPA, and from aquifers tributary to the ESPA, including perched aquifers, depletes the flow in the Snake River, both upstream and downstream from Milner Dam. An assessment by the Idaho Water Resources Research Institute notes: "Every acre-foot of water consumptively used in basins tributary to the Snake River ultimately reduces the flow of the Snake River."<sup>42</sup> New consumptive uses of ground water from the ESPA and tributary aquifers will further deplete the flow in the Snake River.

70. In the Fall of 2022, there were approximately 474 pending water rights applications proposing ground water diversions for irrigation, commercial, municipal, or industrial uses within the ESPA model boundary and in basins tributary to the ESPA. The pending applications propose irrigation of approximately 151,000 acres and diversions of approximately 79 cfs for commercial, municipal, and industrial purposes.

## Snake River Basin Upstream from Milner Dam

71. As described above, the flow past Milner Dam is reduced to zero during normal irrigation season operating conditions. When no Snake River flow passes Milner Dam, existing junior Snake River water rights upstream from Milner Dam are curtailed to satisfy senior Snake River water rights upstream from Milner Dam. Curtailed surface water rights rely on storage water, if available, to maintain adequate supply throughout the year or irrigation season.

72. In July 2022, the Department performed an analysis using ESPAM2.2 to determine the potential impacts to the Snake River of the pending water right applications for irrigation, commercial, municipal, and industrial uses of ground water within the ESPA and tributary basins. The model predicted a steady state depletion of 184,000 AF/yr (254 cfs) to the Snake River upstream from Milner Dam, including a steady state depletion of 100,000 AF/yr (138 cfs) to the Snake River between Near Blackfoot and Minidoka. The model prediction shows that granting pending applications will reduce flows to the Snake River upstream from Milner Dam, to the detriment of senior water users.

73. There is no moratorium on processing applications for new water rights in the nontrust water area. Most pending applications from the non-trust water area predate the expiration of the Non-Trust Water Area Moratorium in 1997. The Department receives few new applications to appropriate water in the non-trust water area because it is difficult for applicants to demonstrate they can divert and use surface water or ground water without reducing the supply of water available to prior water rights. The few water right applications being processed in the non-trust water area are mostly for non-consumptive or mitigated water uses, or they are applications proposing to appropriate surface water from the Snake River or its tributaries

<sup>&</sup>lt;sup>42</sup> Ralston, D. R., Broadhead, R., & Grant, D. L. (1984). *Hydrologic and legal assessment of ground water management alternatives for Idaho* (Technical Completion Report WRIP/371405), Idaho Water Resources Research Institute & University of Idaho (p. 10).

https://cdm17254.contentdm.oclc.org/utils/getfile/collection/idahowater/id/553/filename/iwdl-198410.pdf

upstream from Milner Dam during the limited times that unappropriated water is flowing past Milner Dam.

74. The Department has not addressed the August 15, 2013 *Petition to Renew Moratorium Order for Non-Trust Water Area* from A&B Irrigation District, American Falls Reservoir District #2, Burley Irrigation District, Milner Irrigation District, Minidoka Irrigation District, North Side Canal Company, and Twin Falls Canal Company.

### Snake River Basin Downstream from Milner Dam

75. The Eastern Snake River Plain Moratorium remains in effect for applications to appropriate water for consumptive uses in the Snake River between Milner Dam and the King Hill Gage and tributary surface water and ground water sources in the portion of the trust water area upstream from the King Hill Gage. Most of the pending applications from the trust water area date back to the 1980s and 1990s. The Department receives few new applications to appropriate water in the moratorium area. The few water right applications being processed in the non-trust water area are mostly for non-consumptive or mitigated water uses.

76. The trust water area tributary to the Snake River downstream from the King Hill Gage is not included in the present Eastern Snake River Plain Moratorium area. The Department still receives and processes applications for trust water rights in the trust water area tributary to the Snake River downstream from King Hill Gage.

77. In some recent years, after adjusting for the impacts of Idaho Power Company reservoir operations, Snake River flows measured at the Murphy Gage have remained above but approached the decreed minimum stream flows. Measured flows at the Murphy Gage have approached the minimum flow of 5,600 cfs during the last half of March and have approached the minimum flow of 3,900 cfs from approximately the middle of June until approximately the middle of August. In March of 2015, the three-day average Adjusted Average Daily Flow of the Snake River at the Murphy Gage fell below the 5,600 cfs minimum stream flow water rights for two days.

78. During March 2015, ground water discharge from the ESPA comprised approximately 88% of the inflow to the Snake River between Milner Dam and King Hill. Ground water discharge from the south side of the Snake River provided approximately 10% of the inflow and tributary streamflow from Salmon Falls Creek and the Malad River above Malad Canyon springs provided approximately 2% of the inflow.

79. Reoccurring low flow conditions in the Snake River at Murphy Gage during the last half of March correspond to a period of seasonal low spring discharge from the ESPA to the Snake River and the beginning of the irrigation season for water users diverting from the Snake River between Milner Dam and the Murphy Gage.<sup>43</sup>

<sup>&</sup>lt;sup>43</sup> Geisler, E. (2022). *Swan Falls AADF update* [presentation to Swan Falls Technical Working Group]. Idaho Department of Water Resources (p. 2-3). <u>https://idwr.idaho.gov/wp-content/uploads/sites/2/legal/swan-falls-settlement/20220810-Swan-Falls-TWG-Presentation-AADFUpdate.pdf</u>.

80. The low flow conditions in the Snake River at Murphy Gage during the period from mid-June to mid-August correspond to the period of peak crop consumption demand across the ESRP and the Snake River tributaries.<sup>44</sup> Flows in the Snake River generally increase from late summer through fall as irrigation return flows increase and percolation from irrigation to ground water increases ESPA spring discharge to the Snake River.<sup>45</sup>

81. In June 2022, the Department presented results of an evaluation of the impact of trust water rights developed for irrigation, commercial, municipal, or industrial use of ground water or surface water on the Snake River downstream of Milner Dam.<sup>46</sup> The estimated long-term annual average impact of trust water use is between 98 cfs and 197 cfs. The estimated long-term impact in March is between 58 cfs and 165 cfs. The estimated long-term peak summer impact is between 108 cfs and 300 cfs. The ranges reflect a lack of information on the consumptive use associated with the commercial, municipal, and industrial water rights, uncertainty in the timing of impacts from irrigation use in the Twin Falls area and Western Snake Plain, and uncertainty on surface water available to fill surface water trust rights. The majority, but not all, of the impacts of Trust Water Right appropriations on the Snake River have been realized.

82. Any new appropriations of trust water for consumptive use of surface water from the Snake River and tributary springs and streams between Milner Dam and Swan Falls Dam will further reduce flows in the Snake River at the Murphy Gage. The reductions in flow will jeopardize the maintenance of the minimum stream flow water rights at the Murphy Gage. The reductions in flow will also jeopardize some water right permits, licenses, and decreed water rights authorizing diversion and beneficial use of trust water.

83. In July 2022, the Department performed an analysis using ESPAM2.2 to determine potential impacts to the Snake River of the pending water right applications for irrigation, commercial, municipal, and industrial uses of ground water within the ESPA and tributary basins. The model predicted a steady state depletion of 73,000 AF/yr (101 cfs) of ESPA discharge to the Snake River between Milner Dam and King Hill. The model prediction shows that granting pending applications in the trust water area will reduce flows to the Snake River from Milner Dam to the Murphy Gage, thereby jeopardizing the maintenance of the minimum stream flow water rights at the Murphy Gage and jeopardizing some water right permits, licenses, and decreed water rights authorizing diversion and beneficial use of trust water.

84. Based on the available information, further development of ground water tributary to the Snake River between King Hill and Swan Falls Dam would decrease discharge from the

https://research.idwr.idaho.gov/files/projects/espam/browse/ESPAM22\_Reports/ModelCalibrationRpt/ModelCalibra tion22\_Final.pdf

<sup>&</sup>lt;sup>44</sup> Id.

<sup>&</sup>lt;sup>45</sup> *Id.*; Sukow, J. (2021). *Model calibration report: Eastern Snake Plain Aquifer model version 2.2*. Idaho Department of Water Resources (p. 19).

<sup>&</sup>lt;sup>46</sup> Sukow, J. (2022). Preliminary evaluation of trust water use impact on Snake River below Milner Dam [presentation to Swan Falls Technical Working Group]. Idaho Department of Water Resources. <u>https://idwr.idaho.gov/wp-content/uploads/sites/2/legal/swan-falls-settlement/20220607-Swan-Falls-TWG-Presentation-Trust-Water-Impact.pdf</u>

aquifer to the Snake River upstream from Swan Falls Dam and jeopardize the maintenance of the minimum stream flow water rights at the Murphy Gage and some water right permits, licenses, and decreed water rights authorizing diversion and beneficial use of trust water.

85. In the 2009 Framework Reaffirming the Swan Falls Settlement, the State of Idaho and Idaho Power Company agreed to seek resolution of certain issues, including the development of means to enable the State of Idaho to ensure that the minimum stream flow water rights established at the Murphy Gage are maintained.<sup>47</sup>

## **CGWAs and GWMAs**

86. Department staff observed a regional water table decline in the Artesian City, Oakley-Kenyon, Cottonwood and West Oakley Fan CGWAs of approximately 1.9 feet per year between 1967 and 2009.<sup>48</sup> Implementation of mitigation activities in Water District 140 has had a positive impact on the water table, but ground water declines continued at a rate of 1.0 feet per year between 2009 and 2016.<sup>49</sup> The Management Plan for these CGWAs acknowledged an increase in mitigation activities was needed to meet the goal of bringing withdrawals into balance with recharge.<sup>50</sup> In the Cottonwood CGWA, the average annual rate of aquifer withdrawals was limited to 5,500 acre-feet per year by a 1971 court order, then to 4,000 acre-feet per year by a 2004 administrative order.<sup>51</sup> Department staff observed regional water table declines averaging 21 feet per year between 1961 and 1972, 3.35 feet per year between 1972 and 2004, and 2.98 feet per year between 2005 and 2016.<sup>52</sup>

87. Ongoing monitoring of water levels in the Blue Gulch CGWA indicates an overall decreasing water level trend of approximately 1.4 feet per year since 1990.<sup>53</sup>

88. Ongoing monitoring of water levels in the Grand View-Bruneau GWMA indicates regional declining ground water level trends of 0.8 feet per year from 1998 to 2017 and 0.9 feet per year from 2008 to  $2017.^{54}$ 

<sup>49</sup> *Id*. at 6.

<sup>50</sup> Id.

<sup>51</sup> *Id*. at 2-4

<sup>52</sup> Final Order Regarding Management Program, at 4, *In re Expansion Ground Water Rights in the Cottonwood Critical Ground Water Area* (Idaho Dep't of Water Res. Aug. 26, 2016).

<sup>53</sup> Moody, A. (2020). 2020 Update of ground water conditions in the Blue Gulch Critical Ground Water Area. Idaho Department of Water Resources (p. 22). <u>https://idwr.idaho.gov/wp-content/uploads/sites/2/publications/202009-cgwa-report-blue-gulch-area.pdf</u>

<sup>54</sup> McVay, M. (2017). Summary of groundwater levels in the Grand View-Bruneau Groundwater Monitoring Network – 2017 update. Idaho Department of Water Resources (p. 17). <u>https://idwr.idaho.gov/wp-content/uploads/sites/2/publications/201706-OFR-grand-view-bruneau-gwma-water-level-update-2017.pdf</u>

<sup>&</sup>lt;sup>47</sup> See State of Idaho & Idaho Power Company. (2009). *Framework Reaffirming the Swan Falls Settlement* (p.5). <u>https://idwr.idaho.gov/wp-content/uploads/sites/2/legal/swan-falls-settlement/20090325-Framework-Reaffirming-the-Swan-Falls-Settlement.pdf</u>

<sup>&</sup>lt;sup>48</sup> Final Order Re: Management Program, at 5, *In re Expansion Ground Water Rights in the Oakley Fan Critical Ground Water Areas* (Idaho Dep't of Water Res. Aug. 26, 2016).

89. Ongoing monitoring of water levels in the Mountain Home GWMA and Cinder Cone Butte CGWA indicates declining water levels southwest of Interstate 84, in areas where significant volumes of ground water are pumped for agricultural irrigation.<sup>55</sup>

90. Ongoing monitoring of water levels in the Castle Creek Basin indicates a declining water level trend of 1.1 feet per year from 1968 to 2021, illustrating that water level declines are also occurring in recharge-limited areas within the trust water area but outside of the designated GWMAs and CGWAs.

91. Designation of GWMAs and CGWAs to protect aquifers tributary to the Snake River has not arrested the declines in ground water levels and aquifer storage in those aquifers. Based on the available information, new ground water development would also decrease aquifer storage and the ground water supply for existing ground water users in recharge-limited areas already experiencing declining aquifer storage.

### ANALYSIS

The ESPA is a vital source of water for the State of Idaho. Approximately one million acres of land on the Snake River Plain are irrigated by ground water pumped directly from the ESPA. The ESPA is hydraulically connected to the Snake River and indirectly supports surface water irrigation of roughly another million acres. ESPA-supported agriculture is crucial to Idaho's food supply and to the economies of communities across southern Idaho. As discussed in Finding of Fact 5, there has been a long-term declining trend in ESPA ground water levels and the volume of water in aquifer storage. While there have been brief periods of recovery, the overall downward trend has continued unabated.

ESPAM2.2 shows that the reduced aquifer storage in the ESPA—and the corresponding reduction in ground water levels—reduce the supply of water to senior water right holders. In Surface Water Coalition delivery call proceeding, the Director determined that ground water pumping by *existing* ground water users is causing material injury to *existing* surface water users.<sup>56</sup> In other words, in many years, current water supplies do not satisfy current demands. If there are insufficient water supplies to satisfy current demands, water is not available for new

<sup>&</sup>lt;sup>55</sup> Tesch, C. (2017). *Hydrogeology of the Mountain Home Plateau* [presentation to the Idaho Water Resources Board], Idaho Department of Water Resources (p. 38). <u>https://idwr.idaho.gov/wp-</u>content/uploads/sites/2/iwrb/2017/20170914-IWRB-Work-Session-Materials-10-17.pdf#page=38

<sup>&</sup>lt;sup>56</sup> See Final Order Establishing 2021 Reasonable Carryover (Methodology Step 9) at 3–4, *In re Distribution of Water to Various Water Rights Held by or for the Benefit of A&B Irr. Dist., American Falls Reservoir Dist. #2, Burley Irr. Dist., Milner Irr. Dist., Minidoka Irr. Dist., North Side Canal Co., and Twin Falls Canal Co., No. CM-DC-2010-001 (Idaho Dep't of Water Res. Dec. 21, 2021) (Finding material injury of 31,900 acre-feet to AFRD#2 and 214,200 acre-feet to TFCC.); see also Final Order Establishing 2016 Reasonable Carryover (Methodology Step 9) at 3–4, <i>In re Distribution of Water to Various Water Rights Held by or for the Benefit of A&B Irr. Dist., American Falls Reservoir Dist. #2, north Side Canal Co., and Twin Falls Canal Co.*, see also Final Order Establishing 2016 Reasonable Carryover (Methodology Step 9) at 3–4, *In re Distribution of Water to Various Water Rights Held by or for the Benefit of A&B Irr. Dist., American Falls Reservoir Dist. #2, Burley Irr. Dist., Milner Irr. Dist., Minidoka Irr. Dist., North Side Canal Co., and Twin Falls Canal Co., No. CM-DC-2010-001 (Idaho Dep't of Water Res. Nov. 29, 2016) (Finding material injury of 6,700 AF to TFCC for the 2016 irrigation season and finding carryover injury of 39,500 acre-feet to TFCC.).* 

appropriations. Approving new applications would only add to the injury suffered by the senior surface water users.

For years, the State of Idaho has implemented various water management strategies to maintain water supplies in the non-trust water area and the Snake River upstream from Milner Dam. These management strategies include administration of surface water rights by priority in water districts, organization of ground water rights into water districts 100, 110, and 120 for priority administration, implementation of the mitigation measures identified in the Settlement Agreement, designation of the ESPA GWMA, and managed aquifer recharge. Despite these management strategies, declines in the aquifer portend the likelihood of even more difficulty satisfying existing Snake River water rights upstream from Milner Dam.

The Director must protect the minimum stream flows at Murphy Gage. Since 1976, each state water plan has called for the maintenance of the minimum stream flows at Murphy Gage. In the *2009 Framework Reaffirming the Swan Falls Settlement*, the State of Idaho and Idaho Power Company agreed to develop a means for the State of Idaho to ensure that the minimum flow water rights established at the Murphy Gage are maintained. Management strategies to protect the minimum stream flows and existing water rights below Milner Dam included organization of Snake River water rights into Water District 2 for measurement and administration by priority, formation of Water Districts 130, 140, and 161 for priority administration of ground water rights, designation of the ESPA GWMA and several other GWMAs and CGAs, applying the limitations of Idaho Code § 42-203C to applications for new water rights, and managed aquifer recharge. Despite these efforts to carefully administer Idaho's water, the Adjusted Average Daily Flow of the Snake River at the Murphy Gage is approaching the minimum flow rates. While the three-day average Adjusted Average Daily Flow of the Snake River at the Murphy Gage is approaching the minimum flow rates. While the three-three below the minimum stream flow water rights for two days, the full impacts of the current Trust Water Right appropriations have not yet been fully realized in the Snake River.

Despite these management strategies, (1) declines in ESPA water levels, (2) ongoing declines in water level trends in aquifers tributary to the ESPA and Snake River, (3) reductions in the Adjusted Average Daily Flow of the Snake River at the Murphy Gage approaching the protected flow rates, and (4) the impacts of Trust Water Right appropriations not yet fully realized in the Snake River, all signal that new appropriations for consumptive use cannot be approved without injury to existing Snake River water rights, including the decreed minimum stream flow water rights quantified at Murphy Gage.

### Water Appropriated for Municipal Purposes and Community Water Systems

Idaho courts have acknowledged that a water right for municipal purposes may be fully consumed without exceeding the authorized beneficial use:

The nature of the beneficial use of a municipal right is such that the right can be fully consumed without engaging in waste or violating a beneficial use duty of water . . . The nature of the purpose of use of a municipal right is such that the right can be fully consumed without violating a beneficial use duty of water and without exceeding the authorized scope of the water right.

Mem. Decision & Order at 10, *Riverside Irr. Dist. v. Idaho Dep't of Water Res.*, No. CV14-21-05008 (Canyon Cnty. Dist. Ct. Idaho Dec. 28, 2021).

When community water systems<sup>57</sup> supply water for outside use, the water used for irrigation of lawns and landscaping is largely consumed, while the indoor water use is largely non-consumptive. Separately quantifying the amount of water used outside and the amount of water used inside is usually difficult and is typically only estimated. Furthermore, a community water system often discharges its unconsumed water into a municipal sewer treatment facility operated by a municipality. Sewage disposal methods may include evaporation from the retention facility, land application, or treatment and re-use. Mingling sewage from a community system into a municipal sewage facility may render the community use fully consumptive.

There is little or no additional water in the Snake River Basin for new consumptive uses. Any new water right for municipal purposes has the potential to be fully consumptive, either immediately or as the city modifies its water use or modifies its wastewater treatment and disposal processes over time. Because the entirety of the municipal use may become consumptive over time, the Director should not allow a municipal provider to appropriate water for municipal purposes by applying for a water right permit without mitigation. The same is true for new community water systems. Community water systems that include irrigation are consumptive, and even those that do not include irrigation may be rendered fully consumptive through consumptive wastewater disposal processes. Continuing to issue new municipal water rights and new water rights for community water systems within the Snake River Basin without mitigation would reduce the quantity of water available to supply existing water rights. It is necessary for the Director to suspend further the processing of applications to appropriate water for all municipal and community water systems lacking mitigation plans, given the variability in consumptive use.

If the Director restricts the appropriation of water for municipal purposes and community water systems, additional appropriation of water by drilling a well for domestic purposes, as it is defined in Idaho Code § 42-111, should also be severely limited or prohibited. Potentially significant depletions to ground water sources are ignored when the appropriation of ground water for community water systems, including municipal purposes, is prohibited, while at the same time, appropriation of ground water is perfected by the drilling of individual domestic wells, which may cumulatively result in as much or more consumption of ground water than a community water system.

However, the Director currently lacks the explicit authority to restrict the appropriation of ground water by the drilling of individual domestic wells. Idaho Code § 42-227 exempts the drilling of wells for domestic purposes, as defined in Idaho Code § 42-111(1), from "the permit requirement under section 42-229, Idaho Code." Idaho Code § 42-229 prescribes "the application permit and license procedure" as the method of appropriating ground water.

Idaho Code § 42-1805 grants the Director limited authority to prohibit appropriation of water. The Director is only authorized to "suspend the issuance or further action on *permits or* 

<sup>&</sup>lt;sup>57</sup> Community water system as used in this order is defined as a water system supplying water for domestic purposes that do not meet the Idaho Code § 42-111 definition of domestic purposes.

*applications* . . . ." Idaho Code § 42-1805 (emphasis added). Because the drilling of wells for domestic purposes is exempt from the application permit and licensing procedures, the Director does not have the explicit authority to issue a moratorium order that prohibits the appropriation of water for qualifying exempt domestic ground water uses under Idaho Code § 42-111(1).

When the Director has determined that water is unavailable for appropriation, the Director must have the authority to suspend appropriation of water by any means, including appropriation by beneficial use, for exempt domestic uses, for the following reasons: 1) prevent further depletion of an over-appropriated source of water; and 2) ensure that all prospective appropriators of water are treated equitably.

Until the Legislature grants explicit authority to issue moratorium orders that prohibit the appropriation of water by beneficial use for exempt domestic uses, the opportunity for overappropriation and the inequity and inequality between domestic use in community water systems and single-family domestic uses will continue.

### **CONCLUSIONS OF LAW**

1. The Director is responsible for administration of the appropriation and use of the waters of the state of Idaho. Idaho Code § 42-202 reads in pertinent part:

For the purpose of regulating the use of the public waters and of establishing by direct means the priority right to such use, any person, association or corporation hereafter intending to acquire the right to the beneficial use of the waters of any natural streams, springs or seepage waters, lakes or ground water, or other public waters in the state of Idaho, shall, before commencing of the construction, enlargement or extension of the ditch, canal, well, or other distributing works, or performing any work in connection with said construction or proposed appropriation or the diversion of any waters into a natural channel, make an application to the department of water resources for a permit to make such appropriation.

2. The Director is authorized under the provisions of Idaho Code § 42-1805(7) as follows:

After notice, to suspend the issuance or further action on permits or applications as necessary to protect existing vested water rights or to ensure compliance with the provisions of chapter 2, title 42, Idaho Code, or to prevent violation of the minimum flow provisions of the state water plan.

3. Water Appropriation Rule 55 of the Department (IDAPA 37.03.08.055) provides that a moratorium on the processing of applications for permit shall be entered by issuance of an order of the Director. Notice of the order shall be by certified mail to affected applicants and by publishing a legal notice in newspapers of general circulation in the area.

4. The current Idaho State Water Plan Policy 4A provides, in part, that the Snake River above Hells Canyon will be managed to meet or exceed the following minimum average daily

flows at the Murphy gaging station of 3,900 cfs from April 1 through October 31, and 5,600 cfs from November 1 through March 31.

5. Idaho Code § 42-203B(2) provides in pertinent part as follows:

For the purposes of the determination and administration of rights to the use of the waters of the Snake river or its tributaries downstream from Milner dam, no portion of the waters of the Snake river or surface or ground water tributary to the Snake river upstream from Milner dam shall be considered.

6. General Provision 4 for Basin 2 in the SRBA Final United Decree states as follows:

The exercise of water rights above Milner Dam has and may reduce the flow at the dam to zero. For the purposes of the determination and administration of rights to the use of the waters of the Snake river or its tributaries downstream from Milner dam, no portion of the waters of the Snake river or surface or ground water tributary to the Snake river upstream from Milner dam shall be considered.

7. Delivery call decisions by the Department have held that ground water diversions from the ESPA are injuring senior water right holders.

# Snake River Downstream from Milner Dam

8. During any time that flows in the Snake River at the Murphy Gage are at or below the decreed minimum stream flow water rights, any new appropriation for consumptive use of surface water in the trust water area, including surface water in or tributary to the reach of the Snake River between King Hill and Swan Falls Dam, will reduce the quantity of water available to existing surface water right holders entitled to divert water from the Snake River downstream from Milner Dam and to sustain the minimum stream flows, resulting in injury to senior water right holders.

9. To the extent ground water pumping in the trust water area, including the area tributary to the Snake River downstream from King Hill, and including perched aquifers within the trust water area, is tributary to the Snake River downstream from Milner Dam, any new appropriation for consumptive use of ground water in those areas will reduce the quantity of water available to existing surface water right holders entitled to divert water from the Snake River downstream from Milner Dam and to minimum stream flow water rights, resulting in injury to senior water right holders. The trust water area is shown in Appendix A of this order.

10. New appropriations for the consumptive use of surface or ground water in the trust water area will injure the minimum stream flow water rights decreed at the Murphy Gage and violate the minimum stream flow provision of the State Water Plan.

11. The conclusions reached in the 1990 Evaluation of Significant Reduction Order are no longer justified. New appropriations for consumptive use of ground water in the trust water

area will injure senior water right holders below Milner Dam, including the decreed minimum stream flow water rights at the Murphy gage.

12. The existing moratorium in the trust water area should be expanded to include consumptive use of surface water or ground water in the trust water area in and tributary to the reach of the Snake River downstream from King Hill to protect existing vested water rights and to prevent the violation of the minimum stream flow water rights at the Murphy gauge.

## Snake River Upstream from Milner Dam

13. During any time that water is not spilling over Milner Dam, existing junior surface water rights are being curtailed by Water District 01. The flow past Milner Dam is reduced to zero during normal irrigation season operating conditions. Because existing junior surface water users are already curtailed during normal irrigation season operations, there is no surface water available for appropriation.

14. New appropriations for the consumptive use of ground water diverted from the nontrust water area will reduce the quantity of water available to surface water right holders entitled to divert water from the Snake River Basin upstream from Milner Dam, resulting in injury to senior water right holders. The non-trust water area is shown in Appendix A of this order.

15. The Department should establish a moratorium on the issuance of permits to divert and use surface or ground water from the Snake River Basin upstream from Milner Dam in the non-trust water area for new consumptive uses to protect existing vested water rights and to ensure compliance with the provisions of chapter 2, title 42, Idaho Code, in the non-trust water area.

### ORDER

**IT IS THEREFORE HEREBY ORDERED** that the Snake River Basin moratorium established by the Department by order dated May 15, 1992, as amended January 6, 1993, April 30, 1993, May 3, 1995, and October 21, 2022 is superseded by this moratorium order.

**IT IS FURTHER ORDERED** that this moratorium order suspends further action on the processing and approval of presently pending and new applications for permits to appropriate water from the Snake River upstream from Swan Falls Dam and all surface and ground water sources in the trust water area and the non-trust water area, subject to the following provisions:

1. The moratorium order does not change or affect the authorization to continue development of any existing approved application (permit) that is not subject to an order establishing an indefinite stay in development or suspending action and prohibiting development of any existing approved application (permit).<sup>58</sup>

2. Consistent with Idaho Code § 42-227, the moratorium does not apply to any appropriation of ground water by beneficial use for domestic purposes, including livestock watering, as such term is defined in Idaho Code § 42-111.

3. The moratorium does not apply to any application proposing a non-consumptive use of water as the term is used in Idaho Code § 42-605A. Applications for municipal purposes and for domestic use from community water systems shall be presumed to be fully consumptive. Applicants may rebut the presumption by providing substantial, detailed evidence that the proposed use is not fully consumptive, will not become more consumptive or fully consumptive over time, and will not injure existing vested water rights. A rebuttal of the presumption must address monitoring, reporting, and mitigation measures, to ensure that the proposed use does not become more consumptive or fully consumptive after it has been established. The Director may consider a rebutted presumption when assessing an application. Sufficiently rebutting the presumption alone shall not entitle an applicant to approval of its application. Irrigation proposed in connection with a domestic use will be considered consumptive. Domestic, commercial, industrial, or other water uses that result in the discharge of wastewater to a municipal or publicly owned treatment works will be considered consumptive.

4. The moratorium does not apply to applications for drilling permits to replace or deepen existing wells authorized by valid existing water rights.

5. The moratorium does not apply to applications for transfer, including applications to add points of diversion to valid, existing water rights.

6. The moratorium does not change or affect the designation of any critical ground water area established pursuant to Idaho Code § 42-233a or any ground water management area established pursuant to Idaho Code § 42-233b.

<sup>&</sup>lt;sup>58</sup> See Finding of Fact 39.

7. This moratorium order will only apply to applications to appropriate water within the Big Wood River Ground Water Management Area if the Big Wood River Ground Water Management Area moratorium order is withdrawn.<sup>59</sup>

8. This moratorium order applies to applications to appropriate water within the Twin Falls Ground Water Management Area. The Twin Falls Ground Water Management Area moratorium shall apply to applications to appropriate low temperature geothermal resources and to applications for drilling permits in the low temperature geothermal aquifer in the Twin Falls Ground Water Management Moratorium Area.<sup>60</sup>

9. This moratorium order applies to applications to appropriate water within the Banbury Ground Water Management Area. The Banbury Hot Springs Ground Water Management Area moratorium shall apply to applications to appropriate low temperature geothermal resources and to applications for drilling permits in the low temperature geothermal aquifer in the Banbury Hot Springs Ground Water Moratorium Area.<sup>61</sup>

10. This moratorium order applies only to that portion of the Water District No. 13-T moratorium area within Administrative Basin 29. $^{62}$ 

11. The moratorium does not prevent the Director from reviewing for approval on a case-by-case basis an application which otherwise would not be approved under terms of this moratorium if:

- a. Protection and furtherance of the public interest, as determined by the Director, requires consideration and approval of the application irrespective of the moratorium; or
- b. The Director determines that the development and use of the water pursuant to an application will have no effect on prior surface and ground water rights because of its timing, location, insignificant consumption of water, or mitigation provided by the applicant to offset injury to other water rights. For example, the Director may consider applications proposing to appropriate surface water from the Snake River or its surface water tributaries upstream from Milner Dam when unappropriated water is flowing past Milner Dam or from the Snake River or its surface water tributaries downstream from Milner Dam when flows at the USGS

<sup>&</sup>lt;sup>59</sup> Am. Order Establishing Moratorium, *In re Big Wood River Ground Water Management Area* (Idaho Dep't of Water Res. July 8, 2024).

<sup>&</sup>lt;sup>60</sup> Order Extending Moratorium, *In re Twin Falls Ground Water Management Area* (Idaho Dep't of Water Res. July 11, 2024).

<sup>&</sup>lt;sup>61</sup> Final Order Am. Order Staying Approval of Applications and Suspending Further Development of Permits to Appropriate Ground Water, *In re Banbury Hot Springs Ground Water Management Area* (Idaho Dep't of Water Res. Aug. 4, 2011).

<sup>&</sup>lt;sup>62</sup> Final Moratorium Order and Final Order Dissolving the Bancroft-Lund Ground Water Management Area, *In re Dissolving the Bancroft-Lund Ground Water Management Area Designation* (Idaho Dep't of Water Res. Aug. 31, 2004).

gauging station on the Snake River near Murphy exceed the decreed minimum stream flow water rights.

**IT IS FURTHER ORDERED** that this moratorium order shall be in effect on and after its entry and shall remain in effect until it is withdrawn or modified by order of the Director.

**IT IS FURTHER ORDERED** that the Department shall serve a copy of this order by certified mail upon holders of applications for permits proposing appropriation of ground water or surface water within the moratorium area as shown in Appendix A and shall publish notice of this order for three consecutive weeks as required by IDAPA Rule 37.03.08.055 (Water Appropriation Rule 55).

Pursuant to Idaho Code § 42-1701A(3), any person aggrieved by any decision, determination, order or other action of the Director, and who has not previously been afforded an opportunity for a hearing on the matter, shall be entitled to a hearing before the Director to contest the action. The person shall file with the Director, within fifteen (15) days after receipt of written notice of the action issued by the Director, or receipt of actual notice, a written petition stating the grounds for contesting the action by the Director and requesting a hearing.

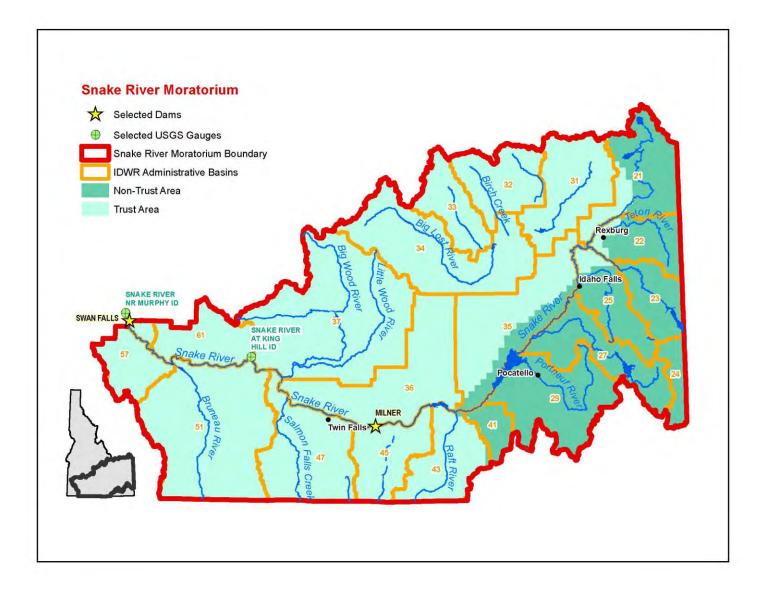
DATED this 16 day of July 2024.

Mathew Weaver Director

### AMENDED MORATORIUM ORDER

## IN THE MATTER OF APPLICATIONS FOR PERMITS FOR THE DIVERSION AND USE OF SURFACE AND GROUND WATER WITHIN THE SNAKE RIVER BASIN UPSTREAM FROM SWAN FALLS DAM

# APPENDIX A: Map of the Snake River Moratorium Area



# **CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that on this 16th day of July 2024, the above and foregoing, was served by the method indicated below, and addressed to the following:

Robert L. Harris HOLDEN, KIDWELL, HAHN & CRAPO, PLLC P.O. Box 50130		U.S. Mail, postage prepaid Email				
Idaho Falls, ID 83405						
rharris@holdenlegal.com						
Attorneys for the City of Ammon, the City of Idaho Falls, and Falls Water Co., Inc.						
Candice McHugh		U.C. Mail mante a manaria				
Chris Bromley	$\boxtimes$	U.S. Mail, postage prepaid Email				
MCHUGH BROMLEY, PLLC		Lindi				
380 South 4 <sup>th</sup> Street, Suite 103						
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