#### BEFORE THE DEPARTMENT OF WATER RESOURCES

#### OF THE STATE OF IDAHO

IN THE MATTER OF DISTRIBUTION OF WATER TO VARIOUS WATER RIGHTS HELD BY OR FOR THE BENEFIT OF 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

Docket No. CM-DC-2010-001

FINAL ORDER REGARDING APRIL 2022 FORECAST SUPPLY

(METHODOLOGY STEPS 1–3)

#### FINDINGS OF FACT

1. On April 19, 2016, the Director ("Director") of the Idaho Department of Water Resources ("Department") issued his *Fourth Amended Final Order Regarding Methodology for Determining Material Injury to Reasonable In-Season Demand and Reasonable Carryover* ("Methodology Order"). The Methodology Order established nine steps for determining material injury to members of the Surface Water Coalition ("SWC"). This order applies steps 1, 2, and 3 of the Methodology Order.

#### A. Step 1

- 2. By April 1 of each year, Step 1 requires members of the SWC to submit to the Department electronic shapefiles delineating the total anticipated irrigated acres for the upcoming year "or confirm in writing that the existing electronic shape file submitted by SWC has not varied by more than five percent." *Methodology Order* ¶ 1 at 35.
- 3. On March 8, 2022, the Department received a letter from A&B Irrigation District ("A&B"), Burley Irrigation District ("BID"), Milner Irrigation District ("Milner"), North Side Canal Company ("NSCC") and Twin Falls Canal Company ("TFCC"), stating that their total number of irrigated acres for 2022 will not vary by more than five percent from the electronic shapefiles submitted in prior years.
- 4. On March 9, 2022, the Department received a letter from American Falls Reservoir District #2 ("AFRD2"), stating that its total number of irrigated acres has not varied by more than five percent.
- 5. On April 1, 2022, Minidoka Irrigation District ("Minidoka") submitted its electronic shapefile delineating its total irrigated acres to the Department.

6. Based on the information submitted by the SWC, the Department will use the following total irrigated acres:

	Total Irrigated	
	Acres	Data Source
A&B	15,924	SRBA Partial Decree
AFRD2	62,361	SRBA Partial Decree
BID	46,035	2013 shapefile submitted by BID, reduced by Department
		for overlapping acres and acres outside of service area.
Milner	13,335	SRBA Partial Decree
		2022 shapefile submitted by Minidoka, reduced by
Minidoka	75,340	Department for overlapping acres and acres outside of
		service area.
NSCC	154,067	SRBA Partial Decree
TFCC	194,732	2013 shapefile submitted by TFCC, reduced by Department
		for overlapping acres and acres outside of service area.

## B. Step 2

- 7. Step 2 states that, within fourteen days of the issuance of the joint forecast ("Joint Forecast") prepared by the United States Bureau of Reclamation and the United States Army Corp of Engineers, the Director "will issue a final order predicting the April [Forecast Supply] for the water year for each SWC entity. The Director will compare the April [Forecast Supply] for each SWC entity to the [Baseline Demand] for each SWC entity to determine if a demand shortfall ("DS") is anticipated for the upcoming irrigation season." *Methodology Order* ¶ 3 at 36.
- 8. On April 6, 2022, the Joint Forecast was announced, predicting an unregulated inflow 2,150,000 acre-feet at the Snake River near Heise gage for the period of April through July. The forecasted flow volume equates to 65% percent of average. The Joint Forecast "is generally as accurate a forecast as is possible using current data gathering and forecasting techniques." *Id.* ¶ 49 at 17 (citation omitted).
- 9. The Heise natural flow data from years 1990–2021 were data inputs for development of regression equations for A&B and Milner to predict the natural flow supply.<sup>2</sup> Data greater or less than two standard deviations from average were excluded from the regression development.
- 10. The April-July Heise natural flow data from the years 1990–2021 and Box Canyon November-March total discharge data for the period 1989–2021, were data inputs for development of multiple linear regression equations to predict the natural flow supplies for AFRD2, BID, Minidoka, NSCC, and TFCC. *Methodology Order* ¶ 49 at 17–18. The U.S.

<sup>1</sup> The average is based on the years1991-2020. The Joint Forecast relies on a "30-Year Climate Normal" to calculate an Average April through July runoff volume.

<sup>&</sup>lt;sup>2</sup> Attached hereto, as Attachment A, are the regression analyses for each SWC entity used to predict natural flow supply.

Geological Survey measures and monitors the flow at the Box Canyon stream flow measurement gage. The Box Canyon November-March total discharge used by the Director in the regression models for 2022 totaled 93,524 acre-feet.

11. The storage allocations were predicted for each SWC member. As of April 1, 2022, preliminary water right accounting indicates the water rights for Lake Walcott, Jackson Lake 1910, Palisades Winter Water Savings, Island Park 1921, American Falls Winter Water Savings, and Henry's Lake 1965 space are satisfied. The remaining reservoir rights are 1,603,003 acrefeet from satisfaction. The Surface Water Supply Index (SWSI)<sup>3</sup> indicates the water supply in 2001, 2002, and 2004 are analogous to the water supply in 2022. Based on the analogous years, the Director anticipates the remaining reservoir rights for Jackson Lake, Palisades and American Falls will be 45-95% satisfied and each SWC member will receive 83-96% of their allocation. The storage allocations are based on the anticipated allocations minus evaporation charges.

# 12. Based on the above, the Director projects as follows:

	Predicted Natural Flow Supply	Predicted Storage Allocation	Minidoka Credit Adjustment	Total Supply	BLY 06/08/12	Shortfall
A&B	467	122,306		122,773	59,992	0
AFRD2	16,941	364,890	1,000	382,831	427,672	44,800
BID	64,881	213,484	5,130	283,494	251,531	0
Milner	3,050	72,450		75,500	47,135	0
Minidoka	88,905	301,293	8,370	398,568	369,492	0
NSCC	246,664	744,164	-7,750	983,078	978,888	0
TFCC	741,869	207,120	-6,750	942,239	1,060,011	117,800
Total Projected Demand Shortfall (AF) 162,6					162,600	

#### C. Step 3

## 13. Step 3 requires the following:

Step 3: By May 1, or within fourteen (14) days from issuance of the final order predicting the April FS, whichever is later in time, junior ground water users with approved mitigation plans for delivery of water must secure, to the satisfaction of the Director, a volume of water equal to their proportionate share of the April DS unless the April DS is revised as explained below in paragraph 6. If junior ground water users secured water for a reasonable carryover shortfall to an individual SWC member in the previous year, the current-year mitigation obligation to the individual SWC member will be reduced by the quantity of water secured for the

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<sup>&</sup>lt;sup>3</sup> SWSI is a predictive indicator of the surface water available in a basin compared to historic supply. The SWSI is produced monthly by the Natural Resources Conservation Service (NRCS). *See* Nat. Res. Conserv'n Serv., U.S. Dep't of Agric., *Surface Water Supply Index (SWSI)*, https://www.nrcs.usda.gov/wps/portal/nrcs/detail/id/snow/waterproducts/?cid=stelprdb1240689 (last visited Apr. 20, 2022).

reasonable carryover shortfall. The secured water will not be required to be delivered to the injured members of the SWC until the Time of Need.

*Methodology Order*  $\P$  4 at 36.

- 14. The predicted April DS for AFRD2 is 44,800 acre-feet and TFCC is 117,800 acre-feet. The total predicted DS is 162,600 acre-feet.
- 15. The Eastern Snake Plain Aquifer Model ("ESPAM") is used to predict the junior priority water rights that must be curtailed to produce the volume of water equal to the predicted April DS in the near Blackfoot to Minidoka reach. The ESPAM is updated periodically as new field measurements and advancements in modeling technology become available. ESPAM Version 2.2 ("ESPAM2.2") superseded Version 2.1. Improvements to the ground water flow model in ESPAM2.2 were identified and prioritized in collaboration with the Eastern Snake Hydrologic Modeling Committee (ESHMC). Significant improvements incorporated into ESPAM2.2 included extension of the calibration period to include water years 2009 through 2018, improved representation of aquifer recharge in the vicinity of the Big and Little Wood Rivers, improved representation of aquifer interaction with the Heise to Shelley reach of the Snake River, and improved representation of aquifer interaction with the near Blackfoot to Minidoka reach of the Snake River. See Jennifer Sukow, Idaho Dep't of Water Res., Model Calibration Report: Eastern Snake Plain Aguifer Model Version 2.2 (2021), https://research.idwr.idaho.gov/files/ projects/espam/browse/ESPAM22 Reports/ModelCalibrationRpt/ModelCalibration22 Final.pdf. The latter included improved spatial representation of aquifer discharge to the lower Portneuf River and numerous spring-fed creeks in the vicinity of American Falls Reservoir. The calibrated ESPAM2.2 was provided to ESHMC members for review on August 25, 2020, and was discussed in committee meetings on September 9, 2020, and October 28, 2020. The ESHMC adopted Version 2.2 of the ground water flow model during the October 28, 2020, meeting. ESPAM2.2 model documentation reports (including a model calibration report, a predictive uncertainty analysis, a superposition model scenario, and a curtailment scenario) were finalized on May 27, 2021. See Idaho Dep't of Water Res., ESPAM2.2 Reports (2021), https:// research.idwr.idaho.gov/files/projects/espam/ browse/ESPAM22 Reports/.
- 16. The Department ran ESPAM2.2 to predict the junior priority water rights within the area of common ground water supply that must be curtailed to produce the volume of water equal to the predicted April DS at steady state. Ground water rights bearing priority dates later than December 25, 1979, must be curtailed to produce the volume of water equal to the predicted April DS in the near Blackfoot to Minidoka reach.

#### **CONCLUSIONS OF LAW**

1. The Fifth Judicial District Court, in and for the County of Minidoka, held that the evidentiary standard of proof to apply in conjunctive administration of hydraulically connected water rights is clear and convincing. *See* Mem. Decision & Order on Pets. for Jud. Rev., *A&B Irr. Dist., Inc. v. Idaho Dep't of Water Res.*, No. CV-2009-647 (Minidoka Cnty. Dist. Ct. Idaho May 4, 2010); Mem. Decision & Order on Pets. for Reh'g, *A&B Irr. Dist., Inc. v. Idaho Dep't of Water Res.*, No. CV-2009-647 (Minidoka Cnty. Dist. Ct. Idaho Nov. 2, 2010).

- 2. "Clear and convincing evidence refers to a degree of proof greater than a mere preponderance." *Idaho State Bar v. Topp*, 129 Idaho 414, 416, 925 P.2d 1113, 1115 (1996) (internal quotations removed). "Clear and convincing evidence is generally understood to be '[e]vidence indicating that the thing to be proved is highly probable or reasonably certain." *State v. Kimball*, 145 Idaho 542, 546, 181 P.3d 468, 472 (2008) (citing *In re Adoption of Doe*, 143 Idaho 188, 191, 141 P.3d 1057, 1060 (2006)); *see also Idaho Dep't of Health & Welfare v. Doe*, 150 Idaho 36, 41, 244 P.3d 180, 185 (2010).
- 3. The Director must utilize the best available technology for determining the impact of junior ground water diversions. See Clear Springs Foods, Inc. v. Spackman, 150 Idaho 790, 816, 252 P.3d 71, 97 (2011). ESPAM 1.1 and 2.1 are the model versions utilized previously in SWC delivery call proceedings. The Director determined that ESPAM 2.1 is the best available scientific tool for predicting the effects of ground water pumping. See Idaho Ground Water Assoc. v. Idaho Dep't of Water Res., 160 Idaho 119, 124, 369 P.3d 897, 902 (2016). ESPAM 2.2 is the latest version of the ESPAM model. The improvements incorporated into ESPAM 2.2, as discussed in Finding of Fact 15, make it the best available scientific tool for predicting the effects of ground water pumping in this proceeding.
- 4. In 2022, the Director has sufficient information to quantify irrigated areas for each of the SWC members as required by Step 1.
- 5. The Joint Forecast predicts an unregulated inflow of 2,150,000 acre feet at the Snake River near Heise gage for the period of April through July. The forecasted flow volume equates to 65% of average.
- 6. The April predicted DS is 162,600 acre-feet. Junior ground water users holding consumptive water rights bearing priority dates junior to December 25, 1979, within the Eastern Snake Plain Aquifer area of common ground water supply must mitigate for their proportionate share of the predicted DS in accordance with an approved mitigation plan. Junior ground water users mitigating for their proportionate share of the predicted DS with a secured volume of water pursuant to an approved mitigation plan must, to the satisfaction of the Director, secure their proportionate share for delivery to the injured members of the SWC on or before May 1, 2022. There was a reasonable carryover shortfall of 64,647 acre-feet in the fall of 2021. However, because junior ground water users did not secure any mitigation water for a carryover shortfall, there is no adjustment to the mitigation obligation.
- 7. If, on or before May 1, 2022, ground water users holding consumptive water rights bearing priority dates junior to December 25, 1979, within the Eastern Snake Plain Aquifer area of common ground water supply fail to establish, to the satisfaction of the Director, that they can mitigate for their proportionate share of the predicted DS of 162,600 acre-feet in accordance with

establish that they can mitigate for their proportionate share of the predicted DS.

<sup>&</sup>lt;sup>4</sup> There are seven approved mitigation plans in place responding to the SWC delivery call filed by: 1) A&B Irrigation District, 2) Southwest Irrigation District and Goose Creek Irrigation District (collectively, "SWID"), 3) the Idaho Ground Water Appropriators, Inc. ("IGWA"), 4) certain cities commonly referred to as the "Coalition of Cities", and 5) certain entities commonly referred to as the "Water Mitigation Coalition." A&B Irrigation District's proportionate share of the predicted DS of 162,600 acre-feet is 2,542 acre-feet. Due to the nature of the mitigation plans for SWID, IGWA, the Coalition of Cities and the Water Mitigation Coalition, these entities do not need to

an approved mitigation plan, the Director will issue an order curtailing the junior-priority ground water user. Junior ground water users who are mitigating with a secured volume of water are not required to assign the secured volume of water until after the Director issues a subsequent order requiring assignment of the water.

8. If, at any time prior to the Director's final determination of the April Forecast Supply, the Director can determine with certainty that any member of the SWC has diverted more natural flow than predicted, or has accrued more storage than predicted, the Director will revise his initial, predicted DS determination.

#### **ORDER**

Based upon and consistent with the foregoing, IT IS HEREBY ORDERED as follows:

The Director predicts an in-season DS of 162,600 acre-feet. On or before May 1, 2022, ground water users holding consumptive water rights bearing priority dates junior to December 25, 1979, within the Eastern Snake Plain Aquifer area of common ground water supply shall establish, to the satisfaction of the Director, that they can mitigate for their proportionate share of the predicted DS of 162,600 acre-feet in accordance with an approved mitigation plan. If a junior ground water user cannot establish, to the satisfaction of the Director, that they can mitigate for their proportionate share of the predicted DS of 162,600 acre-feet in accordance with an approved mitigation plan, the Director will issue an order curtailing the junior-priority ground water user.

Dated this 20th day of April 2022.

Final Order Regarding April 2022 Forecast Supply (Methodology Steps 1–3)—Page 6

# **CERTIFICATE OF SERVICE**

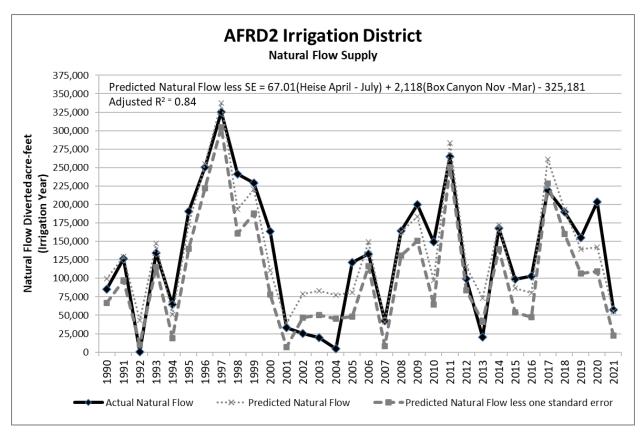
I HEREBY CERTIFY that on this 20th day of April 2022, the above and foregoing, was served by the method indicated below, and addressed to the following:

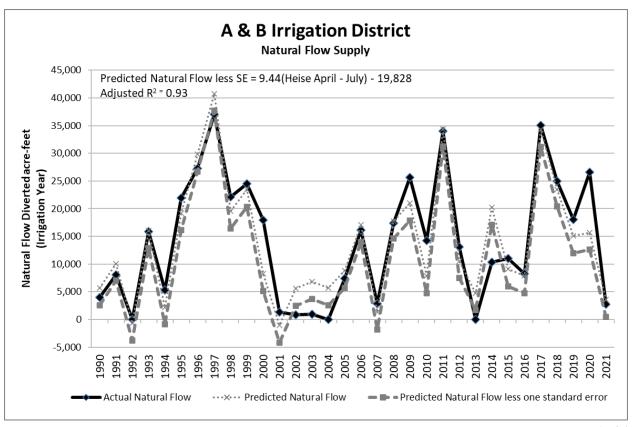
John K. Simpson Travis L. Thompson BARKER ROSHOLT & SIMPSON, LLP P. O. Box 63 Twin Falls, ID 83303-0063 jks@idahowaters.com tlt@idahowaters.com nls@idahowaters.com jf@idahowaters.com	<ul><li>✓ U.S. Mail, postage prepaid</li><li>✓ Email</li></ul>
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Kathleen Marion Carr US Dept. Interior 960 Broadway Ste 400 Boise, ID 83706 kathleenmarion.carr@sol.doi.gov	<ul><li>☑ U.S. Mail, postage prepaid</li><li>☑ Email</li></ul>
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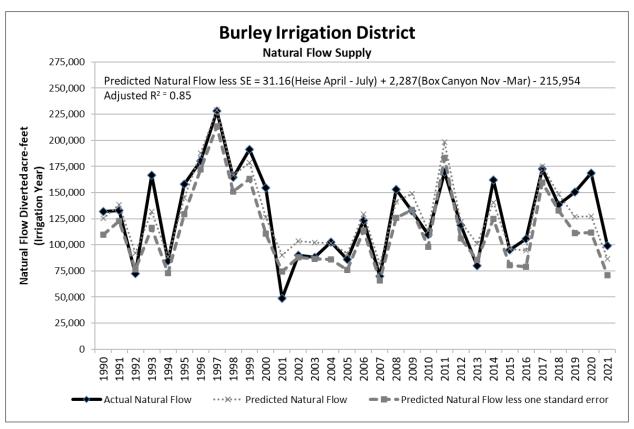
Rich Diehl City of Pocatello P.O. Box 4169 Pocatello, ID 83205 rdiehl@pocatello.us	<ul><li>☑ U.S. Mail, postage prepaid</li><li>☑ Email</li></ul>
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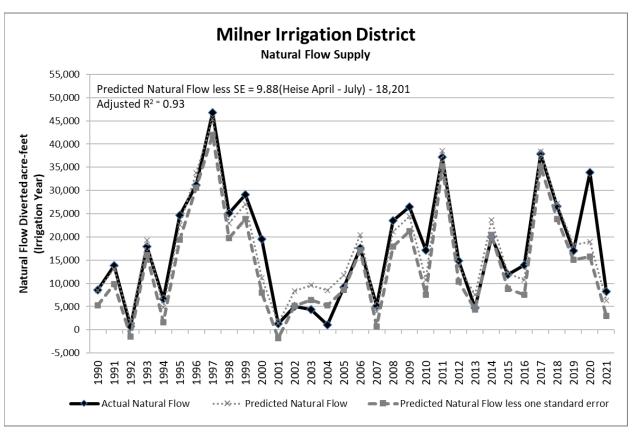
Sarah Tschohl

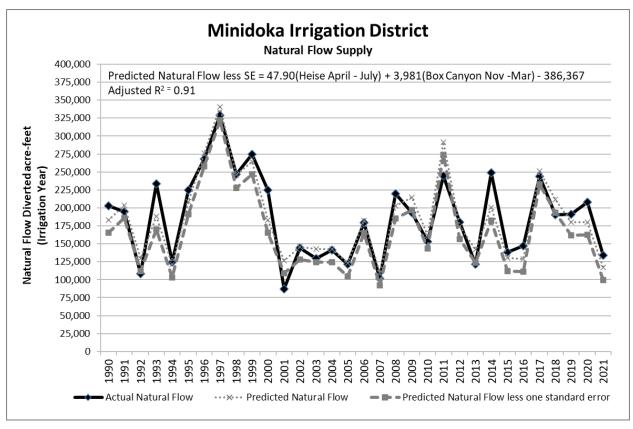
#### ATTACHMENT A

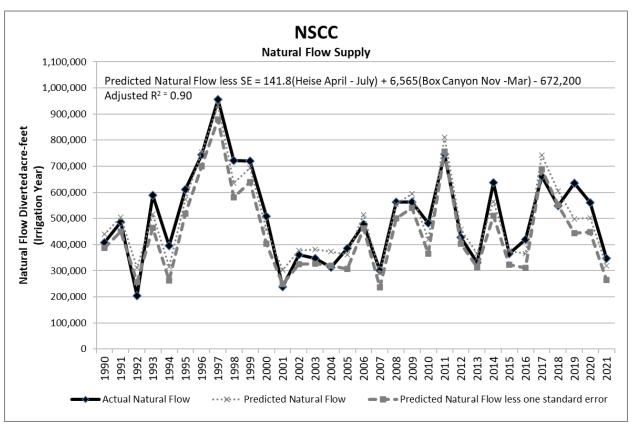


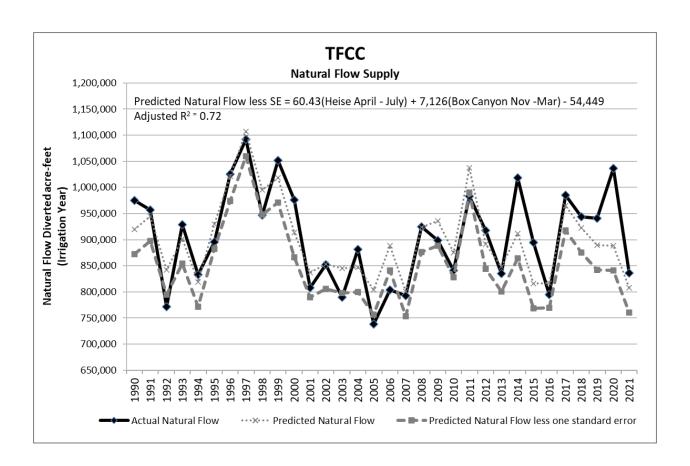












# EXPLANATORY INFORMATION TO ACCOMPANY A FINAL ORDER

(To be used in connection with actions when a hearing was **not** held)

(Required by Rule of Procedure 740.02)

The accompanying order is a "**Final Order**" issued by the department pursuant to section 67-5246. Idaho Code.

# **PETITION FOR RECONSIDERATION**

Any party may file a petition for reconsideration of a final order within fourteen (14) days of the service date of this order as shown on the certificate of service. **Note: The petition must** be <u>received</u> by the Department within this fourteen (14) day period. The department will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. See section 67-5246(4), Idaho Code.

#### REQUEST FOR HEARING

Unless the right to a hearing before the director or the water resource board is otherwise provided by statute, any person who is aggrieved by the 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. See section 42-1701A(3), Idaho Code. **Note: The request must be** received by the Department within this fifteen (15) day period.

# APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, any party aggrieved by a final order or orders previously issued in a matter before the department may appeal the final order and all previously issued orders in the matter to district court by filing a petition in the district court of the county in which:

- i. A hearing was held,
- ii. The final agency action was taken,
- iii. The party seeking review of the order resides, or
- iv. The real property or personal property that was the subject of the agency action is located.

The appeal must be filed within twenty-eight (28) days of: a) the service date of the final order, b) the service date of an order denying petition for reconsideration, or c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration, whichever is later. See section 67-5273, Idaho Code. The filing of an appeal to district court does not in itself stay the effectiveness or enforcement of the order under appeal.