BEFORE THE DEPARTMENT OF WATER RESOURCES

FOR THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR TRANSFER NO. 78356[1] (SHEKINAH INDUSTRIES); APPLICATION FOR TRANSFER NO. 78355[2] (ORCHARD RANCH); APPLICATION FOR PERMIT NO. 63-32499 (MAYFIELD TOWNSITE); APPLICATION FOR PERMIT NO. 61-12095 (NEVID-CORDER); APPLICATION FOR PERMIT NO. 61-12096 (NEVID); APPLICATION FOR PERMIT NO. 63-32703 (ORCHARD RANCH); APPLICATION FOR PERMIT NO. 61-12256 (INTERMOUNTAIN SEWER AND WATER); APPLICATION FOR PERMIT NO. 63-33344 (ARK PROPERTIES-MAYFIELD TOWNSITE)	)	**FINAL ORDER REGARDING WATER SUFFICIENCY**

PROCEDURAL HISTORY

I. Background

On January 24, 2012, the Director ("Director") of the Idaho Department of Water Resources ("Department") issued an *Order Creating Contested Case and Consolidating Protested and Unprotested Applications* ("Consolidation Order"). The order consolidated six pending water right applications and two pending transfer applications (collectively referred to as "the applications") for planned communities and irrigation projects along the I-84 corridor near the Ada County/Elmore County line. The applications were consolidated for the purpose of evaluating the sufficiency of the water supply in the same geographic area of the Western Snake River Plain aquifer along the I-84 corridor. The Director concluded that consolidation was appropriate because the applicants "seek to appropriate new ground water rights or transfer ground water rights in the same general area, an area that is of concern to the Department because of falling ground water levels." *Consolidation Order* at 4. The following chart lists the applications that were consolidated:

[1] Transfer no. 78356 was renumbered from Transfer no. 73811.
[2] Transfer no. 78355 was renumbered from Transfer no. 73834.

Applications Listed in the Chronological Order of Receipt

NAME	NUMBER	RECEIVED	PRIORITY	WATER USE	CFS
Mayfield Townsite, LLC	63-32499	7/28/2006	7/28/2006	Municipal	10.00
Shekinah Industries, Inc.	Transfer 78356	12/4/2006	1963[3]	Irrigation	5.56
Nevid, LLC	61-12095	4/3/2007	4/3/2007	Municipal	5.00
Nevid, LLC	61-12096	4/3/2007	4/3/2007	Municipal & Fire Protection	20.48
Orchard Ranch, LLC	Transfer 73855	6/21/2007	1976	Irrigation (was municipal)	11.36
Orchard Ranch, LLC	63-32703	6/21/2007	6/21/2007	Irrigation (was municipal)	9.60
Intmtn. Sewer & Water	61-12256	1/17/2008	1/17/2008	Municipal	13.76
Ark Properties, LLC/ Mayfield Townsite, LLC	63-33344	3/1/2010	3/1/2010	Irrigation in planned community 63-32499	9.00

On April 13, 2012, the Director issued a *Prehearing Scheduling Order* in this consolidated proceeding, wherein the Director requested a staff memorandum regarding the sufficiency of the water supply in the area of the applications. The Director also established a schedule for the parties to file their own expert reports and to respond to the other parties' expert reports. The Director also established a hearing date.

The Director conducted a hearing in this consolidated proceeding on April 17 and 18, 2013. The following parties appeared at the hearing:

Norm Semanko, attorney at law, appeared for Nevid, LLC ("Nevid") and Orchard Ranch, LLC ("Orchard Ranch").
Bruce Smith, attorney at law, appeared for Mayfield Townsite, LLC ("Mayfield") and Ark Properties, LLC ("Ark").
Michael Creamer, attorney at law, appeared for Shekinah Industries, Inc ("Shekinah").
Wayne Shepherd appeared for the City of Mountain Home.
Lori Atkins ("Atkins") appeared for herself and also acted as spokesperson for Darla Bateman, Tim Conrads, Mary Frisch, Wendy Tippetts, Darwin Roy, Tonya Bolshaw, Dana and Calvin Scott Quinney.[4]
Cleveland Corder appeared for Cleveland Corder, LLC.
John Simpson, attorney at law, appeared for Idaho Power Company ("Idaho Power").

Applicant Intermountain Sewer & Water and protestants Idaho Water Co., LLC, Griffin Herren, the City of Pocatello, and G3, LLC failed to appear at the hearing. By separate orders of the Director, they were dismissed as parties for failure to appear at the time and place set for hearing.

[3] Transfer number 78356 seeks to transfer water rights with priority dates of 1963, 1967, 1972, 1974, and 1980.
[4] Atkins informed the Department that Gene Wilson, a person listed on the group protest filed by Atkins, is deceased.

II. IDWR Staff Memo

Prior to the hearing, Department staff prepared and submitted a memo evaluating the sufficiency of the water supply along the I-84 corridor, titled *Sufficiency of Water Supply for Water Right Applications and Transfers* ("IDWR memo"). The IDWR memo divides the evaluation of the sufficiency of the water supply along the I-84 corridor into three main components.

First, the IDWR memo establishes and justifies a study boundary. The staff memo establishes an 11-mile wide study boundary in which to develop a water budget. *IDWR memo* at 3, Figure 2. The study area extends from the uplands in the northeast, across the Mountain Home Plateau to the rim of the Snake River Canyon. *Id.* The study area is parallel to the southwesterly direction of the regional ground water flow. *Id.* at 4. The staff memo recognizes an adjacent comparison area. The comparison area includes the Cinder Cone Butte Critical Ground Water Area ("Cinder Cone Butte CGWA"). *Id.*, Figure 3. The boundary of the comparison area was developed in an earlier ground water study and is being used now to assist in evaluating hydrologic impacts of the proposed ground water development. *Id.* at 4-5. "Comparing information from the study area to information from a nearby area that has had significant groundwater development for several decades provides context for assessing the potential hydrologic impacts of the proposed applications." *Id* at 3.

Second, the IDWR memo presents existing hydrologic information related to the study area and the comparison area and develops water budgets for the two areas. The water budget is comprised of various inputs and debits to the water system, including surface water inflows and outflows, precipitation, evapotranspiration, recharge and consumptive uses. *Id.* at 6-14. The IDWR memo compares the gross recharge estimate calculated in the IDWR memo with a gross recharge estimate from an independently developed hydrogeologic assessment conducted by J.A. Welhan in a report titled *Preliminary Hydrogeologic Analysis of the Mayfield Area, Ada and Elmore Counties, Idaho*, August 2012 ("Wehlan report") using Darcy's law. *Id.* at 14. Welhan's hydrogeologic assessment was on a smaller scale, so IDWR staff scaled up the estimate for comparison purposes. *Id.* at 14-15. The staff memo recognizes that the adjusted Welhan recharge estimate using Darcy's law is higher, but concludes that the estimates "compare well given the uncertainty inherent in the estimation of recharge, especially when using Darcy's law." *Id.* at 15.

Finally, the IDWR memo estimates the sufficiency of the water supply within the study boundary for existing and new uses. The IDWR memo concludes there is a net average annual recharge volume of 7,100 AFA in the recharge area. This number represents "the maximum additional consumptive use that could normally be authorized within the study area." *IDWR memo* at 20. This estimate is "generally confirmed" by application of Darcy's law. *Id.* On a continuous basis, this amount is equivalent to 9.8 cfs. The total maximum appropriation sought by the parties to the consolidated hearing is 85 cfs. If the flow rate were the only fact considered by the Department, there is not enough water for all applications. However, as the IDWR memo points out, the consumptive use for each development depends not on rate limits but rather on water use and reuse practices. *Id.* at 16. The IDWR memo states there is insufficient information in the record to evaluate each individual applicant's consumptive needs as the

applications do not provide information about consumptive use. *Id.* There is information by which the Director can estimate these quantities, however. These estimates will be discussed in a subsequent section of this order.

III. Expert Reports of the Parties

A. SPF Report

SPF Water Engineers ("SPF") prepared its *Response to IDWR Staff Memo Regarding the Sufficiency of Water Supply for Water Right Applications and Transfers Along the I-84 Corridor* ("SPF report") on behalf of Mayfield, Nevid and Ark. The SPF report generally agreed with the study area method employed by IDWR, but characterized the IDWR memo's water budget conclusions as "likely conservative." *SPF report* at 2. The SPF report suggested changes that would result in an increase in the net annual rate of recharge. The SPF report suggested that the IDWR memo should have included a component of upwelling low temperature geothermal ground water in its water budget calculation. *Id.* SPF suggested the estimated annual geothermal contribution should be 550 AF. *Id.* The SPF report also suggested that the IDWR memo overestimated consumptive use because not all stockwater, commercial, industrial, or domestic withdrawals are fully consumed, and because IDWR assumes irrigation of some lands not identified as a place of use by any active water rights. *Id.* The SPF report also argues that if pumping by the pending applications results in depletions to the Snake River, the amount of depletion is insignificant compared to the flow of the Snake River and wouldn't be realized for decades. *Id.* at 3.

B. ERO Report

ERO Resources Corporation ("ERO") prepared a report titled *Water Supply Evaluation for Proposed Projects Along the I-84 Corridor* ("ERO report") on behalf of Idaho Power. The ERO report criticizes the size and location of the study area adopted in the IDWR memo. The ERO report suggests the study area boundary established by IDWR is arbitrary and argues that there is no basis for treating the study area and comparison area separately. *ERO report* at 14-15. The ERO report argues the water budget in the IDWR memo overestimates the volume of annual recharge and overestimates the volume of water that is available for appropriation. *Id.* at 15.

The ERO report also criticizes a number of assumptions made in the IDWR memo, arguing that the water budget adopted by IDWR staff should have been more conservative. For example, the ERO report criticizes the inclusion of ground water recharge overlying the Blacks Creek Drainage in the water budget without inclusion of ground water diverted in the Blacks Creek Drainage pursuant existing water rights. *Id.* at 15-16. In another example, the ERO report argues that recharge from precipitation on the non-recharge area should not be included in the water budget because portions of this area are outside of and down gradient of the "reach" of the proposed wells. *Id.* at 16.

ERO disagrees with the IDWR memo's approach of separating the study area and the comparison areas. ERO argues that the ground water contours in Figure 5(d) of the IDWR

memo suggest that existing uses in the comparison area are currently withdrawing water in the study area and because of this, the IDWR memo should have combined the study area and comparison area into one unit. *Id.* at 18. In an attempt to show the impact of future pumping in the study area on the comparison area, ERO prepared a Theis analysis simulating the effect of water withdrawals on the comparison area for 20 and 40 year periods. *Id.* at 18-19. While recognizing that the Theis analysis "is a simplification of the actual conditions that may exist," ERO states that the results "point to the potential interconnection" between the study area and the comparison area. *Id.* at 19.

Finally, the ERO report evaluates the impacts of the proposed ground water diversions on the Snake River and concludes that the diversions will reduce the discharge to the Snake River and may lead to a violation of the State of Idaho minimum flows at Murphy Gage. *Id.* at 22-23.

IV. Rebuttal Expert Reports by Parties

A. SPF Rebuttal Report

SPF's rebuttal report, titled, *Rebuttal Report of Christian R. Petrich* ("SPF rebuttal report"), critiques ERO's report. SPF disagrees with ERO's criticisms regarding IDWR's study area boundary: "Constraining study-area dimensions to hydrogeologic features such as faults or geologic contacts (as ERO suggests) would require extending the study area to include the entire western Snake River Plain, an unwieldy and impractical study area for answering the specific water-budget questions at hand." *SPF rebuttal report* at i. SPF concludes that the study area was appropriately sized and technically defensible. *Id.* at 2.

The SPF rebuttal report also challenges ERO's basis for arguing that future pumping in study area will impact the comparison area (including the Cinder Cone Butte CGWA). The SPF rebuttal report argues ERO's use of the Theis method to show hydraulic connection between the study area and the comparison area was "inappropriate" in this situation. *Id.* SPF also addresses ERO's argument that Figure 5(d) of the IDWR memo shows that pumping in the Cinder Cone Butte CGWA extends into the study area. The SPF rebuttal report argues that the "IDWR depictions of groundwater-level declines outside of the CGWA are based on software interpolation unsupported by actual groundwater-level data." *Id.*

The SPF rebuttal report also concluded the inclusion of Blacks Creek Drainage within the study area is appropriate because IDWR staff correctly subtracted surface water flowing out of the study area from the water budget. *Id.* The SPF rebuttal report also identified a geo-referencing error by IDWR which, if corrected, results in a 340 AF increase in IDWR's net average annual recharge volume. *Id.* at 16-17.

Finally, the SPF rebuttal report states that the existing permits are outside of the trust water area established by rule. *Id.* at ii. SPF also theorizes that pumping would first lead to reduced evapotranspiration in the vicinity of the Snake River Canyon springs and would not necessarily lead to a reduction in discharge to the Snake River. *Id.*

B. ERO's Rebuttal Report

ERO's rebuttal report, titled *Response to SPF's Memorandum Entitled "Response to IDWR Staff Memo Regarding the Sufficiency of Water Supply for Water Right Application and Transfers Along the I-84 Corridor"* ("ERO rebuttal report"), critiques the SPF report. First, ERO argues that IDWR's estimated average rate of annual recharge should not be increased by 550 AF because of geothermal upwelling as suggested by SPF. *ERO rebuttal report* at 1. The ERO rebuttal report identifies an error in the temperature conversions in the Idaho Geological Survey report which served as the basis for SPF's geothermal upwelling argument. *Id.* at 2. ERO argues that "given the uncertainty regarding the volume, if any, of upwelling geothermal water, IDWR's recharge estimate is appropriately conservative in not including this factor." *Id.*

ERO also responded to SPF's argument that IDWR memo's average annual rate of recharge should be increased by 180 AF because not all water diverted for stockwater, commercial, industrial, or domestic withdrawals is consumptively used. ERO argues that water diverted but not consumed likely won't be returned to the aquifer and "without information to accurately estimate the amount, timing and location of unconsumed water reaching the regional aquifer," unconsumed water should not be considered in the water budget. *Id.* at 3.

ERO also responded to SPF's argument that the average annual rate of recharge should be increased by 60 AF because some of the water consumption in IDWR's computations in the water balance results from assumed irrigation of land without water rights. The ERO rebuttal report states that IDWR used irrigated acreage for a single year in calculating the average annual rate of recharge for its report. *Id.* at 3. ERO argues that, not only should IDWR have counted water use occurring without water rights (because it is in fact occurring), but that IDWR should have gone further and counted water rights that were not being diverted that year because the water right holders have the right to exercise their water rights and are motivated to do so in the future because of water demand in the area. *Id.* at 5.

In response to SPF's comments about how pumping in the Cinder Cone Butte CGWA has not spread into the study area, ERO refers to Figure 5 of the IDWR memo (the ground water change maps) and references its Theis analysis. *Id.* at 6. ERO also argues that it is appropriate to rely on software interpolations to estimate ground water levels unless other data is available to suggest otherwise. *Id.* at 7.

Finally, ERO responds to SPF's argument that pumping depletions would be insignificant in comparison to the Snake River and wouldn't be realized for decades. ERO argues that SPF understates the likely amount of the depletion of the Snake River flows and that the amount of the depletion should not matter when IDWR is considering injury to senior priority water rights. *Id.* at 8. ERO argues that IDWR is obligated to protect the portion of Idaho Power's water rights not subordinated. *Id.* at 8-9.

V. Prehearing Motions

On April 15, 2013, Mayfield and Ark filed an *Objection and Motion to Limit Testimony and Other Evidence to Only Information Relevant to Water Availability in the Staff Designated*

Study Area ("motion"). Oral argument on the motion was presented at the start of the hearing on April 17, 2013 and the motion was taken under advisement. By separate order, the Director granted in part and denied in part the motion. *Order Granting In Part and Denying In Part Mayfield and Ark Objection and Motion To Limit Testimony and Other Evidence* (November 4, 2013) at 3. The Director excluded issues of trust water and injury to Idaho Power's water rights from consideration in this proceeding. *Id.* However, the Director found that issues related to the impact of the applications on the Snake River, the State of Idaho's minimum flows, and on trust water rights were properly considered in this proceeding. *Id.*

FINDINGS OF FACT

The Study Area Boundary:

1. The Director finds that the study area boundary adopted by IDWR staff in the IDWR memo is reasonable. The 11-mile wide study boundary is appropriately sized and allows for "[c]omparing information from the study area to information from a nearby area that has had significant groundwater development for several decades [and] provides context for assessing the potential hydrologic impacts of the proposed applications." *IDWR memo* at 3.

2. Dr. Christian Petrich, primary author of the SPF report, testified in support of the protocol and methodology adopted by IDWR staff in the IDWR memo. The SPF report concludes that the study area proposed by IDWR staff "is a reasonable study area." *SPF report* at 4.

3. The ERO report argues that the study area boundary is arbitrary and that there is no basis for treating the study area and the comparison area separately. *ERO report* at 14-15. The Director disagrees. The justifications supporting the study area are: (1) the boundary encompasses all proposed POUs and PODs; (2) the study area includes the hydrogeologic system from the recharge area to the discharge area, and includes the contributing watershed; (3) the study area orientation is generally parallel to ground water flow; (4) the study area is large enough to encompass all of the applications but does not include areas influenced by the surface water diversions from the Boise River; and (5) the boundary dimensions were also based on consideration of the Cinder Cone Butte CGWA study, a 1981 report prepared by IDWR, thereby providing a pre-existing comparison area. *IDWR memo* at 4.

4. Norman Young ("Young"), one of the authors of the ERO report, testified that the study area should not be treated as separate from the rest of the entire Mountain Home Plateau. He suggested that unless there is a fault or other discontinuity in the regional aquifer, there is no basis for the smaller study area. *ERO report* at 15. While a study of the entire Mountain Home Plateau would be helpful for analyzing new applications, the scope, size, and cost of the study is unrealistic given state budgets and the need for timely addressing applications filed with the Department. The Director agrees with SPF that "[c]onstraining study-area dimensions to hydrogeologic features such as faults or geologic contacts (as ERO suggests) would require extending the study area to include the entire western Snake River Plain, an unwieldy and impractical study area for answering the specific water-budget questions at hand." *SPF rebuttal report* at i. The study area is a reasonable area within which to determine a ground water budget.

5. ERO argues its Theis analysis further supports its argument that the study area and the comparison area should be treated as one. *ERO report* at 18-19. ERO argues that its Theis analysis proves that pumping by the applicants in the study area will impact the Cinder Cone Butte CGWA. *Id.* at 18. ERO also points to the ground water level change maps in the IDWR memo (especially Figure 5(d)) to argue that pumping in the Cinder Cone Butte CGWA propagates into the study area. *Id.* The Director disagrees with ERO's use of the Theis analysis in this circumstance and disagrees with ERO's interpretation of the IDWR ground water level change maps. ERO's simulations of pumping impacts using the Theis equation overestimate drawdown into the study area because the Theis equation assumes no recharge and also because it assumes continuous pumping. More importantly however, is the fact that approximately 40 years of pumping in the Cinder Cone CWGA has not resulted in the water-level declines projected by ERO's Theis analysis in the study area. The actual water level data from the vicinity of the proposed applications show relatively stable or increasing ground water levels. The results of ERO's Theis analysis are simply not borne out by the actual ground water level data.

Estimate of net average annual recharge volume:

6. IDWR used a standard method for estimating net average annual recharge volume. *SPF report* at 2. The IDWR memo concludes there is a net average annual recharge volume of 7,100 AF in the recharge area. *IDWR memo* at 19. The Director finds that the estimate of net average annual recharge adopted by IDWR staff in the IDWR memo is reasonable with a few modifications.

7. Dr. Petrich testified that IDWR's estimate of net average annual recharge is "reasonable" but also on the conservative side. Dr. Petrich suggested that a higher estimate of average annual recharge was possible and identified three areas where he felt IDWR was too conservative. First, Dr. Petrich argued that IDWR failed to recognize geothermal upwelling in the study area and that this geothermal upwelling would increase the available supply an additional 550 AFA. *SPF report* at 7-8. Dr. Petrich relied upon the Wehlan report to support this argument. Second, Dr. Petrich argued that the consumptive-use volumes used by IDWR staff are likely lower because not all stockwater, commercial, industrial, or domestic withdrawals are fully consumed and some irrigation assumed by IDWR is on land without active water rights. *Id.* at 8. He concluded using SPF's consumptive use estimates for commercial, industrial, or domestic use withdrawals and removing the acres irrigated without water rights would add an additional 180 AFA. *Mayfield/Nevid Exhibit* 4. Third, using SPF's diversion estimates for irrigated land, Dr. Petrich concluded there would be an additional 60 AFA. *Id.*

8. Finally, Dr. Petrich identified an error in the geo-referencing conducted by IDWR. *SPF rebuttal report* at 17-18. Dr. Petrich testified that by correcting the geo-referencing, the net result using IDWR's staff methods was an increase in approximately 340 AFA. *Mayfield/Nevid Exhibit* 4. Dr. Petrich testified these four things added would result in an estimate of average annual recharge of 8,230 AFA. *Id.*

9. The ERO rebuttal report responded to the issues raised in the SPF report. First, ERO identified an error in calculations in the Welhan report. ERO argues IDWR's average rate of annual recharge should not increase because the error raises serious questions about Welhan's conclusions regarding geothermal upwelling. *ERO rebuttal report* at 1. Second, ERO suggests that IDWR's average rate of annual recharge estimate should not be increased because (a) water diverted for stockwater, commercial, industrial or domestic uses would not be available for rediversion by wells in the study area and so cannot be considered as part of the aquifer budget and (b) IDWR's estimate failed to include water use on acres authorized to use water under valid existing water rights that were not irrigated in 2011, thereby potentially underestimating the possible diversions. *Id.* at 3. David Shaw ("Shaw"), another one of the authors of the ERO report, testified that if one was to adopt the study area recommended in the IDWR memo, the estimate of net average annual recharge volume is closer to the Department's recommendation than SPF's number, but Shaw was not able to give a firm recommendation.

10. The Director disagrees with SPF that the average rate of annual recharge volume should increase due to geothermal upwelling. The Director agrees with ERO that there is an error in the Welhan report related to geothermal upwelling. Based on the error, the Director concludes there is unlikely to be any significant geothermal upwelling. And even if there is geothermal upwelling, no evidence was presented by SPF to suggest that geothermal water initiates from outside the study area and wouldn't already be accounted for in the IDWR water budget. Given the uncertainties regarding geothermal contributions, the Director finds the net average recharge volume should not be increased by 550 AF as suggested by SPF.

11. The Director disagrees with SPF that the actual consumptive use volumes determined by IDWR should be decreased. SPF suggests that IDWR's consumptive use estimates for stockwater, commercial, industrial or domestic uses, appear to be high, thereby yielding low estimate of net annual recharge. *SPF report* at 8. For example, SPF states that IDWR's estimate of cattle in the area is excessive. *Id.* at 8-9. However, SPF fails to provide any actual data to counter IDWR's approach. SPF bases it argument on general "familiarity" with stock numbers in the area. *Id.* at 9. SPF also argues that IDWR's estimates of water diversion should be decreased because water might not be fully consumed. *Id.* The quantity of any unconsumed water returning to the aquifer is uncertain. Because of this uncertainty, it is appropriate to be conservative and to treat the ground water pumped as fully consumptive. The Director concludes the net average recharge volume should not be increased 180 AF as suggested by SPF.

12. The Director disagrees with SPF that consumptive use volumes in the IDWR report should be modified. IDWR calculated consumptive use volumes based upon irrigated acreage data for a single year. SPF argues that the consumptive use volumes should be decreased because some irrigation assumed by IDWR is on land without active water rights. *Id.* at 8. In response, ERO argues that IDWR should increase its consumptive use volume because some water rights not presently exercised could be exercised in the future. *ERO rebuttal report* at 5. The Director adopts the IDWR memo approach of looking at a single year of irrigated acreage data because it best represents actual impacts from irrigation. This approach to calculating actual consumptive use is based on the best available data. The Director concludes the net average recharge volume should not be increased by 60 AF as suggested by SPF.

13. The Director agrees with SPF that there was a geo-referencing error in the IDWR memo. Correcting the discrepancy increases the recharge estimate in the "non-recharge" area by approximately 340 AF. The Director concludes that the average recharge volume should be increased by 340 AF as suggested by SPF.

14. Based on the IDWR memo, the expert reports, and the testimony of Dr. Petrich, Shaw and Young, the Director finds the estimated net annual recharge volume for the study area to be 7,440 AFA. On a continuous basis, this amount is equivalent to 10.3 cfs, which is significantly less than the total of the maximum flow rates sought by the consolidated applications.

Volume of Water Needed For Applications:

15. The IDWR memo states that the net recharge rate for the study area is positive but that information related to the annual volume needed for each application was lacking. *IDWR memo* at 16. This prevented staff from being able to evaluate whether there was water for specific applications. Dr. Petrich estimated the annual volume for each transfer and new application. *Mayfield/Nevid Exhibit* 5. No objections to the volumes calculated by Dr. Petrich were raised at the hearing. The Director adopts these volume estimates for consideration of the amount of water needed for each application, recognizing that the volumes may need to be adjusted during further processing of the applications.

16. At a maximum, there is a sufficient supply of water to satisfy only two applications and part of a third: 63-32499 (Mayfield), 73811 (Shekinah), and part of 61-12096 (Nevid):

NAME	NUMBER	RECEIVED	PRIORITY	WATER USE	Est. Annual Volume (AF)
Mayfield Townsite, LLC	63-32499	7/28/2006	7/28/2006	Municipal	4,320
Shekinah Industries, Inc.	78356	12/4/2006	1963	Irrigation	1,107
Nevid, LLC	61-12096[5]	4/3/2007	4/3/2007	Municipal & Fire Protection	2,486
				TOTAL	**7,913**

Sufficiency and Other Water Rights:

17. Ground water sought for appropriation by the applications is hydraulically connected to the Snake River, although the extent of the hydraulic connection is in question. *IDWR memo* at 16-17; *ERO report* at 22; *SPF report* at 3. Ground water is tributary to the Snake River, either as spring flow from the Snake River Canyon rim (that portion that is not evapotranspired) or underflow to the river.

[5] Numerically, Nevid Application No. 61-12095 comes first, but because 61-12095 and 61-12096 were received the same day and have the same priority date, only the larger application will move forward for further processing.

18. Diversion of ground water by the applicants will deplete flows in the Snake River above Swan Falls Dam.

19. Diversion of ground water by the applications will also deplete Snake River flows at Swan Falls Dam, and at Murphy Gage, just downstream from Swan Falls Dam.

20. The State of Idaho is obligated by statute to maintain at least 3,900 cfs (4/1 to 10/31) and 5,600 cfs (11/1 to 3/31) at Murphy Gage. These minimum flows were established by the Swan Falls Agreement and adopted in the State Water Plan. *State Water Plan* (Nov. 2012) at 45.

21. In recent years, flows in the Snake River at Murphy Gage have been near but above the minimum flows during times of the year. There are significant ongoing efforts to develop tools and management strategies to help ensure the minimum flows continue to be met. *State Water Plan* at 45-46.

22. The Director is obligated to consider these efforts when determining the sufficiency of the water supply, but must also balance this consideration with considerations such as the optimum development of the state's water resources as outlined in the State Water Plan. *Id.* at 8, 43.

23. The term "trust water" refers to water made available for future development as a result of the 1984 Swan Falls Agreement between the State of Idaho and Idaho Power. *State Water Plan* (2012) at 48.[6] Trust water is defined at "[t]hat portion of an unsubordinated water right used for hydropower generation purposes which is in excess of a minimum stream flow established by state action … ." IDAPA 37.03.08.010.17. The trust water can be appropriated by third parties following the Department's consideration of certain criteria. Idaho Code § 42-203C; IDAPA 37.03.08.45. Water rights appropriating trust water are commonly referred to as "trust water rights." Trust water rights are junior to the minimum flows at Murphy Gage. Trust water rights must provide mitigation or otherwise face curtailment if the minimum flows at Murphy Gage are not met.

CONCLUSIONS OF LAW

1. Idaho Code § 42-203A sets forth the standard by which the Director evaluates a new application for permit. The Director may grant, partially approve or reject an application where the proposed use is such:

> (a) that it will reduce the quantity of water under existing water rights, or (b) *that the water supply itself is insufficient for the purpose for which it is sought to be appropriated,* or (c) where it appears to the satisfaction of the director that such application is not made

[6] A more detailed explanation of trust water can be found in the 2012 State Water Plan and at: http://www.idwr.idaho.gov/WaterManagement/WaterDistricts/PDF/Snake_M-SF/PDF/Overview_of_Swan_Falls_Settlement_02-28-12_Final.pdf

> in good faith, is made for delay or speculative purposes, or (d) that the applicant has not sufficient financial resources with which to complete the work involved therein, or (e) that it will conflict with the local public interest as defined in section 42-202B, Idaho Code, or (f) that it is contrary to conservation of water resources within the state of Idaho, or (g) that it will adversely affect the local economy of the watershed or local area within which the source of water for the proposed use originates, in the case where the place of use is outside of the watershed or local area where the source of water originates; … .

Idaho Code § 42-203A(5)(emphasis added).

2. Idaho Code § 42-222 sets forth the standard by which the Director evaluates a transfer application. The Director may approve a transfer application provided:

> *[N]o other water rights are injured thereby*, the change does not constitute an enlargement in use of the original right, the change is consistent with the conservation of water resources within the state of Idaho and *is in the local public interest as defined in section 42-202B, Idaho Code*, … .

Idaho Code § 42-222(1)(emphasis added).

3. Idaho Code § 42-203A expressly requires the Director to consider water sufficiency in an evaluation of a new water right application. Water sufficiency is also implicated when evaluating potential injury and the local public interest of a transfer application pursuant to Idaho Code § 42-222. A transfer involving ground water will cause injury and is not in the local public interest if there is insufficient water for the appropriation at the new point of diversion.

4. Idaho Code § 42-1736B(1) provides:

> All future filings, permits and decrees on the unappropriated waters of this state shall be determined with respect to the effect such filings, permits and decrees will have on the minimum daily flow of the affected stream or river, or on the maintenance level of the affected lake or reservoir.

5. Mayfield and Ark suggest that questions about the applications' impact on other water rights (including minimum flows and trust water rights) is a question of injury, not water sufficiency, and should be left for consideration at a later point in the application process. *Motion* at 4. The Director disagrees with Mayfield and Ark's suggestion that there is a clear distinction between water sufficiency and injury. The reality is that water sufficiency and injury overlap. The Director is obligated by statute to protect the sufficiency of the water supply for existing water rights in this proceeding. Idaho Code §§ 42-203A and 42-222. The obligation

applies to water rights downstream from Milner Dam. Idaho Code § 42-203B(2).[7] When the Director considers water sufficiency, the Director must consider the total water supply needed to satisfy existing water rights. If the applications will negatively impact the total water supply needed to satisfy the senior water rights, the water supply is insufficient for the purposes for which it is sought to be appropriated. The applications, if approved, will impact the sufficiency of the supply for existing water rights, especially the minimum flows and trust water rights, because of the direct hydraulic connection between the ground water being appropriated by the applications and the Snake River.

6. In this proceeding, the Director must consider the total water supply needed to satisfy the minimum flows. Idaho Code § 42-1736B(1). If flows in the Snake River drop below the minimum flows, this impacts not only the minimum flows but would also trigger significant consequences for the trust water rights. When flows in the Snake River drop below the minimum flows, trust water rights should be curtailed unless the holders of the trust water rights have mitigated the depletions to the Snake River caused by the trust water diversions.

7. Curtailment of trust water rights that rely on ground water when flows in the Snake River at Murphy Gage drop below the minimum flows will probably not immediately restore depletions to the Snake River. The accretion of flows to the Snake River resulting from curtailment is delayed because of the travel time of the action through the ground water aquifer. Any increase in flows of the Snake River resulting from curtailment of ground water rights will probably be delayed until a later time when the minimum flows are again being satisfied. Similarly, any mitigation for depletions should be provided so the effects of the diversion are mitigated when the actual depletions occur. This mitigation requirement should be effective for both the trust water rights and any water rights issued pursuant to these pending applications.

8. The Director should continue processing the three applications mentioned above. However, the minimum flows at Murphy Gage must be maintained by the State of Idaho. To ensure that the burden of the application's impacts on the Snake River is not shifted to other water users, the applicants' must mitigate for depletions to the reach of the Snake River above Swan Falls so the applicant's depletions do not negatively impact the total water supply needed to satisfy the minimum flows established for the Snake River at Murphy Gage.[8] The consolidated applications for new water rights approved must fully participate in any requirement imposed upon trust water right holders as needed to satisfy the Swan Falls minimum flows.

9. Based on the forgoing, the Director concludes that the estimated net annual recharge for the study area of 7,440 AFA is the *maximum* additional consumptive use that can be authorized within the study area. On a continuous basis, this amount is equivalent to 10.3 cfs, which is significantly less than the maximum total under the consolidated applications.

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[7] Idaho Code § 42-203B(2) provides that administration of the rights to the use of the waters of the Snake river or its tributaries downstream from Milner Dam shall not consider any portion of the waters of the Snake river or surface or ground water tributary to the Snake river upstream from Milner Dam. Accordingly, consideration of the impacts of the applications is limited to waters downstream from Milner Dam.

[8] This requirement does not apply to Shekinah's depletions, because Shekinah's application seeks to transfer an existing water right and Shekinah's water right predates the minimum flows.

10. The Director will consider the pending applications in the chronological order the applications were received unless an applicant is not prepared to proceed with its application.

11. Based on an estimated net annual recharge for the study area of 7,440 AFA and the volumes identified by Dr. Petrich, IDWR will move forward with the next phase of the approval process for Mayfield application for permit no. 63-32499, Shekinah application for transfer 78356, and Nevid application for permit no. 61-12096.

12. The Director is still required to consider other elements under Idaho Code. In particular, limited supply of ground water combined with anticipated domestic and municipal growth in the I-84 corridor requires consideration of how the remaining ground water in the area should be beneficially used. Each of the three applications should be evaluated with a local public interest review of the limited ground water supply and the demand for use of the water for municipal and domestic uses.

13. Following completion of processing of the three Mayfield, Shekinah and Nevid applications and following their development, the remaining applications should be evaluated to determine what additional water might be available for appropriation. Subsequent applications will be processed in the chronological order of receipt.

ORDER

IT IS HEREBY ORDERED that processing shall continue for Mayfield application for permit no. 63-32499, Shekinah application for transfer 78356, and Nevid application for permit no. 61-12096. Other applications shall be held until processing is complete for these three applications.

IT IS FURTHER ORDERED that Mayfield application for permit no. 63-32499 and Nevid application for permit no. 61-12096 shall be conditioned, if approved, to require the water right holders to fully participate in any requirement imposed upon other junior water right holders needed to satisfy the Swan Falls minimum flows.

DATED this 4th day of November, 2013.

GARY SPACKMAN
Director

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 4th day of November, 2013, a true and correct copy of the document described below was served by placing the same in the United States mail, postage prepaid and properly addressed to the following:

Document(s) Served: FINAL ORDER and Explanatory Information to Accompany a Final Order.

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Deborah J. Gibson

Deborah J. Gibson
Assistant to the Director

EXPLANATORY INFORMATION TO ACCOMPANY A FINAL ORDER

(Required by Rule of Procedure 740.02)

The accompanying order is a "**Final Order**" issued by the department pursuant to section 67-5246 or 67-5247, Idaho Code.

Section 67-5246 provides as follows:

(1) If the presiding officer is the agency head, the presiding officer shall issue a final order.

(2) If the presiding officer issued a recommended order, the agency head shall issue a final order following review of that recommended order.

(3) If the presiding officer issued a preliminary order, that order becomes a final order unless it is reviewed as required in section 67-5245, Idaho Code. If the preliminary order is reviewed, the agency head shall issue a final order.

(4) Unless otherwise provided by statute or rule, any party may file a petition for reconsideration of any order issued by the agency head within fourteen (14) days of the service date of that order. The agency head shall issue a written order disposing of the petition. The petition is deemed denied if the agency head does not dispose of it within twenty-one (21) days after the filing of the petition.

(5) Unless a different date is stated in a final order, the order is effective fourteen (14) days after its service date if a party has not filed a petition for reconsideration. If a party has filed a petition for reconsideration with the agency head, the final order becomes effective when:

(a) The petition for reconsideration is disposed of; or
(b) The petition is deemed denied because the agency head did not dispose of the petition within twenty-one (21) days.

(6) A party may not be required to comply with a final order unless the party has been served with or has actual knowledge of the order. If the order is mailed to the last known address of a party, the service is deemed to be sufficient.

(7) A non-party shall not be required to comply with a final order unless the agency has made the order available for public inspection or the nonparty has actual knowledge of the order.

(8) The provisions of this section do not preclude an agency from taking immediate action to protect the public interest in accordance with the provisions of section 67-5247, 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 received 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.

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: a) of 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.