BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR) TRANSFER NO. 79357 IN THE NAME OF) THOMAS AND DOROTHY LENO)

FINAL ORDER APPROVING TRANSFER

On May 20, 2014, Thomas Leno ("Leno") filed Application for Transfer No. 79357 with the Idaho Department of Water Resources ("Department"). The Department published notice of the application beginning on July 3, 2014. Protests were filed by Jimmie L. Conder, Michael and Jana Humphries, William D. Hamby, Eric Parrott, Lois M. Rice, Leslie Ellsworth (for herself and 9 other individuals), Pam Ritter, Ed Smith, Victoria Henson, Scott Houtz, Delea Miller (Andrew), Jeanie McCreary, Barbara and Lynn Stephens, Margaret Winsryg and Leroy Elliott, Elizabeth (Betty) Slifer, and Martin F. Hackard.

A pre-hearing conference was conducted on November 19, 2014. The parties were unable to resolve the issues of protest during the conference and requested that a hearing be held to decide the contested case.

On January 20, 2015, Cedar Ridge Dairy, LLC ("Cedar Ridge") filed a motion to intervene in support of the application. The motion to intervene was granted on March 5, 2015 based on the fact that Cedar Ridge was represented by the same attorney as Thomas and Dorothy Leno and agreed to rely on the evidence presented by Leno.

On March 18 and 19, 2015, Department hearing officer James Cefalo conducted an administrative hearing in Twin Falls, Idaho. Attorney Travis Thompson represented Leno and Cedar Ridge. Attorney David Coleman represented Margaret Winsryg and Leroy Elliot. The hearing was held in conjunction with hearings for Application for Transfer Nos. 79380, 79384 and 79466. On June 1, 2015, the hearing officer issued an Amended Preliminary Order Approving Transfer 79357.

Applicant Leno and Intervenor Cedar Ridge filed timely exceptions to the hearing officer's preliminary order approving application for transfer no. 79357.

STATEMENT OF EXCEPTIONS

The following is a restatement of the exceptions:

A. Leno and Cedar Ridge assert that the hearing officer "erred in limiting the water right's season of use to May 1 to September 30."

B. Leno and Cedar Ridge assert that the hearing officer "erred in advancing the water right's priority date to the date of the transfer, rather than December 22, 1970, as decreed by the Snake River Basin Adjudication District Court."

ANALYSIS OF EXCEPTIONS

Season of Use

The hearing officer determined that water levels may fluctuate ten feet seasonally in the Berger area. During the irrigation season, surface water delivery and irrigation recharges the aquifer. During the nonirrigation season, the surface water does not recharge the ground water, resulting in declines up to ten feet.

Water levels will fluctuate between the irrigation season and the nonirrigation season regardless of whether the Department approves this application for transfer.

Hydraulic conductivity is a measure of the ease with which water can move through pore spaces or fractures of an aquifer. If the hydraulic conductivity value is high, easier transmittal of water toward a pumping well results in less drawdown in the pumping well, and consequently, less drawdown in nearby wells affected by the pumping well's cone of depression. Conversely, if the hydraulic conductivity value is low, the slow transmittal of water toward a pumping well results in a higher drawdown in the pumping well because the pumping well must draw from a greater vertical column in the well to derive the same amount of water. The larger cone of depression in a well completed in material with a low hydraulic conductivity will cause greater drawdowns in nearby wells.

The proposed point of diversion is located near two of the ten wells selected by Brockway for determination of hydraulic conductivity. Brockway averaged hydraulic conductivities derived for each of the ten wells, and computed an average hydraulic conductivity of 15.3 feet/day.

Brockway computed hydraulic conductivity values from the well driller's reports for the two nearest wells. The two individual well hydraulic conductivity values are higher than the hydraulic conductivity values for the other eight wells. As a result, pumping water from wells nearest the proposed points of diversion would cause less simulated drawdown than the simulated drawdown when the data from all ten wells is averaged. Brockway's hydraulic conductivity of 15.3 ft/day is conservative, and would overestimate drawdown near the pumping well.

The nearest well owned by a protestant is 1.5 miles away. Even after employing a conservative value of 15.3 ft/day for hydraulic conductivity, pumping the proposed well will only cause a drawdown of 1.5 inches in the protestant's well.

There are other domestic wells located approximately one-half mile away from the proposed well. Brockway did not model drawdowns in these wells caused by pumping the proposed wells. The relationship between the drawdown in the pumping well and the drawdown in the well 1.5 miles away is not linear. The slope of the cone of depression for drawdown is steeper near the pumping well. The slope of the cone of depression flattens at greater distances from the pumping well. The predicted drawdown in a well 1.5 miles away is only 1.5 inches. Because the drawdown cone of depression will be fairly flat in the distance between one-half mile and 1.5 miles from the pumping well, the drawdown one-half mile away would likely be several inches.

If the unanalyzed wells were located within a few hundred feet, the Director would be concerned about drawdowns caused by pumping water from the proposed wells. Because the nearest domestic wells are a half mile away, and because of the small quantity of water proposed to be pumped, the drawdowns in wells a half mile away will not injure the domestic water right holders.

The evidence presented at the hearing established that the ground water levels in the Berger area are stable or even rising.

A drawdown of several inches in either the irrigation or nonirrigation season is not a sufficient decline in the aquifer to conclude that the pumping at the proposed point of diversion will injure other water right holders. Because the demand from the ground water resource is significantly reduced in the winter, the drawdowns attributable to the small additional water diverted will be minimal.

This final order will approve the transfer of the water right for year round use.

Advancement of Priority

Because water levels in the basalt aquifer in the Berger area are stable and approval of this transfer will not destabilize water levels in the aquifer, the priority date of this transfer should not have been advanced. The water right transferred will retain its original priority date.

Miscellaneous Corrections

The Amended Preliminary Order Approving Transfer stated the following about the relationship between ground water at the location of the existing point of diversion ("from well") and the proposed points of diversion ("to wells"):

Ground water at the existing point of diversion for water right 47-17589 flows south into Nevada toward Shoshone Creek, a tributary of Salmon Falls Creek. Bonnichsen Rebuttal Report, page 3; C. Brockway Testimony. "[T]here is absolutely no reason to believe that water from the [existing point of diversion] . . . would travel underground northward to become part of the groundwater system in the Berger area." Bonnichsen Report, page 5.

The Director interpreted this language to establish that the direction of the ground water gradient is south, and that there is "no reason to believe" that ground water traveling in a southerly direction would **ever** "travel underground northward to become part of the groundwater system in the Berger area." Finding of fact no. 32 confirms the Director's interpretation:

"Shoshone Creek joins Salmon Falls Creek about 3.7 miles south of the Idaho-Nevada border." Bonnichsen Rebuttal Report, page 2. Ground water and surface water in this area leaves the valley as surface water in Salmon Falls Creek near Jackpot, Nevada. Bonnichsen Report. "[T]here does not appear to be any sort of subterranean rock sequence through which groundwater readily could flow out of the basin [near] Jackpot [Nevada] and into the Salmon Tract area to the north." Bonnichsen Report, page 5

The hearing officer relied on the Bonnichsen report for the above finding of fact. Brockway's expert report generally conflicts with the hearing officer's finding. Brockway states:

The general interpretation of the all (sic) referenced published reports indicate (sic) ground water recharge occurs in northern Nevada and in the Jackpot area and southern Idaho in Twin Falls County and that the aquifer flows northward towards the Snake River. Brockway Report, page 10

In a rebuttal report, Brockway states the following:

Based on the published reports and the data that is available, we believe that ground water flows north out of Nevada and into southern Idaho. The ground water flows northward past Rogerson and Hollister to provide ground water to the Castleford, Buhl, and Filer areas. Brockway Rebuttal Report, Page 11

Because Bonnichsen discussed the specific hydrogeology of Shoshone Creek and Salmon Falls Creek, and Brockway only generally described the hydrogeology, the Director understands why the hearing officer would rely on Bonnichsen's hydrogeologic analysis. However, the protestants also employed Lloyd Kimball, another expert witness, who wrote a rebuttal report. In the Kimball rebuttal report, Kimball states:

My general interpretation of the information provided in the reports is that the groundwater contours will generally have a tendency to follow the natural ground elevation contours. This means the groundwater in the Mule Creek drainage will travel to the south into Nevada and will eventually loop its way back into Idaho following the ground elevation decline. The groundwater at that point of re-entry into Idaho will then flow in a general north direction as Brockway's expert report has indicated. Kimball Rebuttal Report page 4

In addition, the Director must consider a general provision in the Snake River Basin Adjudication recognizing that ground water in Basin 47 is hydraulically connected. The hearing officer discusses the SRBA determination in finding of fact no 16:

The existing point of diversion and proposed point of diversion are located within Administrative Basin 47 ("Basin 47"). On February 6, 2014, the SRBA Court issued General Provisions for Basin 47. Ex. 4. The document included the following statement: "Except as otherwise specified above [nothing is specified], all other water rights within Basin 47 will be administered as connected sources of water in the Snake River Basin in accordance with the prior appropriation doctrine as established by Idaho law." *Id.*

After considering all of the evidence, the Director concludes the weight of the evidence supports a finding that the groundwater between the original Leno point of diversion and the proposed point of diversion is hydraulically connected.

Because the director finds that the ground water at the existing point of diversion and the ground water at the proposed point of diversion are hydraulically connected, this order need not discuss the seepage of surface water stored in Salmon Falls Creek Reservoir into the groundwater, losses from irrigation canals, or losses from application of water for irrigation of growing crops. These findings will be eliminated from the final order.

By eliminating these findings, the Director repudiates the hearing officer's previous reasoning in determining hydraulic connection. If the applicant for transfer discontinues diverting ground water at the point of diversion from which water is sought to be transferred, and the ground water that would have been diverted expresses itself as surface water, the water loses its character as ground water. If the surface water is diverted by a surface water right holder for irrigation, a significant portion of the surface water will be consumed by the irrigated crops. Some of the surface water and applied for irrigation that seep into the ground water would increase the ground water supply by the fraction of the total attributable to seepage loss.

An applicant for ground water transfer cannot rely on the seepage from irrigation of crops with surface water to establish hydraulic connection and compensation for depletions of ground water at a new point of ground water diversion near the surface water irrigation location. This is because the losses from surface water irrigation are incidental to the beneficial use of the surface water. The surface water user is not obligated to continue the same efficiency of water delivery and use. The surface water right holder diverting and using surface water might eliminate most if not all losses in his water use, resulting in little or no indirect hydraulic conductivity.

After carefully considering the evidence in the administrative record, the Department finds, concludes, and orders as follows:

FINDINGS OF FACT

1. Application for Transfer 79357 proposes to move a split portion (16.3 acres, 0.19 cfs and 48.9 acre-feet) of water right 47-17589 from property near the Idaho-Nevada border to a dairy ("Dairy #2") located north of Berger, Idaho. Exs. 1 and 12. Thomas and Dorothy Leno are the current owners of record for water right 47-17589. Ex. 3. Thomas Leno ("Leno") signed the application.

2. Dorothy Leno passed away in August 2011. *See* Attachments to Application 79357. Leno's attorney, Travis Thompson, provided an order from the Idaho Fifth Judicial District Court settling the estate of Dorothy Leno and confirming that the entire estate was distributed to Leno.

3. In July 2014, Leno sold the property at the existing place of use for water right 47-17589 to Y-3 II (an Idaho general partnership), but reserved the portion of water right 47-17589 associated with transfer applications 79357, 79380 and 79384. *See* Attachments to Application 79357.

4. Application 79357 included a Contract of Agreement between Blue Sage Properties, LLC ("Blue Sage") and Leno stating that Blue Sage allows Leno to move 0.19 cfs and 30.5 acrefeet of water right 47-17589 to Dairy #2. Ex. 1, page 3. The agreement states that ownership of the split portion of the water right will remain in the name of Thomas and Dorothy Leno. *Id*.

5. The proposed place of use and point of diversion at Dairy #2 are on property owned by Blue Sage. *See* Attachments to Application 79357. Antoinette Hafliger, identified as the manager of Blue Sage, signed the agreement with Leno. Ex. 1, page 3.

6. On May 16, 2014, Leno and Cedar Ridge signed a Water Right Purchase and Sale Agreement for a portion (1.10 cfs, 279.6 afa, 93.2 acres) of water right 47-17589. See Attachment to Application 79357. The portion of water right 47-17589 being sold to Cedar Ridge was divided into three parts, which are the water rights involved in Applications for Transfer 79357, 79380 and 79384. *Id*.

7. On June 1, 2010, a partial decree was issued for water right 47-7106 in the Snake River Basin Adjudication ("SRBA"). Ex. 3. Water right 47-7106 bore a priority date of December

25, 1970, authorized the diversion of 1.85 cfs and an annual diversion volume of 465 acre-feet for the irrigation of 155 acres. *Id*.

8. In three previous transfers approved by the Department (77406, 77669 and 78127), portions of water right 47-7106 were moved to other locations. Brockway Report, App. C. Water right 47-7106 was split into four parts as a result of the previous transfers. The portion of water right 47-7106 remaining at the original place of use was assigned water right number 47-17589.

9. An analysis was provided with the three previous transfers, which calculated the number of acres irrigated with ground water at the original place of use for water right 47-7106. Brockway Report, pages 3-6; *Historical Water Use Analysis on Parent Water Right* 47-7106 (Attachment to Application 79357). That analysis shows that 145.7 acres of the 155 acres described in water right 47-7106 were primarily irrigated with ground water. *Id.* The 16.3 acres proposed to be dried up and moved in the pending application are part of the 145.7 acres considered primary ground water acres. *Id.*

10. As it currently exists, water right 47-17589 authorizes the diversion of 1.21 cfs and an annual diversion volume of 307.5 acre-feet for the irrigation of 102.5 acres. The split portion of water right 47-17589 associated with Application 79357 authorizes the diversion of 0.19 cfs and an annual diversion volume of 48.9 acre-feet for the irrigation of 16.3 acres.

11. Application 79357 proposes to change the nature of use of the split portion of water right 47-17589 from irrigation use to stockwater and commercial use. Leno proposes to limit the changed portion of the water right to an annual diversion volume of <u>30.5 acre-feet</u>, the consumptive portion of the original water right.

12. The existing place of use for water right 47-17589 is located in Sections 20 and 29, T16S, R16E. The existing point of diversion is located in Section 20, T16S, R16E.

13. The existing place of use for water right 47-17589 is also irrigated with surface water rights 47-2118, 47-2048, 47-14285 and 47-7287 from Mule Creek. Ex. 13. Leno proposes to abandon or relinquish the portions of the Mule Creek rights associated with the 16.3 acres proposed to be transferred. *See* Attachments to Application 79357. Leno has demonstrated continued ownership of the portions of water rights 47-2118, 47-2048, 47-14285 and 47-7287 that are proposed to be relinquished if Application 79357 is approved. *Id*.

14. There are two existing ground water rights used for commercial and stockwater purposes at Dairy #2. Water right 47-7431B bears a priority date of August 25, 1977 and authorizes a diversion rate of 0.39 cfs. Water right 47-7519B bears a priority date of April 16, 1979 and authorizes a diversion rate of 0.37 cfs.

15. Water rights 47-7431B and 47-7519B when combined are limited to a diversion rate of 0.39 cfs and an annual diversion volume of 166.8 acre-feet. Blue Sage is the current owner of record for water rights 47-7431B and 47-7519B. Blue Sage leases Dairy #2 to Cedar Ridge, who manages the day to day operations at Dairy #2. *See* Exs. 10 and 11.

16. Water rights 47-7431B and 47-7519B describe two authorized points of diversion: two existing ground water wells located 25 feet apart in the SENE of Section 5, T11S, R16E. Visser Testimony. The two existing wells at Dairy #2 are the same two points of diversion proposed in Application 79357.

17. The existing wells at Dairy #2 were drilled in August/September 1999. Ex. 5. Both wells were drilled to a depth of 345 feet and had a static water level of 220 feet below land surface at the time of completion. *Id*.

18. In April 2002, the existing wells at Dairy #2 were deepened to 480 feet. Ex. 6. The static water level was measured at 244 feet below land surface at that time. *Id.* In March 2014, the static water level of one of the existing wells at Dairy #2 was measured at 232 feet below land surface. Brockway Report, App. D; Visser Testimony.

19. Comparing a small set of depth to water measurements in an aquifer with seasonal fluctuations in water levels may not simulate increases or declines in aquifer levels. Squires Testimony. It is difficult to know whether a single water level measurement represents the maximum or minimum water level for that particular year. *Id*.

20. Ryan Visser, manager for Cedar Ridge, testified that ground water diverted at Dairy #2 is used for cleaning milk pipelines and tanks, cleaning equipment, cleaning floors, cooling dairy cows, providing water to cows, and cooling milk. Water is piped from the existing wells to the milking parlor, where it is used to cool milk and clean equipment. Uncontaminated water is then piped out of the parlor to provide drinking water for the cows and cool the cows.

21. A large portion of the 30.5 acre-feet proposed to be transferred to Dairy #2 would be used to cool dairy cows during the summer months. Visser Testimony. Visser testified that Dairy #2 will employ a "drench system" in the feed line and holding pens where the dairy cows are soaked with water and then cooled as water evaporates off of the animals. *Id*.

22. Visser provided a calculation sheet showing that as much as 27.1 acre-feet per year may be needed for the drench system. Ex. 9. According to Visser's calculations, the drench system water demand will occur between the months of May and September. *Id.* Visser testified that the additional 0.19 cfs and 30.5 acre-feet proposed in the pending application are primarily needed to satisfy peak demands during the summer months. Visser Testimony.

23. The proposed points of diversion are located approximately 34 miles north of the existing point of diversion for water right 47-17589. Ex. 12.

24. The existing point of diversion and proposed points of diversion are located within Administrative Basin 47 ("Basin 47"). On February 6, 2014, the SRBA Court issued General Provisions for Basin 47. Ex. 4. The document included the following statement: "Except as otherwise specified above [nothing is specified], all other water rights within Basin 47 will be administered as connected sources of water in the Snake River Basin in accordance with the prior appropriation doctrine as established by Idaho law." *Id.*

25. The protestants in this contested case divert ground water from the local aquifer for domestic and stockwater purposes. Protestants Lois Rice and Victoria Henson divert from a domestic well located 1.5 miles south of the proposed points of diversion. Ex. 24. Of all of the protestants' wells, the Rice/Henson well is the closest to the proposed points of diversion. *Id*.

26. There are a number of homes and domestic wells located approximately $\frac{1}{2}$ mile north of the proposed points of diversion. *See* Ex. 18. The owners of those domestic wells did not protest the pending application.

27. The term "Salmon Tract" refers to an area south of Twin Falls that lies within the service area for the Salmon River Canal Company. Berger, Idaho is located in the north central part of the Salmon Tract.

28. The productive aquifer in the Berger area is primarily comprised of basalt. Bonnichsen Report, page 1; Bonnichsen Rebuttal Report, pages 3-4. Most of the domestic, irrigation and stockwater wells in the area divert water from the basalt aquifer. *Id.* The basalt aquifer in the Berger area is underlain by geologic formations that do not readily transmit water. *Id.* Hydraulic conductivity and transmissivity values can vary greatly throughout the Salmon Tract aquifer. C. Brockway Testimony.

29. "[T]he elevation of the bottom of the basalt zone in the Berger area may vary locally by several hundred feet." Bonnichsen Report, page 3. "[T]he bottom of the basalt zone represents the bottom of the aquifer from which sustained water volumes can be obtained." *Id.* at 4. Well logs in the record suggest that the saturated zone of the aquifer is between 100 and 250 feet thick in the Berger area. *Id.*

30. Cedar Ridge hired Brockway Engineering, PLLC ("Brockway") to evaluate the effects of diverting ground water as proposed in Application 79357. Brockway prepared two Winflow models to estimate the drawdown impacts resulting from pumping an additional 30.5 acrefeet from the Dairy #2 wells during the irrigation season. The Winflow models relied on the Theis equation to estimate drawdown and evaluate impacts after 20 years of pumping. Exs. 14-17; Sullivan Testimony.

31. The first Brockway model incorporated the following assumed aquifer parameters:

Ground water gradient: 50 feet/mile Saturated thickness: 435 feet (265 feet to 700 feet below land surface) Hydraulic conductivity: 55 feet/day Storativity: 0.12

Brockway Report, page 19.

32. The conductivity and storativity values used by Brockway were taken from a regional evaluation of the Salmon Tract aquifer completed by Cosgrove, et al. in the late 1990s. Brockway Report, pages 19 and 29.

33. The first Brockway model predicted a drawdown of 0.5 inches at the Rice/Henson well, located 1.5 miles south of the proposed points of diversion. Brockway Report, page 23. Brockway did not estimate the drawdown for the domestic wells (not owned by any of the protestants) located closer to the proposed points of diversion.

34. Brockway decided to prepare a second Winflow model to estimate the drawdown impacts at the protestants' wells. C. Brockway Testimony; Brockway Report, pages 23-25. In the second model, Brockway reduced the assumed hydraulic conductivity value to 15.3 feet/day. *Id.*

35. Brockway derived the hydraulic conductivity value of 15.3 feet/day through an analysis of short term pump tests described in well driller reports for ten wells located within five miles of the proposed points of diversion. Brockway Report, pages 23-25. The average hydraulic conductivity calculated for the ten wells is 15.3 feet/day. *Id*.

36. Of the ten well drillers reports used in Brockway's analysis of hydraulic conductivity, the reports for the two closest wells to Dairy #2 resulted in calculated hydraulic conductivity values greater than 15.3 feet/day. *See* Brockway Report, pages 21 and 24. In fact, the closest well ("Well #7") to Dairy #2 had a calculated hydraulic conductivity of 108 feet/day. *Id.* Well #7 is located approximately ½ mile to the north of the existing Dairy #2 wells. *See* Ex. 18.

37. The static water levels and aquifer parameters of Well #7 are influenced by seepage from the Twin Falls Canal Company ("TFCC") High Line Canal. See Brockway Report, page 18. Well #7 is located less than 200 feet from the TFCC High Line Canal. The proposed points of diversion at Dairy #2 are located approximately ½ mile south of the High Line Canal and would also be influenced by seepage from the canal.

38. The second Brockway model predicted a drawdown of about 1.5 inches at the Rice/Henson well after 20 years of pumping an additional 30.5 acre-feet per year from the proposed points of diversion.

39. Brockway did not model drawdowns in wells one-half mile away caused by pumping the proposed wells. Nonetheless, the relationship between the drawdown in the pumping well and the drawdown in the well 1.5 miles away is not linear. The cone of depression for drawdown is steep near the pumping well. The cone of depression flattens at greater distances from the pumping well. The predicted drawdown in a well 1.5 miles away is only 1.5 inches. Because the drawdown cone of depression will be fairly flat in the distance between one-half mile and 1.5 miles from the pumping well, the drawdown one-half mile away would likely be several inches.

40. If the unanalyzed wells were located within a few hundred feet, the Director would be concerned about drawdowns caused by pumping water from the proposed wells. Because the nearest domestic wells are one half mile away, and because of the small quantity of water proposed to be pumped, the drawdowns in wells one-half mile away will not injure the domestic water right holders.

41. The evidence presented at the hearing established that the ground water levels in the Berger area are stable or even rising.

42. A drawdown of several inches in either the irrigation or nonirrigation season is not sufficient decline in the aquifer to conclude that the pumping at the proposed point of diversion will injure other water right holders. Because the demand from the ground water resource is significantly reduced in the winter, the drawdowns attributable to the small additional water diverted will be minimal.

43. TFCC operates a High Line Canal which crosses through the Berger area from east to west approximately ½ mile north of the proposed point of diversion. *See* Ex. 18. The TFCC Low Line Canal is located a few miles farther north. *Id.* Seepage from these large canals provides elevated aquifer levels resulting in smaller depth-to-water levels to the north of the Dairy #2 wells. Brockway Report, page 18. The static water levels in the Berger area fluctuate as much as 10 feet throughout the year due to seepage from the surface water canals and seepage from irrigation. Squires Testimony; Ex. 16.

44. Seepage from surface canals in the area results in a seasonal increase in aquifer levels. *See* Ex. 16. Pumping from the proposed wells is less likely to impact nearby domestic wells during the summer months, when the aquifer levels are increased due to seepage from nearby canals.

45. Ground water at the existing point of diversion for water right 47-17589 flows south into Nevada toward Shoshone Creek, a tributary of Salmon Falls Creek. Bonnichsen Rebuttal Report, page 3; C. Brockway Testimony

46. "Shoshone Creek joins Salmon Falls Creek about 3.7 miles south of the Idaho-Nevada border." Bonnichsen Rebuttal Report, page 2.

47. "[G]roundwater in the Mule Creek drainage will travel to the south into Nevada and will eventually loop its way back into Idaho following the ground elevation decline. The groundwater at that point of re-entry into Idaho will then flow in a general north direction as Brockway's expert report has indicated." Kimball Rebuttal Report, page 4.

48. Ground water at the Leno well is hydraulically connected to ground water at the proposed point of diversion.

49. Ground water levels in the area of the proposed point of diversion are stable. Squires Testimony. Monitoring wells in the area do not show a significant decline in aquifer levels over the last 35 years. Brockway Report, pages 12-15.

ANALYSIS / CONCLUSIONS OF LAW

1. Idaho Code § 42-222 sets forth the criteria used to evaluate transfer applications:

The director of the department of water resources shall examine all the evidence and available information and shall approve the change in whole, or in part, or upon conditions, provided no 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, the change will not 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, and the new use is a beneficial use, which in the case of a municipal provider shall be satisfied if the water right is necessary to serve reasonably anticipated future needs as provided in this chapter.

2. The applicant bears the burden of proof for all of the factors listed in Section 42-222.

Injury to Other Water Rights

3. Injury between ground water users is governed by Idaho Code § 42-226, which states: "Prior appropriators of underground water shall be protected in the maintenance of reasonable ground water pumping levels as may be established by the director of the department of water resources . . ."

4. Reasonable pumping levels have not been established in Basin 47. Therefore, the reasonableness of projected drawdown in neighboring wells resulting from a proposed transfer will be evaluated on a case-by-case basis.

5. A regional analysis of the Salmon Tract aquifer estimated the hydraulic conductivity of the aquifer to be 55 feet/day. Brockway Report, page 19. Regional estimates of conductivity do not necessarily reflect the actual conductivity at a specific point in the aquifer. C. Brockway Testimony. There can be significant local variation depending on the homogeneity of the aquifer substrate.

6. Brockway predicts that the long-term drawdown to the protestants' wells caused by pumping an additional 30.5 acre-feet per year from the proposed wells will be less than 2 inches. Brockway makes this prediction based on the results of a Winflow model incorporating a hydraulic conductivity value of 15.3 feet/day.

7. Brockway's analysis is reasonable and is likely conservative given the proximity of Dairy #2 to the TFCC High Line Canal. The closest well to the proposed points of diversion has a calculated hydraulic conductivity of 108 feet/day. Higher hydraulic conductivity would result in less drawdown effects at neighboring wells.

8. Evidence in the record suggests that the closest domestic wells to the proposed points of diversion are located approximately one-half mile to the north. Despite a closer distance

to the proposed points of diversion, wells one-half mile north will only experience drawdowns of, at most, several inches.

9. It is unlikely that the domestic wells located $\frac{1}{2}$ mile north of the proposed points of diversion will be injured.

10. Visser testified that the primary demand for the additional water at Dairy #2 will occur between the months of May and September, a time when water should be flowing in the TFCC system.

11. The proposed points of diversion are located approximately 34 miles north of the existing point of diversion for water right 47-17589. Water at the existing point of diversion must travel through Nevada to reach the proposed points of diversion.

12. Leno has sufficiently demonstrated that the proposed change will not result in unreasonable drawdown (injury) to domestic water rights located near the proposed points of diversion.

Connectivity of Ground Water in Basin 47

13. A significant amount of testimony was presented at the hearing addressing the question of whether ground water at the existing point of diversion is hydraulically connected to the ground water at the proposed points of diversion.

14. Although the evidence is conflicting, the weight of the evidence establishes that ground water at the Leno well is hydraulically connected to the ground water underlying the location of the proposed point of diversion. Brockway and Bonnichsen agree that ground water at the existing point of diversion flows south into Nevada. Brockway and Kimball agree that the direction of ground water underflow generally follows the stream topography.

15. Bonnichsen and Kimball both concluded there is a hydraulic connection between the existing point of diversion and the proposed points of diversion. In addition, the Department should rely on the general provision from the SRBA Court and treat ground water in Basin 47 as a hydraulically connected source.

Enlargement of Water Rights

16. Pursuant to Idaho Code § 42-222(1), the director may consider consumptive use, as defined in section 42-202B, Idaho Code, as a factor in determining whether a proposed change would constitute an enlargement in use of the original water right. "Consumptive Use" is defined as "that portion of the annual volume of water diverted under a water right that is transpired by growing vegetation, evaporated from soils, converted to nonrecoverable water vapor, incorporated into products, or otherwise does not return to the waters of the state." Idaho Code §42-202B(1).

17. To prevent enlargement, when a transfer application proposes to change the nature of use of a water right, the Department may limit the proposed water right to the historic consumptive use of the original right. In this case, Leno proposes to limit the split portion of water right 47-17589 to the historic consumptive use of 1.87 acre-feet per acre or a total volume of 30.5 acre-feet (1.87 af/acre x 16.3 acres). Attachment to Application 79357. The protestants did not provide evidence challenging Brockway's calculation of historic consumptive use.

18. Leno sufficiently demonstrated that approval of this transfer will not result in the enlargement of the split portion of water right 47-17589. Once the transfer is approved, the proposed water right will be limited to a diversion rate of 0.19 cfs and an annual diversion volume of 30.5 acre-feet.

Conservation of Water Resources

19. During the hearing, the protestants challenged Cedar Ridge's use of a drench system for cooling cows. Although other methods of cooling cows were discussed, no evidence was presented showing that drench systems are not used in other dairies or that drench systems are not consistent with the conservation of water resources in the state of Idaho.

20. Visser's calculation of the maximum annual water demand of the drench system is reasonable. Visser testified that any water not needed for the drench system would be used to satisfy existing peak stockwater demands at Dairy #2. Leno satisfied his burden of proof regarding conservation of water resources. There is no evidence in the record that the proposed water use would be inconsistent with the conservation of water resources in the state of Idaho.

Local Public Interest

21. The local public interest analysis under Section 42-222 is meant to be separate and distinct from the injury analysis. Local public interest is defined as "the interests that the people in the area directly affected by a proposed water use have in the effects of such use on the public water resource." Idaho Code § 42-202B(3).

22. There is no evidence in the record that the changes proposed in Application 79357 are not in the local public interest.

Summary

23. Leno has satisfied his burden of proof for all of the review criteria set forth in Idaho Code § 42-222.

ORDER

IT IS HEREBY ORDERED that Application for Transfer No. 79357 in the name of Thomas and Dorothy Leno is APPROVED.

Dated this 13 day of October, 2015.

Spackman

Gary Spackman Director

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 14% day of October 2015, true and correct copies of the documents described below were served by placing a copy of the same with the United States Postal Service, postage prepaid and properly addressed, certified with return receipt requested, to the following:

Document Served: Final Order Approving Transfer (79357) Explanatory Information to Accompany a Final Order

Jimmie L. Conder 3623 N 2000 E Filer ID 83328

Michael & Jana Humphries 2382 E 3300 North Twin Falls ID 83301

William D. Hamby 2399 E 3300 N Twin Falls ID 83301

Eric Parrott 2152 E 3300 N Twin Falls ID 83301

Lois M. Rice PO Box 200 Filer ID 83328-0200

Leslie Ellsworth PO Box 5023 Twin Falls ID 83303-5023

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Scott Houtz 2231 E 3300 N Twin Falls ID 83301

Richard Parrott 1389 E 4400 N Buhl ID 83316

Final Order Approving Transfer

Barker Rosholt & Simpson Travis L Thompson 195 River Vista Place, Ste 204 Twin Falls ID 83301-3027

2malee Kushun be Deborah Gibson Administrative Assistant

Courtesy copies sent via Regular Mail to:

Thomas Leno 4236 N 1900 E Buhl ID 83316

Four Sister Dairy LLC PO Box 105 Twin Falls ID 83303-0105

Greg Sullivan Brockway Engineering PLLC 2016 N. Washington St., Ste 4 Twin Falls ID 83301

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