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**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)

**SURFACE WATER COALITION'S
PROPOSED FINDINGS OF FACT AND
CONCLUSIONS OF LAW**

COME NOW, A&B Irrigation District ("A&B"), American Falls Reservoir District #2
("AFRD#2"), Burley Irrigation District ("BID"), Milner Irrigation District ("Milner"), Minidoka
Irrigation District ("MID"), North Side Canal Company ("NSCC"), and Twin Falls Canal

Company (“TFCC”) (collectively hereafter referred to as the “Surface Water Coalition”, “Coalition”, or “SWC”), by and through counsel of record, and hereby submit the following *Proposed Findings of Fact and Conclusions of Law* as requested by the Hearing Officer, on February 6, 2008. In support of the proposed findings, the Coalition incorporates its *Pre-Hearing Memorandum*, filed on December 21, 2007, as well as the other pleadings, expert reports, and testimony that it has submitted in this matter.

Background

1. On January 14, 2005, the Surface Water Coalition hand delivered to the Director of the Idaho Department of Water Resources (“IDWR” or “Department”) its Letter regarding *Request for Water Right Administration in Water District 120 (portion of the Eastern Snake Plain Aquifer) / Request for Delivery of Water to Senior Surface Water Rights* (hereinafter referred to as the “Coalition call”).

2. The events leading up the Coalition call, including the creation of new water districts, reformulation of the ESPA Ground Water Model, expiration of an interim stipulated agreement with ground water users, continued reduced water supplies, and a record low storage carryover from 2004, are described in the testimony provided by the Coalition managers. *Alberdi Testimony* at 1624, lns. 3-22, 1625, lns. 1-25, 1626, lns. 1-13, 1627, lns. 1-25; *Bingham Direct* at 17, lns. 5-19; *Diehl Partial Direct* at 14, lns. 19-25, 15, lns. 1-8; *Mullins Direct* at 11, lns. 12-22; *Thompson Direct* at 17, lns. 2-9; *Harmon Direct* at 4, lns. 8-12; and *Temple Direct* at 13, lns. 6-15.

3. Initially, by Order of February 14, 2005, the Director requested each member of the Coalition to submit various pieces of information, including water diversion data, irrigated acreage, and crop data for the fifteen (15) irrigation seasons from 1990 through 2004.

4. On March 15, 2005, the Surface Water Coalition filed *Petitioners’ Joint Response to Director’s February 14, 2005 Request for Information*, which included the information requested by the Director to the extent that such information or data was available to or recorded by the entity. An amended exhibit to the Coalition’s response was submitted to the Director on March 18, 2005.

5. On April 18, 2005, in response to the renewed request for submission of information by the Director, the Coalition submitted a joint supplemental response to the information request.

6. In addition to the 2005 submissions, the Coalition provided additional information to the Director on April 13, 2007 (2007 Water Supply Assessment, HDR Engineering), and again on June 18, 2007 (Updated 2007 Water Supply Assessment, HDR Engineering). Exhibits 8148

and 8149.

7. Managers for the individual Coalition members provided additional information to the Director, on June 21, 2007, describing water supply conditions, the expected demands on their individual projects for 2007, and the need for additional water to meet those demands. *See* Exhibits 9001 (*Alberdi Affidavit*), 9101 (*Bingham Affidavit*), 9201 (*Thompson Affidavit*), 9301 (*Temple Affidavit*), 9401 (*Mullins Affidavit*), 9501 (*Harmon Affidavit*), and 9601 (*Diehl Affidavit*).

8. The Director responded to the Coalition's January 2005 water delivery call with an Amended Order on May 2, 2005 ("*May 2 Order*") and additional supplemental orders throughout 2005, 2006, and 2007.

9. In the *May 2 Order*, and each supplemental Order, the Director made various injury determinations. However, since 2005, no mitigation water has been provided in a timely manner during the irrigation season, and no junior priority ground water rights have been curtailed to satisfy a senior surface water right held by any member of the Surface Water Coalition despite injuries to their senior water rights.

Eastern Snake River Plain Aquifer (ESPA)

10. An aquifer is an underground source of water. Ground water in Idaho is further defined by statute. Idaho Code § 42-230. The Eastern Snake River Plain Aquifer ("ESPA") is defined as the aquifer underlying an area of the Eastern Snake River Plain that is about 170 miles long and 60 miles wide as delineated in the report "Hydrology and Digital Simulation of the Regional Aquifer System, Eastern Snake River Plain, Idaho," U. S. Geological Survey ("USGS") Professional Paper 1408-F, 1992, excluding areas lying both south of the Snake River and west of the line separating Sections 34 and 35, Township 10 South, Range 20 East, Boise Meridian. The ESPA is also defined as an area having a common ground water supply. *See* IDAPA 37.03.11.050 (Rule 50 of the CMRs).

11. The ESPA is predominately in fractured Quaternary basalt having an aggregate thickness that may, at some locations, exceed several thousand feet, decreasing to shallow depths in the Thousand Springs area. The ESPA fractured basalt is characterized by high hydraulic conductivities, typically 1,000 feet/day but ranging from 0.1 feet/day to 100,000 feet/day.

12. Only the upper several hundred feet of the aquifer is penetrated by ground water wells and the exchange of ground water with the Snake River occurs through the thin upper portion of the aquifer that contacts the river. For this reason, relatively small fluctuations in the ground water table on the order of tens of feet can greatly influence the rate of exchange of water between the river and the aquifer. *SWC Report* at 7-6.¹

13. Ground water in the ESPA naturally discharges as springs, tributary streams, and reach gains to the Snake River. The two largest gaining reaches where the ESPA discharges to

¹ All references to the *SWC Report* and its Appendices refer to the Expert Report filed by the Surface Water Coalition's witnesses on September 26, 2007. A copy of the report only is found at Exhibit 8000 as well.

the Snake River are the American Falls reach and the Thousand Springs reach. Ground water from the ESPA flows to the Snake River through springs and seeps located upstream of American Falls Reservoir and downstream to Neeley. *SWC Report* at 5-4; *Brockway Direct* at 8, ¶ 23; *Koreny Direct* at 4, ¶ 8.

14. The ground water in the ESPA is hydraulically connected to the Snake River and tributary surface water sources at various places and to varying degrees. One of the locations at which a direct hydraulic connection exists between the ESPA and the Snake River and its tributaries is in the American Falls area.

15. Hydraulically-connected ground water sources and surface water sources are sources that within which, ground water can become surface water, or surface water can become ground water, and the amount that becomes one or the other is largely dependent on ground water elevations.

16. When water is pumped from a well in the ESPA, a conically-shaped zone that is drained of ground water, termed a cone of depression, is formed around the wells. This causes surrounding ground water in the ESPA to flow to the cone of depression from all sides. These depletionary effects propagate away from the well, eventually reaching one or more hydraulically-connected reaches of the Snake River and its tributaries. When the depletionary effects reach a hydraulically-connected reach of the Snake River, reductions in river flow begin to occur in the form of losses from the river or reductions in reach gains to the river. The depletions to the Snake River and its tributaries increase over time, with seasonal variations corresponding to seasonal variations in ground water pumping. Over time, such depletions will either recede, if ground water pumping from the well ceases, or reach a maximum beyond which no further significant depletions occur, if ground water pumping from the well continues from year to year. This latter condition is termed a steady-state condition.

17. Various factors determine the specific hydraulically-connected reach of the Snake River affected by the pumping of ground water from a well in the ESPA; the magnitude of the depletionary effects to a hydraulically-connected reach; the time required for those depletionary effects to first be expressed as reductions in river flow; the time required for those depletionary effects to reach maximum amounts; and the time required for those depletionary effects to either recede, if ground water pumping from the well ceases, or reach steady-state conditions, if ground water pumping continues. Those factors include the proximity of the well to the various hydraulically-connected reaches, the transmissivity of the aquifer (hydraulic conductivity multiplied by saturated thickness) between the well and the hydraulically-connected reach of the Snake River, the riverbed hydraulic conductivity, the specific yield of the aquifer (ratio of the volume of water yielded from a portion of the aquifer to the volume of that portion of the aquifer), the period of time over which ground water is pumped from the well, and the amount of pumped ground water that is consumptively used. *Koreny Direct* at 5, ¶ 10.

18. The time required for depletionary effects in a hydraulically-connected reach of the Snake River to first be expressed, the time required for those depletionary effects to reach maximum amounts, and the time required for those depletionary effects to either recede, if ground water pumping from the well ceases, or reach steady-state conditions, if ground water

pumping continues, can range from days to years or even decades, depending on the factors described above. Generally, the closer a well in the ESPA is located to a hydraulically-connected reach of the Snake River, the larger will be the portion of ground water depletions to the hydraulically-connected reach and the shorter will be the time periods for depletionary effects to first be expressed, for those depletionary effects to reach maximum amounts, and for those depletionary effects to either recede or reach steady-state conditions.

19. Essentially all depletions of ground water from the ESPA cause reductions in flows in the Snake River equal in quantity to the depletions over time.

20. Kjelstrom (1995) divided the Snake River into gaining and losing reaches as described below:

- a. Henry's Fork (Ashton to Rexburg): Gaining in lower reach
- b. Heise to Shelley: Generally losing reach
- c. Shelley to Near Blackfoot: Losing reach
- d. Near Blackfoot to Neeley: Gaining reach
- e. Neeley to Minidoka: Transitional (gaining/losing)
- f. Minidoka to Milner: Transitional (gaining/losing)
- g. Milner to King Hill: Gaining

SWC Report at 7-5 to 7-6.

21. Ground water in the ESPA is also diverted to the surface, by pumping the ground water from wells. *SWC Report* at 5-4. Approximately 50,000+ ground water rights for irrigation and municipal supply were developed beginning in the 1950s. Land irrigated by ground water and mixed ground/surface water sources increased dramatically to a total of 1.6 million acres by 1992. Ground water pumping allowed the total of all irrigated land on the plain to increase from approximately 1.6 million acres to 2.4 million acres. Consumptive use from ground water irrigation causes a net reduction in aquifer recharge ranging from 1.6 to 3.0 MAF/yr with an average of 2.2 MAF/yr. *SWC Report* at 5-7 to 5-8.

22. Prior to 1950 (before the on-set of large-scale ground water pumping for irrigation), ground water levels fluctuated with changing climate and irrigation seasons but did not exhibit a pattern of decline. *SWC Report* at 7-11. Even during periods of extreme drought (such as during the 1930s) ground water levels in the ESPA were stable. *Id.* Ground water level measurements collected across the ESPA by the USGS, IDWR, and University of Idaho show that, following the onset of large-scale ground water pumping for irrigation, and in particular since the 1960s, ground water levels have demonstrated a persistent declining trend. *Id.*, *Koreny Direct*, p. 7, ¶ 18. Persistent ground water declines ranging between 5 and 60 feet are observed in almost all locations throughout the ESPA. *Id.* See also, Figures at 7-54 to 7-61.

23. The ground water level declines are most severe in the southwestern portion of the aquifer and extend up into the reach near American Falls Reservoir. *SWC Report* at 7-14; *Koreny Direct* at 7, ¶ 18. Ground water declines in the American Falls reach show 5 to 20 feet of decline, with increasing declines during the last two decades. *SWC Report* at 7-13.

Declining ESPA Ground Water Levels and Declining Snake River Reach Gains

24. The ground water level declines observed from the middle of the century have caused spring flow to decline in both the American Falls and Thousand Springs reaches. *SWC Report* at 7-15; *Brockway Direct* at 11, ¶ 32. Spring Creek, a spring in the Fort Hall bottomlands and an indicator for the Blackfoot to Milner reach gains, has declined by about 200 cfs since the 1950s and about 70 to 80 cfs since 1980. *Id.*; *Koreny Direct* at 8, ¶ 20. Similar declining trends are observed for other springs in the American Falls reach, including Ross Fork, Big Jimmy, and Wide Creek springs. *SWC Report* at 7-16. Many springs in the Thousand Springs reach have declined significantly as well (examples include Blue Lakes Spring and Box Canyon Springs, with declines up to 100 to 200 cfs). *Id.*, *Koreny Direct* at 8, ¶ 20.

25. The Surface Water Coalition members rely upon Snake River flows above Milner Dam, primarily reach gains in the reaches between Near Blackfoot and Milner (the “American Falls reach”) as a water supply for both natural flow and storage water rights. *Koreny Direct* at 6, ¶ 14; *Alberdi Testimony* at 1615, lns. 1-14, at 1616, lns. 16-25; *Diehl Partial Direct* at 8, lns. 14-25; *Bingham Direct* at 12, lns. 1-23, at 13, lns. 1-18.

26. Since 1999, there has been a significant decrease in the reach gains in the Near Blackfoot to Neeley reach.

27. The data for the entire American Falls reach (Near Blackfoot to Milner) demonstrate a declining trend in reach gains throughout the entire irrigation season, which is most pronounced during the critical months of July and August. *SWC Report* at 7-18, *see also* Figures 7-30 and 7-31 (at pages 7-77 and 7-78); *Brockway Direct* at 11, ¶ 32; *Koreny Direct* at 8, ¶¶ 21-22; *Rebuttal to Brendecke* at 3-5.

28. Since the Coalition diverts natural flow during the irrigation season and not during the entire year, the use of annual reach gain data is not a good indicator of the amount of natural flow that is available to the Surface Water Coalition during the irrigation season. *Rebuttal to Brendecke* at 3; *Koreny Direct* at 17, ¶ c.

29. The decline in reach gains for the month of July, from the 1950-60 average to the low reach gains observed during the 1990s and 2000s is about 107,000 acre-ft/month for the Blackfoot to Milner reach. *SWC Report* at 7-18, Figure 7-31 (at page 7-78) and Figure 7-32 (at page 7-79; *Brockway Direct* at 11-12, ¶ 33; *Koreny Direct* at 8, ¶ 22; *Rebuttal to Brendecke* at 3-5.

30. In addition to the declines in July, the August monthly reach gains have declined from the 1950-60 average of about 198,000 acre-feet to approximately 120,000 acre-feet in the 1990-2004 time period. *See SWC Report* at 7-30 (Table 7-4).

31. These calculated declines during the irrigation season correlate with the declines observed in TFCC’s natural flow diversions during this period, as well as with declines observed in ESPA ground water levels. *Id.* at 7-19, 7-20; Appendix AO. As ground water levels declined

in the ESPA, beginning in the 1960s, water was induced from the Snake River losing reaches and discharge to the river from the aquifer was captured from the gaining reaches. *SWC Report* at 7-25. Declines in ground water levels are not the result of single or multi-year drought periods. *Id.* at 7-14. Ground water pumping is a major cause of ground water level declines across the ESPA. *Id.*

32. The “Curtailement Scenario” model run by IWRRI demonstrates that ground water pumping is a major cause for decreased Snake River reach gains, including a decline of about 960 to 1,100 cfs in the Blackfoot to Minidoka reach. *SWC Report* at 7-20. Although decreases in incidental recharge have impacted reach gains, ground water pumping for irrigation is the largest source of depletion to the common water supply in the ESPA and is causing severe declines in ground water levels and Snake River natural flow. *Id.* at 7-27. Consequently, the reduced reach gains in the American Falls reach have impacted the water availability for the SWC senior natural flow and storage water rights. *Id.* at 7-16 to 7-23; *Brockway Direct* at 11-12, ¶¶ 32-33; *Koreny Direct* at 13, ¶ 33.

33. The Snake River reach gain analysis in the *SWC Report* shows widespread and persistent declines in reach gains for all reaches of the Snake River since the early 1960s, which have become more severe and regular in the last two decades. *SWC Report* at 7-18; *Brockway Direct* at 11-12, ¶ 33; *Koreny Direct* at 8, ¶ 22. A declining trend is observed in the 6-month average for the May to September irrigation season, and the declining trend is especially severe and pronounced during the middle of the irrigation season in July and August. The total decline in reach gains for all Snake River reaches above Milner, when comparing the average from 1950-1960 to the low reach gains observed during the 1990s and 2000s, is approximately 200,000 acre-ft/month (~1.2 million acre-ft total) for the 6-month irrigation season (May to September). *SWC Report* at 7-18. The result of the reach gain analysis also shows that the Minidoka to Milner reach has now transitioned to a losing reach during the middle and later periods of the irrigation season. This transition contributes to a decrease in natural flow in this reach. *Id.*; *Brockway Direct* at 11-12, ¶ 33; *Koreny Direct* at 8, ¶ 22.

34. For the near Blackfoot to Neeley reach, the average monthly May to September maximum reach gain decline from 1950-1960 to the 1990-2000s has been approximately 49,000 acre-ft/month (~290,000 acre-ft total) and for the Blackfoot to Milner reach the average monthly May to September maximum reach gain decline over the same period has been about 67,000 acre-ft/month (~400,000 acre-ft total). *SWC Report* at 7-18; *Brockway Direct* at 11-12, ¶ 33; *Koreny Direct* at 8, ¶ 22. The monthly decline in reach gains is strongest during the middle of the irrigation season in July. *Id.* The July monthly reach gain decline from the 1950-1960 average to the low reach gains observed during the 1990s and 2000s is about 87,000 acre-ft/month for the Blackfoot to Neeley reach and about 107,000 acre-ft/month for the Blackfoot to Milner reach. *Id.*

35. A comparison was made between the near Blackfoot to Neeley reach gains during the months of July and August and the average monthly natural flow diversion by TFCC during July and August as a check against the reach gain calculation results described above. *SWC Report* at 7-19; *Koreny Direct* at 8, ¶ 22. TFCC (and NSCC) has the most senior priority for diversions of reach gains (up to 3,000 cfs with a 1900 priority) accruing below Near Blackfoot

during July and August. TFCC natural flow diversion follows a very similar pattern of decline as the Blackfoot to Milner reach gain declines. *Id.* Comparison of the trend in historical recorded irrigation mid-season diversions for TFCC and NSCC, with measured declines in reach gains in the Blackfoot to Milner reach cannot be attributed to increases in efficiency of project water use. *Brockway Direct* at 12, ¶ 34. The decline in the irrigation supply for TFCC and NSCC reflects the decrease in available natural flow, especially during the mid irrigation season due primarily to ground water pumping. *Id.* Water demand is the highest in July and August on the TFCC and NSCC projects. *Alberdi Testimony* at 1606, lns. 15-25, at 1607, lns. 1-2; *Diehl Testimony* at 1872, lns. 17-24.

36. A review of the declining ground water levels and reach gain trends shows the ESPA is not in a state of “dynamic equilibrium”. *Koreny Direct* at 17, ¶ d. Accordingly, the “Base Case Scenario” model run does not support the Director’s finding that the aquifer is in “dynamic equilibrium”. *May 2 Order* at 17-18, ¶ 80.

37. Ground water level data plainly demonstrates that declining trends in aquifer levels are becoming stronger over the last two decades and have continued since 2002. *Id.* at 7-54 to 7-57. Reach gain data also demonstrate a declining trend since 2002. *Id.* at 7-77 to 7-78.

38. Further, IWRRI’s “Base Case Scenario” overestimated the state of continued recharge to the aquifer as well as underestimated the remaining effect of ground water depletions on the Snake River reaches, particularly in the Blackfoot to Minidoka reach. *SWC Report* at 7-23, 24. In addition, the researchers at IWRRI and the participants in the ESHMC (technical modeling committee) later concluded that the “Base Case Scenario” results and conclusions were flawed and inappropriately used in the *May 2 Order* because of incorrect assumptions relative to future declines in incidental recharge from surface water irrigation. *Brockway Direct* at 13, ¶ 35.

39. The SWC Experts performed a new model run that corrected the erroneous assumptions in the “Base Case Scenario” and shows that “dynamic equilibrium” has not occurred and the aquifer is continuing to decline. *Brockway Direct* at 13, ¶ 35; *SWC Report* at 7-23 to 7-24; Appendix AP. This analysis presents results for future declining ground water levels and reach gains that are consistent with the declining trends in the historic and recent record. *Brockway Direct* at 13, ¶ 35. This model run demonstrates that additional declines in ground water levels and reach gains are likely to occur in the future if ground water pumping continues at current rates and incidental recharge continues to decline. *SWC Report* at 7-24, Appendix AP. A separate report completed by R.D. Schmidt, with the Bureau of Reclamation (“Reclamation”), in 2005, further demonstrates that the effect of ground water pumping under junior rights and additional reductions in Snake River reach gains has yet to be fully realized. Appendix AQ. In summary, the ESPA has not fully adjusted to impacts from historical ground water pumping in that ground water levels and reach gains will continue to decline unless the trend is significantly altered. *Id.*; *Koreny Direct* at 12, ¶ d. These continued reductions in reach gains will continue to reduce natural flow in the Snake River available to SWC senior water rights. *Id.*

40. Reclamation’s expert, Dr. Patrick McGrane, further explains that there is still over 9% of the ground water depletions that have already occurred but have yet to accrue to the Snake River reach gains in the American Falls reach. *McGrane Direct* at 7-8. This amounts to a loss

of an additional 142,000 acre-feet per year that will still accrue to the detriment of reach gains to the Snake River above Milner Dam, which includes the American Falls reach. *Id.*

ESPA Ground Water Model (ESPAM)

41. The Department uses a calibrated ground water model to determine the effects on the ESPA and hydraulically-connected reaches of the Snake River and its tributaries from pumping a single well in the ESPA, from pumping selected groups of wells, and from surface water uses on lands above the ESPA.

42. In 2004, in collaboration with IWRRI, the University of Idaho, Reclamation, USGS, Idaho Power Company, and consultants representing various entities, including certain members of the Surface Water Coalition, Idaho Ground Water Appropriators, Inc. ("IGWA"), and the City of Pocatello, the Department completed reformulation of the ground water model used by the Department to simulate effects of ground water diversions and surface water uses on the ESPA and hydraulically-connected reaches of the Snake River and its tributaries. This effort was funded in part by the Idaho Legislature and included significant data collection and model calibration intended to reduce uncertainty in the results from model simulations.

43. The reformulated ground water model for the ESPA was calibrated to recorded ground water levels in the ESPA and reach gains or losses to Snake River flows, determined from stream gages together with other stream flow measurements, for the period May 1, 1980 to April 30, 2002. The calibration targets, consisting of measured ground water levels and reach gains/losses, including discharges from springs, have inherent uncertainty resulting from limitations on the accuracy of the measurements. The calibration targets having the maximum uncertainty are the reach gains or losses determined from stream gages, which, although rated "good" by the USGS, have uncertainties of up to 10 percent, which could be 10 percent high or low. The development of a more scientifically based error factor should be a priority in improvement of the model.

44. Simulations using the Department's calibrated computer model of the ESPA show that ground water withdrawals from certain portions of the ESPA for irrigation and other consumptive purposes cause depletions to the flow of the Snake River in the form of reduced reach gains or increased reach losses in various reaches of the Snake River including the reach extending from Shelley, Idaho to Minidoka Dam, which includes the American Falls Reservoir.

45. The results of simulations from the Department's ground water model are suitable for making factual determinations on which to base conjunctive administration of surface water rights diverted from the Snake River and ground water rights diverted from the ESPA.

Brockway Direct at 18, ¶ 50; *Koreny Direct* at 5, ¶¶ 11-12.

46. The Department's ground water model represents the best available science for determining the effects of ground water diversions and surface water uses on the ESPA and hydraulically-connected reaches of the Snake River and its tributaries. There currently is no other technical basis as reliable as the simulations from the Department's ground water model for the ESPA that can be used to determine the effects of ground water diversions and surface water

uses on the ESPA and hydraulically connected reaches of the Snake River and its tributaries.

47. It was appropriate for the Director to use the ESPAM in making conjunctive management decisions in this case.

Creation and Operation of Water Districts

48. On November 19, 2001, the State of Idaho sought authorization from the Snake River Basin Adjudication (“SRBA”) District Court for the interim administration of water rights by the Director in all or parts of the Department’s Administrative Basins 35 and 41 overlying the ESPA in the American Falls area and all or parts of Basins 36 and 43 overlying the ESPA in the Thousand Springs area.

49. On January 8, 2002, the SRBA District Court granted the State’s motion finding that the water supply in basins 35, 36, 41, and 43 was not adequate at that time and was projected to be inadequate at times in the future to satisfy all water rights. The SRBA Court concluded that interim administration in accordance with the Director’s reports and partial decrees was “reasonably necessary to protect senior water rights in accordance with the prior appropriation doctrine as established by Idaho law.”

50. After notice and hearing, the Director issued two orders on February 19, 2002, creating Water District No. 120 and Water District No. 130, pursuant to the provisions of Idaho Code § 42-604.

51. Since 2002, the boundaries of Water District 120 and 130 have been expanded as Director’s reports and partial decrees have been issued for various other basins, and the Director has issued orders creating additional water districts across the ESPA, including 100, 110, and 140.

52. Water Districts No. 120 and No. 130 were created, and the respective boundaries revised, to provide for the administration of water rights, pursuant to chapter 6, title 42, Idaho Code, for the protection of prior surface and ground water rights. As a result, the watermasters for Water Districts No. 120 and No. 130 were given the following duties to be performed in accordance with guidelines, direction, and supervision provided by the Director:

- a. Curtail illegal diversions (i.e., any diversion without a water right or in excess of the elements or conditions of a water right);
- b. Measure and report the diversions under water rights;
- c. Enforce the provisions of any stipulated agreement; and
- d. Curtail out-of-priority diversions determined by the Director to be causing injury to senior priority water rights that are not covered by a stipulated agreement or a mitigation plan approved by the Director.

53. Water Districts No. 120 and No. 130 were created to provide for the administration of ground water rights in areas overlying the ESPA in the American Falls area and other areas, pursuant to the provisions of chapter 6, title 42, Idaho Code, for the protection of prior surface and ground water rights. Ground water rights in Water Districts 100, 110, 120, 130, and 140 are therefore subject to conjunctive administration to satisfy senior surface and ground water rights.

Surface Water Coalition Members' Water Rights

54. The A&B Irrigation District holds the following surface water right as claimed in the SRBA for the diversion of water from the Snake River:

Water Right No.: 01-00014
Basis for Right: Decree
Priority Date: April 1, 1939
Diversion Rate: 267 cfs
Beneficial Use: Irrigation
Place of Use: See Attachment B (May 2 Order)

55. The Letter filed by the Surface Water Coalition referred to water rights nos. 01-02060A, 01-02064F, and 01-02068F claimed by the A&B Irrigation District in the SRBA. The current holder of record for these rights is the United States through the USBR. Determination of the interest held by the A&B Irrigation District in each of these rights is pending in the SRBA.

56. The American Falls Reservoir District #2 holds the following surface water right as claimed in the SRBA for the diversion of water from the Snake River:

Water Right No.: 01-00006
Basis for Right: Decree
Priority Date: March 20, 1921
Diversion Rate: 1,700 cfs
Beneficial Use: Irrigation
Place of Use: See Attachment C (May 2 Order)

57. The Burley Irrigation District holds the following surface water rights as claimed in the SRBA for the diversion of water from the Snake River:

Water Right No.:	01-00007	01-00211B	01-00214B
Basis for Right:	Decree	Decree	Decree
Priority Date:	April 1, 1939	March 26, 1903	August 6, 1908
Diversion Rate:	163.4 cfs	655.88 cfs	380 cfs
Beneficial Use:	Irrigation	Irrigation	Irrigation
Place of Use:	See Attachment D (May 2 Order)		

58. The Milner Irrigation District holds the following surface water rights as claimed in the SRBA for the diversion of water from the Snake River:

Water Right No.:	01-00009	01-00017	01-02050
Basis for Right:	Decree	Decree	License
Priority Date:	April 1, 1939	November 14, 1916	October 25, 1939
Diversion Rate:	121 cfs	135 cfs	37 cfs
Beneficial Use:	Irrigation	Irrigation	Irrigation
Place of Use:	See Attachment E (May 2 Order)		

59. The Letter filed by the Surface Water Coalition referred to water right no. 01-02064B claimed by the Milner Irrigation District in the SRBA. The current holder of record for this right is the United States through the USBR. Determination of the interest held by the Milner Irrigation District in this right is pending in the SRBA.

60. The Minidoka Irrigation District holds the following surface water rights as claimed in the SRBA for the diversion of water from the Snake River:

Water Right No.:	01-00008
Basis for Right:	Decree
Priority Date:	April 1, 1939
Diversion Rate:	266.6 cfs
Beneficial Use:	Irrigation
Place of Use:	See Attachment F (May 2 Order)

61. The Letter filed by the Surface Water Coalition referred to water rights nos. 01-04045, 01-10187, 01-10188, 01-10189, 01-10190, 01-10191, 01-10192, 01-10193, 01-10194, 01-10195, and 01-10196 claimed by the Minidoka Irrigation District in the SRBA. The basis for water right no. 01-04045 is a beneficial use claim filed pursuant to Idaho Code § 42-243 for which the current holder of record is the Amalgamated Sugar Company. The remaining water rights are based on claims filed in the SRBA under Idaho Code § 42-1409 for which the current holder of record, except for 01-10192 and 01-10193, is the United States through the USBR. Determination of the interest held by the Minidoka Irrigation District in each of these rights is pending in the SRBA.

62. The North Side Canal Company holds the following surface water rights as claimed in the SRBA for the diversion of water from the Snake River:

Water Right No.:	01-00005	01-00016	01-00210A
Basis for Right:	Decree	Decree	Decree
Priority Date:	December 23, 1915	August 6, 1920	October 11, 1900
Diversion Rate:	300 cfs	1,260 cfs	54 cfs
Beneficial Use:	Irrigation	Irrigation	Irrigation

Water Right No.:	01-00210B	01-00212	01-00213
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Basis for Right:	Decree	Decree	Decree
Priority Date:	October 11, 1900	October 7, 1905	June 16, 1908
Diversion Rate:	346 cfs	2,250 cfs	890 cfs
Beneficial Use:	Irrigation	Irrig., Irrig. from Storage, Irrig. storage	Irrigation

Water Right No.:	01-00215	01-00220
Basis for Right:	Decree	Decree
Priority Date:	June 2, 1909	June 29, 1910
Diversion Rate:	500 cfs	3,000 cfs
Beneficial Use:	Irrigation	Irrigation

Place of Use: See Attachment G (May 2 Order)

63. The Letter filed by the Surface Water Coalition referred to water rights nos. 01-02064C, 01-10042B, 01-10043A, 01-10045B, and 01-10053A claimed by the North Side Canal Company in the SRBA. The current holder of record for water right no. 01-02064C is the United States through the USBR. The remaining water rights are based on claims filed in the SRBA under Idaho Code § 42-1409 for which the current holder of record is also the United States through the USBR. Determination of the interest held by the North Side Canal Company in each of these rights is pending in the SRBA.

64. The Twin Falls Canal Company holds the following surface water rights as claimed in the SRBA for the diversion of water from the Snake River:

Water Right No.:	01-00004	01-00010	01-00209
Basis for Right:	Decree	Decree	Decree
Priority Date:	December 22, 1915	April 1, 1939	October 11, 1900
Diversion Rate:	600 cfs	180 cfs	3,000 cfs
Beneficial Use:	Irrigation	Irrigation	Irrigation
Place of Use:	See Attachment H (May 2 Order)		

65. The Letter filed by the Surface Water Coalition referred to water rights nos. 01-02064A, 01-10042A, 01-10043, and 01-10045A claimed by the Twin Falls Canal Company in the SRBA. The current holder of record for water right no. 01-02064A is the United States through the USBR. The remaining water rights are based on claims filed in the SRBA under Idaho Code § 42-1409 for which the current holder of record is also the United States through the USBR. Determination of the interest held by the Twin Falls Canal Company in each of these rights is pending in the SRBA.

66. Because sufficient water could not be obtained from the natural and unregulated flow of the Snake River (prior to the additional effects of ground water depletions on reach gains) for the full irrigation of lands authorized under the surface water rights held by the members of the Surface Water Coalition as well as surface water rights held by other entities in

the Upper Snake River Basin of Idaho with points of diversion at and upstream of Milner Dam, Reclamation constructed dams to provide reservoirs to capture and store water from the Snake River when water surplus to irrigation demands was available, generally during the non-irrigation season, for subsequent release to supplement existing water rights for natural flow to help meet irrigation shortages.

67. Additionally, these reservoirs are used to generate power incidental to reservoir releases for irrigation and flood control. Storage reservoirs developed by Reclamation include Jackson Lake, Ririe Reservoir, Lake Walcott, American Falls Reservoir, and Palisades Reservoir.

68. Storage was also acquired to protect against multi-year droughts. For example, Palisades Reservoir was licensed primarily as a long-term carryover reservoir. *Gregg Testimony* at 1228, Ins. 3-4. Congress envisioned that Palisades Reservoir may need to carry-over water for multiple years to sustain farmers in an extended drought. Exhibit 7001 (*Substantiating Report* at 6).

69. Storage water rights represent primary sources of water supply for various members of the Surface Water Coalition, particularly in years when natural flow for junior surface water rights is unavailable.

70. Reclamation holds the following surface water rights as claimed in the SRBA for diversion of water from the Snake River for irrigation, reservoir storage for irrigation, and reservoir releases for irrigation and incidental power generation under some rights:

Water Right No.:	01-00284	01-02064	01-02068
Basis for Right:	Decree	License	License
Priority Date:	March 30, 1921	March 30, 1921	June 28, 1939
Reservoir:	American Falls	American Falls	Palisades
Storage Volume:	1.7 million acre-feet	1.8 million acre-feet	1.4 million acre-feet

71. The Letter filed by the Surface Water Coalition referred to water rights nos. 01-04052, 01-04055, 01-04056, 01-04057, 01-10042, 01-10043, 01-10044, 01-10045, and 01-10053 claimed by the USBR in the SRBA. The basis for water rights nos. 01-04052, 01-04055, 01-04056, 01-04057, 01-10042, 01-10043, 01-10044, 01-10045, and 01-10053 are beneficial use claims filed pursuant to Idaho Code § 42-243 or claims filed pursuant to Idaho Code § 42-1409. Determination of each of these rights is pending in the SRBA.

72. The members of the Surface Water Coalition entered into contracts with Reclamation for the use of water yielded from storage space in the reservoirs described in Finding Nos. 66 and 67 under the water rights described in Findings Nos. 70 and 71 as follows:

- a. A&B Irrigation District –
 - 46,826 acre-feet of storage space in American Falls Reservoir
 - 90,800 acre-feet of storage space in Palisades Reservoir
 - Total: 137,626 acre-feet of storage space

- b. American Falls Reservoir District #2 –
393,550 acre-feet of storage space in American Falls Reservoir
- c. Burley Irrigation District –
31,892 acre-feet of storage space in Lake Walcott
155,395 acre-feet of storage space in American Falls Reservoir
39,200 acre-feet of storage space in Palisades Reservoir
Total: 226,487 acre-feet of storage space
- d. Milner Irrigation District –
44,951 acre-feet of storage space in American Falls Reservoir
45,640 acre-feet of storage space in Palisades Reservoir
Total: 90,591 acre-feet of storage space
- e. Minidoka Irrigation District –
186,030 acre-feet of storage space in Jackson Lake
63,308 acre-feet of storage space in Lake Walcott
82,216 acre-feet of storage space in American Falls Reservoir
35,000 acre-feet of storage space in Palisades Reservoir
Total: 366,554 acre-feet of storage space
- f. North Side Canal Company –
312,007 acre-feet of storage space in Jackson Lake
431,291 acre-feet of storage space in American Falls Reservoir
116,600 acre-feet of storage space in Palisades Reservoir
Total: 859,898 acre-feet of storage space
- g. Twin Falls Canal Company –
97,183 acre-feet of storage space in Jackson Lake
148,747 acre-feet of storage space in American Falls Reservoir
Total: 245,930 acre-feet of storage space

73. Legal title to the storage water rights described above is held by Reclamation. Equitable or beneficial title of the storage water rights is held by the respective landowners of the irrigation districts and canal companies described above. *United States v. Pioneer Irr. Dist.*, 157 P.3d 600 (Idaho 2007). The beneficial use of the water provided under the storage water contracts described in Finding No. 72 is made by the landowners within the respective service areas of the members of the Surface Water Coalition.

74. The Director's characterization of storage water rights in the *May 2 Order* as simply "supplemental" water rights for all Coalition members fails to recognize that for some entities storage water provides a "primary" source of water supply, particularly in dry years. For SWC members with more junior priority natural flow water rights, such as AFRD #2, A&B, Milner, and NSCC, storage water represents a primary supply of water for their projects, particularly in dry water years, and can even consist of 100% of the water supply in certain

years. See *Diehl Partial Direct* at 8, lns. 14-25, at 9, lns. 1-5; *Diehl Testimony* at 1867, lns. 10-12; *Mullins Direct* at 11, lns. 12-22; *Harmon Direct* at 3, lns. 3-14; *Temple Direct* at 10, lns. 16-24.

75. Idaho's water distribution statutes and the Rules for Conjunctive Management of Surface and Ground Water Resources ("CMR"), IDAPA 37.03.11, *et seq.*, do not allow the Director or the Watermaster to administer the source of water differently or unequally for the purposes of administration based upon whether the source of water is storage water, surface tributary flows, flows as a result of spring discharges or reach gains, or precipitation in the form of rainfall or melting snowpack. To do so would create different classes of water rights and water sources not contemplated hydrologically or otherwise.

76. Importantly, Section 42-607 does not distinguish storage water rights from natural flow rights. The CMRs define a water right as "the legal right to divert and use or to protect in place the public waters of the state of Idaho where such right is evidenced by a decree, a permit or license issued by the Department, a beneficial or constitutional use right or a right based on federal law." Rule 10.25. No distinction is made between natural flow and storage water rights. All of the storage water rights held by the SWC have been previously decreed or licensed (nominal legal title in the name of Reclamation).

Previous Use and Administration of Coalition Members' Water Rights

77. Water District 1 (formerly 36) has been operating on a year round basis since at least 1919. *SWC Report* at 4-19 to 4-20. The district administers surface water rights to the Snake River above Milner Dam. *Swank Testimony* at 799, lns. 23-25, at 800, lns. 1-10. The Coalition members' water rights have been previously decreed or licensed and have been subject to administration in Water District 1 for well over 50 years. The Watermaster administers surface water rights in Water District 1 by priority, pursuant to the provisions of these decrees. *Swank Testimony*, at 835, lns. 12-19, at 838, lns. 3-6, 12-16.

78. The Coalition members are entitled to divert up to the quantities of their decrees, which amounts are routinely delivered by priority as against other surface water rights by the Watermaster in Water District 1. *Dreher Testimony*, p. 136, lns. 17-25, p. 137, ln. 1; *Swank Testimony*, p. 801, lns. 13-21; *Alberdi Testimony* at 1597, lns. 8-18, at 1598, lns. 9-12.

79. The Coalition members have historically been delivered the decreed quantities of water under their water rights. *SWC Report* 8-4 to 8-5; *Swank Testimony* at 838, lns. 3-16. Diversions of natural flow under the Coalition's water rights peaked in the late 1960's and early 1970's and have declined, except in wet years, by approximately 500,000 AF/yr. *Id.* A comparison of post-1990 natural flow diversions with pre-1960 diversions shows that there were more average water years before 1960 and an increasing number of dry years after 1990. *Id.* at Tables 8-3 & 8-4. With declining natural flows, the Coalition members have become more reliant on their storage rights, leaving less carryover for future dry years. *Id.* at 8-5 to 8-6. These reductions in natural flow supplies are especially noticeable in the late-summer months (post-July 1). *Id.* at Figure 8-3.

80. Based on the information submitted for AFRD#2, NSCC and TFCC, in response to the Director's February 14, 2005 Order, and based upon the testimony of these entities' Managers and water users, full headgate deliveries under their water rights are defined by these members of the Coalition as rates of diversion at the shareholder-headgates during each month of the irrigation season of 5/8-inch (AFRD #2), 5/8-inch (NSCC), and 3/4-inch (TFCC), respectively. *May 2 Order*, ¶ 89; *Alberdi Testimony* at 1599, lns. 18-25, at 1600, lns. 1-21; *Diehl Partial Direct* at 4, lns.5-12; *Harmon Direct* at 4, lns.5-7; *Esterbrook Direct* at 2, lns.21-22.

81. Coalition members and landowners have historically used up to the entire quantity under their individual decreed water rights, when available. Shareholders within the TFCC project area have historically beneficially used a full headgate delivery of 3/4-inch at the headgate. See *Shewmaker Direct*, at 3, lns.10-13; *Garatea Direct*, at 2, lns.20-24.; *O'Connor Direct*, at 4, lns.1-8; *Blick Direct*, at 6, lns.1-5; & *Coiner Direct*, at 4, lns.1-6; see also *Dreher Testimony* at 121, lns.1-3. NSCC shareholders have also historically beneficially used a full headgate delivery of 5/8-inch at the headgate. See *Diehl Partial Direct*, at 4, lns.5-12; see also *Larsen Direct*, at 3, lns.4-7; *Lockwood Direct*, at 3, lns.16-19; *Pennington Direct* at 3, lns.8-11. AFRD#2 landowners have historically beneficially used a full headgate delivery of 5/8-inch at the headgate. *Esterbrook Direct* at 2, lns.9-11.

82. The Coalition members are "entitled" to the quantity of water under their senior decrees that they can beneficially use, including the above-referenced inch per share headgate deliveries for TFCC, NSCC, and AFRD #2. *May 2 Order* at 19, ¶ 89; *Dreher Testimony* at 144, lns.21-22.

Ground Water Pumping Depletes the Coalition's Water Supplies

83. Various factors contribute to the decline in reach gains in the American Falls reach, including reductions in incidental recharge as a consequence of improved irrigation practices, ground water pumping, and climate or precipitation, including droughts. Consumptive use from ground water irrigation causes a net reduction in aquifer recharge ranging from 1.6 to 3.0 MAF/yr with an average of 2.2 MAF/yr. *SWC Report* at 5-7 to 5-8.

84. Ground water pumping for agriculture is a consumptive use and must have an effect upon the amount of water in the aquifer that will continue to the Snake River in the American Falls reach.

85. The Surface Water Coalition Managers and water users have experienced reduced water supplies under their decreed senior surface water rights in recent years, including reduced natural flow diversions and reduced storage fill. *Alberdi Testimony* at 1616, lns. 16-25, at 1617, ln.1, 1622, lns. 6-23, at 1623, lns. 1-6, *Bingham Direct* at 12, lns. 1-23, at 13, lns. 1-23, at 14, lns. 1-3; *Diehl Partial Direct* at 11, lns. 10-16; *Lockwood Direct*, at 7, lns. 15-23, at 8, lns. 1-5; *Mullins Direct* at 9, lns. 13-22, at 10, lns. 1-6; *Temple Direct* at 10, lns. 6-15; *Thompson Direct* at 13, lns. 1-17; *Harmon Direct* at 4, lns. 1-2.

86. The Department's ESPAM confirms that ground water pumping is responsible for reduced Snake River reach gains. Using the Department's ground water model, IWRRI also

simulated the effects of curtailing ground water diversion and use across the ESPA under ground water rights junior to January 1, 1870; January 1, 1949; January 1, 1961; January 1, 1973; and January 1, 1985; with no other changes using separate model simulations (the “Curtailment Scenario”). IWRRI Technical Report 04-023. The simulated reach gain accruals from the Near Blackfoot Gage and the Neeley Gage and from the Neeley Gage to the Minidoka Gage represent the additional flows that would be present in the Snake River in those river reaches if ground water diversion and use, junior to one of the selected priority dates, were curtailed and no other changes occurred.

87. The effect of ground water depletions reduces the amount of natural flow, over time. As a result, members of the Coalition may use more storage in some years than would otherwise be used but for ground water depletions, which in those years reduces the amount of carry-over storage at the end of the irrigation season for a particular year that would otherwise be available for the following year. At steady-state conditions, this has essentially the same effect as if the holders of ground water rights replaced the diversion and use of ground water instead with diversion and use of storage releases, assuming the water is actually provided.

88. The reservoirs above Milner Dam fill by priority with consideration given to keeping the water stored as high in the system as possible when considering storage fill and release. *Swank Testimony* at 915, lns. 21-25, at 916, lns. 1-13; at 919-922. Hence, while each reservoir may be considered unique in terms of the individual priorities associated with the reservoir and the particular drainage, the operations in terms of storage fill and carryover acknowledge the interrelationship. If American Falls Reservoir does not fill in a particular year, the effect of ground water depletions can also reduce the amount of water in the Snake River that would otherwise be available for diversion to storage in American Falls Reservoir under the Coalition member’s storage water rights. *May 2 Order* at 18, ¶ 83. Likewise, if Palisades Reservoir or Jackson Lake storage rights do not fill in a particular year, the effect of ground water depletions can also reduce the amount of water in the Snake River that would otherwise be available for diversion to storage in Palisades Reservoir or Jackson Lake under the Coalition member’s storage water rights. Further, while there is not ground water pumping above Palisades Dam or Jackson Lake Dam which affects physical fill of those reservoirs, the ground water pumping on the ESPA does affect the use of storage, which in turn reduces carryover in the reservoir system above Milner Dam. This effect will, under certain circumstances, affect the carryover of the Surface Water Coalition members and their water supplies in subsequent years.

89. Ground water depletions further affect the priority fill of storage reservoirs. *May 2 Order* at 18, ¶ 83, at 19, ¶ 87. When senior storage water rights in the Upper Snake River Basin are not filled, it further reduces the fill of junior priority storage water rights. *Id.* at 19, ¶ 87; *Bingham Direct* at 12, lns. 20-23, at 13, lns. 1-18; *Brockway Direct* at 10, ¶ 29; *Koreny Direct* at 6-7, ¶ 15. Water that would fill junior priority reservoir space, such as Palisades, will have to be sent downstream to fill senior space in American Falls because ground water pumping has intercepted the tributary reach gains that would have otherwise filled senior storage rights in American Falls Reservoir. *Koreny Direct* at 6, ¶ 14, *Brockway Direct* at 10, ¶¶ 28-29.

Ground Water Pumping Injures the Coalition Members' Senior Surface Water Rights

90. Based on the information submitted for AFRD#2, NSCC and TFCC, in response to the Director's February 14, 2005 Order, and based upon the testimony of these entities' Managers and water users, full headgate deliveries under their water rights are defined by these members of the Coalition as rates of diversion at the shareholder-headgates during each month of the irrigation season of 5/8-inch (AFRD #2), 5/8-inch (NSCC), and 3/4-inch (TFCC), respectively. *May 2 Order*, ¶ 89; *Alberdi Testimony* at 1599, Ins. 18-25, at 1600, Ins. 1-21; *Diehl Partial Direct* at 4, Ins.5-12; *Harmon Direct* at 4, Ins.5-7; *Esterbrook Direct* at 2, Ins.21-22.

91. Shareholders and landowners within AFRD #2, NSCC, and TFCC have historically used up to the entire quantity under their individual water rights, when available. Shareholders within the TFCC project area have historically beneficially used a full headgate delivery of 3/4-inch per share at the headgate. *See Shewmaker Direct*, at 3, Ins.10-13; *Garatea Direct*, at 2, Ins.20-24.; *O'Connor Direct*, at 4, Ins.1-8; *Blick Direct*, at 6, Ins.1-5; & *Coiner Direct*, at 4, Ins.1-6; *see also Dreher Testimony* at 121, Ins.1-3.

92. NSCC shareholders likewise have historically beneficially used a full headgate delivery of 5/8-inch per share at the headgate. *See Diehl Partial Direct*, at 4, Ins.5-12; *see also Larsen Direct*, at 3, Ins.4-7; *Lockwood Direct*, at 3, Ins.16-19; *Pennington Direct* at 3, Ins.8-11, *Blick Direct* at 10, Ins. 1-3.

93. AFRD#2 landowners have historically beneficially used a full headgate delivery of 5/8-inch at the headgate. *Esterbrook Direct* at 2, Ins.9-11.

94. Ground water pumping under hydraulically connected junior priority rights in the ESPA has impacted the Coalition members' senior natural flow and storage water rights to the Snake River in two ways. First, since ground water pumping increases losses of natural flow in the losing reach above Blackfoot, less water is available to flow past Blackfoot for the Coalition members' water rights. *SWC Report* at 7-22. Second, reduced reach gains in the Blackfoot to Milner reach reduce water availability for the Coalition members' senior storage and natural flow rights. *Id.* at 7-22, 23; *Brockway Direct* at 10, ¶¶ 28-29, at 12-13, ¶¶ 34-3; *Koreny Direct* at 6, ¶¶ 14-15, at 13, ¶ 33. Notably, the Surface Water Coalition received much less natural flow in the 1990-2006 period, than at the time prior to ground water pumping (pre-1962). *Koreny Direct* at 10-11, ¶ 28. The reduction in water supply diminishes and injures the SWC senior water rights. *See also, SWC Report* at 8-1 to 8-21.

95. The CMRs define material injury as "Hindrance to or impact upon the exercise of a water right caused by the use of water by another person as determined in accordance with Idaho Law, as set forth in Rule 42". Rule 10.14.

96. Injury to a water right is not conditioned upon water "shortage" to a particular field. In other words, a senior water right holder does not have to wait and watch his field burn up before he can make a call or before an injury to his water right occurs. *Dreher Testimony* at 85, Ins. 3-6. Such an "after-the fact" determination runs counter to Idaho's prior appropriation doctrine and would usurp the purpose of timely administration. Diverting water out-of-priority,

to the detriment of a senior right that could have otherwise diverted and used that water, is the “injury” that the Director and watermasters are obligated to prevent under the law.

97. Ground water pumping reduces reach gains in the American Falls reach, the water supply for the SWC senior natural flow and storage water rights. *SWC Report* at 7-20 to 7-23; *Brockway Direct* at 10, ¶¶ 28-29, at 12-13, ¶¶ 34-3; *Koreny Direct* at 6, ¶¶ 14-15, at 13, ¶ 33. This reduction in water supply reduces the amount of water that could otherwise be diverted and used, hence it “diminishes” the priority, or injures the SWC senior surface water rights. But for these reduced reach gains, such as in 2007, the SWC could have diverted and used that water under their senior surface water rights. *Alberdi Testimony* at 1601, lns. 20-25, at 1602, lns. 1-6; *Diehl Partial Direct* at 18, lns. 10-17. The following are some additional examples of the “hindrance to or impact upon,” i.e. injury, to the SWC’s senior water rights.

98. As to TFCC:

a. First, junior priority ground water pumping reduces the water available, particularly in the critical months of July to September, that could be diverted and used under TFCC’s (3,000 cfs) and NSCC’s (400 cfs) 1900 water rights. Over the last two decades TFCC daily natural flow diversions have decreased by almost 1,000 cfs in July and August dropping as low as 1,300 to 1,400 cfs in 2004. *SWC Report* at 8-8; *Koreny Direct* at 12, ¶ 29. Other daily flow graphs show that sharp declines in TFCC natural flow diversions are occurring during most years, since 1992. *SWC Report* at Appendix AT. Consequently, TFCC is forced to use storage water earlier and in greater amounts to make up for the lack of natural flow. *Alberdi Testimony* at 1626, lns. 4-6; *Blick Direct* at 12, lns. 8-9; *Coiner Direct* at 9, lns. 3-8.

b.. TFCC has also been forced to reduce deliveries to, or curtail its shareholders during the irrigation season, such as in 1992, 1994, 1996, 2001 to 2005, and 2007 due to the lack of an adequate water supply, including reduced natural flow availability and decreased storage fill. *Alberdi Testimony*; p. 1601, lns. 1-19; *Blick Direct* at 12, lns. 5-8; *Coiner Direct* at 9, lns. 12-13; *SWC Report* at 8-9. TFCC’s manager, Vince Alberdi, advised the Director of the high demand on the TFCC project for the 2007 irrigation season and of the reduced deliveries to TFCC’s shareholders. *See also* Exhibit 9001 (*Affidavit of Vince Alberdi*).

c. As a consequence of reduced water supplies, including natural flow during the critical high demand months of the irrigation season, TFCC’s shareholders have had to rent additional shares, re-nozzle sprinkler systems, modify irrigation practices, dry up acres, and change cropping decisions, including planting less water consumptive crops such as grains. *See Blick Direct* at 7, lns. 10-20, at 8, lns. 13-18, at 9, lns. 1-8, 13-18; *Coiner Direct* at 5, lns. 9-21, at 6, lns. 8-14, at 7, lns. 4-18; *O’Connor Direct* at 5, lns. 6-23, at 6, lns. 1-3, 9-18; *Shewmaker Direct* at 4, lns. 13-23, at 5, lns. 1-3, 14-16, at 6, lns. 1-6; *Garatea Direct* at 5, lns. 17-25; *See also* Exhibit 9001 (*Alberdi Affidavit*).

d. Deliveries of less than 3/4 inch per share have impacted shareholders’ crop yields and farming operations on the TFCC project. *Shewmaker Direct* at 4, lns. 8-

23, at 5, Ins. 1-16, at 6, Ins. 1-6; *Garatea Direct* at 3, Ins. 15-25, at 4, Ins. 1-25, at 5, Ins. 17-25, at 6, Ins. 1-16; *Coiner Direct* at 5, Ins. 9-21; at 6, Ins. 1-14; *Blick Direct* at 7, Ins. 10-20.

e. Reduced water supplies have also reduced crop yields on shareholders' lands on the TFCC project, and reduced forage has affected shareholders' livestock growth and production. See *Blick Direct* at 7, Ins. 10-20; *Coiner Direct* at 6, Ins. 1-7; *Garatea Direct* at 3-6; *O'Connor Direct* at 6, Ins. 1-3; *Shewmaker Direct* at 4, Ins. 13-23, at 5, Ins. 4-13; See also Exhibit 9001 (*Alberdi Affidavit*).

f. Finally, reduced water supplies have forced TFCC to rent additional storage water from the Water District 01 rental pool for its shareholders in recent years, including 2007, which cost the Company approximately \$850,000.00 for the rental of 40,000 acre-feet in 2007. *Alberdi Testimony* at 1631, Ins. 12-20; *Blick Direct* at 12, Ins. 5-13; *Shewmaker Direct* at 11, Ins. 1-7; *Coiner Direct* at 9, Ins. 9-12.

99. Like TFCC, NSCC's natural flow diversions have similarly declined due to decreased reach gains, particularly during the peak of the irrigation season. *Diehl Partial Direct* at 8, Ins. 20-22, at 11, Ins. 12-16 *Diehl Testimony* at 1869, Ins. 5-9; *SWC Report* at 8-10 to 8-12.

a. NSCC's mid-season (July and August) total and natural flow diversions have declined from the 1960s and 1970s to the last two decades. *SWC Report* at 8-12. The number of days per year during dry conditions when NSCC is able to meet irrigation requirements using only its natural flow rights has declined by an average of 15 days based on a comparison of similar years. *Id.*

b. With a less reliable natural flow supply, NSCC is forced to use more reservoir storage earlier in the season leaving less storage available later in the year and less carryover storage for future dry years. *Diehl Partial Direct* at 9, Ins. 1-4; *Lockwood Direct* at 8, Ins. 2-5; *SWC Report* at 8-12. The Director's use of a "total water supply" approach allowed him to ignore the injury to NSCC's individual water rights, including its 400 cfs (1900) water right, since NSCC is forced to make up the injury to this water right every year with its storage water.

c. NSCC has also been forced to reduce deliveries, or curtail water to its own shareholders and has had to shut-off for a period of time during the irrigation season because of short water supplies. *Diehl Partial Direct* at 11-14; *Diehl Testimony* at 1872, Ins. 6-10; *Lockwood Direct* at 8, Ins. 6-9; Exhibit 9601 (*Diehl Affidavit*). In 2007, NSCC reduced deliveries to its shareholders to 1/2" per share on July 10 through the end of the irrigation season. *Diehl Partial Direct* at 13, Ins. 4-10, *Diehl Testimony* at 1879, Ins. 4-11. NSCC's manager, Ted Diehl, advised the Director of this curtailment of NSCC's shareholders in 2007, but no mitigation water was ordered to be provided to NSCC. See Exhibit 9601 (*Diehl Affidavit*); *Diehl Testimony* at 1879, Ins. 4-25, at 1880, Ins. 1-6; *Diehl Partial Direct* at 19, Ins. 5-13.

d. With reduced deliveries per share (less than 5/8 inch), NSCC shareholders

suffer reduced crop yields, are forced to dry up lands, expend additional costs in renting shares and re-nozzling sprinkler systems, and have changed cropping decisions. *Diehl Partial Direct* at 11, lns. 17-25, at 12, 1-14, at 13, lns. 2-10, 16-20; *Diehl Testimony* at 1876, lns. 7-15; *Lockwood Direct* at 4, lns. 18-23, at 5, lns. 1-7, 18-21, 23; *Pennington Direct* at 4, lns. 6-18; *Larson Direct* at 4, lns. 6-20, at 5, lns. 6-7, 15-23; *Breeding Direct* at 7, lns. 1-9; *Blick Direct* at 9, lns. 19-23, at 10, lns. 4-12; *Shewmaker Direct* at 7, lns. 1-23, at 8, lns. 7-16.

100. Similar to NSCC's earlier and increased use of storage water due to reduced reach gains, other SWC members are also suffering reduced natural flow diversions under their water rights. Data for AFRD #2, BID, and MID demonstrate that all three entities have suffered fewer days per year when natural flow diversions are sufficient to meet irrigation demands without using storage water. *SWC Report* at 8-15 to 8-18. The available natural flow has declined and has reduced the number of days that NSCC, BID, MID and Milner are able to divert water under their natural flow rights. *Bingham Direct* at 12, lns. 7-19; *Thompson Direct* at 13, lns. 1-2; *Diehl Partial Direct* at 11, 10-16; *Mullins Direct* at 9, lns. 13-22, at 11, lns. 12-22. For example, BID is diverting about 50,000 acre-feet less natural flow than it was able to 20 years ago. *Bingham Direct* at 14, lns. 1-2. In addition, natural flow diversions for these entities have decreased in average and dry years post-1990 compared to similar years prior to 1962. *SWC Report* at 8-15 to 8-18. Milner's natural flow diversions have also declined, up to 50%. *Id.* at 8-19. Finally, A&B's natural flow diversions have declined by up to 30%. *Id.* at 8-20.

101. Milner's and A&B's landowners have suffered reduced water deliveries, which have altered cropping decisions, reduced yields, and forced additional expenditures to make up for short supplies, such as changing irrigation systems and renting additional water. *Mullins Direct* at 10, lns. 1-15, at 15, lns. 9-23; *Breeding Direct* at 5, lns. 1-23, at 6, lns. 1-3, 10-14; *George Direct* at 3, lns. 20-23, at 4, 1-17, at 5-6; *Kostka Direct* at 3, lns. 19-22, at 4, lns. 1-17, at 5, lns. 4-14; *Temple Direct* at 10, lns. 6-15, at 11, lns. 3-25.

102. Similar to the experiences of other Coalition members, AFRD#2 has suffered reduced water supplies and has been forced to reduce deliveries to its landowners, and shut down water deliveries during the irrigation season. *Harmon Direct* at 4, lns. 1-10. Deliveries of less than 5/8 inch per share have impacted AFRD#2's landowners' crop yields and farming operations as well. *Harmon Testimony* at 4, lns. 3-7; *Esterbrook Testimony* at 3, lns. 4-13. AFRD #2's landowners have suffered reduced crop yields and have been forced to change cropping patterns as a consequence of these reduced water deliveries. *Harmon Direct* at 4, lns. 6-7; *Esterbrook Direct* at 3, lns. 1-23, at 4, lns. 3-9, at 6, lns. 5-12. AFRD#2's manager, Lynn Harmon, repeatedly advised the Director of the reduced water supplies in 2007, yet no mitigation water was ever ordered to be provided to AFRD#2. *See Exhibit 9501 (Harmon Affidavit).*

103. The reduced reach gains and natural flow diversions have forced the SWC to increase their use of storage supplies, which in turn reduces carryover and the ability of those storage rights to fill the next year. *See SWC Report* at ES-13; 7-21 to 7-23; 11-4 to 11-8. Consequently, when entities like BID, MID, Milner, and NSCC are forced to use more of their storage supplies, that reduces their carryover and increases the likelihood of inadequate water supplies in future years. *Bingham Direct* at 13, lns. 5-18; *Thompson Direct* at 13, lns. 4-17;

Mullins Direct at 10, Ins. 1-6.

104. Reduced water supplies, including reach gains and spring flows in the American Falls reach, have affected the fill of American Falls Reservoir and storage water rights. *Bingham Direct* at 12, Ins. 20-23, at 13, 19-23; *Thompson Direct* at 13, Ins. 4-11; *Diehl Partial Direct* at 15, Ins. 5-7. Reduced storage fill in American Falls Reservoir has also injured the Surface Water Coalition members' storage water rights. *SWC Report* at 8-3 to 8-4.

105. The depleted natural flow conditions force SWC members to "self-mitigate" by exhausting storage supplies to make up for the injury to their natural flow rights. In turn, this reduces reliability in water supplies for the SWC in future years, especially under drought conditions. The SWC did not acquire storage water rights to mitigate for injuries caused by pumping under junior priority ground water rights.

106. The Director's failure to recognize injury to the Coalition's senior water rights unlawfully forces the SWC to bear the risk of uncertainty when the future water supply and demand is unknown. Therefore, the SWC must acquire additional supplies and cut back on deliveries to operate conservatively in the face of this uncertainty. *Alberdi Testimony* at 1630, Ins. 18-25, at 1631, Ins. 12-25, at 1632, Ins. 1-7, at 1647, Ins. 15-25; *Diehl Testimony* at 1879, Ins. 4-25; *Diehl Partial Direct* at 16, Ins. 5-9, 16-17. Accordingly, the SWC has suffered and will continue to suffer injury to their senior surface water rights by reason of junior priority ground water pumping.

The Director's Proposed Administration in the May 2 Order Did Not Follow Idaho Law

107. "Priority of appropriations shall give the better right as between those using the water" of the state. Art. XV, § 3, Idaho Const. "As between appropriators, the first in time is first in right." Idaho Code § 42-106.

108. Idaho law requires the Director and Watermaster to protect the interests of a senior priority water right holder against interference by a junior priority right holder from a tributary or interconnected water source. Art. XV, § 3, Idaho Const.; Idaho Code §§ 42-106, 42-237a(g), and 42-607.

109. Under Idaho law, watermasters distribute water to and administer water rights. Idaho Code § 42-607; CMR 40.01, .02.

110. In the *May 2 Order*, the Director failed to properly distribute water to the Coalition's members decreed senior water rights as required by the law. Instead, the Director used criteria other than the water rights to determine how to administer hydraulically connected junior priority ground water rights. These methods are not authorized by statute or the CMRs.

111. First, the Director analyzed the Coalition members' "total water supply" to determine whether or not administration of junior priority water rights was necessary. Nothing in Idaho's constitution, water code, or CMRs allows the Director to arbitrarily combine a senior's water rights for purposes of administration. Idaho Code § 42-607 does not condition

water distribution based upon a senior's "total water supply", it requires administration pursuant to individual water rights. If the Director's "total water supply" approach was legal, junior surface water right holders would be able to demand that seniors with storage water use that storage at any time so that natural flow could be made available for use under the junior's natural flow rights. Such an approach is not used in surface water right administration and there is no legal justification to apply it in conjunctive administration of hydraulically connected ground water rights. Since the "combined total supply" method fails to give effect to the individual water rights held by the SWC, it must be rejected.

112. Junior priority ground water rights are subject to curtailment when their diversion interferes with and depletes water that would otherwise satisfy a senior natural flow or storage water right. If diversions by junior ground water rights deplete reach gains that would otherwise be diverted and used pursuant to the SWC's senior natural flow rights, that results in injury to those natural flow rights. If diversions by junior ground water rights reduce the fill of senior storage water rights, that too results in injury to those storage water rights. The juniors carry the burden of proof to demonstrate that water they are taking out-of-priority would not be put to beneficial use under a senior's decreed natural flow or storage right. *AFRD #2, supra*, at 449.

113. Each water right, no matter if it is a natural flow or storage right, is entitled to protection from injury caused by junior priority ground water rights. The Director's "total water supply" concept eviscerates any proper analysis regarding the effect junior ground water rights have on the Coalition members' individual water rights. Consequently, as described by the testimony cited above, SWC members are forced to "self-mitigate" for the injuries to their natural flow rights by using more storage water, renting additional water, and reducing deliveries to their shareholders and landowners. The Coalition's landowners and shareholders are forced to "self-mitigate" as well, by drying up acres, renting water, re-nozzling sprinklers, and changing cropping patterns to compensate for depleted water supplies. *See generally*, Finding Nos. 98-105.

114. Idaho law does not require a senior to mitigate for injuries caused by juniors, yet the Director's "total water supply" approach has just that effect on senior water right holders.

115. Apart from the "total water supply" approach, the Director also created a "full headgate delivery" criteria to determine whether or not the Coalition members were being injured by junior priority ground water rights. Again, nothing in the Idaho's water distribution statutes or the CMRs provide for administration to an entity's "full headgate delivery". The Director analyzed prior diversion data to determine when the Coalition members made "full headgate deliveries" under each member's "natural flow water rights and storage releases combined." *May 2 Order* at 19, ¶ 89. Again, this method continued the erroneous "total combined water supply" under the senior natural flow and storage rights for purposes of administration and failed to recognize the individual water rights held by the SWC. The criteria further improperly assumes that if a Coalition member can deliver a "full headgate delivery" to its landowners or shareholders then there is no injury to the senior surface water right. In other words, if a senior water right holder is forced to exhaust all storage water supplies due to reduced natural flow in the river, but can still make a "full headgate delivery" under the Director's criteria, then no injury occurs. This example illustrates the errors in the Director's method.

116. If junior priority ground water right holders can reduce and injure a senior's natural flow water right, that "injury" is ignored provided the senior can make it up with his own storage water (or rented water) to make a "full headgate delivery". As stated above, Section 42-607 and the CMRs require the Director to determine whether junior priority ground water rights are injuring senior surface water rights, not the "total combined water supply" or "full headgate delivery."

117. Finally, the Director erroneously used the "total water supply" and "full headgate delivery" criteria to arrive at the least amount of water each Coalition member was entitled to divert for purposes of conjunctive administration, or what is coined the "minimum full supply". Again, similar to the above criteria, the "minimum full supply" is not a term or analysis provided for anywhere in statute or the CMRs. The Director's "minimum full supply" does not represent what the Coalition members can divert and beneficially use under their water rights. Instead, the "minimum full supply" represents the "minimum amount of combined natural flow and storage releases diverted recently that provided for full headgate deliveries, recognizing that climatic growing conditions do affect the minimum amount of water needed and such effects can be significant." *May 2 Order* at 20, ¶ 91.

118. The Director's "minimum full supply" approach unlawfully limited senior surface water rights to a "minimum" use, but at the same time authorized junior priority ground water rights to divert and use their full water rights. The prior appropriation doctrine does not allow juniors to pump their maximum right while seniors are cut to a bare minimum.

119. The "minimum full supply" determinations "had nothing to do with the amount of water that was needed" by the Coalition members during drought years. *Dreher Testimony* at 152, 15-17. The "minimum full supply" was based on the "minimum supply" that may be needed and "not maximum full supply." *Id.* at 45, lns.11-14; at 46, ln.23 to 47, ln.9; at 52, lns.14-16; at 74, lns.13-20.

120. The "minimum full supply" is significantly lower than historical diversions and does not even provide the historical average amount that the SWC has diverted and used under its water rights. *SWC Report* at 8-6, 8-22 (Table 8-1). For example, SWC total diversions have exceeded the Director's "minimum full supply" for 40 of the last 45 years of record. *Id.* Water has been consistently distributed to the SWC's natural flow and storage water rights by the Water District 1 Watermaster during this time.

121. The Director's "minimum full supply" determinations are significantly lower than the total quantities the Coalition has historically diverted under their water rights. *SWC Report*. at 8-6 & Table 8-1. Compared to the total average diversions since 1960, the Director's "minimum full supply" imposes a deficit ranging from 3,029 AF/yr for A&B to 117,416 AF/yr for MID. *Id.* The Coalition's "total diversions have exceeded the 'minimum full supply' in the May 2 Order for 40 of the last 45-years of record." *Id.* at 8-6; *see also id.* at Figure 8-4; *see also* Figures 8-8, 8-12, 8-15, 8-18, 8-21, 8-25 & 8-27 (comparing "minimum full supply" determinations for the individual Coalition members with total annual diversions). As to the specific Coalition members:

a. The “minimum full supply” determination for A&B is significantly lower than A&B’s historical total diversions. *Id.* at 8-20. “A&B’s total annual diversions have exceeded the ‘minimum full supply’ in 13 of the 16 years since 1990 and in all except 15 of the 48-year historic record.” *Id.*; *see also id.* Figure 8-27.

b. The “minimum full supply” determination for AFRD#2 is lower than AFRD#2’s historical total diversions. *Id.* at 8-15. AFRD#2’s “total annual diversions have exceeded the ‘minimum full supply’ in 36 out of the last 45 years of record.” *Id.* “The ‘minimum full supply’ is 44,000 AF less than the average of post-1960 diversions for AFRD#2.” *Id.*; *see also id.* Figure 8-15.

c. The “minimum full supply” determination for BID is lower than BID’s historical total diversions. *Id.* at 8-18 to 8-19. “BID has diverted more than the ‘minimum full supply’ during every year except one since the 1940’s, and this was in 1977 when American Falls Reservoir was being rehabilitated and much of Bid’s storage was not filled.” *Id.* “The ‘minimum full supply’ is 47,000 AF less than the average of post-1960 diversions.” *Id.*; *see also id.* Figure 8-21

d. The “minimum full supply” determination for MID is lower than MID’s historical total diversions. *Id.* at 8-17. “MID has diverted more than the ‘minimum full supply’ during every year since 1940 except 2004.” *Id.* “The ‘minimum full supply’ is 117,000 AF less than the average of post-1960 diversions.” *Id.*; *see also id.* Figure 8-18.

e. The “minimum full supply” determination for Milner is significantly lower than Milner’s historical total diversions. *Id.* at 8-19. Milner’s “total annual diversions have exceeded the state’s minimum in every previous year except three.” *Id.*; *see also id.* Figure 8-25.

f. The “minimum full supply” determination for NSCC is lower than NSCC’s historical total diversions. *Id.* at 8-12. “NSCC’s total annual diversions have exceeded the ‘minimum full supply’ in 38 out of the last 45 years of record.” *Id.* at 8-12 to 8-13. “The ‘minimum full supply’ is 100,000 AF less than the average of post-1960 diversions.” *Id.*; *see also id.* Figure 8-12.

g. The “minimum full supply” determination for TFCC is significantly lower than TFCC’s historical total diversions. *Id.* at 8-9. “TFCC’s total annual diversions have exceeded the ‘minimum full supply’ in 20 out of the last 45 years of record.” *Id.* “The ‘minimum full supply’ provides 47,000 AF less water than the average of post-1960 TFCC diversions.” *Id.*; *see also id.* Figure 8-8.

122. Each of the Coalition members have historically diverted more water for beneficial use under their decreed water rights, than what is prescribed by the Director’s “minimum full supply.”

a. For A&B, the “minimum full supply” finding “does not represent the average of what the District typically diverts and uses.” *Temple Direct* at 15, lns. 16-17. The “minimum full supply” was based on a wet water year and fails to take into consideration the quantity of water needed by A&B in years like “2007 when it is hot and dry and demands are higher.” *Id.* at lns.17-18. In such years, A&B will “divert up to 63,000 acre-feet.” *Id.* at lns. 18-19. In 2007, for example, A&B “diverted and used about 57,500 acre-feet.” *Id.* The “minimum fully supply” determination “fails to recognize that because of climatic conditions and crop rotations, the demands of landowners within the District who depend on water from the District to grow their crops will exceed the ‘minimum fully supply’ in almost all years.” *Id.* at 16, lns.14-18. The Director’s “minimum full supply” determination impairs A&B’s ability to plan for upcoming irrigation seasons. *Id.* at 17, lns.4-9. Farmers within the A&B project area have historically received and beneficially used “an average of 3 [acre-feet] throughout” their farms. *Kostka Direct* at 3, lns.9-12. If less water is delivered, the farmers must “alter” their “irrigation practices.” *Id.* at 3, ln.19 to 5, ln.14.

b. For AFRD#2, the Director’s “minimum full supply” finding “leaves [AFRD#2] short of water.” *Harmon Direct* at 4, lns. 16-18, at 5, lns. 9-11. Farmers within the AFRD#2 project area have historically received and beneficially used “5/8 of an inch delivered at the headgate.” *Esterbrook Direct* at 2, lns.9-11. In years when less water is delivered, the farms must “dry up ground, or irrigate less than the crop[s] require,” “rent water,” or change “cropping patterns.” *Id.* at 3, lns.4-23.

c. For BID, the “minimum full supply” is also “less than the decreed quantities on BID’s water rights.” *Bingham Direct* at 20, lns.3-4. “For example, the May 2 Order determined that BID’s ‘minimum full supply’ was 220,200 acre-feet. In 2007, BID had to divert 255,916 acre-feet and in 2000, BID need to divert about 270,441 in order to meet the needs of its landowners.” *Id.* at lns. 4-8. “The entire natural flow of water from the Snake River, under BID’s water rights, are historically diverted and beneficially used in irrigation of crops within BID.” *Id.* at lns. 17-19. However, the “minimum full supply” finding “prevents BID from delivering a full water supply, as determined by BID’s water rights, to its landowners in years when they may need that water.” *Id.* at 21, lns. 5-7. Due to the “minimum full supply” finding, “BID cannot accurately plan for the upcoming irrigation seasons.” *Id.* at ln.19.

d. For Milner, the Director’s “minimum full supply” finding is 38,651 acre-feet less than Milner’s storage rights – without taking into consideration any of Milner’s natural flow water rights. *Mullins Direct* at 13, lns.10-14. “The Director’s determination doesn’t appear to recognize [Milner’s] natural flow rights at all.” *Id.* at lns. 15-16. Milner has historically diverted its natural flow right “well into the irrigation season.” *Id.* at lns. 14-15. “Milner relies heavily on its storage to provide water to the District landowners.” *Id.* at 14, lns.16. “If the District does not receive natural flow and is forced to rely upon its storage water rights, it will impair [Milner’s] ability to satisfy the landowners’ full supply, particularly in multiple dry years.” *Id.* at lns.18-20. Landowners within the Milner project have historically used their full water supply when available and have been forced to alter cropping patterns and other irrigation practices

when less than their full water supply is available. *Breeding Direct* at 5, lns. 1-13; *George Direct* at 3, lns.1-5; 20-23, at 4, lns.1-17.

e. For MID, the “minimum full supply” is “significantly” lower than MID’s decreed water rights. *Thompson Direct* at 20, lns.11-14. The “minimum full supply” does not “reflect the variations that take place in cropping patterns, weather and other variables.” *Id.* at lns. 18-23. The determination fails to consider the higher demand for water due to “hotter weather and other factors.” *Id.* “It doesn’t reflect reality and it clearly doesn’t reflect the historical diversions of MID.” *Id.* This determination impacts MID’s ability to plan its water operations and forces MID to “hope that its demands are not greater than those in 1995 if it is a low water year.” *Id.* at 21, lns.2-11.

f. For NSCC, the “minimum full supply” finding “does not even address what water [NSCC] can divert and beneficially use under [its] water rights.” *Diehl Partial Direct* at 18, lns.10-17. In 2007, NSCC “diverted more than the Director’s ‘minimum full supply.’” *Id.* at 17, lns.21-25. Yet, NSCC was still forced to “cut deliveries to 1/2” per share for about half of the irrigation season.” *Id.* A full delivery is 5/8-inch per acre at the headgate. *Id.* at 4, lns.5-11. In fact, if NSCC would have delivered a full 5/8 inch per share, it “would have run out of water completely during the [2007] irrigation season.” *Id.* at 18, lns.15-17; *see also Diehl Testimony* at 1878, lns.3-7. The “minimum full supply” finding reduces deliveries, impacts the water users operations and impairs NSCC’s ability to plan for upcoming irrigation seasons. *Id.* at 18, lns.18-23 to 19, lns.1-4. Shareholders within the NSCC project area have historically used their full water supply when available and have been forced to alter cropping patterns and other irrigation practices, suffer reduced crop yields, and dry up acres when less than their full water supply is available. *Blick Direct*, at 10, lns.1-12; *Breeding Direct* at 6, lns.15-25, at 7, lns.1-9; *Larson Direct* at 3, l.5, at 4, lns.4-20, at 5, lns.5-23; *Lockwood Direct* at 3, l.18, at 4, lns.11-23, at 5, lns.1-23, at 6, lns.3-7; *Pennington Direct* at 3, l.9, at 4, lns.1-18; *Shewmaker Direct* at 6, lns.13-16, at 7, lns.1-23, at 8, lns.1-11.

g. For TFCC, the “minimum full supply” method does not recognize TFCC’s decreed water rights and the process that is undertaken to deliver water to the shareholders each irrigation season. *Alberdi Testimony* at 1646, lns. 7-25, at 1647, lns. 1-3. Landowners within the TFCC project area have historically used their full 3/4 inch delivery when available and have been forced to alter cropping patterns and other irrigation practices and suffer reduced crop yields and livestock production when less than their full water supply is available. *Bick Direct* at 6, lns.1-5, at 7, lns.4-20, at 8, lns.1-5 & 13-18; *Coiner Direct* at 4, lns.1-6; at 5, lns.5-21, at 6, lns.1-14; *Garatea Direct* at 2, lns.20-24, at 3, lns.15-25, at 4, lns.1-25, at 5, lns.1-8 & 17-25, at 6, lns.1-16; *O’Connor Direct* at 4, lns.1-8, at 5, lns.1-23, at 6, lns.1-6; *Shewmaker Direct* at 3, lns.10-13, at 4, lns.8-23, at 5, lns.1-7 & 14-20.

123. In addition to failing to provide sufficient water to meet the SWC water rights, the “minimum full supply” does not provide for the actual irrigation requirements of the SWC projects, and further impacts the entities’ shareholders and landowners by forcing changed cropping decisions, additional costs for “self-mitigation”, and reducing crop yields. *See Alberdi*

Testimony at 1645, Ins. 17-25, at 1646, Ins. 7-25, at 1647, Ins. 1-3; *Diehl Partial Direct* at 17, Ins. 15-25, at 18, Ins. 1-25; *Bingham Direct* at 20, Ins. 1-23, at 21, Ins. 1-23; *Thompson Direct* at 17, Ins. 11-22, at 20, Ins. 7-23, at 21, Ins. 1-11; *Harmon Direct* at 5, Ins. 17-24; *Mullins Direct* at 13, Ins. 4-23, at 14, Ins. 13-20; *Temple Direct* at 15, Ins. 9-24, at 16, Ins. 1-18; *SWC Report* at 8-4; 9-1 to 9-2.

124. A well-established history of diversion data in Water District 1 plainly establishes that the SWC has “needed” and used water up to the quantities stated on their decreed senior surface water rights. *SWC Report* at 8-1 through 8-21. While the irrigation diversion requirement varies by month and year, the comprehensive analysis provided in the *SWC Report* further demonstrates that the SWC’s “needs” are more than the “minimum full supply” set forth in the *May 2 Order*. See *SWC Report* at 9-1 through 9-9; Exhibit 8148 (2007 Water Supply Assessment at 16-20).

125. Moreover, since the Director’s “minimum full supply” for the SWC (2.893 MAF) was determined by using the year (1995) with the lowest total irrigation diversion requirement in the last 17, the number vastly underestimates SWC water requirements during all other years, particularly during hot and dry years like 2007. *SWC Report* at 9-8.

126. 1995 was one of the coldest and wettest years on record in the last 17 years. See *SWC Report* at Appendix V (annual precipitation data at various gages in the Snake River Basin). The SWC Managers’ testimony confirms that 1995 was a cold and wet irrigation season. See also, *Bingham Direct* at 20, Ins. 13-14, *Alberdi Testimony* at 1645, Ins. 21-23; *Diehl Partial Direct* at 17, ln. 25, at 18, ln. 1; *Mullins Direct* at 13, Ins. 19-21; *Thompson Direct* at 20, Ins. 19-20; *Temple Direct* at 15; Ins. 15-16.

127. The Director arbitrarily used total diversion data from one year (1995) to define the Coalition members’ “minimum full supply” for purposes of conjunctive administration in any year. The use of 1995 to define the SWC’s water needs failed to take into account the Coalition members’ decreed water rights, as well as the changing water supply and weather conditions, which affects water demand on the projects. *Alberdi Testimony* at 1645, Ins. 17-25, at 1646, Ins. 1-25, at 1647, Ins. 1-3; *Bingham Direct* at 20, Ins. 14-19; *Diehl Partial Direct* at 17, Ins. 19-20, at 18, Ins. 1-9; *Diehl Testimony* at 1873, Ins. 7-17; *Mullins Direct* at 13, Ins. 19-23, at 14, Ins. 1-3; *Temple Direct* at 15, Ins. 15-25, at 16, Ins. 14-18; *Thompson Direct* at 20, Ins. 11-23, at 21, Ins. 2-11; *Harmon Direct* at 4, Ins. 13-18, at 5, Ins. 17-25.

128. Consequently, this “minimum” number is not representative of what the Coalition is authorized to divert and beneficially use under its water rights and does not even represent the Coalition’s average, or maximum irrigation diversion requirements. See *SWC Report* 9-13 to 9-19; Exhibit 8148. By using the year with the lowest irrigation diversion requirement since 1990, the Director’s “minimum full supply” drastically underestimates the Coalition’s irrigation diversion requirements, particularly in years when it is hot and dry, such as 2007. Contrary to Idaho law, the senior water right holder is then left to shoulder the burden of the Director’s error and endure injury while juniors receives the benefit and are authorized to divert their full or maximum water right to meet higher irrigation diversion requirements.

129. 2007 provides an example of the dangers is using a “minimum full supply”, particularly diversions from 1995, as defining a project’s irrigation need for a hot and dry year. Notably, NSCC exceeded its “minimum full supply” total diversion in 2007, but had to reduce deliveries to its shareholders to 1/2" after July 10, and was left with reduced carryover supplies heading into 2008, even below the Director’s “reasonable carryover” amount. *Diehl Partial Direct* at 12, lns. 15-19, at 13, lns. 2-10, at 17, lns. 15-25, at 18, lns. 1-9; *Diehl Testimony* at 1879, lns. 4-25.

130. In addition, although the total 2007 diversions for AFRD #2 and NSCC exceeded their designated “minimum full supply” set by the Director, both entities reduced deliveries to their water users during the 2007 irrigation season. *Diehl Testimony* at 17, lns.21-23. AFRD#2 and NSCC did not have full water supplies to meet their “full headgate delivery” criteria, yet they still exceeded the “minimum full supply” because of high water demand in the hot and dry conditions. Accordingly, 1995’s diversion data had no application to what was needed and what could have been diverted and used under the SWC’s senior surface water rights in 2007.

131. Chapter 9 of the *SWC Report* provides a comprehensive analysis of the Coalition members’ irrigation diversion requirements. *SWC Report* at 9-1 through 9-9. An additional analysis was prepared and provided to the Director in April 2007. Exhibit 8148. The Director failed to account for variability between different months and years across the irrigation seasons when irrigation diversion requirements are higher than 1995. *Id.* at 9-1. The Director did not estimate actual crop ET, effective precipitation during the irrigation season and field and conveyance losses on a month-by-month and annual basis. *Id.* Consequently, the Director’s method is not reflective of commonly-recognized procedures and standards for determining irrigation diversion requirements, is contrary to IDWR’s own guidelines on the subject, and does not address the related provisions in Rule 42.1.d. *Id.* at 9-2, 3.

132. Importantly, the Director’s use of 1995 as a measure of the “minimum full supply”, completely ignored prior Department practice and guidelines used to estimate irrigation diversion requirements. *Id.* at 9-5 to 9-6. The Director’s approach disregarded actual crop ET and conveyance and farm distribution losses. *Id.* Consequently, in years like 2007 with high water demands, the 1995 “minimum full supply” is not reflective of the SWC irrigation diversion requirements.

133. The Director’s use of “1995” as the signature year for purposes of conjunctive management is not supported and forces the senior to suffer injury for the error in subsequent years. The Coalition’s irrigation diversion requirements vary based upon a number of conditions that should be taken into account. *SWC Report* at 9-1 to 9-9, *see also*, Exhibit 8148. Since the Director’s approach is not justified by either the law or the standards used to determine irrigation diversion requirements, it should be rejected.

134. The Director’s “minimum full supply” criteria does not represent what can be diverted and used under the SWC water rights and does not represent irrigation diversion requirements for all years and all conditions. Consequently, the Director improperly reduced the Coalition members’ water rights to an arbitrary “minimum” of a combined diversion of natural flow and storage releases for purposes of conjunctive administration. Idaho law does not

authorize the Director's unprecedented approach to water right administration, therefore it should be rejected.

Proposed Conjunctive Administration

135. A full supply of water for the members of the Surface Water Coalition results from the decreed natural flow and storage releases diverted to yield all the water which the senior right holder actually needs in order to fulfill its beneficial use.

136. Administration of water commences with recognition of the senior's decreed water right. *Dreher Testimony*, p. 23, lns. 23-25. The next steps in the process require a determination of the senior calling parties' need for water pursuant to that decreed right. *See generally, Dreher Testimony*.

137. The typical full supply of water to fulfill the need of the members of the SWC during recent history since 1990, operating with reasonable efficiencies, are set out in Chapter 9 of Exhibit 8000, the September 26, 2007, SWC Expert Report. See especially Tables 9-2 through 9-9 (hereinafter "typical full supply"). The typical full supply of water is that amount of water, up to the amount of water that is set forth in the various decreed SWC water rights, that the SWC entities may be anticipated to apply to beneficial use, at the times indicated in the above Tables.

138. The correlation between the quantity of the water right and the amount of water that the senior user will apply to beneficial use is made by consideration of the amount of water actually needed under the call, which determination commences with the presumption that the senior is entitled to his decreed water right, and proceeds as set forth by the Idaho Supreme Court in *AFRD#2, supra* at 449:

The presumption under Idaho law is that the senior is entitled to his decreed water right, but there certainly may be some post-adjudication factors which are relevant to the determination of how much water is actually needed. The Rules may not be applied in such a as to force the senior to demonstrate an entitlement to the water in the first place; that is presumed by the filing of a petition containing information about the decreed right. The Rules do give the Director the tools by which to determine "how the various ground and surface water sources are interconnected, and how, when, and where and to what extent the division and use of water from one source impacts [others]." *A&B Irrigation Dist. 131 Idaho at 422, 958 P.2d at 579*. Once the initial determination is made that material injury is occurring or will occur, the junior then bears the burden of proving that the call would be futile or to challenge, in some constitutionally permissible way, the senior's call.

139. This Hearing Officer has elaborated on this principle in the *Opinion Constituting Findings of Fact, Conclusions of Law and Recommendation* ("*Spring Users' Opinion*") issued January 11, 2008 in the Blue Lakes and Clear Springs consolidated case:

Idaho Code section 42-1420 addresses the binding effect of a decree: ‘The decree entered in a general adjudication shall be conclusive as to the nature and extent of all water the in the adjudicated water system...’ From this language and the determinations of the Supreme Court it is clear that the Director cannot go behind the partial decrees on those matters decided in the decrees. But it is also clear that in responding to a call the Director may consider information bearing on whether the water can or will be put to a beneficial use, whether there will be waste, whether the call is futile, the amount of curtailment necessary or whether there is any other reason recognized within State law that would preclude responding to the call as made.

140. The governing Idaho statute requires that the water which the junior pumper would ordinarily take from the aquifer is not available for diversion under the junior water right if that water would be applied to beneficial use by the senior. Idaho Code §42-237a(g) provides in part:

Water in a well shall not be deemed available to fill a water right therein if withdrawal therefrom of the amount called for by such right would affect, contrary to the declared policy of this act, the present or future use of any prior surface or ground water right or result in the withdrawing of the ground water supply at a rate beyond the reasonably anticipated average rate of future natural recharge.

141. This Hearing Officer has held in the *Spring Users Opinion* at page 27 that “it is critical that procedures be adopted which define the immediate rights of parties subject to emergency conjunctive management orders of curtailment, or denial of curtailment.” This holding is adopted here such that in responding to a call, the Director must make a determination of the predicted amount of water available to fulfill the water right of the calling senior water right holder so that the junior user may present its’ defenses, if any, prior to the commencement of the irrigation season and so that the junior user may timely present a mitigation plan if desired that may be reviewed for approval under Rule 43 of the CMRs.

142. The defenses identified above all ultimately concern whether the water called to fulfill the senior right will be put to a beneficial use by the senior under its right; or, due to post-adjudication factors, whether the senior will not need the full amount of the right to apply to beneficial use. Because we can only anticipate the future year’s weather, cropping patterns, and all the variables that affect demand for water, the Director cannot know the senior water users’ ultimate demand and need for water to apply to beneficial use for subsequent years at the time the call is made. Further, the junior water user, who carries the burden of proof regarding these defenses, cannot have adequate information to overcome the presumption that the decreed amount is the amount needed for beneficial use in the following irrigation seasons. Therefore, absent such proof, the junior, under the constraints of a call, must be prepared to provide mitigation prior to ground water being “available” if the junior users’ ground water pumping “affects ... future use of any prior surface ... water right.” Idaho Code § 42-237a(g).

143. A mitigation plan encompasses actions or measures to prevent or compensate

holders of senior water rights for hindrance or injury to the senior water right caused by the use of water by the junior. Rule 10.14 & 10.15.

144. A mitigation plan, as contemplated by Rule 43, provides a prospective program, which may be in place for multiple years, to allow ground water to be “deemed available” under Idaho Code §42-237(a)(g) for junior ground water right depletions in the event such depletion would affect the present or future use a senior right. *Dreher Testimony* at 160, lns. 16-20. The mitigation plan must, as contemplated by Rule 43(b) and (c), make mitigation available when needed: “in kind, in time, in place;” and must be approved before water is “deemed available” for depletion by junior ground water right holders.

145. Because mitigation decisions and commitments must be made prior to deeming water available to the junior pumper, and such decisions and commitments are therefore made at a time prior to fully reliable knowledge concerning the amount of water that will be necessary to fulfill the senior’s need in the subsequent irrigation season or seasons, the quantity of mitigation which must be committed prior to deeming water available to the junior pumper must provide for fulfillment of the typical full supply of water, not to exceed either the full quantity of the water right or the juniors’ depletions. As the irrigation season progresses to and through the time that the junior will commence pumping in the spring of the year, the Director can continue to monitor climatic conditions, cropping patterns, and other factors determinative of the seniors’ need as presented to the Director pursuant to the juniors’ burden of proof to resolve whether such need varies from the face amount of the decreed right. *Dreher Testimony* at 50, lns. 14-18, at 74, lns. 13-18.

146. As time elapses from the call, through the issuance of the Director’s assessment in the preceding autumn, more and more information concerning the water supply also becomes available. Historic predictable indicators include, but are not limited to, carryover from the prior season entering the winter months; snowpack and snow water equivalents in the drainage indicated by the National Resource Conservation Center SNOTEL sites; various river gages along the Snake River and its tributaries; various spring flows and gains in various sections, or reaches, of the Snake River; and the state of reservoir fill as indicted by the Bureau of Reclamation “Teacup” chart. *See generally Alberdi Testimony* at page 160 and following; *Diehl Testimony* at 1864, lns. 24-25, at 1865, lns. 1-8; *Diehl Partial Direct* at 10, lns. 9-24; *Thompson Direct* at 12, lns. 1-19.

147. The timing of predicting the amount of water available to senior water right holders controls whether both junior and senior right holders and their financial institutions can adequately plan for the coming irrigation season. *Diehl Testimony* at page 1871, lns. 1-13. The process to decide whether withdrawal of water by a junior pumping right will “affect ... future use of any prior surface ... water right,” can commence as early as September 1 of the year preceding the irrigation season in question. Idaho Code §42-233b. In this case, the evidence shows that on or before October 17, 2007, the Director made predictions concerning water supply from “IDWR computations” that there may be a shortage of irrigation water in the ESPA during the 2008 irrigation season. *See Exhibit 9716.*

148. Similar to adjustments to the mitigation plan by the Director after obtaining more

certain knowledge of predicted demand by the senior water right holders as the irrigation season approaches, and even commences, the Director can also consider developing information from these indicia to determine expected supply of water and how any resulting scarcity or surplus affects the mitigation responsibilities of the junior ground water right holders.

149. In this case, IGWA and the City of Pocatello have presented two distinct defenses: That the scarcity of water to apply to a beneficial use is caused by drought, not pumping by junior water right holders; and, that although the members of the SWC will apply the water resulting from administration to beneficial use, a senior water right holder may only call for enough water to fulfill its beneficial use assuming that the individual shareholders or farmer members of the respective SWC canal company or irrigation company have all refined their farms and irrigation use to reach “achievable farm efficiencies.”

150. If cessation of pumping by junior right holders will provide water that is needed by a senior right holder to apply to beneficial use, the cause of the scarcity of water becomes irrelevant to the administration of water rights in priority. As explained in *Spring Users Opinion* at 8:

But to the extent that water is in the aquifer subject to appropriation, senior rights come ahead of junior rights. Otherwise it would result in junior ground water users continuing to pump to the detriment of senior surface water users simply because they can reach water that would otherwise continue in the aquifer until it emerged at the Thousand Springs area. The Spring Users [seniors] are entitled to curtailment to the extent that the junior ground water users interfere with the water Spring Users [seniors] would otherwise have under their water rights.

151. Pocatello’s defense positing that SWC members need only enough water to fulfill the highest “achievable irrigation efficiency” evidences a misunderstanding of both the nature of the operation of the SWC entities, and of the plain language of the Rules. “Achievable farm efficiencies” contemplates a “high level of irrigation management.” *Sullivan Direct* at 47, Ins. 22-23. The SWC entities do not, however, engage in or control irrigation management. That is a matter controlled by each individual farmer in the SWC service areas. Each SWC member must supply water to its landowners and shareholders in accordance with the contractual and statutory rights held by those individuals unless the landowner or shareholder will waste the water. *See Alberdi Testimony* at 1579-1580; *Diehl Partial Direct* at 2, Ins. 16-17, at 10, Ins. 5-8; *Bingham Direct* at 2, ln. 12, at 3, Ins. 5-9; *Mullins Direct* at 2, 6-15; *Temple Direct* at 2, Ins. 9-20; *Thompson Direct* at 2, Ins. 10-23; *Harmon Direct* at 2, Ins. 9-13. Further, the Rules themselves describe the efficiencies that the SWC entities are required obtain. Rule 40.03 provides that in response to a call, “the Director shall consider whether the petitioner making the delivery call is suffering material injury to a senior-priority water right and is diverting and using water efficiently and without waste, and in a manner consistent with the goal of reasonable use of surface and ground water as described in Rule 42.” Rule 42 mandates “reasonable diversion and conveyance efficiency,” not “achievable farm efficiencies.”

152. The suggestion that all achievable farm efficiencies must be achieved before a

senior may call upon a junior to make available water being diverted by the junior results from an amalgam of public interest doctrines espoused by IGWA in this and other calls, including “reasonable diversion, optimum development of water resources in the public interest, and full economic development of underground resources.”

153. As stated by this Hearing Officer in the *Spring Users Opinion* at page 17, “[f]irst in time, first in right’ is fundamental to water administration but is subject to consideration of the public interest.” While Rule 020.03 provides that “[a]n appropriator is not entitled to command the entirety of large volumes of water in a surface or ground water source to support his appropriation contrary to the public policy of reasonable use of water as described in this rule,” “[i]t is clear that the Legislature did not intend to grant the Director broad powers to do whatever the Director might think right.” *Spring Users Opinion* at page 16. Instead, each facet of the public interest doctrines described above has an independent, and different, significance.

154. The doctrine requiring a reasonable method of diversion first arose in *Schodde v. Twin Falls Land and Water Co.*, 224 U.S. 107, 32 S. Ct. 470, 56 L. Ed. 686 (1912), and is recently cited with approval in *AFRD#2*, 143 Idaho at 878, 154 P.3d at 449. In *Schodde*, the senior user employed means of diversion that prohibited using unappropriated water in the Snake River by any junior appropriator. The federal courts held such means of diversion was unreasonable and should be changed to allow both the senior and junior appropriator to obtain their water rights. This instant case is distinguishable from *Schodde* both factually and legally. The Idaho Supreme Court has been clear that in *Schodde*, the senior water user overreached by interfering with the current of the river, not the junior user’s water right, it being acknowledged that the senior was entitled to his water right. *Arkoosh v Big Wood Canal*, 48 Idaho 383, 283 P. 522 (1929). Once Schodde corrected his diversion, he received his full water right. In this case, absent a showing that the means of diversion by the SWC entities is somehow wasteful or otherwise unreasonable, the entities remain entitled to their water rights. The evidence in this matter is universal that the means of diversion and operation of the SWC entities are reasonable, and not wasteful.

155. Article XV, Section 7 of the Idaho Constitution, adopted in 1964, provides for the adoption of “a state water plan for optimum development of water resources in the public interest.” The legislative implementation of Section 7, Idaho Code §42-1734A, makes clear that the state water plan is for the “conservation, development, management and optimum use of all *unappropriated* water resources and waterways of this state in the public interest.” [Emphasis added.] The limitation of the state water plan to unappropriated water is consistent with the constitutional dictate that there be optimum development because appropriated water is, by definition, already developed.

156. The Idaho Ground Water Act also contains a provision at Idaho Code §42-226 providing that “while the doctrine of ‘first in time, first in right’ is recognized, a reasonable exercise of this right shall not block the full economic development of underground water resources.” This statute, passed in 1951, does not apply, however, to rights of earlier priority. *Musser v. Higginson*, 125 Idaho 392, 871 P.2d 809 (1994); *see also*, SRBA Court’s decision in *Order on Cross Motions for Summary Judgment* (Fifth Jud. Dist., Twin Falls County District Court, In Re: SRBA: Subcase No. 91-00005, July 2, 2001) (“*Basin-Wide 5 Order*”) at 27

(“Idaho’s ground water management statutes, I.C. § 42-226 *et seq.*, do not apply to water rights with priorities earlier than 1951.”). Even if this amalgam of public interest doctrines could find legal application in the instant matter, to the extent economic analysis has relevance to these proceedings, the record does not support deviation from administration by “first in time, first in right.” John Church, the economist hired by IGWA to give evidence in support of its economic theories, concluded that when a rational junior user was faced with the threat of curtailment, he would take “measures” to acquire water if the economics of his operation justified continued use. *See Deposition of John Church* at 32-43, 48-52. Through this process, water would move to its highest and best use, which in turn may or may not result in more overall economic benefit to the state. *See id.*

157. Finally, the analysis is inadequate under the requirements of the Rules because it fails to take into account the efficiencies of the junior ground water user as required by Rule 20.05, which provides: “**Exercise of Water Rights.** These rules provide the basis for determining the reasonableness of the diversion and use of water by both the holder of a senior-priority water right who requests priority delivery and the holder of a junior-priority water right against whom the call is made.” Further, Rule 40.03 provides: “The Director will also consider whether the respondent junior-priority water right holder is using water efficiently and without waste.” In order to require that the irrigators served by the SWC obtain state of the art efficiencies before a call may be made against junior water users, both the rules and simple logic require that juniors achieve the same efficiencies before they are immune from the operation of the priority doctrine. No evidence has been provided that the juniors are obtaining such efficiencies. To the contrary, the evidence in this matter supports the conclusion that both the junior pumpers and the irrigators in the SWC systems use comparable amounts of water. *See Exhibit 4614 (Example Ground Water Right)*. Moreover, junior ground water right holders are authorized to apply up to 1 miner’s inch per acre (or 0.02 cfs and 4 afa). *See id.* The evidence and testimony in this case plainly demonstrates that for those Coalition entities that deliver by amounts per share to the headgate, they apply less than the standard 1 inch per acre under their decreed water rights. *Alberdi Testimony* at 1599, lns. 18-25, at 1600, lns. 1-19; *Diehl Partial Direct* at 4, lns. 5-11; *Harmon Direct* at 4, lns. 3-7.

158. The SWC report analysis of typical full supply of water to fulfill the need of the members of the SWC entities which relies on historic use by the SWC entities and reviews actual reasonable efficiencies does comport to the requirement of the rules that the SWC employ “reasonable” efficiencies. This report supports the conclusion that historically the SWC entities have applied the quantity of water in the water right to beneficial use, thus bolstering the need to commence administration with the quantity of the water right unless and until the junior can support a defense to the contrary as the irrigation season approaches and information solidifies.

Reservoir Storage Operations / Reasonable Carryover Requirement

159. Rule 42.01.g of the CMRs requires that senior water users be allowed a reasonable carryover.

160. A senior water right holder does not have to exhaust its storage water supplies in any given year in order to suffer injury to its senior water rights. *Dreher Testimony* at 83, lns. 5-

9.

161. Storage carryover must be provided during the irrigation season when the injury is determined so the senior right holder actually has the storage water to “carry over” into the storage season and subsequent irrigation season. *Dreher Testimony* at 103, lns. 11-25.

162. Storage carryover provides security that the senior water right holder has the water in place for planning purposes and to guard against future drought years. *Diehl Partial Direct* at 15-17; *Bingham Direct* at 19, lns. 1-5; *Mullins Direct* at 12, lns. 3-10, *Alberdi Testimony* at 1608, lns. 4-25, at 1609, lns. 1-17; *Temple Direct* at 14, lns. 11-19; *Dreher Testimony* at 167, lns. 7-16.

163. The SWC report establishes what prudent practice has determined to be a reasonable carryover during years when SWC managers have been able to control their carryover without interference by shortage from drought or excessive ground water depletions. *SWC Report* at 8-22 (Table 8-2).

164. Reclamation stores water in a series of nine federal reservoirs located along the Upper Snake River and its tributaries and is authorized to release water from these storage facilities for a variety of purposes, including irrigation and flood control. *Gregg Testimony* at 1200, lns.12-17; *see also id.* at 1195, lns.2-5; at 1219, ln.17, at 1222, lns.17-19; *Swank Testimony* at 901, l.8.

165. Reclamation has entered into contracts with the members of the Coalition, among other irrigation entities, for storage space to be dedicated for irrigation use for the specific Coalition member. *Gregg Testimony* at 1238, ln.4. Such “spaceholder” contracts authorize the use of the water stored in certain space in a reservoir in exchange for a proportional share of the construction repayment cost and yearly operation and maintenance costs. *Id.* at 1186, lns.1-18. All Coalition members have completed payments on their spaceholder contracts and continue to make yearly operation and maintenance payments to Reclamation. *Bingham Direct* at 7, lns.1-17; *Diehl Partial Direct* at 9, lns. 11-17; *Mullins Direct* at 6, lns. 9-14; *Temple Direct* at 6, lns. 4-7; *Thompson Direct* at 9, lns. 2-21.

166. As stated above, ground water pumping has caused the depletion of reach gains and has impaired the ability of the Coalition’s natural flow and storage rights to fill. Reclamation participated in these proceedings to protect its contracts with spaceholders and to ensure that it has sufficient water to meet its various statutory and contractual obligations.

167. Storage reservoirs were constructed, in part, to provide irrigators with a water supply to supplement their natural flow water rights. *Gregg Testimony* at 1207. Associated with that right, is the right to carry over water from one irrigation season to the next, in order to provide irrigators with a full supply of water during times of drought. *Id.* at 1209-1210, at 1326-1327.

168. The purpose of carry over is to provide for deficits in multi-year irrigation seasons as a consequence of multiple year droughts. The amount of carry over must be “reasonable” in

light of this circumstance, and all circumstances attendant to a particular storage users' needs. Carryover storage is more than "a supplemental water supply to natural flow" as it "provides the holders of the senior surface water rights some level of insurance against future dry years." *Dreher Testimony* at 43, lns.11-18.

169. The members of the Surface Water Coalition are not be required to exhaust their available storage water prior to being able to make a delivery call against the holders of junior priority ground water rights. *May 2 Order* at 44, ¶ 51. "Surface water right holders are not required to exhaust all of their storage before they can claim that they're being injured." *Dreher Testimony* at 42, lns.2-4; at 83, lns.5-9; *see also id.* at 230, lns.21-25 to 231, lns.1-2.

170. The storage contracts executed by the members of the Coalition do not limit the number of years that a Coalition member can carryover its water. *Gregg Testimony* at 1227-1228. Once water is allocated to a particular storage account, that Coalition member may carryover its water until it chooses to use the water, or until all the reservoirs in the Upper Snake River System completely fill – at which time the carryover amount is wiped out. *Id.* at 1228, lns.6-7; *Swank Testimony* at 911, lns.15-18.

171. Carryover storage is "subject to change based upon climatic variability" as well as to changes in irrigation practices. *Dreher Testimony.* at 79, l.20 to 80, l.25.

172. Because it is not possible to foresee with perfection the weather and climatic conditions over a series of future years, the junior user will not be able to show that any water that would be available for carryover will not be applied to a beneficial use. Logically, therefore, on the record in this matter, a reasonable carryover has not been shown to be any less than would be available to the senior users absent all depletions by junior users.

173. Carryover storage for an irrigation season must be provided during the prior year to compensate for uncertainties of future water years. *Id.* at 167, lns.7-16. Senior water users are entitled to "some minimum level of insurance that they have sufficient carryover in the event of a drought year." *Id.*; *see also id.* at 121, lns.23-25 & 122, lns.1-3. Failure to mitigate for depletions to carryover storage during an irrigation season would lead to curtailment in the following irrigation season. *Id.* at 103, lns.11-25.

174. Unlike the other reservoirs along the Upper Snake, Palisades Reservoir was licensed primarily as a long-term carryover reservoir. *Gregg Testimony* at 1228, lns.3-4. Congress envisioned that Palisades Reservoir may need to carry-over water for multiple years to sustain the farmers in an extended drought. Exhibit 7001, *Substantiating Report*, p. 6.

175. To protect its operations by and through the Biological Opinion for Reclamation's Upper Snake River Basin Projects and the Nez Perce Agreement, Reclamation developed the Rainbow Chart, based upon a historical perspective of carryover and projected demand in the system above Milner. *Gregg Testimony* at 1229-1232. That need was not premised upon one-year, but the likelihood of multiple years of drought. What the Rainbow Chart and Reservoir studies did not anticipate was ground water pumping depleting the carryover/water supply for the spaceholders in the various reservoirs. Therefore, this historical perspective is an indication of

what carryover is required with the caveat that if ground water pumping effects are still being felt in the system, as evidenced during the hearing, then the amount of carryover required will likely increase.

176. The Testimony of Patrick C. McGrane, P.E. clearly depicts that in the last six years there would have been more storage, and, ultimately, carryover, had pumping been curtailed during that period. Further, as evidenced in 2007, that increased carryover storage was necessary to meet the demands in the system. This supports the previous studies completed by the federal government in supporting construction.

177. From 1960 through 2006, the Coalition members carried over, on average, the following amounts (also compared to the Director’s “reasonable carryover” amounts set in the *May 2 Order* and the percentage that number represents compared to the SWC long-term average):

	Reasonable Carryover	Average Carryover (1960-2006)	Reasonable Carryover %
TFCC	38,400	92,162	42%
NSCC	83,300	300,635	28%
AFRD#2	51,200	92,930	55%
MID	0	156,579	0%
BID	0	96,497	0%
Milner	7,200	44,127	16%
A&B	8,500	75,633	11%

See *SWC Report* at 8-22 (Table 8-2).

178. The junior ground water users in this case, who carry the burden of showing that such amounts were wasted or not applied to beneficial use, have not taken issue with this allegation except to allege that the presence of any carryover shows that the senior suffered no injury, which argument must be rejected as facially contrary to the CMR, the Supreme Court’s holding in *American Falls, supra*, and the seniors’ stated water rights. Therefore, any determination of “reasonable carryover” must, at least, be equal to the average carryover since 1960. Such “reasonable carryover” may be increased based on the Director’s perception, in the fall prior to an irrigation season, that more carryover will be necessary given the anticipated needs of the following summer.

179. Immediate past history provides an example of how even the average carryover amounts since 1960, set out herein, may not be enough to suffice to fulfill the entities needs in conjunction with natural flow. At the conclusion of 2006, TFCC had approximately 78,000 acre-feet in carryover storage and NSCC had about 350,000 in carryover storage heading into the 2007 irrigation season. *Alberdi Testimony* at 1630, Ins. 1-17; *Diehl Partial Direct* at 15, Ins.22-25 & 16, Ins.1-9. However, these entities were still forced to cut deliveries to their shareholders despite the carryover, and TFCC’s was forced to rent an additional 40,000 acre-feet from the Water District 1 rental pool.

180. Accordingly, even though NSCC carried over nearly 50,000 acre-feet more than its 46-year average in 2007, NSCC was still forced to curtail its shareholders. NSCC further used all of its carryover from 2006 (about 350,000 acre-feet) to meet irrigation demand in 2007.

181. As shown in the above table, the Director's "reasonable carryover" determination for the members of the Coalition fails to meet the Coalition's average carryover quantities since 1960. "The 'reasonable carryover' is only 0 to 16 percent of the individual [Coalition] members' storage rights, 0 to 20 percent of the [Coalition] members' individual storage diversions since 1960, and 0 to 55 percent of the [Coalition] individual average carryover since 1960." *SWC Report* at 8-4; *see also id.* Table 8-2. The Director's "reasonable carryover" determination "is lower than the historical carryover for 37 of the past 45 years." *Id.* at 8-6 & Figure 8-4.

182. "As a point of comparison, more carryover storage has always been available than the 'reasonable carryover' storage ... since Palisades Reservoir began operation (even during droughts) until the last two decades when the depleted reach gains and natural flow have become so significant." *Id.* at 8-6.

183. As to the individual Coalition Members:

a. A&B's "reasonable carryover" of 8,500 acre-feet/year is "much less than the historical carryover." *Id.* at 8-21; *see also Temple Direct* at 14, lns.20-23. "A&B's carryover storage has exceeded the 'reasonable carryover' in 46 out of 48 years of record." *Id.* "The average historical carryover storage for the 1960-2006 period is 76,000 acre-feet, more than eight times the 'reasonable carryover value.'" *Id.*; *see also id.* at Table 8-2 & Figure 8-27. A&B cannot depend on its natural flow rights "for any given year." *Temple Direct* at 14, lns.15-19. Any natural flow received by A&B "is undeterminable in advance, so the district relies primarily on its storage carry over and projected run off forecasts for planning purposes." *Id.* "Carryover is an important part of the next irrigation season's water supply." *Id.* "By the Director's use of reasonable carryover of storage 8,500 acre-feet for A&B and combining it with the District's senior priority storage right at American Falls reservoir of 46,826 acre-feet assuming that it fills every year (which it doesn't), it will only give the district an annual supply of 55,362 acre-feet." *Id.* at 15, lns.1-8. "This amount will not even meet the average need of 56,000 acre-feet" or the need of A&B in dry years which can be as high as 63,000 acre-feet. *Id.*

b. AFRD#2's "reasonable carryover" volume of "51,200 acre-feet is only 13% of the full reservoir allocation" for AFRD#2. *SWC Report* at 8-15. In the 30-years "prior to 1960 more than this amount of carryover was available in all except five years." *Id.*; *see also id.* at Figure 8-15. "Carryover can be a major part of the right in case American Falls Reservoir doesn't fill." *Harmon Direct* at 5, lns.1-3. Since the largest portion of AFRD#2's water right is storage, it "depend[s] on having a full storage right each year." *Id.* AFRD#2 needs "to be able to carry over all that accrues to storage water in order to insure [its] water supply for" future water years. *Id.* at 5, lns.5-8.

c. BID's "reasonable carryover" volume of 0 Af "is much less than BID's

historical carryover.” *SWC Report* at 8-18. “BID has had more carryover in every year except two since 1930.” *Id.* “BID’s average historical carryover is 96,000 AF/yr.” *Id.* & Table 8-2. BID “has benefited from more historical carryover than the ‘reasonable carryover’ established in” the May 2 Order “during almost all previous water years.” *Id.*; see also *id.* Figure 8-21. Carryover storage “is a vital part to an adequate water supply to BID.” *Bingham Direct* at 18, Ins.9-12. Carryover means that less water is needed to fill the reservoirs so that BID’s other water rights “fill quicker.” *Id.* at Ins.13-15. “BID has always had water to carry over.” *Id.* at 18, l.19. “Carryover storage provides BID with a sort of insurance policy to protect against future shortages” and “allows BID to plan for, and provide, a greater water delivery in times of shortage.” *Id.* at 19, Ins.1-5. “BID uses its carryover to protect its landowners against drought.” *Id.*

d. MIDs “reasonable carryover” volume of “0 AF in the May 2 Order is much less than MIDs historical carryover.” *SWC Report* at 8-17. “MID has had more carryover in every year except two since 1930.” *Id.*; see also *id.* at Figure 8-18. “MIDs water supply operations benefited from historical carryover during almost all previous water years at a volume greater than the ‘reasonable carryover’ established in” the May 2 Order. *Id.* “The amount of carryover storage held by MID is a critical fact that is looked at early in [the District’s] planning process for the coming irrigation seasons in order to determine if water supplies will be adequate to fill MIDs demand.” *Thompson Direct* at 18, Ins.7-12. If MID has sufficient carryover, then a snow pack that is “70% or less of normal” could still provide MID with sufficient water for the irrigation season. *Id.* at Ins.14-19. With insufficient carryover and a dry winter or hot irrigation season, “MID runs the risk of running out of irrigation water.” *Id.* A “reasonable carryover” determination of 0 acre-feet changes “MIDs storage right to something other than a right to plan for future dry years.” *Id.* at 19, Ins.4-19. In addition, the “reasonable carryover” determination forces MID to “completely run out of water before the Director would even consider MIDs call against ground water pumpers.” *Id.* Unless storage rights are administered by priority, and with the understanding that “storage rights were developed and are maintained at great expense to provide for multiple low water years,” then the rights are not being protected. *Id.* at 20, Ins.1-5.

e. Milner’s “reasonable carryover” of 7,200 acre-feet is “inconsistent with historical records.” *SWC Report* at 8-19. “Even before [Milner’s acquisition of] 46,000 AF of Palisades Reservoir storage ... the district routinely enjoyed more carryover than the ‘reasonable carryover.’” *Id.*; see also *id.* Figure 8-25. “As a point of comparison, the average historical carryover for the entire 1960-2006 period is 44,000 acre-feet, which is about six times the ‘reasonable carryover.’” *Id.* at 8-19 to 8-20. With the increasing uncertainty of Milner’s natural flow rights, Milner is “growing increasingly dependent on carry over storage to meet the needs of [Milner’s] water-users.” *Mullins Direct* at 12, Ins.3-10. The Director’s “reasonable carryover” findings would “put Milner’s ability to meet the needs of its landowners, primarily the ‘new’ lands landowners in jeopardy.” *Id.* at Ins.16-18. A “reasonable carryover” of 7,200 acre-feet will prevent Milner from being “able to plan sufficiently for future short water years.” *Id.* at Ins.18-23. Historically, Milner has been able to reduce the impacts of the ongoing drought. *Id.* However, Milner has had carryover in excess of the 7,200 acre-foot “reasonable carryover” determination.

Id. With dwindling supplies, and the “reasonable carryover” determination, “Milner’s ability to meet the needs of its water users will be at risk.” *Id.* If Milner’s natural flow rights are curtailed, and American Falls fails to fill, then “Milner would need at least 20,000 acre feet in carryover in Palisades to” deliver a full supply to the “new” lands landowners. *Id.* at 13, lns.1-3.

f. NSCC’s “reasonable carryover” is “only 10 percent of NSCC’s total reservoir storage contracts.” *SWC Report* at 8-13. “The ‘reasonable carryover’ is exceeded in 27 out of 30-years prior to 1960 and in 36 out of 45 years after 1960.” *Id.* “Since 1975, more than this amount of carryover has been available in all except seven years.” *Id.*; see also *id.* at Figure 8-12. Every year, NSCC tries to “carry-over as much storage as possible.” *Diehl Partial Direct* at 15, lns.9-25. NSCC’s “primary water supply is storage.” *Diehl Testimony* at 1867, lns.10-12. This allows NSCC to plan for the uncertainties in the water supply for the upcoming irrigation season. *Diehl Partial Direct* at 15, lns.9-25. NSCC was forced to cut deliveries in 2007, even though it has 350,000 acre-feet in carryover storage from 2006. *Id.* at lns.22-25, at 16, lns.1-9. NSCC “self-mitigates by cutting deliveries to the Company’s stockholders to provide carry-over water for the next year” and cannot “risk an inadequate carryover because it does not have senior natural flow rights to satisfy early season irrigation demands.” *Id.* “Inadequate storage jeopardizes the entire project.” *Id.* The Director’s “reasonable carryover” determination of 83,000 acre-feet “doesn’t take into account weather factors and how [NSCC] operate[s] to provide water in the future.” *Id.* at 16, lns.20-25. Had NSCC been limited to 83,000 acre-feet “coming into the 2007 season, [NSCC] would have run out of water.” *Id.* at 17, lns.1-5. The “reasonable carryover” determination impairs NSCC’s ability to plan for upcoming water years, *id.* at lns.8-14, as no two water years are the same, *Testimony of Diehl*, at 1873, lns.7-17.

g. “TFCC’s historical carryover levels are higher than the ‘reasonable carryover’ in 26 out of 30 years prior to 1960,” *SWC Report* at 8-9, and 10 out of the last 30-years, *id.* at 8-10. See also *id.* Figure 8-8. TFCC’s carryover supplies have reduced in recent years due to decreased natural flows and the fact TFCC has to use more storage water later in the irrigation season. *Alberdi Testimony* at 1607, lns. 12-25, at 1808, lns. 1-3. Carryover is important to TFCC’s planning operations and with decreased spring flows it is critical to TFCC’s operations *Id.* at 1607, lns. 7-25, at 1609, lns. 1-17.

Director Tuthill’s Fifth, Sixth, and Seventh Supplemental Orders Issued in 2007 Did Not Follow Idaho Law or the Director’s May 2 Order

184. Under the Director’s *May 2 Order*, in order to receive the benefit of “out-of-priority” diversions, junior ground water right holders were required to provide “replacement water” at the beginning of the irrigation season so that it was available for delivery to the senior in timely manner. *Dreher Testimony* at 84, lns. 15-25, at 85, lns. 1-8. “Replacement water” had to be provided up front in order to keep the senior water right holders “whole”. *Id.* at 101, lns. 9-19. If “replacement water” cannot be provided up front, then junior ground water right holders must be curtailed. *Id.* at 101, lns. 3-8.

185. Similarly, “reasonable carryover” water had to be provided up front and in a timely manner in order for the senior water right holder to have the benefit of the storage heading into the storage season and for use in the subsequent irrigation season. *Dreher Testimony* at 103, lns. 11-25. If carryover could not be provided, then junior ground water right holders would have to be curtailed. *Id.*

186. Consistent with the requirement to provide water in a timely manner during the irrigation season, the Idaho Supreme Court has plainly held that “a timely response is required when a delivery call is made and water is necessary to respond to that call”. *AFRD #2*, 154 P.3d at 445.

187. Contrary to the above requirements, and the process to provide water in a timely manner to the Coalition members in 2007, Director Tuthill failed to order any mitigation water be provided in the 2007 irrigation season. *Burrell Testimony* at 654, lns. 10-13, at 685, lns. 7-21. Director Tuthill’s orders further failed to adjust the “minimum full supply” based upon the hot and dry conditions experienced in 2007, and the increased demands of the Surface Water Coalition members. *Burrell Testimony* at 648, lns. 1-25, at 649, lns. 1-21.

188. Director Tuthill’s method of treating the “minimum full supply” as a “maximum allowed amount” was not even what was intended pursuant to the *May 2 Order*. *Dreher Testimony* at 222, lns. 2-10; *Burrell Testimony* at 672, lns. 6-25, at 673, lns. 1-11. Such a change in method and implementation by a subsequent Director exposes the dangers of a lack of objective standards and criteria in the CMRs and their application.

189. Finally, Director Tuthill’s orders did not require any “carryover” water to be provided in timely manner so that the Coalition members have the storage in their accounts heading into the storage season. This method is contrary to even the *May 2 Order* requirement and provides no water to the Coalition members in a timely manner. *Burrell Testimony* at 685, lns. 22-25, at 686, lns. 1-8.

190. In sum, in a year when demands were extremely high, the Coalition members were forced to reduce deliveries to their water users, rent additional supplies, and endure reduced carryover supplies, no mitigation water was ordered to be provided up front, and yet ground water right holders were authorized to pump their full water rights without consequence.

191. On May 18, 2005, IGWA filed a Ground Water Districts’ Joint Replacement Water Plan for 2007, which was amended May 15, 2007 (“2007 Replacement Water Plan”). The 2007 Replacement Water Plan stated that it would “mitigate any and all material injury by guaranteeing and under writing [TFCC’s] irrigation season supply”. 5th Order at 14, ¶ 30. The plan did not make provision for injury to any other Coalition entity or for injuries to carry over storage.

192. In response to the 2007 Replacement Water Plan, the Coalition filed a *Protest and Motion to Dismiss the Ground Water District’s Amended Joint Replacement Water Plan for 2007 (Motion to Dismiss)*. The *Motion to Dismiss* alleged that Idaho law and the CMRs do not contemplate replacement water plans, that the replacement water plan was premature due to the

fact that it was filed prior to the issuance of an order quantifying material injury, and requested that the Director advise the Coalition whether “full head gate deliveries” in 2007 would be provided, whether carryover storage for 2008 would be realized, whether curtailment would occur if sufficient water could not be provided for in season use in 2007 and reasonable carryover for 2008, asked the Department to provide a list of all groundwater rights in Water District No. 120 and a calculation of the total volume pumped from the ESPA to date, and requested that the Department conduct ESPA – wide aquifer water level measurements in 2007. The Coalition also requested an immediate hearing and opportunity for oral argument and testimony on the *Motion to Dismiss*.

193. On May 23, 2007, the Director issued the *Fifth Supplemental Order Amending Replacement Water Requirements Final 2006 & Estimated 2007* (5th Order).

194. In the 5th Order, the Director found that the predicted material injury to TFCC was 58,914 acre-feet during the 2007 irrigation season. 5th Order at 12, ¶ 24. In addition, the Director found that the predicted carryover short falls were 43,017 acre-feet for AFRD#2 and 38,400 acre-feet for TFCC. 5th Order at 13, ¶ 26. The sum of the predicted irrigation season injury and carryover short falls was 140,331 acre-feet. (58,914 + 43,017 + 38,400).

195. In the 5th Order, the Director acknowledged that he should continue to monitor water supply and climatic conditions in 2007 and require additional replacement water or involuntary curtailment if replacement water cannot be secured. 5th Order at 16, ¶ 6.

196. The Director denied the Coalition’s *Motion to Dismiss*, 5th Order at 16, ¶ 7, but granted a request for hearing on the *Motion to Dismiss*, *id.* at 16, ¶ 8. In addition, the Director conditionally approved IGWA’s 2007 Replacement Water Plan and directed that if IGWA failed to fulfill the commitments described in the 2007 Replacement Water Plan, immediate involuntary curtailment would be ordered. 5th Order at 17, ¶¶ 4 & 6.

197. Notwithstanding the total predicted material injury of 140,331 acre-feet, the Director found that the 2007 Replacement Water Plan would mitigate for the predicted material injury to members of the Coalition. *Id.* at 17, ¶¶ 3 & 7.

198. The Director failed to require that any replacement water be supplied during the 2007 irrigation season when the water was actually needed. Rather, the Director indicated that he would make a final determination of the amounts of mitigation required and actually provided after the final accounting for surface water diversions from the Snake River for 2007 was complete. *Id.* at 17, ¶ 9.

199. The Coalition filed a *Petition for Reconsideration and Review of Fifth Supplemental Order Amending Replacement Water Requirements Final 2006 & Estimated 2007* (“*Petition*”). The Director scheduled a status conference on June 5, 2007, and scheduled hearing on the *Petition* on June 22, 2007.

200. Following the status conference, the Director issued an Order dated June 11, 2007 stating that the hearing on the 2007 Replacement Plan was limited in scope to presentation of

information regarding the implementation of the replacement water plan by IGWA to demonstrate that timely, in season replacement water, and reasonable carryover water could be provided to members of the Coalition. IGWA was informed that it should be prepared to identify with specificity the water it had acquired, the quantities it had acquired, and the means by which such water could be timely delivered to members of the Coalition.

201. On June 21, 2007 the Coalition filed its request for updated material injury determination for 2007 water right administration, accompanied by Affidavits of the managers of the irrigation districts and canal companies and supporting data compiled by Coalition experts.

202. On June 22, 2007 hearing on IGWA's Replacement Plan was held. Following the hearing, the Director issued the *Sixth Supplemental Order Amending Replacement Water Requirements and Order Approving IGWA's 2007 Replacement Water Plan dated July 11, 2007* ("6th Order").

203. In the 6th Order, the Director acknowledged that he would continue to monitor water supply and climatic conditions through the 2007 irrigation season and issue additional orders regarding replacement water needs. 6th Order at 3, ¶ 3.

204. In the 6th Order, the Director found that the storage in the Upper Snake River Basin was over estimated by 264,546.9 acre-feet. 6th Order at 3-4, ¶ 5. In addition, the Director found that there was 97,745 acre-feet less in the Coalition entities' storage allocation than that which was estimated. 6th Order at 4, ¶ 7.

205. In the 6th Order, the Director found that the only entities that had natural flow available to divert were NSCC and TFCC. *Id.* at 4-5, ¶ 9.

206. The Director found that the predicted material injury to TFCC during the 2007 irrigation season was 46,929 acre-feet and that the predicted carryover short fall to members of the Coalition was 67,791 acre-feet, for a total of 114,720 acre-feet. *Id.* at 6, ¶ 15.

207. At the time of the June 22nd hearing, the Director ruled that he would not consider the Coalition's Manager's Affidavits and other filings, claiming that they were outside the scope of the June 22nd hearing, *id.* at 6, ¶ 17, while at the same time denying IGWA's Motion to Strike the June 21st filings and leaving the June 21st filings in the record.

208. At the time of the June 22nd hearing, IGWA presented an exhibit that represented that it has 65,145.8 acre-feet of water secured by lease, and "commitments for leases that had not yet been entered into" for up to an additional 30,000 acre-feet. 6th Order at 7, ¶¶ 19-20. The Director found that 20,000 acre-feet of water leased by IGWA represented on its exhibit had already been used by IGWA for mitigation in delivery calls in the Thousand Springs area of the Snake River. *Id.* at 8, ¶ 24. As a result, the total amount of water under lease by IGWA that could be used as a replacement supply was 45,145.8 acre-feet, less than the 46,929 acre-feet of the in season material injury to TFCC predicted by the Director. Later it was revealed that of the 65,000 acre-feet presented in IGWA's Replacement Water Plan to satisfy the Coalition's injury, approximately 55,000 acre-feet had been committed to a replacement water plan to satisfy

delivery calls in the Thousand Springs area. *Burrell Testimony* at 656, Ins. 8-25, at 657, Ins. 1-4. IGWA's lease with the City of Pocatello entered into on January 9, 2008 confirms that it did not have sufficient water supplies to provide to the Coalition during the 2007 irrigation season. Exhibit 4603.

209. Because of the predicted shortages for 2007, TFCC had leased 40,000 acre-feet of storage from the Water District 1 rental pool. The Director found that "it is appropriate that IGWA be allowed to underwrite the lease entered into by TFCC to assist in mitigating TFCC's predicted material injury of 46,929 acre-feet." 6th Order at 8, ¶ 5.

210. The Director approved IGWA's 2007 Replacement Water Plan, *id.* at 8, ¶ 6, and explicitly held that IGWA was not required to provide replacement water to members of the Coalition who were predicted to experience in season injury and reasonable carryover shortages, *id.* at 9, ¶ 7, a clear deviation from the procedure set forth in the *May 2 Order* as described by the testimony of Director Dreher.

211. In the 5th Order and 6th Order, the Director made no adjustment to the determination of minimum full supply.

212. On December 20, 2007, the Director issued the *Seventh Supplemental Order Amending Replacement Water Requirements* (7th Order).

213. The 7th Order contains several contradictory findings which have neither been corrected nor explained:

a. Rental pool adjustments supplied to NSCC are stated to be 25,500 acre-feet on page 4, ¶ 8, and 35,000 acre-feet in the table described on page 5, ¶ 8 and footnote 4;

b. The sum of the adjustments for NSCC set forth in the table in page 5, ¶ 8 is stated to be 816,108 acre-feet and it should be 821,108 acre-feet;

c. NSCC's preliminary carryover is stated to be 65,504 acre-feet on page 5, ¶ 10, but is stated to be 61,004 acre-feet on page 6, ¶ 11.

214. In the 7th Order, the Director acknowledges climatic changes that occurred during 2007 that affected water supply included "abnormally low precipitation", "temperatures that remained above normal for July and August", and "earlier than normal warm temperatures that moved to the beginning of the main growing season earlier into the year by at least two weeks." 7th Order at 4, ¶ 7. Despite these findings, the Director made no adjustment to the 2007 minimum full supply for any of the Coalition entities.

215. Although the Director acknowledged growing conditions that would increase the use of water during the 2007 growing season, the Director minimized his calculation of injury to Coalition members by applying actual 2007 diversions in excess of the minimum full supply against the amount of reasonable carryover to which the entity was entitled at the end of the 2007

irrigation season. See 7th Order at 6, ¶ 11.

a. For example, the tables on page 6 show that AFRD#2's minimum full supply was 405,600 acre-feet and its reasonable carryover was determined to be 51,200 acre-feet, for a total of 456,800 acre-feet. The preliminary 2007 carryover for AFRD#2 was calculated to be 3,495 acre-feet. Adding AFRD#2's preliminary 2007 carryover (3,495 acre-feet) to its minimum full supply (405,600 acre-feet) results in a total of 409,095 acre-feet. Subtracting 409,095 acre-feet from AFRD#2's total minimum full supply and reasonable carryover (456,800 acre-feet) results in a calculated injury of 47,705 acre-feet. However, the Director added the actual diversions made by AFRD#2 during 2007 (433,414 acre-feet) to the preliminary 2007 carryover (3,495 acre-feet), resulting in a total of 436,909 acre-feet, which he then subtracted from the minimum full supply and reasonable carryover (456,800 acre-feet) in order to determine injury to AFRD#2 in the amount of 19,891 acre-feet. Even though the diversions were well within AFRD#2's water rights, by counting actual diversion amounts during 2007 against carryover storage, the Director reduced AFRD#2's calculated reasonable carryover injury by 28,414 acre-feet (47,705 minus 19,891). *Id.* at 6, ¶11.

b. The same methodology understated the material injury to NSCC. The minimum full supply for NSCC (988,200 acre-feet) and reasonable carryover (83,300 acre-feet) totals 1,071,500 acre-feet. The preliminary 2007 carryover for NSCC was calculated to be 61,004 acre-feet. Adding NSCC's preliminary 2007 carryover (61,004 acre-feet) to its minimum full supply (988,200 acre-feet) results in a total of 1,049,204 acre-feet, or 22,296 acre-feet less than its calculated minimum full supply plus reasonable carryover. By counting actual diversion amounts during 2007 against carryover storage, the Director found that NSCC had no predicted injury to carryover storage, effectively reducing NCSS's injury by 22,296 acre-feet. *Id.*

216. Using the methodology described by Director Dreher, the predicted material injury for AFRD#2 resulting from a short fall of reasonable carryover at the end of the 2007 irrigation season should be 47,705 acre-feet, and for NSCC should be 22,296 acre-feet. The injuries to NSCC and AFRD #2 were even greater than these amounts since NSCC and AFRD #2 did not deliver the full 5/8 inch headgate delivery that the Director's *May 2 Order* "minimum full supply" indicated they were entitled to provide.

217. Although it was predicted that TFCC would suffer material injury during the 2007 irrigation season in the amount of 46,929 acre-feet, and it rented 40,000 acre-feet in an attempt to avoid shortage, since TFCC carried over 22,655 acre-feet at the end of the 2007 irrigation season, the Director adjusted TFCC's predicted material injury to 17,345 acre-feet. 7th Order at 6, ¶ 12. The Director went on to hold that the carryover short fall for TFCC was 38,400 acre-feet. *Id.* at 6, ¶ 13. Director Tuthill calculated the total 2007 injury to TFCC to be 55,745 acre-feet (17,345 plus 38,400).

218. Although the Director found that the in season injury to TFCC was 17,345 acre-feet, and that the predicted carryover storage injury to TFCC and AFRD#2 totaled 58,291 acre-feet, *id.* at 6, ¶ 13, the Director ordered IGWA to provide proof to the Director that it had secured

a minimum replacement supply of 14,345 acre-feet, *id.* at 8, ¶ 6. The Director went on to state that he would not require the remaining 3,000 acre-feet until a final accounting for the 2007 irrigation season is completed. The Director did not make any provision for IGWA to supply proof of amounts greater than 17,345 acre-feet should the accounting determine that TFCC's injury, or the injury to any other Coalition entity, exceeded that amount.

219. The Director went on to hold the IGWA would not be required to provide reasonable carryover water to members of the Coalition until the 2008 operating forecast is issued and "at such time as it is needed by members of the Coalition," *id.* at 8, ¶ 7, without stating how Coalition members establish that need.

220. As a result of the Director's Orders, action and inaction, even though the Director found material injury occurring to members of the Coalition during 2005 and 2007, no in season replacement water has been supplied to any member of the Coalition.

221. Any action by the Director that violates constitutional or statutory provisions, is in excess of the statutory authority of the Idaho Department of Water Resources, that is made upon an unlawful procedure or that is arbitrary capricious or an abuse of discretion subjects the Director to having his Orders set aside, in whole or in part. Idaho Code §§ 67-5279(2) and (3).

222. The Director recognized that he should take into account changes in water supply and climatic conditions and issue additional orders regarding replacement water needs (Sixth Order, p. 3, ¶ 3). The Director recognized that climate conditions in 2007 included abnormally low precipitation, temperatures above normal, and earlier than normal warm temperatures, all of which increase the need for irrigation water. (Seventh Order, p. 4, ¶ 10). In June, 2007, the Director received, but did not consider, Affidavits and other information from the managers of the Coalition entities describing the difficult conditions and high water demands on their projects. Despite the recognized increased need for irrigation water during 2007, the Director made no adjustments to the minimum full supplies required for the Coalition entities. It was an abuse of discretion for the Director to fail to adjust the minimum full supply for 2007 taking into account water supply and climatic conditions and how those conditions were different from the 1995 water year, the year used to determine the minimum full supply. It was further an abuse of discretion for the Director to fail to order "replacement water" to be provided in a timely manner to Coalition members during the irrigation season.

223. The Conjunctive Management Rules contain no provision for a "minimum full supply". According the testimony of former Director Dreher, the minimum full supply calculation was never intended to place a cap on a water right, nor were diversions exceeding the minimum full supply ever intended to be used against a water users' carryover storage. It was an abuse of the Director's discretion and an act in excess of the statutory authority of the Idaho Department of Water Resources for the Director to count diversions in excess of the minimum full supply against an entity's reasonable carryover storage.

224. Before diverting out of priority, junior water right holders must have in place all mitigation water prior to the commencement of an irrigation season pursuant to a mitigation plan adopted as provided in CMR 43.

The Director's Replacement Water Plan Process Violates the CMRs and Idaho Law

225. Once the Director determined that material injury was likely to occur, the Director encouraged junior water right holders to file "a plan for providing such replacement water". *May 2 Order*, ¶ 9. The Director makes no provision for hearing on the proposed plans, does not set forth factors to be considered by the Director in determining whether or not the replacement plans will prevent injury, and effectively eliminates the right of the Coalition to address the plans in any meaningful manner. Several replacement plans have been filed by IGWA and other parties.

226. The CMR are explicit as to what the Director should do if the Director finds that material injury is occurring:

- a. The Director should regulate the diversion and use of water in accordance with priorities or
- b. Allow out of priority diversion of water by junior priority groundwater users pursuant to a mitigation of plan that has been approved by the Director. CMR 40(1)(a) and (b).

227. The procedure for submitting a mitigation plan, including a requirement of notice and hearing, is contained in CRM 43. The replacement water plan procedure set forth in the May 2, 2005 Order and subsequent orders does not comply with CMR 43.

228. According to Director Dreher, the intent of the replacement water plan concept was to "provide the replacement water up front," before material injury actually occurred. *Dreher Testimony* at 85, lns.3-8. "The mitigation plan call for in the [CMR] is something that's put in place in advance of injury. Not while injury is occurring. In advance of injury." *Id.* at 165, lns.5-8.

229. Replacement water must be provided "in kind, in time, and in place." *Dreher Testimony* at 159, lns.1-12. The Director does not have authority to impose any "out-of time mitigation, such as payment of monies, or other considerations." *Id.* at 160, lns.14-25.

230. Failure to provide adequate replacement water results in curtailment. *Id.* at 101, ll.3-8.

231. There is no provision in the Conjunctive Management Rules or in the law allowing the Director to create a replacement water plan or to consider something other than the mitigation plan requirements described in the Conjunctive Management Rules. *See* Rules 40.01 and 43. In order to allow a junior water right holder to divert out of priority, approval of any mitigation plan must follow the procedures described in Rule 43 requiring, among other things, notice, a right to hearing, and consideration of the plan under the procedural provisions of Idaho Code § 42-222, in the same manner as applications to transfer water rights. *See* Rules 40, 41, and 43.

232. The Director has no legal right or authority to unilaterally create a new rule or procedure; in order to do so, the Director must follow the provisions of the Idaho Administrative Procedure Act. §§ 67-5201 *et seq.*

233. The Director does not set forth in any of the Orders issued by the Director authority that would authorize the Director to create the replacement water plan concept.

234. The State of Colorado has recognized that the Director (in Colorado referred to as the State Engineer) has no authority to create a replacement plan, holding that proposed rules allowing the State Engineer to authorize out of priority diversions requiring replacement plans in the absence of an augmentation plan submitted pursuant to state law was in excess of the State Engineer's statutory authority and contrary to law. *Simpson v. Bijou Irrigation Company*, 69 P.3d 50, 67 (2003).

235. The Director must follow existing law and rules and any attempt by the Director to unilaterally create new rules or procedures is contrary to law and outside the scope of his authority.

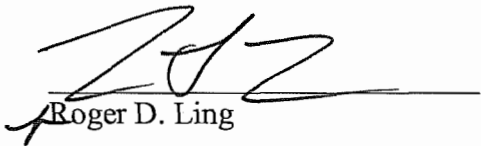
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CONCLUSION

For the reasons identified above, including those stated in its *Pre-Hearing Memorandum*, and other pleadings and reports filed in this matter, the Surface Water Coalition respectfully requests the Hearing Officer to adopt the above proposed findings and conclusions.

DATED this 26th day of February, 2008.

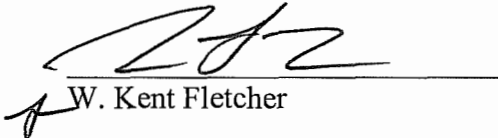
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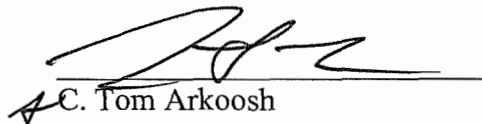
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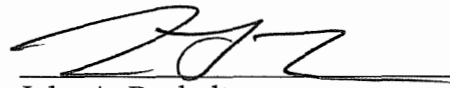
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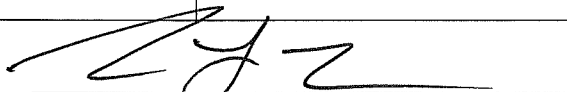
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Twin Falls Canal Company

CERTIFICATE OF SERVICE

I hereby certify that on this 26th day of February, 2008, I caused to be filed with the Idaho Department of Water Resources at victoria.wigle@idwr.idaho.gov and served a true and correct copy of the foregoing **SURFACE WATER COALITION PROPOSED FINDINGS OF FACT & CONCLUSIONS OF LAW** by electronic mail and U.S. Mail, to:

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