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DEPARTMENT OF
WATER RESOURCES

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Attorneys for Rangen, Inc.

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF THE PETITION
FOR DELIVERY CALL OF RANGEN,
INC.'S WATER RIGHT NOS. 36-02551
& 36-07694

Docket No. CM-DC-2011-004

**RANGEN, INC.'S PROPOSED
FINDINGS OF FACT AND
CONCLUSIONS OF LAW**

COMES NOW, Rangen, Inc. ("Petitioner" or "Rangen"), by and through its attorneys of record, Robyn M. Brody of Brody Law Office, P.L.L.C.; J. Justin May of May, Browning & May, P.L.L.C.; and Fritz X. Haemmerle of Haemmerle & Haemmerle, P.L.L.C., and hereby submits its *Proposed Findings of Fact and Conclusions of Law*.

FINDINGS OF FACT

A. Rangen, Inc.

1. Rangen was started in 1925 by Theodor Rangen. The company was formally incorporated in 1935 and has been in business for 88 years.

2. Rangen is an agricultural company. Its operations include, the buying and selling of commodities (e.g., dry edible beans, grains), manufacturing of general feeds (e.g., feeds for land and air animals), and aquaculture.

3. Rangen's aquaculture division manufactures fish feed and operates the Rangen Aquaculture Research Center, a cold water trout facility also known as the "Research Hatchery."

4. Rangen built the Research Hatchery in 1962 and has been raising fish there for fifty plus years.

5. The Research Hatchery is located a few miles South of Hagerman. The Hagerman Valley has a unique water source that is ideal for raising trout because it is 59 degrees year round.

6. The Research Hatchery consists of sixty plus acres of land and is situated along a canyon rim.

7. Rangen uses the Research Hatchery to raise fish for conservation for Idaho Power Company, commercial sales and research.

B. Rangen's Water Rights.

8. Rangen has the following water rights:

Water Right No.:	36-00134B	36-00135A	36-15501	36-02551	36-07694
Priority Date:	October 9, 1884	April 1, 1908	July 1, 1957	July 13, 1962	April 12, 1977
Beneficial Use:	Irrigation (0.09 cfs) and Domestic (0.07 cfs)	Irrigation (0.05 cfs) and Domestic (0.05 cfs)	Fish Propagation	Domestic (0.10 cfs) and Fish Propagation (48.54)	Fish Propagation
Diversion Rate:	0.09 cfs	0.05 cfs	1.46 cfs	48.54 cfs	26.0 cfs
Period of Use:	Jan. 1 - Dec. 31 (Domestic) Feb. 15 - Nov. 30 (Irrigation)	Jan. 1 - Dec. 31 (Domestic) Feb. 15 - Nov. 30 (Irrigation)	Jan. 1 - Dec. 31	Jan. 1 - Dec. 31	Jan. 1 - Dec. 31

9. Rangen has made this Delivery Call based on Water Right Nos. 36-02551 and 36-07694. Both water rights were originally obtained through the permit and licensing process and were subsequently adjudicated in the Snake River Basin Water Adjudication (“SRBA”) resulting in the issuance of Partial Decrees in Rangen’s favor.

10. The Partial Decree for Water Right No. 36-02551 describes the source of the water as: “Source: Martin-Curren Tunnel; Tributary: Billingsley Creek.”

11. The Partial Decree for Water Right No. 36-07694 describes the source of the water as: “Source: Martin-Curren Tunnel; Tributary: Billingsley Creek.”

12. Rangen has been using the spring water that forms the headwaters of Billingsley Creek to raise fish for more than fifty years. As it has done for fifty years, Rangen continues to divert and use not only the water from the mouth of the Martin-Curren Tunnel, but also from the springs on the talus slope where the tunnel is located.

13. Rangen's Partial Decrees for both water rights Nos. 36-02551 and 36-07694 identify the point of diversion as: T07S R14E S32 SESWNW (hereinafter referred to as "10 acre tract" or "Eastern Parcel").

14. Rangen has a diversion structure that lies within the Eastern Parcel and the quarter/quarter/quarter section immediately adjacent to the 10 acre tract ("Western Parcel"). The mouth of the Curren Tunnel, concrete boxes called the Farmers Box and the Rangen box, various pipes and the talus slope are located within the Eastern Parcel. The dam and concrete pipeline to the Large Raceways are located within the Western Parcel.

15. Water rights 36-02551 and 36-07694 are based on licenses. Both licenses describe point of diversion as T07S R14E S32 SW1/4NW1/4, which includes the Eastern Parcel and the Western Parcel.

16. Rangen has diverted water from the entire SW1/4NW1/4 since the time the licenses were issued.

17. Rangen employs reasonable diversion and conveyance efficiency and conservation practices.

18. There are no reasonable alternative means of diversion.

C. Water Measurements.

19. Rangen has been measuring water flows at the Research Hatchery since 1966.

20. Rangen uses a method of water measurement called "sticking the weir" which involves placing a ruler on top of a raceway checkboard to measure the head and then converting that measurement to cubic feet per second. Raceway checkboards are not considered a standard measuring device, but IDWR accepts measurements using these structures if there is an accuracy of +/- 10%. Although Rangen likely under-measures actual flows, IDWR and the watermaster have always accepted Rangen's water measurements. Most of the under-measurement in

Rangen's case is the result of the conversion table Rangen uses rather than measurement technique. Rangen's measurements are within the +/- 10% accuracy level acceptable by IDWR standards.

21. The location of the measurements for Rangen's water are well-established and have always been recognized by the Department as follows:

The flow measurements that are considered to be representative of the total supply of water available to the Rangen hatchery facilities under water right nos. 36-15501, 36-02551, and 36-07694, consist of the sum for the discharge from raceways designated by Rangen as the "CTR" raceways and the flow over the check "Dam." The dam is sited upstream for the discharge points from the CTR raceways and downstream from the discharge points from raceways designated by Rangen as the "Large" raceways. The sum of the discharge from the CTR raceways and the flow over the check dam is considered to be representative of the total supply of water available even though that at times some of the flow over the check dam may include water flowing from small springs downstream from the diversion to the Large raceways, water discharged from the Large raceways that was not diverted through the CTR raceways and irrigation return flows.

D. Rangen's Use of Water.

22. Rangen has been beneficially using water, without waste, at its Research Hatchery to raise fish for fifty plus years under water Right Nos. 36-02551 and 36-07694. Rangen raises fish for multiple purposes: (1) commercial sale; (2) conservation fish for Idaho Power Company; and (3) research.

23. The number of fish that can be raised in the facility is dictated substantially by the amount of water available.

24. Rangen uses industry standard metrics known as a density index and flow index to determine how many fish can be raised based upon the size of the rearing containers and the flow of water.

25. The applicable density index and flow index used depends upon whether the fish are being raised for commercial purposes, conservation or research. The density indexes and flow indexes used by Rangen are reasonable.

26. As a result of decreased spring flows at the Research Hatchery, the majority of the raceways at the Research Hatchery are now empty and Rangen raises fewer fish. In addition, research is more difficult to conduct. Rangen has had to lay off staff and reduce the size of its operation.

27. If more water were available at the Research Hatchery, Rangen could use that water to raise more fish.

28. Rangen has gone to considerable expense and effort to divert water to the Research Hatchery.

29. The Department has observed and evaluated Rangen's use of water since at least 1992. To date, the Department has never questioned the way Rangen has diverted or measured its water.

E. Respondents' Use of Water.

30. There is no evidence which shows that the Idaho Ground Water Appropriators ("IGWA"), City of Pocatello or Fremont-Madison Irrigation District (collectively "Respondents") have been using their water beneficially and without waste.

F. Snake River Plain Aquifer.

31. The Snake River Plain is a 15,600 square mile regional aquifer system in the southern portion of Idaho. The plain exists in a graben-like feature, likely created by Middle Miocene crustal extension forces. The graben is primarily filled by Tertiary and Quaternary basalts intercalated with less extensive sedimentary rocks. Basalt deposits are made up of many thinner basalt flows (tens of feet thick) that combine to create cumulative thicknesses in excess

of 1,000 feet. The eastern plain aquifer system is dominated by the Snake River Group basalt layers. Snake River Group basalt deposits are known to be up to 5,000 feet thick in some locations.

32. The Eastern Snake Plain Aquifer (ESPA) is primarily an aquifer consisting of relatively shallow (a few hundred feet deep) and highly transmissive rubble and pillow basalts. Deeper aquifer conditions exist and are likely confined, but little data is available to evaluate them.

33. Sources of recharge into the aquifer include infiltration of precipitation, natural surface water losses, irrigation canal losses, deep percolation of irrigation water, recharge projects, and ground water inflow from tributary basins. Discharge out of the aquifer includes well pumping, spring discharge, ground water flow into surface water features (including the Snake River), and evapotranspiration.

34. The ground water in the ESPA is hydraulically connected to the Snake River and tributary surface water sources. One of the locations at which a direct hydraulic connection exists between the ESPA and springs tributary to the Snake River is the Rangen spring complex.

G. Ground Water Pumping Has Contributed to Declining Spring Flows at the Curren Tunnel.

35. Between the 1960s and the present, discharge of the Rangen spring complex has decreased in response to changes in the ESPA water budget. These changes include increased groundwater pumping, decreased incidental recharge associated with surface water irrigation, and changes in natural recharge derived from precipitation.

36. Between 1966 and 2011, the average annual discharge at the Rangen spring complex decreased from 51 cfs to 15 cfs.

37. Ground water pumping is one of the causes of the declining spring flows at the Rangen spring complex. 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 well. 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, including springs in the Thousand Springs area. When the depletionary effects reach a hydraulically-connected reach of the Snake River or the points of discharge for springs in the Thousand Springs area, reductions in flow begin to occur in the form of losses from the river, reductions in spring discharge, or reductions in reach gains to the river.

H. The Model.

38. The Department uses a calibrated numerical ground water model to quantify the effects from ground water pumping.

39. The Department's model was developed in an open, collaborative environment, with guidance from the Eastern Snake Hydrologic Modeling Committee (ESHMC).

40. The ESHMC was formed out of the Idaho Technical Committee on Hydrology (the ITCH Committee) in approximately 2000 to serve as an advisory group for updating and improving the ESPA model.

41. Experts retained by parties to this call participated heavily in both the ITCH Committee and the ESHMC. Dr. Charles Brockway and Greg Sullivan were each members of the ITCH Committee. Dr. Brockway and Mr. Sullivan became members of the ESHMC when it was formed in 2000. IGWA expert Dr. Charles Brendecke, Rangen experts Dave Colvin and Jim Brannon, as well as Fremont Madison Irrigation District expert Bryce Contor were also members of the ESHMC.

42. The ESHMC provided a forum for discussing model design, providing interested parties the opportunity for technical review and input throughout the model development process. Decisions regarding the conceptual model, model grid size, drain elevations, locations of transmissivity pilot points, spring discharge and aquifer head targets, the location of general head boundaries, calibration bounds, and other model features were presented to the ESHMC with opportunity for committee members to provide comments and suggest alternative approaches.

43. The Department used previous versions of its model, ESPAM1.0 and ESPAM1.1, to evaluate Rangen's first delivery call, which was initiated in October 2003.

44. The current version of the Department's updated model is ESPAM2.1.

45. The Director of IDWR set forth a list of criteria to be completed prior to the adoption and use of this updated model. The list of criteria included calibration, validation, and an uncertainty analysis.

E. Calibration.

46. A model is well calibrated if the model output closely matches what is observed in historic time series data sets.

47. Model calibration involves the adjustment of model parameters including transmissivity, aquifer storage, riverbed conductance, drain conductance, general head boundary conductance, and components of the water budget until model generated aquifer water levels and discharges match observed values/calibration targets.

48. The updated model was calibrated utilizing a parameter estimation tool known as PEST. During calibration, PEST runs the modeling code thousands of times, comparing model-generated values with field observations. The calibration is optimized by minimizing the

weighted sum of the squared residuals for the difference between model-generated values and field observations.

49. One of the changes made for the updated model was the development and utilization of calibration targets for spring flow.

50. The spring calibration targets are categorized into three groups based upon the nature of the available data. Group A springs include springs that are measured by the USGS or the IDWR. Group B springs are measured and reported by water users. Group C springs are not routinely measured or reported.

51. Monthly flow data from Group A and B springs were used were used to develop the spring discharge calibration targets. From 2005 - 2012 the ESHMC and the Department spent considerable time developing and reviewing both agency data and discharge data for those particular spring-flow targets. The data that was presented or collected by the Department or anyone else was reviewed by the committee. And where there were problems or decisions that had to be made, they were reviewed by the ESHMC.

52. The Rangen spring complex was included as a Group B spring.

53. Calibration of the updated model began in 2010. As calibration runs were completed, they were presented to the committee for review and discussion.

54. In June or July 2012, the committee agreed upon a calibration of the updated model. This calibrated model is referred to as ESPAM2.0 and was adopted by the Director for use in this call.

55. After the adoption of ESPAM2.0, a data error was discovered in the water budget in the Mud Lake area.

56. The Mud Lake error was fixed and the updated model was recalibrated. This recalibrated updated model is referred to as ESPAM2.1.

57. There was little difference between the calibration of ESPAM2.0 and ESPAM2.1.

58. Like ESPAM2.0, ESPAM2.1 is a well calibrated model.

59. ESPAM2.1 is well calibrated to the Rangen spring complex.

F. Validation.

60. Validation is an attempt to demonstrate a calibrated model's performance for a period of time outside the calibration period.

61. A validation analysis was performed with the result that IDWR had no significant concerns or limitation regarding the use of ESPAM-2.1. ESPAM2.1 went through a validation process and the Department concluded that it was not invalidated. That information was made available to the committee and the committee did not object. All the experts who testified agree with the IDWR conclusion and it is their opinion that these validation results further support the use of ESPAM 2.1 as the best available science.

G. Uncertainty.

62. The Department performed an uncertainty analysis utilizing the "dual calibration" predictive analysis mode of PEST. This uncertainty analysis was not intended to provide a confidence interval range or probability distribution on the predictions of ESPAM2.1. However, the results of the uncertainty analysis provide confidence in the predictions of ESPAM2.1.

63. The best available predictions of junior pumping impacts to the Rangen spring complex are those made by ESPAM2.1.

64. The modeling process that went into producing ESPAM2.1 resulted in a very "robust model"; i.e. a high quality model with good calibration results and accurate predictions.

65. The Mud Lake error provided an unintentional water balance uncertainty analysis demonstrating the robustness of ESPAM2.1. Despite the error in water balance input data, the calibration results between ESPAM2.0 and ESPAM2.1 are very similar.

66. The efforts of Dr. Bredecke and Bern Hinckley to create alternative models further demonstrated the robustness of ESPAM2.1. IGWA's experts, Dr. Bredecke and Bern Hinckley created three new models with significant changes near the Rangen spring complex. These three new models were based in part upon Mr. Hinckley's speculations regarding the local hydrogeology near the Rangen spring complex. The purpose of these "alternative" models was to show that ESPAM2.1 has significant conceptual uncertainty by demonstrating that the different models would show different results from ESPAM2.1. However, the results of Dr. Bredecke and Mr. Hinckley's "heroic" efforts to change the model were predicted impacts at the Rangen spring complex similar to those shown by ESPAM2.1.

67. The alternative models proposed by IGWA's experts provide further evidence that ESPAM2.1 is a robust model and represents the best available science for predicting response to spring flows of curtailment of junior groundwater pumping in the ESPA and boundaries of the ESPAM2.1 model.

H. The Department Has Adopted ESPAM2.1 For Use In This Proceeding.

68. With the assistance of the ESHMC, the Department performed the calibration, validation, and uncertainty analysis requested by the Director. The Department subsequently adopted ESPAM2.1 for use in this proceeding.

I. Impact of Groundwater Pumping Junior to July 13, 1962.

69. ESPAM2.1 predicts that curtailment of groundwater irrigation junior to July 13, 1962 within the model boundary would increase discharge at the Rangen spring cell by 17.9 cfs.

J. Trimline.

67. There was no testimony from any party proposing the use of any trimline.

CONCLUSIONS OF LAW

1. The Department's Adjudication Rules specify how water sources are to be listed in the claim forms used in the SRBA. The claim forms are the basis for the Partial Decrees that are entered. Rule 37.03.01.060.02.c states:

Source of Water Supply. The source of water supply shall be stated at item three (3) of the form.

i. For surface water sources, the source of water shall be identified by the official name listed on the U.S. Geological Survey Quadrangle Map. If no official name has been given, the name in local common usage should be listed. If there is no official name, the source should be described as "unnamed stream" or "spring." The first named downstream water source to which the source is tributary shall also be listed. For ground water sources, the source shall be listed as "ground water."

IDAPA 37.03.01.060.02.c.

2. The "Martin-Curren Tunnel" is the name of Rangen's water source in local common usage. This designation is used to refer not only to the mouth of the Curren Tunnel, but the entire Rangen spring complex. The source for Rangen's water right Nos. 36-02551 and 35-07694 is the entire Rangen spring complex.

3. The phrase "Martin-Curren Tunnel" is ambiguous. "Martin-Curren Tunnel" is a regional identifier that includes not only the mouth of the physical tunnel itself, but also the springs on the talus slope that form the headwaters of Billingsley Creek.

4. The 10 acre tract identified in Rangen's Partial Decrees is the proper legal description for Rangen's diversion structure based on IDAPA 37.03.01.060.05.d.i as that rule existed at the time Rangen's Partial Decrees were entered. This 10 acre parcel is the nearest 10 acre parcel to Rangen's diversion and includes the spring water that forms the headwaters of Billingsley Creek. Rangen can legally divert all of the spring water that forms the headwaters of

Billingsley Creek which it has been using for the past fifty plus years, which includes all spring water sources in T07S SW1/4NW1/4 S32.

5. The Conjunctive Management Rules help the Department evaluate and administer water delivery calls such as this one. “The rules acknowledge all elements of the prior appropriation doctrine as established by Idaho law.” American Falls Reservoir No. 2 v. IDWR, 143 Idaho 862, 873, 154 P.3d 433, 444 (2007). “Idaho law,” as defined by CMR 10.12, means “[t]he constitution, statutes, administrative rules and case law of Idaho.” Id.

6. To initiate a water delivery call, the CMRs “require the petitioner, that is the senior water rights holder, to file a petition alleging that by reason of diversion of water by junior priority ground water rights holders, the petitioner is suffering material injury.” Id. at 877, 154 P.3d at 448. Rule 40.03 is the starting point of that analysis. It states:

In determining whether diversion and use of water under rights will be regulated under Rule Subsection 040.01.a or 040.01b, 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 waters as described in Rule 42. The Director will also consider whether the respondent junior-priority water right holder is using water efficiently and without waste.

IDAPA 37.03.11.040.03.

7. The term “material injury” is defined in the CM Rules as: “[h]indrance 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.”

8. Rule 42 is labeled “Determining Material Injury and Reasonableness of Water Diversions.” IDAPA 37.03.11.042 (emphasis added). The Rule states:

Factors the Director may consider in determining whether the holders of water rights are suffering material injury and using water efficiently and without waste include, but are not limited to the following:

a. The amount of water available in the source from which the water right is diverted.

b. The effort or expense of the holder of the water right to divert water from the source.

c. Whether the exercise of junior-priority ground water rights individually or collectively affects the quantity and timing of when water is available to, and the cost of exercising, a senior-priority surface or ground water right. This may include the seasonal as well as the multi-year and cumulative impacts of all ground water withdrawals from the area having a common ground water supply.

d. If for irrigation, the rate of diversion compared to the acreage of land served, the annual volume of water diverted, the system diversion and conveyance efficiency, and the method of irrigation water application.

e. The amount of water being diverted and used compared to the water rights.

f. The existence of water measuring and recording devices.

g. The extent to which the requirements of the holder of a senior-priority water right could be met with the user's existing facilities and water supplies by employing reasonable diversion and conveyance efficiency and conservation practices;

h. The extent to which the requirements of the senior-priority surface water right could be met using alternate reasonable means of diversion or alternate points of diversion, including the construction of wells or the use of existing wells to divert and use water from the area having a common ground water supply under the petitioner's surface water right priority.

IDAPA 37.03.11.042.01(a)-(h).

9. The Conjunctive Management Rules require the Department to evaluate the use of both the senior and junior users.

In determining whether diversion and use of water under rights will be regulated under Rule Subsection 040.01.a. or 040.01.b., 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 waters as described in Rule 42. The Director will also consider whether the

respondent junior-priority water right holder is using water efficiently and without waste.

IDAPA 37.03.11.040.03.

10. Rangen has been beneficially using water under Water Right Nos. 36-02551 and 36-07694 to raise fish at the Research Hatchery for fifty plus years.

11. Rangen uses water efficiently and without waste.

12. There is no evidence that the Respondents or any of IGWA's members are using their water beneficially and without waste.

13. A junior user cannot be excluded from curtailment in the absence of evidence that user is using water efficiently and without waste.

14. Rangen has gone to considerable expense and effort to divert water to the Research Hatchery. Rangen's diversion structure is described in detail above in the Findings of Fact.

15. Rangen employs reasonable diversion and conveyance efficiency and conservation practices.

16. There are no reasonable alternative means of diversion.

17. Water Rights Nos. 36-02551 and 36-07694 are not being filled. The spring flows at the Research Hatchery have been declining for decades. As of the first day of the hearing of this matter, Rangen was receiving less than 12 cfs of the 74.54 cfs of water which is at issue.

18. The ground water in the ESPA is hydraulically connected to the Snake River and tributary surface water sources. One of the locations at which a direct hydraulic connection exists between the ESPA and springs tributary to the Snake River is the Rangen spring complex.

19. Junior-priority groundwater pumping within the Eastern Snake Plain aquifer and the boundaries of the ESPAM2.1 model is hindering and impacting Rangen's use of its water rights at the Research Hatchery.

20. When responding to a water call, and in consideration of CMR 42 factors, "the burden is not on the senior water rights holder to re-prove an adjudicated right." American Falls Reservoir No. 2 v. IDWR, 143 Idaho 862, 878, 154 P.3d 433, 449 (2007). "Once a decree is presented to an administrative agency or court, all changes to that decree, permanent or temporary, must be supported by clear and convincing evidence." A&B Irrigation District v. IDWR, 153 Idaho 500, 284 P.3d 225, 249 (2012).

21. A junior water right holder has the burden of establishing non-injury, and any other theory justifying a senior not obtaining its water, by clear and convincing evidence.

22. A junior water right holder has the burden of establishing non-injury, and any other theory justifying a senior not obtaining its water, by clear and convincing evidence. Specifically, in addition to the junior's general burden of proving "no injury" and "futile call" by clear and convincing evidence, the junior bears the burden by clear and convincing evidence as to the following specific issues: (1) establishing waste, A&B Irrigation District v. IDWR, 153 Idaho 500, 284 P.3d 225, 241 (2012), citing Gilbert v. Smith, 97 Idaho 735, 739, 552 P.2d 1220, 1224 (1976); (2) water not being put to a beneficial use, Id.; and (3) forfeiture or abandonment, Id., citing Crow v. Carlson, 107 Idaho 461, 467, 690 P.2d 916, 922 (1984).

23. Rangen is not wasting water by raising fish for conservation purposes. Rangen is beneficially using the water in a reasonable manner and in a manner which benefits the public.

24. Rangen's practices are reasonable, and the opposing parties have not carried their burden of proving waste by clear and convincing evidence.

25. The testimony presented by the opposing parties does not satisfy the clear and convincing standard of proof that is required under Idaho law.

26. The opposing parties have not presented any evidence of whether they are using water efficiently and without waste.

27. ESPAM2.1 is the best available science. ESPAM2.1 is suitable and adequate for quantifying the effect of curtailment of junior ground water pumping upon the flows at the Rangen spring complex.

28. Curtailment of junior ground water pumping on the ESPA would result in significantly higher spring flows at the Rangen spring complex.

29. Based on simulations using the Department's ground water model ESPAM2.1, Rangen is being materially injured by junior-priority ground water users in the Eastern Snake River Plain Aquifer. The model simulations show that permanent curtailment of the diversion and use of ground water use junior to July 13, 1962 would increase the discharge of water from the complex of springs in the Thousand Springs area to Rangen by a total average of 17.9 cfs at steady state conditions.

30. All the experts who testified all agreed with Dr. Brendecke's paper entitled "Comments on Trim Line and Model Uncertainty," wherein Dr. Brendecke opined that, "The trimline has nothing to do with model uncertainty." To the extent all parties and IDWR agree that ESPAM2.1 is currently the best available science for determining impacts, any application of a trimline, which has nothing to do with science or modeling, would simply constitute an arbitrary or capricious act.

DATED This 21 day of June, 2013.

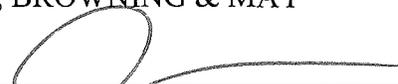
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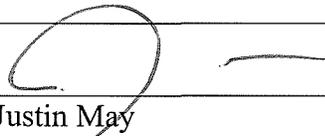
CERTIFICATE OF SERVICE

The undersigned, a resident attorney of the State of Idaho, hereby certifies that on the 21 day of June, 2013, he caused a true and correct copy of the foregoing document to be served by email and first class U.S. Mail, postage prepaid upon the following:

Original: Director Gary Spackman Idaho Department of Water Resources P.O. Box 83720 Boise, ID 83720-0098 Deborah.Gibson@idwr.idaho.gov	Hand Delivery <input checked="" type="checkbox"/> U.S. Mail <input type="checkbox"/> Facsimile <input type="checkbox"/> Federal Express <input type="checkbox"/> E-Mail <input checked="" type="checkbox"/>
Garrick Baxter Chris Bromley Idaho Department of Water Resources P.O. Box 83720 Boise, Idaho 83720-0098 garrick.baxter@idwr.idaho.gov chris.bromley@idwr.idaho.gov	Hand Delivery <input type="checkbox"/> U.S. Mail <input type="checkbox"/> Facsimile <input type="checkbox"/> Federal Express <input type="checkbox"/> E-Mail <input checked="" type="checkbox"/>

<p>Randall C. Budge Candice M. McHugh Thomas J. Budge RACINE, OLSON, NYE, BUDGE & BAILEY, CHARTERED P.O. Box 1391 101 South Capitol Blvd, Ste 300 Boise, ID 83704-1391 Fax: 208-433-0167 rcb@racinelaw.net cmm@racinelaw.net tjb@racinelaw.net</p>	<p>Hand Delivery <input type="checkbox"/> U.S. Mail <input type="checkbox"/> Facsimile <input type="checkbox"/> Federal Express <input type="checkbox"/> E-Mail <input checked="" type="checkbox"/> <input type="checkbox"/></p>
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<p>Dean Tranmer City of Pocatello P.O. Box 4169 Pocatello, ID 83201 dtranmer@pocatello.us</p>	<p>Hand Delivery <input type="checkbox"/> U.S. Mail <input type="checkbox"/> Facsimile <input type="checkbox"/> Federal Express <input type="checkbox"/> E-Mail <input checked="" type="checkbox"/> <input type="checkbox"/></p>
<p>John K. Simpson Travis L. Thompson Paul L. Arrington Barker Rosholt & Simpson, L.L.P. 195 River Vista Place, Suite 204 Twin Falls, ID 83301-3029 Facsimile: (208) 735-2444 tlt@idahowaters.com jks@idahowaters.com</p>	<p>Hand Delivery <input type="checkbox"/> U.S. Mail <input type="checkbox"/> Facsimile <input type="checkbox"/> Federal Express <input type="checkbox"/> E-Mail <input checked="" type="checkbox"/> <input type="checkbox"/></p>
<p>C. Thomas Arkoosh Arkoosh Law Offices 802 West Bannock, Suite 900 Boise, ID 83701 Tom.arkoosh@arkoosh.com</p>	<p>Hand Delivery <input type="checkbox"/> U.S. Mail <input type="checkbox"/> Facsimile <input type="checkbox"/> Federal Express <input type="checkbox"/> E-Mail <input checked="" type="checkbox"/> <input type="checkbox"/></p>
<p>W. Kent Fletcher Fletcher Law Office P.O. Box 248 Burley, ID 83318</p>	<p>Hand Delivery <input type="checkbox"/> U.S. Mail <input type="checkbox"/> Facsimile <input type="checkbox"/> Federal Express <input type="checkbox"/></p>

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 J. Justin May