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DEPARTMENT OF
WATER RESOURCES

Review of

Expert Report in the Matter of Rangen Inc.
Availability of Spring Flow and Injury to Water Rights
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1.0 Introduction

This report presents rebuttal of certain statements and claims presented in the December 21, 2012, expert report by Brockway, Colvin and Brannon submitted on behalf of Rangen, Inc. ("Rangen report"). The format of this rebuttal addresses each section of the Rangen report, presenting a brief overview of the primary issues for rebuttal raised in the section followed by more detailed responses to specific statements and claims. A summary of my rebuttal opinions is found at the end, formatted as responses to the summary opinions found in the Rangen report.

2.0 Rangen Report Section A "Background"

2.1 Overview

The rebuttal issues that are raised in this section of the Rangen report are those related to the circumstances of development of the Martin-Curren Tunnel; to the nature of the water rights held by Rangen, Inc.; to the findings of previous Orders related to Rangen; and to the presentation of historical groundwater development.

2.2 Tunnel Development

The Rangen report contains the following statements concerning development of the Martin-Curren Tunnel:

> *"Historic anecdotal evidence indicates that the Curren Tunnel was advanced into the Malad Basalt above the Rangen Research Hatchery in order to facilitate delivery of high quality spring water." (Sec. A.3).*
>
> *"USGS records for Curren Tunnel indicate 50 cfs in 1902 and 96 cfs in 1917 (USGS, 1958)." (Sec. A.2).*

The Rangen report does not present any of the claimed "historic anecdotal evidence." The historical record shows that the Tunnel had been excavated by 1884 to supply irrigation water by gravity to lands south of Billingsley Creek (New Int'l Mortgage, 1932). Figure 2.1 shows the parcels of land on which irrigation water from the Tunnel was used. Because these lands are higher in elevation than Billingsley Creek, it is clear that the Tunnel was placed at the elevation it is in order to facilitate gravity delivery of water to them.

The earliest aquaculture right at the Rangen site has a priority date of 1957 and Rangen Research Hatchery construction did not begin until 1962 (Twin Falls Times-News article, December 30, 1962). Review of the depositions of Rangen staff indicate that Rangen has made no modifications or improvements to the Tunnel as they found it, other than emplacement of a 6" PVC pipe to segregate and protect a portion of Tunnel discharge for domestic and landscape irrigation uses. Plainly the Tunnel was not excavated to supply 'high quality spring water' for aquaculture use (nor does the Rangen report present any evidence that it was) and there would have been no reason for Tunnel excavators to seek 'high quality spring water' for irrigation use.

The USGS record of flows (Nace, 1958) cited in the Rangen report states that the flow measurement point was located "In sec. 36, T. 7 S., R. 13 E., near bridge on county road." Figure 2.2 shows the location of this measuring point relative to the Martin-Curren Tunnel and the Rangen facility. Flows measured at this point would include discharge from the Tunnel and natural spring outlets near Rangen, discharge from "Spring Creek Springs" immediately north of the county road, and return flows from irrigation above the rim, from lands south of Billingsley Creek and from lands served by the Hoagland

Ditch. There is no basis to assert that the cited historical records present discharge from the Martin-Curren Tunnel; such discharge would be only a portion of the recorded flow.

Review of the cited record also shows that the 50 cfs measurement from 1902 was made in April, and that the 96 cfs measurement from 1917 was made in September. Figure 2.3 shows the seasonal variation in Rangen total discharge highlighting the months of April and September. This shows that the higher measurement in September of 1917 may simply reflect the seasonal variation of discharge stemming from surface water irrigation above the rim, as documented in my report of December 21, 2012.

2.3 Rangen Water Rights

The Rangen report contains the following statement regarding the water rights held by Rangen, Inc.:

> *"Rangen owns five (5) water rights with the designated point of diversion as the Rangen Spring or Martin-Curren Tunnel which issues from the Eastern Snake Plain Aquifer (ESPA)." (Sec. A.4)*

The SRBA decrees for all the Rangen water rights unequivocally cite their source as the Martin-Curren Tunnel. These decrees are attached to this report as Appendix A. None of these decrees list the source of the water right as "Rangen Spring."

2.4 Findings of Previous Orders

The Rangen report contains the following statements regarding the findings of previous orders related to water rights held by Rangen, Inc.:

> *"...on May 19, 2005 the Director issued an amended order based on a re-calibrated ESPAM 1.1 model, in which he determined that the Rangen call was futile due to what was perceived uncertainty in the model based upon assumed river gauge error (+/- 10%, i.e. "trim line")." (Sec. A.4)*

Conclusion of Law 25 of the May 19, 2005, Order states that curtailment to supply water to water right 36-02551 "...is futile because an insignificant amount of water would accrue..." to the reach containing Rangen. Conclusion of Law 26 of that Order further states that even if model uncertainty were disregarded, curtailment to benefit water right 36-02551 across "...all of the area included in the ESPA model...would be precluded under principles of the prior appropriation doctrine as established by Idaho law." From these findings and conclusions it is clear the determination that the Rangen call was futile was based on more fundamental principles than "perceived uncertainty" in the model.

> *"The previous determination (Second Amended Order of May 19, 2005) of the estimated increase at Rangan (sic) Spring...was 0.4 cfs." (Sec. A)*

Finding of Fact 80 of the May 19, 2005, Order actually states that curtailment for water right 36-02551 would increase discharge in the Thousand Springs to Malad Gorge reach by an average amount of 0.4

cfs. As Rangen benefits from only a fraction of the discharge in this reach, the increase at Rangen from curtailment would have to have been substantially less than 0.4 cfs.

2.5 Presentation of Historical Ground Water Use

Figure 3 of the Rangen report purports to show cumulative groundwater diversions from the ESPA by priority date over the period 1900 to 2010. Systematic measurement of groundwater pumping did not begin until the 2000s and annual groundwater consumption estimated for ESPAM development purposes only goes back to 1980. Reference to the Rangen report (Sec. A.2) suggests that the figure shows "cumulative discharge authorized by water rights". Presenting such water right data as "diversions" is misleading, especially when placed in comparison, as does Figure 3, to historical annual spring discharge between Milner and King Hill.

The diversion rates specified in water rights are typically instantaneous maximums, e.g., the rate at which water may be diverted to meet the highest daily demand of the irrigation season. These rates cannot be construed as rates of constant year-around flow or consumption. The spring discharges on Rangen's Figure 3, by contrast, are annual average year-around flows. In addition, the permitted diversion rates shown on Figure 3 are for the entire ESPA, while the spring flows on Figure 3 represent only the spring flows below Milner.

Rough estimates of historical groundwater use at various priority dates can be derived from the results of the generic curtailment scenarios used to compare ESPAM1.1 and ESPAM2.1 (Sukow, 2012a). Figure 2.4 is a version of Rangen's Figure 3 upon which I have superimposed the estimated average annual groundwater-related depletion below Milner Dam from the Sukow report. This illustrates in a more comparable way the relative magnitudes of historical spring discharge and groundwater use for the river below Milner.

3.0 Rangen Report Section B "Historical Availability"

3.1 Overview

The rebuttal issues raised in this section of the Rangen report are those related to hydraulic capacities and measurement accuracy.

3.2 Hydraulic Capacity

The Rangen report contains the following statement regarding hydraulic capacities of certain Rangen facilities:

> *"Spring discharge is diverted by Rangen using a 6-inch PVC pipe in the Curren Tunnel, a 12-inch diameter steel pipe at the retaining structure, or a 36-inch concrete pipe in the channel. These pipes can convey 3.6, 14.3, and 59.0 cfs, respectively."* (Sec. B.1)

No evidence is presented substantiating these hydraulic capacity values. There are no measurement devices on any of these pipelines. IDWR evaluation of the 6-inch PVC line in 2001 compared flows estimated by Rangen to measurements using a polysonic meter; at that time, measured flows varied from 9% less than Rangen estimates to 18% more (Yenter, 2003). In his decomposition of Rangen flows, Brannon (2009) estimated flows in the 6-inch PVC line to be 1 cfs. Given that the culinary and irrigation uses of flows in the 6-inch pipeline are consumptive (Yenter, 2003), a capacity in that line of 3.6 cfs raises the possibility of a greater amount of unaccounted-for flow in the Rangen system than has been assumed in estimates of total aquifer discharge.

3.3 Measurement Accuracy

The Rangen report contains the following statements regarding the accuracy of flow measurements at Rangen:

> *"Review of the measurements indicates that the Rangen staff lookup tables are likely to be more accurate than the flow calculations presented in Appendix A." (Sec. B.1)*

No evidence is presented to substantiate that the lookup tables are more accurate than the flow calculations of Rangen's Appendix A. Department review of Rangen measurement methods by Cindy Yenter (2003) determined that the Rangen measurements may systematically underestimate actual flows by 10%. Furthermore, this determination has been stated as a Finding of Fact in previous Departmental Orders related to Rangen (e.g., Order of February 25, 2004, at FF 67; Order of May 19, 2005, at FF 76).

4.0 Rangen Report Section C "ESPAM2.1"

4.1 Overview

The rebuttal issues raised in this section of the Rangen report are those related to the endorsement of ESPAM2.0 by the ESHMC; characterization of differences between model versions ESPAM1.1, 2.0 and 2.1; utilization of superposition techniques for simulation of impacts; and to conclusions drawn from the calibration of ESPAM2.1 to flows at Rangen.

4.2 Recommendation of ESPAM2.0 and 2.1 by ESHMC

The Rangen report contains the following statement regarding recommendation of ESPAM2.0 by the Eastern Snake Hydrologic Modeling Committee (ESHMC):

> *"This upgrade, ESPAM 2.0, was recommended by the ESHMC and adopted by IDWR in July 2012." (Sec. C.1)*

It should be noted that three ESHMC members, myself among them, added qualifications to the recommendation of the committee to the effect that the model was not necessarily suited to analysis of any and all groundwater issues and that some level of uncertainty in model predictions remained. These qualifications were also added to the recommendation recently adopted for ESPAM2.1.

4.3 Curtailment Difference between ESPAM1.1 and 2.1

The Rangen report contains the following statement regarding the curtailment difference between ESPAM1.1 and 2.1.

> *"Improvement in the estimates of model input and calibration target data for version ESPAM2.1 resulted in the consumptive use curtailed using ESPAM2.1 being 17-21% higher than with ESPAM1.1. This is generally attributed to increased confidence in model inputs and calibration targets, and their contribution to increased confidence in model output." (Sec C.6.4)*

There is nothing in the Department's report (Sukow, 2012b) on this comparison that attributes the increase in curtailed consumptive use to "increased confidence in model inputs and calibration targets." Most changes in model inputs were associated with extension of the model period and disaggregation to monthly stress periods. The curtailment difference is largely due to the use of different time periods to represent current conditions. From Sukow (2012b, p. 6) "Results from the steady state simulations indicate that changes in model input data result in a 17% to 21% increase in curtailed consumptive use from ESPAM1.1.... This results partly from an increase in junior irrigated land area and partly from an increase in crop irrigation requirement."

4.4 Differences between ESPAM2.0 and 2.1

The Rangen report contains the following statement concerning the differences between model versions ESPAM2.0 and 2.1.

> *"None of these exercises indicate that there is substantive difference regarding the comparison of ESPAM2.0 to ESPAM 2.1 prediction for the Rangen spring." (Sec. C.1)*

In fact, many ESHMC members were somewhat surprised at the differences between ESPAM2.0 and ESPAM2.1, particularly that a relatively small error correction (about 1% of the aquifer water budget) in the far northeastern end of the model would manifest itself as significant changes to model parameters, i.e. drain conductances and model transmissivities, in the far western end. These changes, which were discussed in my December, 2012, report, produced curtailment scenario results that differ between ESPAM 2.0 and ESPAM 2.1 by up to 30% of the ESPAM 2.0 simulated gain.

Table 4.1 shows the change in curtailment scenario results for selected springs (those named in Table 2 of the Rangen report) using ESPAMv2.0 and ESPAMv2.1. Note that the changes in results are not confined to the area around Mud Lake where the error was noted.

4.5 Utilization of Superposition and Constant Transmissivity

The Rangen report contains the following statement concerning the utilization of superposition.

> *"Utilization of a ground water model in the superposition mode to simulate change in an output variable caused by changes in depletion within the aquifer is implicitly more certain than modeling differences in the simulation of the absolute value of the output with a fully populated model." (Sec. C.2)*

The statement that modeling in superposition mode is more certain is unjustified. While the use of superposition may reduce the likelihood of arithmetic error in evaluating model results, there is nothing in the conversion from a fully populated model to a superposition model that reduces uncertainty of model inputs or results. In fact, conceptual uncertainty likely increases due to assumptions (such as extent of perched river reaches) made in the conversion. However, the more significant point is that both the steady state and the fully populated models err in their underlying assumptions of linearity, particularly in the vicinity of Rangen.

The principle of superposition applies to linear and homogenous systems. Because superposition simplifies the problem solving in groundwater models it is sometimes applied even when conditions of the underlying assumptions are not strictly met. Reilly (1987) describes these conditions as follows:

> *"Flow in confined aquifers is described by linear differential equations, and flow in unconfined aquifers by nonlinear differential equations...if the problem concerns an unconfined aquifer, we might consider using superposition if the regional drawdown in the aquifer is small relative to the full saturated thickness of the aquifer (as a rule of thumb, 10% or less)...However, if a new distribution of stress is introduced that causes appreciable*

movement of the interface, the response of the same system could become highly non-linear." (Reilly, 1987; USGS)

The ESPAM model does take advantage of this common simplification, citing "the generally considerable saturated thickness of the ESPA" (IDWR, 2013). While the assumption may be justified in general, it is not justified in representing the site specific characteristics at Rangen. As discussed in my December 2012 report, seasonal water level fluctuations and predicted water level changes (due to curtailment) are nearly 100% of the saturated thickness immediately above the Tunnel and about 10% of the thickness above the lower springs at Rangen. Actual aquifer behavior at Rangen is thus susceptible to the non-linear response described by Reilly. This potential problem was at least partially acknowledged in the ESPAM1.1 documentation, which states that "...some of Whitehead's presumed data points were used, some were modified and several points were established in the Thousand Springs region to establish the minimum aquifer thickness of 200 ft." (Cosgrove, et al., 2006). It is also at least partially acknowledged by Rangen's presentation of alternative prediction methods (discussed later in this report) which all show non-linear relationships between observed aquifer water levels and Rangen discharge.

As pointed out by Hinckley (2012), by assuming constant transmissivity "No explicit 'aquifer thinning' is possible in the ESPAM2.1 structure, nor can the calibration assigned transmissivity be responsive to temporal changes in water levels." He further notes that there is no decrease in model transmissivity along the western edge of the model related to either decreasing aquifer thickness (as is evident in the geology) or permeabilities, and that transmissivities are actually higher along the Hagerman Rim cells than in nearby spring areas associated with higher flow rates.

The curtailment scenario discussed by Rangen represents a "new distribution of stress" as described by Reilly (1987). The assumption of linearity in this case is questionable; see Section 4.6 and Figure 4.1.

4.6 ESPAM2.1 and Rangen Calibration

The Rangen report contains the following statements concerning the ESPAM2.1 calibration.

"The selection and development of calibration targets reflects the intended predictive capacity of the model." (Sec C.3)

This statement suggests that the addition of individual spring targets in the ESPAM2.1 calibration was specific to the intended use of the model for prediction at individual springs. ESPAM2.1 documentation (p. 1) clearly states that the objective of ESPAM2.1 was to update ESPAM1.1 by extension of the model period, disaggregation to monthly stress periods, incorporation of time-variable representation of irrigated

land and available METRIC ET data. Targets were chosen to improve temporal resolution of aquifer behavior.

Throughout ESPAM1.1 and ESPAM2.1 documentation are references to the intended use of the model for regional applications. The conclusions in the ESPAM2.1 documentation begin with the following statement: "The ESPAM2.1 is a regional groundwater model. For this reason, the model is best used for broad-scale predictions. The user should avoid the temptation to model localized phenomena, such as the impact of a single well on a specific spring. This limitation exists because the input data used to compute the agricultural impacts are still coarse. Data are available to support fairly accurate estimates of surface-water diversions on an entity scale, precipitation on a 4 km x 4 km scale, and crop distribution on a county scale." ESPAM2.1 is further limited in its application by its conceptual model.

> *"...the ESPAM 2.1 model is capable of simulating impacts on individual springs, including the Rangen spring." (Sec C.3)*

This statement from the Rangen report is presumably based on this statement from ESPAM2.1 documentation (p. 86/87): "Unlike ESPAM1.1, ESPAM2.1 can be used to compute regional impacts on selected individual springs because it was calibrated to spring-specific discharge measurements." This latter statement presumes that acceptable calibration implies accurate prediction. Acceptable calibration is a necessary but not sufficient condition for accurate prediction; accurate predictions also rely on proper representation of underlying hydro-geology. As stated by Klĕmes (1986), "It is not enough that models work well, they must work well for the right reasons."

Tables 4.2 and 4.3 show the relative mean error (ME) and mean absolute error (MAE) over the last 10 years of model calibration for Class A and B springs used in ESPAM2.1 calibration. These tables show that the relative error at Rangen is larger than at any other Class A or B spring used as a calibration target. It may be that ESPAM2.1 can be used to predict impacts on selected springs, but this error summary, combined with the hydro-geologic evaluation of Hinckley (2012), suggests that Rangen is not one of them.

> *"The pumping curtailment scenario is well within the ESPAM2.1 historical model "state space" used during calibration, as the reduction in pumping would return water levels (and therefore spring flows) to values that are still well inside the historically observed range." (Sec. C.7.1)*

This statement is a misapplication of the concept of state space because it evaluates the range in the dependent variable (water levels/spring flow) rather than the independent variable (pumping stress). To evaluate whether curtailment would represent a stress change that is outside the range of model calibration it is necessary to compare the model pumping stress that would exist with curtailment to the pumping stresses that existed during the calibration period.

Figure 4.1 shows such a comparison using Figure 36 from the ESPAM2.1 documentation. Modeled groundwater extraction over the 1985-2008 calibration period is shown by the blue line on Figure 4.1. This line shows that the minimum pumping stress on the aquifer over the calibration period was 1.75

million acre-feet (MAF) per year. The green dotted line on Figure 4.1 is derived from the results of the comparison between ESPAM1.1 and ESPAM2.1 (Sukow, 2012a) and shows the pumping stress that would remain on the aquifer after curtailment to a 1961 priority. This "remaining" pumping stress can be calculated as the pumping stress from all groundwater use junior to 1870 minus the pumping stress from all groundwater use junior to 1961. This remaining stress is 0.97 MAF per year, a value substantially smaller than any groundwater extraction extant over the calibration period.

Curtailment to Rangen's 1962 priority would leave a slightly more residual stress on the aquifer than depicted by the 1961 line, due to groundwater uses occurring under priorities between January 1, 1961, and July 13, 1962. Nevertheless, it can be concluded that curtailment to Rangen's 1962 priority would represent an aquifer stress considerably outside the range of calibration of ESPAM2.1. As is well understood for the simpler example of a regression equation, the use of a model outside its range of calibration substantially decreases the confidence that can be placed on model results.

4.7 ESPAM2.1 Representation of Trends and Variability

The Rangen report makes the following statements regarding the model representation of trends and variability of spring discharge:

> *"...changes in climate and irrigation practices are being accurately modeled." (Sec C.5)*

The only change in irrigation practice represented in ESPAM2.1 is the conversion to sprinkler application methods, which is interpolated from only a few estimates. There is no representation of changes in local water distribution or local improvements to surface water conveyances, such as lining or piping of laterals. The latter are known to have occurred in the area immediately above Rangen (Brendecke, 2012: February 25, 2004, Order at FF 6; May 19, 2005, Order at FF 23).

In fact, its failure to represent these improvements in local irrigation water conveyance would be consistent with the noted tendency of ESPAM2.1 to under-predict Rangen discharge in the early part of the calibration period while over-predicting it in more recent years. If incidental recharge were underestimated in the early part of the calibration period (prior to the noted conveyance improvements), ESPAM2.1 would simulate lower than observed discharge. If incidental recharge is overestimated in the later parts of the calibration period (after the noted conveyance improvements began) ESPAM2.1 would be expected to simulate higher than observed discharge.

> *"The seasonal variations in the spring flows are attributable to seasonal pumping and are accurately represented in the model."* (Sec C.5)

The Rangen report provides no evidence to support this statement. Seasonal variation in spring flow was evident shortly after the advent of surface water irrigation and before any groundwater development, as discussed in my December 2012 report. If seasonal variation in spring flow

was attributable to pumping, then one would expect observed spring flows to be declining over the irrigation season when in fact the opposite is true.

> *"This is another expression of the model having less accurate low flow predictions" (Sec C.5)*

The consistent over-prediction of low flow values in recent years is problematic because this is the starting point for any changes due to curtailment.

4.8 ESPAM2.1 Uncertainty and Validation Scenarios

The Rangen report makes the following statements regarding the ESPAM2.1 uncertainty analysis:

> *"...the maximization/minimization analysis provides upper and lower bounds for the probability distribution with output from the ESHMC-chosen model supplying the most likely outcome (IDWR Wylie 2012a)"* (Sec C.6.1)

> *"Any other result using the current model is statistically less probable and would be inappropriate to use." (Sec C.6.1)*

> *"...the original calibration model still provides the best predictions." (Sec C.6.1)*

> *"The best estimate of the impact on a spring or river reach by any change in depletion (pumping or recharge or other changes) is the unmodified prediction from the ESPAM2.1 model." (Sec C.6.1)*

Nowhere in the PEST documentation is it stated that predictive analysis, as was carried out for ESPAM2.1, provides any information on the probability distributions of prediction errors or "upper and lower bounds" on such distributions. The predictive analysis is essentially a constrained sensitivity analysis; it reveals information about the range of parameter values that can provide a pre-determined overall level of calibration but provides no information on the probability distributions of model prediction error. The PEST documentation does state that such probability distributions can be derived using a Monte Carlo analysis, but such an analysis was not part of the Department's uncertainty analysis of ESPAM2.1.

The predictive analysis procedure insures that the original model will have smaller overall RMSE than either of the maximum/minimum versions identified in the analysis. This does not, however, lead to the conclusion that the model accurately represents everything, everywhere. The evidence shows that ESPAM2.1 fails to accurately represent local hydro-geologic conditions at Rangen. This problem is recognized in the Department's uncertainty report Wylie (2012) "...the maximization/minimization approach employed in this analysis addresses sources of uncertainty due to correlated parameters, it does not address conceptual model errors or impact from measurement error" (p. 8).

> *"It is common in the industry to utilize a ground water model without validation or extensive uncertainty analysis." (Sec C.6.1)*

While it may be true that groundwater models are sometimes used without validation or uncertainty analysis, ASTM D5718-95: Standard Guide for Documenting a Ground-Water Flow Model Application says that best practices include these. The import of decisions based on ESPAM2.1 certainly merits them.

> *"Any modification of the output to qualify the results based on limited or no statistically evaluated procedures is not warranted." (Sec C.6.1)*

The Conjunctive Management Rules call for a wide range of factors to be considered in evaluating material injury, reasonable use, and whether curtailment of junior groundwater users is warranted. Model results have several levels of uncertainty, some of which cannot be readily quantified, but the inability to quantify uncertainty does not disprove its existence or demonstrate that it should be ignored. The ESHMC considered completing an uncertainty analysis to be the third highest priority in developing ESPAM2.0. Simply because time and resource constraints limited the scope of the uncertainty analysis does not justify ignoring the continued existence of uncertainty in model results. This is particularly important because there is no uncertainty about the effects of curtailment on the curtailed users, who will immediately be denied the right to water.

With regard to the validation analysis carried out by the Department, the Rangen report offers the following statement:

> *"...the validation evaluation raised no 'significant concerns or limitation regarding the use of ESPAM2.1." (Sec C.6.3)*

In the validation scenario for 2009 to 2010, error in spring discharge simulation exceeded the range of error found over the calibration period. This is important since curtailment would begin with present, rather than historical, aquifer conditions.

5.0 Rangen Report Section D "Benefits from Curtailment"

5.1 Overview

The primary rebuttal issues raised in this section of the Rangen report relate to the simulated results of curtailment and the benefits of such curtailment to others.

5.2 Results of Curtailment

The Rangen report contains the following statement regarding the simulated results of curtailing groundwater rights junior to July 13, 1962:

> *"Evaluation of the benefits of curtailment of ground water rights junior to July 13, 1962, results in increases in Rangen Spring of approximately 17.9 cfs average annual flow at steady state. This evaluation was performed using the ESPAM 2.1 ground water model assuming curtailment to July 13, 1962, over the entire aquifer." (Sec. D)*

The term "entire aquifer" as used in this statement is not defined. However, by comparison with statements made in Exhibit 2 of Rangen's December, 2011, delivery call and with results of Departmental modeling of generic curtailment scenarios (Sukow, 2012a), it reasonably can be concluded that "entire aquifer" in this case means "entire model domain." The domain of ESPAM2.1 does not correspond to the Area of Common Ground Water Supply as defined in Rule 50 of the Conjunctive Management Rules.

5.3 Benefits of Curtailment to Others

The Rangen report contains a number of statements to the effect that increased spring flows and reach gains resulting from curtailment of groundwater rights junior to July 13, 1962, will be of benefit to numerous other water users besides Rangen. A sample of such statements follows:

> *"Curtailment to effect mitigation for historical decreases in Rangen Spring results in significant increases in discharge at other developed springs and benefits to water rights holders who utilize the increased discharge for irrigation or other uses." (Sec. D)*

> *"Increases in Malad springs benefit Idaho Power hydroelectric facilities and increases in Blue Lakes spring benefit two major fish hatcheries (Blue Lakes Trout and Pristine Springs), as well as the City of Twin Falls municipal water supply." (Sec. D)*

These statements are irrelevant because the call is from Rangen and not from other developed springs or hydroelectric facilities. Nevertheless, if one were to examine the distribution of increased aquifer discharge from curtailment, these statements fail to provide a complete picture. Table 5.1 shows the gains to each river reach and spring complex from the curtailment simulation disclosed by the Rangen experts using ESPAM2.1 (it appears this Rangen model run did not converge, but has been relied upon nevertheless). For each reach or spring complex I

have added a comment describing the current administrative status of each, that is, whether there is an active call from that reach or spring and if so, whether an approved mitigation plan is already in place for it.

As can be seen from Table 5.1, roughly half the increase in discharge from simulated curtailment would accrue to springs and reaches with approved mitigation plans, and roughly half would accrue to springs and reaches where there is no active delivery call in place. Of the latter, it can reasonably be expected that some springs will be undeveloped with no diversions (e.g., Lower White Springs), that some would have diversions under water rights junior to Rangen's 1962 priority, and that some would have diversions that fully satisfy their water rights. Additionally, a portion of the increased discharge would occur as underflow that goes from the aquifer directly to the Snake River without any use.

Of the total 1705 cfs simulated increase in gains stemming from curtailment across the ESPA, only 1% will, according to Rangen's model run, actually accrue to Rangen. In my opinion, the actual delivery to Rangen would likely be less than 1%, given the inability of the current ESPAM2.1 formulation to accurately represent observed groundwater gradients at Rangen (as discussed in my December report) and its tendency to over-predict discharge in more recent years of the calibration period. Imposing curtailment that has a delivery efficiency of less than 1% would represent, in my opinion, a waste of the water resource.

6.0 Rangen Report Section E "Alternative Procedures"

6.1 Overview

The rebuttal issues that are raised in this section of the Rangen report are those related to drain parameters and the presentation of regression analyses as "alternative procedures" for determining flow changes at Rangen.

6.2 Drain Parameters

The Rangen report makes the following statement regarding drain parameters.

> *"The drain module equation shows the dependence on an accurate determination of spring elevation in correctly modeling the response of a spring to water level elevations in the aquifer. The drain parameters are adjusted by the automatic calibration routine, PEST."* (Sec. E.1)

It is well documented that discharge from the ESPA at Rangen occurs at more than one elevation. Furthermore, there is a range of 14 feet in the estimates of the elevation of the Curren Tunnel. Given that the predicted change in water level from curtailment sought by Rangen is 6 feet, it certainly cannot be said that the spring elevations at Rangen are determined accurately. Thus it cannot be said that the response of aquifer discharge at Rangen to water levels in the aquifer is correctly modeled.

The head difference computed for a drain assumes a uniform water level across the entire model cell. Observations of water levels in the vicinity of Rangen show substantial variation over distances of less than one mile (the cell size in ESPAM2.1). This in part is the rationale for cautions against using the model to evaluate conditions at a particular well. Given the complex small-scale geologic variation along the Hagerman rim and the variability in observed water levels, the very same logic argues against using the model to evaluate conditions at an individual spring such as Rangen.

Drain conductance was adjusted by PEST in calibration of ESPAM2.1, but drain elevations were not. A single elevation was assumed for the Rangen drain, despite evidence of outlets at multiple elevations and uncertainty in those elevations.

6.3 Regression of Spring Discharge vs. Aquifer Water Levels

The Rangen report contains the following statements concerning the alternative procedures for estimates of spring discharges:

> *"Seasonal variability in the aquifer water levels, pumping patterns, and spring flow are all correlated and discussed in Section E below." (Sec B.2)*

Nowhere in Section E is there any presentation of correlations between pumping patterns and water levels or pumping patterns and spring flows.

> *"The algorithm which is used to simulate spring flow in ESPAM2.1 is essentially a form of weir equation for which the operating variable is water surface elevation up-gradient of the drain cell." (Sec E.2)*

This analogy is a poor one as there are no practical weir equations that are linear in head as are the drains in ESPAM2.1. The weir equation is non-linear in head and in MODFLOW a drain is modeled as a strictly linear feature.

> *"Therefore, the expected response of the spring discharge must be related to changes in up-gradient water levels. With this as the hypothesis, the relationship between target spring flow versus historical measured water levels in wells up-gradient of the spring should be relatively well defined. If that is the case, the relationships developed by regression methods using historical measured water levels and measured spring flows should be adequate for estimating the spring discharge response." (Sec E.2)*

While presented as "alternative procedures", the regression analyses in the Rangen report Section E are not ever applied to demonstrate their utility nor is it explained precisely how they would be applied. In this sense they are irrelevant.

From the summary presented in Appendix C from the Rangen report, it is clear that all the regressions presented are non-linear. This is contradictory to the linear relationships embodied in ESPAM2.1 drains. In addition, the regressions are not useful in evaluating spring flow response to curtailment unless the change in water level is known, and this can be determined only with the model. However, the ESPAM2.1 documentation cautions against drawing interpretations for individual wells. Thus it would appear that the use of ESPAM2.1 in conjunction with a regression (the Rangen experts do not say which regression model(s) should be used) can only increase the uncertainty of discharge estimates.

The Rangen report states that the proposed wells are up-gradient of Rangen. This is a questionable assumption given the complexity of the groundwater gradient in the vicinity of Rangen, as illustrated in Figure 6.1. As can be seen in this figure, most of the wells chosen by Rangen are distant from the Curren Tunnel and appear to lie along flow paths that would not be considered up-gradient to Rangen; only one well is nearby. As shown in Figure 6.2, two of the wells actually have water levels lower than that observed immediately above Rangen. From these figures, it is difficult to see how any of the proposed wells can be considered "up-gradient' of the Curren Tunnel.

The choice of wells used for the regression analyses is a biased representation for the Rangen area. A map of the well locations with available data online from IDWR through Hydro.online (which Rangen reports as its source) is presented in Figure 6.3. There are at least a dozen other nearer wells available for regression that were disregarded in lieu of wells that fall further away. When a similar regression analysis is performed on the nearby wells with sufficient data available some of the correlation coefficients are quite a bit lower. The variability in the correlation coefficients closer to the Curren Tunnel suggests that there is not a uniform or direct connection between the wells modeled by Rangen and the Curren Tunnel. Either way, significant correlation is not a meaningful way to establish that flow at Rangen is from certain directions or of a regional nature; it simply demonstrates that both aquifer water

levels and discharge at Rangen are correlated to more global causative factors such as precipitation and incidental recharge.

The Rangen report contains the following statement concerning the alternative procedure for estimates of spring discharges using regression analysis relationships.

> *"...it supports the current procedure for the inclusion of Rangen Spring in the ESPA model and that the flow at Rangen spring is from the regional aquifer" (Sec E.2)*

The regression analysis presented in the Rangen report actually presents support against the current implementation of Rangen in ESPAM2.1. Just considering the relationships shown for the seven wells presented in Appendix C, the spring discharge response for a given water level change would be different depending on which well relationship is used. The seven different polynomial and exponential relationships would predict anywhere from 1.8 cfs to 11.8 cfs gain at Rangen for 1 foot in water level change, depending on the well relationship chosen. The current drain implementation in ESPAM2.1 simply cannot represent the non-linear and highly variable discharge relationships shown in Appendix C.

The Rangen report contains the following statement concerning the other benefits of the alternative procedure for estimates of spring discharges using regression analysis relationships.

> *"In addition, the well to spring regression procedure eliminates the concern of inaccurate drain elevations at springs and provides a statistically defensible confidence level to the estimate if the water level change is known." (Sec E.2)*

No information is provided in Appendix C regarding confidence intervals of the regressions presented and neither is there any statistical evaluation of the confidence that could be placed in discharge estimates derived from their use. The only way to obtain the water level change is to use the regressions in conjunction with ESPAM2.1, which, as described earlier, simply increases overall uncertainty in the prediction of discharge.

7.0 Rangen Report Section F "Opinions"

This section recites the opinions of the Rangen experts and offers my summary rebuttal of each:

1. Pumping by junior ground water rights impacts the exercise of Rangen water rights 36-02551(priority July 13, 1962) and 36-07694 (priority April 12, 1977).

The Department erred in issuing water right 36-07694 as there was never water available to it at or since the time of its appropriation. Pumping from the ESPA affects connected reaches of the Snake River in various ways, the question at issue is the amount and timing of the effect at Rangen and whether curtailment is justified.

2. It is our opinion that there is insufficient spring flow available to operate the Rangen facility and that the available Rangen spring flows are being utilized appropriately and efficiently according to the adjudicated water rights. There is no evidence of wasted water.

As discussed in my December report, Rangen could obtain additional use of existing supplies with relatively minor modifications to its distribution system to deliver water to the small raceways from Billingsley Creek.

3. It is our opinion that the best available science (ESPAM 2.1), predicted a steady state impact of 17.9 CFS from curtailment of ground water pumping within the area of the model, under water rights junior to July 13, 1962.

The ESPAM2.1 does not represent well the local hydrology and hydro-geology in the Rangen area and consistently over predicts discharge under current conditions. In my opinion it cannot, in its current form, be relied upon to accurately predict effects at Rangen from curtailment of junior groundwater rights. Relatively modest changes to the model demonstrate quite different model results. In lieu of making further improvements to the model, its predictions of effects at Rangen must be viewed as quite uncertain.

4. It is our opinion that the flow measurements collected at the Rangen facility are accurate and consistent with the industry practice.

Department review of Rangen measurement procedures and findings of previous orders indicate that Rangen measurements consistently underestimate available flows.

5. It is our opinion that no alternative method of water diversion has been identified that would provide the Rangen facility additional water with a usable and acceptable quantity and quality that isn't already being accessed by existing Rangen intake structures.

The Rangen facility relies primarily on a horizontal well excavated for irrigation purposes (i.e., the Curren Tunnel). This means of diversion relies on maintenance of historical water levels to obtain historical levels of diversion. Other well diversions on the ESPA are not guaranteed their historical water levels and must deepen their wells if necessary to maintain diversions. Rangen has made no improvements to the Curren Tunnel, such as lengthening or replacement with a lower elevation tunnel, to maintain its diversions. Furthermore, the ESPAM2.1, if it is to be believed, indicates substantial water availability beneath the Rangen facility.

6. It is our opinion that IDWR has appropriately developed the ESPAM 2.1 model and that the ESHMC has provided guidance and oversight of the modeling process.

The ESPAM2.1 is appropriately developed only as a regional model and is best used for regional-scale evaluation of change in water use and aquifer conditions.

7. It is our opinion that the ESPAM 2.1 model represents the best available science for simulating hydraulic behavior of the ESPA.

The ESPAM2.1 is a good regional model of the ESPA but, in its current form, does not represent local conditions in the Rangen area sufficiently accurately to reliably predict changes in discharge there from modifications of water use conditions at distant points in the aquifer.

8. It is our opinion that the Mud Lake input data mistakes discovered in October 2012 did not have any significant impact on the ESAPM development process and that ESPAM 2.1 should be used for all IDWR ground water modeling at this time.

The ESPAM2.1 is insufficiently detailed to reliably predict local-scale changes in water levels and spring flows. It is appropriate only for regional scale analyses. As discussed in my December report, the correction of the Mud Lake error had unexpected levels of effect in the western part of the ESPA, showing considerable change to model parameters and results there.

9. It is our opinion that the historic Rangen Spring flows presented to the ESHMC are accurate and that the ESHMC approved IDWR use of these data during calibration.

Department evaluation of Rangen measurements indicates they systematically underestimate available flows.

10. It is our opinion that the ESPAM 2.1 calibration quality at the Rangen Spring and other major springs and Snake River reaches indicates that the model is an excellent predictor of changes to spring flow an river reaches.

Good model calibration is a necessary but not sufficient condition for reliable model prediction. Reliable prediction also requires accurate model representation of hydrologic and hydro-geologic conditions in the area of the prediction. ESPAM2.1 does not contain this detailed representation.

11. It is our opinion that the current IDWR ESPAM 2.1 uncertainty analysis is not sufficient or useful for quantifying the uncertainty of any particular model prediction. Its primary value will be to guide future calibrations and data collection efforts. The best available predictions of junior pumping impacts to the Rangen Spring are those made by calibrated model E121025A001 (ESPAM 2.1).

The IDWR predictive analysis was of limited scope and did not evaluate conceptual uncertainty. In my opinion, considerable uncertainty exists in the predictions from ESPAM2.1 in contrast to the effects of curtailment on groundwater users, which are not uncertain. The inability to quantify uncertainty is not a demonstration that it doesn't exist or can be ignored.

12. It is our opinion that the results of the IDWR Validation and Comparison to 1.1 exercises do not preclude the use of ESPAM 2.1 in any way.

The ESPAM2.1 is essentially the same regional model as ESPAM1.1 and is subject to the same limitations as ESPAM1.1. The validation analysis indicates that predictions of changes in spring flows are the least reliable of the prediction categories examined.

13. It is our opinion that the IDWR curtailment methodology is reasonable and sufficient for calculating the impacts of curtailment on ESPA water levels and spring flows using the ESPAM 2.1 model.

The ESPAM2.1 is a regional model and cannot, in its current form, be relied upon to accurately quantify flow changes at Rangen from curtailment of junior groundwater uses.

14. It is our opinion that curtailment to mitigate injury to a senior water right is not a waste of the water resource. The relationships between ESPA water levels and Rangen Spring flows are well correlated. This correlation is an indication that ESPA well pumping and spring flows are hydraulically connected and that the spatial distribution of the correlated data indicates that the Rangen Spring source water is a large regional area.

The correlation of water levels and spring flows reflects that fact that they both are related to underlying causative factors of natural and incidental recharge. Simple correlation reveals nothing about the nature of hydraulic connection between particular wells and springs. The curtailment of junior groundwater use across the model domain ignores the statutory definition of the Area of Common Ground Water supply

contained in the Conjunctive Management Rules. Delivery of less than 1% of the curtailed use to the calling water right constitutes waste by any reasonable definition.

15. It is our opinion that specific components of uncertainty (uncertainty in model inputs, calibrated aquifer parameters, observation target measurement, and numerical calculation) by themselves cannot be used as a definition of model prediction uncertainty.

This is an incomplete list of the sources of model uncertainty. The inability to fully quantify uncertainty does not mean it does not exist and can be ignored.

16. It is our opinion that model predictive uncertainty has not been adequately quantified and that it would be inappropriate to use any adjustment to model predictions other than the calibrated ESPAM 2.1 model predictions.

In my opinion, the ESPAM2.1 cannot be relied upon to accurately predict changes in flow at Rangen from curtailment of junior groundwater uses. The Conjunctive Management Rules list a wide variety of factors to be considered in determining material injury, reasonable use, and curtailment of junior water rights.

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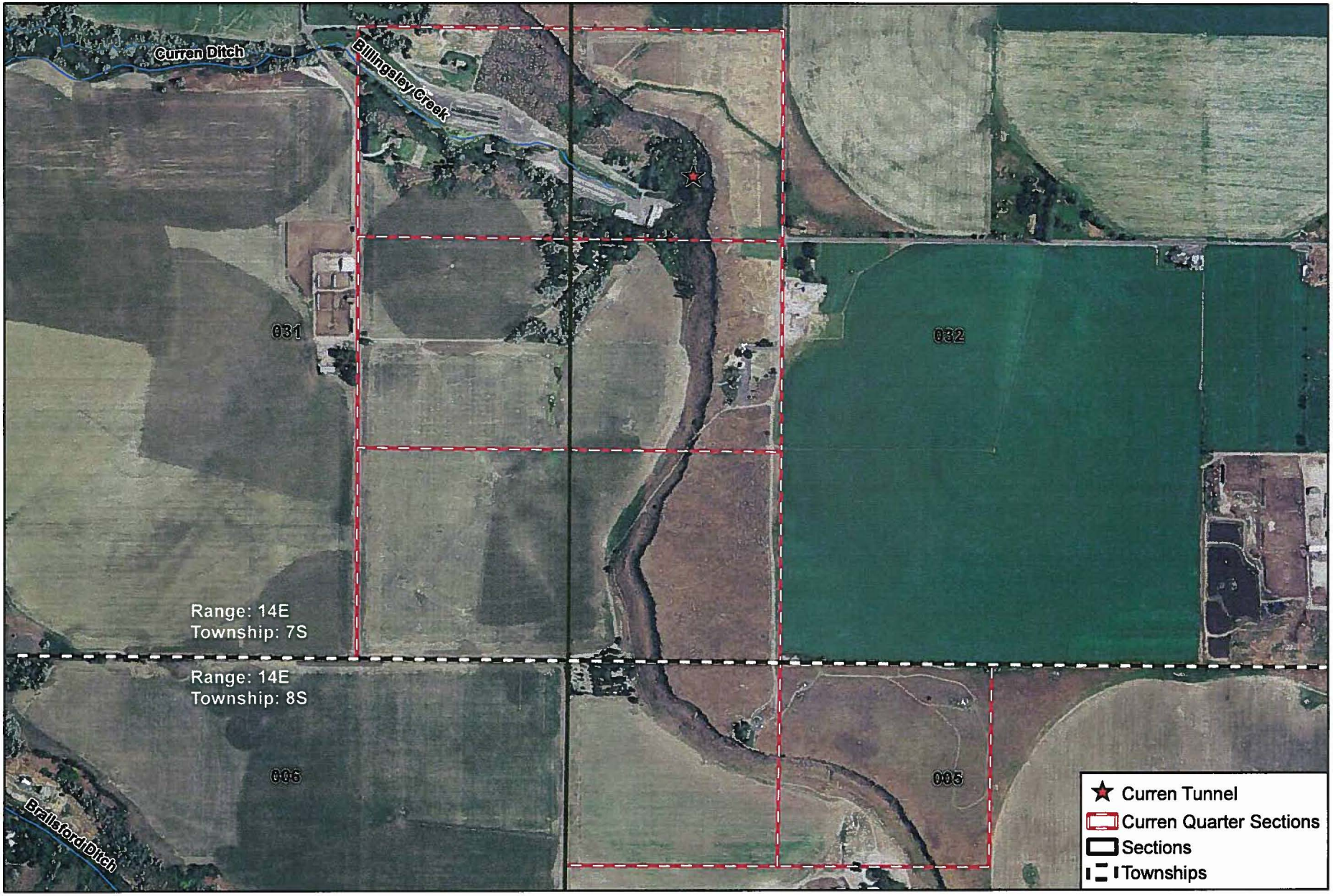
Figure 2-1. Lands Irrigated from Curren Tunnel, 1884



amec

Map compiled 1/2013; intended for planning purposes only
Data Sources: NAIP 2011 imagery, New Int'l Mortgage Bank v. Idaho Power, In Equity No. 1602 (D. Idaho March 22, 1932)

Figure 2-2. Location of Nace (1958) Measurement Point

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0 1,100 2,200 Feet

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Map compiled 1/2013; intended for planning purposes only
Data Sources: NAIP 2011 imagery, New Int'l Mortgage Bank v. Idaho Power, In Equity No. 1602 (D. Idaho March 22, 1932)

Figure 2-3. Average Monthly Flow Measurements at Rangen 1966-1975

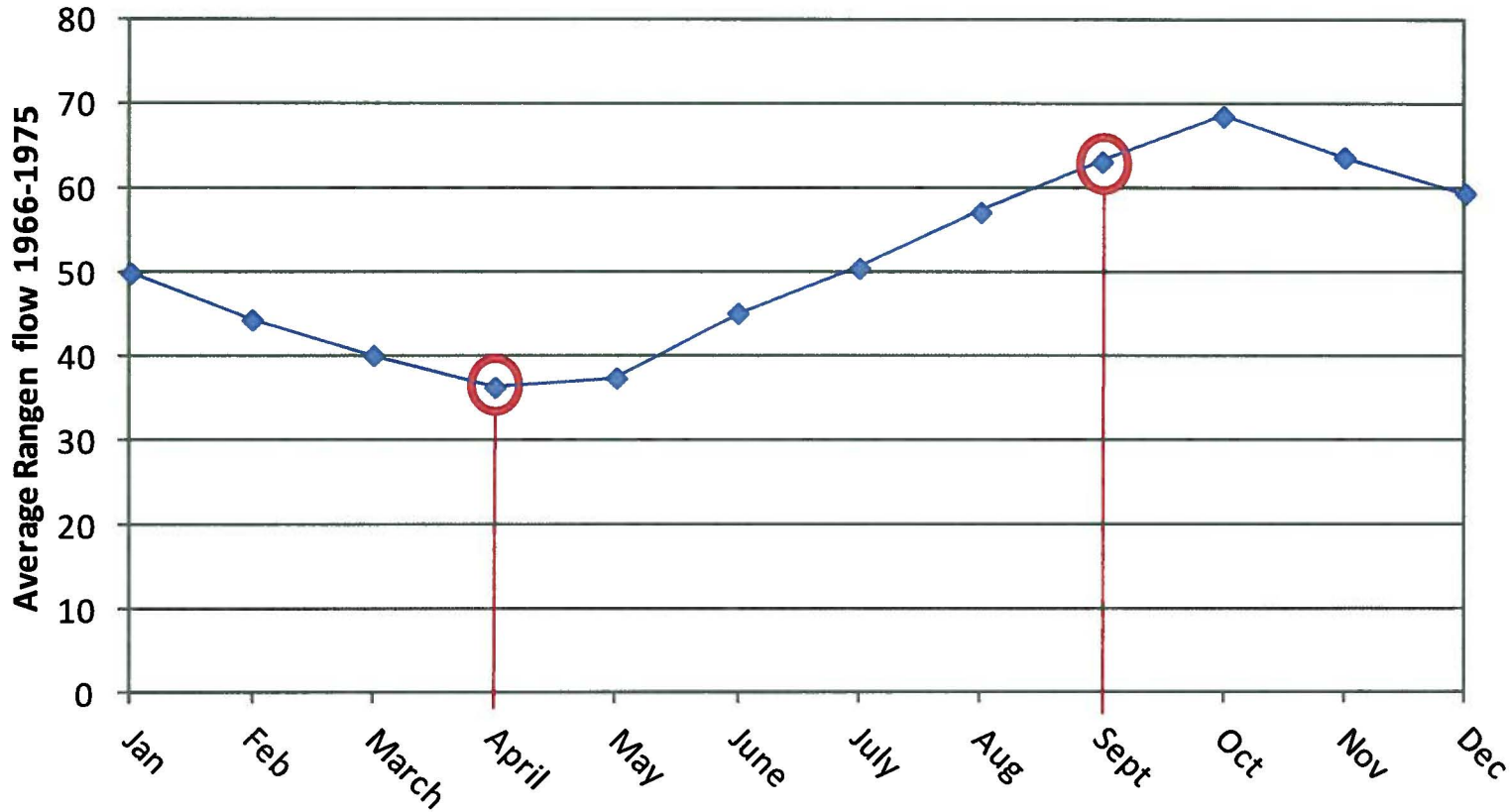


Figure 2-4: Modified Rangen Report Figure 3 with Estimates of Historic Groundwater Use

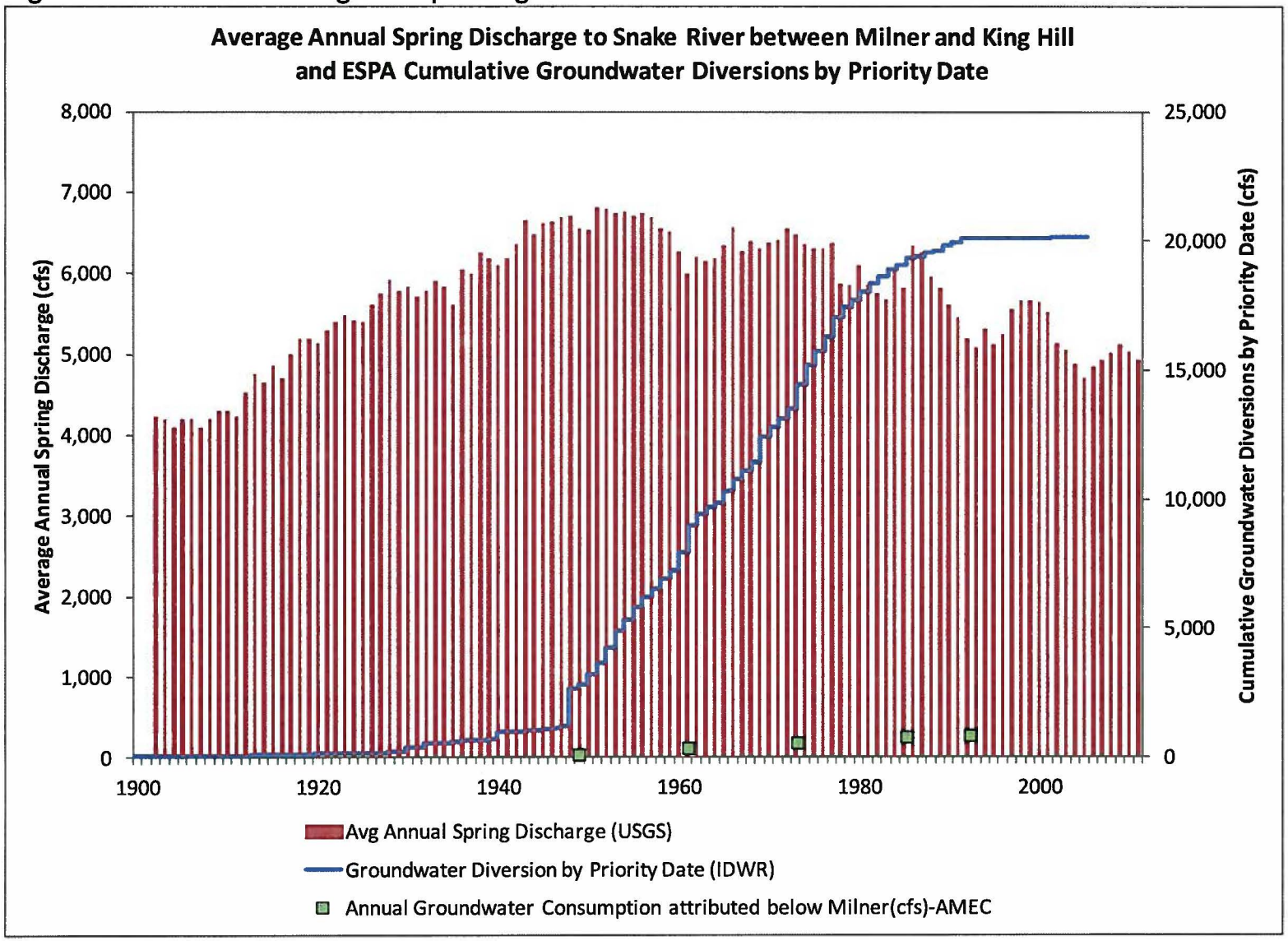


Figure 4-1: Modified ESPAM Documentation Figure 36 with Estimates of Groundwater Extraction remaining after 1961 curtailment

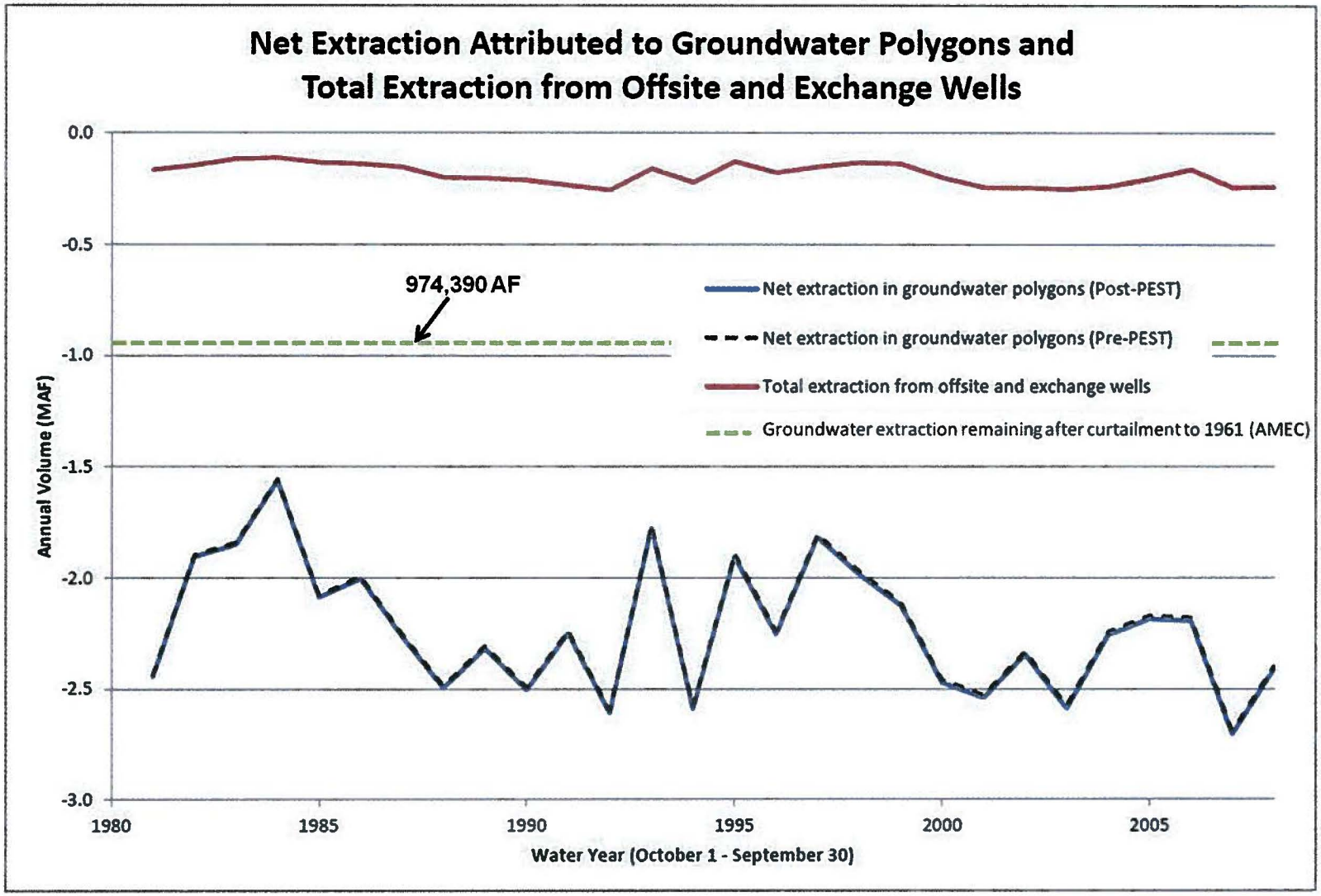


Figure 6-1. Groundwater Gradients with Rangen Report Regression Well Locations

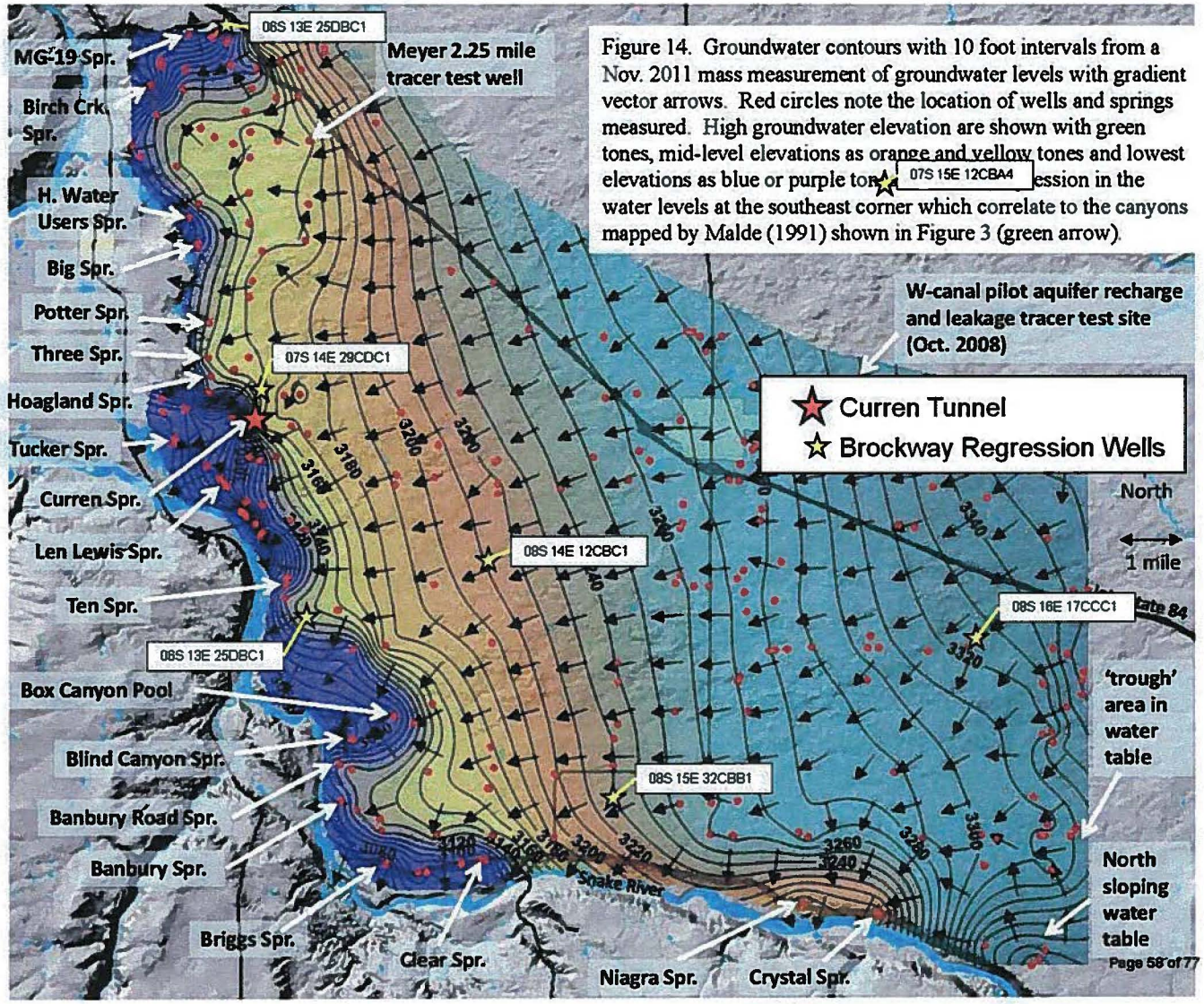


**Figure modified from Farmer & Blew (2012) Figure 14*

Figure 6-2. Groundwater Level Comparison

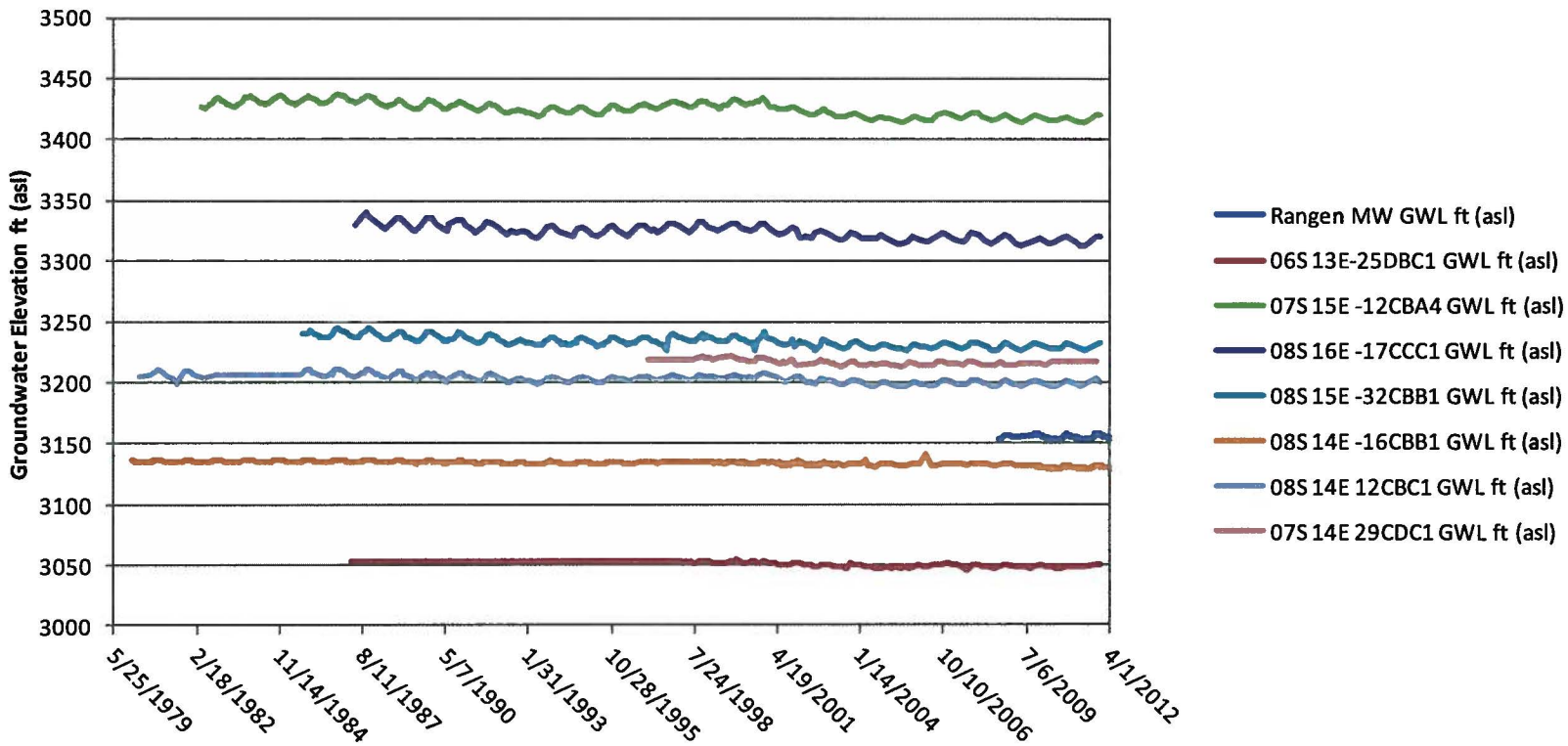
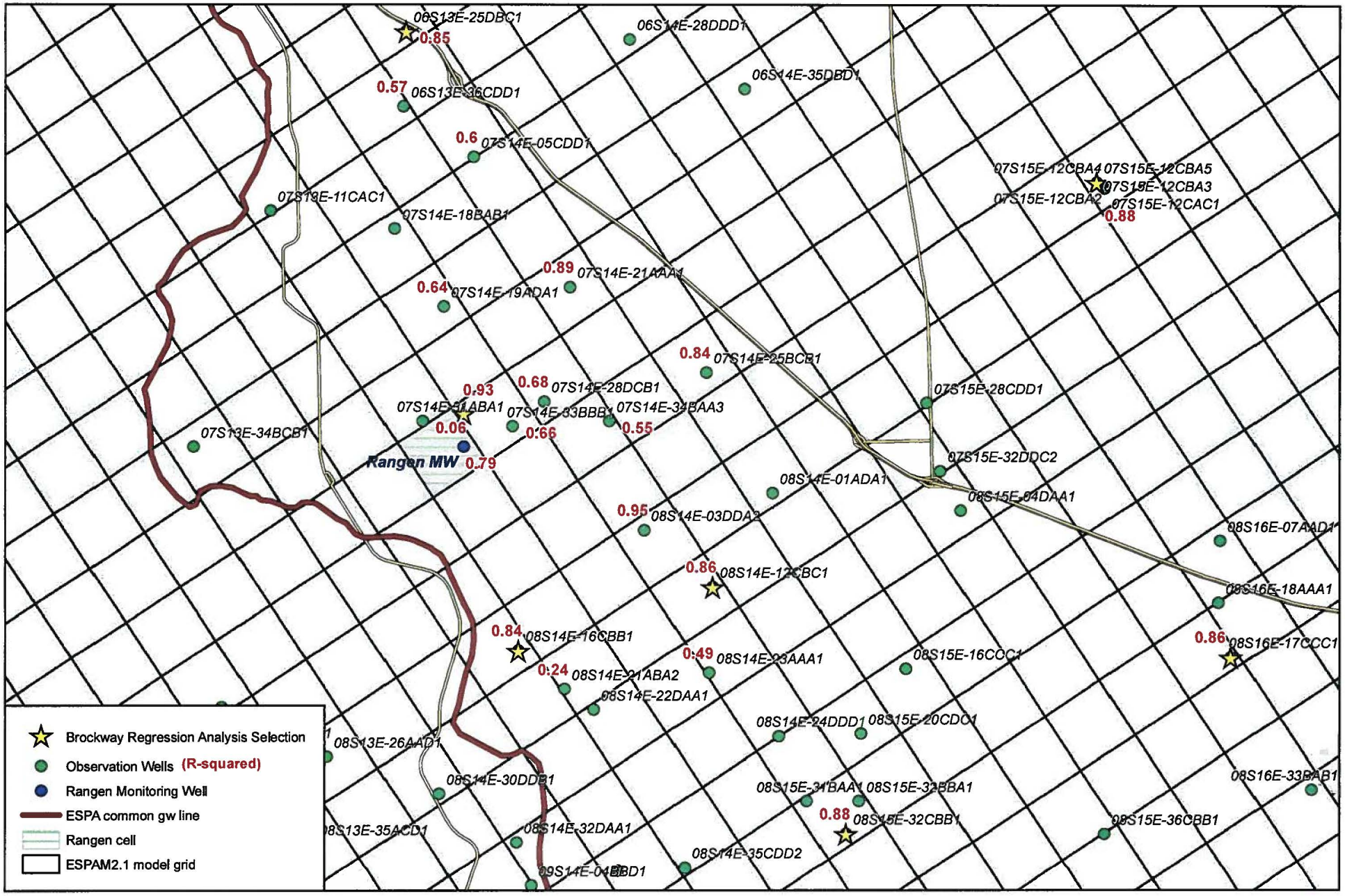


Figure 6-3. Regression Analysis and Well Location Review



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Map compiled 1/2013; intended for planning purposes only
Data Sources: Idaho Department of Water Resources

Table 4.1. Changes in Gains to Springs Named in Rangen Table 2

Specific Spring Name From Table 2	Drains per cell	Row	Column	Spring Class	Gain (CFS) ESPAM 2.1	Gain (CFS) ESPAM 2.0	Δ gain (CFS) (2.1 - 2.0)	% increase (+) or decrease (-)
BANBURY	1	48	11	C	3.3	4.6	-1.35	-29%
BANCROFT	1	25	6	C	0.69	0.7	0.02	2.8%
BIGSP	2	39	14	C	7.1	6.9	0.18	2.6%
BIRCH, WILLOW	1	37	15	C	0.07	0.1	0.00	-2.6%
BLUELK	1	62	24	B	20.0	19.2	0.78	4.0%
BOX, BLIND CANYON	2	47	12	A	68.7	64.8	3.92	6.0%
BRIGGS	1	49	11	A	1.1	1.7	-0.60	-34%
CLEARLK	2	50	12	B	41.8	37.8	4.01	11%
CRYSTAL	2	54	18	B	45.7	48.1	-2.40	-5.0%
DEVILC	2	65	27	A	7.4	7.8	-0.37	-4.7%
DEVILW	1	66	28	A	5.7	5.8	-0.13	-2.3%
ELLISON	2	58	20	C	0.115	0.162	-0.05	-29%
MALAD	2	36	15	B	43.9	45.1	-1.13	-2.5%
NIAGARA	2	53	17	B	32.0	32.1	-0.10	-0.32%
NTLFSHH, MAGIC, BICKEL	2	43	12	B	11.4	11.5	-0.17	-1.5%
RANGEN	1	42	13	B	17.9	18.1	-0.19	-1.0%
SAND, BLUEHRT	1	46	12	B	18.3	19.1	-0.80	-4.2%
THOUSAND	2	44	12	B	50.1	46.2	3.83	8.3%
THREESP	2	41	13	B	13.0	13.1	-0.04	-0.29%
TUCKER, JOSEPH, MAHANNA	2	42	12	C	1.129	1.056	0.07	6.9%

Table 4.2. Mean Error (ME) over Last 10 Years for Individual Springs

Spring	Measured (cfs)	Modelled (cfs)	R^2	ME	ME %
Niagara	223.8	223.4	0.5	-0.4	-0.2%
BlueLk	184.5	185.1	0.5	0.6	0.3%
SandSpgs	55.9	56.1	0.4	0.2	0.4%
kspgs	548.7	551.8	0.4	3.0	0.5%
Malad	1061.0	1068.7	0.6	7.7	0.7%
DevilsWb	*11.2*	11.1	0.6	-0.2	-1.4%
DevilsC	36.7	37.3	0.7	0.5	1.5%
Crystal	338.0	343.0	0.8	5.0	1.5%
ThreeSp	49.6	50.5	0.8	0.9	1.9%
NFHatch	160.0	163.9	0.8	3.9	2.4%
Box	657.4	674.1	0.9	16.8	2.6%
Briggs	99.4	102.0	0.6	2.6	2.6%
ClearLk	423.6	437.8	0.9	14.3	3.4%
Rangen	18.6	23.1	0.8	4.4	23.8%

Table 4.3. Mean Absolute Error (MAE) over Last 10 Years for Individual Springs

Spring	Measured (cfs)	Modelled (cfs)	R^2	MAE	MAE %
kspgs	548.7	551.8	0.4	10.9	2.0%
SandSpgs	55.9	56.1	0.4	1.2	2.2%
NFHatch	160.0	163.9	0.8	4.0	2.5%
Crystal	338.0	343.0	0.8	8.7	2.6%
Malad	1061.0	1068.7	0.6	28.8	2.7%
Box	657.4	674.1	0.9	18.5	2.8%
ClearLk	423.6	437.8	0.9	14.5	3.4%
Niagara	223.8	223.4	0.5	8.1	3.6%
DevilsC	36.7	37.3	0.7	1.8	4.8%
ThreeSp	49.6	50.5	0.8	2.5	5.0%
Briggs	99.4	102.0	0.6	5.7	5.7%
BlueLk	184.5	185.1	0.5	13.4	7.3%
DevilsWb	*11.2*	11.1	0.6	1.6	14.4%
Rangen	18.6	23.1	0.8	4.8	26.0%

Table 5.1 - Gains to River Reaches and Springs as Simulated by ESPAM 2.1, Priority Date 7/13/1962

River Reach		Gain (CFS)	Administrative Status
Ashton to Rexburg		157.79	No call
Heise to Shelley		206.50	No call
Shelley to Near Blackfoot		229.60	No call
Near Blackfoot to Minidoka		695.22	Mitigation plan
Springs	**Spring Class**	**Gain (CFS) ESPAM 2.1**	**Administrative Status**
BANCROFT	C	0.69	No call
10 unnamed class C springs	C	3.01	No call
MALAD	B	43.95	No call (IPC*)
WHITE (37, 14)	C	0.15	No call
BIRCH	C	0.07	No call
1 unnamed class C spring	C	0.97	No call
BIGSP	C	7.09	No call
2 unnamed class C springs	C	0.90	No call
THREESP	B	13.03	Mitigation plan
TUCKER	C	1.13	No call
RANGEN	B	17.89	Active call
NTLFSHH	B	11.37	No call
THOUSAND	B	50.06	No call (IPC)
2 unnamed class C springs	C	0.03	No call
SAND	B	18.33	No call
1 unnamed class C spring	B	0.11	No call
BOX	A	68.74	Mitigation plan
BANBURY	C	3.30	No call
BRIGGS	A	1.14	No call
CLEARLK	B	41.84	Mitigation plan
2 unnamed class C springs	C	0.00	No call
NIAGARA	B	31.98	Mitigation plan
CRYSTAL	B	45.75	Mitigation plan
2 unnamed class C springs	C	0.07	No call
ELLISON	C	0.12	No call
2 unnamed class C springs	C	0.02	No call
WARM CRK SP (61, 23)	C	0.17	No call
1 unnamed class C spring	C	0.04	No call
BLUELK	B	20.02	Mitigation plan
2 unnamed class C springs	C	1.02	No call
DEVILC	A	7.39	No call
DEVILW	A	5.67	No call (IPC)
3 unnamed class C springs	C	0.13	No call
2 unnamed class C springs	C	0.58	No call
DEVILC	A	7.86	No call
DEVILC	A	7.39	No call
DEVILW	A	5.67	No call (IPC)
3 unnamed class C springs	C	0.14	No call
Totals		**Gain (CFS)**	**% of total**
Undivertable baseflow (GHBs)		19.66	1.15%
Mitigation plans		916.58	53.76%
No call		750.82	44.04%
Rangen		17.89	1.05%
Total Change All Connected Reaches		**1704.95**	100.00%

*IPC - Idaho Power Company

Appendix A

SRBA Decrees for Rangen Water Rights

RECEIVED
FEB 0 2 1998
Department of Water Resources

1998 JAN 30 PM 4: 18
DISTRICT COURT - SRBA
TWIN FALLS CO., IDAHO
FILED

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	**ORDER OF PARTIAL DECREE**
	)	
Case No. 39576	)	**For Water Right 36-00134B**
	)	

On October 1, 1997, a ***Special Master's Report and Recommendation*** was filed for the above water right. No Challenges were filed to the ***Special Master's Report and Recommendation*** and the time for filing Challenges has now expired.

Pursuant to I.R.C.P. 53(e)(2) and ***SRBA Administrative Order 1***, Section 13f, this court has reviewed the Findings of Fact and Conclusions of Law contained in the ***Special Master's Report*** and wholly adopts them as its own.

Therefore, IT IS ORDERED that water right 36-00134B is hereby **decreed** as set forth in the attached ***Partial Decree Pursuant to I.R.C.P. 54(b)***.

DATED January 30, 1998.

DANIEL C. HURLBUTT, JR.
Presiding Judge
Snake River Basin Adjudication

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

1998 JAN 30 PM 4:18

DISTRICT COURT - SRBA
TWIN FALLS CO., IDAHO

FILED _____

In Re SRBA	)	PARTIAL DECREE PURSUANT TO
	)	I.R.C.P. 54(b) FOR
Case No. 39576	)	
_____	)	Water Right 36-00134B

NAME & ADDRESS: RANGEN INC
PO BOX 706
BUHL ID 83316

SOURCE: MARTIN-CURREN TUNNEL TRIBUTARY: BILLINGSLEY CREEK

QUANTITY: 0.09 CFS

THE QUANTITY OF WATER UNDER THIS RIGHT FOR DOMESTIC USE SHALL NOT EXCEED 13,000 GALLONS PER DAY.

PRIORITY DATE: 10/09/1884

POINT OF DIVERSION: T07S R14E S32 SESWNW Within GOODING County

PURPOSE AND PERIOD OF USE:

PURPOSE OF USE	PERIOD OF USE	QUANTITY
IRRIGATION	Irrigation Season	0.09 CFS
DOMESTIC 3 HOMES AND 2 OFFICES	01-01 12-31	0.07 CFS

PLACE OF USE:

IRRIGATION Within GOODING County
T07S R14E S31 SWNE 2 SENE 4
S32 SWNW 1
7 ACRES TOTAL

USE OF THIS RIGHT WITH RIGHT NO. 36-00135A IS LIMITED TO THE IRRIGATION OF A COMBINED TOTAL OF 7.0 ACRES IN A SINGLE IRRIGATION SEASON.

DOMESTIC Within GOODING County
T07S R14E S31 SENE
S32 SWNW

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT:

THE QUANTITY OF WATER DECREED FOR THIS WATER RIGHT FOR DOMESTIC USE IS NOT A DETERMINATION OF HISTORICAL BENEFICIAL USE.

RULE 54(b) CERTIFICATE

With respect to the issues determined by the above judgment or order, it is hereby CERTIFIED, in accordance with Rule 54(b), I.R.C.P., that the court has determined that there is no just reason for delay of the entry of a final judgment and that the court has and does hereby direct that the above judgment or order shall be a final judgment upon which execution may issue and an appeal may be taken as provided by the Idaho Appellate Rules.

DANIEL C. HURLBUTT, JR.
PRESIDING JUDGE
Snake River Basin Adjudication

1998 JAN 30 PM 02:00
DISTRICT COURT - SRBA
TWIN FALLS CO., IDAHO
FILED _____

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	CERTIFICATE OF MAILING
	)	
Case No. 39576	)	
	)	Water Right(s): 36-00134B

CERTIFICATE OF MAILING

I certify that a true and correct copy of the PARTIAL DECREE PURSUANT TO I.R.C.P. 54(b) for WATER RIGHT 36-00134B was mailed on January 30, 1998, with sufficient first-class postage prepaid to the following:

DIRECTOR OF IDWR
PO BOX 83720
BOISE, ID 83720-0098

STATE OF IDAHO
Represented by:
CLIVE STRONG
OFFICE OF ATTORNEY GENERAL
STATE OF IDAHO
PO BOX 44449
BOISE, ID 83711-4449
Phone: 208-334-2400

RANGEN, INC.
Represented by:
J DEE MAY
PO BOX 1846
TWIN FALLS, ID 83303
Phone: 208-733-7180

DIANA DELANEY
Chief Deputy Clerk

2
District
Twin Falls, Id.
Filed: drd

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	**Water Right 36-00134B**
	)	
Case No. 39576	)	**ORDER AMENDING IRRIGATION PERIOD OF USE ELEMENT IN PARTIAL DECREE AND INCORPORATING INTO PARTIAL DECREE AN EXPRESS STATEMENT REGARDING GENERAL PROVISIONS, *NUNC PRO TUNC***
	)	

A ***Partial Decree*** was entered for the above-captioned irrigation water right on January 30, 1998. The period of use element was decreed as "irrigation season." In *A&B Irrigation Dist. v. Idaho Conservation League,* 131 Idaho 411, 423, 958 P.2d 568, 580 (1998), the Idaho Supreme Court remanded with the directive to include specific dates for the period of use element. Following remand, IDWR filed a *Supplemental Director's Report, Reporting Area 3, IDWR Basin 36, Regarding Revision of Period of use (For Irrigation Water Uses) and Conjunctive Management General Provisions,* which included an irrigation period of use recommendation for this water right. No objections were filed to this recommendation and the time period for filing objections has now expired.

THEREFORE, IT IS ORDERED that the period of use for the irrigation element of the above-captioned water right is hereby amended and decreed as:

PERIOD OF USE: 02-15 11-30

IT IS FURTHER ORDERED that the ***Partial Decree*** for the above-captioned water right is hereby amended and decreed to contain the following:

> This partial decree is subject to such general provisions necessary for the definition of the rights or for the efficient administration of the water rights as may be ultimately determined by the court at a point in time no later than the entry of a final unified decree. I.C. section 42-1412(6).

This order is being entered *nunc pro tunc* as of the date the ***Partial Decree*** was issued and is not intended to modify any subsequent administrative changes for the water right, if any, which occurred following entry of the ***Partial Decree.***

RULE 54(b) CERTIFICATE

> With respect to the issues determined by the above judgment or order, it is hereby CERTIFIED, in accordance with Rule 54(b), I.R.C.P., that the court has determined that there is no just reason for delay of the entry of a final judgment and that the court has and does hereby direct that the above judgment or order shall be a final judgment upon which execution may issue and an appeal may be taken as provided by the Idaho Appellate Rules.

Dated August 27, 2001

Roger Burdick

ROGER BURDICK
Presiding Judge
Snake River Basin Adjudication

District Court
Snake River Basin Adjudication
PO Box 2707
Twin Falls, ID 83303-2707

Important Information About Your Water Right

August 27, 2001

RANGEN INC
PO BOX 706
BUHL, ID 83316

Dear Water Right Claimant(s):

The reverse side of this letter contains a copy of an ***Order Amending Irrigation Period of Use Element in Partial Decree and Incorporating into Partial Decree An Express Statment Regarding General Provisions, Nunc Pro Tunc*** (hereinafter ***"Order"***) for water right number 36-00134B. According to Idaho Department of Water Resources (IDWR) records, you are the current owner of this water right. If you are not the current owner, please contact IDWR immediately at:

Idaho Department of Water Resources
1301 North Orchard
Boise, ID 83706
800-451-4129

The Purpose of the ***Order*** is to set forth beginning and ending dates for the irrigation period of use for this water right. As stated in the face of the ***Order,*** this action was necessary following the decision of the Idaho Supreme Court in *A&B Irrigation Dist. v. Idaho Conservation League,* 131 Idaho 411, 423, 958 P.2d 568, 580 (1998). This ***Order*** also incorporates into the ***Partial Decree*** an express statement that the ***Partial Decree*** is subject to such general provisions necessary for the definition or for the efficient administration of the water right. This express statement is necesssary to comply with the requirements of Idaho Code section 42-1412(6). This ***Order*** in combination with the ***Partial Decree*** that was issued for this water right on January 30, 1998, sets forth all of the elements of your water right. The Snake River Basin Adjudication (SRBA) Court suggests that you keep this document in a safe location together with a copy of the ***Partial Decree*** to show evidence of the water right. The original of this ***Order*** and the original of the ***Partial Decree*** for this water right are on file with SRBA Court. If you do not have a copy of the original ***Partial Decree,*** one can be obtained by contacting the SRBA Court at (208) 736-3011. Please note that the ***Order*** is entered ***Nunc Pro Tunc,*** meaning that the ***Order*** will be treated as if it were issued the same date that the ***Partial Decree*** was originally issued.

Sincerely,

Diana Delaney
Case Administrator

1998 JAN -6 AM 11: 44
DISTRICT COURT - SRBA
TWIN FALLS CO., IDAHO
FILED

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	**ORDER OF PARTIAL DECREE**
	)	
Case No. 39576	)	**For Water Right 36-00135A**
	)	

On October 1, 1997, a ***Special Master's Report and Recommendation*** was filed for the above water right. No Challenges were filed to the ***Special Master's Report and Recommendation*** and the time for filing Challenges has now expired.

Pursuant to I.R.C.P. 53(e)(2) and ***SRBA Administrative Order 1***, Section 13f, this court has reviewed the Findings of Fact and Conclusions of Law contained in the ***Special Master's Report*** and wholly adopts them as its own.

Therefore, IT IS ORDERED that water right 36-00135A is hereby **decreed** as set forth in the attached ***Partial Decree Pursuant to I.R.C.P. 54(b)***.

DATED January 6, 1998.

DANIEL C. HURLBUTT, JR.
Presiding Judge
Snake River Basin Adjudication

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	PARTIAL DECREE PURSUANT TO I.R.C.P. 54(b) FOR
	)	
Case No. 39576	)	Water Right 36-00135A
	)	

1998 JAN -6 AM 11: 44
DISTRICT COURT - SRBA
TWIN FALLS CO., IDAHO
FILED _____

NAME & ADDRESS: RANGEN INC
PO BOX 706
BUHL ID 83316

SOURCE: MARTIN-CURREN TUNNEL TRIBUTARY: BILLINGSLEY CREEK

QUANTITY: 0.05 CFS

THE QUANTITY OF WATER UNDER THIS RIGHT FOR DOMESTIC USE SHALL NOT EXCEED 13,000 GALLONS PER DAY.

PRIORITY DATE: 04/01/1908

POINT OF DIVERSION: T07S R14E S32 SESWNW Within GOODING County

PURPOSE AND PERIOD OF USE:

PURPOSE OF USE	PERIOD OF USE	QUANTITY
IRRIGATION	Irrigation Season	0.05 CFS
DOMESTIC 3 HOMES AND 2 OFFICES	01-01 12-31	0.05 CFS

PLACE OF USE:

IRRIGATION Within GOODING County
T07S R14E S31 SWNE 2 SENE 4
S32 SWNW 1
7 ACRES TOTAL

USE OF THIS RIGHT WITH RIGHT NO. 36-00134B IS LIMITED TO THE IRRIGATION OF A COMBINED TOTAL OF 7.0 ACRES IN A SINGLE IRRIGATION SEASON.

DOMESTIC Within GOODING County
T07S R14E S31 SENE
S32 SWNW

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT:

THE QUANTITY OF WATER DECREED FOR THIS WATER RIGHT FOR DOMESTIC USE IS NOT A DETERMINATION OF HISTORICAL BENEFICIAL USE.

RULE 54(b) CERTIFICATE

With respect to the issues determined by the above judgment or order, it is hereby CERTIFIED, in accordance with Rule 54(b), I.R.C.P., that the court has determined that there is no just reason for delay of the entry of a final judgment and that the court has and does hereby direct that the above judgment or order shall be a final judgment upon which execution may issue and an appeal may be taken as provided by the Idaho Appellate Rules.

DANIEL C. HURLBUTT, JR.
PRESIDING JUDGE
Snake River Basin Adjudication

1998 JAN 07 PM 02:00
DISTRICT COURT - SRBA
TWIN FALLS CO., IDAHO
FILED _____

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	CERTIFICATE OF MAILING
	)	
Case No. 39576	)	
	)	Water Right(s): 36-00135A

CERTIFICATE OF MAILING

I certify that a true and correct copy of the PARTIAL DECREE PURSUANT TO I.R.C.P. 54(b) for WATER RIGHT 36-00135A was mailed on January 07, 1998, with sufficient first-class postage prepaid to the following:

DIRECTOR OF IDWR
PO BOX 83720
BOISE, ID 83720-0098

STATE OF IDAHO
Represented by:
CLIVE STRONG
OFFICE OF ATTORNEY GENERAL
STATE OF IDAHO
PO BOX 44449
BOISE, ID 83711-4449
Phone: 208-334-2400

RANGEN, INC.
Represented by:
J DEE MAY
PO BOX 1846
TWIN FALLS, ID 83303
Phone: 208-733-7180

DIANA DELANEY
Chief Deputy Clerk

2001
District C
Twin Falls, Idaho
Filed: drd

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	**Water Right 36-00135A**
	)	
Case No. 39576	)	**ORDER AMENDING IRRIGATION PERIOD OF USE ELEMENT IN PARTIAL DECREE AND INCORPORATING INTO PARTIAL DECREE AN EXPRESS STATEMENT REGARDING GENERAL PROVISIONS, *NUNC PRO TUNC***
	)	

A ***Partial Decree*** was entered for the above-captioned irrigation water right on January 06, 1998. The period of use element was decreed as "irrigation season." In *A&B Irrigation Dist. v. Idaho Conservation League,* 131 Idaho 411, 423, 958 P.2d 568, 580 (1998), the Idaho Supreme Court remanded with the directive to include specific dates for the period of use element. Following remand, IDWR filed a *Supplemental Director's Report, Reporting Area 3, IDWR Basin 36, Regarding Revision of Period of use (For Irrigation Water Uses) and Conjunctive Management General Provisions,* which included an irrigation period of use recommendation for this water right. No objections were filed to this recommendation and the time period for filing objections has now expired.

THEREFORE, IT IS ORDERED that the period of use for the irrigation element of the above-captioned water right is hereby amended and decreed as:

PERIOD OF USE: 02-15 11-30

IT IS FURTHER ORDERED that the ***Partial Decree*** for the above-captioned water right is hereby amended and decreed to contain the following:

> This partial decree is subject to such general provisions necessary for the definition of the rights or for the efficient administration of the water rights as may be ultimately determined by the court at a point in time no later than the entry of a final unified decree. I.C. section 42-1412(6).

This order is being entered *nunc pro tunc* as of the date the ***Partial Decree*** was issued and is not intended to modify any subsequent administrative changes for the water right, if any, which occurred following entry of the ***Partial Decree.***

RULE 54(b) CERTIFICATE

> With respect to the issues determined by the above judgment or order, it is hereby CERTIFIED, in accordance with Rule 54(b), I.R.C.P., that the court has determined that there is no just reason for delay of the entry of a final judgment and that the court has and does hereby direct that the above judgment or order shall be a final judgment upon which execution may issue and an appeal may be taken as provided by the Idaho Appellate Rules.

Dated August 27, 2001

Roger Burdick

ROGER BURDICK
Presiding Judge
Snake River Basin Adjudication

District Court
Snake River Basin Adjudication
PO Box 2707
Twin Falls, ID 83303-2707

Important Information About Your Water Right

August 27, 2001

RANGEN INC
PO BOX 706
BUHL, ID 83316

Dear Water Right Claimant(s):

The reverse side of this letter contains a copy of an ***Order Amending Irrigation Period of Use Element in Partial Decree and Incorporating into Partial Decree An Express Statment Regarding General Provisions, Nunc Pro Tunc*** (hereinafter ***"Order"***) for water right number 36-00135A. According to Idaho Department of Water Resources (IDWR) records, you are the current owner of this water right. If you are not the current owner, please contact IDWR immediately at:

Idaho Department of Water Resources
1301 North Orchard
Boise, ID 83706
800-451-4129

The Purpose of the ***Order*** is to set forth beginning and ending dates for the irrigation period of use for this water right. As stated in the face of the ***Order,*** this action was necessary following the decision of the Idaho Supreme Court in *A&B Irrigation Dist. v. Idaho Conservation League,* 131 Idaho 411, 423, 958 P.2d 568, 580 (1998). This ***Order*** also incorporates into the ***Partial Decree*** an express statement that the ***Partial Decree*** is subject to such general provisions necessary for the definition or for the efficient administration of the water right. This express statement is necesssary to comply with the requirements of Idaho Code section 42-1412(6). This ***Order*** in combination with the ***Partial Decree*** that was issued for this water right on January 06, 1998, sets forth all of the elements of your water right. The Snake River Basin Adjudication (SRBA) Court suggests that you keep this document in a safe location together with a copy of the ***Partial Decree*** to show evidence of the water right. The original of this ***Order*** and the original of the ***Partial Decree*** for this water right are on file with SRBA Court. If you do not have a copy of the original ***Partial Decree,*** one can be obtained by contacting the SRBA Court at (208) 736-3011. Please note that the ***Order*** is entered ***Nunc Pro Tunc,*** meaning that the ***Order*** will be treated as if it were issued the same date that the ***Partial Decree*** was originally issued.

Sincerely,

Diana Delaney
Case Administrator

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	**ORDER OF PARTIAL DECREE**
	)	
Case No. 39576	)	**For Water Right 36-02551**
	)	

On October 10, 1997, a ***Special Master's Report and Recommendation*** was filed for the above water right. No Challenges were filed to the ***Special Master's Report and Recommendation*** and the time for filing Challenges has now expired.

Pursuant to I.R.C.P. 53(e)(2) and ***SRBA Administrative Order 1***, Section 13f, this court has reviewed the Findings of Fact and Conclusions of Law contained in the ***Special Master's Report*** and wholly adopts them as its own.

Therefore, IT IS ORDERED that water right 36-02551 is hereby **decreed** as set forth in the attached ***Partial Decree Pursuant to I.R.C.P. 54(b)***.

DATED December 29, 1997.

DANIEL C. HURLBUTT, JR.
Presiding Judge
Snake River Basin Adjudication

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	PARTIAL DECREE PURSUANT TO
	)	I.R.C.P. 54(b) FOR
Case No. 39576	)	
	)	Water Right 36-02551

NAME & ADDRESS: RANGEN INC
PO BOX 706
BUHL ID 83316

SOURCE: MARTIN-CURREN TUNNEL TRIBUTARY: BILLINGSLEY CREEK

QUANTITY: 48.54 CFS

THE QUANTITY OF WATER UNDER THIS RIGHT FOR DOMESTIC USE SHALL NOT EXCEED 13,000 GALLONS PER DAY.
THIS RIGHT AND RIGHT NO. 36-15501 ARE LIMITED TO A TOTAL COMBINED FACILITY VOLUME OF 123,272 CU. FT.

PRIORITY DATE: 07/13/1962

POINT OF DIVERSION: T07S R14E S32 SESWNW Within GOODING County

PURPOSE AND PERIOD OF USE:

PURPOSE OF USE	PERIOD OF USE	QUANTITY
FISH PROPAGATION	01-01 12-31	48.54 CFS
DOMESTIC 3 HOMES AND 2 OFFICES	01-01 12-31	0.1 CFS

PLACE OF USE:

FISH PROPAGATION Within GOODING County
T07S R14E S31 SENE
S32 SWNW

DOMESTIC Within GOODING County
T07S R14E S31 SENE
S32 SWNW

OTHER PROVISIONS NECESSARY FOR DEFINITION OR ADMINISTRATION OF THIS WATER RIGHT:

THE QUANTITY OF WATER DECREED FOR THIS WATER RIGHT FOR DOMESTIC USE IS NOT A DETERMINATION OF HISTORICAL BENEFICIAL USE.

RULE 54(b) CERTIFICATE

With respect to the issues determined by the above judgment or order, it is hereby CERTIFIED, in accordance with Rule 54(b), I.R.C.P., that the court has determined that there is no just reason for delay of the entry of a final judgment and that the court has and does hereby direct that the above judgment or order shall be a final judgment upon which execution may issue and an appeal may be taken as provided by the Idaho Appellate Rules.

DANIEL C. HURLBUTT, JR.
PRESIDING JUDGE
Snake River Basin Adjudication

1997 DEC 29 PM 02:00
DISTRICT COURT - SRBA
TWIN FALLS CO., IDAHO
FILED _____

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	CERTIFICATE OF MAILING
	)	
Case No. 39576	)	
	)	Water Right(s): 36-02551

CERTIFICATE OF MAILING

I certify that a true and correct copy of the PARTIAL DECREE PURSUANT TO I.R.C.P. 54(b) for WATER RIGHT 36-02551 was mailed on December 29, 1997, with sufficient first-class postage prepaid to the following:

DIRECTOR OF IDWR
PO BOX 83720
BOISE, ID 83720-0098

RANGEN INC
Represented by:
J DEE MAY
PO BOX 1846
TWIN FALLS, ID 83303
Phone: 208-733-7180

DIANA DELANEY
Chief Deputy Clerk

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS .

In Re SRBA	)	PARTIAL DECREE PURSUANT TO
	)	I.R.C.P. 54(b) FOR
Case No. 39576	)	
	)	Water Right 36-07694

1997 DEC 30 AM 9:46
DISTRICT COURT - SRBA
TWIN FALLS CO., IDAHO
FILED

NAME & ADDRESS: RANGEN INC
PO BOX 706
BUHL ID 83316

SOURCE: MARTIN-CURREN TUNNEL TRIBUTARY: BILLINGSLEY CREEK

QUANTITY: 26.00 CFS

FACILITY VOLUME=287,640 CU. FT.

PRIORITY DATE: 04/12/1977

POINT OF DIVERSION: T07S R14E S32 SESWNW Within GOODING County

PURPOSE AND PERIOD OF USE:

PURPOSE OF USE	PERIOD OF USE	QUANTITY
FISH PROPAGATION	01-01 12-31	26.00 CFS

PLACE OF USE: FISH PROPAGATION Within GOODING County
T07S R14E S31 SENE
S32 SWNW

RULE 54(b) CERTIFICATE

With respect to the issues determined by the above judgment or order, it is hereby CERTIFIED, in accordance with Rule 54(b), I.R.C.P., that the court has determined that there is no just reason for delay of the entry of a final judgment and that the court has and does hereby direct that the above judgment or order shall be a final judgment upon which execution may issue and an appeal may be taken as provided by the Idaho Appellate Rules.

DANIEL C. HURLBUTT, JR.
PRESIDING JUDGE
Snake River Basin Adjudication

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	**ORDER OF PARTIAL DECREE**
	)	
Case No. 39576	)	**For Water Right 36-15501**
	)	

On October 10, 1997, a ***Special Master's Report and Recommendation*** was filed for the above water right. No Challenges were filed to the ***Special Master's Report and Recommendation*** and the time for filing Challenges has now expired.

Pursuant to I.R.C.P. 53(e)(2) and ***SRBA Administrative Order 1***, Section 13f, this court has reviewed the Findings of Fact and Conclusions of Law contained in the ***Special Master's Report*** and wholly adopts them as its own.

Therefore, IT IS ORDERED that water right 36-15501 is hereby **decreed** as set forth in the attached ***Partial Decree Pursuant to I.R.C.P. 54(b).***

DATED December 29, 1997.

DANIEL C. HURLBUTT, JR.
Presiding Judge
Snake River Basin Adjudication

MICROFILMED
2 0 2003

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	PARTIAL DECREE PURSUANT TO
	)	I.R.C.P. 54(b) FOR
Case No. 39576	)	
	)	Water Right 36-15501

NAME & ADDRESS: RANGEN INC
PO BOX 706
BUHL ID 83316

SOURCE: MARTIN-CURREN TUNNEL TRIBUTARY: BILLINGSLEY CREEK

QUANTITY: 1.46 CFS

THIS RIGHT AND RIGHT NO. 36-02551 ARE LIMITED TO A TOTAL COMBINED FACILITY VOLUME OF 123,272 CU. FT.

PRIORITY DATE: 07/01/1957

POINT OF DIVERSION: T07S R14E S32 SESWNW Within GOODING County

PURPOSE AND PERIOD OF USE:

PURPOSE OF USE	PERIOD OF USE	QUANTITY
FISH PROPAGATION	01-01 12-31	1.46 CFS

PLACE OF USE: FISH PROPAGATION Within GOODING County
T07S R14E S31 SENE
S32 SWNW

RULE 54(b) CERTIFICATE

With respect to the issues determined by the above judgment or order, it is hereby CERTIFIED, in accordance with Rule 54(b), I.R.C.P., that the court has determined that there is no just reason for delay of the entry of a final judgment and that the court has and does hereby direct that the above judgment or order shall be a final judgment upon which execution may issue and an appeal may be taken as provided by the Idaho Appellate Rules.

DANIEL C. HURLBUTT, JR.
PRESIDING JUDGE
Snake River Basin Adjudication

MICROFILMED
NOV 2 0 2003

1997 DEC 29 PM 02:00
DISTRICT COURT - SRBA
TWIN FALLS CO., IDAHO
FILED _____

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re SRBA	)	CERTIFICATE OF MAILING
	)	
Case No. 39576	)	
	)	Water Right(s): 36-15501

CERTIFICATE OF MAILING

I certify that a true and correct copy of the PARTIAL DECREE PURSUANT TO I.R.C.P. 54(b) for WATER RIGHT 36-15501 was mailed on December 29, 1997, with sufficient first-class postage prepaid to the following:

DIRECTOR OF IDWR
PO BOX 83720
BOISE, ID 83720-0098

RANGEN INC
Represented by:
J DEE MAY
PO BOX 1846
TWIN FALLS, ID 83303
Phone: 208-733-7180

DIANA DELANEY
Chief Deputy Clerk

MICROFILMED
NOV 2 0 2003