BEFORE THE DEPARTMENT OF WATER RESOURCES
OF THE STATE OF IDAHO

Docket No. CM-MP-2014-001

IGWA’s Post-Hearing Brief

Idaho Ground Water Appropriators, Inc. (IGWA), acting for and on behalf of its members, submits this post-hearing brief pursuant to the briefing instructions given verbal by the Director of the Idaho Department of Water Resources (IDWR) at the close of the hearing in this matter on March 19, 2014.
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INTRODUCTION

The Rules of Conjunctive Management of Surface and Ground Water Sources ("CM Rules") define “mitigation plan” as a “document that identifies actions and measures to prevent, or compensate holders of senior-priority water rights for, material injury caused by the diversion and use of water by the holders of junior-priority ground water rights within an area having a common groundwater supply.”¹ IGWA’s Mitigation Plan identifies eleven ways of preventing or compensating Rangen for material injury. However, the Director ruled at the beginning of the hearing that he will not consider mitigation that will compensate Rangen for material injury by providing replacement fish or lost profits. Therefore, the evidence presented at the hearing was limited to ways of preventing material injury by delivering additional water to Rangen. These mitigation proposals are numbered as follows in IGWA’s Mitigation Plan:

1A. Converting farm land from ground to surface water irrigation.
1B. Drying up irrigated farmland.
1C. Recharging the Eastern Snake Plain Aquifer (ESPA).
2. Assigning water right no. 36-16976 to Rangen.
3. Delivering water to senior Curren Tunnel water rights from alternative sources via the Sandy Pipe.
6. Cleaning or improving the Curren Tunnel.
7. Drilling a horizontal well near the Curren Tunnel.
8. Constructing an over-the-rim water delivery system.
9. Constructing a pump-back system to recirculate spring water.

Each of these actions will provide additional water to Rangen. Some are capable of meeting the full 9.1 cfs mitigation obligation; others can meet only part of it. Items 1 and 3 are already in place and have benefitted Rangen for many years. Item 2 can be implemented immediately. Items 6 through 9 require substantial engineering and acquisitions and will take months to implement.

IGWA’s goal is to provide additional water to Rangen so groundwater users are not curtailed. This requires firm determining the amount of mitigation credit available from items 1 through 3. Given the costs, items 6 through 9 will be pursued only to the extent necessary items 1 through 3 do

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¹ IDAPA 37.03.11.10.15.
not meet the full mitigation requirement, and only if the Director approves them in concept.

This leads to Rangen’s objective. If there was ever any doubt, Rangen made it clear in this proceeding that it is far more interested in curtailing juniors than in having water to raise fish.

The final order issued January 29th determined that Rangen does not have a valid water right to divert water from Billingsley Creek, and on January 31st the Director issued a cease and desist order requiring Rangen to stop using water from Billingsley Creek beginning February 24th. This was no small imposition, as flows in Billingsley Creek (10-12 cfs) make up roughly 90 percent of the total water Rangen uses to raise fish. Yet, when faced with the option of complying with the cease and desist order, or temporarily staying both the cease and desist order and the curtailment order, Rangen stood ready and willing to give up 90 percent of its water. This is, on its face, a bewildering decision, underscoring Rangen’s true motives. If Rangen’s primary objective is having water to raise fish, it makes no sense to comply with the cease and desist order, which would deprive Rangen of 10-12 cfs, when curtailment would provide only 9.1 cfs decades later.

Likewise, when Rangen failed to pay its protest fee on time, and faced the very real possibility of being barred from participating in the mitigation plan hearing, but was once again offered the chance to avoid that risk, ensure its participation in the hearing, and extend the stay of both the cease and desist order and the curtailment order, Rangen declined. Rangen was more concerned with maintaining the threat of curtailment than ensuring it receives adequate mitigation.

Rangen’s opposition to IGWA’s Mitigation Plan reflects its curtailment mission. Instead of focusing on whether the replacement water IGWA proposes to deliver to Rangen is of sufficiently quality and reliability to raise fish, Rangen outright opposed every proposal to deliver water directly to its facility. As its counsel explained: “We’re here objecting to the entire mitigation plan. Except for conversions and CREPs those kinds of things and to the extent they deserve credit out of the Sandy Pipeline. That was what I said in the opening and what we’re here to discuss.”

Recognizing the IDWR has already approved pump-based systems to mitigate injury to fish farmers in the Thousand Springs area who depend on discharge from the ESPA, Rangen declined to put on any evidence of the quality, temperature, or reliability needed to utilize alternative water sup-

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2 Haemmerle, Hrg. Tr. 75:20-76:23 (rough draft).
3 Haemmerle, Hrg. Tr. 143:1-12 (rough draft).
plies in its facility. Instead, Rangen waived its arms and claimed it is incapable of conceiving what concerns it has with alternate water supplies unless it has detailed engineering plans showing how the plumbing would be constructed to transport such water. This contrived argument attempts to misdirect the Director’s attention from the issue that matters most (whether the alternate water supply will provide water that can be used to raise fish) to an issue that matters least at this stage of the mitigation process (how the conveyance system will be plumbed).

These actions leave no doubt that Rangen is far more interested in curtailing juniors than having water to raise fish.

ANALYSIS

All of the mitigation proposals in IGWA’s Mitigation Plan will provide additional water to Rangen. Because the assignment of water right 36-16976 is immediately available to meet the full 9.1 cfs mitigation obligation, this proposal is addressed first. If the Director approves this mitigation the remaining mitigation proposals need not be addressed.

If the Director refuses to approve mitigation credit for the assignment of water right 36-1976, he must determine the amount of credit due from conversions, recharge, and dry-ups, which requires running the Eastern Snake Plain Aquifer Model (ESPAM or Model), and the credit due from the delivery of alternate water sources to senior-priority water rights from Curren Tunnel. These mitigation actions are already in place and immediately available.

To the extent conversions, recharge, dry-ups, and surface water exchanges do not meet the full 9.1 cfs mitigation obligation, IGWA’s alternative proposals to clean the Curren Tunnel, improve the Curren Tunnel, drill a horizontal well, pump groundwater over the rim to Rangen, and/or recirculate surface water through the Rangen facility should be approved conditionally to allow further feasibility studies to be conducted and engineering design prepared for final approval before construction.

1. Assignment of water right no. 36-16976.

The best solution to the Rangen curtailment order is the assignment of water right no. 36-16976 to Rangen.4 The application for permit explains that the purpose of the water right is to “use this water for mitigation purposes to protect groundwater use on the Eastern Snake Plain to mitigate for Rangen’s apparent material injury and to provide mitigation for the cur-

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4 Exhibit 1018.
Rangen raises two objections to this proposal. First, it argues that this would be unfair because Rangen has historically used the water that would be assigned to under water right 36-16976. Second, Rangen contends that the assignment would be invalid because Rangen will not allow IGWA to perfect the water right by raising fish in its raceways. Neither argument stands up to scrutiny.

A. The equity of using water right 36-16976 for mitigation.

Rangen is the only protestant to the permit application, having filed its own application to appropriate the same water. Thus, if the Director refuses to allow water right 36-16976 to be used for mitigation, Rangen’s junior-priority water right 36-17002 will step in and take the water that water right 36-16976 has a prior right to. Rangen argues this is only fair because Rangen has historically used water from Billingsley Creek to raise fish. In other words, Rangen asks the Director to ignore the priority system.

It is unclear why Rangen claimed in the SRBA that its entire water supply comes from the Curren Tunnel, but given declining flows and curtailment rumblings at that time, it is certainly conceivable that Rangen believed filing its claims in this manner would put it in a better position to curtail juniors. Yet whether strategic or not, it is not the responsibility of the IDWR to effectively re-write Rangen’s SRBA claims by depriving groundwater users of their prior application to appropriate Billingsley Creek for mitigation purposes.

When IGWA argued in the delivery call proceeding that the Curren Tunnel should be administered as a groundwater right, Rangen countered that if IGWA believed the Curren Tunnel to be a groundwater source, it should have filed a protest against Rangen’s SRBA claims on the basis that the source should be named “groundwater.” Rangen’s argument cuts both ways.

Moreover, if there is any unfairness in allowing IGWA’s members to assign water right 36-16976 to Rangen as mitigation, it pales in comparison to the unfairness of permanently curtailing groundwater rights where less than 1% of the curtailed water will accrue to the Curren Tunnel after 50 years of curtailment, particularly since these groundwater rights were developed based on the IDWR’s determination that there was sufficient water in the ESPA to support the appropriation, the Legislature’s promise that the exercise of priority would not block full economic development of

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5 Id.
6 Exhibit 2068.
the ESPA, and the assurance from both the IDWR and the IWRB that the holders of aquaculture rights in the Thousand Springs area would not be permitted to curtail groundwater use on the Eastern Snake River Plain so long as the Swan Falls minimum flows are maintained. As IGWA’s members know all too well now, the State’s promises have not held up. Though the ESPA is not being mined by groundwater pumping, the Swan Falls minimum flows have not been breached, and spring discharges in the Thousand Springs area remain well above natural levels, groundwater users have spent the last decade—and more than $50 million—struggling to preserve their livelihoods in the face of curtailment orders.

The IDWR was right in finding there was sufficient water in the ESPA to sustain present groundwater withdrawals—there was, and there still is. But 157,000 acres of sustainable irrigation, along with groundwater use by cities, dairies, and commercial businesses, is being curtailed anyway.

If fairness is to be considered in deciding whether mitigation credit will be granted for the assignment of water right 36-16976 to Rangen, then by all means such credit is warranted.

**B. The Director has discretion to authorize the assignment of water right 36-16976 to Rangen for mitigation credit.**

Rangen also contends the assignment of water right 36-16976 is inappropriate because Rangen will not allow IGWA to raise fish in its facility, thereby precluding IGWA from perfecting the water right. This argument misses the point and effect of the assignment.

IGWA has no interest in raising fish in Rangen’s facility. Each of IGWA’s mitigation proposals is designed to provide additional water to Rangen that Rangen can use to raise fish. Under every mitigation alternative proposed, including the assignment of water right 36-16976, Rangen will be making beneficial use of the water.

IGWA’s mitigation credit comes from making water available to Rangen to apply to beneficial use. Whether Rangen actually uses the water is its prerogative. The Director acknowledged this in the Snake River Farm mitigation case, ruling that IGWA would be relieved of curtailment once it installs an over-the-rim system, whether or not Clear Springs Foods, Inc., decided to utilize the system.7

Rangen’s opposition to this proposal hinges on its hope that the IDWR will deny the application for permit for water right 36-16976 on the basis of

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7 Exhibit 1020 p. 9 (“If the plan is rejected by Clear Springs, the Ground Water Districts’ mitigation obligation will be reduced by the amount of water the over-the-rim pipeline could physically deliver to Clear Springs.”)
that it is speculative, but this puts the cart before the horse. If the Director accepts the assignment of water right 36-16976 as mitigation, the right will undoubtedly be approved, for two reasons.

First, water right 36-16976 is not speculative because mitigation rights are perfected by complying with the terms of the order approving their use for mitigation. In fact, Idaho Code 42-223(10) expressly exempts water rights used for mitigation purposes from forfeiture. If the Director approves use of the water right 36-16976 for mitigation, Rangen’s speculation argument has no basis.

Second, Rangen is the only protestant against water right 36-16976, and its protests derive entirely from the use of that water right by IGWA. Once water right 36-16976 is assigned to Rangen, there is nothing left to protest. Rangen can withdraw its protest, the IDWR can issue a permit in a matter of days, and Rangen can put to beneficial use the water made available under IGWA’s prior right.

The irony of Rangen’s opposition to water right 36-16976 is that it wants all the benefits of the priority system, but none of the responsibilities. The fact is, Rangen has no right to use water from Billingsley Creek once the stay of the cease and desist order is lifted. IGWA has a prior right to use that water. This water is immediately available to Rangen upon assignment of water right 36-16976.

It is disingenuous for Rangen to advocate for strict priority administration to curtail junior groundwater rights, and then demand that the IDWR deny the right of groundwater users to utilize their prior right on Billingsley Creek for mitigation purposes. Therefore, IGWA asks the Director grant mitigation credit upon the assignment of water right 36-16976 to Rangen for the amount of water flowing in Billingsley Creek which presently exceeds the full 9.1 cfs mitigation obligation based upon the watermaster records.

If the Director authorizes this credit, an issue arises as to whether water from Billingsley Creek must be pumped to the Small Raceways. In the delivery call proceeding, IGWA argued that Rangen can meet any water needs it has in the Small Raceways by pumping water from Billingsley Creek.8 The Director did not address this argument due to his conclusion that Rangen has no right to use water from Billingsley Creek.

Rangen’s historic practices demonstrate there is no need to pump water to the Small Raceways. During the entire time that Rangen believed it had a right to use water from Billingsley Creek, it never pumped water into

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8 See Exhibits 1051 & 1052.
the Small Raceways, which Dr. Brendecke explained could be done very easily. Groundwater users should not be required to install conveyance facilities that Rangen has never deemed necessary itself.

Therefore, if the Director accepts the assignment of water right 36-16976 as mitigation, IGWA asks the Director to confirm pursuant to CM Rules 42.01.g and 42.01.h that Rangen is responsible to improve its diversion facilities to convey water from Billingsley Creek to the Small Raceways to the extent Rangen deems necessary.

2. Conversions, recharge, and dry-ups.

Groundwater users have for many years invested in actions to enhance the ESPA. This includes convert farmland from surface water to groundwater irrigation, recharging the aquifer, and voluntarily drying up land that has historically been irrigated with groundwater. IGWA already has an approved mitigation plan for these activities.9

Rangen eventually withdrew its objection to IGWA receiving credit for these activities, but there remain a few issues the Director should address in the order approving these mitigation proposals: (a) the mitigation credit for recharge undertaken by the Idaho Water Resource Board (IWRB), (b) the mitigation credit for recharge via the Sandy Ponds, (c) Rangen’s assertion that conversions, recharge, and dry-ups must be permanent, and (d) projecting conversion, recharge, and dry-up credits prospectively.

A. Credit for IWRB recharge.

Jennifer Sukow explained that the IDWR calculation of recharge mitigation credit in Exhibit 1025 does not account for recharge sponsored by the IWRB. Rangen contends that IGWA should receive no mitigation credit for IWRB recharge activities. This raises a question of the purpose of IWRB recharge.

The IWRB has a constitutional obligation to “formulate and implement a state water plan for optimum development of water resources in the public interest.”10 The “Optimum Use” section of the State Water Plan specifically addresses the need to “adopt plans and policies that facilitate and encourage a resolution of conflicts that occur in water basins where there is a hydraulic connection between ground and surface waters,”11 and provides

9 Exhibits 1003 and 1004.
10 Idaho Const., Art. 15, § 7.
for aquifer recharge as a means of “providing mitigation for junior ground water depletions.”\textsuperscript{12} The plan explicitly states that the “Board supports and assists in the development of managed recharge projects that further water conservation and increase water supplies available for beneficial use.”\textsuperscript{13}

The ultimate objective of IWRB recharge is to facilitate beneficial use of Idaho’s water resources. It would certainly be inequitable to permit Rangen to benefit from IWRB recharge by way of increased water flows, yet not allow those flows to also have the effect of reducing curtailment. It is unimaginable that the IWRB would not expect its investments in recharge to benefit both surface and ground water users in this way. Therefore, IGWA requests all IWRB recharge activities be granted mitigation credit, regardless of private funding contributions.

At a minimum, IGWA should receive mitigation credit for IWRB recharge activities that groundwater users contribute private funding to, consistent with the Director’s order in the Surface Water Coalition case where IGWA paid all of the private funding to the CREP program and received all of the credit even though IGWA’s payment represented about 1\% of the total program cost which was largely funded by the federal government.\textsuperscript{14} Disallowing credit for recharge would establish poor policy by removing the incentive to financially participate in recharge activities.

Therefore, IGWA requests at a minimum that mitigation credit be provided for IWRB recharge that IGWA contributed private funding for. While IGWA was unable to obtain an accounting from the IWRB of all private contributions to IWRB-sponsored recharge prior to the hearing, Lynn Carlquist testified that IGWA had contributed financially to IWRB activities in the past, two letters transmitting IGWA funding were admitted into evidence,\textsuperscript{15} and Wayne Courtney testified that Rangen had not funded any IWRB recharge. IDWR and/or IWRB records should provide accurate determination of private funding of IWRB recharge activities.

B. Recharge via Sandy Ponds.

The approved mitigation plan for recharge approves mitigation credit for recharge via the NSCC system and “other canal conveyance systems and other recharge sites located throughout the Eastern Snake Plain.”\textsuperscript{16} It

\begin{itemize}
  \item \textsuperscript{12} Id. at 15.
  \item \textsuperscript{13} Id.
  \item \textsuperscript{14} Exhibit 1005.
  \item \textsuperscript{15} Exhibit 1077.
  \item \textsuperscript{16} Exhibit 1003 p. 7.
\end{itemize}
states that “the benefits from specific mitigation activities in response to specific findings or material injury to specific senior water rights can be determined using the Eastern Snake Plain Aquifer Model and other administrative tools.”

IGWA presented evidence of recharge that takes place via the Sandy Ponds which are located roughly a mile and a half from the Curren Tunnel. North Snake Ground Water District (NSGWD) owns and is responsible for the Sandy Ponds, and owns stock in NSCC that is delivered to the Ponds. Butch Morris testified that he diverts 8.5 cfs out of the ponds for irrigation during the irrigation season, and that a minimum of 14 cfs must be coming into the Sandy Ponds from NSCC to maintain equilibrium in the water level in the Ponds if he is diverting 8.5 cfs out of them for irrigation. He also testified that he diverted 25 cfs into a recharge site next to the upper pond for one month continuously in 2011.

Exhibits 1032 and 1033 report NSCC water deliveries into the Sandy Ponds. Deliveries into the Ponds far exceed the irrigation diversions, and Carlquist and Morris both testified that substantial aquifer recharge occurs via the Ponds. Dr. Brendecke confirmed that water recharged via the Sandy materialy increases flows at the Curren Tunnel based on ESPAM 2.1 simulations.

Attached as Appendix A is a table summarizing the recharge at the Sandy Ponds based on NSCC deliveries, irrigation withdrawals by Morris, and evaporation. Sukow testified that this data would enable the IDWR to calculate the effect of such recharge on flows at Rangen.

Were it not for NSGWD’s ownership and management of the Sandy Ponds, this water would flow down the wastewater ditch to the Snake River. Instead, recharge takes place to the benefit of Rangen. Since this recharge occurs on land owned and managed by NSGWD, using water delivered under NSGWD’s stock in NSCC as well as wastewater that NSGWD is responsible for, IGWA requests mitigation credit for this recharge.

NSGWD, Magic Valley Ground Water District (MVGWD), and Southwest Irrigation District (SWID) have filed application for permit no 36-17001 to use up to 50 cfs from the Sandy Ponds for recharge purposes. This was done to address Rangen’s objections, and arguably is unnecessary since the recharge as well as the irrigation from the Sandy Pipeline by Mor-

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17 Id. at 8.
18 Exhibit 1088.
19 Exhibits 1008 and 1009.
20 Exhibit 1017.
ris are all within the NSCC authorized service area where the existing water rights of NSCC can lawfully be used. While this will solidify its right to conduct recharge in the future, it does not negate the recharge that has occurred to date which has benefited Rangen and should be a credit.

C. Mitigation credit calculation.

The curtailment order states that simulated mitigation credits will be determined on a steady-state basis. Rangen has not opposed with that approach, but asks the Director to order that conversions, recharge, and dry-ups be made permanent if they are to qualify for mitigation credit. While this request is superficially understandable, it does not account for certain assumptions inherent in conjunctive water administration, and it would create a disincentive to conversions and recharge while producing a windfall to Rangen.

Calculating mitigation credits on a steady-state basis reflects two related assumptions that exist in the conjunctive management context. On one hand, the simulated benefits from curtailment will take years to be fully realized, so an assumption is made that the senior will need additional water indefinitely. This assumption may prove false. By the same token, the simulated benefits of mitigation may also take decades to be fully realized, so a corresponding assumption is also made that mitigation will continue indefinitely. The IDWR cannot realistically order that the senior will need additional water indefinitely, nor can it realistically order that mitigation continue indefinitely. Calculating both curtailment benefits and mitigation credits based on a steady-state Model run strikes a balance between these assumptions.

Further, Rangen’s request for an order that conversions and recharge be static is impractical given the natural fluctuations in the surface water supply used for conversions and recharge. If conversion and recharge were limited to the amount of water that could be guaranteed every year, there would be much less of both. Or, more likely, “soft” conversions would continue, but IGWA’s members would not receive any mitigation credit for them, resulting in a windfall to Rangen.

The record shows that CREP and conversions are quite consistent and stable. Recharge is more dynamic, but can nonetheless reasonably be expected to continue into the foreseeable future, with a likelihood of increasing. Therefore, the Director should decline Rangen’s invitation to order that conversions, recharge, and dry-ups must be permanent to qualify for

21 Final Order p. 42.
mitigation credit. The averaging mechanism discussed below adequately addresses Rangen’s concern over the slight variability in conversions, recharge, and CREP activities.

D. Calculating mitigation credits prospectively.

Jennifer Sukow explained that a precise calculation of mitigation credits for conversions, recharge, and dry-ups can only be made after-the-fact by running actual recharge and conversion volumes through the Model. Yet, IGWA needs to know how much mitigation credit can be expected in the upcoming irrigation season so it can determine the amount of water that must be delivered to Rangen from other sources to meet the full mitigation obligation. IGWA proposes that the Director resolve this challenge by assigning as the mitigation credit for the upcoming year the average of the actual mitigation provided during the prior three years. For example, the mitigation credit for the 2014 season would be the average mitigation provided in the years 2011, 2012, and 2013. The actual mitigation provided in 2014 will likely vary to some degree, but over time this variation will be offset by the moving 3-year moving average.

3. Exchange of water via Sandy Pipe.

In response to the original Rangen curtailment order in 2003, NSGWD constructed the Sandy Pipe to provide an alternative source of water to senior irrigation water rights from the Curren Tunnel. This arrangement was recently memorialized in a signed agreement between NSGWD and Butch Morris.\(^\text{22}\) Carlquist and Morris both testified that this agreement memorializes the oral agreement that has been in place since the Sandy Pipe was first installed. While the Agreement cites the Morris water rights specifically, Morris testified that he farms the Musser and Candy properties which are also irrigated from the Sandy Pipe.\(^\text{23}\)

As mentioned above, NSGWD owns stock in NSCC and is responsible to dispose of NSCC wastewater that is delivered to the Sandy Ponds, and the Morris, Musser, and Candy lands are within the NSCC service area.\(^\text{24}\) In light of this, the application for permit that NSGWD, Magic Valley Ground Water District, and Southwest Irrigation District filed to use wastewater

\(^{22}\) Exhibit 1016.

\(^{23}\) See Exhibits 1069 & 1070.

\(^{24}\) Exhibit 3000.
from the Sandy Ponds as a source of supplemental or exchange water for mitigation purposes is arguably unnecessary.\textsuperscript{25}

Rangen initially objected to mitigation credit for water delivered to the holders of senior water rights from the Curren Tunnel via the Sandy Pipe, arguing there are no water rights that allow this, but eventually retreated from that position in the face of the Eastern Snake Plan Aquifer Mitigation, Recovery and Restoration Agreement for 2004.\textsuperscript{26} The Agreement, which Rangen signed, included the obligation of groundwater users to use “best efforts to convey Northside Canal Company operational spills to the Sandy project into the Sandy pipeline.”\textsuperscript{27}

In addition, evidence was admitted that Rangen itself applied for and received a grant to install piping needed deliver the Candy water right via the Sandy Pipe for the benefit of Rangen.\textsuperscript{28} Rangen stated in its grant application that the “purpose of this proposed project is to provide increased flow to the Rangen aquaculture facility.”\textsuperscript{29}

Thus, there is now no objection to IGWA receiving mitigation credit for water delivered to senior Curren Tunnel water rights from alternative sources. However, there are four sideboards on the amount of mitigation credit available to IGWA from this exchange of water.

First, the credit cannot exceed the diversion rate authorized under senior water rights from the Curren Tunnel. The Morris, Musser, and Candy water rights senior to 1962 collectively authorize the diversion of 11.15 cfs from the Tunnel, as shown in Exhibit 1049.

Second, the mitigation credit cannot exceed the amount of water diverted from the Sandy Pipe to irrigate lands that have senior Curren Tunnel rights. Morris explained that he diverts 6 cfs from the Sandy Pipe to irrigate the Morris, Musser, and Candy properties during the irrigation season, which in recent years has been from May 15 to October 15.\textsuperscript{30} In addition,

\textsuperscript{25} Exhibit 1017.
\textsuperscript{26} Exhibit 1014.
\textsuperscript{27} \textit{Id.} at 5.
\textsuperscript{28} Exhibit 1050.
\textsuperscript{29} \textit{Id.} at 3.
\textsuperscript{30} The irrigation season of Curren Tunnel water rights is February 15 to November 30. However, Morris testified that he typically starts irrigating wheat by the first of May and corn by the first of June, and that he typically stops irrigating around October 15, though he finishes irrigating corn in early September. Given the dynamic nature of cropping patters, and the relatively long growing season in the Hagerman area, IGWA assumes an average irrigation season of May 15-October 15 for purposes of calculating the Sandy Pipe mitigation credit.
Morris explained that groundwater users drilled a stockwater well for Musser as a supplemental source of Musser’s stockwater right 36-102 which authorizes the diversion of 0.07 cfs year-round, and that Musser presently utilizes this well to water roughly 500 cattle year-round.

Third, the mitigation credit cannot exceed the amount of water that discharges from the Curren Tunnel. The IDWR produced water measurement records from the measuring device within the Curren Tunnel along with measurements of flows in the white pipe that lies on the bottom of the Tunnel. Attached as Appendix B is a table and hydrograph combining the flow measurements from the Tunnel measuring device with the flow measurements from the white pipe. The total flow from the Tunnel averaged 3.58 cfs during the 2013 irrigation season (May 15-October 15).

Fourth, the mitigation credit is available so long as the senior Curren Tunnel water rights are not curtailed by downstream water users. Frank Erwin testified that these rights have never been curtailed and will not occur in 2014, but that a priority curtailment could happen in future years. If that occurs, curtailment can be avoided, and the mitigation credit can be preserved, by delivering additional water through the Sandy Pipe as needed to ensure at least 15 cfs of flow at the head of the Curren Ditch.\(^{31}\)

Based on the foregoing, IGWA requests a mitigation credit of 0.07 cfs year-round for the exchange that occurs via the Musser stockwater well, plus a credit of 3.58 cfs during the 2014 irrigation season based on the 3-year average discharge from the Tunnel from 2011 to 2013. Combined with the mitigation credit from conversions, recharge, and dry-ups as set forth above, this meets IGWA’s staged year-1 mitigation obligation of 3.4 cfs during the 2014 irrigation season (until October 15, 2014). Because this does not meet the 3.4 cfs year-1 obligation after October 15, IGWA will be required to undertake one or more of the direct delivery options discussed below.

4. Cleaning the Curren Tunnel.

IGWA was surprised to learn during the course of preparing its mitigation plan that tunnels in the Hagerman area often experience declining flows due to obstructions from collapse and erosion of tunnel walls, and that removing such obstructions can significantly increase tunnel discharges. Butch Morris testified that he cleans the Hoagland Tunnel annual-

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\(^{31}\) Erwin also explained that the water district measurements of diversions to the Curren Ditch do not account for water discharged into the head of the Curren Ditch from the Sandy Pipe.
ly, and that discharge from the Tunnel increases as a result. Frank Erwin similarly testified that the Florence Livestock tunnel was cleaned in 2013 resulting in significant additional flows.

IGWA requests authorization to clean the Curren Tunnel, and to receive credit for increased discharge from the Curren Tunnel as a result of such cleaning. The mitigation credit from cleaning would be equal to the addition discharge, determined by comparing flows before and after the cleaning takes place.

Rangen argued at the hearing that IGWA should be foreclosed from cleaning the Curren Tunnel because Rangen already has the ability to clean the Tunnel. However, Rangen has had a disincentive against cleaning the Tunnel because the amount of water that discharges from the Tunnel is a cap on the mitigation credit IGWA receives for deliveries via the Sandy Pipe.

Therefore, IGWA requests authorization to clean the Tunnel for mitigation credit. If the Director denies this request, IGWA asks that Rangen be ordered to clean the Tunnel annually, that IGWA be authorized to have a representative present to ensure such cleaning is performed to the extent reasonably practical, and that a failure to annually clean the Tunnel will toll the mitigation obligation of junior groundwater users.

5. **Improving the Curren Tunnel / drilling a horizontal well.**

A natural solution to increasing flow at Rangen would be to widen or deepen the Curren Tunnel or drill a second horizontal well/tunnel nearby. Either of these actions would draw additional water from the ESPA and make it available to Rangen by gravity flow under the same hydrologic conditions by which Rangen presently receives water. Rangen previously hired SPF Engineering to evaluate this, who concluded that it could significantly increase flows of water available to Rangen. Rangen’s expert Dr. Brockway also admitted that Curren Tunnel improvements as well as a horizontal well can be expected to increase Rangen’s water supply.

If getting more water was the ultimate goal, one would expect Rangen to jump at the chance to have groundwater users pay the cost of these types of improvements. Yet, Rangen opposes these as well, claiming that without engineering plans Rangen is incapable of conceiving what objections it may have to additional water from the Curren Tunnel or a horizontal well. Since Rangen relied on the same argument to oppose all of IGWA’s other proposals to deliver water directly to Rangen, some discussion is needed of the purpose and protocol of the mitigation plan process.
The chief consideration in any proposal to deliver mitigation water directly to the senior water user is whether the plan will “provide replacement water, at the time and place required by the senior-priority water right, sufficient to offset the depletive effect of ground water withdrawal . . .”32 Related to this is the “reliability of the source of replacement water over the term in which it is proposed to be used under the mitigation plan.”33

As mentioned above, Rangen declined to put on any evidence of the quality, temperature, or reliability needed of replacement water supplies delivered to Rangen’s facility, instead arguing that it is incapable of conceiving the objections it may have to alternative water supplies. This argument is a red herring designed to misdirect the focus of this proceeding.

By definition, a mitigation plan is only required to “identify[] actions and measures to prevent, or compensate holders of senior-priority water rights for, material injury caused by the diversion and use of water by the holders of junior-priority ground water rights within an area having a common ground water supply.”34 While CM Rule 43 requests information to help the Director evaluate various factors, there is no requirement of engineering plans. The only factor that even mentions engineering deals with computer simulations, which are not a part of IGWA’s direct delivery proposals.35

In an ideal world absent of time or financial constraints, junior water users could submit engineering plans with every mitigation plan alternative. In the real world, water users often need to know whether a proposed replacement water supply is suitable, at least conceptually, before undertaking to engineer the delivery system. The hearing on IGWA’s mitigation plan was held only seven weeks after the plan was filed, yet Rangen’s own expert testified that it would take his firm at least six months to prepare engineering plans for an over-the-rim delivery system.

Rangen contends that IGWA should have been engineering mitigation plans years ago so that they were ready to go as soon as the curtailment order was issued. This is equally unrealistic considering the IDWR had previously deemed Rangen’s delivery call a futile call. Moreover, even if Rangen’s call had not been deemed futile, the 10% trimline would have

32 CM Rule 43.03.b.
33 CM Rule 43.03.h.
34 CM Rule 10.14 (emphasis added).
35 See CM Rule 43.03.e.
resulted in the curtailment of only 735 acres. Had the IDWR adopted a trimline in this case that was anywhere near the 10% trimline, IGWA’s ongoing mitigation activities (conversions, recharge, dry-ups) may have fully mitigated the curtailment obligations, avoiding any need to engineer direct delivery systems. It is naive to suggest that groundwater users should spend tens or hundreds of thousands of dollars engineering mitigation plans when there was no curtailment order and no quantification of how much mitigation would be required in the event the IDWR abandoned its futile call ruling.

Given the time and cost of developing engineering plans, IGWA’s Mitigation Plan states up front that “it is impractical to include the specific details, engineering, hydrogeological analysis, technical data, and necessary acquisitions” to implement its direct delivery proposals. Rather, IGWA asked the IDWR to “review and conditionally approve these solutions in concept, providing necessary guidance for IGWA to proceed with the acquisitions, engineering, technical support, financial plans, and construction commitments necessary to implement these alternatives.”

Rangen’s suggestion that this should be done in reverse is mistaken. When a water user applies for a new water right, they are required to provide the information necessary for the IDWR to evaluate whether there is sufficient water to support the appropriation without injuring other water users. The water user does not undertake to engineer diversion structures, drill wells, purchase irrigation equipment, run power lines, etc. until after the IDWR has authorized the use of water. Water right transfers are handled the same way, and mitigation plans should be as well. The Director should reject Rangen’s argument that a mitigation plan cannot be considered without engineering plans showing how the replacement water delivery system will be plumbed.

With respect to IGWA’s specific proposal to improve the Curren Tunnel or drill a horizontal well/tunnel, there is no substance to Rangen’s assertion that it is incapable of evaluating whether it’s feasible. SPF Engineering has already determined it is feasible, concluding: “A successful horizontal well could result in a substantial increase in flow to the Rangen facility.” Dr. Brendecke agreed that there is ample water in the ESPA and that a horizontal well would likely increase the flow at Rangen, and Dr. Brockway acknowledged that the technology exists to drill horizontal wells and that it would access the same water Rangen presently procures from

36 Exhibit 1001 p. 2.
37 Exhibit 1060 p. 6.
the ESPA. SPF suggested that one or more test wells be drilled to determine the appropriate depth and location of the horizontal well.\textsuperscript{38} This would be a pre-requisite to engineering the horizontal well. The price tag of the test wells and detailed feasibility analysis 10 years ago was $132,928, which Rangen was unwilling to pay on its own though it now contends IGWA should have undertaken this expense before knowing if there would be any need for it.

As an engineer and hydrologist, Dr. Brockway is certainly qualified to evaluate whether the additional water that would discharge from a wider or deeper Curren Tunnel, or the additional water discharge from a nearby horizontal well, poses any legitimate threat to Rangen. The truth is, it doesn’t. It’s the same water.

Therefore, IGWA asks the Director to conceptually approve its proposal to improve the Curren Tunnel and/or drill a horizontal well/tunnel in the vicinity of the Curren Tunnel. This will enable IGWA to undertake the test wells and other analyses outlined in the SPF report as necessary to determine whether improving the Curren Tunnel or drilling a horizontal well will be more cost-effective than other proposed mitigation activities.

In addition, IGWA requests an order providing that if Rangen does not provide the access and easements needed to evaluate and construct these improvements, IGWA’s obligation to deliver mitigation water to Rangen will be tolled until such easements can be obtained by other means.

6. \textbf{Pump-based mitigation solutions.}

IGWA’s remaining direct delivery proposals utilize pumps to either pump groundwater from the ESPA and deliver it over the rim to Rangen, or pump water from the bottom to the top of Rangen’s hatchery to enable recirculation of water. The IDWR has already approved the use of pump-based systems to deliver mitigation water. In that case, a conceptual design was prepared to show how such a system may be engineered.

Rangen argues that IGWA’s mitigation plan is deficient for not also having a conceptual design. As mentioned above, however, there was inadequate time to design such a system for Rangen specifically, particularly since we don’t know the total mitigation credit that will be granted for IGWA’s other mitigation activities. IGWA had months to prepare the conceptual over-the-rim design in the Snake River Farms case.

Moreover, IGWA has already demonstrated that an over-the-rim delivery system can be constructed to mitigation material injury to senior aq-

\textsuperscript{38} \textit{Id.} at 6.
uculture rights under hydrogeologic conditions that are nearly identical to Rangen’s. The purpose of Dr. Brendecke’s testimony is to confirm that the exact same type of over-the-rim system that was conceptually designed for Clear Springs Foods, Inc., can be implemented for Rangen.

Previously, it was demonstrated that: “The temperature of the water delivered through pumping would be the same as that utilized at the Clear Springs facility;” “Redundancy systems are available and designed into the system to provide backup to deliver the water in the event of power or mechanical failure or failure of a well;” “Water quality will be at least equal to the water that flows from the springs that supply the Clear Springs facility;” and “Issues of biosecurity have been adequately addressed.”

The Snake River Farms plan was conceptual. It has not been fully engineered. Accordingly, the Director imposed certain conditions, including:

- “the Ground Water Districts are entitled to know whether Clear Springs will in fact refuse the replacement water prior to incurring the time and expense of a transfer proceeding.”
- “As a condition of approval, the Ground Water Districts must still present a plan to Clear Springs which allows Clear Springs to fully evaluate the proposal. At the time of the hearing, the construction plans were not fully developed. The Ground Water Districts shall prepare a full conceptual plan for review by Clear Springs consistent with the Idaho Public Works Construction Standards. The conceptual plan should locate sources of water and the placement of pipe in both plan and profile views. The conceptual plan should describe the proposed modification of existing ground water wells and pumping systems and should specify the quantity of water proposed to be delivered, the pipe size, and pipe type. The conceptual plan should contain computations showing the amount of water proposed for delivery can physically be delivered by the conceptual delivery system. Finally, the conceptual plan should describe the methods of construction and security to minimize risk to Clear Springs of water contamination. The plan must include a detailed plan of maintenance and response to emergencies.”
- “Following submittal of the conceptual plan, Clear Springs must state, in writing, whether it will accept the water delivered through the over-the-rim pipeline before the Ground Water Dis-

39 Exhibit 1020 p. 6.
40 Id. at 7.
41 Id.
tricts need to take any further action (i.e. file transfers, seek easements, finish plans). ... Rejection of the water by Clear Springs or Clear Springs’ refusal to allow construction in accordance with an approved plan suspends the Ground Water Districts’ mitigation obligations for the quantity of water that can physically be delivered to Clear Springs by the over-the-rim pipeline. The Director may require resubmission of the plan by the Ground Water Districts to address any reasonable design and construction concerns raised by Clear Springs. If the plan is accepted by Clear Springs, the Ground Water Districts must immediately file and pursue appropriate transfer applications and finalize all necessary approvals.”

“"If the plan is rejected by Clear Springs, the Ground Water Districts’ mitigation obligation will be reduced by the amount of water the over-the-rim pipeline could physically deliver to Clear Springs.”

As with the IDWR’s over-the-rim plan approved for Clear Springs, IGWA asks that the Director confirm that delivering water to Rangen from groundwater wells above the rim is conceptually acceptable, subject to the conditions imposed on approval of the Clear Springs plan.

**CONCLUSION**

Based on the foregoing, IGWA asks the Director to approve all of the mitigation alternatives identified in IGWA’s Mitigation Plan.

**RACINE OLSON NYE BUDGE**

& BAILEY, CHARTERED

By: [Signature] March 26, 2014

Randall C. Budge

T.J. Budge

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42 *Id.*

43 *Id.* at 9.
CERTIFICATE OF MAILING

I certify that on this 26th day of March, 2014, the foregoing document was served on the following persons in the manner indicated.

Signature of person mailing form

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