

Randall C. Budge, ISB # 1949  
Candice McHugh, ISB# 5908  
RACINE, OLSON, NYE, BUDGE &  
BAILEY, CHARTERED  
P.O. Box 1391  
Pocatello, Idaho 83204-1391  
Telephone: (208) 232-6101  
Facsimile: (208) 232-6109  
[rcb@racinelaw.net](mailto:rcb@racinelaw.net)  
[cmm@racinelaw.net](mailto:cmm@racinelaw.net)

*Attorneys for IGWA*

BEFORE THE DEPARTMENT OF WATER RESOURCES  
OF THE STATE OF IDAHO

IN THE MATTER OF THE MITIGATION  
COMPUTATIONS IN WATER DISTRICT 120  
FOR THE SURFACE WATER COALITION

**COMMENTS ON DRAFT PROTOCOL  
FOR MITIGATION COMPUTATIONS  
BY THE IDAHO GROUND WATER  
APPROPRIATORS, INC. ("IGWA")**

COME NOW the Idaho Ground Water Appropriators, Inc. and its members, for and on behalf of their respective members ("IGWA"), through counsel, and submit these *Comments on the Draft Protocol for Mitigation Computations* ("Draft Protocol") pursuant to the letter dated May 15, 2009 from the Idaho Department of Water Resources' ("IDWR" or "Department").

These comments are made in a good faith effort to provide initial feedback and input to IDWR as requested. They and are not intended to be comprehensive or inclusive of all matters that concern IGWA relating to the Draft Protocol which is not possible given the compressed timeframe provided by the Department to submit comments and particularly since IGWA's Second Questions were just answered by IDWR yesterday. By submitting these comments IGWA does not intend to be bound or to waive any defenses or additional objections to the Draft Protocol, the final Protocol or the process established by IDWR.

At the outset, because the current Director has resigned, IGWA would urge the adoption of any final protocol be delayed until a new Director has been appointed. This is appropriate to avoid yet another separate proceeding before the new Director.

## INTRODUCTION

The starting point for developing any protocol or methodology for determining what amount of water the calling senior surface water users are entitled to obtain through the curtailment of ground water users must include those factors and conditions already established as a matter of law in the Director's *Final Order Regarding the Surface Water Delivery Call* entered September 5, 2008 ("Final Order") and Hearing Officer Schroeder's *Opinion constituting Findings of Fact, Conclusions of Law and Recommendation* issued April 29, 2008 ("Opinion") to the extent adopted by the Final Order. The Final Order and Opinion must be clearly recognized and established as the guiding light for administering ground water and surface water conjunctively. Both the Final Order and the Opinion reaffirm with certainty the authority and importance for the Director to exercise sound judgment and discretion as contemplated by Title 42, Idaho Code. Water administration by its nature requires professional judgment and cannot be reduced to the rote application of mathematical equations and formulas. "Somewhere between the absolute right to use a decreed water right and an obligation not to waste it and to protect the public's interest in this valuable commodity, lies an area for the exercise of sound discretion by the Director." *American Falls Reservoir District No. 2 v. Idaho Dep't of Water Resources* 143 Idaho, 862, 882 (2007).

With that said, mathematical equations and formulas of the nature proposed by the Draft Protocol must be recognized to have limitations on accuracy and the ability to capture or predict complex hydrologic relationships. They must be considered as only one tool that the Director

may use in applying the factors and criteria established in the Rules for Conjunctive Management of Surface and Ground Water Resources (“CM Rules”). The state, through the Department, “shall equally guard all the various interests involved” and acknowledge the prior appropriation doctrine yet consider the necessary other water law principles including “reasonable use”, “optimum development of water resources”, and “full economic development” when the Director performs his duties in administering water rights between ground water and surface water users. See, Idaho Code § 42-101, CM Rule 20.03 and Opinion at 38-39.

The parties and IDWR participated in a lengthy administrative hearing where an extensive record of legal, technical and factual information was established. This vast information should not go to waste, nor need it be duplicated in this proceeding. Instead, this information should be used by the Director to refine not re-create a reasonable irrigation requirement and a method for predicting reasonable carryover storage for use in the final Protocol. The final Protocol should fairly and accurately determine the timing and amount of water owing from the ground water users to the entities of the Surface Water Coalition (“SWC”) to the extent necessary to mitigate any material injury caused by ground water pumping.

Fully supported by the well established record in the administrative hearing on the SWC’s Delivery Call, the Opinion and the Final Order contained detailed findings of fact and conclusions of law which are not clearly enumerated in the Draft Protocol yet must be fully recognized in the final Protocol.

Some of the key principles from the Opinion and Final Order that should not be lost and must be fully recognized and incorporated in the final Protocol are:

1. TFCC is primarily dependent upon its natural flow rights to meet its needs. All other SWC entities have relatively junior natural flow rights that commonly only provide water

during the runoff period between April and June in years of moderate to good snow pack and they rely primarily upon water from their storage contracts with the BOR. (Opinion at 10).

2. Conjunctive Management is not needed every year. (Opinion at 29). The system has not run out of water and it appears there will be water available to meet irrigators' needs. (Opinion at 6).
3. Although ground water pumping reduces the flow of the Snake River, this "does not mean that all water withdrawn from pumping has an adverse effect on surface water users dependent upon the Snake River." (Opinion at 29). "It is relevant to consider how much water is necessary to irrigate crops to maturity." (Opinion at 54).
4. The total water supply of the Surface Water Coalition must be considered – natural flow and storage rights and if crop needs are met by the combined use of natural flow and storage water and there is sufficient water for reasonable carryover, there is no material injury. (Opinion at 66-67).
5. The application of a trimline which limits the geographic scope of any curtailment is proper to avoid a significant probability that curtailment would extend to ground water users who would suffer significantly without contributing water where necessary to mediate material injury to the surface water users. (Opinion at 33).
6. Non-irrigated acres should be determined and excluded when determining the irrigation supply necessary for SWC members. (Opinion at 53).
7. Historical expectations of filling the reservoirs 2/3 of the time have been met and ground water pumping has not defeated the expectations of storage but has affected the amount of water in storage. (Opinion at 15). "With the amount of fill of the reservoir system, if replacement water for reasonable carryover shortages was provided in 2005 and 2007 for predicted shortages in 2006 and 2008, the water acquired by GIWA would not have been required for use by the members of the SWC. (Final Order at 6). There is no precise amount of reasonable carryover storage. Storage needs beyond the next season of need should not be considered. (Opinion at 62).
8. The right to secure reasonable carryover storage through curtailment does not extend to make up for water that is sold or leased "for uses unrelated to the original rights, e.g., the sale of water for ESA flow augmentation, power production, etc." (Opinion at 61, 64).
9. Replacement water in season may occur either by IGWA obtaining lease water before the beginning of the irrigation season and transferring the right to the water to the SWC

members OR underwriting the affected SWC members in their acquisition of the water as needed to be finally settled with a year-end accounting. (Opinion at 66).

10. If crop needs are met, there is no material injury and no right of curtailment. (Opinion at 39, 40, 51, 52, 67)
11. Replacement water for reasonable carryover storage shortages “should be provided in the season in which the water can be put to beneficial use, not the season before.” (Final Order at 6). “To order reasonable carryover the year prior to the season of need would result in waste of the State’s water resources.” (Final Order at 11).
12. CM Rule 42 lists factors that the Director may consider in determining material injury: “depletion does not equate to material injury.” (Final Order at 8).

### **IGWA’S UNDERSTANDING OF THE DRAFT PROTOCOL**

IGWA’s summary and understanding of how the Draft Protocol will be used to compute mitigation obligations set forth below is based upon the workshops and IDWR answers to

IGWA’s Questions to date:

1. Two basic quantities are calculated, deficit to reasonable in-season demand and deficit to reasonable carryover.
2. Deficit to reasonable carryover is calculated at the end of year by comparing actual and predicted carryover; however no delivery is required immediately.
3. Deficit to in-season demand is first estimated in the spring, and updated after the date of storage allocation for Water District 01. Ground water users must then secure the amount of water to meet the deficit to in-season demand in preparation for eventual delivery.
4. If the storage accounts of the SWC entities fill, any deficit to reasonable carryover from the previous year is set to zero and delivery of mitigation water for any deficit to in-season demand is held in abeyance until “time of need.”
5. If the storage accounts of the SWC entities do not fill, then the lesser of the deficit to in-season demand or the previous year’s deficit to carryover is deliverable within two weeks and any remaining deficit to in-season demand is deliverable at “time of need.”

Assuming the forgoing is a correct understanding of the Draft Protocol, IGWA provides the following comments.

### COMMENT ON CALCULATION OF IN-SEASON DEFICIT<sup>1</sup>

**Actual Acres Irrigated.** The calculation for the in-season deficit must consider the actual irrigated acres for each entity.<sup>2</sup> IDWR in answer to IGWA's Question No. 13 states:

A Geographic Information System shapefile is prepared depicting acres irrigated for each water delivery organization.

- The initial shapefile is prepared by Department staff, and shared with the water delivery organization;
- Inputs and changes are sought from each water delivery organization;
- When information is received from the water delivery organization, the information is reviewed and a summary report is prepared and issued; and
- This information is updated from time-to-time as conditions are deemed to have significantly changed, at a minimum once every five years.

If the acreage irrigated count is within five percent of the irrigated acreage limit of the water right, no adjustments to mitigation calculations are deemed necessary due to acreage count. If the acreage count is more than five percent in excess of the irrigated acreage limit of the water right, further investigation is required to determine the reason for the use of water on excess lands. If the acreage count is less than five percent less than the irrigated acreage limit of the water right, then an assessment must be made of the impact of this reduction in use of the water right on the mitigation requirement.

---

<sup>1</sup> IGWA also shares the City of Pocatello's concerns surrounding the proposed protocol for determining the in-season deficit contained in Pocatello's comments provided to the Director.

<sup>2</sup> As noted in the Recommendation and Final Order, non-irrigated acres should be determined and excluded when determining the irrigation supply necessary for Surface Water Coalition members. At least 6,600 acres claimed by TFCC in its District are not irrigated and a similar calculation should be done for each entity. The calculation of the water budget in determining if there will be curtailment should be based on acres, not shares. (Opinion at 53).

The Department's proposal to not adjust mitigation requirements if the acreage number found through remote sensing data is less or within 5% of the number of acres on the water right is not acceptable. The 5% (or less) variation when applied to the SWC entities' water rights can result in a large mitigation obligation and corresponding cost to ground water users. Therefore, field verification of the actual acres irrigated must be part of the review process and mitigation obligations should be based on that verified acreage. The actual irrigated acres can and should be determined. In no circumstance can mitigation obligations be based on an acreage amount greater than that shown on water rights nor should any non-irrigated acres, regardless of quantity, be used as a basis for determining in-season demand. (Opinion at 53). The irrigated acres should be reviewed each year that a mitigation obligation is calculated as due and owing from the ground water users.

Efficiency estimates should be verified through comprehensive measurement of irrigation diversions, deliveries and return flows. Under the Draft Protocol even small changes in efficiency estimates can lead to large changes in demand and in mitigation requirements. Substantial evidence was presented at the hearing that should be considered in refining the proposed approach. Efficiencies must also be refined as irrigation methods and operations change. Diversions in excess of irrigation demand, such as for power productions purposes early or late in the irrigation season, must be determined and excluded. In other words, the SWC's irrigation diversion calculations must be based on need to raise crops, not to use senior rights to supply water to junior power production rights or for any other use not directly related to raising their crops.

If seasonal precipitation is to be considered as an adjustment to baseline demand, a more thorough analysis of antecedent soil moisture conditions and soil profile water storage capacity

must be undertaken. The assumption that all excess precipitation in April and May of 2006 was available to meet irrigation requirements is not justified.

**Natural Flow to TFCC and NSCC Only.** As the Water District 01 records indicate and as evidence at the hearing established, Twin Falls Canal Company (TFCC) and North Side Canal Company (NSCC) natural flow water rights command the entire natural flow arising below Blackfoot during the majority of the irrigation season. When this occurs, the other SWC entities are reliant on storage only. These facts were acknowledged by the Hearing Officer at page 10 of the Opinion and adopted by the Final Order. Therefore, mitigation computations for in-season deficit of natural flow should only be done for TFCC and NSCC.

**Timing of Mitigation Water Delivery.** The water distribution and delivery methods employed by Water District 01 should be honored going forward. As reflected in the Final Order at 6, shortages to reasonable carryover should be provided in the season in which the water can be put to beneficial use, not the season before.” Such is consistent with the requirement of beneficial use and avoidance of waste.

#### **COMMENTS ON CALCULATION OF CARRYOVER STORAGE DEFICIT**

IGWA questions why it is necessary to perform calculations of reasonable carryover storage if ground water users are otherwise required to offset all shortages to in-season demands. If in-season demand will always be assured, there would seem to be no reason to be concerned with carryover storage because surface water users will face no risk of shortages.

The proposed methodology to predict carryover storage is by definition derived to predict historical values of carryover storage. Historical carryover storage is not necessarily the same as

the “reasonable carryover” to be assured by ground water users. In fact, to assume that the amount of historical carryover storage was “reasonable” is flawed especially given the changes in the past 30 years that impact the water supply to the SWC entities. These changes include changed irrigation efficiencies and demands, reduced incidental recharge, additional storage demand for environmental and flow augmentation demands.

**Regression Equations Do Not Predict Reasonable Carryover Values.** As shown in the Table 1. below, the regressions used to predict reasonable carryover storage produce extreme results when compared to the 2005 Order. This raises serious question about the validity of the regression models to predict reasonable carryover storage for mitigation purposes.

	Reasonable Carryover Storage for 2005 Original Order of May 2, 2005 <sup>3</sup>	Predicted Reasonable Carryover Storage for 2005 Using Draft Protocol <sup>4</sup>
Minidoka	-	239,306
Burley	-	161,682
A&B	8,500	43,606
Milner	7,200	20,593
AFRD #2	51,200	120,683
NSCC	83,300	510,129
TFCC	38,400	120,769
<b>Total</b>	<b>188,600</b>	<b>1,216,768</b>

Table 1. Comparison of Carryover Storage Calculations.

<sup>3</sup> Values from Amended Order, date May 2, 2005 at 26.

<sup>4</sup> Value from van Kirk spreadsheet titled: Carryover\_regression\_analysis\_tabulated\_results.xls

**Characteristics of Underlying Data do not Justify use of Regression Procedure.** The least-squares regression method used to develop the carryover storage equations presumes that the underlying data are normally distributed. This is not the case for all the data used in the equations and raises further doubt about the validity of the models.

The accrual of storage by the SWC entities is greatly influenced by the storage rights associated with their space-holder contracts. If the Department deems carryover storage calculations necessary, the Department should devise a method that more explicitly addresses the storage priorities of the surface water users. The Department should revise the proposed approach so that it predicts reasonable values of carryover deficit. This will require at the least a revision of the underlying data (e.g., through transformation) so that they conform to the assumptions of the methodology used. Alternative methods, such as Similar Years or Principal Component Analysis should also be considered.

**Amount of Reasonable Carryover Storage Must be Reduced by All Water Leased, Sold or Exchanged.** The right to secure reasonable carryover storage through curtailment does not extend to make up for water that is sold or leased “for uses unrelated to the original rights, e.g., the sale of water for ESA flow augmentation, power production, etc.” (Opinion at 61, 64). Therefore, any calculation for the deficit to carryover must be adjusted to account for such leases or other private agreements, including leases for flow augmentation<sup>5</sup> and private agreements such as that struck between surface water users relating to the Minidoka Credit. Ground water users should only be required to provide water that is needed to raise crops that is short due to ground water depletion, and nothing more.

Each of the SWC entities has different water needs, irrigation methods, water supplies and water rights. Therefore, the impact to their water supply and water rights due to ground water pumping must be determined individually. This requires that water rights, natural flow availability, drought, climate, and reductions due to changes in incidental recharge must be determined and calculated for each entity.

**Adjustments for Water Released Past Milner.** Water that is released past Milner dam must not inflate any mitigation obligations due and owing from ground water users.

### **RECOMMENDED ADDITIONAL TERMS**

Based on the foregoing, IGWA urges the following additional terms and conditions be set forth in the final Protocol:

1. With respect to natural flow supplies, mitigation computations for in-season deficit should only be done for TFCC and NSCC.
2. The calculation for the in-season deficit must consider the actual irrigated acres for each SWC entity.
3. Current Water District 01 accounting methods must continue.
4. Any carryover deficit calculation must be adjusted to account for all SWC leases or other private agreements, including leases for flow augmentation and private agreements.
5. The deficit to reasonable carryover storage must be explicitly limited to not exceed the unfilled (after initial allocation) storage account space of each entity.
6. Ground water users should only be responsible to provide reasonable carryover storage not some amount based on historical averages. Further, any protocol for predicting reasonable carryover storage must account for the different priority dates of the storage space-holder contracts.

---

<sup>5</sup> I.C. 42-1763B(4) states that flow augmentation is not a recognized beneficial use of water.

7. There must be a method by which ground water users will receive and preserve mitigation credit for excess mitigation water, such as allowing IGWA to put water into another space-holder's storage account or use the water for recharge for which IGWA can get mitigation credit.
8. Ground water users must be provided a reasonable time to secure lease agreements and place the replacement/mitigation water in storage account(s).
9. Mitigation options available to IGWA must include the ability to underwrite the senior users' water supply.
10. During the period any mitigation obligation is established any water released past Milner must be credited against any deficit amount.

### CONCLUSION

It is IGWA's position and belief that the current Director should defer to the newly appointed Director any adoption of a final Protocol. However, if the current Director intends to adopt a final Protocol, then, IGWA requests that IDWR address the areas of concern listed above and modify the methodology to incorporate the additional terms.

DATED this 12<sup>th</sup> day of June, 2009.

RACINE OLSON NYE BUDGE  
& BAILEY, CHTD.

  
RANDALL C. BUDGE

## CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 12th day of June, 2009, I caused to be served a true and correct copy of the foregoing as indicated below:

David R. Tuthill, Jr., Director (Original)  
Idaho Department of Water Resources  
P.O. Box 83720  
Boise, Idaho 83720-0098  
[dave.tuthill@idwr.idaho.gov](mailto:dave.tuthill@idwr.idaho.gov)

U.S. Mail/Postage Prepaid  
 Facsimile  
 Overnight Mail  
 Hand Delivery  
 Email

John K. Simpson  
Travis Thompson  
Barker Rosholt & Simpson  
PO Box 485  
Twin Falls, Idaho 83303-0485  
[jks@idahowaters.com](mailto:jks@idahowaters.com)  
[tlr@idahowaters.com](mailto:tlr@idahowaters.com)

U.S. Mail/Postage Prepaid  
 Facsimile  
 Overnight Mail  
 Hand Delivery  
 Email

Tom Arkoosh  
Capitol Law Group  
PO Box 2598  
Boise, Idaho 83701  
[tarkoosh@capitolawgroup.net](mailto:tarkoosh@capitolawgroup.net)

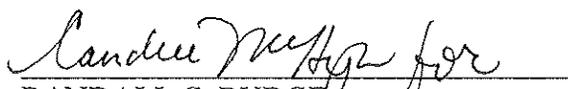
U.S. Mail/Postage Prepaid  
 Facsimile  
 Overnight Mail  
 Hand Delivery  
 Email

Sarah Klahn  
White Jankowski  
511 16<sup>th</sup> Street, Suite 500  
Denver, Colorado 80202  
[sarahk@white-jankowski.com](mailto:sarahk@white-jankowski.com)

U.S. Mail/Postage Prepaid  
 Facsimile  
 Overnight Mail  
 Hand Delivery  
 Email

Kent Fletcher  
Fletcher Law Office  
P.O. Box 248  
Burley, Idaho 83318  
[wkf@pmt.org](mailto:wkf@pmt.org)

U.S. Mail/Postage Prepaid  
 Facsimile  
 Overnight Mail  
 Hand Delivery  
 Email

  
RANDALL C. BUDGE