RECEIVED
JUN 0 2 2005
DEPARTMENT OF
WATER RESOURCES

Jeffrey C. Fereday (Idaho State Bar # 2719)
Michael C. Creamer (Idaho State Bar # 4030)
GIVENS PURSLEY LLP
601 Bannock Street, Suite 200
P.O. Box 2720
Boise, ID 83701-2720
Telephone: (208) 388-1200
Facsimile: (208) 388-1300

Attorneys for Idaho Ground Water Appropriators, Inc.

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF DISTRIBUTION OF WATER TO WATER RIGHT NOS. 36-02356A, 36-07210 AND 36-07427	**SUPPLEMENT AND ERRATA TO GROUND WATER DISTRICTS' PLAN FOR PROVIDING REPLACEMENT WATER (BLUE LAKES DELIVERY CALL)**

Idaho Ground Water Appropriators, Inc. ("IGWA"), through its counsel Givens Pursley LLP and on behalf of its ground water district members, Magic Valley Ground Water District and North Snake Ground Water District (the "Ground Water Districts"), pursuant to the Director's May 19, 2005 Order in the above-captioned matter ("Order"), hereby files with the Director, Idaho Department of Water Resources ("Director") the following supplement and correction to its Plan for Providing Replacement Water ("Replacement Water Plan"). Due to the shortness of time to obtain supporting information prior to the initial filing on May 27, 2005, IGWA was not able to provide this information at that time.

1. Conversions

The following additional lands should be included in the listing of the converted acres described in Attachment B to the Districts' Replacement Water Plan ("Conversions"):

Water Right No.	Water Right Owner	Location	Converted Acres
36-07145	Richard Trail Trust	07S 16E 32 NWNWSE	449[1]
36-02359	Henry Farms	08S 18E 34 NESENW	200[2]

2. Transient Reach Gain Supporting Analysis and Data Files

Attached hereto is "Supplement: Description of Transient Analysis of Mitigation Credits for Blue Lakes Order, May 30, 2005" together with a compact disk containing the analysis and data files for the transient reach gains tables contained in Attachment D and Attachment E to the Districts' Replacement Water Plan filed on May 27, 2005.

3. Errata

The Replacement Water Plan contains an error on Page 4. Under the heading "Steady State Reach Gains," the second sentence in this section incorrectly states that there will be an 11.3 cfs steady-state gain resulting from curtailment *and* deliveries to Conversion sites. However, 11.3 cfs is the steady-state gain resulting from deliveries to Conversion sites only. Thus, the second sentence under this heading should read: "The ESPA Model predicts an additional 11.3 cfs steady state gain to the Devils Washbowl Subreach attributable to application of surface water at the Conversion sites themselves in 2005."

---

[1] Completed in the fall of 2004, first irrigation with surface water 2005.

[2] First irrigation with surface water in 2005.

DATED this 2nd day of June 2005.

GIVENS PURSLEY LLP

By: _____
Michael C. Creamer
Attorneys for Idaho Ground Water Appropriators, Inc.

CERTIFICATE OF SERVICE

I hereby certify that on this 2nd day of June 2005, I served a true and correct copy of the foregoing by delivering the same to each of the following individuals by the method indicated below, addressed as follows:

Mr. Karl J. Dreher Director Idaho Department of Water Resources 322 East Front Street P.O. Box 83720 Boise, ID 83720-0098	_____ U.S. Mail _____ Facsimile _____ Overnight Mail ✓ Hand Delivery _____ E-mail
Gregory Kaslo Blue Lakes Trout Farm P.O. Box 1237 Twin Falls, ID 83303-1237	✓ U.S. Mail _____ Facsimile _____ Overnight Mail _____ Hand Delivery _____ E-mail
Daniel V. Steenson, Esq. Ringert Clark, Chartered 455 S. Third Street P.O. Box 2773 Boise, ID 83701-2773	✓ U.S. Mail _____ Facsimile _____ Overnight Mail _____ Hand Delivery _____ E-mail
Cindy Yenter Watermaster – Water District 130 Idaho Department of Water Resources Southern Regional Office 1341 Fillmore Street, Suite 200 Twin Falls, ID 83301-3380	✓ U.S. Mail _____ Facsimile _____ Overnight Mail _____ Hand Delivery _____ E-mail
Frank Erwin Watermaster – Water District 36 2628 South 975 East Hagerman, ID 83332	✓ U.S. Mail _____ Facsimile _____ Overnight Mail _____ Hand Delivery _____ E-mail

Michael C. Creamer

SUPPLEMENT

Description of Transient Analysis of Mitigation Credits for Blue Lakes Order, May 30, 2005

This document briefly describes the procedures used to determine certain of the mitigation credits claimed in the Replacement Water Plan. The analyses described below were used to calculate the claimed mitigation credits stemming from water supply activities undertaken or planned in Water District 130 over the period 2002-2005. This supplement describes the transient analysis reported in the Blue Lakes Order of May 30, 2005 and the attached compact disc is in addition to the earlier steady state analysis compact disc.

The analyses were carried out in part using tools and data obtained from researchers at the Idaho Water Resources Research Institute (IWRRI). The tools used were: (1) the Conversion Tool (River and Spring Response to Stresses Applied at Conversion Projects) – an Excel™ workbook of convolving response functions for conversion project sites, and (2) a transient flat water table version of the Eastern Snake Plain Aquifer (ESPA) model. The Conversion Tool was used for the analysis of water deliveries to existing conversion sites in the North Snake Ground Water District (NSGWD). Model simulations were used for the analysis of canal seepage, and pumping reductions.

Analyses Using the Conversion Tool

The Conversion Tool was used to determine the Devil's Washbowl to Buhl (DWB-BUL) reach gain credits (hereafter "credits") occurring in 2005 from conversions in the NSGWD that began in 2002. The conversions analysis treated canal seepage separately from water delivered to the conversion sites themselves. Canal seepage was assumed to equal 30% of total amount of water diverted at Milner for conversions. This seepage was subtracted from the total diversion. The remainder was assumed to be delivery at the conversion sites and was input to the Conversion Tool workbook. The canal seepage portion of the diversion was analyzed separately using the ESPA model as described later in this document.

Credits for 2002-2004 water deliveries to conversion sites were calculated separately from those anticipated from 2005 deliveries. Other than entering the water supply input data, no changes were made to the workbook versions obtained from IWRRI. Conversion deliveries for 2005 were assumed to be identical to those of 2004.

Results from this analysis are in files under the *Conversions* directory in the attached compact disc. Reach gain in the DWB-BUL subreach in 2005 from: (i) 2002-2004 mitigation activities are in file *Conversions_1_NSGWD_2002-*

2004.xls, and (ii) 2005 conversion deliveries are in file *Conversions_1_NSGWD_2005.xls.*

Analyses Using the ESPA Model

The ESPA model was used to calculate credits occurring in 2005 from canal seepage and pumping reductions in 2005 and prior years in which mitigation activities occurred. All model simulations were done using daily time step. This required that certain changes be made in the model discretization and output control files. Changes were also made to the name file to facilitate identification of different model runs. No other modifications were made to the version of the ESPA model obtained from IWRRI.

Canal Seepage
Canal seepage was assumed to be 30% of the total amount of water diverted at Milner to serve conversions and to supply the Sandy Pipeline project. All seepage was assumed to occur in the North Side Canal. Seepage was distributed spatially among model cells intersected by the canal.

ESPA model files used to calculate reach gain in the DWB-BUL subreach in 2005 only from canal seepage for 2002-2004 and for 2005 conversion and Sandy project deliveries are in directories *OnlyCanalSeepage_2002-2004* and *OnlyCanalSeepage_2005* respectively in the attached compact disc.

Pumping Reductions
Pumping reductions occurred in 2002 and 2004 in the Magic Valley Ground Water District (MVGWD). These pumping reductions were distributed uniformly over the model cells comprising those districts.

ESPA model files used to calculate reach gain in the DWB-BUL subreach in 2005 only from pumping reductions in 2002-2004 are in directory *OnlyPumpingReduction_2002-2004.*

All MODFLOW simulations were carried out using MODFLOW-2000 (U.S. GEOLOGICAL SURVEY MODULAR FINITE-DIFFERENCE GROUND-WATER FLOW MODEL) Version 1.10 07/26/2002. The executable code (*MF2K1.EXE*) is in directory *MODFLOWExecutable.*

Input data used to calculate the credits is given in Table 1.

Table 1. Summary of Historical Mitigation Activities (all values in acre-feet).

	Year			
Location and Type	**2002**	**2003**	**2004**	**2005***
North Snake GWD				
Pumping reductions	692	0	0	0
Recharge/conversions	19,963	27,000	31,137	31,137
Sandy Project delivery	0	9,000	12,814	12,814
Magic Valley GWD				
Pumping reductions	29,585	0	6,000	0
Recharge/conversions	0	0	0	0
Sandy Project delivery	0	0	0	0

* Recharge/Conversions and Sandy Project delivery in NSGWD assumed equal to 2004 values.