BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF DISTRIBUTION OF WATER TO WATER RIGHTS NOS. 36-2356A, 36-7210, AND 36-7427	))))	**ORDER APPROVING IGWA'S 2005 SUBSTITUTE CURTAILMENTS (Blue Lakes Delivery Call)**

BACKGROUND

On May 19, 2005, the Director issued his order ("May 19 Order") in the above-captioned matter, finding that ground water diversions under junior priority rights are materially injuring water rights held by the Blue Lakes Trout Farm, Inc. ("Blue Lakes"). As part of the Order, the Director required either: (1) curtailment of junior priority ground water rights; or (2) ground water districts representing certain holders of junior priority ground water rights submit a plan for replacement water (direct delivery of water to Blue Lakes) or for substitute curtailment (reduction in ground water diversions resulting in gains to the Devil's Washbowl to Buhl Gage spring reach) equivalent to (1) with the Department no later than May 30, 2005.

On May 27, 2005, the Idaho Ground Water Appropriators, Inc. ("IGWA") on behalf of some of its members, which include Aberdeen-American Falls Ground Water District, Bingham Ground Water District, Bonneville-Jefferson Ground Water District, Madison Ground Water District, Magic Valley Ground Water District, Southwest Irrigation District, and North Snake Ground Water District (collectively or in part referred to as the "Districts") submitted *Ground Water Districts' Plan for Providing Replacement Water (Blue Lakes Delivery Call)* ("IGWA Plan") to the Director for his review. The IGWA Plan proposed substitute curtailment, although termed replacement water, for 2005 as required by the May 19 Order. The IGWA Plan proposed acquisition and use of surface water for irrigation of certain lands in lieu of irrigation using ground water ("conversions") in the North Snake Ground Water District and voluntary curtailment of ground water irrigation ("voluntary curtailment" or "reductions") of lands in the North Snake Ground Water District and the Magic Valley Ground Water District.

On June 7, 2005, the Director issued *Order Regarding IGWA Replacement Water Plan (Blue Lakes Call)* ("June 7 Order"). The June 7 Order concluded that the IGWA Plan did not provide "sufficient replacement water to satisfy the 2005 requirement of 10.0 cfs flow in the Devil's Washbowl to Buhl reach."

On June 14, 2005, IGWA submitted *IGWA's Response to Director's June 7, 2005 Order Regarding Replacement Water Plan (Blue Lakes Delivery Call)*, and on June 17, 2005, IGWA submitted *IGWA's First Supplemental Response to Director's June 7, 2005 Order Regarding*

Replacement Water Plan (Blue Lakes Delivery Call), collectively referred to herein as "IGWA's Responses." IGWA's Responses proposed additional conversions from ground water irrigation to surface water irrigation within the North Snake Ground Water District, and additional voluntary curtailments of ground water irrigation within the Magic Valley Ground Water District and the North Snake Ground Water District.

On July 6, 2005, the Director issued *Order Approving IGWA Substitute Curtailment Plan (Blue Lakes Delivery Call)* ("July 6 Order"). The July 6 Order recognized a projected 12.2 cfs of "steady state gain to the Devil's Washbowl to Buhl reach for conversions from ground water irrigation to surface water irrigation, and voluntary curtailment of ground water irrigation and idling of other lands."

The July 6 Order required water users proposing conversion from ground water to surface water to either: (1) insure use of only surface water by (a) disabling the power supplies to ground water diversions or (b) locking valves to delivery systems serving conversion acres; or (2) adequately measure and record both surface water deliveries and ground water diversions. The North Snake Ground Water District was required to report surface water deliveries and ground water diversions to the Department.

The July 6 Order discussed post-irrigation season reanalysis of reach gains resulting from surface water conversions after final data were submitted by the North Snake Ground Water District:

> Post-season reach gain credits will be recomputed to account for the additional ground water diversion. Failure by the ground water district to accurately measure and report the surface water and ground water diversions will result in total disqualification of the conversion acres for replacement credits.

July 6 Order at p. 9-10, ¶ (2).

In December 2005, the North Snake Ground Water District submitted surface water delivery and ground water diversion data to the Department for the conversion acres recognized by the July 6 Order. The watermaster for Water District No. 130 and Department staff compared the information submitted with other information in the files of the Department. During the summer and fall of 2005, the watermaster for Water District No. 130 and Department staff examined many of the conversion acres on site to determine from what source the lands had been irrigated. Following Department analysis of the information, the Department determined the volume of surface water that had been delivered to the conversion acres.

The July 6 Order also required water users proposing voluntary curtailment of irrigation to provide maps to the Department depicting the acres on which irrigation had been curtailed and other information related to the water rights appurtenant to the land and historical use of water on the acres. The July 6 Order discussed reanalysis of reach gains resulting from voluntary curtailment of ground water irrigation after the North Snake Ground Water District and the Magic Valley Ground Water District submitted final data to the Department:

> After receiving the above information, the Department will review the voluntary curtailment acreage recognized by this order and will readjust the idled acreage and the associated reach gains.

July 6 Order, at p. 10, ¶ (3).

The Magic Valley Ground Water District provided additional information to the Department regarding the voluntary curtailment acres identified in the initial responses to the Director's May 19 Order and also identified additional acreage that would not be irrigated. The watermaster for Water District No. 130 and Department staff compared the information submitted with other information in the files of the Department. In addition, the Watermaster for Water District No. 130 and Department staff examined many of the voluntary curtailment acres on site to determine whether the lands had been irrigated. Following Department analysis of the information, the Department determined the location and number of the voluntary curtailment acres.

Based upon the Director's consideration of this matter, the Director enters the following Findings of Fact, Conclusions of Law, and Order.

FINDINGS OF FACT

1. The Department uses a calibrated ground water model to determine the effects on the Eastern Snake Plain Aquifer ("ESPA") and hydraulically connected reaches of the Snake River and its tributaries from ground water depletions and from surface water uses on lands overlying the ESPA.

2. The ground water model for the ESPA divides the Thousand Springs area into six adjacent groupings of spring complexes, or spring reaches. Water right nos. 36-2356A, 36-7210, and 36-7427 authorize diversion of spring flows that gather in Alpheus Creek, located in the spring reach from the Devil's Washbowl to the USGS stream gage located near Buhl, Idaho.

3. The ground water model for the ESPA was calibrated to measured ground water levels in the ESPA, spring discharge in the spring reaches, and reach gains or losses to Snake River flows, determined from stream gages together with other stream flow measurements, for the period May 1, 1980, to April 30, 2002. The calibration targets, consisting of measured ground water levels, reach gains/losses, and discharges from springs, have some inherent uncertainty resulting from limitations on the accuracy of the measurements. The uncertainty in results predicted by the ESPA ground water model cannot be less than the uncertainty of the calibration targets. The calibration targets having the maximum uncertainty are the reach gains or losses determined from stream gages, which although rated "good" by the USGS, have uncertainties of up to 10 percent.

4. The results from simulations using the Department's ESPA ground water model are suitable for making factual determinations on which to base conjunctive administration of surface water rights diverted from the Snake River and its tributaries and ground water rights diverted from the ESPA.

5. The Department's ESPA ground water model represents the best available science for determining the effects of ground water diversions and surface water uses on the ESPA and hydraulically connected reaches of the Snake River and its tributaries.

Ground Water to Surface Water Conversions

6. In its review of the conversions from ground water to surface water, the Department determined for each holder of ground water right(s) for irrigation converting to surface water irrigation: (a) the volume of surface water per acre delivered in 2005, and (b) the volume of ground water per acre diverted in 2005.

7. The Department recognizes a maximum annual field headgate diversion volume of 4.0 acre-feet per acre for irrigation of lands in the area overlying the ESPA where irrigation was converted from ground water to surface water.

8. The North Side Canal Company delivered all the surface water for the ground water to surface water conversions.

9. Irrigation of the conversion acres was evaluated in two categories: (a) delivery of surface water without diversion of ground water, and (b) delivery of surface water combined with diversion of ground water.

Delivery of Surface Water Without Diversion of Ground Water

10. If North Side Canal Company's records showed delivery of surface water to the conversion participant in excess of 4.0 acre-feet per acre of land irrigated, the Department only recognized 4.0 acre-feet per acre delivered for irrigation of the conversion lands. The Department assumed that the volume of surface water exceeding 4.0 acre-feet per acre percolated into the ground (recharge to the ESPA) within the boundaries of the North Side Canal Company.

11. If North Side Canal Company records showed delivery of surface water to the conversion participant of less than 4.0 acre-feet per acre of land irrigated, the Department recognized the entire volume of surface water as having been delivered for irrigation of the conversion lands.

Delivery of Surface Water Combined with Diversion of Ground Water

12. If the combined volume of surface water shown by North Side Canal Company's records to have been delivered to conversion acres and ground water diverted by a conversion participant exceeded 4.0 acre-feet per acre, the Department assumed all of the ground water diverted was used for irrigation on the conversion acres. The volume per acre of ground water diverted was subtracted from 4.0 acre-feet per acre, and the Department assumed that any remainder of surface water delivered by the North Side Canal Company percolated into the ground (recharge to the ESPA) within the boundaries of the North Side Canal Company.

13. If the combination of surface water shown by North Side Canal Company's records to have been delivered to conversion acres and the ground water diverted by the conversion participant was less that 4.0 acre-feet per acre, the Department recognized the entire volume of surface water delivered and ground water diverted as having been used to irrigate the conversion acres.

Summary of Ground Water to Surface Water Conversions

14. During 2005, the North Side Canal Company recorded delivery of 20,319.5 acre-feet of surface water to conversion projects. Of this total, the Department recognized a surface water volume of 18,939.5 acre-feet of surface water having been used to irrigate the conversion acres. The volume of surface water exceeding the volume needed to irrigate the conversion acres was 1,380 acre-feet. The 18,939.5 acre-feet of water was assumed to be delivered at the points of ground water diversion for the conversion participants as input to the ESPA ground water model. The remaining 1,380 acre-feet of surface water was spread throughout the service area of the North Side Canal Company and input to the ESPA ground water model as recharge.

15. Of the 18,939.5 acre feet of surface water the Department recognized as having been used to irrigate conversion acreage, 1,128 acre-feet of surface water was delivered to irrigate lands located where the simulated steady state gain to the Devil's Washbowl to Buhl spring reach from the ESPA ground water model was less than 10 percent of the total simulated steady state gain to all the hydraulically connected reaches along the Snake River receiving gain from the conversions in model simulations. The 1,128 acre-feet of surface water delivered to these acres was not recognized as surface water benefiting reach gains in the Devil's Washbowl to Buhl spring reach. A net surface water volume of 17,811.5 acre-feet was used as input to the ESPA ground water model to determine the net reach gain to the Devil's Washbowl to Buhl spring reach resulting from surface water irrigation of the acres converted from ground water irrigation.

16. Of the 1,380 acre-feet of surface water the Department recognized as additional water spread across the North Side Canal Company service area for recharge, 143 acre-feet was spread on lands within the North Side Canal Company's service area where the simulated steady state gain to the Devil's Washbowl to Buhl spring reach was less than 10 percent of the total simulated steady state gain to all the hydraulically connected reaches along the Snake River receiving gain in model simulations. The 143 acre-feet of surface water distributed on these acres was not recognized as surface water benefiting reach gains in the Devil's Washbowl to Buhl spring reach. A net surface water volume of 1,237 acre-feet was used as input to the ESPA ground water model to determine the net reach gain to the Devil's Washbowl to Buhl spring reach resulting from surface water recharge to the ESPA through spreading within the North Side Canal Company's service area.

Voluntary Curtailment of Irrigated Acreage

17. IGWA, North Snake Ground Water District, and Magic Valley Ground Water District were required to submit the following information about voluntary curtailment acres: (a) maps precisely depicting the boundaries around previously irrigated lands that would be idled during 2005; (b) water rights authorizing irrigation of the lands and whether there are surface

water rights appurtenant to the lands; (c) when the lands were last irrigated; (d) whether the lands were not irrigated in previous years because of ongoing mitigation plans; and (e) whether the lands would continue to be irrigated with surface water.

Magic Valley Ground Water District Voluntary Curtailments

18. The Department reviewed the information submitted and compared it to 2005 satellite imagery and water right information. In addition, Department staff field verified the eligibility of acres offered for voluntary curtailment. The Department found a number of problems associated with the proposed voluntary curtailments, including but not limited to identification of pivot corners not authorized as a place of use under any ground water rights, lands not irrigated in 2004 and not identified as being included in an existing mitigation plan, and lack of definition of the specific location of both 2004 reductions and proposed 2005 reductions. After reviewing all of the available information, the Department determined the following acres were not irrigated in 2005 and eligible for mitigation credit:

	Acres Submitted	**Acres Recognized**
North Snake Ground Water District	8,562	2,144
Magic Valley Ground Water District	7,053	4,741
Total Acres Recognized as Voluntary Curtailment Acres		6,885

19. The 6,885 acres recognized as voluntary curtailment acres were used as input to the ESPA ground water model to simulate the effects of the acres no longer being irrigated with ground water diverted from the points of diversion from which ground water was once diverted to irrigate those acres.

20. Of the 6,885 voluntary curtailment acres, 99 acres were located where the simulated steady state gain to the Devil's Washbowl to Buhl spring reach from non-diversion and use of ground water using the ESPA ground water model was less than 10 percent of the total simulated steady state gain to all the hydraulically connected reaches along the Snake River receiving gain from the voluntary curtailment in model simulations. The 99 acres were not recognized as voluntary curtailments benefiting reach gains in the Devil's Washbowl to Buhl spring reach. A net total of 6,786 acres was used as input to the ESPA ground water model to determine the net reach gain to the Devil's Washbowl to Buhl spring reach resulting from voluntary curtailment of irrigation with ground water.

Total Devil's Washbowl to Buhl Gage Reach Gain

21. The total steady state reach gain for the Devil's Washbowl to Buhl Gage spring reach simulated using the ESPA ground water model from conversions of using ground water for irrigation to surface water irrigation and voluntary curtailment of ground water diversions for irrigation in 2005 is 14.4 cfs.

CONCLUSIONS OF LAW

1. The Director recognizes the importance under Idaho law of protecting a senior priority water right holder against interference by a junior priority right holder from a tributary or interconnected water source. *See* Art. XV, § 3, Idaho Const.; Idaho Code §§ 42-106, 42-237a(g), and 42-607.

2. Idaho Code § 42-602, addressing the authority of the Director over the supervision of water distribution within water districts, provides:

> The director of the department of water resources shall have direction and control of the distribution of water from all natural water sources within a water district to the canals, ditches, pumps and other facilities diverting therefrom. Distribution of water within water districts created pursuant to section 42-604, Idaho Code, shall be accomplished by watermasters as provided in this chapter and supervised by the director. The director of the department of water resources shall distribute water in the water districts in accordance with the prior appropriation doctrine.

3. Idaho Code § 42-603, which grants the Director authority to adopt rules governing water distribution, provides as follows:

> The director of the department of water resources is authorized to adopt rules and regulations for the distribution of water from the streams, rivers, lakes, ground water and other natural water sources as shall be necessary to carry out the laws in accordance with the priorities of the rights of the users thereof. Promulgation of rules and regulations shall be in accordance with the procedures of chapter 52, title 67, Idaho Code.

In addition, Idaho Code § 42-1805(8) provides the Director with authority to "promulgate, adopt, modify, repeal and enforce rules implementing or effectuating the powers and duties of the department."

4. In accordance with chapter 52, title 67, Idaho Code, the Department adopted rules regarding the conjunctive management of surface and ground water effective October 7, 1994. IDAPA 37.03.11. The Conjunctive Management Rules prescribe procedures for responding to a delivery call made by the holder of a senior priority surface or ground water right against junior priority ground water rights in an area having a common ground water supply. IDAPA 37.03.11.001.

5. Pursuant to Idaho Code § 67-5291, the Conjunctive Management Rules were submitted to the 1st Regular Session of the 53rd Idaho Legislature (1995 session). During no legislative session, beginning with the 1st Regular Session of the 53rd Idaho Legislature, have the Conjunctive Management Rules been rejected, amended, or modified by the Idaho Legislature. Therefore, the Conjunctive Management Rules are final and effective.

6. A change in the source of irrigation supply from ground water to surface water will reduce depletions to the ESPA.

7. Voluntary curtailment of irrigation with ground water will reduce depletions to the ESPA.

8. The best tool for determining reductions in depletions resulting from conversions and voluntary curtailment is the ESPA ground water model.

9. For 2005, IGWA should receive credit for steady state reach gains of 14.4 cfs to the Devil's Washbowl to Buhl spring reach as a result of its substitute curtailments, comprised of conversions from ground water irrigation to surface water irrigation and voluntary curtailments.

ORDER

The Director enters the following Order for the reasons stated in the foregoing Findings of Fact and Conclusions of Law:

IT IS HEREBY ORDERED that IGWA and its member ground water districts receive credit for 14.4 cfs steady state gain to the Devil's Washbowl to Buhl reach for conversions from ground water irrigation to surface water irrigation and voluntary curtailments in irrigation ground water diversions.

IT IS FURTHER ORDERED that on or before May 30, 2006, the North Snake Ground Water District and the Magic Valley Ground Water District must submit plans for substitute curtailment to the Director that will provide 20 cfs of steady state gain to the Devil's Washbowl to Buhl reach of the Snake River, or otherwise provide replacement water as provided in the Director's Order dated May 19, 2005. Failure to submit sufficient replacement water or an acceptable substitute curtailment plan(s) will result in curtailment of ground water diversions as described in the Director's Order dated May 19, 2005.

DATED this 29th day of April, 2006.

KARL J. DREHER
Director

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 29th day of April, 2006, the above and foregoing document was served by placing a copy of the same in the United States mail, postage prepaid and properly addressed to the following:

JEFFREY C. FEREDAY MICHAEL C. CREAMER GIVENS PURSLEY PO BOX 2720 BOISE ID 83701-2720 (208) 388-1200 cf@givenspursley.com mcc@givenspursley.com	(x) U.S. Mail, Postage Prepaid ( ) Facsimile (x) E-mail
DANIEL V. STEENSON CHARLES L. HONSINGER RINGERT CLARK PO BOX 2773 BOISE ID 83701-2773 (208) 342-4657 dvs@ringertclark.com clh@ringertclark.com	(x) U.S. Mail, Postage Prepaid ( ) Facsimile (x) E-mail
GREGORY KASLO BLUE LAKES TROUT FARM PO BOX 1237 TWIN FALLS ID 83303-1237 (208) 733-0325	(x) U.S. Mail, Postage Prepaid ( ) Facsimile ( ) E-mail
NORTH SNAKE GWD 152 EAST MAIN STREET JEROME ID 83338 (208) 388-1300	(x) U.S. Mail, Postage Prepaid ( ) Facsimile ( ) E-mail
MAGIC VALLEY GWD 809 EAST 1000 NORTH RUPERT ID 83350-9537	(x) U.S. Mail, Postage Prepaid ( ) Facsimile ( ) E-mail
FRANK ERWIN WATERMASTER WATER DIST 36 2628 SOUTH 975 EAST HAGERMAN ID 83332	(x) U.S. Mail, Postage Prepaid ( ) Facsimile ( ) E-mail

ALLEN MERRITT
CINDY YENTER
IDWR – SOUTHERN REGION
1341 FILLMORE STREET SUITE 200
TWIN FALLS ID 83301-3380
(208) 736-3037
allen merritt@idwr.idaho.gov
cindy.yenter@idwr.idaho.gov

(x) U.S. Mail, Postage Prepaid
( ) Facsimile
(x) E-mail

Victoria Wigle
Administrative Assistant to the Director
Idaho Department of Water Resources