MEMORANDUM

To: AWBA Commission Members

From: Virginia O'Connell

Subject: Amended 2011 Plan of Operation

Date: August 30, 2011



AUTHORITY MEMBERS Sandra Fabritz-Whitney, Chairman Maureen R. George, Vice-Chairman John Mawhinney Lisa Atkins Marshall P. Brown

EX OFFICIO MEMBERS Senator Steve Pierce Representative Andy Tobin

As approved by the Authority at the August 25, 2011 meeting, the 2011 Annual Plan of Operation (Plan) has been amended to reflect changes made to the original Plan due to a change in the cost share paid by the Pinal AMA groundwater savings facility (GSF) operators for additional water supplies and to identify changes made to the delivery schedule. Attached to this memorandum are three replacement paragraphs that describe the changes and an Amended Table 2, 4, 5 and 7. These changes constitute the Amended 2011 Plan of Operation.

Amended Table 2 ¹ Water Delivery Schedule (Acre-Feet) Calendar Year 2011															
ļ ,	AWBA-Recharge Sites	Permitted Capacity (AF)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
PHOENIX A	5					<u> </u>									
	West Maricopa Combine	25,000	0	0	0	0	0	0	0	0	0	0	0	0	0
USF	HIEROGLYPHIC	35,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	AGUA FRIA	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	TONOPAH DESERT	150,000	171	6,262	12,622	3,753	1,706	14,354	12,465	3,617	0	0	0	0	54,950 <i>54,950</i>
	RWCD	105,000	0	0	0	0	0	0	0	0	0	0	0	0	0
Щ	NEW MAGMA ²	54,000	0	0	0	0	0	0	0	0	2,500	2,500	0	0	5,000
GSF	QUEEN CREEK	28,000	0	0	0	0	0	2,945	0	0	683	1,142	1,143	1,142	7,055
	TONOPAH ID	15,000	0	0	0	0	0	0	0	0	0	0	0	0	0
															12,055
	AMA TOTAL INTRASTATE		171	6,262	12,622	3,753	1,706	17,299	12,465	3,617	3,183	3,642	1,143	1,142	67,005
PINAL AMA	: CAIDD ³	110.000	0	0	0	0	0	0	0	7,500	10,000	5,000	0	0	22,500
GSF	HOHOKAM	55,000	0	0	0	0	0	0	0	500	750	750	750	250	3,000
o o	MSIDD	120,000	380	720	1,550	1,650	1,450	930	318	200	200	0	0	102	7,500
					,	,	,								33,000
AMA TOTAI	AMA TOTAL INTRASTATE		380	720	1,550	1,650	1,450	930	318	8,200	10,950	5,750	750	352	33,000
TUCSON AN															
	AVRA VALLEY	11,000	0	0	0	0	0	0	0	0	236	0	700	700	1,636
ιĻ	PIMA MINE RD	30,000	0	0	0	0	0	0	0	0	0	0	0	0	0
USF	LOWER SANTA CRUZ	50,000	1,146	2,526	2,893	2,811	0	0	0	2,000	425	0			11,801
	CAVSARP SAVSARP	100,000 60.000	0	0	0	0	0	0	3,000	4,000	5,000	3,000	2,000	4,000	21,000
	SAVSARP	60,000	U	U	- 0	U	- 0	- 0	3,000	4,000	5,000	3,000	2,000	4,000	34,437
	CORTARO-MARANA ID	20,000	0	0	0	0	0	0	0	500	500	0	0	0	1,000
GSF	KAI FARMS (Red Rock)	11,231	0	0	0	0	500	500	0	0	0	0	0	0	1,000
g		,=			<u> </u>					<u> </u>					2,000
AMA TOTAI	AMA TOTAL INTRASTATE		1,146	2,526	2,893	2,811	500	500	3,000	6,500	6,161	3,000	2,700	4,700	36,437
TOTAL INTE	RASTATE		1,697	9,508	17,065	8,214	3,656	18,729	15,783	18,317	20,294	12,392	4,593	6,194	136,441
TOTAL INTE	ERSTATE		0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECHARGE		1,697	9,508	17,065	8,214	3,656	18,729	15,783	18,317	20,294	12,392	4,593	6,194	136,441	
DIRECT DE	LIVERY (Non-Storage):														
Southside Replenishment Bank		0	0	0	0	1,000	0	0	0	0	0	0	0	1,000	
Southside Replenishment Obligation		0	0	0	0	0	0	0	0	0	0	0	0	0	
-	TOTAL DIRECT		0	0	0	0	1,000	0	0	0	0	0	0	0	1,000
TOTAL DELIVERIES			1,697	9,508	17,065	8,214	4,656	18,729	15,783	18,317	20,294	12,392	4,593	6,194	137,441

Water deliveries have been updated to reflect actual deliveries through July.
 Up to 5,000 acre-feet of deliveries redirected from TDRP.
 Up to 15,000 acre-feet of deliveries redirected from SAVSARP.

PRICING

Page 12, insert as paragraph 4

In August, certain GSF operators in the Phoenix and Pinal AMAs requested additional water supplies because of an increase in demand for irrigation water that was greater than anticipated. Because the AWBA does not have funds available in the Pinal AMA, the AWBA will charge its GSF partners the full cost of \$137 per acre-foot for providing in lieu water in excess of the amounts scheduled in the original Plan. GSF partners in the Phoenix AMA will continue to pay a cost share of \$33 per acre-foot since the AWBA has sufficient funds available in that AMA.

Table 4. Amended 2011 Water and Facility Rates

CAWCD delivery rate to AWBA for water storage	\$137 per acre-foot							
Interstate rate	\$167 per acre-foot							
Groundwater Savings Facility operator cost share rate ¹								
Intrastate								
Phoenix and Pinal AMAs	\$33 per acre-foot							
Tucson AMA	\$15 per acre-foot							
Deliveries Redirected to Pinal AMA ²	\$137 per acre-foot							
Interstate	\$26 per acre-foot							
Underground Storage Facility rate paid by AWBA								
Agua Fria Recharge Project ³	\$8 per acre-foot							
Hieroglyphic Mtn. Recharge Project ³	\$8 per acre-foot							
Tonopah Desert Recharge Project ³	\$8 per acre-foot							
West Maricopa Combine	\$25 per acre-foot							
Avra Valley Recharge Project ⁴	\$15 per acre-foot							
Lower Santa Cruz Recharge Project ⁴	\$15 per acre-foot							
Pima Mine Road Recharge Project ⁴	\$15 per acre-foot							
Clearwater Facility (CAVSARP/SAVSARP)	\$14.73 per acre-foot							
CAWCD rate to AWBA for Southside Replenishment Bank deliveries \$122 per acre-foot								

¹ This rate is paid directly to CAP by the GSF operators and is not available as revenue to the AWBA. The AWBA's rate for delivery of in lieu water is thus reduced to \$104/af for intrastate deliveries to the Phoenix and Pinal AMAs, \$122/af to the Tucson AMA, and \$141/af for interstate deliveries.

² Rate paid by Pinal AMA GSF operators for 15,000 acre-feet of water redirected from the Tucson AMA.

³ Additional capital charge of \$15 per acre-foot for interstate storage.

⁴ Additional capital charge of \$9 per acre-foot for interstate storage.

ACCOUNTING

Page 13, amended paragraph 2

Under the AWBA's Amended 2011 Plan of Operation, the total estimated cost of the Plan decreased from approximately \$19.3 million to \$16.8 million. Table 5 provides estimates of the funds available to be utilized by the AWBA, an estimate of funds to be collected during the year, the funds to be utilized, the entity that holds the funds, and the credits that will accrue to those accounts based on the Amended 2011 Plan.

Page 14, amended paragraph 1

The Amended 2011 Plan continues to expend all available withdrawal fees in the three AMAs. AWBA water costs offset by CAWCD utilizing four-cent tax collected in Maricopa County, decreased by \$205,000 due to a shift in storage of 5,000 acre-feet from a USF to a GSF. Likewise, water costs offset by CAWCD utilizing the four-cent tax collected in Pima County has been reduced by approximately \$2.3 million, which reflects a reduction in storage of 15,000 acre-feet at the Southern Avra Valley Storage and Recovery Project. The total number of long-term storage credits accrued from funds available to the AWBA decreased by 13,800 acre-feet to account for the decrease in 15,000 acre-feet of deliveries to the Tucson AMA. Credits accrued from the 15,000 acre-feet of water that was redirected to the Pinal AMA from the Tucson AMA are not identified in Table 5 since the AWBA paid no costs for that water.

Table 5. Funding for 2011 Annual Plan of Operation

	Funds A	vailable (\$)	Funds Ut	Credits (AF)	
	AWBA	CAWCD	AWBA	CAWCD	
Withdrawal Fees					
Phoenix AMA	\$1,600,000	-	\$1,600,000	-	10,460
Pinal AMA ¹	\$1,200,000	-	\$1,200,000	-	9,540
Tucson AMA ²	\$435,000	-	\$435,000	-	1,800
Four Cent Tax					
Phoenix AMA	\$0	\$120,870,000	\$0	\$7,621,000	51,180
Pinal AMA	\$0	\$795,000	\$0	\$794,000	7,020
Tucson AMA ³	\$0	\$7,440,000	\$0	\$5,164,000	31,720
Other					
General	\$0				
Phoenix AMA		-	\$0	-	0
Pinal AMA		-	\$0	-	0
Tucson AMA		-	\$0	-	0
Gifts, Grants, Donations					
Shortage Reparations (NV):	\$0				
Phoenix AMA		-	\$0		0
Pinal AMA		-	\$0		0
Tucson AMA		-	\$0		0
Interstate Banking- Nevada					
Operating ^⁴	\$33,3	315,000	\$0		0
	Total Funds Available		Total Funds	Credits	
		655,000	\$16,814,000		111,720

¹ Includes expenditure for 1,000 acre-feet of direct deliveries for establishing the Southside Replenishment Bank under the Gila River Indian Water Settlement Program.

lncludes expenditure of \$141,360 for the assignment of an estimated 930 acre-feet of credits to the AWBA from the Tohono O'odham Nation pursuant to §45-841.01.

³ Includes CAWCD's capital charge recovery for costs of construction of state demonstration projects when facilities are used for interstate purposes and by entities that do not pay the 4¢ ad valorem tax. Revenue through 2009 is estimated to be \$2,026,952.

The amount of funding that will be available from the Southern Nevada Water Authority (SNWA) if water becomes available for interstate storage. Pursuant a letter agreement between SNWA and AWBA dated June 15, 2010, annual payments of \$23 million for calendar years 2011 and 2012 have been deferred.

Table 7. Projected Percent of Goals and Obligations Achieved through 2011

Location and Objective	Funding Source	Goal	Obligation	Non-Credit Goal/Oblig. Achieved	Credits Accrued (AF)	Percent Goal/Oblig. Achieved
Phoenix AMA						
M&I Firming	Ad valorem tax	1,566,000 AF			1,268,596	81%
Groundwater Mgmt ¹	Withdrawal Fees				279,343	99%
Pinal AMA						
M&I Firming	Ad valorem tax	243,000 AF			179,869	74%
Groundwater Mgmt ¹	Withdrawal Fees				383,416	232%
Tucson AMA						
M&I Firming	Ad valorem tax	864,000 AF			360,206	42%
Groundwater Mgmt ^{1,2}	Withdrawal Fees				90,766	54%
On-River M&I Firming ³	General Fund	420,000 AF			403,830	96% ⁴
Indian Settlements:						
GRIC Firming	Withdrawal Fees	350,000 AF ⁵	up to 15,000 AF/YR		0	0%
Future Settlements	Withdrawal Fees	200,000 AF ⁵	up to 8,724 AF/YR		0	N/A
Federal Assistance			\$3,000,000	\$3,000,000	39,723	100%
Tucson AMA	Appropriation			\$2,338,171	34,102	
	Withdrawal Fees			\$630,490	5,621	
	Cost of Services ⁶			\$31,339	n/a	
Southside Repl. Bank	Withdrawal Fees		15,000 AF Direct Delivery		3,000	20%
Interstate Water Banking – NV	Contract with Nevada		1,250,000 AF ⁷		600,252	48%
Other:						
Shortage Reparations- Nevada	Gifts, Grants, Donations	\$8,000,000		\$2,999,748	82,283	37%
Pinal Redirect Credits	n/a				13,800 ⁸	

¹ Withdrawal fees could be utilized in addition to 4¢ ad valorem tax revenues for M&I firming if needed to reach firming goals.

² Includes credits acquired from the Tohono O'odham Nation pursuant to §45-841.

³ By resolution passed in 2002, the AWBA established on-river firming as the highest priority of use for credits accrued through expenditure of general fund appropriations. Pursuant to the AWBA Agreement to Firm with the Mohave County Water Authority (MCWA) dated February 4, 2005, a total of 230,280 acre-feet of credits were transferred to the AWBA long-term-storage sub-account for the MCWA in 2005.

⁴ This percentage reflects full utilization of general fund credits accrued to date and would change as other objectives are identified by the AWBA.

⁵ Based on estimates from the Indian Firming Study Commission Report dated January 6, 2006.

⁶ Include \$14,883 and \$16,456 deducted for payment of cost of services for FY08 and FY09, respectively.

⁷ Pursuant to the Amended Agreement for Interstate Water Banking, the AWBA has committed to have this number of long-term storage credits within the Nevada sub-account.

⁸ Credits accrued from 15,000 AF of water that was scheduled for the Tucson AMA and redirected to the Pinal AMA for storage at GSFs. These credits will be used for M&I firming in the Tucson AMA and would meet 1% of the firming goal.