

**Arizona Water Banking Authority**  
1110 W. Washington St, Ste. 310, Phoenix, Arizona 85007  
Telephone 602-771-8487



**AUTHORITY MEMBERS**  
Thomas Buschatzke, Chairman  
Ray L. Jones, Vice-Chairman  
Kathryn A. Sorensen, Secretary  
Alexandra Arboleda  
Mark Clark

**EX OFFICIO MEMBERS**  
The Honorable Karen Fann  
The Honorable Gail Griffin

DATE

Governor Stephen R. Lewis  
Gila River Indian Community  
525 West Gu u Ki  
Sacaton, Arizona 85147

Dear Governor Lewis:

RE: Satisfaction of replenishment obligation for Southside Protection Zone

In October 2019, the Arizona Department of Water Resources (ADWR) notified the Arizona Water Banking Authority (AWBA) that a replenishment obligation had been incurred in the Southside Protection Zones for water use in calendar year 2018 (enclosed). Based on its analysis, ADWR determined that a replenishment obligation of 9.78 acre-feet had been created in the Municipal and Industrial (M&I) Eastern Protection Zone South. Pursuant to A.R.S. § 45-2623(A), the AWBA must satisfy the replenishment obligation by June 1 of the third calendar year following the year the obligation was created, in this instance, 2021.

The AWBA acknowledged its requirement to satisfy this replenishment obligation in its 2020 Plan of Operation, proposing to extinguish an equal volume of long-term storage credits (LTSCs). This method may be used if the LTSCs were earned within the last seven years and the storage facility is located within the protection zone where the obligation was created. The AWBA has satisfied this obligation on \_\_\_\_\_, 2020, by extinguishing 9.78 acre-feet of LTSCs accrued at the Hohokam Irrigation and Drainage District groundwater savings facility from water stored in 2013.

If you have any questions, please do not hesitate to contact me at (602) 771-8491.

Sincerely,


Virginia O'Connell  
Director

cc: Linus Everling, General Counsel, Gila River Indian Community  
Thomas Buschatzke, ADWR Director  
AWBA Commission members



**MEMORANDUM – Revised**

To: Virginia O’Connell, Manager Arizona Water Banking Authority

From: Thomas Buschatzke, Director 

Subject: Southside Replenishment Obligations for 2018

Date: October 10, 2019

The Water Planning and Permitting Division has completed its analysis of water use in the Southside Protection Zones. The focus of the analysis was to determine if there are any annual replenishment obligations as required under A.R.S. § 45-2622. Replenishment obligations were calculated for each of the following subsections:

- **45-2622.B.1** Municipal and Industrial Replenishment Obligation for the Western Municipal and Industrial Protection Zone
- **45-2622.B.2** Municipal Replenishment Obligation for the Western Municipal Protection Zone
- **45-2622.B.3** Municipal and Industrial Replenishment Obligation for the Eastern Protection Zone North
- **45-2622.B.4** Municipal and Industrial Replenishment Obligation for the Eastern Protection Zone South
- **45-2622.B.5** Irrigation Replenishment Obligation for the Western Municipal and Industrial Protection Zone and the Western Municipal Protection Zone
- **45-2622.B.6** Irrigation Replenishment Obligation for the Eastern Protection Zone North and the Eastern Protection Zone South
- **45-2622.B.7** Water Company Replenishment Obligation for the Eastern Protection Zone
- **45-2611** Transportation of Underground Water and Stored Water away from Eastern Protection Zones and Western Protection Zones
- **45-2626** Individual Replenishment Obligations for Industrial Use

**Replenishment Obligation:**

The analysis shows that there is a replenishment obligation of 9.78 AF for the 2018 reporting year in the Municipal and Industrial Eastern Protection Zone South.

**Individual Obligation:**

There is no individual replenishment obligation because the industrial use in the Eastern Protection Zone South failed to reach the 3.5 AF/acre threshold described in A.R.S. § 45-2626.B. Please see the table below for additional details.

<b>Industrial Use in the Municipal and Industrial Eastern Protection Zone South</b>			
<b>Right #</b>	<b>Groundwater Use (AF)</b>	<b>Acres Used On</b>	<b>Use Per Acre</b>
58-107818.0010	402.59	161	2.50

**Transportation of Underground Water and Stored Water:**

The analysis did not identify any compliance issues with regard to the transportation of underground and stored water away from Eastern Protection Zones and Western Protection Zones.

If you have any questions or need further clarification, please call me at 602-771-8412.



Municipal and Industrial RO for the Western M&I Zone											
45-2622 B 1 a.		45-2622 B 1 b.		45-2622 B 1 c.		45-2622 B 1 d.					
Amount Underground/Stored Withdrawn from w/in West. M&I zone for Municipal Uses w/in a Western prot. Zone	Amount Underground/Stored Withdrawn from w/in West. M&I zone for Industrial Uses w/in West M&I zone	Total Amount Underground/Stored Withdrawn <u>Muni &amp; Industrial</u> Uses w/in West M&I zone	Number of Municipal Acres on which the water was used	Number of Industrial Acres on which the water was used	Total Number of <u>Municipal and Industrial</u> Acres on which the water was used	Product from B1a Number of Municipal and Industrial Acres on which the water was used	Total Number of <u>Municipal and Industrial</u> Acres on which the water was used mult. By 2 af	The quotient of b minus the product of c	a minus the product of c Replenishment Obligation		
2018	6829.60	2996.83	9826.43	5069	1145.49	6214.49	1.58	12428.98	-12427.40	-2602.55	0

Municipal RO for the Western Municipal Zone

45-2622 B 2 a.	Amount Underground/Stored Withdrawn from w/in the West. Muni. Prot. Zone for <b>Municipal</b> Uses w/in Western Muni zone	2018	0
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45-2622 B 2 b.	Number of <b>Municipal</b> Acres on which the water was used in the Western protection zones	0
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45-2622 B 2 c.	Total Number of <u>Municipal</u> Acres in the Western zones on which the water was used mult. By 2 af	0
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45-2622 B 2 d.	Quotient of b minus product of c	0	a minus the product of c	0	Replenishment Obligation	0
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Municipal and Industrial RO for Eastern Protection Zone North

45-2622 B 3 a.		
Amount Undersground/Storage Withdrawn w/in Eastern Prot Zone North for Municipal Uses w/in East Prot. Zone	Amount Undersground/Storage Withdrawn w/in Eastern Prot. Zone North for Industrial Uses w/in East Prot. Zone	Total Amount Undersground/Storage Withdrawn w/in Eastern Prot Zone North M&I Uses w/in East Prot. Zone
2018 208.20	1114.59	1322.79

45-2622 B 3 b.
Amount of Undersground/Storage water Withdrawn by water co. from Eastern Prot. Zone South & used for muni w/in Eastern Prot. Zone North
0

45-2622 B 3 c.			
Number of Municipal Acres on which the water withdrawn from the East Prot Zone North was used w/in the Eastern Protection Zones	Number of Industrial Acres on which the water withdrawn from the East Prot Zone North was used w/in the Eastern Protection Zones	Total Number of <i>Municipal and Industrial</i> Acres on which the water was used w/in the Eastern Protection Zones	a plus b divided by total number of muni and indust. Acres in column 1.
720	553.92	1273.92	1.04

45-2622 B 3 d.
Total Number of <i>Municipal and Industrial</i> Acres on which the water was used w/in the Eastern Protection Zones multiplied by 2.33 at
2968.23

45-2622 B 3 e.	a minus the product of d	Replenishment of d
-2967.20	-1945.44	0

Municipal and Industrial Replenishment Obligation for the Eastern Protection Zone South

2018	45-2622 B 4 a.		45-2622 B 4 b.		45-2622 B 4 c.		45-2622 B 4 d.		45-2622 B 3 e.		
	Amount Undergroud/Stored Withdrawn w/in Eastern Prot Zone South for Municipal Industrial Uses w/in East Prot. Zone	Amount Undergroud/Stored Withdrawn w/in Eastern Prot. Zone South for Industrial Uses w/in East Prot. Zone	Total Amount Undergroud/Stored Withdrawn w/in Eastern Prot Zone South M&I Uses w/in East Prot. Zone	Amount of Undergroud/Stored water withdrawn by water co. from Eastern Prot. Zone South & used for muni w/in Eastern Prot. Zone North	Number of Municipal Acres on which the water wdwn from the East Prot Zone South was used w/in the Eastern Protection Zones	Number of Industrial Acres on which the water wdwn from the East Prot Zone South was used w/in the Eastern Protection Zones	Total Number of Municipal and Industrial Acres on which the water was used w/in the Eastern Protection Zones (than b was used	Total Number of Municipal and Industrial Acres on which the water was used w/in the Eastern Protection Zones other than b multiplied by 2.33 af	quotient of c minus product in d	a minus the product of d	Replenishment Obligation
	3.29	402.59	405.88	0.00	9	161	170	396.10	-393.71	9.78	9.78



Water Company Replenishment Obligation for Eastern Protection Zone

45-266 B 7

2018	Amount underground water and stored water wdwrn by water co in easter zone and transported outside zone for muni use	Statutory threshold for replenishment obligation	Replenishment Obligation (if greater than zero)
	208.20	1275	-1066.80

2018						
Right Type	Total Water Use	Groundwater Use	In-Lieu Use (GSF)	Gwtr + In-Lieu	Total Flex Credits	Irrigation Acres
<b>BMP</b>						
Eastern Protection Zone North	58,675.13	25,029.14	17,639.90	42,669.04	-	12,028.58
Eastern Protection Zone South	1,970.10	1,682.82	86.46	1,769.28	-	1,257.09
Western Municipal and Industrial Protection Zone	24,962.72	9,419.50	10,166.98	19,586.47	-	5,686.73
Western Municipal Protection Zone	8,475.64	3,718.65	1,972.29	5,690.95	-	1,238.04
	23,266.68	10,208.17	5,414.17	15,622.34	-	3,846.71
<b>/GRs</b>						
Eastern Protection Zone North	52,094.99	27,870.55	8,853.13	36,723.67	799,200.18	19,219.32
Eastern Protection Zone South	9,061.09	7,338.39	-	7,338.39	222,154.77	3,287.94
Western Municipal and Industrial Protection Zone	9,917.77	4,600.93	1,728.13	6,329.06	223,819.84	4,339.08
Western Municipal Protection Zone	19,609.87	10,000.22	3,984.24	13,984.47	177,943.83	6,276.27
	13,506.26	5,931.01	3,140.75	9,071.76	175,281.74	5,316.03
<b>Grand Total</b>	<b>110,770.13</b>	<b>52,899.69</b>	<b>26,493.03</b>	<b>79,392.72</b>	<b>799,200.18</b>	<b>31,247.90</b>