

Draft 2016 Plan of Operation

Arizona Water Banking Authority

December 2, 2015

2015 Activities

- Normal Operating Conditions
- Lower Basin Estimated Uses
 - California – 4.45 million acre-feet (MAF)
 - Nevada – 0.23 MAF
 - Arizona – 2.59 MAF
 - On-River – 1.08 MAF
 - Central Arizona Project 1.51 MAF

2015 Plan of Operation

- Planned deliveries – 50,448 AF
- Projected year-end deliveries - 75,360 AF
 - Phoenix AMA – 42,360 AF
 - Pinal AMA – 7,900 AF
 - Tucson AMA – 20,100 AF
 - No Interstate storage
 - Southside Replenishment Bank – 5,000 AF

2015 Storage Deliveries (AF)

Recharge Sites		Permitted Capacity	Delivery Amount
Phoenix AMA	Agua Fria	100,000	13,530
	Hieroglyphic Mtns	35,000	13,775
	Superstition Mtns	25,000	8,609
	GRUSP	93,000	3,312
	Queen Creek ID	28,000	3,134
			42,360
Pinal AMA	Central Arizona IDD	110,000	0
	Hohokam IDD	55,000	3,700
	Maricopa-Stanfield IDD	120,000	4,200
			7,900
Tucson AMA	Avra Valley	11,000	1,200
	Lower Santa Cruz	50,000	1,846
	Pima Mine Road	30,000	1,300
	SAVSARP	60,000	14,345
	Cortaro-Marana ID	20,000	900
	BKW Farms	14,316	500
			20,100
TOTAL STORAGE DELIVERIES			70,360

AWBA Long-term Storage Credits 1997-2015

(Acre-Feet)

Funding Source	Phoenix AMA	Pinal AMA	Tucson AMA	Total
Withdrawal Fees	345,500	413,390	105,000	863,890
Ad valorem Tax (4¢)	1,389,400	207,630	447,070	2,044,100
General Fund	42,320	306,970	54,550	403,830
Indian Settlement Approp.	-	-	28,480	28,480
Shortage Reparation	20,640	60,510	28,270	109,420
Pinal Redirect (costs paid 100% by GSF)	-	14,130	-	14,130
SUBTOTAL	1,797,860	1,002,630	663,370	3,463,850
Interstate - Nevada	51,010	440,240	109,790	601,040
TOTAL	1,848,870	1,442,870	773,160	4,064,890

Long-term storage credits estimated for 2015; amounts are rounded

AZ Water Settlements Act Requirement

- AWBA required to deliver 15,000 AF to Gila River Indian Community to establish Southside Replenishment Bank
- Required minimum delivery of 1,000 AF per year
- Can be used to offset a replenishment obligation

Southside Replenishment Activities	2015 Obligations/Deliveries (AF)	Cumulative Obligations/Deliveries (AF)
Replenishment Obligations	0	0
Replenishment Bank Deliveries	5,000	15,000
TOTAL DIRECT DELIVERIES	5,000	15,000

2016 Plan of Operation

Three main components to consider...

- Water Availability
- Funding
- Storage Facility Capacity

Water Availability

- 2016 Colorado River Lower Basin State Diversions
 - Intentionally Created Surplus (ICS) Operating Condition – 2.66 MAF
 - Creation of over 142 KAF of ICS and system water
 - Central Arizona Project – 1.52 MAF
 - On-River – 1.14 MAF
- CAWCD Policy for Distributing Excess CAP Water
 - Statutory Firming Pool
 - Volume determined annually
 - 79,308 AF available to pool in 2016
 - AWBA share of pool – 65,708 AF

Funding Sources

- Withdrawal fees collected in Phoenix, Pinal and Tucson AMAs
- 4¢ *Ad valorem tax*
 - Levied by CAWCD in Maricopa, Pinal, and Pima Counties
 - Retained in CAWCD fund accounts
 - Utilized by CAWCD to offset AWBA water storage and delivery costs as part of project operating and maintenance costs
- General Fund Appropriations

Storage Facility Capacity

- Discussions with storage facility operators on storage opportunities
- Significant interest in providing storage capacity
- Water storage agreement for SRP GSF in process
- TDRP remains offline

2016 Water Delivery Schedule (AF)

AMA	Recharge Sites		Permitted Capacity (AF)	Delivery Amount
Phoenix	USF	Hieroglyphic Mountain	35,000	10,736
		Agua Fria	100,000	6,177
		Superstition Mountains	25,000	1,345
		GRUSP	93,000	500
	GSF	Queen Creek ID	28,000	5,230
		SRP	89,000	10,000
		Subtotal		33,988
Pinal	GSF	Central Arizona IDD	110,000	5,840
		Hohokam IDD	55,000	5,840
		Maricopa-Stanfield IDD	120,000	5,840
		Subtotal		17,520
Tucson	USF	Avra Valley	11,000	1,500
		SAVSARP	60,000	10,200
	GSF	Cortaro-Marana ID	20,000	1,500
		BKW Farms	14,316	1,000
		Subtotal		14,200
TOTAL DELIVERIES				65,708

2016 Water and Facility Rates

Description of Rate	Cost/AF
CAWCD delivery rate to AWBA for water storage	\$184
Groundwater Savings Facility operator cost share rate	
Phoenix and Pinal AMAs	\$34
Tucson AMA	\$16
Underground Storage Facility rate paid by AWBA	
CAWCD - Phoenix Facilities	\$10
CAWCD - Tucson Facilities	\$15
Avra Valley Recharge Project	\$16.39
Tucson Water Clearwater Facilities	\$16.57
Granite Reef Underground Storage Project	\$15

Funding for 2016 Annual Plan of Operation

Funding Source	Estimated Available	Estimated Utilized	Estimated Credits (AF)	
			Water Storage	Developed
Withdrawal Fees				
Phoenix AMA	\$2,100,000	\$2,100,000	920	12,000
Pinal AMA	\$1,400,000	\$1,400,000	8,680	0
Tucson AMA	\$400,000	\$400,000	1,910	0
CAWCD Offset (4-cent tax)				
Phoenix AMA	\$14,000,000	\$8,753,000	30,680	13,950
Pinal AMA	\$1,268,000	\$1,228,000	7,610	0
Tucson AMA	\$2,370,000	\$2,370,000	11,300	0
General Fund	\$0	\$0	0	0
TOTAL	\$21,538,000	\$16,251,000	61,100	25,950

Projected Goals/Obligations Achieved through 2016

Objective	Goal/Obligation	Credits Accrued (AF)	% Achieved
CAP M&I Firming:			
Maricopa County	1,566,000 AF	1,420,078	91
Pinal County	243,000 AF	215,242	89
Pima County	864,000 AF	458,376	53 (w/fees 65 %)
On-River M&I Firming:	420,000 AF	403,830	96
Indian Settlements:			
GRIC Firming	15,000 AF/Yr (Est. 350,000 AF)	121,390	35
Future Settlements	8,724 AF/Yr (Est. 200,000 AF)	0	0
Federal Assistance	Contribute \$3,000,000	34,102	100
Southside Repl. Bank	15,000 AF	15,000 (Non-recharge)	100
Groundwater Mgmt:			
Phoenix AMA	-	242,107	
Pinal AMA	-	404,991	
Tucson AMA	-	101,284	
Shortage Reparation:	Expend \$8,000,000	109,423	100
Pinal Redirect Credits:	-	14,125	n/a

Public Review and Comment

Groundwater Users Advisory Council Meetings

- Support for 2016 Plan overall
- Phoenix AMA
 - Adequacy of storage facility capacity
- Pinal AMA
 - Satisfaction that SSRB has been fully established
- Tucson AMA
 - Appreciated efforts to focus on storage in the Tucson AMA and can see the results