



2018 Plan of Operation

Arizona Water Banking Authority

November 30, 2017

2017 Plan of Operation

Water Storage

- Projected year-end water deliveries - 17,630 AF
 - Phoenix AMA – 4,130 AF
 - Pinal AMA – 11,400 AF
 - Tucson AMA – 2,100 AF
- No Interstate storage

2017 Plan of Operation

Supplemental Credits

- Firming credits developed under IGA with the Gila River Indian Community - 7,000 AF
- Purchased Long-term Storage Credits
 - Phoenix AMA – 59,082 AF
 - Tucson AMA – 14,095 AF

AWBA Developed Credits 1997-2017

(Acre-Feet)

| Funding Source | Phoenix AMA | Pinal AMA | Tucson AMA | Total |
|--|------------------|------------------|----------------|------------------|
| Withdrawal Fees | 370,904 | 427,019 | 108,622 | 906,544 |
| Ad valorem Tax (4¢) | 1,478,641 | 221,025 | 473,002 | 2,172,668 |
| General Fund | 42,316 | 306,968 | 54,546 | 403,830 |
| Indian Settlement Approp. | - | - | 28,481 | 28,481 |
| Shortage Reparation | 20,642 | 60,507 | 28,340 | 109,489 |
| Pinal Redirect (costs paid 100% by GSF) | - | 14,125 | - | 14,125 |
| SUBTOTAL | 1,912,502 | 1,029,644 | 692,991 | 3,635,137 |
| Interstate - Nevada | 51,009 | 440,241 | 109,791 | 601,041 |
| TOTAL | 1,963,511 | 1,469,885 | 802,782 | 4,236,179 |

Long-term storage credits estimated for 2017.

2018 Plan of Operation

Three main components to consider...

- Water Availability
- Funding
- Storage Facility Capacity

Plus an Interstate component

Water Availability

- CAWCD Policy for Distributing Excess CAP Water
 - Statutory Firming Pool
 - Volume determined annually
 - 43,000 AF available to pool in 2018
 - AWBA share of pool – 38,000 AF
- Nevada's unused apportionment - 13,500 AF

2018 Funding Sources

- Withdrawal fees collected in Phoenix, Pinal and Tucson AMAs (\$2.50/AF)
- 4¢ *ad valorem* tax
 - Levied by CAWCD in Maricopa, Pinal, and Pima Counties
 - Only ½ of revenues made available for AWBA
 - Used to offset AWBA water storage and delivery costs
 - Reserved by CAWCD Board for potential long-term storage credit purchases
- Revenues from Nevada

Storage Facility Capacity

- Discussions with storage facility operators on storage opportunities
- Maximized available GSF storage capacity
 - Pinal AMA storage limited to available funding
- Additional USF storage capacity available if needed but limited

2018 Water Delivery Schedule (AF) - AZ

| AMA | Recharge Sites | | Delivery Amount |
|-------------------------|----------------|------------------------|-----------------|
| Phoenix | USF | Agua Fria | 5,000 |
| | | Hieroglyphic Mountain | 7,011 |
| | | Superstition Mountains | 8,687 |
| | GSF | Tonopah ID | 1,402 |
| | | Subtotal | 22,100 |
| Pinal | GSF | Central Arizona IDD | 2,700 |
| | | Hohokam IDD | 2,700 |
| | | Maricopa-Stanfield IDD | 2,700 |
| | | Subtotal | 8,100 |
| Tucson | USF | Lower Santa Cruz | 6,300 |
| | | Pima Mine Road | 500 |
| | GSF | Cortaro-Marana ID | 1,000 |
| | | Subtotal | 7,800 |
| TOTAL DELIVERIES | | 38,000 | |

2018 Water Delivery Schedule (AF) - NV

| AMA | Recharge Sites | | Delivery Amount |
|-------------------------|----------------|-------------------|-----------------|
| Phoenix | USF | Agua Fria | 2,070 |
| | GSF | New Magma | 3,000 |
| | | Queen Creek ID | 3,930 |
| | | Tonopah ID | 500 |
| | | Subtotal | 9,500 |
| Tucson | USF | Pima Mine Road | 2,000 |
| | GSF | Cortaro-Marana ID | 1,500 |
| | | Kai Farms | 500 |
| | | Subtotal | 4,000 |
| TOTAL DELIVERIES | | 13,500 | |

2018 Water and Facility Rates

| Description of Rate | Cost/AF |
|---|-----------|
| CAWCD delivery rate to AWBA for water storage | \$205 |
| CAWCD Interstate delivery rate | \$254 |
| Groundwater Savings Facility operator cost share rate | |
| Phoenix and Pinal AMAs (Intra/Inter) | \$34/\$30 |
| Tucson AMA | \$16 |
| Underground Storage Facility rate paid by AWBA | |
| CAWCD - Phoenix Facilities | \$13 |
| CAWCD - Tucson Facilities | \$15 |

Funding for 2018 Annual Plan of Operation

| Funding Source | Estimated Available | Estimated Utilized | Estimated Credits (AF) | |
|------------------------------------|---------------------|---------------------|------------------------|---------------|
| | | | Water Storage | Developed |
| Withdrawal Fees | | | | |
| Phoenix AMA | \$1,614,000 | \$1,614,000 | 750 | 9,000 |
| Pinal AMA | \$961,000 | \$961,000 | 5,230 | 0 |
| Tucson AMA | \$274,000 | \$274,000 | 1,180 | 0 |
| Ad Valorem Tax (4-cent tax) | | | | |
| Phoenix AMA | \$8,200,000 | \$8,200,000 | 19,800 | 15,620 |
| Pinal AMA | \$435,000 | \$423,870 | 2,310 | 0 |
| Tucson AMA | \$1,500,000 | \$1,411,000 | 6,080 | 0 |
| Interstate | | | | |
| Phoenix AMA | | \$2,248,000 | 8,840 | |
| Tucson AMA | | 1,032,000 | 3,720 | |
| TOTAL | \$16,264,000 | \$16,163,870 | 47,910 | 24,620 |

Projected Goals/Obligations Achieved through 2018

| Objective | Goal/Obligation | Credits Accrued (AF) | % Achieved |
|----------------------------------|--------------------------------|-----------------------|------------|
| CAP M&I Firming: | | | |
| Maricopa County | 1,566,000 AF | 1,498,441 | 96 |
| Pinal County | 243,000 AF | 223,335 | 92 |
| Pima County | 864,000 AF | 479,082 | 55 |
| On-River M&I Firming: | 420,000 AF | 403,830 | 96 |
| Indian Settlements: | | | |
| GRIC Firming | 15,000 AF/Yr (Est. 350,000 AF) | 149,390 | 43 |
| 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 | - | 248,341 | |
| Pinal AMA | - | 415,172 | |
| Tucson AMA | - | 104,181 | |
| Shortage Reparation: | Expend \$8,000,000 | 109,423 | 100 |
| Pinal Redirect Credits: | - | 14,125 | n/a |

Projected Interstate Storage through 2018

| Interstate | Credits Accrued through 2017 (AF) | Projected Credits Accrued in 2018 (AF) | Total Projected Credits Accrued through 2018 (AF) |
|-------------------|--|---|--|
| Phoenix AMA | 51,009 | 8,840 | 59,849 |
| Pinal AMA | 440,241 | - | 440,241 |
| Tucson AMA | 109,791 | 3,720 | 113,511 |
| Total | 601,041 | 12,560 | 613,601 |

Public Review and Comment

Groundwater Users Advisory Council Meetings

- Support for 2018 Plan overall
- Pleased with AWBA accomplishments to date
- Questions on recovery planning
- Concerns over continued legislative transfers
- More storage welcome in the Pinal AMA