



## Agenda

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- **Introductory Comments**—*Cooke/Meyers/O'Connell*
- **Background/Context**—*Seasholes*
- **CAP System Use Agreement**—*Seasholes/Dent*
- **Next Steps**—*Ticknor/Meyers*
- **Open Discussion**—*All*



## Background/Context



## Firming

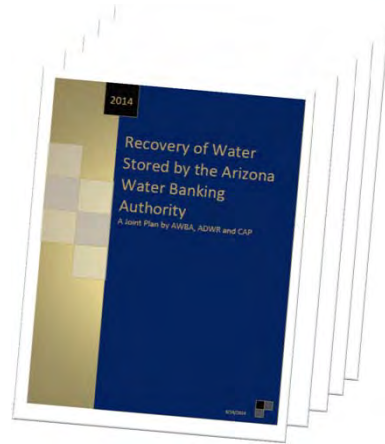
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- Firming involves the use of one supply to increase the reliability of another supply
  - Primarily through recovery of stored water
- Both the State, through the Arizona Water Banking Authority, and the Federal government, through the Bureau of Reclamation, have existing firming responsibilities
  - Tribes, M&I subcontractors, municipal on-River users
- Some users have also been firming their own supplies



## Recovery Planning

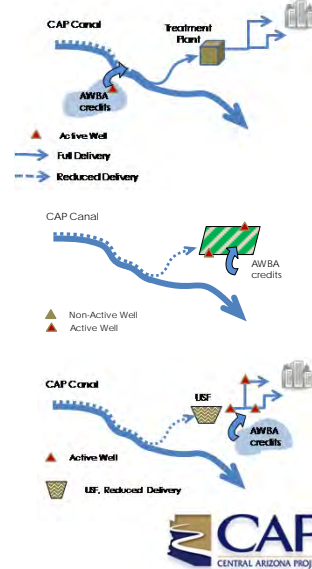
- Over time there have been a number of separate recovery planning efforts by AWBA, ADWR and CAP
- In 2014, a Joint Recovery Plan was developed by CAP, AWBA and ADWR
- Describes basic framework, methods, timing, volume, and potential partnering opportunities



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## Recovery Planning

- Recovery can be accomplished by pumping water directly into the CAP canal
- Preferred methods involve partnerships with CAP customers that agree to accept some of their order in the form of previously stored water



## Recovery Implementation

- Technical studies
- Internal CAP coordination
- Development of draft partner agreements
- Coordination with AWBA and ADWR
  - Credit transfer and accounting procedures
- Coordination with Reclamation
  - Discussion of framework to reconcile legal/contractual issues



## Recovery Issues

- Recovery using the CAP system requires consideration of both Arizona and Reclamation law, plus a number of key agreements
  - Basin Project Act (1968)
  - Master Repayment Contract (1988)
  - Operating Agreement (2000)
  - Arizona Water Settlements Act (2004)
  - Repayment Stipulation (2007)
  - Tribal contracts and M&I subcontracts (various)
- Key issues include Project Water vs. Non-Project Water, and shortage sharing provisions



# Wheeling



## Wheeling

- There is long-standing interest in using the CAP system to deliver additional water supplies
- The system is physically capable of delivering additional water
- There are opportunities to increase the delivery capacity of the system
- What has been lacking is an implementable contractual framework



## Wheeling Terminology

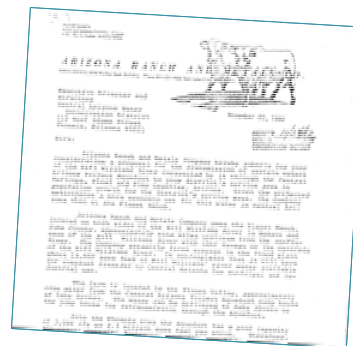
- **Project Water** – Colorado River water available to CAP, and certain Agua Fria inflows into Lake Pleasant
- **Non-Project Water** – Any water other than Project Water, including Colorado River water, imported groundwater or other supplies
- **Article 8.18** –Master Repayment Contract section related to “Wheeling Non-Project Water” = Wheeling by CAWCD
- **Article 8.17** –Master Repayment Contract section related to “Rights Reserved to the United States to Have Water Carried by Project Facilities” = Wheeling by Reclamation



## Wheeling History

*“...[CAWCD] endorses the concept of transporting water surplus to outlying areas of the state into the District for use within its boundaries. Such transportation shall be limited to otherwise unused capacity of CAP works...”*

--CAWCD Position Statement, 1983



## Wheeling History

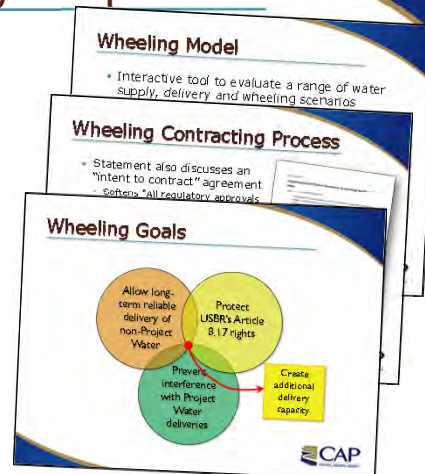
### Efforts related to the transportation of non-Project Water

- CAP position statement (1983)
- CAP discussion document (1988)
- Project Wheel (2002)
- Informal discussions (2005)
- CAP Strategic Plan (2006)
- ADD Water (2008)
- CAP Staff Proposal (2012)



## CAP Staff Wheeling Proposal

- Open to all parties, including Tribes
- Includes Standard Form Wheeling Contract
- Contracts tied to a specific legal & physical supply
- Contracts issued on the basis of increased delivery capacity
- System improvement projects go through a Reclamation review process



# Exchanges



## Exchanges

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- Various types of exchanges are recognized in different contexts, including the Basin Project Act, the Master Repayment Contract, individual delivery contracts, and also in State law
- There is some current exchange activity
  - Shared SRP/CAP customers
  - Tribal CAP water exchanged for effluent from cities
- Concept proposed by Phoenix, Tucson and Metro Water introduced a new variation—an M&I subcontractor exchanging with another user on the CAP system
  - Proposal also raised system capacity issues related to “downstream” recharge





## Issue Convergence

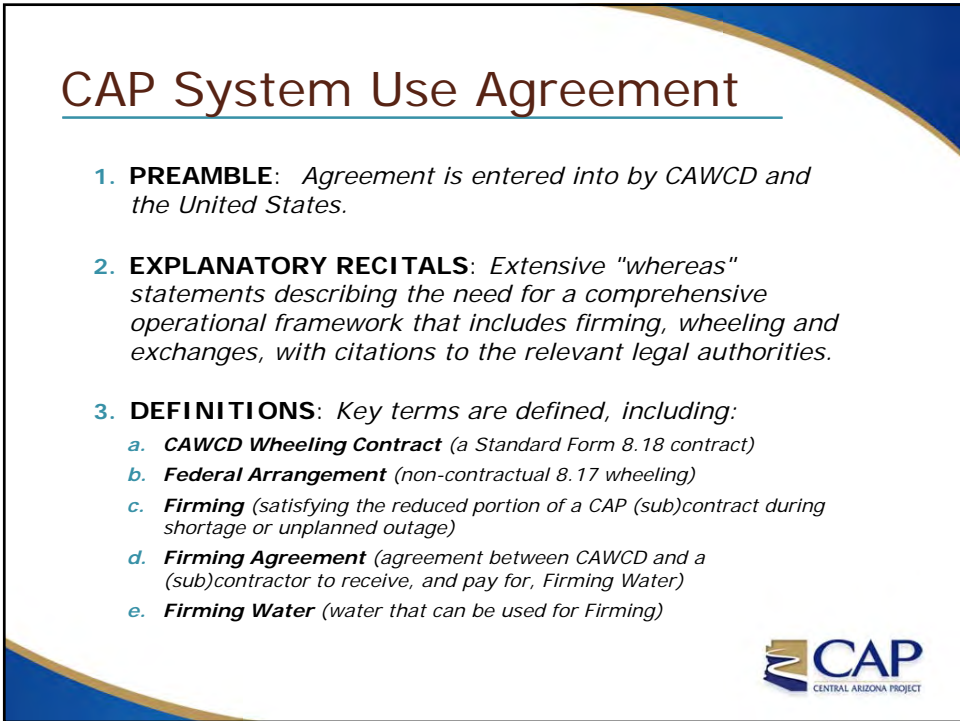
- Each issue is critically important
- Each issue has its own set of complexities
- But, each issue has a common attribute—*water moving within the CAP system in a “non-traditional” way*
- Therefore, an overall framework is essential
  - Maximize project benefits
  - Foster flexibility
  - Reduce potential conflict



## CAP–Reclamation Discussions

- The CAP is a federal project, and the owner/operator relationship is at the core of many of these issues
- Not all of the contractual language is perfectly clear, and some things were not fully contemplated
  - In particular, certain aspects of Arizona's recharge & recovery program
- There has been intensive effort on these issues in last six months among staff from CAP, Reclamation and the Solicitor's Office, with input from ADWR and AWBA





## CAP System Use Agreement

1. **PREAMBLE:** *Agreement is entered into by CAWCD and the United States.*
2. **EXPLANATORY RECITALS:** *Extensive "whereas" statements describing the need for a comprehensive operational framework that includes firming, wheeling and exchanges, with citations to the relevant legal authorities.*
3. **DEFINITIONS:** *Key terms are defined, including:*
  - a. **CAWCD Wheeling Contract** *(a Standard Form 8.18 contract)*
  - b. **Federal Arrangement** *(non-contractual 8.17 wheeling)*
  - c. **Firming** *(satisfying the reduced portion of a CAP (sub)contract during shortage or unplanned outage)*
  - d. **Firming Agreement** *(agreement between CAWCD and a (sub)contractor to receive, and pay for, Firming Water)*
  - e. **Firming Water** *(water that can be used for Firming)*

## CAP System Use Agreement

### 3. DEFINITIONS (continued)

- f. **Projected Additional CAP System Capacity** (estimated capacity from a proposed system improvement project)*
- g. **Reclamation Wheeling Contract** (an 8.17 wheeling contract)*
- h. **Recovery Exchange Agreement** (an agreement to exchange Project Water for recovered water, either between CAWCD and a (sub)contractor, OR, between a (sub)contractor and a 3<sup>rd</sup> party, with CAWCD and Reclamation approval)*
- i. **Recovery Exchange Water** (the water CAWCD delivers pursuant to a Recovery Exchange Agreement)*
- j. **Replenishment Exchange Water** (the water CAWCD delivers when CAGR's subcontract is exchanged for LTSCs used for replenishment)*
- k. **Segment** (a section of the CAP system between pumping plants)*
- l. **Underground Storage** (includes USFs and GSFs)*
- m. **Verified Additional CAP System Capacity** (capacity from a completed system improvement project, verified by Reclamation)*



## CAP System Use Agreement

- 4. TERM OF AGREEMENT:** *Same term as the Master Repayment Contract.*
- 5. USE OF CAP SYSTEM:** *In addition to Project Water, authorizes CAWCD to deliver Recovery Exchange Water, Replenishment Exchange Water, and non-Project water for Firming, On-River Firming, and Interstate agreements. Other non-Project Water deliveries require a federal or CAWCD wheeling agreement. Approves a standard form of CAWCD Wheeling Agreement, which is to be attached as an exhibit to the CAP System Use Agreement.*



## CAP System Use Agreement

**6. ANNUAL OPERATING PLAN FOR CAP SYSTEM USE:**

*Establishes CAWCD's existing AOP process as the implementation mechanism for scheduling priorities.  
 Recognizes and accommodates the range of operational considerations that affect monthly capacity by location.  
 Sets a uniform 5% loss factor for non-Project Water that is introduced into the CAP System, but exempts Firming Water.*



## Annual Operating Plan

- CAP system capacity is determined during the AOP process. Once the initial Water Delivery Requests are received, the AOP is developed based on range of factors:

- Requested location and timing of deliveries
- Planned maintenance outages
- Lake Pleasant operations
- Energy resources and programs
- USF capacity and scheduling
- End-of-year water availability

Month	Projected CAP WATER OFFER in Acres-foot
January	0.0000
February	0.0000
March	0.0000
April	0.0000
May	0.0000
June	0.0000
July	0.0000
August	0.0000
September	0.0000
October	0.0000
November	0.0000
December	0.0000
Total	0.0000



# Annual Operating Plan

CENTRAL ARIZONA PROJECT  
QUARTERLY SYSTEM DEMAND FORECAST  
(acre-feet)  
2013 Calendar Year

PRINTED: 03/20/13

Revised: 11/30/12

	JAN	FEB	MAR	1st Qtr	APR	MAY	JUN	2nd Qtr	JUL	AUG	SEP	3rd Qtr	OCT	NOV	DEC	4th Qtr	TOTAL
TOTAL CUSTOMER DELIVERIES	64,907	79,919	128,977	273,803	167,842	153,069	201,384	562,255	159,945	179,832	118,301	458,078	83,884	59,535	65,320	214,925	1,642,701
TOTAL CANAL LOSSES	739	1,283	2,185	4,207	2,959	3,425	3,464	9,848	3,382	2,663	2,569	8,604	2,343	1,892	1,423	5,658	28,317
MWD LAKE STORAGE THRU TIO	0	2,000	2,852	4,852	3,476	4,300	3,476	11,252	2,323	2,205	2,205	6,733	2,509	3,008	941	6,908	29,745
SRI/CAP EXCHANGE WATER	0	0	0	0	0	0	(13,000)	(13,000)	(7,500)	0	0	(7,000)	0	0	0	0	(20,000)
WADDELL PUMPING	45,000	72,000	51,000	168,000	2,000	0	0	2,000	0	0	0	0	46,000	70,000	42,000	158,000	328,000
WADDELL RELEASES	(25,000)	0	0	(25,000)	0	(18,000)	(85,000)	(128,000)	(105,000)	(95,000)	0	(208,000)	0	0	0	0	(388,000)
COLORADO RIVER DIVERSIONS	85,646	155,202	183,014	423,862	178,277	182,794	130,324	489,395	89,650	89,700	123,065	302,415	140,916	134,485	109,690	385,091	1,600,763
COLORADO RIVER ACTUAL	85,646	155,202	183,014	423,862	178,277	182,794	130,324	489,395	89,650	89,700	123,065	302,415	140,916	134,485	109,690	385,091	1,600,763
HAVASU PP	JAN	FEB	MAR	1st Qtr	APR	MAY	JUN	2nd Qtr	JUL	AUG	SEP	3rd Qtr	OCT	NOV	DEC	4th Qtr	TOTAL
Canal Losses	97	148	274	519	367	425	417	1,209	416	334	316	1,066	295	235	186	706	3,580
SEGMENT DEMAND	97	148	274	519	367	425	417	1,209	416	334	316	1,066	295	235	186	706	3,500
SEGMENT AVG FLOW (CFS)	2	3	4	6	7	7	7	7	7	5	5	5	5	4	3	3	5
VOLUME PASSING HAV	85,646	155,202	183,014	423,862	178,277	182,794	130,324	489,395	89,650	89,700	123,065	302,415	140,916	134,485	109,690	385,091	1,600,763
LOW PASSING HAV (CFS)	1,399	2,999	2,317	2,983	2,914	2,131	1,459	1,459	2,098	2,292	2,291	1,754					

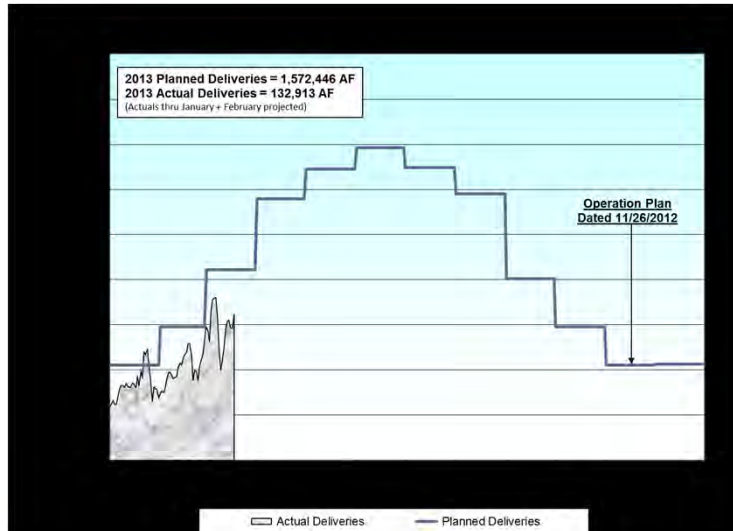
Siphon Outage

Energy Constraint

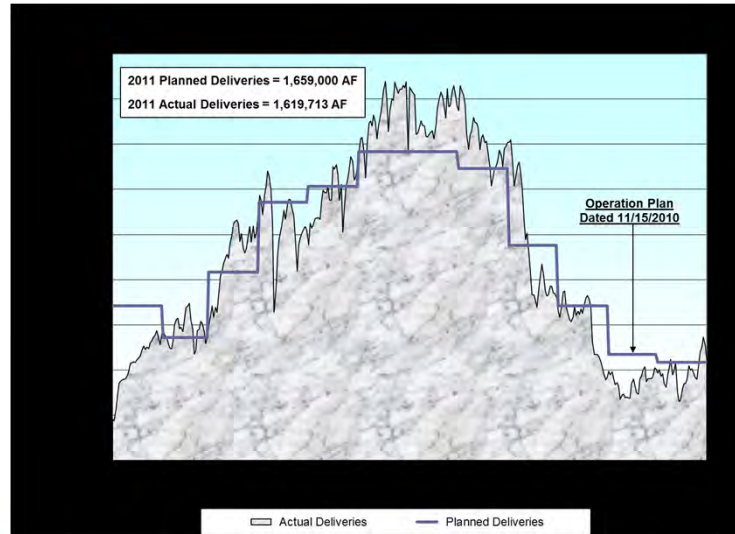
Maintenance

Unused Capacity

# Annual Operating Plan



## Annual Operating Plan



## CAP System Use Agreement

**7. CAP SYSTEM USE SCHEDULING PRIORITIES:** *If necessary, defines how competition for monthly delivery capacity is resolved. During shortage, Firming Water carries the scheduling priority of the supply it replaces.*

[The following priorities are under development]

- **First**, Long-Term Contracts, delivered directly or by exchange for use within the Long-Term Contractor's service area or reservation, OR for leases, exchanges, and underground storage delivered within the same Segment as the Long-Term Contractor's service area or reservation, or an upstream Segment
- **Second**, through 2030, the Agricultural Settlement Pool
- **Third**, CAWCD Wheeling Contracts (8.18) after project completion & verification.
- **Fourth**, Long-Term Contracts delivered for leases, exchanges and underground storage in downstream Segments
- **Fifth**, other excess water
- **Sixth**, federal wheeling (8.17) for Indian and federal agency purposes.
- **Seventh**, federal wheeling (8.17) for other purposes.
- **Eighth**, CAWCD Wheeling Contracts (8.18) before system improvement project completion



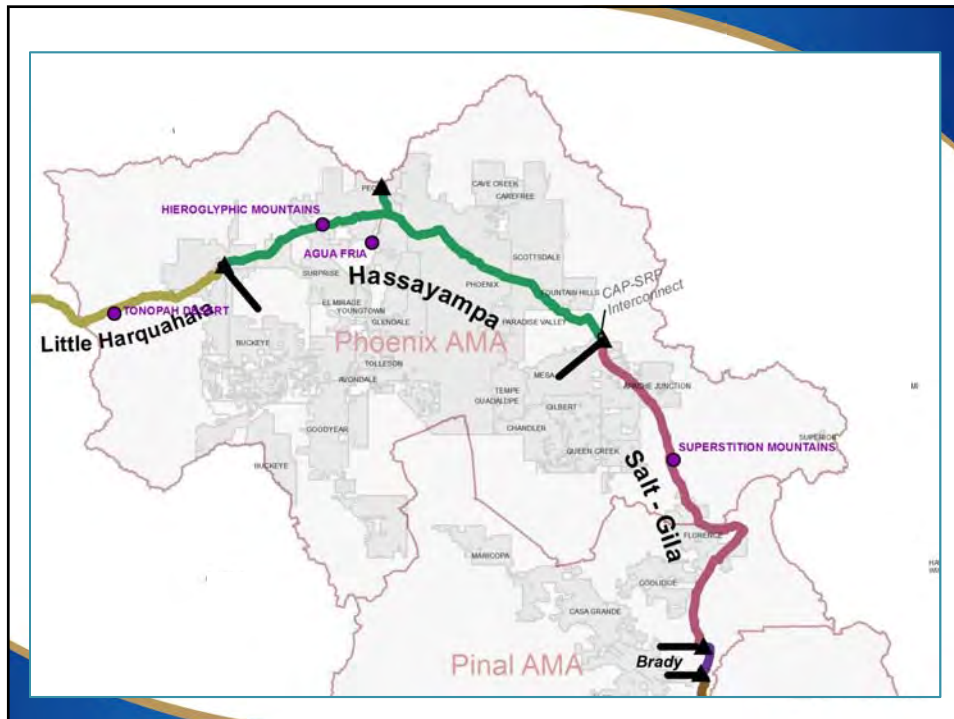
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## CAP System Use Agreement

**8. FIRMING WATER:** *Authorizes all sources of firming water, and by extension, all methods of recovery. Recipients may be required to enter into a Firming Agreement.*

**9. EXCHANGE AGREEMENTS ENTERED INTO BY LONG-TERM CONTRACTORS:** *Contemplates new exchanges, including M&I subcontractors exchanging with a 3<sup>rd</sup> party, for firming and non-firming purposes. For subcontractors, anticipates an exchange agreement approved by CAWCD, Reclamation and ADWR, and a separate implementation agreement between the subcontractor, 3<sup>rd</sup> party and CAWCD.*



## CAP System Use Agreement

- 10. WATER QUALITY:** *Any water put into the CAP system has to meet standards set by CAWCD and Reclamation. Implemented through policy and wheeling contract approval.*
- 11. CAP SYSTEM IMPROVEMENT PROJECTS:** *Defines the process for projects that will add delivery capacity. CAWCD Wheeling Contracts can be issued based on "Projected" capacity, but do not receive full reliability (i.e., scheduling priority 3) until projects are completed and "Verified" by Reclamation.*



## CAP System Use Agreement

- 12. FEES, CHARGES, AND REVENUES:** *Allows CAWCD to recoup its costs for developing firming water from the recipients of the water. CAWCD can also retain system improvement fees (for capacity projects), with Reclamation oversight.*

**13. [Boilerplate]**

**Exhibit(s):** Standard Form CAWCD Wheeling Agreement



# Next Steps

