# Section 4: Methods and Costs

## Methods

The 2014 Plan identifies three methods for the recovery of AWBA LTSCs – direct recovery, indirect recovery and credit exchange. The 2014 Plan provides detailed descriptions of these methods, each with their own attributes and associated costs. The methods are primarily differentiated by their reliance on the CAP system and whether or not additional pumping and energy are required over normal operations. The 2014 Plan also assumed that CAP would play a central role in recovery, directly or with recovery partners, and, in particular, that firming of the M&I subcontracts would occur by making up the shortfall to the M&I priority pool as a whole not on an individual subcontractor basis. The terms of the 2017 CAP System Use Agreement (SUA) changed the pool concept as this water is accounted for separately from project water available per a CAP subcontract. The approach to the recovery methods that were envisioned in the 2014 Plan has been altered and is discussed in greater detail in this section.

# Implementation and Accounting of Firming

In early 2015, discussions between CAP and Reclamation identified two issues that had not received sufficient previous attention: (i) how M&I firming affected the shortage-sharing provisions between Indian and M&I priority CAP water, and (ii) accounting distinctions between Project and Non-Project water. The former could complicate efforts to provide a full supply to the M&I priority CAP subcontracts while the co-equal Indian Priority contracts were shorted. The latter implicated unresolved issues related to wheeling and disputed provisions of the 1988 CAP Master Repayment Contract.

Initially, the proposed approach was to enshrine the established recovery methods as authorized ways that AWBA, CAP on behalf of AWBA, or Reclamation could use to satisfy their respective firming responsibilities.<sup>2</sup> That approach identified a number of key issues and potential solutions, but consensus could not be reached. Simultaneous to those discussions, CAP and Reclamation were working on a standard form wheeling contract, and were addressing issues posed by an exchange agreement entered into between the cities of Phoenix and Tucson. Ultimately discussions on all three of those issues were combined, and resolved in the CAP System Use Agreement (SUA), which includes key provisions related to wheeling, firming and exchanges.

# System Use Agreement

The SUA defines firming water as water to support CAP long-term contracts that have been reduced as a result of Colorado River shortages. Firming water includes both directly introduced non-project water (i.e., direct recovery) and exchange water (e.g., indirect recovery) and the SUA provides for its scheduling priority (identical to the priority of the supply it is supplementing), and an exemption from the 5% loss factor applied to wheeling contractors. However, because

<sup>&</sup>lt;sup>1</sup> The actual allocation between the two priorities is governed by a formula that can, depending on utilization rates, result is a slightly unequal percentage reduction during shortage.

<sup>&</sup>lt;sup>2</sup> Pursuant to Article 10.4 of the Master Repayment Contract

firming water is not a part of the project water supply available under the recipient's CAP contract or subcontract, it must be separately accounted for, and may require a separate Firming Agreement between CAP and the individual long-term contractor. This approach fundamentally alters some of the assumptions about CAP's role in recovery, particularly the "pool" concept for firming the M&I supply as a whole.

The provisions of the SUA related to exchanges also affect AWBA recovery. Based on the underlying contract authorities, the SUA defines three types of permissible exchanges,<sup>3</sup> each of which involves use of a project water supply and a non-project water supply. For AWBA recovery, the non-project supply is recovered LTSCs. The reliance on water-for-water exchanges comports with both state law and the underlying provisions of the long-term contracts. This approach also steers clear of any characterization that M&I subcontracts are being leased, which is expressly prohibited and was an exclusive benefit negotiated by tribal contractors as part of several Indian water rights settlements.

# **Exchanges**

A water-for-water exchange allows CAP or other entities to exchange recovered AWBA LTSCs, (recovered water), for CAP water. This mechanism figures predominately in both CAP recovery and in recovery among other parties. In an exchange, one party provides recovered water (i.e., LTSCs recovered pursuant to permitted recovery wells), and the other party provides a CAP supply. The statutory requirements for an exchange involving recovered LTSCs and CAP water includes written notice to ADWR4 and a written exchange contract between the exchange partners.

For recovery of AWBA LTSCs by CAP, the CAP water that CAP receives in the exchange is available for CAP to deliver to CAP water users that require direct delivery of firming water. In this exchange situation, CAP is not delivering a contractor or subcontractor's CAP water, but instead is delivering

#### **EXCHANGE ACCOUNTING**

Arizona law authorizes parties with a right or claim to use water to conduct water-for-water exchanges consistent with certain statutory requirements.

A.R.S. § 45-1001 et seq. Each party in an exchange is restricted to using the water they physically receive in the same manner as the water they give (the "giver rule"). A.R.S. § 45-1003(A)(2).

The "giver rule" applies the following three restrictions to the parties in an exchange:

- 1. Each party receiving water through an exchange must hold a legal right to use the water they give in an exchange.
- 2. Each party may use the water received only in the same manner that they could have used the water they gave.
- 3. Each party must comply with all laws relating to the water they gave.

The Notice of Exchange is subject to ADWR Director approval.

<sup>&</sup>lt;sup>3</sup> The SUA defines three categories of exchanges based on the parties involved: between a long-term contractor and CAP; between a federal long-term contractor and a party holding a Non-Project Water supply; and a non-federal long-term contractor and a party holding a Non-Project Water supply.

<sup>&</sup>lt;sup>4</sup> A Notice of Water Exchange is filed with the Arizona Department of Water Resources. A noticed water exchange must comply with requirements and conditions per A.S.R. § 45-1002(A).

recovered water. The LTSCs that CAP recovers are assigned to it by AWBA based on an approved Interstate or Intrastate Recovery Schedule. The ability of CAP and contractors or subcontractors to enter into exchanges is further addressed in the CAP SUA, which requires Reclamation approval of Exchange Agreements between CAP and Long-Term Contractors (SUA § 9.1) and authorizes CAP to use the CAP System to deliver exchange water without the need for a wheeling agreement (SUA § 5.1.2).

For recovery of AWBA LTSCs by others, the party recovering the AWBA LTSCs would exchange this non-project water, or recovered water, with a partner who has CAP water. The holder of the CAP water would have this water delivered to their partner's turnouts. The Exchange Agreement between the parties in this arrangement require Reclamation and CAP approval and an additional Exchange Implementation Agreement between the party holding a non-project

water supply, non-Federal long-term contractor

and CAP (SUA § 9.2).

# Approach to Recovery Methods

Changes in the firming approach resulting from the SUA prompted an extensive examination of recovery methods by RPAG members. The examination indicated the three recovery methods identified in the 2014 Plan remained largely unchanged. However, the SUA provided a mechanism to broaden the approach to recovery implementation. In the RPAG discussion, many M&I stakeholders expressed a preference for a more central role in recovering AWBA LTSCs, termed independent recovery. M&I subcontractors could elect to recover AWBA LTSCs through their own infrastructure or recover with a partner using any of the three recovery methods. Independent recovery would allow contractors or subcontractors to tailor recovery to suit their water supplies, demands and operating systems. This is one of the primary concepts developed in the RPAG process and fundamentally changes recovery roles and implementation. To help facilitate independent recovery, Senate Bill 1301 was introduced in the 2020 Legislative session. The bill's language modifies §45-2457 to allow the direct distribution

#### INDEPENDENT RECOVERY

To facilitate independent recovery, Senate Bill 1301 water banking; storage credits; subcontractors, has been introduced in the 2020 legislative session. The bill proposes to change language in A.R.S § 45-2457(B)(7) applying to LTSCs that have been accrued by the AWBA and paid for with the ad valorem water storage tax levied by CAP. It would authorize the AWBA to distribute LTSCs to CAP M&I subcontractors with the stipulations that they cannot be sold, and the subcontractor is responsible for all fees assessed by AWBA or ADWR for the distribution of the LTSCs and all costs of recovery of the LTSCs. Currently, the state requires the AWBA to distribute these credits to CAP. This direct distribution would be between AWBA and the subcontractor.

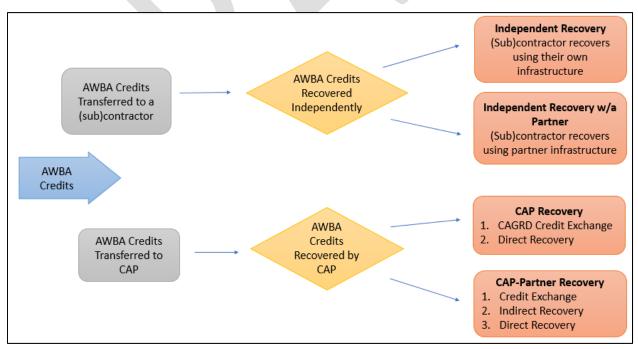
of AWBA ad valorem water storage tax credits to CAP M&I subcontractors. Direct distribution of these credits from the AWBA to M&I subcontractors would occur through the completion of the "Long-Term Storage Credit Transfer Form ARS §45-854.01".

Recovery can be performed by CAP, or by (sub)contractors, on their own or with a partner. Any recovery of LTSCs requires a recovery well permit, but the types of additional agreements and permits required depends primarily on who is recovering, whether there is an exchange, and whether the CAP system in involved.

If AWBA credits are distributed to CAP, under most circumstances CAP will hold the recovery well permit, even if a partner is recovering LTSCs on behalf of CAP. This confers legal ownership of the recovered water to CAP, and that non-Project supply can then be delivered or exchanged. Pursuant to Section 5.1.2, delivery of Firming Water does not require a wheeling contract. However, since firming is not specified in existing subcontracts, recipients of Firming Water from CAP must enter into a Firming Agreement specifying the conditions under which CAP will deliver, and the holder of the Long-Term Contract will accept Firming Water.

If AWBA credits are transferred directly to a (sub)contractor, the subcontractor is responsible for the recovery of those credits, either with their own infrastructure or with a partner. If the arrangement with the partner involves a water-for-water exchange, a Notice of Water Exchange per State water law is required. If the CAP system is necessary to effectuate the exchange, provisions of the subcontract and the SUA require that the exchange be approved by CAP and Reclamation along with and an Exchange Implementation Agreement with CAP. If the CAP system is not implicated in the exchange, then no additional agreements with CAP would be necessary.

Figure 1 shows the general credit distribution pathway and recovery methods for both CAP and (sub)contractor recovery. A detailed diagram is in Appendix C that further illustrates these recovery options, agreements and permits, and the general terms and conditions of the agreements.



**Figure 1** Approaches and methods for the recovery of AWBA LTSCs. Subject to finalization of proposed legislation SB 1301 for direct transfer of LTSCs.

In addition to the evaluation of recovery methods, to plan for possible near-term recovery, a proposal to evaluate a near-term deep shortage scenario was introduced and recommended by RPAG members. This firming exercise provided an opportunity to analyze individual recovery preferences. Of the ten M&I subcontractors who participated in the scenario exercise, nine indicated that in the near term they would elect to receive AWBA LTSCs to recover independently or would opt out of receiving AWBA LTSCs altogether. This exercise highlighted the reduced amount of recovery CAP would be responsible for in the near term.

### Costs

The overall cost of recovery will still depend on the method, or combination of methods used to physically recover AWBA LTSCs. The cost components of each recovery method remains the same as the 2014 Plan. Entities electing to use CAP for recovery will be responsible for paying the cost of this firming water. Entities electing to recover independently will be responsible for their own costs.

In addition to the "CAP Policy Allowing the Use of the CAGRD Long-Term CAP Contract to Satisfy the Arizona Water Banking Authority's Firming or Interstate Obligations" (see Appendix D for the policy), CAP has entered into recovery agreements with Arizona Water Company (AZWC), Roosevelt Water Conservation District (RWCD), Tucson Water (Tucson), New Magma Irrigation and Drainage District, Queen Creek Irrigation District, Central Arizona Irrigation and Drainage District and Maricopa-Stanfield Irrigation and Drainage District. These agreements have associated costs for recovery of certain volumes of water. The recovery costs associated with the AZWC and Tucson agreements are \$15.38/AF. The RWCD Agreement has a water recovery and delivery charge of \$125/AF with a potential for an annual adjustment of up to 2.5% of the total unit cost or any component of the total unit cost, an administrative fee of \$2,000/month and additional fixed costs. The agreements with the four irrigation districts have a recovery cost of \$15.38/AF and an operation, maintenance and pumping energy rate starting in 2027 at \$70/AF increased by 2.5%/year over the term of the agreement. Finally, the CAGRD policy has a \$15/AF cost. Additional administrative costs associated with recovery well permitting, LTSC transfers and annual recovery will also be incorporated into the firming cost.

For implementation of independent recovery, recovery opportunities identified in the 2014 Plan are now being developed among a number of M&I subcontractors instead of CAP. This reliance on independent recovery reduces the amount of recovery capacity needed by CAP. As recovery roles and opportunities change in the future, this will have a direct effect on the cost of firming water developed by CAP.

For the near term, if CAP is able to create recovery capacity through CAGRD policy or credit exchange partnerships, then the costs for firming water will remain low as is seen in the existing recovery agreements mentioned above. However, if there are limited opportunities to enter into credit exchange agreements, then direct recovery may be necessary. The costs to develop firming water through CAP direct recovery would be higher with development of wells and conveyance systems, maintenance and operation costs of wells including energy for pumping and the potential for water treatment.

Based on the feasibility studies in 2017 and 2018 which found smaller hydraulic conductivity and higher concentrations of arsenic and fluoride, direct recovery at Tonopah Desert Recharge

Project (TDRP) may be as high as \$500/AF. Currently, alternative recovery sites with potentially lower recovery costs are being evaluated. With the focus on interstate recovery in the near-term and interest in independent recovery among intrastate parties, direct recovery may not be needed immediately, allowing for a more pragmatic, stepwise approach in future feasibility investigations with a potential for reduced costs.

Initially, the costs of feasibility studies were paid for in the rates, but in 2017 the CAP Board established a \$10 million Recovery Reserve (Reserve) with property tax funds to cover upfront recovery costs when there is no revenue from beneficiaries receiving recovered water. For P4 on-river M&I users, beneficiaries will be responsible for the costs associated with recovering LTSCs for delivery to beneficiaries in place of a reduced CAP delivery. For interstate recovery, Southern Nevada Water Authority (SNWA) will be responsible for the entire cost to recover LTSCs for development of Intentionally Created Unused Apportionment (ICUA). Recovery of water for both on-river and SNWA will include upfront costs paid for with property taxes.



# Appendix C – Recovery Options, Agreements, Permits and Terms and Conditions

DRAFT, subject to change.

#### AWBA LTSCs RECOVERY CAP receives (Sub)contractor Who receives the AWBA LTSCs? AWBA LTSCs receives AWBA LTSCs CAP recovers with a **CAP** recovers (Sub)contractor (Sub)contractor Who recovers the AWBA LTSCs? partner recovers with a partner CAP exchanges CAP delivers CAP delivers 4 and 5. 1. (Sub)contractor 2 and 3. Is there an exchange of non-Project non-Project directly uses non-(Sub)contractor (Sub)contractor non-Project water water water with the non-Project water? Project water receives delivery of exchanges non-Project partner's CAP non-Project water water with partners CAP water Recovery well Does the exchange require CAP system? 1. CAP delivers non-2. CAP delivers non-3. Partner receives LTSCs instead of Project water to Project water to receiving CAP water and CAP 2. Delivery 3. Delivery through recovery partner or 5. Exchange does not beneficiaries delivers CAP water 4. Exchange uses CAP other beneficiaries through a non-CAP the CAP system use the CAP system 4. Partner pumps LTSCs instead of system receiving CAP water and CAP delivers CAP water Recovery well · Recovery well · Recovery well permit Recovery well Recovery permit Notice of Water permit Agreeement Recovery Exchange Notice of Water Agreement Exchange Agreement Exchange Firming CAP and Reclamation Exchange Recovery well permit Agreement with Recovery well approval of Exchange Agreement Recovery well Notice of Water Exchange CAP permit Agreement permit Exchange Agreement Exchange Recovery agreement Firming Reclamation approval of Implementation with partner agreement Exchange Agreement Agreement/Firming Firming agreement Firming agreement Agreement with CAP

#### **AWBA LTSC Recovery Options and Agreements**

#### **CAP Recovery**

- 1. CAP receives AWBA LTSCs CAP recovers LTSCs (CAGRD policy or direct) CAP <u>delivers</u> non-Project water to beneficiaries
  - Recovery well permit \*
  - Firming Agreements with those that are receiving non-Project water (firming)\*
- 2. CAP receives AWBA LTSCs CAP recovers with a <u>partner</u> CAP <u>delivers</u> non-Project water to recovery partner or other beneficiaries
  - Recovery well permit\*
  - Recovery agreement with partner
  - Firming Agreements with entities receiving non-Project water (firming)\*
- 3. CAP receives AWBA LTSCs CAP recovers with a <u>partner</u> CAP <u>exchanges</u> non-Project water with partner's CAP water <u>partner receives LTSCs instead of CAP water</u> CAP delivers the exchanged CAP water
  - Recovery well permit\*
  - Notice of Water Exchange\*
  - Exchange Agreement\*
  - Reclamation approval of Exchange Agreement
  - Firming Agreement with recovery partner receiving non-Project water (firming)\*
- 4. CAP receives AWBA LTSCs CAP recovers with a <u>partner</u> CAP <u>exchanges</u> non-Project water with partner's CAP water <u>partner pumps LTSCs in place of receiving CAP water</u> CAP delivers the exchanged CAP water
  - Recovery well permit\*
  - Notice of Water Exchange\*
  - Exchange Agreement\*
  - Reclamation approval of Exchange Agreement
  - Firming Agreement with recovery partner receiving non-Project water (firming)\*

#### (Sub)contractor Recovery

- 1. (Sub)contractor receives AWBA LTSCs <u>(sub)contractor recovers</u> LTSCs on their own directly uses the non-Project water
  - Recovery well permit\*
- 2. (Sub)contractor receives AWBA LTSCs (Sub)contractor recovers with a <u>partner</u> partner <u>delivers</u> the non-Project water through a non-CAP system
  - Recovery well permit\*
- 3. (Sub)contractor receives AWBA LTSCs (sub)contractor recovers with a <u>partner</u> partner <u>delivers</u> the non-Project water through the CAP system
  - Recovery well permit\*
  - Recovery Agreement among the parties
  - Firming Agreement between (sub)contractor and CAP\*

- 4. (Sub)contractor receives AWBA LTSCs (sub)contractor recovers with a <u>partner</u> (sub)contractor <u>exchanges</u> non-Project water with partner's CAP water the CAP System is used to complete the exchange
  - Recovery well permit\*
  - Notice of Water Exchange\*
  - Exchange Agreement among the parties\*
  - CAP and Reclamation approval of Exchange Agreement
  - Exchange Implementation/Firming Agreement with CAP\*
- 5. (Sub)contractor receives AWBA LTSCs (sub)contractor recovers with a <u>partner</u> (sub)contractor <u>exchanges</u> non-Project water with partner's CAP water CAP System is not used to complete the exchange
  - Recovery well permit\*
  - Notice of Water Exchange\*
  - Exchange Agreement among the parties\*

#### \*Summary of Agreements (see Agreement Terms and Conditions below)

#### Recovery Well Permit [ADWR]

- Establishes legal character of recovered water to the entity recovering the water
- For production of a Non-Project Water supply (i.e., recovered CAP water) that can be delivered directly, indirectly or by exchange (ARS § 45-834.01)

#### Exchange Agreement [Exchange Parties]

- Defines terms of the exchange between the parties. May require CAP & Reclamation approval.
- The Exchange Agreement specifies the terms of a water-for-water exchange between two parties—one providing CAP Project Water, the other providing recovered CAP water. The Exchange Agreement may contain a range of provisions that are unique to the arrangement between the parties (e.g., compensation, volumes, timing, noticing, dispute resolution, etc.). Exchange Agreements require approval by Reclamation and CAP to conform with the terms of M&I subcontracts section 4.3(d) (to which CAP and Reclamation are parties) and the System Use Agreement (see section references below).
  - If CAP is providing the recovered CAP water, (via recovery well permits under its name), section 9.1 of the System Use Agreement applies, ("9.1 Exchanges between Long-Term Contractors and CAP").
- If an entity other than a tribe is providing the recovered CAP water, section 9.2 applies ("9.2 Exchanges between Non-Federal Long-Term Contractors and parties holding Non-Project Water supplies"). Note that the party holding the non-project water supply may also happen to be an M&I subcontractor, but their subcontract is not involved in the exchange per se. An exchange is subject to ADWR review (Notice of Exchange) and a required Exchange Implementation Agreement with CAP.

#### Notice of Exchange [ADWR]

• Confirms that a water-for-water exchange meets statutory requirements

• Under State law (ARS § 45-1051), an exchange is "water for any other water" and subject to regulatory oversight

#### Exchange Implementation Agreement [Exchange Parties & CAP]

- If the CAP system is necessary to effectuate the exchange, provisions of the subcontract and the SUA require that the exchange be approved by CAP and Reclamation, and an Exchange Implementation Agreement with CAP
- Defines terms under which CAP will deliver, and party will receive Exchange Water (e.g., payment, release of liability, etc.)
- In instances in which CAP is not a direct party to an Exchange, an Exchange Implementation Agreement is required under the System Use Agreement section 9.2.1.3 to memorialize the operational terms of the exchange.
  - Defines responsibility and procedure for paying water delivery charges (e.g., CAP Energy and Fixed OM&R)
  - Defines water scheduling responsibilities, and scheduling priority
  - Confirms that Exchange Water is not assessed a loss factor
  - Confirms that CAP will deliver Exchange Water to specified points of delivery
  - Confirms that CAP does not warrant the quality of the Exchange Water (i.e., same language as M&I subcontract)

#### Firming Agreement [Exchange Parties & CAP]

- If the CAP System is involved, defines terms under which CAP will deliver, and party will receive Firming Water (e.g., payment, release of liability, etc.)
- Under the System Use Agreement, "Firming" means "satisfying all or a portion of a Long-Term Contract entitlement that has been reduced due to a Water Shortage." "Firming Water" is then defined to include both "Non-Project Water delivered through the CAP System, including Recovered Water introduced into the CAP System" and Exchange Water. For those electing to receive Firming Water, a Firming Agreement is required under the System Use Agreement section 8.3 between the Long-Term Contractor (or lessees of tribal Project Water) and CAP to define the operational terms of the delivery of this water. Note, since Firming Water does not require a Wheeling Agreement, a Firming Agreement may also serve as a water delivery contract for 3rd party firming.
  - Defines responsibility and procedure for paying water delivery charges (e.g., CAP Energy, Fixed OM&R, and, if applicable, charges based on CAP's expenses incurred in the development and delivery of Firming Water)
  - Defines water scheduling responsibilities, and scheduling priority
  - Confirms that Firming Water is not assessed a loss factor
  - Confirms that CAP will deliver Firming Water to specified points of delivery
- Confirms that CAP does not warrant the quality of the Exchange Water (i.e., same language as M&I subcontract)

#### **General Agreement Terms and Conditions**

#### **Exchange Agreement**

#### Recitals

- Pursuant to the System Use Agreement, the Parties enter into this Exchange Agreement with a non-Federal Long-Term Contractor with Project Water and an entity holding Non-Project Water to set forth the terms and conditions for the exchange.
- The Exchange Agreement allows for the storage of non-Federal Long Term Contractor's CAP Water in Non-Project Water holder's underground storage facility to earn long-term storage credits for a future water exchange.

#### **Definitions**

- "Exchange Water" means Project Water exchanged for Non-Project Water pursuant to an Exchange Agreement.
- "Long-Term Contract" means a long-term contract or subcontract for delivery of a Project Water entitlement as defined in footnote 1 to Section 4(a) of the Repayment Stipulation. Excess Water Contracts are not Long-Term Contracts.
- "Non-Project Water" means all water other than Project Water.
- "CAP Water" shall mean 'Project Water' as that term is defined in the CAP Repayment Stipulation.

#### Term

 This Exchange Agreement shall be effective when executed by the Parties and shall have the same termination date as the Exchange Agreement, previously entered into between the Parties.

#### Obligations

• The Parties are entering into this Agreement to exchange Project Water and Non-Project Water in any year that the Parties decide to exercise this Exchange Agreement.

#### Procedure for the Exchange

- The Non-Project Water holder exchanges non-Project Water in the same amount as the non-Federal Long Term Contractor CAP Water that was stored.
- The non-Federal Long Term Contractor will deliver CAP water to the Non-Project Water holder points of delivery.
- Water delivered for the purpose of exchange shall be in accordance with the terms and conditions of Long-Term Contract and pursuant to this Exchange Agreement under which the exchange of Project Water for Non-Project Water is being implemented.
- Exchange Water transported under the System Use Agreement will bear a 5% loss for transportation through the CAP System unless it is used for firming purposes and then there is no loss factor.
- Exchange Water shall carry the scheduling priority as described in Subsection 11.1 of the System Use Agreement.

#### Exchanges between Long-Term Contractors and CAWCD

- If CAWCD is providing the recovered CAP water, (via recovery well permits under its name Section 9.1 applies ("Section 9.1 Exchanges between Long-Term Contractors and CAWCD of the System Use Agreement".
- Requires Reclamation approval to conform to the SUA.

Exchanges between Non-Federal Long-Term Contractors and parties holding Non-Project Water supplies

• If an entity other than a tribe is providing the recovered CAP water, section 9.2 applies ("9.2 Exchanges between Non-Federal Long-Term Contractors and parties holding Non-Project Water supplies").

 Requires approval by Reclamation and CAWCD to conform with the terms of M&I subcontracts section 4.3(d) (to which CAWCD and Reclamation are parties) and the System Use Agreement.

#### Payments

- The non-Federal Long Term Contractor shall pay the same CAP rates for Exchange Water.
- Payment for Exchange Water shall follow the same payment procedures as defined in Subcontract No. XXXXX Section 5.

#### **Exchange Implementation Agreement**

**Note:** If exchange water will be used for firming purposes, then the provisions of the firming agreement can be incorporated into this agreement to eliminate the need for a separate firming agreement.

#### Recitals

- Pursuant to the System Use Agreement, the CAWCD will enter into an Exchange Implementation Agreement with a non-Federal Long-Term Contractor and an entity holding Non-Project Water to set forth the terms and conditions for CAWCD to deliver Exchange Water pursuant to an Exchange Agreement.
- The non-Federal Long Term Contractor and Non-Project Water holder have previously entered into Exchange Agreement No. XXXXX ("Exchange Agreement"), a copy of which is attached hereto as Exhibit "A" and by this reference made a part hereof. The Exchange Agreement has been approved by Bureau of Reclamation and CAWCD.
- The Exchange Agreement allows for the storage of non-Federal Long Term Contractor's CAP Water in Non-Project Water holder's underground storage facility to earn long-term storage credits for a future water exchange.
- The Parties are entering into this Agreement for the delivery of Exchange Water pursuant to the Exchange Agreement.

#### **Definitions**

- "Exchange Water" means Project Water exchanged for Non-Project Water pursuant to an Exchange Agreement.
- "Long-Term Contract" means a long-term contract or subcontract for delivery of a Project Water entitlement as defined in footnote 1 to Section 4(a) of the Repayment Stipulation. Excess Water Contracts are not Long-Term Contracts.
- "Non-Project Water" means all water other than Project Water.
- "CAP Water" shall mean 'Project Water' as that term is defined in the CAP Repayment Stipulation.

#### Term

• This Exchange Implementation Agreement shall be effective when executed by the Parties and shall have the same termination date as the Exchange Agreement, previously entered into between the Parties.

#### **Obligations**

• The Parties are entering into this Agreement to receive Exchange Water in any year that the Parties decide to exercise the Exchange Agreement.

#### Procedure for Recovery of Exchange Water

 The non-Project Water holder, or non-Federal Long Term Contractor if delegated, will notify CAWCD of its intention to take delivery of recovered water in exchange for delivery of non-Project Water in the same amount as the non-Federal Long Term Contractor CAP Water that was stored.

- CAWCD will deliver Exchange Water to the non-Federal Long Term Contractor's points of delivery.
- Water delivered for the purpose of exchange shall be in accordance with the terms and conditions of Long-Term Contract and pursuant to the Exchange Agreement under which the exchange of Project Water for Non-Project Water is being implemented.
- Exchange Water transported under the System Use Agreement will bear a 5% loss for transportation through the CAP System.
- Exchange Water shall carry the scheduling priority as described in Subsection 11.1 of the System Use Agreement.
- CAWCD does not warrant the quality of water transported through the CAP System to the Parties pursuant to this Exchange Implementation Agreement and the Contractor is under no obligation to construct or furnish water treatment facilities to maintain or better the quality of any water transported through the CAP System. The Parties assume all responsibility for purifying or otherwise treating Exchange Water received to meet applicable water quality standards established by federal, state or local authorities. The Parties waiver their rights to make a claim against the United States, the Contractor or another subcontractor for the quality of Firmed Water.

#### **Payments**

- The non-Federal Long Term Contractor shall pay the same CAP rates for Exchange Water.
- Payment for Exchange Water shall follow the same payment procedures as defined in Subcontract No. XXXXX Section 5.

#### Firming Agreement

**Note:** Provisions in this agreement can be incorporated into the Exchange Implementation Agreement.

#### Recitals

- Pursuant to the System Use Agreement, the CAWCD will enter into a Firming Agreement
  with any entity who elects to receive Firming Water and has the authority to collect
  charges to offset the costs of firming.
- Pursuant to Subcontract No. XXXXX Among the United States, The Central Arizona Water Conservation District, and XXXXX, hereafter referred to as the Subcontract, a copy of which is attached hereto as Exhibit "A" and by this reference made a part hereof, the Subcontractor is entering into this Supplemental Subcontract as a commitment to be firmed either through self-firming with the transfer of Long-Term Storage Credits (LTSC) recovered in the subsequent calendar year, Recovered Water or Exchange Water.

#### Definition

- "Blended Rate" or "Uniform Firming Rate" means the cost to extract and deliver water stored as long term storage credits.
- "Exchange Water" means Project Water exchanged for Non-Project Water pursuant to an Exchange Agreement.
- "Firming" means satisfying all or a portion of a Long-Term Contract or Subcontract entitlement that has been reduced due to a Water Shortage;
- "Firming Water" means water available for Firming a Long-Term Contract or Subcontract;
- "Long-Term Contract" means a long-term contract or subcontract for delivery of a Project Water entitlement as defined in footnote 1 to Section 4(a) of the Repayment Stipulation. Excess Water Contracts are not Long-Term Contracts.
- "Non-Project Water" means all water, including Recovered Water, other than Project Water.

- "Recovery Partner" means those entities that have entered into agreements to recover long term storage credits to create available CAP water.
- "Recovered Water" means the water resulting from the recovery of Long-Term Storage Credits from wells pursuant to a valid recovery well permit issued by ADWR under A.R.S. § 45-834.01.
- "Water Shortage" means available CAP water is insufficient to fully meet the demand of Long-Term Contractors, and their lessees, if any, for that CAP NIA and M&I Priority Water.

#### Term

 This Supplemental Subcontract shall be effective when executed by the Parties and shall have the same termination date as Subcontract No. XXXXX, previously entered into between the Parties.

#### Firming Obligations

- The Subcontractor is entering into this Supplemental Subcontract to receive Firmed Water during the term of Subcontract No. XXXXXX in any year there is a Water Shortage on the Colorado River which would impact NIA or M&I Priority Water.
- The amount of Firmed Water the Subcontractor will receive will be based on their water order per Subcontract No. XXXXX.

#### Firming Water

- Sources of Firming Water may include Non-Project Water delivered through the CAP System, including Recovered Water introduced into the CAP System, and Exchange Water.
- Water delivered for the purpose of firming the subcontractor shall be in accordance with the terms and conditions of Subcontract No. XXXXX and based on the Recovery Partners ability to perform.
- Firming Water transported under the System Use Agreement shall bear no uniform losses for transportation through the CAP System.
- Firming Water shall carry the scheduling priority of the Project Water it replaces during Water Shortages.
- Firming Water shall not be subject to redistribution, nor made available for delivery, under the shortage sharing provisions of Long-Term Contracts.
- The Contractor does not warrant the quality of water transported through the CAP System to the Firmed Entity pursuant to this Supplemental Subcontract and the Contractor is under no obligation to construct or furnish water treatment facilities to maintain or better the quality of any water transported through the CAP System. The Firmed Entity assumes all responsibility for purifying or otherwise treating Firmed Water received to meet applicable water quality standards established by federal, state or local authorities. The Firmed Entity waives its rights to make a claim against the United States, the Contractor or another subcontractor for the quality of Firmed Water.
- Scheduling of Firming Water will follow the same water scheduling procedure as defined in Subcontract No. XXXXX Section 4.4.

#### **Payments**

• The Subcontractor shall pay a Blended Rate for Firming Water. The Blended Rate will be determined by the Contractor based on the cost to recover water through Recovery Partners. These costs include, but are not limited to, partner incentive payments, well rehabilitation, well operation and maintenance, non-CAP wheeling fees, and other Recovery fees and capital costs including infrastructure development and treatment. The Blended Rate may be adjusted periodically by the Contractor.

 Payment for Firming Water shall follow the same payment procedures as defined in Subcontract No. XXXXX. Section 5



# Appendix D – CAP Policy Allowing the Use of the CAGRD Long-Term CAP Contract to Satisfy the Arizona Water Banking Authority's Firming or Interstate Obligations



# **BOARD POLICY**

Approved CAWCD Board June 8, 2017

#### I. Process for CAGRD to Accept Long-Term Storage Credits

- A. Prior to the use of the CAGRD Long-Term CAP contract to satisfy the Arizona Water Banking Authority's firming or interstate obligations, CAWCD shall obtain approval from the United States Bureau of Reclamation that the process is consistent with the exchange requirements in the CAP System Use Agreement section 9.1 and in accordance with the Supplemental Contract between the United States and the Central Arizona Water Conservation District for Delivery of Central Arizona Project Water contract no. 14-06-W-245 and any subsequent supplements or amendments (the "Supplemental Contract").
- B. In any year in which CAWCD is required to recover long-term storage credits on behalf of the Arizona Water Banking Authority for either instate firming or interstate obligations, CAWCD may exchange up to the maximum quantity of CAP water available to CAGRD under the Supplemental Contract, as authorized by the CAP System Use Agreement.
- C. For every long-term storage credit exchanged with the Supplemental Contract, CAGRD shall accept an equal reduction in the volume of CAP water deliveries in that same calendar year.
- D. Any long-term storage credits transferred to CAGRD for firming or instate obligations must be transferred into a conservation district account established under Arizona Revised Statute § 45-859.01 in satisfaction of a replenishment obligation.
- E. CAGRD shall pay all charges, including CAP Fixed OM&R Charges, CAP Pumping Energy Charges, CAP Capital Charges, and any applicable water storage charges for CAP or non-CAP owned and operated facilities, that would otherwise have been associated with delivery of CAGRD's CAP water order as if the CAP water order was fully delivered to CAGRD as ordered and no exchange had taken place.
- F. By April 30 of the year following the year in which long-term storage credits were transferred, CAWCD shall pay \$15 to CAGRD for each every long-term storage credit that CAWCD exchanges with CAGRD.

#### II. Locations From Which CAGRD May Accept Long-Term Storage Credits

- A. Exhibit A of the Supplemental Contract, as amended, identifies the entities that have assigned CAP M&I water entitlements to CAGRD.
  - a. In a given calendar year, CAGRD may only reduce CAP water deliveries for its CAP M&I water entitlements obtained from Sunrise Water Company, West End Water Company, New River Utility Company, and Valley Utilities Water Company for long-term storage credits that were created at water storage facilities within the area of hydrologic impact of the groundwater withdrawals to be replenished.
  - b. In a given calendar year, CAGRD may reduce CAP water deliveries for its CAP M&I water entitlements obtained from Litchfield Park Service Company and Chandler Heights Citrus Irrigation District for long-term storage credits that were created at water storage facilities in the Phoenix Active Management Area.
- B. To the extent that CAGRD obtains NIA Priority Water, in a given calendar year, CAGRD may reduce CAP water deliveries available for its CAP NIA Priority water entitlements for long-term storage credits that were created at any water storage facility in the Phoenix, Pinal, or Tucson Active Management Areas.