

11/17/10

CAP STAFF ADD WATER PROGRAM PROPOSAL

WATER SUPPLY

Phased Approach

1. Phase 1 of the ADD Water Program will “launch” in 2015, meaning that CAWCD will begin delivery of ADD Water in 2015.
2. A new phase will launch every 5 years—i.e., 2020, 2025, etc.
3. In each phase, CAWCD will plan to acquire/develop up to 50,000 acre-feet of new water supplies for the ADD Water Program.
 - a. CAWCD, in consultation with potential ADD Water contractors, will determine the target volume and potentially available supplies for each phase during a "pre-launch" planning process that will evaluate the potential demand for ADD Water at differing price points.
4. Phases will continue until the ADD Water Program target volume of 300,000 acre-feet has been acquired/developed or until CAWCD determines that no additional ADD Water supplies are available, whichever occurs first.

Types of ADD Water Supplies

1. Types of water supplies that may be acquired for the ADD Water Program include:
 - a. Colorado River water. CAWCD may acquire rights to Colorado River water held under contract pursuant to §5 of the Boulder Canyon Project Act.
 - i. Most likely these will be priority 3 or higher water rights—i.e., senior to CAP’s Colorado River entitlement.
 - ii. CAWCD may consider priority 4 water rights—equal to CAP priority—on a case-by-case basis.
 - iii. This may entail obtaining rights to water that is currently unused by the existing contract holder.
 - b. Imported Groundwater. CAWCD, directly or in conjunction with other authorized entities, may acquire the groundwater that is available for transport into an initial AMA.

- i. A portion of the groundwater resource would be used to meet long-term ADD Water contract demands.
 - ii. The remainder of the groundwater resource could be used as a drought supply or to complement other water supplies.
 - c. Brackish groundwater. Desalination of brackish groundwater may be considered on a case-by-case basis for the ADD Water Program if the costs of developing (capital) and producing (OM&R) that supply are comparable to the costs of other ADD Water supplies.
2. Ocean Desalination Not Included. At present, the cost of ocean desalination—particularly annual OM&R cost—is far greater than the expected cost of the supplies identified above. Therefore, CAWCD will not develop ocean desalination as a water supply for the initial ADD Water Program.
- a. If there is still a demand for additional water supplies when no additional water supplies of the type identified above are available, CAWCD will work with stakeholders to develop ocean desalination.
 - b. Ocean desalination would have its own operating rules, financial structure, etc.

ADD Water Supply Portfolio

1. Water supplies for the ADD Water Program will be acquired from multiple sources at various times, but CAWCD will manage the water supplies as a single portfolio that increases with each phase.
2. ADD Water contracts will be for delivery of water from the overall ADD Water portfolio, not from any specific source.
3. At least 80% of the ADD Water portfolio must be comprised of long-term (100-year) or permanent water supplies.
4. Up to 20% of the ADD Water portfolio may include non-permanent supplies with a minimum term of 30 years.
 - a. Non-permanent supplies in the ADD Water portfolio will be renewed and/or replaced as needed.
 - b. The cost of periodic replacement of ADD Water supplies—non-permanent supplies as well as “permanent” supplies that may become unavailable or unreliable for any reason—will be included in ADD Water rates. (See discussion below.)

5. The intent is that M&I providers may use contract entitlements based on the ADD Water portfolio to qualify for Assured Water Supply purposes under existing ADWR rules.

CONTRACTS¹

Eligibility to Contract for ADD Water

1. Any municipal, industrial, agricultural or Indian water user within CAWCD's three-county service area is eligible to obtain a water service contract for ADD Water. Municipal and industrial water user includes the CAGR and landowners. [Q3, #1]
2. CAWCD, acting in its capacity as CAGR, will have the same privileges, obligations and rights as other ADD Water contractors. [Q3, #1]
3. AWBA is not eligible to enter into a long-term water contract for ADD Water. [Q3, #2]
4. An entity whose primary business purpose is to purchase or store water for future resale ("remarketer") cannot obtain an ADD Water contract. [Q3, #3]
 - a. This provision does not prevent a group of eligible parties (e.g., landowners) from forming an entity to purchase an ADD Water contract for assignment to the individual parties between phases.

Classes of ADD Water Contracts

1. CAWCD will offer two classes of ADD Water contracts: long-term and spot market.
2. Long-term contracts will be for permanent service and are intended to meet assured water supply requirements. [Q4, #1]
3. Spot-market contracts will be annual contracts for unscheduled ADD Water. The availability of this type of water will be determined on an annual basis based on delivery schedules submitted by long-term ADD Water contractors. Spot-market water may not be counted for assured water supply purposes. [Q4, #1]
4. In lieu of offering short-term or interruptible contracts, CAWCD will encourage and facilitate mutually beneficial arrangements between ADD Water customers. Examples could include:

¹ SEC categories covered in this section include: Participation Eligibility (Q3-8); Need Determination (Q9-10); Ownership Interest (Q13-15); and Use of Unscheduled Supply (Q16).

- a. An entity desiring to receive ADD Water only for a defined term may enter into a long-term ADD Water contract, and then assign that contract to another entity when no longer needed.
- b. An entity desiring to receive ADD Water only intermittently—such as during a shortage—may partner with a long-term ADD Water contractor that is willing to have its deliveries interrupted from time to time (e.g., CAGR).
- c. An ADD Water contractor may lease its contract entitlement to another entity for a defined term.

Flexible Arrangements for ADD Water Contracts

Assignment s

1. "Assignment" means the permanent transfer of an ADD Water Contract entitlement to a third party.
2. An ADD Water contractor may assign all or part of its ADD Water contract entitlement to another eligible entity, subject to CAWCD review and approval. **[Q6, #1]**
3. The parties to the assignment will define the financial terms of their agreement.
4. CAWCD will impose operational requirements, as necessary and appropriate, on assignments to prevent harm to other CAP or ADD Water contractors – e.g., if the assignment would move the point of delivery downstream on the CAP system and thereby impair CAWCD's ability to make other deliveries. **[Q6, #2]**
5. CAWCD will prepare the necessary assignment documents to effectuate the assignment.

Leases

1. "Lease" means an agreement for the temporary transfer of an ADD Water Contract entitlement to a third party.
2. An ADD Water contractor may lease all or part of its ADD Water contract entitlement, subject to CAWCD review and approval.
3. The parties to the lease will define the financial terms of their lease agreement.
4. Contractual provisions relating to scheduling and payment for ADD Water deliveries and other provisions will be required to be included in the ADD Water Contract lease.

5. CAWCD will impose operational requirements, as necessary and appropriate, on leases to prevent harm to other CAP or ADD Water contractors – e.g., if the lease would move the point of delivery downstream on the CAP system and thereby impair CAWCD's ability to make other deliveries. [Q6, #2]

Market-Based Allocation Method

1. The ADD Water long-term contract entitlement volume available during each phase will be distributed among potential contractors using an auction process. The auction will establish a market-clearing price for each phase—i.e., the price at which demand equals supply.
2. Each participant will determine its own need, based on its evaluation of current and future demand, cost, other supply options (including conservation) and its own projections as to the price of contracts in future phases.
3. All participants in a phase will pay the same price for ADD Water contracts awarded in that phase.
4. Aside from the assignment of an existing ADD Water contract entitlement, the only way to acquire a long-term contract for ADD Water is through the auction process that occurs in connection with the launch of each phase.

Floor Price

1. CAWCD will establish a “floor price” for each phase of ADD Water. The floor price will include the aggregate cost of water acquisition for that phase (but no other phase) and other necessary components—e.g., to establish or maintain ADD Water reserves, to repay pre-launch costs or to cover other program costs.
2. CAWCD will announce the floor price for each phase sufficiently in advance of the auction process to allow potential ADD Water contractors to evaluate their options and prepare their strategy for the auction.

Auction Rules

1. The auction will be conducted in rounds. In each round, potential contractors will submit bids for specific ADD Water contract entitlement volumes at the price specified for that round.
2. The specified price for the first round will be the floor price.
3. If the demand for ADD Water contract entitlements in a round exceeds the volume available in that phase, a subsequent round will be conducted at a higher specified price.

4. The auction will continue until the aggregate contract demand equals the volume available in that phase, establishing a market-clearing price for that phase.
5. The auction process may include conditions such as:
 - a. Pre-qualification of bidders.
 - b. Minimum/maximum volumes that may be requested by a single bidder.
 - c. Minimum number of bidders to have a valid auction.
 - d. CAWCD's ability to reject all bids.
 - e. A bidder may not participate in an auction round if it did not participate in the immediately preceding round.
 - f. A bidder may not request a greater contract entitlement volume than it requested in the immediately preceding round.

Carryover Revenue

1. If the market-clearing price established for a phase exceeds the floor price for that phase, the revenues generated by the difference ("carryover revenue") will be applied to reduce the floor price for the next phase of ADD Water.
 - a. The intent of this mechanism is to discourage speculative activity. Bidding up the price in one phase could make the next phase less expensive.
 - b. This application of carryover revenues will continue through all phases.
2. If there is any carryover revenue after the final phase, it will be applied to reduce ongoing program costs for all ADD Water contractors, regardless of when they contracted.

FINANCES²

Pre-Launch Costs

1. CAWCD will have to incur some costs before the start of each phase of the ADD Water Program. Such pre-launch costs could include fees for consultants retained to identify and evaluate water supplies, costs to obtain options to acquire water rights and basic administrative costs. Pre-launch costs do not include the full cost of acquiring water supplies for each phase of ADD Water, which are addressed separately below.

² SEC categories covered in this section include: Capital Costs – Supply (Q17-18); Capital Costs – Infrastructure (Q19-21); and Operation Maintenance and Repair (OM&R) (Q22-24).

- a. CAWCD will establish an accounting fund to capture ADD Water costs on an ongoing basis beginning January 2012, which coincides with the start of CAWCD's next budget cycle.
 - b. After the ADD Water accounting fund is established, CAWCD may identify and capture pre-2012 expenses that should be charged to the ADD Water Program.
2. Phase 1 will be unique due to the fact that there have been no previous phases. Consequently, there may be certain pre-launch costs that will be incurred only in Phase 1. Other types of pre-launch costs may be incurred in multiple phases. Certain financing mechanisms may only be appropriate or available for a single phase, others may be appropriate or available for multiple phases, and still others may only be appropriate or available once the ADD Water Program is operational (i.e., after Phase 1).
3. Funding to cover pre-launch costs may be obtained in one or more of the following ways:
- a. Establish a revolving fund using existing, but currently unused, taxing authority. The revolving fund would be available to pay pre-launch costs for each phase of ADD Water, beginning as early as Phase 1. Each phase would repay the pre-launch costs for that phase by incorporating those costs into the floor price for the auction of the ADD Water contract entitlement for that phase, thereby replenishing the revolving fund for use by the following phase.
 - i. CAWCD has the authority to levy an ad valorem tax of up to 10¢ per \$100 of assessed valuation. That tax may be used for any purpose for which CAWCD is organized. CAWCD is currently levying only 6¢ of that taxing authority.
 - ii. CAWCD could establish an ADD Water working capital fund by temporarily increasing its general ad valorem tax for some period of time.³
 - iii. The currently unused taxing authority would only be available for ADD Water if and to the extent it was not needed for CAP purposes. If at any point during the collection period CAWCD determined that the temporary

³ At present valuations, a 1¢ increase in the ad valorem tax rate would generate around \$6 million. A revolving fund could be raised in a number of ways. For example, a revolving fund of \$25 million could be raised by levying a flat 1¢ for 4 years or 2¢ for 2 years, or through a graduated increase (e.g., 0.5¢ for the first year, 1¢ for the second and third years, and 1.5¢ for the fourth year).

ad valorem tax revenues were needed for CAP purposes, then those revenues would immediately be available for CAP.

- b. Borrowing. CAWCD could borrow funds to cover pre-launch costs. Borrowing will necessarily entail added cost. Borrowing would not create a revolving fund, so each phase of the ADD Water Program would have to obtain its own separate financing. Any amounts borrowed to finance the pre-launch costs for a particular phase would be repaid by incorporating those costs into the floor price for the auction of the ADD Water contract entitlement for that phase.
- i. Loan from CAWCD reserves.⁴ CAWCD reserves could be used for this purpose only if and to the extent that actual reserves exceed CAWCD's reserve target. The ADD Water Program would repay the loan to CAWCD reserves, with interest. Self-financing from CAWCD reserves likely represents the least-cost borrowing alternative.
 - ii. Loan from a third-party. These are funding sources that should be readily obtainable, but are likely to be more expensive than financing by CAWCD.
 1. Loan from a potential ADD Water contractor. Potential contractors could purchase an ADD Water voucher from CAWCD. Vouchers would accrue interest at a specified rate and could be redeemed only to pay costs associated with an ADD Water contract, including costs due at the time of contracting or annual delivery costs.
 2. Secured conventional loan from a commercial lender. Loan security could take the form of contracts for water options, backed up by CAGR assets if the ADD Water Program is not implemented.
 3. Loan from private investor. Terms and requirements cannot be predicted at this point.
- c. ADD Water Self-Funding. After the launch of Phase 1, the ADD Water Program may have its own reserve accounts (e.g., Carryover Revenue, Working Capital, Big R, etc.) that may be available temporarily for purposes of

⁴ We acknowledge that this financing option is somewhat contrary to the Summary of Emerging Consensus, which states (Q17, #11) that "CAWCD will not lend or otherwise use funds from its current reserve accounts to finance the acquisition of ADD water supplies." As described here, only those CAWCD reserves that are in excess of the established reserve target would be available for loan to the ADD Water Program. Thus, we believe this option is consistent with the SEC statement (Q17, #8) that "[f]unding mechanisms used may not adversely impact costs to CAP contractors and subcontractors." It should also be noted that CAWCD reserves would be used only once—for pre-program costs—and would not be used to finance the actual acquisition of water supplies for ADD Water.

funding pre-launch costs (i.e., until the launch of the next phase, at which time they would be repaid from ADD Water contract entitlement auction proceeds). The cost of such self-funding would be the interest earnings that would be foregone.

- d. Other funding mechanisms. Numerous other funding mechanisms have been identified. Some would require additional legislative action. Others would involve complicated negotiations with third parties. Identified alternatives are listed here, but CAWCD does not propose to pursue any of these at this time.
 - i. New ad valorem taxing authority.
 - ii. Grants.
 - iii. State or federal appropriations.
 - iv. Unique business arrangements, such as with a power generator that might agree to contribute funds in exchange for a purchase power agreement with the ADD Water Program.

Water Supply Acquisition Costs

Phase 1

1. The cost of acquiring water supplies and associated infrastructure for Phase 1 of the ADD Water Program will be substantial. CAWCD cannot demonstrate the creditworthiness or security that would be required to obtain sufficient financing without pledging existing CAP reserves, revenue streams and taxing authorities for the ADD Water Program. Therefore, it is not realistic at this time for CAWCD to finance the cost of water supply acquisition for Phase 1 on behalf of ADD Water contractors.
2. For Phase 1, ADD Water contractors will be required to provide 100% of the water acquisition charge at the time of contracting. ADD Water contractors will be responsible for arranging their own financing as needed.
3. If CAWCD is able to negotiate flexible payment terms with those selling water supplies to the ADD Water Program for Phase 1, CAWCD may be able to offer some payment flexibility to ADD Water contractors.

Subsequent Phases

1. For subsequent phases, CAWCD may be able to offer ADD Water contractors more financial flexibility. Such flexibility may come from any of the following sources (or others):

- a. Financing mechanisms that may become available to CAWCD once the ADD Water Program has established an operating history.
 - b. Flexible payment terms CAWCD may be able to negotiate with those selling water supplies to the ADD Water Program.
 - c. A revolving fund established for that purpose. Initial funding to establish the revolving fund could come from a single infusion or a committed revenue stream, such as a new or re-designated tax.
2. In all cases, the amount CAWCD receives each year from ADD Water contractors must equal or exceed the amount that CAWCD must pay for water supply acquisition in that year.

Capital Costs for Improvements to CAP Canal Capacity

1. An infrastructure improvement capital charge will be computed based on the cost of increasing annual CAP canal capacity to 2.1 million acre-feet divided by 300,000 acre-feet (the target size of the ADD Water Program).
2. Currently the cost of canal improvements is estimated at around \$100M, but that estimate will be updated before implementation of the ADD Water Program.
3. The capital charge will be levelized over the phases and paid over a specified period of time for each phase (e.g., \$333/acre-foot, paid over 10 years).

OM&R Costs

Fixed OM&R

1. ADD water contractors will pay two fixed, postage stamp OM&R rates: **[Q22, #1]**
 - a. A fixed OM&R rate designed to cover OM&R costs tied to clearly separable and identifiable ADD water assets.
 - b. A share of the existing CAP fixed OM&R rate. Any fixed OM&R costs that are not based on clearly separable and identifiable ADD Water assets will be incorporated into the existing CAP fixed OM&R rate and paid by both existing CAP customers and ADD Water contractors.
2. ADD Water contractors will be required to pay fixed OM&R costs (both ADD-specific and CAP) for water scheduled for delivery whether taken or not. The contractor would be relieved of this obligation only to the extent that CAP, or the contractor, is able to find another customer for any unused water. **[Q22, #2]**

3. The annual reconciliation for ADD Water contractors will involve no additional billing or refunds. CAP will develop and incorporate an acceptable annual rate stabilization mechanism. This will not change in any way the annual reconciliations performed under existing CAP contracts. **[Q22, #3]**

Variable OM&R (Energy)

1. Energy costs for existing CAP customers and ADD Water contractors will be kept completely separate. ADD Water contractors will pay a pumping energy rate designed to cover the energy costs for ADD Water. **[Q23, #1]**
2. Power supplies used to deliver ADD water will be pooled and ADD Water contractors would pay a single postage stamp rate for energy, but the rate could be "hedged" or protected against disproportionate increases in the cost of those power supplies in relation to overall operation and maintenance costs. How the rate would be "hedged" against disproportionate increases in energy costs will require additional work by stakeholders in the future. **[Q23, #2]**

ADD Water Replacement Costs

1. Costs associated with replacing infrastructure will be incorporated into a "Big R" component of fixed OM&R. **[Q24, #1]**
2. Costs associated with replacing short-term supplies or addressing contingencies for long-term supplies will be incorporated into a "Big W" delivery rate component.

Other Rate Components

1. ADD Water delivery rates may also include, but are not limited to, the following components as appropriate:
 - a. Peak capacity surcharge. This charge would be designed to discourage extensive use of CAP delivery capacity during the peak delivery periods.
 - b. Conservation charge. If there is consensus for such a program, CAWCD could collect funds through a conservation charge and then make those funds available to ADD Water contractors to promote local efforts that reduce demand for ADD Water, thereby potentially reducing the volume of new/replacement supplies that must be acquired and lowering cost to all ADD Water contractors.

Reserves

1. CAWCD may establish and maintain ADD Water reserve funds (similar to existing CAP reserves) by including additional rate components, as necessary, for working capital needs, environmental, and other costs. **[Q24, #2]**

CAGR D AND THE ADD WATER PROGRAM

Pre-ADD CAGR D Obligations

1. Pre-ADD obligations are those replenishment obligations associated with:
 - a. All Member Lands enrolled as of the launch date of Phase 1 of the ADD Water Program.
 - b. The current and committed demands of Member Service Areas as of the launch date for Phase 1 of the ADD Water Program.
2. CAGR D will remain responsible for acquiring water supplies to meet its pre-ADD obligations.
3. CAGR D may obtain water for pre-ADD obligations by contracting for ADD Water.
 - a. CAGR D will participate in the auction process on the same terms and conditions as other potential ADD Water contractors.
4. CAGR D may acquire non-ADD Water supplies to satisfy pre-ADD obligations. Such supplies may include, but are not limited to:
 - a. Effluent or other water supplies that will not be transported through the CAP.
 - b. Project water supplies—e.g., leases of CAP Indian priority water.
 - c. Non-Project water supplies that do not otherwise meet the requirements for inclusion in the ADD Water supply portfolio. These supplies may rely on the CAGR D interim set-aside.

Post-ADD CAGR D Obligations

1. Post-ADD obligations are those replenishment obligations associated with:
 - a. All Member Lands that enroll in the CAGR D after the launch date of the ADD Water Program,
 - b. All Member Service Areas that enroll⁵ in the CAGR D after the launch date of the ADD Water Program.

⁵ If a water provider that serves pre-ADD member lands enrolls its service area as a member service area after the launch date for Phase 1 of the ADD Water Program, then the replenishment obligations associated with the pre-ADD subdivisions will continue to be considered pre-ADD obligations.

- c. New growth within Member Service Areas that enrolled prior to the launch date of the ADD Water Program (i.e., all obligations exceeding the Member Service Area's pre-ADD obligations).
2. CAGRDR will not be responsible for acquiring water supplies to meet post-ADD obligations.
3. Member Lands and Member Service Areas will be required to provide CAGRDR a permanent water supply to meet their post-ADD obligations.
 - a. Provision of this supply is a condition of enrollment for Members that join CAGRDR after the launch date of the ADD Water Program.
 - b. Member Service Areas that enrolled prior to the launch date of the ADD Water Program must provide the supply prior to incurring post-ADD obligations.
 - c. The water supply must be acceptable to CAGRDR and sufficient to meet CAGRDR's perpetual replenishment obligations for the enrolling entity at full build out.
 - d. Enrolling entities may satisfy this requirement by contracting for ADD Water.
 - e. The enrolling entity must assign the ADD water contract or other acceptable water supply to CAGRDR upon enrollment.
 - f. Water supplies provided to CAGRDR by members will become part of the overall CAGRDR water supply portfolio and may be used to satisfy both pre- and post-ADD replenishment obligations.
 - g. This requirement will be effective for all enrollment under future CAGRDR plans of operation.
 - h. Post- and pre-ADD CAGRDR members will pay the same rates for the same CAGRDR services, although there may be discrete rate components—e.g., water rights and infrastructure—that apply to one group but not the other.

CAP STAFF JUST WATER PROGRAM PROPOSAL

WATER SUPPLY

1. In conjunction with each phase of ADD Water, CAWCD will also acquire water supplies for the Just Water Program.
2. The target volume for Just Water acquisitions will be 8,333 acre-feet for each phase, up to a total of 50,000 AF.
3. Just Water supplies will be available for delivery from the Colorado River.

WATER RIGHTS

1. CAWCD will assign the water rights it acquires for the Just Water Program to the Arizona Department of Water Resources (or other appropriate regional or statewide entity) upon payment to CAWCD of its costs in acquiring those water rights.
2. ADWR (or other appropriate regional or statewide entity) will hold Just Water rights in trust until contracted to individual entities outside CAWCD's three-county service area.

FINANCES

If ADWR (or other appropriate regional or statewide entity) does not pay or provide for payment to CAWCD for Just Water supplies within a reasonable time period following CAWCD's acquisition of those supplies, then CAWCD may, in its sole discretion:

1. Allow options for water rights to expire.
2. Exercise options for water rights and make that water a part of the next ADD Water phase, selling the water under ADD Water spot market contracts in the meantime.
3. Sell the water rights to CAGR.
4. Other disposition.

WATER ALLOCATION

1. ADWR (or other appropriate regional or statewide entity) will determine how to distribute/allocate available Just Water supplies.
2. ADWR (or other appropriate regional or statewide entity) will determine how Just Water supplies are paid for.