

ADD Water Program Proposal

Prepared by CAWCD Staff
November 17, 2010

ADD Water BIG Meeting, November 17th, 2010

Agenda

- Background
- ADD Water
 - Water supply
 - Contracts
 - Finances
 - CAGR
- Just Water

ADD Water BIG Meeting, November 17th, 2010

Background

- Stakeholder process produced Summary of Emerging Consensus (SEC)
- Task teams raised questions about how various elements of the SEC fit together
- CAWCD Board directed staff to prepare a comprehensive ADD Water proposal
- Intent is to integrate SEC principles into a cohesive package that can be implemented

ADD Water BIG Meeting, November 17th, 2010

Program Overview

- Water Supply
 - Phased development over 30 years; regular, defined entry points; diverse portfolio
- Contracts
 - Long-term contracts with flexible leasing/assignment
 - Market-based allocation system; contractors determine own needs
- Finances
 - Program pays own way; acquisition costs by phase; common costs shared by all ADD contractors

ADD Water BIG Meeting, November 17th, 2010

Program Overview

- **CAGR**
 - Post-ADD members must bring CAGR water; CAGR meets Pre-ADD obligations using ADD water and other supplies
- **Just Water**
 - CAWCD acquisition agent only; Just Water pays own way

ADD Water BIG Meeting, November 17th, 2010

Water Supply

ADD Water BIG Meeting, November 17th, 2010

Water Supply

Core Principles

- Promote confidence that water will be available when needed over coming decades
- Provide certainty on types of water supply that will be acquired
- Create flexibility in assembling an ADD Water supply portfolio
- Minimize and spread risk across program
- Facilitate program implementation and administration

ADD Water BIG Meeting, November 17th, 2010

Water Supply

Phased Approach

- Phase 1 launch = 2015 (i.e. CAWCD begins deliveries in 2015)
- New phase launches every five years thereafter (2020, 2025, 2030, etc.)
- Phases continue until target volume of 300,000 AF reached or until no additional water supplies are available, whichever occurs first

ADD Water BIG Meeting, November 17th, 2010

Water Supply

Phased Approach

- CAWCD will acquire/develop up to 50,000 AF of new supplies for each phase
- Pre-launch planning process
 - Target volume, at differing price points, will be determined in consultation with potential contractors
 - Potentially available supplies will be identified, evaluated and secured
 - Contracts offered

ADD Water BIG Meeting, November 17th, 2010

Water Supply

Types

- Water supplies that may be acquired include:
 - Colorado River water
 - Imported groundwater
 - Brackish groundwater
- Ocean desalination not included

ADD Water BIG Meeting, November 17th, 2010

Water Supply

Types

- Colorado River Water
 - Most likely priority 3 or higher water rights—i.e., senior to CAP's Colorado River entitlement
 - May consider priority 4 water rights (equal to CAP priority) on case-by-case basis
 - May entail obtaining rights to water currently unused by existing contract holder

ADD Water BIG Meeting, November 17th, 2010

Water Supply

Types

- Imported Groundwater
 - Working directly or in conjunction with others, CAWCD acquires groundwater available for transport
 - Portion of groundwater resource used to meet long-term ADD Water contract demands
 - Remainder used as a drought supply or to complement other water supplies

ADD Water BIG Meeting, November 17th, 2010

Water Supply

Types

- Brackish groundwater
 - Desalination of brackish groundwater may be considered on case-by-case basis if cost of developing (capital) and producing (OM&R) supply are comparable to costs of other supplies

ADD Water BIG Meeting, November 17th, 2010

Water Supply

Types

- Ocean desalination not included
 - Today's cost of ocean desalination far greater than expected cost of other supplies
 - If demands for water exhaust more affordable supplies, CAWCD will consider developing ocean desalination
 - Ocean desalination would have its own operating rules, financial structure, etc.

ADD Water BIG Meeting, November 17th, 2010

Water Supply

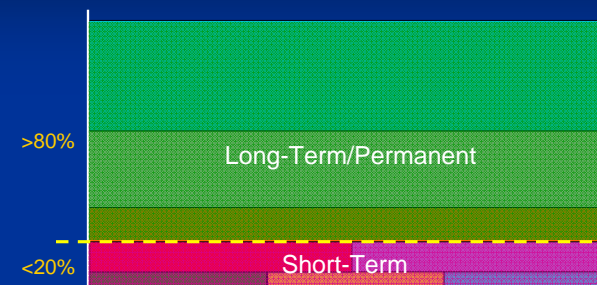
Portfolio

- ADD Water supplies will be acquired from multiple sources at various times, but CAWCD will manage the supplies as a single portfolio that increases with each phase
- ADD Water contracts will be for delivery of water from the overall ADD Water portfolio, not from any specific source

ADD Water BIG Meeting, November 17th, 2010

Water Supply

Portfolio



ADD Water BIG Meeting, November 17th, 2010

Water Supply Portfolio

- At least 80% must be long-term (100-year) or permanent water supplies
- Up to 20% may include non-permanent supplies; minimum term 30 years
 - Non-permanent supplies in the portfolio will be renewed and/or replaced as needed
 - Replacement costs—for non-permanent supplies as well as ‘permanent’ supplies that may become unavailable/unreliable—will be included in ADD Water rates

ADD Water BIG Meeting, November 17th, 2010

Water Supply Portfolio

- Assured Water Supply
 - 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

ADD Water BIG Meeting, November 17th, 2010

Contracts

ADD Water BIG Meeting, November 17th, 2010

Contracts Core Principles

- Develop equitable method of “allocating” available water in each phase
- Discourage hoarding and speculation
- Encourage partnering among eligible entities
- Provide flexibility to contractors
- Simplify contracting and program administration

ADD Water BIG Meeting, November 17th, 2010

Contracts

Eligibility

- **Eligible parties**
 - Any municipal, industrial, agricultural or Indian water user within CAWCD's three-county service area (includes CAGR and landowners)
 - CAGR has the same privileges, obligations and rights as other ADD Water contractors
- **Not eligible**
 - AWBA
 - "Remarketers"
 - Does not prevent formation of joint entity of eligible parties

ADD Water BIG Meeting, November 17th, 2010

Contracts

Classes

- **Two classes of ADD Water contracts:**
 - **Long-term** contracts will be for permanent service and can be pledged for assured water supply purposes
 - **Spot-market** contracts will be annual contracts for unscheduled ADD Water
 - Availability determined annually based on delivery schedules of long-term ADD Water contractors
 - Spot-market water may not be counted for Assured Water Supply purposes

ADD Water BIG Meeting, November 17th, 2010

Contracts

Flexible Arrangements

- **In lieu of short-term or interruptible contracts, CAWCD will encourage and facilitate mutually beneficial arrangements**
 - ADD Water contractors may assign or lease entitlements, subject to CAWCD review and approval
 - Parties to assignment or lease—not CAWCD—will define financial terms of their agreement
 - CAWCD will impose operational and administrative requirements, as necessary and appropriate, to prevent harm to other CAP or ADD Water contractors

ADD Water BIG Meeting, November 17th, 2010

Contracts

Flexible Arrangements

- **Examples:**
 - An entity wanting ADD Water only for defined term may enter into a long-term contract, then assign it to another entity when no longer needed
 - An entity wanting ADD Water only intermittently (such as during a shortage) may partner with a long-term ADD Water contractor willing to have its deliveries interrupted from time to time (e.g., CAGR)

ADD Water BIG Meeting, November 17th, 2010

Contracts

Market-Based Allocation

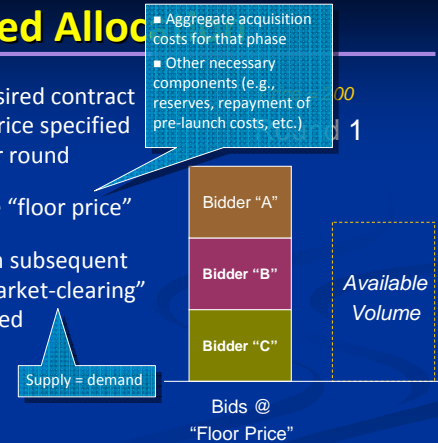
- ADD Water entitlements available during each phase will be distributed among potential contractors using an auction process
- Each participant will determine its own need, based on its evaluation of current and future demand, cost, other supply options (including conservation) and its own projections as to the price of contracts in future phases

ADD Water BIG Meeting, November 17th, 2010

Contracts

Market-Based Allocation

- Bids are for a desired contract volume, at the price specified for the particular round
- Round 1 is at the "floor price"
- Price escalates in subsequent rounds, until "market-clearing" price is established

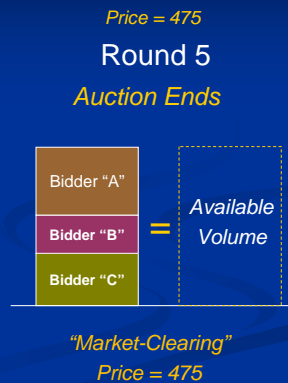


ADD Water BIG Meeting, November 17th, 2010

Contracts

Market-Based Allocation

- Bids are for a desired contract volume, at the price for the particular round
- Round 1 is at the "floor price"
- Price escalates in subsequent rounds, until "market-clearing" price is established
- All successful bidders pay the same final price

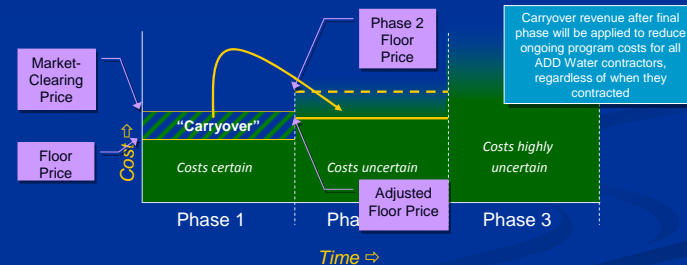


ADD Water BIG Meeting, November 17th, 2010

Contracts

Market-Based Allocation

- To discourage speculative activity, revenue above floor price in a phase is applied to the next phase



ADD Water BIG Meeting, November 17th, 2010

Contracts

Market-Based Allocation

■ Potential Auction Conditions

- Pre-qualification of bidders
- Minimum/maximum volumes that may be requested by a single bidder
- Minimum number of bidders for a valid auction
- CAWCD's ability to reject all bids
- Bidder may not participate in a round if it did not participate in immediately preceding round
- Bidder may not request a greater volume than requested in immediately preceding round

ADD Water BIG Meeting, November 17th, 2010

Finances

ADD Water BIG Meeting, November 17th, 2010

Finances

Core Principles

- Avoid harm to CAP contractors and finances
- Develop a self-sufficient, financially viable, sustainable program
- Avoid financial risk to CAWCD and ADD Water contractors
- Kick start program as quickly as possible

ADD Water BIG Meeting, November 17th, 2010

Finances

Pre-Launch Costs

- Some costs incurred before start of each phase (e.g., consultant fees, options on water supplies)
- CAWCD will establish an accounting fund to capture ADD Water costs on an ongoing basis beginning January 2012
- Once ADD Water fund is established, CAWCD may identify and capture pre-2012 expenses

ADD Water BIG Meeting, November 17th, 2010

Finances

Funding Pre-Launch Costs

- Funding to cover pre-launch costs may be obtained in one or more of following ways:
 - Revolving fund established using existing, but currently unused, taxing authority
 - Borrowing
 - ADD Water self-funding
 - Other funding mechanisms

ADD Water BIG Meeting, November 17th, 2010

Finances

Funding Pre-Launch Costs

- Unused Taxing Authority
 - CAWCD already authorized to levy ad valorem tax of up to 10¢ per \$100 of assessed valuation
 - May be used for any CAWCD purpose
 - Currently, only 6¢ is being levied
 - Temporarily increase general ad valorem tax to establish ADD Water working capital fund
 - Tax authority only available for ADD Water if and to extent not needed for CAP purposes
 - If CAWCD determined temporary tax revenues were needed for CAP purposes, revenues would immediately be available for CAP

ADD Water BIG Meeting, November 17th, 2010

Finances

Funding Pre-Launch Costs

- Revolving Fund
 - Tax revenues could create a revolving fund available to pay pre-launch costs for each phase of ADD Water, beginning with Phase 1
 - Each phase would repay pre-launch costs for that phase by incorporating those costs into floor price of auction for that phase
 - Revolving fund would then be available again for use by following phase
 - No other financing mechanism allows for creation of revolving fund

ADD Water BIG Meeting, November 17th, 2010

Finances

Funding Pre-Launch Costs

- Borrowing
 - CAWCD could borrow to cover pre-launch costs
 - Entails added cost
 - 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 pre-launch costs for a particular phase would be repaid by incorporating those costs into auction floor price for that phase

ADD Water BIG Meeting, November 17th, 2010

Finances

Funding Pre-Launch Costs

■ Borrowing Options

- Loan from CAWCD reserves
- Loan from a third-party
 - Potential ADD Water contractor
 - Commercial lender
 - Private investor

ADD Water BIG Meeting, November 17th, 2010

Finances

Funding Pre-Launch Costs

■ Borrowing Option: Loan from CAWCD reserves

- CAWCD reserves could be used for this purpose only if and to the extent that actual reserves exceed CAWCD's reserve target
- ADD Water Program would repay the loan to CAWCD reserves, with interest
- Likely represents the least-cost borrowing alternative

ADD Water BIG Meeting, November 17th, 2010

Finances

Funding Pre-Launch Costs

■ Borrowing Option: 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

ADD Water BIG Meeting, November 17th, 2010

Finances

Funding Pre-Launch Costs

■ Borrowing Option: Secured conventional loan from a commercial lender

- Loan security could take the form of contracts for water options, backed up by CAGR if the ADD Water Program is not implemented
- Borrowing Option: Loan from private investor
 - Terms and requirements cannot be predicted at this point

ADD Water BIG Meeting, November 17th, 2010

Finances

Funding Pre-Launch Costs

- **ADD Water Self-Financing**
 - 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 to fund pre-launch costs
 - ADD Water reserve accounts would be repaid from auction proceeds at the launch of the next phase
 - Cost of self-funding would be lost interest earnings

ADD Water BIG Meeting, November 17th, 2010

Finances

Funding Pre-Launch Costs

- **Other Funding Mechanisms**
 - New ad valorem taxing authority
 - Grants
 - State or federal appropriations
 - 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

Each presents unique challenges and complications, and CAWCD does not propose to pursue any of them at this time

ADD Water BIG Meeting, November 17th, 2010

Finances

Water Acquisition Costs

- **Phase 1**
 - Cost of acquiring water supplies and associated infrastructure for Phase 1 will be substantial
 - CAWCD cannot show the creditworthiness or security required to obtain financing without pledging existing CAP reserves, revenue streams and taxing authorities
 - Therefore, CAWCD cannot finance the cost of water supply acquisition for Phase 1 on behalf of ADD Water contractors

ADD Water BIG Meeting, November 17th, 2010

Finances

Water Acquisition Costs

- **Phase 1**
 - ADD Water contractors will be required to provide 100% of the market clearing price at the time of contracting
 - ADD Water contractors will be responsible for arranging their own financing as needed
 - If CAWCD is able to negotiate flexible payment terms with Phase 1 sellers, CAWCD may be able to offer payment flexibility to ADD Water contractors

ADD Water BIG Meeting, November 17th, 2010

Finances

Water Acquisition Costs

■ Subsequent Phases

- May be able to offer financial flexibility as a result of:
 - Financing mechanisms that may become available once ADD Water is established
 - Flexible payment terms CAWCD may be able to negotiate with sellers
 - 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

ADD Water BIG Meeting, November 17th, 2010

Finances

Water Acquisition Costs

■ Subsequent Phases

- 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

ADD Water BIG Meeting, November 17th, 2010

Finances

CAP Canal Capacity

■ ADD Water contractors will pay a CAP infrastructure improvement capital charge

- Based on cost of increasing annual CAP canal capacity to 2.1 MAF
 - Currently estimated at around \$100M
 - Estimate will be updated before implementation
- Cost spread evenly across 300,000 AF (the target size of the ADD Water Program)
- Capital charge will be levelized over all phases and paid over a specified period of time after contract execution—e.g., \$333/AF, paid over 10 years

ADD Water BIG Meeting, November 17th, 2010

Finances

OM&R Costs

- Fixed OM&R
- Variable OM&R (energy)
- ADD Water replacement costs
- Other rate components

ADD Water BIG Meeting, November 17th, 2010

Finances

Fixed OM&R

- **ADD water contractors will pay two fixed, postage stamp OM&R rates**
 - A fixed OM&R rate designed to cover OM&R costs tied to clearly separable and identifiable ADD water assets
 - 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

ADD Water BIG Meeting, November 17th, 2010

Finances

Fixed OM&R

- **ADD Water contractors will be required to pay fixed OM&R (both ADD-specific and CAP) for water scheduled for delivery whether taken or not**
 - Contractor would be relieved of this obligation only to the extent that CAWCD, or the contractor, is able to find another customer for any unused water
- **Annual reconciliation for ADD Water contractors will involve no additional billing or refunds**
 - CAP will develop and incorporate an acceptable annual rate stabilization mechanism
 - No change to annual reconciliations under existing CAP contracts

ADD Water BIG Meeting, November 17th, 2010

Finances

Variable OM&R

- **Energy costs for CAP and ADD Water contractors will be kept separate**
- **ADD Water contractors will pay a pumping energy rate designed to cover the energy costs for ADD Water**
- **Postage stamp rate for ADD Water energy**
 - Rate could be "hedged" or protected against disproportionate increases in the cost of power in relation to overall O&M costs

ADD Water BIG Meeting, November 17th, 2010

Finances

ADD Water Replacement Costs

- **Costs associated with replacing ADD Water supply infrastructure will be incorporated into a "Big R" component of fixed OM&R**
- **Costs associated with replacing short-term water supplies or addressing contingencies for long-term supplies will be incorporated into a "Big W" delivery rate component**

ADD Water BIG Meeting, November 17th, 2010

Finances

Other Rate Components

- **Delivery rates may include other components, as appropriate, such as:**
 - Peak capacity surcharge
 - Designed to discourage extensive use of CAP delivery capacity during peak delivery periods
 - Conservation charge
 - Could be used to collect funds that would then be made 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

ADD Water BIG Meeting, November 17th, 2010

Finances

ADD Water Reserves

- 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

ADD Water BIG Meeting, November 17th, 2010

CAGR

ADD Water BIG Meeting, November 17th, 2010

CAGR

Core Principles

- Continuing the present CAGR program poses unacceptable financial/legal risk to CAWCD
- ADD Water offers a viable alternative
- Responsibility for securing water supplies should shift to those seeking CAGR services
- Member land and member service area obligations will vary based on whether member is “pre-ADD” or “post-ADD”

ADD Water BIG Meeting, November 17th, 2010

CAGRD

“Pre-ADD” Obligations

- **Pre-ADD CAGRD replenishment obligations are those associated with:**
 - All Member Lands enrolled as of the launch date of Phase 1 of the ADD Water Program
 - Current and committed demands of Member Service Areas as of the launch date for Phase 1 of the ADD Water Program

ADD Water BIG Meeting, November 17th, 2010

CAGRD

“Pre-ADD” Obligations

- **CAGRD remains responsible for acquiring water supplies to meet its pre-ADD obligations**
- **CAGRD may use an ADD water contract to meet pre-ADD obligations**
 - CAGRD will participate in ADD water on same terms and conditions as others, including the auction

ADD Water BIG Meeting, November 17th, 2010

CAGRD

“Pre-ADD” Obligations

- **CAGRD may acquire non-ADD Water supplies, such as:**
 - Effluent or other water supplies that will not be transported through the CAP
 - Project water supplies—e.g., leases of CAP Indian priority water
 - 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 CAGRD interim set-aside

ADD Water BIG Meeting, November 17th, 2010

CAGRD

“Post-ADD” Obligations

- **Post-ADD CAGRD replenishment obligations are those associated with:**
 - All Member Lands that enroll in CAGRD after launch date of ADD Water Program
 - All Member Service Areas that enroll after launch date of ADD Water Program
 - New growth within Member Service Areas already enrolled (i.e., obligations exceeding Member Service Area’s pre-ADD obligations)

ADD Water BIG Meeting, November 17th, 2010

CAGR

“Post-ADD” Obligations

- CAGR will not be responsible for acquiring water supplies to meet post-ADD obligations
- Member Lands and Member Service Areas will be required to provide CAGR a permanent water supply to meet their post-ADD obligations

ADD Water BIG Meeting, November 17th, 2010

CAGR

“Post-ADD”

- Provision of a permanent water supply is a condition of CAGR enrollment after the launch of the ADD Water Program
- Member Service Areas that enrolled before ADD Water must provide the supply prior to incurring post-ADD obligations
- Water supply must be acceptable to CAGR and sufficient to meet CAGR's perpetual replenishment obligations for the enrolling entity at full build out

ADD Water BIG Meeting, November 17th, 2010

CAGR

“Post-ADD” Obligations

- Enrolling entities may satisfy this requirement by contracting for ADD Water
- Enrolling entity must assign ADD water contract or other acceptable water supply to CAGR upon enrollment
- Water supplies provided to CAGR by members will become part of overall CAGR water supply portfolio and may be used to satisfy both pre- and post-ADD replenishment obligations
- Requirement will be effective for all enrollment under future CAGR plans of operation

ADD Water BIG Meeting, November 17th, 2010

CAGR

Administration

- CAGR services for pre-ADD and post-ADD members will be reflected in rate components
- Pre-ADD and post-ADD members will pay amount for each rate component
- Appropriate rate components (e.g., water rights and infrastructure) will be applied

ADD Water BIG Meeting, November 17th, 2010

Just Water

ADD Water BIG Meeting, November 17th, 2010

Just Water

Core Principles

- Provide benefit of collective acquisition to areas outside the CAP service area
- Eliminate perceptions of inequity and competition between central and “rural” Arizona
- Avoid financial risk to CAWCD
- Limit CAWCD’s role to water acquisition
- Let “rural” water users decide how Just Water is distributed, used and paid for

ADD Water BIG Meeting, November 17th, 2010

Just Water

Overview

- CAWCD will only be acquisition agent on behalf of Just Water Program
- CAWCD will not make any allocation decisions
- Water supply costs to ADD Water and Just Water Programs will be same in each phase
- Just Water Program is responsible for appropriate share of all costs, including pre-launch costs

ADD Water BIG Meeting, November 17th, 2010

Just Water

Water Supply

- CAWCD will acquire water supplies for Just Water with each phase of ADD Water
- Target volume for Just Water acquisitions will be 8,333 AF/phase, up to a total of 50,000 AF
- Just Water supplies will be available for delivery from the Colorado River

ADD Water BIG Meeting, November 17th, 2010

Just Water

Water Rights

- CAWCD will assign water rights acquired for Just Water to ADWR or appropriate regional or statewide entity upon payment to CAWCD of its costs in acquiring those water rights
- ADWR or appropriate regional or statewide entity will hold Just Water rights in trust until contracted to individual entities outside CAWCD's three-county service area

ADD Water BIG Meeting, November 17th, 2010

Just Water

Finances

- Cost of acquiring supplies for ADD Water and Just Water for each phase will be aggregated and distributed proportionately among the two programs, so that cost of water to each program in each phase is the same
- Just Water Program will be responsible for funding its proportionate share of pre-launch costs in a timely manner

ADD Water BIG Meeting, November 17th, 2010

Just Water

Finances

- If ADWR or appropriate regional or statewide entity does not pay or provide for payment to CAWCD for Just Water supplies within a reasonable time, CAWCD may, in its sole discretion:
 - Allow options for water rights to expire
 - 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
 - Sell the water rights to CAGR
 - Other

ADD Water BIG Meeting, November 17th, 2010

Just Water

Water Allocation

- ADWR or appropriate regional or statewide entity will determine how to distribute/allocate available Just Water supplies
- ADWR or appropriate regional or statewide entity will determine how Just Water supplies are paid for by contractors

ADD Water BIG Meeting, November 17th, 2010