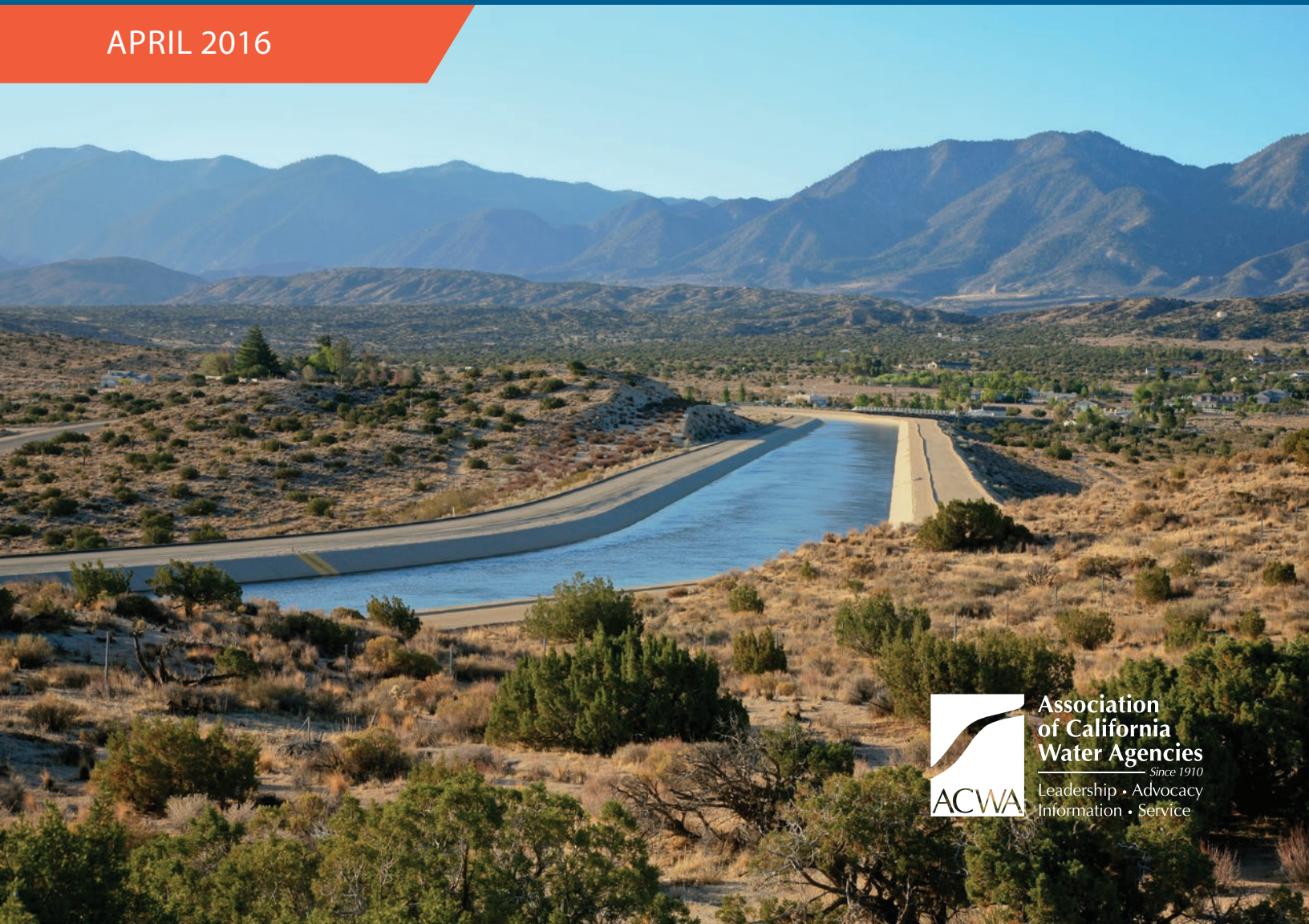


— RECOMMENDATIONS FOR IMPROVING —

# WATER TRANSFERS AND ACCESS TO WATER MARKETS IN *California*

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ACWA's mission is to assist its members in promoting the development, management and reasonable beneficial use of good quality water at the lowest practical cost in an environmentally balanced manner.

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# OVERVIEW

ACWA believes that a more efficient water transfer process and a more accessible water market can play important roles in reducing regulatory uncertainty and water shortage impacts on the state's economy, now and in the future.

Making improvements to the water transfer process should be a top priority for the Brown Administration and state leaders — not only for immediate drought response, but also as part of a comprehensive, long-term water management policy, as outlined in the California Water Action Plan and as directed by the Administration's executive orders and drought proclamations.

While numerous water agencies and water users currently participate in the water market, water transfer processes are complex and water market information may not be readily available to all potential buyers and sellers — especially those who operate on a smaller scale. Providing greater access to water marketing should be seen as a tool to increase water supplies by leveraging significant local and regional investments made over the past two decades to increase water supply reliability. Used in conjunction with investments in water use efficiency, including water conservation and water recycling, surface and groundwater storage, desalination and other strategies, an enhanced water market can add to the water supplies available to help the state weather multiple years of drought, while protecting economic and environmental uses of water.

ACWA is committed to working with the Brown Administration, the appropriate federal agencies, legislators, stakeholders and others to identify ways to make the water transfer process more efficient to enhance the role of a voluntary water market as California combats the current drought as well as those in the future.

## Policy Statement

ACWA supports California's existing water rights laws and priority system, which were developed over the past 150 years and are foundational to the state's property rights system and the economy.

California's water rights laws provide for and encourage the use of a *water market* for voluntary *water transfers* to help satisfy water demand, especially in drought conditions. Water markets rely on economic incentives to connect willing buyers with willing sellers of water. Water transfers refer to the actual processes through which water is moved within the water market. In nearly all cases, transfers involve complex regulatory review. It should be noted that water supplies are routinely moved among water users within water agency service areas and project service areas in transactions that do not require changes to the place of use, purpose of use or point of diversion or re-diversion of the underlying water right. These voluntary reallocations are not considered *water transfers* under California law and policy. Nothing in these recommendations is intended to affect these types of transactions.

Regulatory actions that reallocate water supplies should not be used as a substitute for voluntary water transfers, because such actions undermine the foundation of the water rights priority system and create uncertainty for water suppliers and the general public. Market-based transactions are a more effective tool than regulatory allocations because they rely on pricing incentives to move water where it is needed, they are voluntary, they are less costly and controversial, and they incentivize innovative approaches to water allocation and demand reduction by water agencies and individual water users.

State and federal legislation approved in the late 1980s and early 1990s provided some improvements in water transfer processes, but more can and should be done. In any discussion of water market and water transfer policies, it must be noted that current constraints on Delta exports remain the biggest bottleneck in moving transfer water from Northern California to Southern California. Even during drought conditions, Delta export facilities are constrained from moving all of the water that willing sellers could make available to willing buyers in need. Additional water supplies that could be available for transfer through a more accessible water market would face this same limitation. Actions to increase the role

of water markets and improve efficiencies in water transfer processes should be part of a comprehensive approach to meeting the coequal goals of the 2009 Delta Reform Act, namely, water supply reliability and ecosystem protection.

Voluntary water transfers are a proven and effective way to supplement California's water needs, as evidenced by the landmark 1991 Governor's Emergency Drought Water Bank and numerous subsequent water banks, exchanges and short-term and long-term water transfers. Water transfers have played a vital role in helping to meet California's water supply needs during the current drought. Policymakers should do nothing that would add to the cost or regulatory process for, or diminish the utility of, water transfer mechanisms that have served California well.

Making water transfers more efficient and water markets more accessible is a next logical step toward a more comprehensive and integrated suite of water management solutions, including water use efficiency<sup>1</sup> (which may include water conservation and demand reduction incentives, recycled water or water reuse projects), desalination, stormwater capture, surface storage, groundwater storage, groundwater recharge and groundwater banking. Some leading environmental organizations promote water markets as a way to improve water use efficiency and pricing, which in turn can contribute to enhanced stream flows and make more water available for wetlands and other environmental resources. This benefit would be of particular importance during prolonged drought. Improving the water transfer process and enhancing access to voluntary water markets can:

- Help protect existing local and regional investments in these strategies;
- Improve coordination among water agencies;
- Incentivize significant investments in water use efficiency projects and programs;
- Increase water supply reliability for urban and agricultural water users;

- Increase the quantities or improve the timing of water available for voluntary transfers by providing information to buyers and sellers who might not otherwise have sufficient information to participate in water markets;
- Benefit the environment by enhancing the state's water supplies and potentially increasing the amount or improving the timing of water available for environmental uses.

<sup>1</sup> "water use efficiency," as used hereinafter in this document, includes water conservation and demand reduction incentives, recycled water and water reuse projects

# GENERAL PRINCIPLES AND APPROACH

Improvements to the water transfer process and increased access to the water market would play an important role in implementing a comprehensive, long-term water management policy, as has long been advocated by ACWA and as articulated by the Brown Administration's California Water Action Plan.

**Vision:** Promote and facilitate a more efficient water transfer process and greater access to the California water market, where water can be voluntarily transferred between willing sellers and willing buyers without injuring other legal users of water or causing unreasonable effects on the environment or third parties.

ACWA has prepared these "Recommendations for Improving Water Transfers and Access to Water Markets in California" to offer specific proposals to help realize this vision.

## General Principles

The general principles that inform these recommendations are:

- Water transfers are a proven and effective way to supplement California's water needs, especially during the current drought.
- The water market must continue to be based on California's existing water rights laws, which encourage use of market mechanisms for voluntary water transfer transactions between willing buyers and sellers to help meet water demands.
- Market-based transactions between voluntary buyers and sellers are preferable to regulatory actions, because they rely on pricing incentives to move water to where it is needed, they provide certainty, and they incentivize innovative approaches to water allocation and water demand reduction by water agencies and individual water users.
- Voluntary water transfers have been an effective way to supplement California's water needs; making water transfers more efficient and water

markets more accessible is a next logical step in comprehensive and integrated water resource management.

- A more efficient transfer process and more accessible water market can benefit the environment by enhancing the state's water supplies and potentially increasing the amount of water available for environmental uses, particularly during prolonged drought.
- Policymakers should do nothing that would add to the cost or regulatory burden associated with the water transfer process, or diminish the utility of this tool that has served California well. For example, creating uncertainty about the water rights upon which water transfers are based would likely discourage participation in water markets.
- Policymakers should do nothing to change current water transfer practices that allow water supplies to be moved among water users within water agency and water project service areas in transactions that do not require changes to the place of use, purpose of use or point of re-diversion of the underlying water right.
- Where regulatory approvals are required, policymakers should establish any necessary approvals at the most appropriate local level and minimize approvals at the state level.

ACWA encourages the California Department of Water Resources (DWR), the State Water Resources Control Board (SWRCB), and the U.S. Bureau of Reclamation (USBR) to continue to empower and develop internal leadership, designating key personnel from each agency to promote a culture for successful and responsible water transfers. The current drought response effort and establishment of the interagency drought task force has demonstrated the benefits of collaboration and coordination of key personnel from each approving agency. Commitment of administrative resources for these purposes should continue, and would make water transfer processes more efficient and water markets more accessible.

ACWA believes that now is the time for California to consider additional ways to promote water transfers and access to the water market. We are committed to working with the Brown Administration, the appropriate federal agencies, legislators, stakeholders and others to identify ways to enhance the role of a voluntary water market as California combats a prolonged, historic drought.

## **Scope of Recommendations**

ACWA recommends changes to: 1) improve the water transfer approval process by making it more efficient, and 2) enhance access to water markets by making information more readily available and accessible.

The following recommendations are intended as a multi-pronged strategic response to a continuing multi-year drought, which will set the stage for more effective water management in all water year types in coming decades. Many of these recommendations can be implemented in the near term through administrative actions by DWR or the USBR, or both. For example, several of the following recommendations involve revisions to an existing and extremely useful guidance document developed jointly by DWR and the USBR: *the Draft Technical Information for Preparing Water Transfer Proposals* (Water Transfer White Paper). Some of the recommendations may require longer-term efforts to develop technical approaches and/or legislative proposals to make needed statutory changes.

# RECOMMENDATIONS

## 1. Improve the Water Transfer Process

DWR and the USBR should create administrative efficiencies to reduce transaction and administrative costs and efforts required by sellers, buyers and regulatory agencies to process transfers, while continuing to protect water rights, the environment and third parties.

### Recommended Implementation Actions

- 1.1 Expand the Timeframe for Moving Transfer Water Across the Delta.** DWR and the USBR should, in consultation with their contractors, seek revision to the current July-September “transfer window” restriction in the Biological Opinions regarding transfers of water across the Delta in consultation with the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) based on current best-available science. As part of this analysis, NMFS and USFWS should consider the beneficial effects of transferred water to augment flows across the Delta and the beneficial effects of increased water for the environment that could be associated with less-restrictive water transfers. If warranted, the Biological Opinions should be modified to extend the period during which transfer water may be conveyed across the Delta prior to July 1 and after October 1. If warranted, consideration should be given to eliminating the transfer window restriction entirely.
- 1.2 Consolidate Places of Use.** As needed, DWR and the USBR should continue to submit annual petitions to the State Water Resources Control Board (SWRCB) to consolidate the State Water Project (SWP) and Central Valley Project (CVP) places of use for specific water transfers and exchanges. The SWRCB should continue to act expeditiously on any such petition.
- 1.3 Expedite Certain Types of Transfers.** DWR and the USBR should expedite approvals of the categories of transfers that involve the use of their respective facilities, or currently require their approval, that have been demonstrated

over time to have minimal potential impacts to legal water users, in-stream uses, third parties and local economies. DWR and the USBR should develop criteria to expedite such transfers, which could include previously-approved transfers and temporary transfers during an emergency drought declaration, either through expedited California Environmental Quality Act (CEQA) and/or National Environmental Policy Act (NEPA) processes or shorter approval deadlines. DWR and the USBR should develop multidimensional “tiers” or “bands” for different transfer scenarios that could be evaluated more quickly (i.e., lower tiers would be approved more quickly). Examples include proposed transfers based on fallowing agricultural land of not more than 20% of historically applied water (consistent with applicable state and federal laws), transfers within watersheds, or transfers for groundwater recharge. Criteria that could be considered include the type of transfer (e.g., use of evapotranspiration of applied water, groundwater substitution, etc.), proposed transfer quantity, ratios and carriage losses.

- 1.4 Make the Water Transfer White Paper Durable.** DWR and the USBR should revise the Water Transfer White Paper to: a) ensure that its provisions do not significantly change from year to year; b) facilitate water transfers that utilize SWP/CVP facilities in conformance with the Water Transfer White Paper and without impinging on the contractual rights and obligations between DWR or the USBR or their water contractors; c) develop a transparent process with guidelines for participation schedules that would improve the ability of willing buyers/sellers to negotiate short-term transfers and improve DWR’s and the USBR’s ability to review and approve transfers that utilize SWP/CVP facilities; d) perform an annual stakeholder review of DWR and USBR technical information on water transfers and other relevant materials and practices, and make recommendations for any needed changes/amendments; e) include stakeholder

participation in the development of revisions, set a definitive schedule establishing annual revisions, and set a schedule and process for establishing longer-standing transfer provisions that are not subject to annual changes; and f) avoid material changes to the Water Transfer White Paper during any transfer season after buyers and sellers have committed to the transaction. Instead, material changes should be reserved for the next transfer season.

- 1.5 Update the Water Transfer White Paper to Incentivize Water Use Efficiency-Related Water Transfers.** DWR and the USBR should update the Water Transfer White Paper through a public process to inform the development of short-term and long-term proposals to incentivize water use efficiency-related water transfers. One such incentive could be expediting approvals for use of unused conveyance capacity for water use efficiency-related water transfers. The revised Water Transfer White Paper would assist in evaluating the predictability of the success of proposed water use efficiency-related water transfers.
- 1.6 Facilitate Water Use Efficiency-Related Transfers.** The SWRCB should facilitate the transfer of water made available from water use efficiency-related actions and programs and projects, consistent with Water Code sections 1010 and 1011 and other applicable provisions of law. State policy should encourage transfers that will facilitate voluntary reductions in water use by implementation of water use efficiency programs and projects that do not impact other legal water users. An active water market based on incentivizing use efficiency-related projects will attract new capital to these projects and programs, as well as related infrastructure improvement projects and environmental investments, thereby increasing water supply reliability statewide.
- 1.7 Develop and Implement Pilot Transfers to Quantify Consumptive Water Use Rates.** DWR and the USBR should encourage pilot water transfers based on fallowing alfalfa and pasture acreage, and foregoing rice straw decomposition water uses, including a study component that assists with quantifying standard consumptive

use rates by crop and region and validating consumptive use rates that are already included in the Water Transfer White Paper.

- 1.8 Improve Quantification of Water Rights to Support Transfers.** The Water Transfer White Paper should emphasize the importance of sellers holding valid water rights (as opposed to a right to water service) and maintaining data on historical diversion amounts and cropping patterns as a prerequisite for implementing future water transfers and expediting approvals. This would be especially helpful to facilitate water transfers originating from pre-1914 in-Delta water users. DWR and the USBR should incentivize reporting on diversions and flows by expediting approvals for those that provide such information.
- 1.9 Provide Transparency Regarding Delta Carriage Loss Analysis.** DWR and the USBR should provide more transparency and disclosure as to how Delta carriage losses are calculated on cross-Delta transfers. Delta carriage losses are assessed to maintain Delta water quality requirements due to the additional increment of Delta export pumping from the water transfer. Delta carriage water losses of 20% have typically been assessed for water transfer supplies exported from the Delta, but have been even higher (up to 35%) in recent years. In most years, the carriage loss percentage is not known until many months after the water transfer supplies have been delivered to the buyer. Section 1.4 of the Water Transfer White Paper includes a single sentence regarding Delta carriage losses and no explanation on how such losses are calculated. The Water Transfer White Paper should include a transparent discussion on the components of Delta carriage losses and how they are computed and applied to water transfers. DWR and the USBR should also commit to an early estimate of likely Delta carriage losses prior to the commencement of the transfer, followed by a timely final determination of Delta carriage losses each year.
- 1.10 Establish or Document Conveyance Access Protocols.** Water conveyance facility owners should be encouraged to establish protocols for accessing their conveyance facilities



consistent with Water Code section 1810, et seq. The rules for accessing some conveyance facilities are well understood (e.g., state and federal water projects), but others may not be well understood. These rules need to be transparent and readily available to all water market participants, possibly by means of a water market Information Clearinghouse (Recommendation 2.2).

- 1.11 Clarify Definition and Examples of Third-Party Impacts.** DWR and USBR should revise the Water Transfer White Paper to clarify third-party impacts, and include case studies that highlight where third-party impacts are well managed (e.g., within Yuba County Water Agency). The Water Transfer White Paper should do the following: a) define the term “third-party impact” to include third-party economic impacts, but not include potential impacts to legal users or to in-stream uses, which are already included in existing law; b) be consistent with the provisions of existing law that declare the state’s policy to favor and facilitate voluntary water transfers, by not overburdening the transfer approval process; c) not require an analysis of potential third-party economic impacts for the types of water transfers that have little or no likelihood to cause such impacts, such as transfers from storage or transfers of conservation water; d) prior to proposing new measures to address possible third-party impacts, require a determination of the adequacy of existing laws governing groundwater pumping for a water transfer to minimize long-term impacts on sustainable yield of aquifers and long-term third-party economic impacts; and e) prior to proposing new measures, require a determination of the adequacy of existing laws that limit the amount of land following to carry out a water transfer to minimize third-party economic impacts.

## 2. Enhance Access to Water Markets

Actions to enhance access to California’s water market should improve market information, provide opportunities for increased water market participation by smaller buyers and sellers holding water rights, incentivize greater water use efficiency, improve water availability for urban, agricultural and environmental uses, incentivize improved and

sustainable conjunctive management and provide for greater water supply reliability.

## Recommended Implementation Actions

- 2.1 Create a Water Transfer Database.** DWR has a webpage that provides information on water transfer processes, water transfer transactions and related information. This information should: a) be more comprehensive and more user-friendly, especially for potential buyers and sellers who operate on a smaller scale; b) include mechanisms for potential buyers and sellers to identify each other and explore potential water transfers between them; and c) explain “pathways” through the water transfer process. DWR should immediately implement measures to create a Water Transfer Database to provide a readily-accessible voluntary repository of information on completed regional and statewide water transfers that meets these objectives. This Water Transfer Database should summarize key information regarding completed water transfers, whether or not DWR is a party for approvals or conveyance. DWR should be responsible for consolidating this information on one table, displayed on DWR’s water transfer webpage to improve transparency. This information will assist in efforts to quantify the estimated benefits to areas receiving transfer water as a result of the completed water transfers, possibly through subsequent economic, environmental, or other analyses. Initial action by DWR could be focused on cross-Delta water transfers (which involve complex review, approval and implementation of water transfers to address considerations relative to the Delta and upstream), with the database being ultimately expanded to all completed transfers statewide. Other types of useful information regarding water transfers could be added in the future, if necessary. This information could ultimately be incorporated into the Information Clearinghouse proposed in Recommendation 2.2
- 2.2 Establish an Information Clearinghouse to Improve Transparency for Water Market Transactions.** As a subsequent action to creation of a water transfer data base as described in Recommendation 2.1, an online water market “Information Clearinghouse”

should be established to monitor and collect publicly available or voluntarily submitted data regarding market transactions for voluntary participants, including those that require use of state or federal storage or conveyance. The Information Clearinghouse would also provide a service to assist buyers and sellers on how to navigate the water market by providing an online “roadmap” on water markets and the water transfer process, for example, regarding volume, pricing and delivery information, environmental transaction costs, the identity of buyers and sellers for completed transactions, and water rights associated with the transaction, to facilitate a more-orderly and open market for potential buyers and sellers that access the Information Clearinghouse. Buyer and seller participation in the Information Clearinghouse would be voluntary and would not be a condition of water transfer approvals. The Information Clearinghouse would not function as a “broker” for water market transactions. This Information Clearinghouse should be created within an existing state agency, such as DWR. Establishment of a new state entity is not recommended. ACWA stands ready to work with the state and other stakeholders to refine the details of this Information Clearinghouse.

**2.3 Create Market Mechanisms for Access to Capital.** Market mechanisms should be created to provide access to capital that can facilitate water use efficiency programs and infrastructure projects for the joint benefit of participating water agencies, property owners and related parties. Consideration should be given to public/private partnerships and attracting private capital investments to enhance water supplies and improve water supply reliability. Alternative mechanisms could be developed and evaluated through pilot programs to be implemented as regional water markets are established.

## CONCLUSION AND NEXT STEPS

ACWA recognizes that many other stakeholders have ideas and other recommendations for creating conditions for a more-robust California water market. We are committed to helping water agencies contribute proactive leadership, in collaboration with the Brown Administration, federal agencies, the California Legislature, and other academic, non-profit, and private-sector stakeholders, to enhance the role of voluntary water markets in California and improve the water transfer process.

# ACWA Water Transfers Work Group

In May 2015, ACWA formed a Water Transfers Work Group to develop a policy document for a water market-based approach to most effectively address the ongoing drought. On July 31, 2015, the ACWA Board adopted policy principles titled, “Developing an Effective Water Market in California.”

**Members of the Water Transfers Work Group are:**

John Coleman, Chair, East Bay Municipal Utility District

Paul Bartkiewicz, Partner, Bartkiewicz, Kronick & Shanahan

Thad Bettner, General Manager, Glenn-Colusa Irrigation District

Paul Cook, General Manager, Irvine Ranch Water District

Matt Hurley, General Manager, Angiola Water District

Roger Patterson, Assistant General Manager, Metropolitan Water District of Southern California

Robert Roscoe, General Manager, Sacramento Suburban Water District

Maureen Stapleton, General Manager, San Diego County Water Authority

Bill Taube, Consultant, Wheeler Ridge-Maricopa Water Storage District

# ACWA Water Market Technical Advisory Committee

ACWA formed a Water Market Technical Advisory Committee (TAC) in August 2015 to assist staff in developing implementation recommendations. The TAC includes broad representation of interested member agency representatives with special expertise in water transfers, including experienced water transfer managers, water attorneys, and representatives from the Public Policy Institute of California and the Environmental Defense Fund. Members of the TAC are listed below.

The TAC met on Sept. 1, Sept. 21, Oct. 6, Oct. 21, Dec. 17, 2015, and Jan. 22, 2016 to identify, outline, and draft proposed recommendations for enhancing the functioning of California's water market. On March 4, 2016, the TAC met with members of the Water Transfer Task Force and members of the ACWA State Legislative Committee's Water Markets/Transfers Work Group to review and provide final input to the Water Market and Transfer Recommendations.

Special Projects Manager David Bolland facilitated preparation of the Water Market and Transfer Recommendations. ACWA appreciates the contributions and expertise represented on the Water Market TAC, but the policy positions advocated by the Water Market and Transfer Recommendations are those of ACWA and do not necessarily reflect the opinions of individual participants.

## **Participants in ACWA Water Market TAC are:**

Paul Bartkiewicz, Chair, Bartkiewicz, Kronick & Shanahan LLP  
David Aladjem, Downey Brand, LLP  
Eric Averett, Rosedale-Rio Bravo Water Storage District  
Thaddeus Bettner, Glenn-Colusa Irrigation District  
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# ACWA Board of Directors

The Water Market and Transfer Recommendations were reviewed and approved by the Board of Directors on March 25, 2016. Approval by the ACWA Board of Directors does not imply endorsement of the recommendations by individual agencies that Board members represent.

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