



Water for People and Place

Moving Beyond Markets
in California Water Policy

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WATER
FOR ALL

CAMPAINING TO KEEP
WATER AS A PUBLIC TRUST

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Public Citizen is a national, nonprofit consumer advocacy organization founded by Ralph Nader in 1971 to represent consumer interests in Congress, the executive branch and the courts. We fight for openness and democratic accountability in government, for the right of consumers to seek redress in the courts; for clean, safe and sustainable energy sources; for social and economic justice in trade policies; for strong health, safety and environmental protections; and for safe, effective and affordable prescription drugs and health care. We have six divisions and two state offices.

Public Citizen's Water for All Campaign fights to protect universal access to safe and affordable drinking water by keeping it in public hands. Public Citizen believes that citizens do not benefit from privatization of their water and wastewater systems because the sale of public works to private companies can foster corruption and result in higher rates, inadequate customer service and a loss of local control and accountability.

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Introduction

Water is essential for all life

People do not make water, nature does. And all life depends on water. Our bodies are made of water. Our bones are 22 percent water; the tissue in our muscles and brains is over 75 percent water. All biochemical processes in our bodies rely on water, and we can live no more than a few days without it.¹ Thus for human societies, water has typically been thought of as a social good to be managed for the benefit of all. For millennia, societies across the globe have recognized that the unique nature of water demands its protection from hoarding and monopolization by designating it as a public good and, recently, a human right.²

California's history, however, has been marked by tension between treating water as a public good versus private property. California's earliest European settlers came for the gold and saw the state's incredible bounty in economic terms. Many had no intention of staying in California, but sought to become rich and return to their homes.³ They devised ways of diverting streams from their natural courses to accelerate the pace of mining and soon after for irrigation on a scale never before seen on earth.

Water law in California evolved to allow these uses of water, while maintaining that California's surface water—the water that falls as rain and snow and then gathers in lakes and runs to the ocean in rivers and streams—belongs to the people of California. Individuals, businesses, and regional and local governments may hold rights to *use* water, but not rights to own it. Article 10, Section 5 of the California State Constitution declares that the use of water in the state is “a public use, and subject to the regulation and control of the State.”⁴ Article 10, Section 2 of the State Constitution furthermore declares that all water use should be “reasonable and beneficial... in the interest of the people and for the public welfare.”⁵ The idea that water is a public resource to be managed by the state in the public interest is known as the public trust doctrine.

Now the tension rises again as some call for creating water markets in California, a system that would allow for open sales of water and water rights

and enable water management to be taken over by the will of the highest bidder. But there are two intractable problems facing the proponents of a statewide water market: the public owns the plumbing and the public owns the water.

California houses the largest and most complex water infrastructure in the world. Tax and ratepayers across the state and country paid to build the many dams, canals, pumping stations and hydro-electric power stations that make up this system. The idea—at least in theory—behind creating these projects was to best distribute the state’s water for public benefit. The movement of water in the state, from the rainy and less populated north, to the dry agricultural valleys in the middle, and the booming cities of the south, depends entirely upon the publicly funded water projects. Southern California and the Central Valley as we know them would not exist without the water that the public pays to send there.

The history of the development of the state’s major water projects, however, gives this key lesson in California resource management: “water utilities exist to nourish real estate, not people.”⁶ Land without water cannot support cities or agriculture: “water actually creates land value.”⁷ This report will show that the drive behind water marketing is yet another phase in harvesting water to irrigate property values.

But it should also be noted that the debate over water marketing offers a unique opportunity to take stock of water distribution in California—where people move the water and why—and to change course towards a sustainable future for people, for the environment, for our food supply, for California.

What is a water market?

In an open water market, any person, company or government agency could bid for and purchase water or water rights from a willing seller. Water would cease to be a public resource that could only be *used* and would become a commodity like t-shirts and tortillas that may be bought and sold, that may be *owned*. Whoever has the most money controls where the water goes.

Market advocates argue that selling water for a profit will ultimately be in the public interest. The efficiency of the market, they tell us, will guide water to where it is most valuable and eliminate wasteful water uses. If people have to

pay the “true costs” of what it takes to harvest water in California, the market advocates say, they will no longer waste. The water will flow to the “highest value uses,” which will be determined by whoever will pay the most.

In theory, a water market is a tool for reallocating water, for moving water from where, how, and by whom it is used to different uses, locations and beneficiaries. But in California, water markets are, in reality, tools for reallocating water from large scale agriculture to urban growth.

Agriculture consumes 80 percent of the available water supply in California, and many of the irrigation practices still common in the state are remarkably wasteful. Starting in the 1980s and gaining momentum after the 1987-1992 droughts, Southern California water agencies, a handful of big Central Valley farmers and agribusinesses, and a few environmental organizations began to advocate for creating water markets in California. The Southern California and environmental proponents called for markets to “reallocate” water from wasteful and subsidized agricultural uses to higher value urban uses and long-neglected environmental needs. Many of the large agribusinesses were eager to sell their water, which is often subsidized by federal or state tax and ratepayers.

An open water market of willing buyers and sellers does not currently exist in California. Such a market requires clearly defined, exclusive and transferable property rights and ways to transport goods to the market place. There are no property rights to California’s lakes, rivers and streams. There are no private companies in California, or anywhere in the United States, with the capacity to move water on the scale of the public water projects.

But several recent changes to state and federal laws have made it possible for persons and businesses with water rights to sell those rights on a temporary, long-term or permanent basis. Many of these types of sales require approval from a local, state or federal agency.

What are the problems with water markets?

The fallacy of thinking that the price of something reflects its entire value is immediately apparent with water, a substance upon which all life depends. Water is not the same as sneaker designs, Hollywood movies, or pizza crust; there are no consumer choices. Everyone needs water to drink and bathe.

Everyone thirsts equally. In a water market, those with access to the most capital would be able to decide, by the power of their checkbooks, whose thirst is most valuable.

This report demonstrates how creating water markets moves California in the wrong direction, exacerbating unsustainable practices and inequities present in the existing water system. The strong constitutional guarantee to protect the state's public water resources should be strengthened, not wiped out in favor of private property rights for the state's wealthiest agribusinesses and housing development corporations.

Market advocates claim that economic incentives will encourage the development and implementation of new water conservation technology. Barton Thompson, a professor at Stanford University, wrote in a law review article in 2000 that "markets provide an important added incentive by giving farmers the option of selling the conserved water for more than the water's opportunity cost."⁸

Let's think about this. Say a farmer uses 100 gallons of water. She realizes that she could make more money by investing in conservation—installing water meters, switching to drip irrigation, or, though less likely, switching to a crop that needs less water. She cuts her water use down to 80 gallons, sells 20 gallons and makes a handsome profit. Did she then conserve 20 percent of her water? No. She sold it.

Where did the water go? Most likely, she sold it to a housing developer like Newhall Ranch in Los Angeles County or an urban water district like the Metropolitan Water District of Southern California, both major water shoppers. But, perhaps she sold the water to an almond grower (trees need water year round), or a big dairy (so do cows). Industrial-sized nut growers and dairies account for most of the agricultural expansion in California. In any such case, the "conserved" water goes to an entirely *new* consumptive use. Whether it is for new lawns, new trees, or new cows the water "conserved" on the market fuels growth. A buyer comes on the scene to get new water and grow bigger. The incentive to develop and implement conservation technology becomes yet another engine for urban and industrial growth.

But farmers can also sell to the environment, market advocates tell us. The environment however, does not have a major credit card, or a Wells Fargo account. When marketers say that the environment will buy water, they mean taxpayers will buy water for the environment. A water market in California is yet another subsidy dressed in green.

California Waterscape in Context

Water rights and wrongs in California

*“Mushrooming population, developer’s zeal, agricultural subsidies, pesticides, and other forms of pollution only partially explain the persistence of environmentally destructive water practices. The entire body of water law itself has been—and remains—a major culprit...”*⁹

For centuries before the Spaniards, and later the 49ers, arrived in present day California, nearly 300,000 Native Americans inhabited the region, making it one of the most populated areas in North America upon European arrival. The diverse cultures that evolved and thrived in California, depended upon water for sustenance, fishing, agriculture, and ceremony. Native Americans’ manipulations of the waterscape for agriculture barely left an imprint on the environment.¹⁰

Under both Spanish colonial rule and the policies of the United States Federal Reclamation Service (now the Bureau of Reclamation), Native Americans were stripped of their water sources and most of their land and denied equal standing before the law.¹¹ The entire legal edifice of federal and state water rights in California today would crumble if Native Americans were given equal treatment, and their water rights enforced.¹²

The existing patchwork of water law in California evolved as an attempt to reconcile two opposing views of nature: something to be shared and something to be owned. The California State Constitution states that water use should be “reasonable and beneficial... in the interest of the people and for the public welfare.”¹³ Rights to the water in rivers, lakes and streams are usufructuary; that is, rights to use the water but not to own it.¹⁴ The people are the ultimate owners of the water, and the State regulates water use on behalf of the public interest. Well, at least in theory. In California, the economic interests of miners, irrigators, and land speculators drove the evolution of water law.¹⁵

There are two main types of rights to surface water in California: appropriative and riparian. Appropriative rights allow water users to divert streams or rivers for “reasonable and beneficial” uses. The first to arrive at a water source—not

including Native Americans—and make a diversion, acquired appropriative rights to the water. The legal doctrine of prior appropriation was an enormous subsidy for early miners and agribusinesses in that “it allowed public property (water on public land) to be taken for free.”¹⁶ Riparian rights gave landowners whose property bordered a stream, river or lake, the rights to use the water, without diverting it. In 1865 the California Supreme Court ruled that riparian water users could make limited diversions for irrigation.¹⁷

Throughout the first decades of statehood, the courts and the state legislature embraced both prior appropriation and riparian water rights. In 1886, the California Supreme Court settled the growing conflicts between the two doctrines in an epic legal battle between two of the largest land monopolists in the state. James Haggin claimed the rights to the Kern River in the San Joaquin Valley through prior appropriation. Henry Miller and Charles Lux, who had amassed an empire of land holdings in the state, claimed riparian rights to the lower Kern River that flowed through their property near Bakersfield. They fought in court over control of the river. The court ruling, though complex, essentially recognized as legitimate both forms of water rights, and used timing—who was there first, again not including Native Americans—to determine whose water right would prevail in the case of conflict. Though Miller and Lux held the senior water right, their victory was mostly symbolic: the Kern flowed through Miller and Lux’s property at a time when they couldn’t use it and they were forced to offer Haggin a deal.¹⁸

“Over the next four decades, through legislative act and constitutional amendment, the state found a way to blend both riparian and appropriative rights under a formula of ‘beneficial and reasonable’ uses. What this meant on the ground was that the water generally went to those with the most creative lawyers and engineers. [...] Whether riparian or appropriative, it no longer mattered. It all flowed into the same deep pockets.”¹⁹

Groundwater—the water that percolates down into the soil and collects in underground pools called aquifers—is not managed as a public resource in California. The rights to such percolating groundwater supplies belong to the



owners of the overlying land.²⁰ The law draws a distinction between surface water and groundwater that flows through subterranean streams on the one hand, and percolating groundwater on the other.²¹ Nature, however, does not draw this distinction. “To put the matter as simply as possible, the above categories do not accord with scientific understanding of the occurrence and distribution of water on and in the earth. To hydrogeologists, water is a continuum. The same water may sometimes be found on the surface of the earth and at other times underground.”²²

The use of groundwater for irrigation, industry, and drinking makes up about 30 percent of the state’s total water use.²³ Currently water uses in California pull more water out of the ground than the hydraulic cycle can replenish, a process called overdraft. Overdraft leads to degraded water quality and causes the land to sink.²⁴ Water users in California, particularly irrigators, are overdrafting the state’s groundwater at a rate of almost 1.5 million acre-feet[†] a year.²⁵ Overdraft is a public health as well as an environmental problem. Many rural, farmworking communities were left out of the major public water projects and rely on groundwater supplies in the very regions that have the highest rate of overdraft. A recent report by the Environmental Justice Coalition for Water shows that these regions also have the highest number of drinking water quality violations in the state.²⁶

Joseph Sax argues that the State Water Resources Control Board should be more proactive in managing groundwater resources in the public trust.²⁷ As will be discussed below, such protection will be essential to prevent continued excessive overdraft as well as water marketing speculation and abuse of the public trust in surface water.

Where the water moves and where people move it

California is a region of extremes. About 70 percent of the state’s rain and snow falls over the rugged mountains and green valleys of the north. Yet about 90 percent of the water that is eventually caught behind dams, pumped through aqueducts or up from underlying aquifers, goes to irrigate rows of

[†]An acre-foot is the amount of water necessary to fill an area of one acre to a depth of one foot, or 325,000 gallons.

alfalfa, cotton, and almond trees; flush toilets; and fill swimming pools in the driest, central and southern parts of the state.²⁸

Urban and industrial growth in California's early years was chaotic, but never accidental. First-time settlers and established businessmen came to California in the mid-1800s for gold. They set up camps, diverted water from streams, and built boom towns to feed and lodge the influx of miners. They dredged wealth from the land and from the armies of go-for-broke miners pouring over the Sierra Nevada Mountains. In little time they saw the greatest riches were to come from coastal real estate and irrigated agriculture, both of which would depend upon diverted water. The miner's sluice is grandparent to the California Aqueduct, and this is the legacy of mining: in just a few decades, early U.S. settlers laid the frenzied foundation for a state depending upon complete dominance over nature to generate wealth and power.²⁹

In the latter half of the nineteenth century, San Francisco and Los Angeles battled for West Coast dominance, with land speculators from both cities quickly acquiring land through mass purchases and mass deceit. The imperial cities and agricultural estates they planned and constructed outgrew the water supplies provided by local streams and aquifers within a few decades. By the early 1900s, city officials in both San Francisco and Los Angeles were drawing up plans to block rivers 150 to 300 miles away and pipe the water to their ever-expanding city limits. Soon the growing agribusinesses in the Imperial and Central valleys were following suit, calling upon the federal and state governments to build vast networks of dams, canals and pumps to bring irrigation water to their ever-expanding fields.³⁰

Over the course of the 20th century—aided by coastal cities and the federal government—California built the largest, farthest reaching, and most expensive water “reallocation” system in the world. With hundreds of dams and thousands of miles of aqueducts and canals, residents in suburban San Diego can now water their lawns with snowmelt from Mount Shasta, nearly 700 miles away.

The federal Central Valley Project (CVP) and the California State Water Project (SWP) are the largest of the projects, and overlap or intersect in several key points. The United States Bureau of Reclamation began construction on the CVP in 1937 and delivered water to the San Joaquin Valley (the

southern portion of the Central Valley) in 1951.³¹ The project—paid for by US taxpayers—was designed to promote small family farms throughout the Valley, but instead delivered most of its subsidized water to the largest agribusinesses in the state.³²

The SWP took the federal project’s precedent of water subsidies to a new batch of landowners in the Central Valley, mainly oil and insurance companies, and fueled further land speculation and industrial growth.³³

In 1960, California voters narrowly approved the Burns-Porter Act which authorized the sale of \$1.75 billion dollars in bonds to help finance the original construction of the project. An additional \$510 million for project construction came from the California Water Fund which was created using Tidelands Oil revenues. The Tidelands money came as an interest free loan, which means that taxpayers have had to make up for the money the state declined to charge in interest.³⁴

The SWP is the largest and most expensive state-funded water project in the United States. It comprises the world’s tallest earthen dam, Oroville Dam, the country’s longest aqueduct, the 444-mile California Aqueduct, and the world’s highest water lift, the 2,000-foot pipes that carry Sierra snowmelt over the Tehachapi Mountains into Southern California. All the pumping involved makes the SWP California’s single largest consumer of energy.³⁵

The SWP delivers a supplemental drinking water supply for 23 million California residents. San Joaquin Valley agribusinesses, however, reaped the best deal from the project, getting 53 percent of the water and paying 15 percent of the costs. Southern California tax and ratepayers have paid for 62 percent of the total costs while receiving only 31 percent of the water.³⁶

Overview of Water Exchanges and Water Sales in California

Definitions

The fractured division of authority over water in California between various federal, state and local agencies makes it extremely difficult to find clear definitions for even basic concepts in California water policy. Attempts to find a precise and accurate official definition of water marketing are further frustrated by the adoption of the term “water transfer” to refer to a varied and mostly disparate array of transactions. Consider the three following definitions.

The State Water Resources Control Board writes in its 1999 *Guide to Water Transfers*: “A water transfer is a change in the way water is usually allocated among water users.”³⁷

The California Department of Water Resources (DWR) 2005 public review draft of the California Water Plan Update—the official statewide water plan—writes as follows: “A more general definition is that water transfers are a voluntary change in the way water is usually distributed among water users in response to water scarcity.”³⁸

Both definitions lack any reference to the economic nature of the “transfers,” that water is up for sale. Use of the term “voluntary” further obscures the idea that for-profit business deals take place. Much of the state Water Code that governs water sales is also silent on the economics by using “water transfer” and definitions such as: “a change of point of diversion, place of use, or purpose of use.”³⁹

The economics are not lost on the state legislature however. The California Legislative Analysts Office provides the following definition: “Water transfers refer to the permanent sale or the short or long-term lease of part or all of a right to use or be supplied water.”⁴⁰

In this report, “water transfer” will refer to a change in the point of diversion, place of use, or purpose of use of water when such a change *does not* involve a sale; that is, a for-profit monetary exchange for the water. When a change in the point of diversion, place of use, or purpose of use of water *does* involve a

for-profit sale then the term “water sale” will be used. Water marketing refers to the buying and selling of water and water rights throughout the state.

Water transfers involve significant policy issues, particularly relating to the impacts of moving water from longstanding uses for agriculture, farmworkers and farmworker communities, land use, the environment, and urban development. Many of the concerns and critiques of water sales in this report also apply to certain water transfers. By singling out water sales, this report does not imply that all water transfers are free of complexity and conflict, or that the for-profit nature of sales is the only issue of relevance for California water policy.

Types of exchanges

Water transfers seldom involve moving water from one place to another. Most often, different water rights holders or water contractors exchange their rights or contract water deliveries with each other. People transfer water rights most often on a short-term basis, less than one year. For example, a farmer in Kern County who gets water from the SWP through the California Aqueduct may need water at a time when the SWP does not have enough water in the system to deliver what the farmer requests. The farmer can find another water user, say a larger agribusiness that contracts with a different project like the CVP for more water than the business needs at that time, or with water rights from a local source like the Kern River.

Through a water transfer, the farmer could use the agribusiness’s CVP or Kern River water; the agribusiness could then take the farmer’s SWP water out of the California Aqueduct at a later date. The farmer and the agribusiness transferred water, but not by actually pumping water from one to the other. Rather, they switched their rights or contracts to a certain water source, so that each could take the water when they most needed it. Their transaction was entirely voluntary and no money changed hands.

Some water transfers are carried out to reduce the energy costs of pumping water and to create flexibility within the water system. Gary Bucher, water resources specialist with the Kern County Water Agency, says that these are the most prevalent in Kern County, which receives water from federal, state and local supplies.⁴¹ A water transfer may involve an irrigator taking someone

else's water early in the season and giving them water later in the season, or withdrawing state water from the California Aqueduct and releasing San Joaquin river water from the Friant-Kern Canal to another user.

People who work with the water system say that these types of transfers are necessary to create “operational flexibility” in the system. The ability to swap water within and between projects, they say, keeps the system running smoothly. From within the system this makes good economic sense. Creating flexibility in the rules of water movement between various water users allows them to save money on the cost of running the system, most notably on the high energy costs of pumping water out of the Delta, through canals, from underground, and even over mountains.

Consider the water system as a whole however, and a policy of frequent water transfers takes on implications beyond flexibility. Water transfers enable more overall water use. What is thought of as a constraint in the water system—the inability to deliver a set amount of water at a given time—is ultimately the work of nature, how much water fell as rain or snow in a given year or month. Instead of adjusting water use to the patterns of nature's provision, California's entire network of plumbing is designed to adjust nature to the demands of people, principally irrigation and real estate development. Increasing water transfers is tantamount to running the water system's engine on high, all the time.

Recent changes in state law

Many changes to state and federal law have impacted the ability to sell water and water rights in California. First, the Water Commission Act of 1913 created a permitting procedure for changing the point of diversion, place of use, or purpose of use of appropriative surface water rights that became known as “post-1914 appropriative rights.”⁴² The State Water Resources Control Board assumed the authority to approve such changes if they did not create a new water right or injure any other legal user of water. Changes to “pre-1914 appropriative” water rights did not require Board approval, but still could not result in harm to other legal water users.⁴³

In the 1980s, the state legislature enacted several policy statements encouraging “water transfers.” Lawmakers added Section 109 (a) to the Water Code in 1980, stating that: “It is hereby declared to be the established policy of this state to facilitate the voluntary transfer of water and water rights where consistent with the public welfare of the place of export and the place of import.”⁴⁴ While this statute *does not* state that the policy of the state is to create a water market, it *does* clearly state that all transfers must be “consistent with the public welfare.” But the statute focuses myopically on the areas of export and import rather than taking a statewide view of the potential impacts. This language thus falls short of the state’s constitutional public trust responsibilities and its regulatory obligations.

In 1982, the legislature directed DWR, the State Board, and “all other appropriate state agencies to encourage voluntary transfers of water and water rights.”⁴⁵ And in 1986, the legislature required DWR and all local and regional public agencies to allow all “bona fide transferors” the use of unused capacity in agency water conveyance facilities, such as the California Aqueduct or the Los Angeles Aqueduct.⁴⁶

The Central Valley Project Improvement Act

In 1992, Congress passed the Central Valley Project Improvement Act (CVPIA). The new law sought to reform CVP subsidies and help restore the Sacramento-San Joaquin Delta, which had been devastated after half a century of water diversions and intensive farming. National environmental organizations such as Environmental Defense (then called Environmental Defense Fund) vigorously supported the law, as did the powerful Metropolitan Water District of Southern California.⁴⁷ The CVPIA also made an unprecedented shift in federal water policy: it enabled contractors with the federal project to sell or lease their water rights to anyone else in California.⁴⁸ Even though no CVP contractors have yet to sell water or water rights to a city or developer outside of the federal project, the CVPIA is credited with creating the largest push for water marketing in California.⁴⁹

Summary

The term “water transfer” is ambiguous and misleading; it lumps together water exchanges and water sales. Both exchanges and sales have significant and at times over-lapping policy implications. Water sales, however, warrant separate discussion, as the profit motive behind sales will trigger very different types of transactions. Most notably, water sales allow for new water users with access to capital to buy into the state’s developed water supply, whereas water exchanges take place only between existing water users.

The True Cost of Markets

Markets as tools for allocating resources

Water market advocates call for allowing water sales within and between different regions of the state using the various public water projects to move the water. The Pacific Research Institute even calls for privatizing the water projects themselves.⁵⁰ Some proponents argue for an unregulated water market, others for varying levels of state oversight or administrative participation.

Markets are mechanisms for allocating resources and products. Markets work by setting prices for items. Prices make potential buyers pay up or go without. As a resource becomes scarcer, prices go up. When a resource becomes more abundant, prices go down. The raising and lowering of prices is supposed to match supply with demand so that, in theory, all of a given product will be purchased, or “clear the market.”⁵¹

Consider, for example, a carrot market. In a year with a low crop yield of carrots, farmers will price the vegetables higher. Diners with little taste for carrots will decline to pay the high price, while carrot lovers will pay up and indulge. The higher price in a time of scarcity “allocates” the carrots to those who most value them. Say then that neighboring farmers envy the high profits of carrot producers that year and decide to switch their broccoli fields to carrots the following year. Such decisions made independently by several farmers lead to an abundant carrot crop the following year. Farmers must then drop the price low enough to sell all their carrots, since there are not enough devout carrot-lovers to buy the entire crop at the previous year’s high price.

For a market to work properly and result in efficient and beneficial resource allocations, several conditions must be met:⁵²

1. Property rights need to be clearly defined, exclusive and transferable.
2. Sellers need means of transporting goods to buyers.
3. Buyers and sellers need complete information about other buyers and sellers, the property rights, and potential costs and benefits of a given transaction and its alternatives.

4. Transaction costs need to be low.
5. Buyers and sellers need to be abundant enough so as to avoid monopoly control of the resource.

Most of these conditions would not be met in a water market “due to the physical characteristics of water and its importance to community and individual well being.”⁵³ There are no exclusive and transferable property rights to water in California. There are no private means of transporting water from seller to buyer. There is uncertain information on potential environmental, economic, and social impacts of water sales. Finally, due to decades of public water subsidies, there are not enough potential buyers and sellers to avoid monopoly control of water.

Markets vs. politics: false choice

Economist Terry Anderson writes in the *Orange County Register* that California’s “water programs don’t work well because they are predicated on politics, not market factors.”⁵⁴ Indeed, markets do strip politics away from resource management. Public hearings, environmental reviews, and stakeholder negotiations have no home in a water market. The allocation of water—where it goes, and what it will be used for—is left to the magic of pricing.⁵⁵ And the magic is this: whoever can pay most for water will have their desired use for that water legitimized by the simple act of purchase. No public debate. No environmental impact review.

Pro-market advocates argue that less political oversight is better. At a recent meeting of the Southern California Water Dialogue in Los Angeles, Lloyd Fryer, a water resources planner for the Kern County Water Agency, told a packed room that “the whole business of water exchanges, water sales, what we call water transfers colloquially, will be much easier to deal with because DWR will start thinking of it as a *business* solution rather than a *regulatory* solution. There is a balance there somewhere of course, because DWR has regulatory responsibilities, but until transfers become more of a business issue for DWR I think we’re going to have a fairly controlled market that’s going to continue to be relatively small.”⁵⁶

Treating water allocation—who gets water and how much—as a business disempowers communities and environmental advocates by cutting out

community participation and environmental protection as integral parts of decision making. Moreover, viewing water provision as a business implies viewing citizens as customers. Former Stockton Mayor Gary Podesto, for example, said in his 2003 State of the City address, promoting his campaign to privatize the city's water and sewer services: "It's time Stockton enter the 21st century in its delivery of services and think of our citizens as our customers."⁵⁷

Citizens have rights. Customers have desires. When rights are diluted in favor of emphasizing the consumer's purchasing power, people are left out, particularly rural and low-income communities that stand at a disadvantage in the current water allocation system.

Thomas Frank dubbed the belief that markets are a more democratic form of organization than elected governments "market populism." The central premise of market populism for Frank is: "that in addition to being mediums of exchange, markets are mediums of consent. With their mechanisms of supply and demand, poll and focus group, superstore and Internet, markets manage to express the popular will more articulately and meaningfully than do mere elections. By their very nature markets confer democratic legitimacy, markets bring down the pompous and the snooty, markets look out for the interests of the little guy, markets give us what we want."⁵⁸

With water, especially in California, markets are not mediums of consent; they are mediums of control. Under a market allocation system, who gets water and who gets to use the state's public water projects would be determined by access to capital, not the public interest.

The hidden politics of the highest bidder

The highest bidder is simply the willing buyer—individual, business, or agency—with access to most capital. An individual or corporation's ability to pay more for a good does not determine that the end use of that good will result in a public benefit. If more people will pay high prices to go to a roof-top ski jump in downtown San Francisco or Los Angeles than for locally grown fruits and vegetables, an unregulated market would promote sending the water to the snow machines.

In California at the dawn of the 21st century, the highest bidders will be the state's fastest growing cities and the real estate developers driving that growth. Market advocates assume that urban growth is inevitable.⁵⁹ Urban growth is anything but inevitable; it is highly political. Housing developers that build projects with no local water supply are engaging in speculative business, not public service. Their houses are products which they aggressively advertise and their profits and business survival depend upon filling the houses.

The two largest proposed urban development projects in California—Newhall Ranch and Tejon Ranch's Centennial—illustrate the speculative nature of contemporary urban growth, as well as the longstanding inequities in land ownership and water subsidies. Both projects consist in entirely new urban development external to any existing city or town. Both projects lack a sufficient natural water supply—local aquifer or streams—to serve future residents. Both projects are business ventures pursued by corporations. The land proposed for both developments traces back to the Mexican land grants of the 1830s and has been held in private ownership by the largest landowners in the state since then. The land has increased in value due to the publicly funded construction of the California Aqueduct, and is close to Los Angeles, making it incredibly valuable as a location for bedroom communities. Last, but not least: both projects plan to buy rights to drinking water for future residents from subsidized Central Valley agribusinesses or descendants of old-time land and water barons.⁶⁰

The case of Newhall Ranch is particularly instructive of the type of transactions favored by water marketing. Newhall Land and Farming has long been one of the largest landowners in California. Now, the company is owned by Lennar Corporation, a \$10.5 billion housing development company based in Miami, and Cerberus Associates, a New York-based investment firm.⁶¹

Newhall fought in the courts and before the Los Angeles County Board of Supervisors for years to get their project approved. One challenge to Newhall's proposed new city, charged that the company's plans to buy water through the State Water Project were not sufficiently reliable. A Kern County judge agreed. Newhall then went shopping and found a "willing seller" in Jim Nickel, descendent of Henry Miller, the most infamous of California land and water barons. Miller amassed a million acres of land through manipulating water rights and federal law in the early years of statehood. A century later

his descendents are profiting from selling water and water rights, including enough water for Newhall's project to get the judge's stamp of approval.⁶²

Newhall Ranch and Tejon's Centennial are not inevitable growth. They are based on the assumption that the houses will sell. And once houses are built and people move in, public health considerations will trump all worries about the sustainability of diverted water sources or the economic impacts on the communities left without water and the jobs water brings. As Randle Kanouse, a water agency lobbyist, told the *Los Angeles Times*: "There's a history in California for 150 years that if you create the demand, the water will flow. It's the dirty little secret of the development industry."⁶³

Water sales for urban development

"Los Angeles was trapped in a vortex of excess. Its ceaseless promotion of itself had led to a population influx, which led to a water crisis, which led to the Owens River Aqueduct, which led to a greater population influx, which led to a new water crisis, which led to the Colorado River Aqueduct, which was about to lead to more people and another water crisis [...]
*The next jolt of water was to come, finally, from northern California's Feather River, via the longest aqueduct and the highest dam and the most imponderable pump lift ever engineered."*⁶⁴

Los Angeles is still trapped in a vortex of excess and it is pulling most of the region in with it. Metropolitan Los Angeles grows by about 700 people a day, between 200,000 and 300,000 people a year.⁶⁵ For the first time in the region's history, most of the new people are due to "natural increase," more births than deaths.⁶⁶ It seems then, as if Southern California's water crisis may be insuperable. The immense pull of the region's population, economy and property values has already created the most complex and farthest reaching plumbing for any city in the United States. Now Southern California water managers are using that plumbing to pull in water from the farmers and agribusinesses across the state who have themselves benefited from decades of water subsidies. Some call this water marketing: Southern California tax and ratepayers making payments to some of the largest agribusinesses in the state, many owned by LA businessmen, for water that supposedly belongs to the public in the first place.

Los Angeles out to buy

Beginning in the 1980s, Southern California water planners came to realize that the region would have to scale back its dependence upon distant rivers. The reliance upon building new water projects suffered a major setback in 1982. An unlikely coalition of environmentalists, Bay Area water districts, and San Joaquin cotton barons pulled together a successful statewide referendum to block construction of the Peripheral Canal.⁶⁷ The canal would have carried Feather River water around the edge of the Delta, straight to the SWP pumping plant near Tracy.

Also, the Metropolitan Water District of Southern California (MWD) had been taking twice its rightful amount of water from the Colorado Aqueduct for 40 years when the Central Arizona Project finally tapped into the Colorado River in 1985.⁶⁸ By 1990, there was no more “surplus” for Southern California. Also in 1983, National Audubon Society, the Mono Lake Committee, and other allies successfully argued that the Los Angeles Department of Water and Power did not have the right to divert water from streams feeding into Mono Lake without taking into consideration the harms that might be done to the public interest in the lake.⁶⁹

On the heels of these defeats the muscle behind Southern California water changed its tactics. MWD began to push for water marketing in the late 1980s, and spent \$2.25 billion building a new reservoir in Riverside County to store anticipated new supplies through purchases.⁷⁰ MWD lobbied to allow sales of federal CVP water, purchased water storage rights in Kern County water districts, and in 2003 began purchasing water “options” from Sacramento Valley Rice farmers.

LA and Imperial Irrigation District

The Imperial Irrigation District (IID) is the largest agricultural water district in the United States. Through the All-American Canal and over 1,000 miles of side canals, IID delivers 3 million acre-feet of water to over 460,000 acres of crops.⁷¹ IID sends more diverted river water to agriculture than any other district in California.⁷² In 1984, the State Water Resources Control Board held that the IID was using water in an “unreasonable” manner and ordered the district to come up with a conservation plan. Four years later IID presented their plan, which mainly consisted of lining dirt canals with concrete and

fixing leaks in canal gates, to the Board but said that they had no way of funding it. The Board told them to find a way.⁷³ Enter Los Angeles.

MWD offered to pay for IID's required conservation plan, if Southern California could take the water that was saved. First IID fought for more money on top of the overhaul, then Mexico objected that the conservation plan would hurt their aquifers by stopping canal seepage, and finally neighboring Coachella Valley Water District filed a lawsuit arguing that IID had no rights to water that leaves its service area. MWD found a way to satisfy all the objections with cash and water and after years of wrangling signed an agreement with IID.⁷⁴

LA and Arvin-Edison

In 1996, MWD approached Arvin-Edison Water Storage District in Kern County with a proposal to transfer 14,000 acre-feet a year of Arvin-Edison's federal CVP water to Southern California. Local water districts and agencies including the Friant Water Users Authority opposed the deal, fearing groundwater overdraft and that selling the water would leave the region vulnerable during a drought. MWD then agreed to store SWP water in Arvin-Edison's depleted aquifer and in turn receive from 40,000 to 75,000 acre-feet annually, water that would depend upon flood runoff during wet years.⁷⁵

Environmental organizations like the Natural Resources Defense Council opposed the deal saying it would further deplete the San Joaquin River, which runs dry due to diversions for irrigation. MWD and Arvin-Edison were concerned about environmental protests before the State Water Resources Control Board, which had to approve the agreement. So they devised a strategy that would avoid the public hearings before the Board where environmentalists could voice their concerns.⁷⁶ Arvin-Edison would send MWD's water to the Kern County Water Agency. Since the Kern agency is within Arvin-Edison's service area, they could avoid the State Board hearings. Kern County Water Agency would then supply MWD with an equal amount of water from the California Aqueduct.⁷⁷

LA and the rice farmers

Sacramento Valley rice farmers produce about 2 million tons of rice a year, making California the second largest rice producer in the U.S. after Arkansas. Nationwide, the rice industry receives more federal subsidies than any other

crop.⁷⁸ More than 95 percent of California rice is grown in the Sacramento Valley, within 100 miles of the State Capital.⁷⁹

Over the past decade MWD has purchased water “options” from Sacramento Valley rice farmers for over 200,000 acre-feet of federally subsidized water, enough to supply a city of almost a million people for a year.⁸⁰ In the “option” agreements, MWD pays first to reserve the right to buy the water and later, if other supplies are low, MWD will pay more to actually take the water, leaving the rice farmers to fallow their fields.⁸¹ In one recent agreement, MWD offered to pay \$10 an acre-foot to reserve 80,000 acre-feet of water from the Glenn-Colusa Irrigation District until April 1, another \$10 an acre-foot to hold it until May. MWD would pay \$115 an acre-foot, in addition to the \$10 or \$20 hold fees, to buy the water. Thus the price in April would be \$125 an acre-foot, and in May \$145. If MWD decided not to buy, the rice farmers would pocket the \$10 or \$20 an acre-foot and plant their fields.⁸²

In an unexpected twist to flooding desert fields to grow rice during the summer months, Sacramento Valley farmers have created an important stop-over for migratory birds on the Pacific Flyway. Since most of the wetlands have long been drained and converted to cities and irrigated agriculture, the flooded rice fields have taken over as fertile wildlife habitat.⁸³ If these fields are no longer routinely flooded the impacts on migratory birds and other wildlife could be devastating.

San Diego and Imperial Irrigation District

Texan multi-millionaires Edgar and Lee Bass bought thousands of acres of farmland in the Imperial Valley in the 1990s, amassing 45,000 acres by the end of the decade. The land came with rights for water at a cost of \$12.50 an acre-foot. They planned to sell that water to Southern California cities for \$400 an acre-foot. The Bass brothers held secret meetings with San Diego water officials, but failed to convince them to buy. San Diego decided instead to negotiate directly with the Imperial Irrigation District in 1995. A year later the Bass brothers sold their land to US Filter for \$250 million. The payment came in the form of US Filter stock, making the brothers the largest shareholders.⁸⁴

San Diego and IID continued to discuss a potential water sale and reached a tentative agreement in 1997 where San Diego would buy between 200,000 and 300,000 acre-feet for \$249 an acre-foot annually, though the price would rise to \$311 an acre-foot in 10 years. IID would make a *profit* of \$120 an acre-foot, or \$24 million a year.⁸⁵ The landowners participating in the deal had to produce the water without fallowing crops. IID and San Diego both approved the deal in 1998.

MWD wanted to charge San Diego \$262 an acre-foot to use its aqueduct and pumps, but San Diego protested that the “wheeling” rate was too high. Wheeling involves using another agency’s water conveyance facilities to move water. In a series of lengthy negotiations both sides began drafting a wish-list of projects that would help them make up the costs of moving the water, like lining the All-American Canal and the Coachella Branch. In the end San Diego and MWD signed a memorandum of understanding authorizing a \$235 million dollar bond measure to fund the projects. The bond measure ballooned to \$1.2 billion in the state legislature to include projects statewide and eventually died. Governor Pete Wilson jumped in, supporting a rewritten version of the original bond bill. The governor also introduced a separate bill to purchase Headwaters Forest—a large tract of 1,000-2,000 year old redwoods in northern California—and placate environmentalists.⁸⁶

The Monterey Amendments: water for developers

The Monterey Amendments were changes made to the California State Water Project after closed-door negotiations in 1994 between DWR and a select group of the most influential contractors, including MWD and KCWA.⁸⁷ The Amendments were successfully litigated on the grounds of having failed to conduct a valid environmental impact report (EIR) as required by the California Environmental Quality Act. DWR is now carrying out the required EIR.⁸⁸ However, the SWP contractors have continued to implement many of the changes made in the Monterey Amendments throughout the period of litigation. One such change enabled SWP contractors in Kern County (the second largest contractor in the SWP, and the single largest recipient of water) to permanently sell up to 130,000 acre-feet of SWP water contracts to any willing buyer, anywhere in the state.⁸⁹

To date, three water districts on the west side of the San Joaquin Valley have sold contracts for just over 70,000 acre-feet of water.⁹⁰ Water districts in Los Angeles, San Bernardino, Solano, Napa and Alameda counties purchased the water rights. In one of the water rights sales, the water helped the Dougherty Valley development project get approved after the East Bay Municipal Utilities District Board had voted against servicing the new development, largely due to concerns about growth in the area.⁹¹ Shapell Industries, one of the largest private developers in California, is building the 11,000-house development in Contra Costa County.⁹²

Two Kern County water agencies are attempting to sell 41,000 acre-feet of water contracts to the Castaic Lake Water Agency. Castaic services one of the fastest growing areas in Los Angeles County: the Santa Clarita Valley where Newhall Ranch, the proposed “new city” development, will be built. The Kern-Castaic water sale has been caught in a series of lawsuits spanning 5 years and untold thousands of pages of legal documents.⁹³ While the legal and environmental arguments in this case are numbingly complex, the crux of the issue is simple: is the State Water Project water for sale reliable enough over time to support the projected growth in the Santa Clarita Valley?

“Castaic wants to have that 41,000 acre-feet in their portfolio so that the developers in their jurisdiction can say they’ve got water for development,” attorney Antonio Rossmann told the *Los Angeles Times*.⁹⁴

SWP water deliveries have been up over the past few years. The average water deliveries over the past twenty years of the project, however, are just over 2 million acre-feet a year, about half the contracted amount of 4.1 million acre-feet.⁹⁵ The difference between the contracted amount of SWP water and the actual amount of physical water the project can deliver on a given year is called “paper water.”⁹⁶ When development projects seek approval based upon new purchases of SWP water contracts like Castaic’s 41,000 acre-feet, anywhere from 10,000 to 20,000 acre-feet of the contracts may only represent water on paper.

What then will the residents whose homes were built on the promise of SWP water do when the project cannot deliver its full contract amount? True, the state—that is, taxpayers—may be able to pay agribusinesses and farmers to fallow their fields and ship the emergency water to urban areas in short

supply. But the issue is: if we can avoid this, shouldn't we? If the Central Valley water districts need to shave off extra water contracts, that water should go to the rural communities in the Valley first, and then back into the streams and aquifers from which it was diverted. But when water is treated as a commodity rather than a public good, the rural areas that have been left out continue in their neglect and the water instead goes to nourish Southern California property values.

Water in the bank

Water storage—which until recently, consisted of mainly holding rivers back behind dams—is essential to California's dependence upon an “artificial abundance” of water in the Central Valley, the Bay Area, and Southern California.⁹⁷ Storage is also necessary for water marketing. For buyers and sellers to treat water like a commodity, they must be able to control when it is available. The market demands for water such as new housing developments and orchard crops are not viable without a constant, uninterrupted water supply.

For the past century, the state has relied upon the distant reservoirs in Northern California and the Sierra Nevada Mountains for water storage. Now, in what is the reigning irony of California water management, irrigation districts and water agencies are using the depleted aquifers to store the water brought in from the north underground. Water banking—also called “conjunctive use”—refers to the practice of “recharging” empty groundwater basins and later “recovering” the water.⁹⁸ As with the term “water transfers,” this technical language masks the politics involved in the actions described.

Water banking in the Central Valley—where most of the banks are located—consists in first flushing river water that has been pumped hundreds of miles from Northern California or the Sierras over dry land so that the water will percolate down through the soil and collect in the empty aquifer below. Water users then pump the water back out of the ground at a later date.

Water banking is the glue that makes water marketing in California possible. With the water being shipped in from across the state, or with water rights to local rivers that vary in their flows throughout the year, without a place to store the water, it has no commodity value. Many of the water marketing

deals detailed above depend upon water banking. Newhall Ranch is able to purchase Nickel's water only because Nickel cut a deal with the Kern County Water Agency granting him guaranteed water deliveries and because Newhall purchased storage capacity in a Semitropic water bank. Tejon Ranch owns storage capacity in the Kern Water Bank. Metropolitan Water District has purchased storage capacity in the Semitropic water bank and Arvin-Edison.⁹⁹

Water banking to date, has also followed the path of granting public water subsidies for private gain. In a 2003 report, Public Citizen documented how the largest private agribusiness in California orchestrated the take over of the state-owned Kern Water Bank, the largest water bank in the world.¹⁰⁰ The Department of Water Resources purchased the 19,900 acres of land overlying the water bank from Tenneco West Inc. for \$31.4 million in 1988. DWR then spent another \$42.6 million conducting studies and building initial facilities for the water bank. DWR initially planned the water bank as a part of the State Water Project, to provide drought protection with statewide benefit. In 1994, the state gave it away.

Moreover, since the giveaway, California taxpayers have continued to subsidize the water bank. The state granted over \$25 million in Proposition 13 funds to the Kern Water Bank and surrounding groundwater storage projects in 2002 alone.¹⁰¹

Water banking could be used as drought protection to statewide benefit and to help improve water quality in the heavily depleted San Joaquin Valley groundwater basin. Operating the banks for water marketing will have the opposite effect, fueling increased dependence upon distant water supplies for new growth as shown above. Using water banks for private water sales circumvents the public trust doctrine, once the river water is in the ground landowners may try to argue that the water they plan to sell is percolating groundwater and not protected by the public trust. The water in these banks does in fact percolate, but only after tax and ratepayers have paid to pump it in from harnessed rivers.

The same industries that depleted the aquifers in the San Joaquin Valley now stand to profit from the damage done.¹⁰² Instead of learning to conserve after decades of overdraft, water managers are increasing their destructive water

uses by configuring yet another subsidized engineering fix to quench the thirst for growth.

Profit motive promotes increase in water use

Market advocates argue that a water market will provide a financial incentive for agricultural users to conserve water.¹⁰³ The water saved may be sold on the market and add to a farmer or agribusiness's profits, they argue. There are two principal manners of conserving water in agriculture: 1) reducing the amount of water lost during transport and application to crops and 2) reducing the amount of water consumed by crops (e.g., by fallowing fields or switching to less water intensive crops).

Market advocates focus only on the act of the agribusiness or farmer, not the end use of the water they supposedly conserve. When the urban agencies and developers who buy the water are factored into the equation, it shows that water markets promote an overall *increase* in water consumption in California. Farmers and agribusinesses that save water by reducing spills and seepage or fallowing will create a source of water for *new or expanding consumptive uses*.

Robert Gottlieb and Margaret Fitzsimmons noted this even in the earliest stages of California's quasi-market experiments: "By transferring water to an expanding urban user from a marginal agricultural user (who might otherwise have reduced or eliminated water use as a result of price increases or other economic factors), inter-agency markets perpetuated existing water supply export patterns."¹⁰⁴

While much of industrial agriculture has thrived on subsidized water and evolved extremely wasteful water use practices, it is not accurate to lump all agriculture into a broad category of wasteful use. In a water market the larger more wasteful agricultural operations could buy more water and expand their wasteful practices, while smaller farms with better water management could buckle under when faced with rising water prices. The same may be said of cities where larger economies of scale could permit simply buying more supply rather than investing in water conservation. Los Angeles and other MWD agencies show that this is not necessarily the case: while being the most aggressive water buyers, they have also developed among some of the most effective urban water conservation plans.

The Environmental Water Account: Market or subsidy?

Water market advocates celebrate the Environmental Water Account, or EWA, as an example of the environment jumping on the market train. Scrutiny reveals, however, that the EWA program and water market deals for the environment generally are not markets at all, but another breed of water subsidy. The EWA teaches us that the water market is less about fair exchange than passing environmental regulation from polluting industries back onto taxpayers.

The CALFED Bay-Delta Program created the EWA in 2000 with an impossible mandate: provide water for fish protected by the Endangered Species Act (ESA) and guarantee “no uncompensated water costs to the projects’ water users.”¹⁰⁵

State and federal taxpayers paid for the program. In four years, and at a taxpayer expense of \$140 million, the EWA has proven successful in protecting water supply reliability for contractors and unsuccessful in protecting fish.¹⁰⁶

Here’s how it works: when the massive state pumps that lift water 244 feet out of the Delta and into the California Aqueduct suck up too many endangered fish species, federal and state regulators slow down the pumps so that the fish can, in theory, swim away. The state tracks how much water has not been pumped due to the slower pumping rates and uses taxpayer money to buy an equal amount of water that has already been stored south of the Delta. The state pays for that water to be sent to those with the heaviest demands, which are primarily large agribusiness companies, often the same companies that are *selling* water to the EWA.

Both state agency and water marketing advocates describe the EWA as an environmental program. The CALFED Bay-Delta Authority says that the program is “designed to provide water at critical times to meet environmental needs without water supply impacts on cities, farms and businesses.”¹⁰⁷

Former resource secretaries under the administrations of President Clinton and Governor Pete Wilson concur in their recent characterization of the EWA as an “innovative water marketing plan that enables state and federal fishery managers to purchase water for wildlife without disrupting agricultural water deliveries.”¹⁰⁸

The agricultural water agency that both benefits from EWA water purchases *and sells water* to the EWA provides quite a different perspective of the intent of the program. The Kern County Water Agency, in its 2001-2002 biennial report, writes that the EWA “provided that fisheries agencies would purchase water with state and federal funds from both north and south of the Delta. The money would be used to repay the SWP and CVP projects for water lost due to Delta pumping curtailments or other fishery actions. [...] The program was intended to protect SWP and Central Valley Project water users from additional shortages resulting from Endangered Species Act (ESA) fish actions.”¹⁰⁹

The Kern agency’s description is by far the most accurate. First of all, the EWA is not a market program at all. There is only one buyer: the state. DWR conducts all purchases of water for the program. Secondly, the “water for wildlife” is required by federal law. “In this respect,” said Cynthia Koehler, former legal director for Save the Bay, “it could be viewed as a public subsidy for complying with the Endangered Species Act.”¹¹⁰

Thirdly, as an environmental program, the EWA is a resounding failure. Over the past four years the already low numbers of monitored endangered fish species in the Delta have dropped even further.¹¹¹ There are no studies that provide evidence of fish benefits due to the EWA.¹¹² In fact, after four years of operating the program, the National Oceanic and Atmospheric Administration recently wrote that the EWA impacts on salmon, for example, “would be too low to detect.”¹¹³

Christina Swanson, a staff scientist with the Bay Institute who has written two reports on the Environmental Water Account, is frustrated by the lack of evidence showing fish benefits. “The agencies have not done what they said they would in terms of collecting and analyzing good information,” she told *Terrain Magazine*. “There is no good data supporting the Environmental Water Account giving benefits for fish. There are hypotheses, people saying, ‘Well, I think it works.’ The only thing it has been shown to do is guarantee water supply for south of Delta contractors at tremendous cost to the public.”¹¹⁴

It gets worse. Many of the companies selling water to the EWA—for millions of dollars—are the very companies that benefit from the EWA’s subsidies. In August 2003, the *Bakersfield Californian* reported that of the water purchased

south of the Delta, “The biggest local player in the EWA market is usually Paramount Farming Company, which not only sells major amounts of water through its Westside Mutual Water Company, but is also one of the sellers in Berrenda Mesa,” a water district that receives State Water Project water through the Kern County Water Agency.¹¹⁵ Department of Water Resources records for EWA water purchases during fiscal year 2000-2001 alone show that Westside Mutual Water Company sold 36,000 acre-feet for a total of \$7,950,000.¹¹⁶

Paramount Farming Company is privately owned by one of the fifty wealthiest residents of Los Angeles, Stewart Resnick, whose collected agribusinesses constitute the largest privately owned agribusiness in the United States and whose private holding company, Roll International, recently purchased Fiji Water, the second highest selling imported bottled water company in the United States.¹¹⁷ Paramount owns over 100,000 acres of land in Kern County alone and receives State Water Project water through five of the Kern County Water Agency’s 13 member units.¹¹⁸ This makes Paramount perhaps the single largest potential benefactor from a taxpayer funded EWA. Their benefits increase sharply however when they are also among the largest *sellers* of water to the EWA.

Paramount uses a wholly owned subsidiary, Westside Mutual Water Company, to sell to the water EWA.¹¹⁹ Where does Westside Mutual Water Company get the water to sell? Westside owns 48 percent of the formerly-state owned Kern Water Bank. Since the years directly preceding the 2000 implementation of the EWA were unusually wet years, Paramount Farming was able to store its State Water Project water in the Kern Water Bank. In subsequent years when the Delta pumps needed to be slowed down in an attempt to protect fish, California taxpayers paid the largest privately owned agribusiness in the United States, through their wholly owned subsidiary, Westside, to pump their “surplus” water back out of the ground.¹²⁰ This is precisely the sort of shell game with California’s vital water resources that the state should prevent in its role as guarantor of the public trust.

The Delta is the largest estuary on the west coast and provides a supplemental supply of drinking water for about two-thirds of the state’s population and irrigation water for over 7 million acres. It is also one of the most heavily managed estuaries in the world, making its altered ecosystem extremely

fragile. With fish populations dropping and water quality worsening, now is the time to study deeply and act cautiously. The EWA does neither.

In a water market, water purchases for environmental purposes will be charged to tax and ratepayers, shifting the burden of mitigating the environmental damage of the water projects away from the industries that have most benefited. Market advocates celebrate the Environmental Water Account as a market-based program providing the environment with water. Some even say that the environment is driving the push for water markets in California. The Environmental Water Account, at a cost of \$140 million dollars, is no more than a taxpayer subsidy for Delta water exporters to give a nod to the Endangered Species Act.

Communities are not “third parties”

Buyers and sellers are the two main “parties,” or participants in a water sale or transfer. One or another government agency may also have a role in approving their agreement, but the negotiations concerning the terms of the sale or transfer have only two participants: buyers and sellers. So-called “third parties” to a water sale or transfer are “those who stand to be affected... but are not represented in the negotiations and lack control over or input into the processes by which the transfer proposals are evaluated and implemented.”¹²¹ The people most likely to be affected by water sales and transfers in California are farmworkers losing employment due to a water seller’s fallowing their fields. Small farmers or local residents may have more difficulty pumping groundwater due to a water seller’s increased pumping to make up for the surface water sold or transferred.¹²²

Market advocates talk about whether or not there will be “third-party impacts” of water sales, and if so, what—if anything—to do about them. The impacts in question are viewed in purely economic terms, and the various “mitigation” strategies proposed tend to focus on one or another form of cash compensation.¹²³ “Standard economic theory does not usually consider these third-party financial losses to be legitimate,” two agricultural economists note, but “many [water] trades do provide some compensation to third parties, often to appease public opinion.”¹²⁴

The Water Transfer Program of the California Bay Delta Authority—the collaborative state and federal program initiated in 1994 to solve water conflicts impacting the Delta—published a paper in September 2003 entitled: “Perceptions of Third Party Interest Groups on Compensation and Mitigation for Water Transfer Impacts.”¹²⁵ The paper begins as follows: “Selected third party interest groups were interviewed to identify and characterize their perspectives on potential impacts resulting from water transfers and the need to compensate individuals/ groups that could be directly or indirectly effected [sic] with the implementation of a water transfer.”¹²⁶

In the Bay Delta Authority’s report, the disempowered position of a third party as someone left out of the negotiations is further weakened by characterizing them as “interest groups” who have “perceptions” of “potential impacts.” An “interest group” usually refers to an advocacy organization attempting to influence policy. Interest groups may have concerns, but farmworkers have jobs and families and small farmers and rural residents have pumps that can only pull water up from so deep. Moreover, farmworkers, small farmers, and rural residents are all part of communities that may themselves be seriously affected by losing water and jobs to the water sales. The “potential impacts” to interest groups and communities are not the same.

Relegating community concerns to “third-party” status ignores the legal and social nature of water as a public resource in California and weakens the ability for communities, particularly low-income and communities of color, to advocate for community needs in relation to water reallocation.¹²⁷

Communities are more than household median incomes and aggregate individuals. Communities are the over-lapping reaches of people, place, and the work and play that bind them together: the street corners and school yards, churches and *taquerias*, rivers and parks; the years or generations of shared experiences across culture and language; the connections people make between each other and with the place where they live. Communities are living things, and like biological systems, they are more than just the sum of their parts.

“Not much about California, on its own preferred terms, has encouraged its children to see themselves as connected to one another,” wrote Joan Didion in her book *Where I Was From*. “The separation, of north from south—and even

more acutely of west from east, of the urban coast from the agricultural valleys and of both the coast and the valleys from the mountain and desert regions to their east—was profound, fueled by the rancor of water wars and by less tangible but even more rancorous difference in attitude and culture.”¹²⁸

California’s rancor is laced with the history of explicit racial and class exclusion.¹²⁹ Didion alludes to this history when she writes: “One difference between the West and the South, I came to realize... was this: in the South they remained convinced that they had bloodied their land with history. In California, we did not believe that history could bloody land, or even touch it.”¹³⁰

In California, land and water both have been bloodied with history. The public water projects have been long manipulated by corporate landowners and landowner-controlled water and irrigation districts.¹³¹ In the agricultural valleys that most reaped the benefits of the public water projects, rural communities of farmworkers were mostly cut out of the projects and the economic wealth generated through water subsidies.

This legacy of exclusion continues to this day. The Tulare County General Plan Policy Summary, for example, recommends that “[p]ublic commitments to communities with little or no authentic future should be carefully examined before final action is taken. These non-viable communities would, as a consequence of withholding public facilities such as sewer and water systems, enter a process of long term, natural decline...”¹³² Choosing which communities have access to clean water is political, not “long term, natural decline.”

Tulare is the second largest county in agricultural sales in the state; it is also the state’s poorest county.¹³³ In fact, four of the five top agricultural counties are in the San Joaquin Valley and rank in the top ten poorest counties in the state.¹³⁴ It seems like an impossible equation, but it is not: the wealthiest agribusinesses, the largest beneficiaries of massive public water projects and the poorest populations are all found in the rural agricultural heartland of California.

Yet, despite decades of unrelenting hardship in the fields, the pulse of community is vibrant throughout these valleys. With the piercing light of early evening, workers return home, children play soccer in quiet streets,

friends gather for barbecues in front yards, and families take in the sunset from their porches. In San Joaquin Valley towns like Poplar and Wasco, Lindsay and Alpaugh, the sense of community is palpable even to the stranger. These are the communities that have struggled to create a place to live and raise families amidst the unprecedented wealth of industrial agriculture. These communities are not third-parties. They are the public of which the constitution speaks.

As noted above, agriculture uses 80 percent of the “developed” water supply in California and has long benefited from local, state, and federal water subsidies. Water conservation in industrial agriculture, especially among the largest operations, should be mandatory (in an ideal world, industry would do so voluntarily). The water saved should first go to the rural communities that have provided the workforce for the industry for improvements in drinking water access and quality, as well as for projects like community gardens and small local farms unable to compete with subsidized agribusinesses.

The long-term sustainability of agriculture in regions like the San Joaquin Valley depends not only upon cleaning up pollution and changing wasteful irrigation practices, but also upon investing in the quality of life of the region’s rural communities. New York and Beverly Hills investment firms will sell their land and water to the highest bidder, whether she drives a bulldozer or a plough. Communities will fight to protect their land, water, and ways of life.

Conclusion

*“[Beneficial use] must come to mean beneficial to the community, not just the individual user... Bank robbery, after all, is beneficial to the robber.”*¹³⁵

The principal assumption of water marketing is that technology and cash will solve all water supply problems. This is a time bomb. Patterns of water use in agriculture, manufacturing, and municipal sectors must be scrutinized and made more sustainable. The state constitution foresees this necessity by viewing all water use as needing to serve the public interest, and prohibiting wasteful practices.

A 2001 California Department of Health Services study found that 4 million California residents “have drinking water that is unfiltered surface water or well water that have fecal or *e. coli* contamination.”¹³⁶ This is an unacceptable number of people without quality drinking water for any state, but it is shameful for the state with the largest economy in the nation. Rural families are forced to drink dangerously polluted groundwater while high quality surface waters are dedicated to new urban developments and to irrigate subsidized crops on lands with no natural water supply and no natural drainage for the pesticide and saline run-off from their fields. California water policy needs to change course.

Myopia in resource management leads to disaster, as we have seen with the impacts of and failure to respond to Hurricane Katrina’s destruction and as we will see in the coming years with the impacts of global warming. Water management in California requires long-term planning, especially to prepare for earthquakes, floods, and droughts. There is enough water to meet reasonable growth demands, urgently needed rural water access and quality improvements, and to restore some of the most damaged areas of the state’s waterscape, like the Sacramento-San Joaquin Delta. A water market would do none of this, but rather continue to usher the state’s rivers to the kudzu growth of subdivisions and “new cities” over waterless land.

Recommendations

Ban for-profit bulk water sales

The State Legislature should pass a law banning for-profit water sales between private entities—individuals and corporations—in California.

Fund rural and environmental water programs with reallocation charges

The California Department of Water Resources should levy “water reallocation charges” on all water transfers between public agencies and dedicate the funds to long-needed water development in rural communities and ecosystem restoration projects.

Reallocate water based on need, not price

Any reallocation of California water rights should be based on a thorough study of current water uses and water needs. Need-based reallocation provides the opportunity to include those sectors of California society that have been excluded in water allocations and decision-making bodies, such as Native American tribes and rural farmworking communities. Water should be reallocated from unreasonable uses to unmet needs, not from those with less capital to pay for water to those with more.

Establish independent statewide taskforce to study water uses in California

The Governor should call an independent state wide taskforce to conduct a comprehensive study of water uses in California, and make recommendations on where practices are unreasonable or not in the public interest. The taskforce should include representatives from small and large farms, farmworking communities, urban water agencies, environmental organizations, environmental justice organizations and scientific and academic experts. The taskforce should be facilitated by out-of-state water experts representing various sectors and with no vested interest in California water policy.

Include groundwater in public trust protections

The State Legislature should pass a constitutional amendment to include the state's groundwater resources as part of the public trust.

Water banks for drought protection, not private profit

Manage water banks for drought protection, not as warehouses for water sales.

Conservation first

Urban water agencies should first invest in water conservation measures before looking to reallocations from agriculture. Agribusinesses receiving water from federal and state water projects should implement sweeping conservation measures to provide water for environmental restoration and rural community water projects. Agribusinesses and small farmers that prove successful in water conservation should be rewarded with agricultural land protections and priority water rights over wasteful areas.

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