



Uncertain Waters

Navigating
California's
Water
Priorities

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Welcome to our Forum!

National Issues Forums (NIF) provide citizens an opportunity to purposefully and carefully deal with our most challenging public problems. For over 25 years, community members like you have come together in NIF-style conversations across the country to deliberate on our most urgent and important public issues in order to:

- Better understand the problem and its consequences;
- Consider the benefits and drawbacks of different approaches to the problem;
- Identify actions that are likely to make a positive difference and are doable in terms of time, resources, and public will;
- Examine the roles of government, schools, businesses, and civic and religious groups, as well as our responsibility as individuals; and
- Explore potential next steps.

We hope this forum will lead to further conversations, involving wider circles of people who care about the issue and are willing to work toward California water policies that everyone can live with.

The National Issues Forums network includes an array of civic, educational and professional groups, organizations, and individuals that promote non-partisan public deliberation in communities across the country. For more information about resources for community forums on national topics, visit the National Issues Forums website at www.nifi.org.

The development of this guide was coordinated by the California NIF Network with the primary research and writing being done by Craig Paterson. For over 15 years, the network has held NIF training workshops for adults and youth, sponsored NIF forums, and developed customized local materials for public policy decisions. For more information about the California topics and local issue research, visit the California NIF Network website at www.nifca.org.



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The Water Education Foundation is a unique resource for unbiased information about water issues. It is an impartial nonprofit organization whose mission is to create a better understanding of water issues and to help resolve water resource problems through educational programs. (www.watereducation.org)



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Most people agree that water is the life-blood of California, but that's about as far as the agreement reaches about how we manage this essential, natural resource for the greatest benefit. In this forum, we will examine several approaches to enacting more effective policies in a more timely fashion for a more secure water future.

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The central problem is that California's water infrastructure doesn't store or carry enough water to meet our needs. We need to expand our water storage capacity, and to fix the Delta as an essential ecosystem and water supply hub.

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The central problem is that Californians routinely waste much of the water we could be using to meet our needs. We need to create a culture of wise water use and reuse, and a goal of decentralized, local water self-sufficiency.

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The central problem is that California's water management system is too uncoordinated, too slow to respond and too biased by special interests and politics to meet our needs. We need an unbiased water management system where decisions are based on science rather than politics.

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A NOTE FROM THE WRITER: This is not the only way to frame the issue of California water priorities for public conversation. These approaches are not the only approaches. They are the approaches that emerged from my interviews, literature searches and web searches. In addition, these are not the only water-related topics that need to be discussed. The issue is vast and the topics are all interconnected. The purpose of this issue guide on our California water dilemmas is to provide a basic exploration of some of the complexities of the topic in a public forum, and then to have each forum participant to extend the conversation among family, friends, co-workers and neighbors.

PHOTOS: Courtesy of the California Department of Water Resources and FreeLargePhotos.com (Roy Tennant, David Chudnov, Carol Bean)

GRAPHIC DESIGN: Barbara Kelly, bkdesign@gte.net

People Are Talking About . . . WATER!



“Federal water managers said they plan to cut off water, at least temporarily, to thousands of California farms as a result of the withering drought gripping the state. Farms supplied by flows from the state will still get 15% of their normal deliveries, but the combined state and federal cutbacks will leave more than 1 million acres of fields and orchards with no aboveground water supply.”

Associated Press, 2009

“We may be at the start of the worst California drought in modern history. It’s imperative for Californians to conserve water immediately at home and in their businesses.”

Lester Snow, Director of the state Department of Water Resources (DWR), USA Today, 2009

“To get to where we want to be (in California water policy), we have to go through that morass of infrastructure, and old institutions, and old philosophies of thinking, and old water rights allocations that we’re still embedded in.”

Peter Gleick, Pacific Institute, 2009

“Today, the Delta is at a tipping point—its systems are unstable and headed for major change.”

Public Policy Institute of California (PPIC) and University of California faculty in a PPIC research brief, 2008

“The current system of governing water in California—letting more than 220 government agencies, federal, state and local, to independently operate in the Delta—just does not work and needs to be changed.”

Delta Vision Strategic Plan press release, 2008

“How we respond to the drought will offer us a template of how to respond to global climate change.”

Richard Rominger & Michael Dimock, 2009

“For too long there has been a false debate between ‘conservation’ and ‘construction’ to address the water crisis—both are needed.”

Delta Vision member Sunne Wright McPeak

“An integrated system of federal, state and locally owned dams, reservoirs, pumping plants and aqueducts transports large portions of the state’s surface water hundreds of miles. California’s rise to prominence as the nation’s most populous state and the world’s eighth largest economy has depended largely on its ability to deliver water supplies where they are most needed by people.”

2008 Layperson’s Guide to California Water, Water Education Foundation, 2008

“No more fear mongering over drought declarations—just a clear acknowledgement that we are living beyond our water means.”

Mark Gold, President of ‘Heal the Bay’

“To address water issues is for me one of the most complex of all intellectual exercises, because it involves the full range of human values. It involves nature, human beings, technology, the environment. But California has invented itself through water, so therefore when we address water issues, we are also addressing the question, ‘What is California?’”

Kevin Starr



Introduction

Public conversations about California water are needed now, more than ever. A confluence of events, frustrations, negotiations and court decisions is creating some new opportunities for public input on one of our most urgent and important issues. This is a critical time for citizens across California to purposefully and carefully talk about the policy choices and the foundational values involved in our critical water decisions.

The potential for unprecedented water shortages may spur farmers, environmentalists and urban water planners to find common ground that has so far eluded them, according to speakers at an irrigation conference as reported in a California Farm Bureau Federation web article. "People are tired of fighting," said one farmer. "There was a shared realization that the old way of butting heads isn't working," said an environmentalist. "I think there's a lot of common ground," added an irrigation district manager.

Water management is primarily a local responsibility in California: over 400 large water utilities, nearly 600 wastewater utilities, and hundreds of agricultural water districts. Numerous state and federal agencies collect valuable water data that is largely unused in dealing with systemic water policy decisions. Drought, continued population growth, ecosystem deterioration, and the emerging consequences of climate change are making it clear that we have neglected long-term planning, coordination, efficiency and personal responsibility for far too long.

The Delta is in an ecological tailspin. Invasive species, water pumping facilities, urban growth and urban and agricultural pollution are degrading water quality and threatening multiple fish species with extinction. Delta infrastructure as well is increasingly vulnerable to collapse as levees deteriorate and as the threat of a rising sea level grows.

An eight-year drought in the Colorado River basin has reduced the water supply to Southern California with greater cuts coming in each of the next few years. This critical water source will be very hard to replace, making it necessary very soon to balance water priorities for urban and agricultural use.

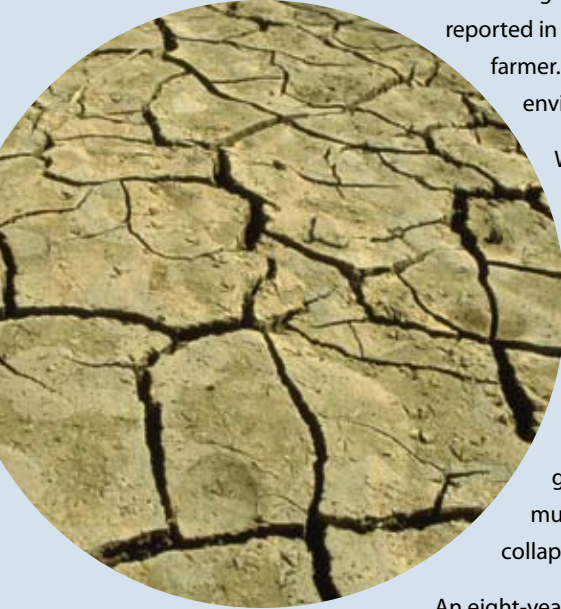
But...we need to talk about how we make water decisions in California too. A growing sense among Californians agrees with the Delta Vision Task Force report of November 2007 that "the current governance structure of water and the Delta has failed." In California water policy, everyone is involved but no one seems to be in charge. Existing fragmentation of policies and projects guarantees continued failure in restoring ecosystem integrity and in ensuring reliable water supplies for California.

- "California is functionally ungovernable. Our hyper-democracy has become, effectively, anti-democratic, thwarting the will of the majority in the pursuit of perfect process and exquisite equity. And the result is an ever-lengthening list of unresolved, but critical, issues – not only the deficit-riddled state budget, but water, education reform, health care, housing and many others."

Dan Walters, The Sacramento Bee, 2008

- "We believe California's system of government is fundamentally broken. Our prisons overflow, our water system teeters on collapse, our once proud schools are criminally poor, our financing system is bankrupt, our democracy produces ideologically-extreme legislators that can pass neither budget nor reforms, and we have no recourse in the system to right these wrongs. We believe it is our duty to declare that our California government is not only broken, it has become destructive to our future. It is time to repair our system of governance."

Bay Area Council, 2009



Just Add Water

California needs more water to meet its basic needs in agricultural, urban and environmental interests. The competition among these interests for a bigger slice of the 'water pie' isn't working well in support of our economy or our ecology...we need a larger pie! As we face threats to our state-wide water system due to drought, neglect and climate change, Californians need to decide how to at least stabilize our water supply in the short run, and then how to systematically increase our water supply in the long run.

These efforts will cost money...lots of money. Large projects are needed now to balance decades of neglect. This means that substantial public funding is needed to support the expanding water needs of our economy while continuing to guarantee the health of our watersheds, estuaries and water habitats. Much of this money will need to come through additional state water bonds, but in these difficult economic times such support seems to be weakening. Californians need to decide how much to spend and how soon it's needed to meet future water goals.

- "The court's decision (on the Delta smelt) has caused, in my opinion, the need for the environmental community, water stakeholders, including agricultural and the sports fishing enthusiasts, to come to the table and find solutions. Whatever you want to call the old peripheral canal concept today, I think California needs it. We need something to happen in the next five years, the problem is that it takes 10 to 20 years to get these infrastructure projects approved and built. If something isn't done right now, farmers are going to be cut back further."

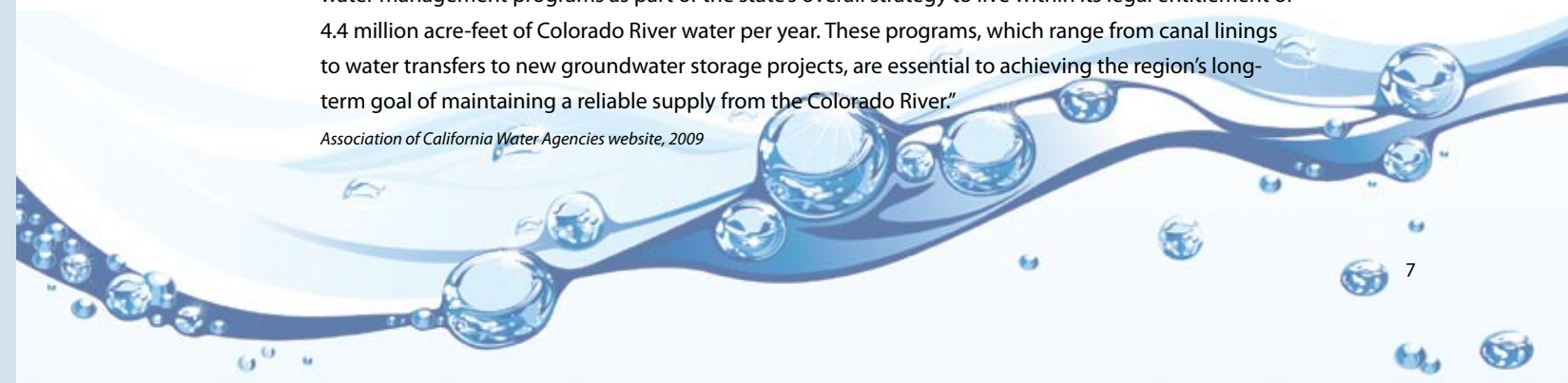
Avocado grower Ken Roth, who is chairman of the California Avocado Commission's Southern California Agricultural Water Team, California Farm Bureau Federation article, 2008

- "John Andrew, the manager of the climate change program at the Department of Water Resources, said the case for new dams is built on a single principle: flexibility. Andrew and others at the DWR, including its director, Lester Snow, are pushing the 'portfolio approach' supported by the governor, agricultural interests and many state lawmakers. This means more urban water conservation, better groundwater facilities, improved wastewater processing, research into lowering the cost of desalination and – yes – expanding existing dams and building new reservoirs to increase the capacity to catch the earlier runoff that is no longer held by mountain snowpack."

ClimateWire, 2008

- "California water agencies that rely on the Colorado River have committed billions of dollars to develop water management programs as part of the state's overall strategy to live within its legal entitlement of 4.4 million acre-feet of Colorado River water per year. These programs, which range from canal linings to water transfers to new groundwater storage projects, are essential to achieving the region's long-term goal of maintaining a reliable supply from the Colorado River."

Association of California Water Agencies website, 2009





What Needs to Be Done?

- Start immediately in building a peripheral canal to move water around the Delta to satisfy both economic and environmental goals—a proposal that has received at least qualified support from many of the state’s water agencies, Governor Arnold Schwarzenegger, the Delta Vision Committee, The Nature Conservancy, the Department of Fish and Game, and a panel of outside experts that have been working under the auspices of the Public Policy Institute of California
- Spend the remaining \$2.6 billion from the 2006 state water bond and propose a new bond measure to fund much-needed supply and environmental projects
- Invest in new above-ground and underground water storage projects, including new dams and the use of recharge ponds that allow water to filter into groundwater basins, or aquifers. These recharge ponds are usually located close to rivers where coarse sands and shallow aquifers allow water to reach the basins quickly
- Modernize the federal Endangered Species Act and other laws and regulations to allow water-related projects to proceed while protecting species and their habitats
- Evaluate long-term threats to the Delta levee and conveyance system and pursue actions to reduce risks to the state’s water supply and the environment
- Defend California’s water rights on the Colorado River and oppose changes to the 1968 law that would compel California to accept more shortages during droughts



What Are Some Drawbacks?

- Adding more canals and dams will take a major investment in time and money with no guarantees that the dams will be in the right places or that any water will be available to flow through the canals
- Adding water capacity without unbiased, science-based water management will only intensify the political competition for water

Would You Be Willing to Accept Any Trade-offs?

Would you support Approach One EVEN IF it meant that the increased taxes and bond expenses would slow our economic recovery?



Leadership Needed in Approach One

Effective bipartisan state legislative leadership is essential to make the actions of Approach One achievable. The Office of the Governor can exert strong advocacy with state legislators, using updated information from state and federal agencies, while taking this message to the people to build public support. State and federal agencies don’t have the authority to make these sweeping water policy and infrastructure decisions, nor do they have the power to fund the large projects that must be undertaken. Approach One requires effective top-down leadership.

But...this may be possible only if state government is completely reorganized through a citizens’ constitutional convention or if all of the provisions in the 1978 Proposition 13 are completely reversed, including the requirement of a two-thirds majority in both legislative houses for tax increases.

What values and principles have you found to be the most helpful as you’ve thought about and discussed Approach One?

“Battles over water in the West are always about something more. At their most elemental, they are about survival.”

Bettina Boxall, 2007

“A man from the west will fight over three things: water, women and gold, and usually in that order.”

Senator Barry Goldwater, AZ

“If there is magic on this planet, it is contained in water.”

Loren Eisley, The Immense Journey, 1957



Good to the Last Drop

California needs a culture of wise water use and a goal of local water self-sufficiency, where it's possible. Water conservation shouldn't be practiced only when shortages occur...water is a precious resource all the time. Innovative water conservation methods already exist, and more will be discovered when Californians choose to take personal responsibility for their basic human need for clean water, for water to grow their food, and for water to sustain the beauty and health of our environment. Californians need to make wise water use an automatic and daily personal and community practice.

Water conservation is ultimately a personal and local choice. State standards can be set, but local peer pressure and accountability are needed to make wise water use a cultural norm. Decentralized and localized water projects can make efficiency in supply and conservation in use powerfully persuasive in gaining local public support. When local conservation leads to local savings and these savings are passed on to local consumers, more innovative methods are encouraged, and the cycle of conservation learning and practice continues.

- "As the nation's largest water user with a vast water transportation and conveyance infrastructure, California has a series of water systems that are uniquely energy-intensive, primarily due to pumping requirements to deliver volumes of water long distances, across mountain ranges and over high elevations. The State Water Project, the nation's largest state-built water conveyance system of reservoirs, lakes, power plants, pump stations, canals, tunnels and a 444 mile-long aqueduct, is the largest single user of electricity in the state."

Letter by John K. Hawks, California Water Association, 2006

- "Water savings achieved through conservation and efficiency improvements are just as effective as new, centralized water storage and are often far less expensive."

Pacific Institute, 2008

- "We can create water savings that insure the future success of agriculture in California, and it can be done without adversely affecting the economic productivity of the agricultural sector."

Craig McNamara, owner of Sierra Orchards in Winters, CA, 2008



What Needs to Be Done?

- Reduce California's dependence on transported water, just like we aspire to reduce U.S. dependence on foreign oil, to save millions of dollars for Californians by reducing the energy expenses involved in transporting surface water large distances
- Mandate state-wide water conservation standards for everyone, setting water efficiency standards like fuel efficiency standards for vehicles and like energy efficiency standards for appliances, and state-wide installation of water meters on all surface and groundwater users with tiered rate schedules
- Assess new housing development "impact fees" to charge the costs of expanded water-treatment facilities and increased supply needs, requiring up-front payment included in new home prices or taken out of developer profits
- Run desalination plants to supply water to local communities all along the Pacific Coast with power from wind turbines like in Australia, and expand opportunities for public-private partnerships to speed up project delivery and reduce costs
- Maximize local water self-sufficiency in all areas of California to create sustainable, reliable water supplies and to protect rivers and streams for healthy ecosystems
- Implement the comprehensive water recycling policy that was negotiated in 2008, including water quality safeguards and a streamlined process for using recycled water for irrigation and groundwater recharge

What Are Some Drawbacks?

- Our water needs are too great...we can't conserve our way out of this huge water crisis
- The proposed decentralization in this approach is good for those areas that already have abundant water resources, but it doesn't serve the drier and more isolated areas very well

Would You Be Willing to Accept Any Trade-offs?

Would you support Approach Two EVEN IF it meant that some private entrepreneurs would end up making lots of money in providing water conservation services?



“Thousands
have lived without
love, not one
without water.”

W.H. Auden

“Irrigation of the
land with seawater
desalinated by fusion
power is ancient.
It’s called rain.”

Michael McClary

“Don’t throw away
the old bucket until
you know whether
the new one
holds water.”

Swedish proverb

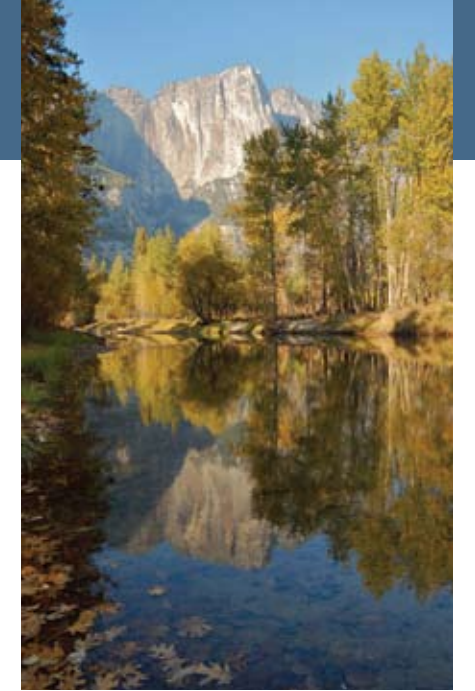
Leadership Needed in Approach Two

Innovative and entrepreneurial leadership at the local level is essential to make the actions of Approach Two achievable. The Office of the Governor can work to build networks and partnerships, integrating grass-roots organizers with local, county, state agencies in the public, private and non-profit sectors. Municipal, county and state agencies can create scale-appropriate water projects, and state-wide research can focus on what works as they discover, share and encourage innovative conservation practices for local application. Approach Two requires effective bottom-up leadership.

But...this may be possible only if significant public funding is allowed to flow through local, non-profit conservation organizations and if some privatizing of water management functions is allowed, like for water treatment, water reuse, and coastal desalination.

What values and principles have you found to be the most helpful as you’ve thought about and discussed Approach Two?

You Can’t Fool Mother Nature!



California needs a new ‘agile’ and non-political water management system to respond quickly and efficiently to changing conditions and scientific research. Many people are frustrated that many water-related decisions in recent years have been made by judges as a result of special-interest lawsuits or by state and federal agencies where partisan bias is assumed. Vast monitoring systems currently exist that produce detailed real-time data, but this valuable science-based information is seldom used in ways that inspire confidence. Californians need a water management system they can trust.

Urgent and important decisions need the best possible foundational information. Fish and wildlife habitats deserve careful stewardship where science replaces politics. People across California need to know that water decisions that affect their lives are being made as an application of critical thinking, not lobbying. A state-wide water clearinghouse can provide a timely response to changing water conditions with total transparency so everyone can inspect and question the criteria used to make each decision.

- “Water rights in California are use rights. All waters are the property of the state. A water right in California is a property right allowing the use of water, but it does not involve ownership of the water.”
Bureau of Land Management, Water Rights Fact Sheet, 2001
- “Urban areas will have to get used to even more water rationing. Farmers may have to consider planting less-thirsty crops. The state is going to have to keep a close eye on how water is being bought and sold, in order to prevent the possibility of pricing shenanigans.”
San Francisco Chronicle, 2008
- “The California Delta affects everybody...two thirds of all Californians rely on Delta water, and it irrigates 45% of fruits and vegetables grown in the U.S.”
Water Education Foundation, 2008





What Needs to Be Done?

- Create an independent water clearinghouse, fashioned after the existing 2009 Drought Water Bank and the California Independent System Operator (ISO), a not-for-profit public-benefit corporation charged with operating the majority of California's high-voltage wholesale power grid...this is the single most valuable water system in the world, and it deserves comprehensive and careful management
- Actively plan and prepare for dramatic changes in the Delta ecosystem. Water managers in Delta projects should plan for climate change, rising sea levels, permanent levee failures, and new invasive species
- Reform and clarify water rights provisions in the California Constitution to state that all surface water and groundwater belongs to the people, and that all public water must be put to the highest beneficial use
- Food production in California is a national security priority, so effective and efficient water management in support of food production is essential
- Integrate flood management into the state-wide water clearinghouse to balance risk and opportunity
- Use taxpayer dollars to fund public benefits...like ecosystem investments...and let water users pay to expand their supplies

What Are Some Drawbacks?

- We don't need another bureaucracy to make common sense decisions about water distribution...our current methods are still serving the needs of most water users
- The actions in this approach don't increase the supply of water, nor do they decrease the use of water...coordination won't effectively create a stable water system

Would You Be Willing to Accept Any Trade-offs?

Would you support Approach Three EVEN IF it meant that people with water flowing through their land ended up with water shortages because their water is sent to other places to fulfill the greater good for the state?

Leadership Needed in Approach Three

Leadership with agile response to change and a commitment to coordination is essential to make the actions of Approach Three achievable. The Office of the Governor can work to create a non-profit, independent water clearinghouse to manage California water with science, not politics. Local and state agencies can focus their attention on the flow of timely and accurate water flow and water need data, so the water clearinghouse can balance agricultural, urban and environmental interests. Approach Three requires non-partisan and coordinated leadership in the science of water management.

But...this may be possible only if the public chooses to create a water management system with efficiency based on research, science and best practices rather than continuing to trust partisan politics, special-interest lobbying and a willingness to compromise water needs in negotiations that include other state issues.

What values and principles have you found to be the most helpful as you've thought about and discussed Approach Three?

*"When the well is dry,
we learn the worth
of water."*

Benjamin Franklin

*"By means of water, we
give life to everything."*

Koran, 21:30

*"Water links us to our
neighbor in a way more
profound and complex
than any other."*

John Thorson

*"Water flows uphill
towards money."*

*Anonymous saying
in the American West,
quoted by Ivan Doig in
Marc Reisner, Cadillac Desert,
1986*

Reflecting on the Forum

In this forum conversation, we explored three different approaches in “navigating California’s water priorities.” Though the approaches overlap in some respects, they each suggest different priorities for action that would bring different benefits and trade-offs. It’s important to take a few minutes to ‘unpack’ some of your thoughts and feelings as you reflect on the whole forum experience...about what was said and about what you feel should be done.

- What comments or points made during our forum stand out in your mind as most memorable?
- What surprised you? What ideas did you hear that were new for you?
- What were the most important components of our California water dilemma that we DIDN’T discuss much?
- Judging from our conversation here, how well do you feel we understand the problems and decisions we face around California water?
- Did we find any foundational values...ones that were helpful in more than one of the approaches...for actions everyone can live with?
- Can we identify any shared sense of purpose or direction from our conversation?
- What actions that we discussed in our forum are most likely to have the greatest impact?
- What actions would be the most efficient in terms of time, resources, and public will?
- Very briefly...what, if anything, are you going to do about our water problems?
- Again, very briefly...who else needs to talk about this issue...in this way?

