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Dam Fights and Water Policy in California: 1969-1989

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DAM FIGHTS AND WATER POLICY
IN CALIFORNIA: 1969-1989

also
Judge Terrence M. Finney's decision in
Mono Lake Water Rights Cases

The American River Decision: Balancing Instream
Protection with Other Competing Beneficial Uses
by
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INNOVATION IN WESTERN WATER LAW
AND MANAGEMENT

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WATER policy in California has been through many transitions since the prior-appropriation doctrine was first developed in the mid-nineteenth century. The rise of irrigated agriculture, the growth of coastal cities with their demands for water-storage projects, and the rapid increase in water-related outdoor recreation since World War II have all led to shifts in emphasis and, sometimes, to very dramatic changes in legal doctrine within the state. In many instances the evolution has been provoked by a highly publicized controversy over the proposed construction or the operation of a dam or related facilities. These dam fights have served to highlight the underlying clash in values regarding the best use of water and to give focus and life to what otherwise might have remained rather abstract policy debates.

In this century California's most famous dam fight undoubtedly was that over San Francisco's project in the Hetch Hetchy Valley of Yosemite National Park. That valley was regarded by many, foremost among them John Muir, as one of the jewels of the Sierra Nevada, comparable in beauty to Yosemite Valley itself. Muir and the still-young Sierra Club fought hard to preserve Hetch Hetchy Valley from the water project, but to no avail. Los Angeles had built its Owens Valley project, other urban areas in California would in the near future be enjoying water from the Mokelumne River and the Colorado River, and San Francisco's plans for the Tuolumne River could not be defeated by Muir. There was an important dam fight, one which had a major impact on national-park policy. But it did not lead to any significant change in water policy in the state.

Dam fights in California in the last 20 years, however.
have had very different outcomes. Some major water development proposals have been defeated altogether and are today no longer live possibilities. Even more important, perhaps, is the way some of the dam fights have led to a distinctively more preservationist and environmentally sensitive water policy. In that regard, none has been more important than the dispute over Dos Ríos.

Dos Ríos: Development of a California "Wild and Scenic" River System

Dos Ríos was a large dam and reservoir proposed for the Middle Fork of the upper Eel River on California's north coast. It would have been a major source of water supply for the State Water Project, with a storage capacity of over seven million acre-feet of water. To understand its significance, one must understand something of the history of state involvement in water development in California.

During the early decades of the twentieth century, the major players in California water development were water districts and cities. A multitude of districts developed the rivers of the Sierra Nevada as sources of irrigation water supply, while cities and special districts like the East Bay Municipal Utility District (EBMUD) and the Metropolitan Water District of Southern California (MWD) brought water hundreds of miles to their urban service areas. Engineers for the state of California were on the sidelines, but they were busy making plans to emulate the districts and the cities by developing projects in the Sacramento Valley to supply water to agricultural areas in the San Joaquin Valley to the south.

These plans for a major state water project, however.
met many frustrations. The fact that a state water project would bring with it public power caused serious political problems in the 1920s. Although these were overcome during the Great Depression, by then state officials had concluded they would not be successful in selling the bonds necessary to finance a state water project. As a consequence, the state’s Central Valley Project (CVP) was turned over to the federal government in 1935. Ultimately it was constructed by the U.S. Bureau of Reclamation, which impounded water not only at Shasta Dam on the upper Sacramento River, but also later at Trinity Dam on the Trinity River on the north coast. That water is brought by tunnel eastward to the Sacramento River, so as to join the Shasta Dam water, most of which is exported to the San Joaquin Valley.

After World War II, with the state economy recovered and with many large landowners restive over restrictions in federal reclamation law designed to ensure that federally developed water be limited to family farm enterprises, state officials again developed plans for a water project. The principal supply features of the state project, initially widely known as the Feather River Project but now termed the State Water Project (SWP), paralleled much of the CVP: a major impoundment facility in the Sacramento Valley, this one on the Feather River near Oroville; use of river channels to convey released water to the Sacramento-San Joaquin Delta; pumps to lift water from the Delta into an aqueduct heading south; and an off-stream storage reservoir in the San Joaquin Valley, to be shared with the CVP. California’s legislature endorsed these initial features of the SWP in 1959, and with approval by the people of the financing in 1960, construction of the project got underway.

By 1964 the California Department of Water Resources (DWR), which had been created in 1956 to design, build, and operate the SWP, decided that the first additional supply facility for the SWP should be on the north coast. Just as the CVP had gone to the Trinity River, the SWP would go to the Eel River, where there had been serious flood problems which the U.S. Army Corps of Engineers...
The principal aqueducts which supply Southern California. (Courtesy of the Los Angeles Department of Water and Power)

The south shore of Mono Lake. (Courtesy of Ray Borton)
Wanted to remedy. After several years of studies, in 1967 the DWR entered into a memorandum of understanding with the Army. The Corps would design, construct, and operate the Dos Rios Dam and Reservoir, while the DWR would contract for the project's water supply and would construct conveyance facilities to the Sacramento River. There the north coast water would join that from the Feather River for supply of the various SWP contractors.

Opposition to Dos Rios came from several sources. Regional tensions remained from the vote to approve the financing for the SWP — the Burns-Porter Act had received public affirmation by only a very narrow margin, with all northern counties voting against except for Butte County, where Oroville Dam was to be constructed. Environmentalism had developed very strongly in the late 1960s: 1969, the year when Governor Ronald Reagan first expressed reservations about Dos Rios, was the year Congress, with hardly a dissenting vote, approved the National Environmental Policy Act. Local opponents of the dam mounted an effective campaign, publicizing their concerns to a statewide audience. Spiraling cost estimates were a major difficulty. And, apparently of greatest importance to the gubernatorial decision, Indians whose lands at the reservoir site would have been flooded were strongly opposed.

Thus, astoundingly to many observers of California politics, the energetic director of the DWR lost the debate over Dos Rios to the conservationist Secretary for Resources. A conservative governor sided with the opponents of a dam which SWP supporters said was badly needed to meet the water-supply commitments undertaken contractually by the DWR. Opponents led by rancher Richard Wilson had succeeded in Sacramento in the sort of dam fight John Muir had lost in Washington. Alternative water projects which would protect the Indian lands were studied, but in 1971 the whole idea of an upper Eel River project was abandoned.

Dos Rios, moreover, was more than elimination of a particular site from active consideration for a water facility. It signaled a radical change in the fundamental water policy of the state, from one of wholehearted commitment to water project development to a policy which treats a free-flowing natural condition as the best goal for many of the state's important stretches of river. The defeat of Dos...
The contrast between the water policy of the 1928 constitutional amendment and that of the 1972 Wild and Scenic Rivers Act could not be more stark. The former eschewed "waste" of fresh water to the sea; the latter declared, as the act's fundamental policy, that "certain rivers which possess extraordinary scenic, recreational, fishery or wildlife values . . . shall be preserved in their free-flowing state . . . such use of these rivers is the highest and most beneficial use and is a reasonable and beneficial use of water within the meaning of . . . the Constitution." By 1972, it was the prayers of the preservationists which were answered. The fight over Dos Rios Dam had precipitated a major change in the state's water policy.

The Mono Basin: Emergence of the "Public Trust Doctrine"

Many of California's dam fights have presented the question whether or not to build a proposed water project. Hetch Hetchy and Dos Rios are leading examples. Another, a so-far defeated project proposed first as a CVP-SWP joint facility and later as a feature of the SWP, was the Peripheral Canal, designed to convey water from the Sacramento River along the eastern edge of the Sacramento-San Joaquin Delta to the pumps at the Delta's southern edge. But some dam fights have posed the question whether the operation of an existing water project should be significantly modified. The Mono Basin controversy is one of those, and like the Dos Rios fight it has brought a substantial change in water policy. This has happened even before the "dam fight" itself has been completed.

The Mono Basin was targeted for water supply purposes...
over 60 years ago by the Los Angeles Department of Water and Power (DWP). Later, a series of dams and aqueducts was built to form a northern extension of the DWP's Owens Valley project. They impound and convey an average of about 100,000 acre-feet of water a year from several of the streams which empty into Mono Lake, a highly salty water body which provides habitat for significant numbers of bird life. The project provides over 15 percent of the Los Angeles water supply, and it also generates power for municipal use.

Research on the environmental consequences of the DWP's Mono Basin project indicates continued diversions will likely cause serious disruption of bird nesting sites, destruction of the food chain of various species of birds and significant air pollution related to the alkaline dust left behind as the level of Mono Lake falls. The National Audubon Society and other environmental groups as a consequence brought suit in 1979 to force a drastic curtailment in the export of water from the basin. The principal legal theory advanced was that the "public trust doctrine," an ancient concept of public access rights heretofore largely confined to disputes over various types of shorelands, requires that result. Subsequently, California Trout, an organization devoted to the advancement of trout fishing, also sued on the basis of certain Fish and Game Code provisions to obtain augmented flows of water in the stream stretches below the DWP dams and above the lake.

Although in no case is the final outcome certain, it appears the legal and political attacks on the DWP's Mono Basin projects will ultimately succeed in forcing more water to be released downstream by the DWP, both to meet the long-dormant Fish and Game Code provisions successfully invoked by California Trout and to meet the public trust requirements raised by the National Audubon Society. Last year the California Court of Appeal concluded that the State Water Resources Control Board (SWRCB) should attach fish-protective flow requirements to the licenses held by DWP for operation of its Mono Basin projects, and the California Supreme Court has denied a hearing in the matter. In 1983 the latter court unanimously approved Audubon's theory that the exercise of appropriative water rights is subject to limitation in order to protect public trust values, including that of preservation of wildlife habitat. Furthermore, in 1989 the trial court in the Audubon case issued a preliminary injunction requiring that the level of Mono Lake be maintained at approximately its current level, which means for the near future the DWP will likely have to curtail water exports from the basin. Finally, in September 1989, legislation was enacted which provides up to $65,000,000 in state funds to help to protect Mono Lake, in part by assisting the DWP to find replacements for some of the water and power foregone to raise the lake.

Thus, although the final chapters have not been written, the current situation is promising for those who initiated the Mono Basin dam fight. But as with Dos Rios, the ensuing changes in state water policy may be even more significant.

To understand the policy consequences of Mono Basin developments, one must again recall the heavy emphasis in earlier years on promoting water projects. The constitutional language on maximum use and the need to avoid "waste to the sea" has been mentioned, as has the way the Wild and Scenic Rivers Act effectively abolished that
policy for certain river segments. But that act left intact the earlier policy for the majority of the state's waters. One significant legislative move toward instream flow protection for those waters was the amendment of the Water Code to specify that fish and wildlife enhancement and recreation are beneficial uses of water, but that change was insufficient to persuade the courts to order the SWRCB to consider applications to appropriate water where no water project was contemplated. Furthermore, although recommendations for systematic instream flow protection were made by a blue-ribbon commission, they were rebuffed by the legislature. A complicated water-resources initiative which included similar measures was soundly defeated in November 1982.

Thus, as of 1982, for waters not covered by the Wild and Scenic Rivers Act, the best instream flow protection which could be anticipated was from conditions placed in the water right permits of conventional appropriators. Some such permit conditions existed, but generally only for recent projects. Older projects such as that in the Mono Basin seemed untouchable.

All that has changed in the policy aftermath of the Mono Basin controversy. The public-trust doctrine now permits challenges to all water projects which are operated in a way that seriously impacts fish, wildlife, recreation, and other public values related to navigable water. Even where a measure of instream flow protection had been achieved through permit conditions, as in the Sacramento-San Joaquin Delta, that protection may be strengthened and/or broadened as a result of application of the public-trust doctrine. And in many other cases where such permit conditions are nonexistent or inadequate, integration of public-trust doctrine limitations may be required. Even federal facilities like Trinity Dam, a CVP dam which has seriously damaged the fisheries of the Trinity River, are not immune to challenge.

New Melones: Subjecting Federal Projects to State Controls

Those who challenged construction plans for the Dos Rios project in the late 1960s and the way the DWR operates its Mono Basin project in the 1980s took on some
of the most powerful water interests in California. Their successes have done much to change water policy and water politics within the state. But both the SWP and the Mono Basin project are dwarfed in significance by the CVP; the giant federal project which moves in excess of six million acre-feet of water from one place to another in California. CVP water, in fact, represents about a third of all the water developed by the Bureau of Reclamation in the West.\footnote{14}

For decades after the federal takeover of the CVP in 1935, construction of various elements of the project went forward with the wholehearted support of California state officials. Section 8 of the Reclamation Act of 1902, pursuant to which the CVP has been built and operated, provided for the Bureau of Reclamation to acquire its water rights in accordance with California water law, but this seems to have been regarded as strictly a pro forma exercise. The occasional judicial decisions on Section 8 seemed to indicate that at most state law would serve to define private rights in waters for which the Bureau might have to pay compensation.\footnote{15} Indeed, it was common practice for CVP projects to build the dam first and get the water rights later, when the dam was ready to be closed. That practice, technically in compliance with the requirements of California water-rights law, reflected the comfortable assumption among both federal and state water officials that whatever permits were necessary, for the project would be forthcoming with conditions acceptable to the Bureau of Reclamation. The New Melones Dam fight changed all that, and it brought us some sharply different expectations about state control of federal water projects.

Although a dam at the New Melones site on the Stanislaus River, less than a mile below "old" Melones Dam built by local water districts, had been mentioned in state water studies as early as the 1920s, it was first authorized as a federal Corps of Engineers project in 1944. At that time, the project was to be relatively small, with reservoir capacity of only 450,000 acre-feet. Its principal purpose was to be flood control.

New Melones I, as the project authorized in World War II may be called, became a victim of several sorts of bureaucratic difficulties. Ever since 1936, federal flood-control projects had been subject to benefit-cost analysis, with a mandate that they be constructed only if benefits exceeded costs. This was difficult to show for New Melones, if flood control were to be the major project purpose, yet to broaden the purposes to include water supply for irrigation and other uses ran the risk that Congress might conclude that the dam should be built by the Corps' arch-rival, the Bureau of Reclamation. The Bureau, in fact, was actively proposing a New Melones Dam to supply irrigation water to a new CVP aqueduct proposed for the east side of the San Joaquin Valley. To complicate matters even further, normally supportive state water officials this time were saying additional storage for irrigation water supply was not needed in that part of the state, and local water districts preferred further local water development to any Bureau project.

Thus New Melones I never got underway, and by 1954 the Corps of Engineers had put it on the back burner. Both the Corps and the Bureau maintained their interest in the site, however. The Corps continued to massage the benefit-cost numbers, and the Bureau to push for more and more storage capacity to support ever-grander plans for expanded surface water supplies for San Joaquin Valley farms. By 1962, the interagency dispute was resolved by a decision to have New Melones — or "New Melones II" — built by the Corps but operated by the Bureau. By now, it was to be a massive dam, some 625 feet in height, with a 2,400,000 acre-foot reservoir. The latter would inundate Melones Dam, as well as the Stanislaus Canyon farther upstream. Political opposition in the region largely vanished after serious flooding in the Stanislaus River basin at the end of 1964. By 1965 initial construction funds for New Melones Dam were approved by Congress, and by 1966 construction was underway. The first phase of the dam fight, in which no environmental objections were heard, was over.

The agency skirmishing prior to the approval and initial funding of New Melones Dam was conventional and largely outside the view of the general public in California. Not so the dam fight which erupted in the 1970s — an unconventional, emotional, and highly publicized battle which some regard as California's most important environmental controversy of the decade. The effort was twofold: first, to try to stop construction of a partially built project — an outcome, for example, which had occurred for the Cross Florida Barge Canal, but which was certainly a rare event. Second, once construction of the massive dam had been completed, to delay or possibly prevent forever filling of the reservoir beyond the point of inundation of the Stanislaus Canyon. The point of limiting the reservoir to "moderate" storage, about one-third of what Congress had authorized, would have been to preserve recreational uses and environmental values in areas which otherwise would be inundated by the reservoir.

Central to the concerns of opponents of New Melones Dam was whitewater boating in the Stanislaus Canyon. Although commercial whitewater trips did not begin on the Stanislaus River until 1962, by the mid 1970s the river was one of the most rafted in the United States. It offered water of moderate difficulty, which provided recreation for many thousands of people. A particular feature was its use for groups of disabled persons. In effect a major recreational asset had been developed upstream concomitantly with the planning and initial construction phases of a major water project downstream, and the collision between the two was dramatic.\footnote{16}

Many tactics were tried by those who sought to protect the Stanislaus Canyon from inundation. The Environmental Defense Fund was enlisted to bring a National Environmental Policy Act (NEPA) lawsuit in 1972 over the adequacy of the New Melones Environmental Impact Statement. An
In 1967 by a merger of state water-rights and water-quality entities. The SWRCB in the early 1970s began to show a greatly increased interest in the recreational and environmental amenities of rivers and in the detrimental — often, devastating, particularly regarding fish and wildlife — impact on those amenities of water projects. One manifestation of that interest was SWRCB action in 1973, by which time the New Melones Dam was already a political hot potato. The board had before it the Bureau of Reclamation’s application for water rights to store water behind the partly built dam and to divert water for various uses throughout the vast CVP service area.

Ordinarily an application for water rights for still another CVP unit would have been processed in a routine manner, with little fanfare. But New Melones was different, and the SWRCB was different from the former State Water Rights Board. New Melones had widespread opposition, and the SWRCB was newly concerned with the “instream” question — the value of water flowing in place in a river, including water like that in the Stanislaus Canyon, even though its recreational advantages were greatly augmented by impoundments and releases at upstream power facilities. The SWRCB in 1971 had set state water-quality objectives for the Sacramento-San Joaquin Delta more stringent than the relevant federal water-quality standards, in a decision which purported to bind the CVP. In 1972 the board demanded augmented flows in the lower American River as a condition of the permits for Auburn Dam, another CVP facility. And in 1973, on New Melones, the SWRCB made filling of the reservoir for irrigation water supply other than the satisfaction of prior rights contingent upon later board approval of a specific plan for use of the water.

The stage was thus set for a showdown on the legal authority of a state to limit a federal water project. Section 8 of the Reclamation Act, which as noted above in the 1960s had been read as providing minimal state control of reclamation projects, had been brought to center stage by the New Melones Dam battle. Lawsuits were filed on the Delta and American River permit conditions as well, but it was that on the New Melones permit conditions that was to come before the United States Supreme Court. And in 1978 the bitterly divided court revived Section 8 by holding that California’s permit conditions would stand, unless particular ones could be shown to be contrary to a “clear Congressional directive.” On remand to the lower court, the conditions have to be examined one by one.

Unfortunately, the doctrinal victory of 1978 by the SWRCB was not enough to save the Stanislaus Canyon. Ultimately the Ninth Circuit upheld all 25 of the board’s permit conditions, but severe flooding largely filled the reservoir, and the SWRCB’s plans to force release of the impounded flood waters brought threats from the legislature to strip the board of its permit conditioning authority. The board backed down, the permits were amended, and the reservoir stayed full.

The policy consequence of greatest importance from the fight over New Melones Dam is being felt not on the Stanislaus River but on other important waterways in the state. Federal recalcitrance at meeting state water-quality standards for the Delta, for example, has greatly diminished. A Coordinated Operations Agreement has been signed by the DWR and the Bureau of Reclamation with regard to the SWP and the CVP, and federal legislation has directed the Bureau to meet state water-quality standards, at least up to a certain point. And the Bureau has indicated a possible willingness to comply with state law requirements for the American River, scene of still another series of dam fights. In effect, although those who fought to protect the whitewater of the Stanislaus Canyon lost what was precious to them, they set in motion a process which has made the U.S. Bureau of Reclamation much more a partner in achieving California environmental objectives than it ever was before.

The American River

Dos Rios brought California its Wild and Scenic Rivers Act. Mono Basin — “Mono Lake” to most people — brought the public trust doctrine to California’s water-rights law. New Melones brought the Bureau of Reclamation at least partly into compliance with California environmental standards for water projects. The last “dam fight” for consideration here involves disputes over the flows of the American River. These disputes are on-going, and the principal policy outcome is difficult to discern. Wild-and-Scenic-River considerations, the public trust doctrine, and federal compliance with state standards are all implicated.

The American River arises in the central Sierra Nevada, flows through California’s capital city, and joins the Sacramento River just north of the Sacramento-San Joaquin Delta. Although it is home to some local water supply projects, surprisingly until after World War II the American River had no CVP project. That changed with the construction of Folsom Dam in the 1950s and the Folsom-South Canal a few years later.

Folsom Dam, with its downstream regulating dam, was designed to be complemented by the much later Auburn Dam, which was to have a storage capacity of two and a
half million acre-feet. But after the Auburn Dam site was cleared and the foundation begun, the work was stopped for further review of seismicity problems. In the face of mounting costs at a time of enormous federal budget deficits, difficulties in working out the financing when greater contributions are being sought from state and local beneficiaries, and continued vehement opposition from environmental groups, however, it is currently uncertain if the dam will be built. Flooding in the lower American River basin in 1986 increased the pressure for construction, but also produced suggestions for a "dry" dam that would serve only flood-control purposes. Presumably that outcome would be much like having had a version of New Melones Dam designed to have a mostly empty reservoir which would not interfere with upstream recreation.

Folsom-South Canal originally was to be the first leg of the ill-fated east-side CVP aqueduct mentioned above. Twenty-five miles had been completed when an injunction on NEPA grounds brought construction to a halt. Some contracts have been entered into by the Bureau of Reclamation for Folsom-South water deliveries, however, including one for up to 150,000 acre-feet annually with the East Bay Municipal Utility District (EBMUD). That contract, like the canal itself, has been the object of litigation. Thus the American River dam fight is both about whether and how to construct water-project facilities and about how to operate those which are or may be built. It is similar to both phases of the New Melones fight, or to Dos Rios and Mono Basin rolled into one.

The Dos Rios and New Melones water-project controversies are both over — one down for the preservationists, one down for the water developers. The water-policy outcomes of each can be studied and discussed. The Mono Basin battle is not over, but its initial contribution to California water rights law is specific, well known and important. Much more difficulty, however, attends any attempt to pin down the long-term water-policy significance of the American River wars. In effect we have both half-built projects and half-completed policy developments, and the latter have emerged in the context of some most peculiar litigation.

The Environmental Defense Fund (EDF) has been a major opponent of both the Auburn Dam and the Bureau of Reclamation-EBMUD contract. The EDF first challenged the contract with two arguments, both rooted in California's constitutional requirement that all water rights be limited to reasonable beneficial use. One argument was that the EBMUD should reclaim — recycle — its water supply from the Mokelumne River before seeking additional water from the American River. The second was that any new water should come from below Sacramento, i.e., from either the Sacramento River or the Delta, in order to preserve flows in the American River below the Folsom-South point of diversion.

The EDF's lawsuit survived an initial objection from the EBMUD that the constitutional restrictions do not apply to rights to water held by contract, but then the Supreme Court of California tossed both parts of the suit out on two different theories. The waste-water reclamation argument, it was decided, could not be entertained by the courts until the EDF had taken it to the SWRCB — a theory of "primary" agency jurisdiction. And the point-of-diversion argument could not be considered because the EBMUD's contract was with a federal entity, and consequently it could not be subjected to norms derived from state law.

Just when the EDF's EBMUD suit appeared finished, however, along came the New Melones decision from the U.S. Supreme Court — the one that breathed new life into Section 8 of the Reclamation Act and opened the door to state law norms binding federal projects absent a "clear" Congressional directive to the contrary. The implication for the American River litigation was obvious: the U.S. Supreme Court vacated the decision of the California Supreme Court, and the EDF was able to resume its American River lawsuit.

Timing is important in war, love-making, and certainly in litigation. The EDF's timing, by skill or by luck, was perfect in having the American River case go to Washington just after the New Melones decision. On return to the state courts, its timing again proved to be faultless in waiting several years to pursue the case. Apparently the delay occurred as the EDF lacked the resources to enter the expensive and time-consumptive trial phase of the case. But by the time matters got moving again with a heavy resource commitment from an intervenor, the County of Sacramento, the California Supreme Court had announced its public-trust ruling in the National Audubon Society's Mono Basin lawsuit. Suddenly, the complexion of the American River case was greatly changed. No longer was it a matter simply of applying the "reasonableness" mandate of the state constitution. Rather, that was to be done while at the same time complying with the new mandate to "integrate" conventional development norms of water-rights law with the protectionist norms of the public-trust doctrine.

How to do all this with any kind of methodological coherence is a massive problem. For the environmentalists, it is largely a matter of ensuring that the public-trust values newly made applicable to the exercise of water rights go beyond merely ensuring consideration of matters such as fish and wildlife impacts. Environmentalists seek different outcomes in resource-allocation decisions, outcomes substantively more favorable to the preservation of the public values of water in place. For the water developers, it is conversely a matter of diluting the public-trust doctrine, of finding ways to make the values of water development continue to prevail over those of nondevelopment, to resist any suggestion of a "priority" for instream uses.

The next step in litigation over the validity of the EBMUD's contract for American River water was a reference by the trial court to the SWRCB. As is standard practice in such instances, the board was asked to advise
the court on the facts and the legal issues. The SWRCB in effect advised the court that as the EBMUD's diversions would have minimal adverse impacts on American River public-trust resources, there was no basis for modifying the diversions. The board emphasized the importance for water quality of diversion for municipal use from the American River rather than the Delta, and the futility of trying to modify the EBMUD's planned diversions when the Bureau of Reclamation was not involved in the lawsuit.

Once again, things looked grim for the opponents of the EBMUD Folsom-South point of diversion. An agency designed to use its specialized expertise to resolve water questions had in effect said to the court there is no problem to concern you on the lower American River. No need to try to integrate water-rights norms and public-trust norms, because there is no significant threat to the public-trust resources.

Exceptions to the SWRCB's report as referee are now before the trial court, and at the moment this is written, only a "preliminary tentative decision" has been issued. That decision, however, is one of great interest, for while it agrees with the board that the Folsom-South point of diversion should not be modified, it also concludes that any EBMUD diversions should be subject to respect for a rather stringent flow regime in the lower American River. In other words, the court does not agree there is no significant threat to public-trust resources, and it interprets the public-trust doctrine as requiring feasible resource-based levels of protection to be implemented.

Even more interesting as a policy outcome of this litigation than the public-trust conclusion, however, is what is said about reasonableness. Recall that the constitutional reasonable beneficial use limitation originated as a way to implement a policy of maximum water development. "Conservation" was to occur to put water behind dams and to avoid the dreaded "waste to the sea." Over time, however, that policy objective has been complemented by the contrary objective of letting water flow unimpeded in its natural channel — witness the unchallenged policy foundation of the California Wild and Scenic Rivers Act. Now a court seems to be saying some unimpeded flow is not only necessary to meet public trust requirements, but also is required to satisfy constitutional imperatives. Perhaps the most important water policy contribution of the American River litigation, therefore, will be once and for all to sever "reasonable beneficial use" from notions of water development. Just as the meaning of "equal protection" in the federal constitution changed, as social conditions changed, from sanctioning "separate but equal" racially segregated public schools to mandating integrated public education, so "conservation," "waste," and "reasonableness" are terms whose meaning is changing with new perceptions of what is in society's best interests.

**Dam Fighting and Water Marketing**

My objective thus far has been to explore the relationship between particular dam fights in California and evolution in the state's water policy: Dos Rios and the initiation of a state wild and scenic rivers system; Mono Basin and application of the public-trust doctrine to water rights; New Melones and greater state control over Bureau of Reclamation projects; the American River and, it seems, a new understanding of the constitutional reasonable beneficial use mandate. A final important policy development, however, has been stimulated by dam fighting in general, rather than any particular dam fight. "Water marketing" is the name which in the 1980s has become popular for this phenomenon. Although that term is sometimes used for initial allocations by a wholesaler such as the Bureau of Reclamation, the current policy debate is over reallocation of established water rights by market mechanisms (e.g., water for money or water for water).

Water marketing is not, in fact, brand new in California or in Western water law in general. Most states with prior-appropriation water rights have for a long time held that changes may be made in the place of use, type of use, and point of diversion of the water, provided that third-party water-right holders, including juniors, are not injured by the change. Water boards and courts have concerned themselves with "change applications," and scholars have examined what used to be known as the "transferability" of water rights. Studies have shown considerable transfer activity in places like the Sever River area in Utah and the Colorado-Big Thompson Project in northern Colorado. In California, transfers have been common in the adjudicated ground-water basins on the southern coastal plain. An earlier example of surface water marketing was the acquisition by Los Angeles of water rights in the Owens Valley.

Despite these precedents for water marketing, in many cases problems exist. Market transactions are facilitated by precision in the definition of the right being sold — precision which often is not provided where rights are measured by actual past beneficial use rather than by a decreed amount. "Beneficial use" in principle does not include wasted water, yet whether waste has occurred is generally not examined until a transaction is proposed. Hydrological complexity may make the calculation of impact on third-party right holders exceedingly difficult — transaction costs can be greatly increased by an expensive "depletion analysis." Third parties who are not water-right holders — equipment suppliers in the agriculturally-oriented town where nearby farmers want to sell water rights to a distant city, for example — may object, and the fact that most water rights are administered by an agency may mean a forum for their objections is readily available. Entities created to acquire a water supply for their area may display considerable institutional inertia when faced with the suggestion they sell some of their water rights to an entity somewhere else. For these and doubtless other reasons, historically those who seek an augmented water supply have looked much more frequently to new water development than to a water marketplace.
Dam fighting changes that. In the time since the Dos Rios proposal in California, the noncontroversial large-water project has vanished from the scene. Environmentalists, fiscal conservatives, local activists, and others are certain to organize against any proposed new major water development and vociferously to put forward their objections. Water development is now as problematic as trying to work out a deal to purchase water rights, and any water acquired by development may be considerably more expensive than water obtained by the purchase of water rights. Hence in California, as elsewhere in the West, there is greatly increased interest in water marketing.

In at least a crude sense, this phenomenon in California in the last 15 years is related to continued dismal prospects for new water projects. Leaders of the water-development community, for example, were convinced that the drought of 1976-1977 would lead to construction of the Peripheral Canal. Instead, legislation authorizing the canal and a number of other water projects was placed on the ballot and resoundingly defeated in 1982. Legislation in 1980 adopting water marketing as a policy objective for California went forward, however, with little objection. Indeed, in 1982 it was supplemented by a legislative directive to state agencies to work to facilitate market transactions in water rights.

The most publicized water “marketing” transaction in California in recent times involves the MWD and the Imperial Irrigation District (IID). In the 1950s the MWD’s chairman had been interested in acquisition of some of the massive amounts of water from the lower Colorado River which service farming areas in the Imperial and Coachella Valleys. That idea died, however, with the birth of the SWP. But the defeat of the Peripheral Canal revived interest in the concept, one which was strongly supported by the Environmental Defense Fund. Defeat in the legislature of an alternative to the Peripheral Canal presumably increased the MWD’s interest in an Imperial deal even more. Years of negotiation between the MWD and the IID finally produced an agreement. Whether that agreement technically constitutes “water marketing” is disputed, but the essence is water from the IID in return for money from the MWD. The latter will provide the financing for physical improvements in the IID system and will receive the salvaged water for a term of 35 years.

The MWD-IID transaction now serves as an inspiration for more large-scale reallocations of water in California. The MWD is working with the Arvin-Edison Water District in the southern San Joaquin Valley on a possible reallocation. Water marketing is slowly gaining credibility as an important part of California’s water scene, despite continuing ambivalence or hostility from many in the state’s farming and environmental communities. There is some tension between water marketing and the instream-protection policy spawned by the Dos Rios, Mono Basin, New Melones, and American River controversies, but nonetheless it seems the growth in water marketing, like the increase in instream flow-protection, has been provoked in large part by opposition to water development.

Conclusion

Dam backers and dam fighters typically display very different preferences for the use of our limited Western water resources. Dam backers want to “put the water to work”—to maximize beneficial uses such as irrigation, municipal water supply, and power production. To them a big dam is a thing of beauty, a manifestation of success in the conquest and manipulation of a hostile environment. Dam fighters, on the other hand, mix an interest in instream recreational amenities with a larger concern for preservation of parts of our natural heritage as places for repose, for spiritual satisfaction, and for observation of nature at work in its own way. Dam fighters want some rivers to run free, to sustain riparian vegetation and wildlife, to nourish estuaries. For them it is anathema to speak of water “wasting to the sea.”

Neither of the two camps, of course, presents an absolutist position. Dam backers often love to go trout fishing on a free-flowing stream, and most dam fighters surely enjoy the benefits of a reliable municipal water supply, an irrigated agricultural economy, and inexpensive hydropower production. But the differences are pronounced, and they are important. Both groups may support “balance” in our water policy, but with radically different notions of what an appropriate balance entails.

California’s experience of the past 20 years suggests that dam fights highlight the underlying clash in values and often lead directly to significant changes in water policy. On balance, the California dam fighters seem to have gained strength in this period, even though they have lost some major battles. They have given new prominence to stream protection and water marketing. Wise management is replacing unrestrained development as California’s dominant water policy.

NOTES

5. California Constitution, Article X, Section 2 (formerly Article XIV, Section 3). California Public Resources Code, Section 5093.50.
Professor Harrison C. Dunning is a graduate of Dartmouth College (1960) and Harvard Law School (1964). Since 1969 he has been teaching courses in water law and other natural resources law subjects at the University of California at Davis. In 1977 and 1978 he took leave from UC Davis to serve as Staff Director of the Governor’s Commission to Review California Water Rights Law. In 1981 and 1982 he served on the California Water Commission, and since 1984 he has chaired the Board of Directors of the Bay Institute of San Francisco. He has published numerous articles on various aspects of Western water law.
The motion of plaintiffs in Alpine County No. 566, National Audubon Society et al. (collectively, "Audubon") and the State Lands Commission, for renewal of the preliminary injunction in this case came on for evidentiary hearing beginning June 21, 1990, and was submitted on January 17, 1991. F. Bruce Dodge, Patrick J. Flinn, and Bryan Wilson appeared on behalf of Audubon. Jan Stevens and Michael Valentine, Deputy Attorneys General, appeared on behalf of the State Lands Commission. Adolph Moskovitz, Janet Goldsmith, Thomas Birmingham, and Kenneth Downey appeared on behalf of defendant Department of Water and
Power of the City of Los Angeles. Michael Gheleta, United
States Department of Justice, appeared on behalf to the
United States as Amicus Curiae and Paul Bruce appeared on
behalf of the Great Basin Unified Air Pollution Control
District as Amicus Curiae.

The Court, having considered the testimony and
evidence submitted in support of and in opposition of the
motion, finds and orders as follows:

1. Audubon and the State Lands Commission have
proven that a threat of irreparable harm, combined with a
probability of success on the merits of this dispute,
justifies entry of this injunction. Accordingly, the
Department of Water and Power of the City of Los Angeles
("DWP"), together with its agents, employees, and others
acting in concert with DWP, are ordered, subject to the
availability of water, to allow to pass through its
diversion facilities in or around Rush Creek, Lee Vining
Creek, Parker Creek, South Parker Creek, and Walker Creek,
sufficient water to bring the level of Mono Lake to 6377
feet above sea level (NGVD '29 datum) and to maintain the
lake at or above that elevation during the pendency of this
order as described in paragraph 5 infra.

2. The releases are subject to the following
conditions:

a. In no event shall DWP be required to
release water to Mono Lake in an amount which will cause
the level of Grant Lake Reservoir to fall below its
elevation on March 31, 1989.
b. The maximum flow rates provided by the Preliminary Injunction filed December 6, 1989, ¶¶ 1(b) and (c), for Rush Creek and Lee Vining Creek shall no longer be in effect. Instead, in accordance with this Court's second amended order regarding interim flows (and subject to DWP's ability to control flows), the maximum flow for Rush Creek shall be 165 cubic feet per second ("cfs"); the maximum flow for Lee Vining Creek shall be 160 cfs; the maximum flow for Walker Creek shall be 15 cfs, and the maximum flow for Parker Creek shall be 21 cfs.

3. In the event that the level of Mono Lake exceeds 6377 feet above sea level (NGVD '29 Datum), DWP may store, divert, export, or make such other lawful use of any such water not reasonably projected to be needed to maintain the lake at that 6377 foot elevation.

4. Plaintiff's undertaking in the amount of $1,000 shall be maintained during the pendency of this injunction.

5. This order shall continue in effect according to the terms of, and pursuant to, the Stipulation and Order Regarding Scope of Preliminary Injunction Ruling, filed February 19, 1991.

Dated: April 17, 1991

[Signature]

Hon. Terrence M. Finney
Superior Court Judge
This is the second preliminary injunction sought by petitioners from this court to require respondents to restore and maintain the level of Mono Lake at 6377 feet above sea level. The first preliminary injunction issued in August 1989, had it been met, would have resulted in the level of the lake being restored to 6377 feet and maintained there through the 1989-1990 runoff year, ending March 30, 1990.

The parties have agreed that pending this decision the court's previous injunctive order will remain in effect. They have further stipulated with some qualifications, that this ruling of the court
shall remain in effect until the Water Resources Board has completed the public trust hearing for which it is now preparing.

The court heard many days of testimony, mostly from expert witnesses, read numerous briefs, reviewed several hundred exhibits and re-read the closing arguments of counsel totalling some 448 pages of transcript. In addition, the court in the company of the parties, has visited the Mono Lake Basin.

It should also be mentioned that during this same time frame, the court conducted a hearing on the issue of the appropriate interim stream flows mandated by the decision of the Appellate Court in what has been commonly referred to as Cal. Trout II, (California Trout, Inc. v. Superior Court [1990] 218 Cal.App. 3d 187).

Those interim stream flows affect Lee Vining, Parker, Walker, and Rush creeks. The court's interim stream flow order contains details that need be of no concern here. Suffice it to say the net result compels the respondents to release approximately 60,000 acre feet of water yearly down those four creeks.

LEGAL CONSIDERATIONS

Cal. Civil Practice Code §526 provides, in part:

An injunction may be granted...

2. When it appears by the complaint or affidavits that the commission or continuance of some act during the litigation would produce waste, or great or irreparable injury, to a party to the action;

3. When it appears during the litigation that a party to the action is doing or threatens, or is about to do, or is procuring or suffering to be done, some act in violation of the rights of another party to the action respecting the subject of the action, and tending to render the judgment ineffectual;
4. When pecuniary compensation would not afford adequate relief....

Some of the factors the court must weigh in determining whether a preliminary injunction should issue before trial on the merits are the following:

1. The general purpose of a preliminary injunction is to preserve the status quo until final determination on the merits;

2. Whether the party seeking the injunction is likely to prevail on the merits;

3. The granting of a preliminary injunction is a drastic solution to a pendente lite problem;


STATUS QUO

During the final argument the court asked counsel to state what they contended the status quo to be. Mr. Moskovitz, counsel for respondent Department of Water & Power, stated

"We believe the status quo is that we are permitted to continue to divert water as we had been doing when the lawsuit was filed, and when the motions were made, subject, however, also to whether that might cause irreparable injury.

"THE COURT: I understand that. But I just -- so your concept of what the status quo was when the court was asked to intervene is to allow you to export water as you had in the past, I take it, subject to the interim stream flows now?

"MR. MOSKOVITZ: Oh, yes. Yes.

"THE COURT: All right. Thank you."


Mr. Dodge, counsel for petitioner Audubon responded

"I want to respond to that question and then we'll have three points. The answer to Your Honor's question..."
is that the status quo to be preserved is 6377 feet when we applied for the preliminary injunction.

"I would also note that regardless of what status quo was to be preserved, one can still seek a preliminary injunction where the test for a preliminary injunction is met, which is basically balancing of the equities and the probability of success on the merits, which is something that I'm going to address a little later." (RT, January 17, 1991, page 105, lines 2-11).

Mr. Jan Stevens, counsel for petitioner State Lands Commission had previously stated what he believed the status quo to be

"And the third issue, of course, was the maintenance of the status quo. And in that respect we don't accept the argument that continued diversions resulting in continued harm to the Lake in effect constitutes the status quo. The status quo, we believe, is to attempt to preserve the status of the Lake in its present condition or better. And to attempt to preserve the Public Trust values that exist in the Lake."

The respondents' position as to what the status quo is seems to the court to be flawed. To claim the right to divert water as had been done before the lawsuit was filed, absent irreparable harm begs the question. Clearly the water diversions by respondent before the lawsuit was filed caused irreparable harm. Counsel for respondent argues that experimenting with the ecology and environment of the Mono Basin does not cause irreparable harm because it can always be repaired. Streams can be rebuilt, the level of the lake can be lowered and then raised again, gull populations can be decimated by predators using land bridges to what had been islands of protected habitat and then recover. Such an argument is bottomed on the assumption that to constitute irreparable harm the harm must be permanent. No authority for such a position is cited and the court doubts any can be found. One simply has to ask about the lost public trust use of Lee Vining,
Parker, Walker and Rush creeks to put to rest the argument that to be irreparable, a harm must be permanent.

For years both Parker and Walker creeks were partially or completely dewatered. The fisheries in those creeks were destroyed; the stream beds were, in places, obliterated and riparian vegetation was lost. During the same period Lee Vining and Rush creeks were also adversely affected in a similar but less severe fashion. The loss for years of those excellent trout streams denied the citizens who would have recreated by fishing those streams the right that the public trust was intended to protect. The loss of that recreational experience to thousands of citizens over a substantial number of years is irreparable and even though the streams are in the process of being restored, those lost recreational opportunities are permanent.

In fairness, the court should note that counsel acknowledges that respondent cannot in the future continue to divert the same amount of water it has in the past and that there is a level below which the lake should not be allowed to drop. However, the argument then goes on to say that for various reasons respondent should be allowed to continue diversions, allowing for the interim stream flows ordered by the court, until the public trust hearings have been completed by the Water Resources Board in December of 1992.

**RESPONDENTS' POSITION**

Avoiding the technical language of the experts the court understands respondents' position to be that a minimum lake level of 6377 feet as ordered by the court in 1989, is not necessary to protect the Mono Lake environment against irreparable harm.
there would be no ecologically significant change if the level drops to approximately 6373.5 feet, the level that could reasonably be expected on October 1, 1993, if the injunction is denied.

To be more specific, respondent argues that if the injunction is denied and the lake level is allowed to fall as low as 6373.5 feet, there would be no material adverse effects on the limnology of the lake; that is, lake chemistry, the algae, the shrimp, or the alkali flies.

There would be no adverse effects on the birds, the California Gulls, the Grebes and the Phalaropes.

There would be no adverse effects on the air quality, the aesthetics, recreation; and further changes in ownership between the State and Federal Government would be immaterial and clearly not serious or irreparable.

On the other hand counsel argues the adverse effects on respondents' water supply if the 6377 foot lake level must be restored and maintained would be substantial over the next two or three years. It is claimed there would be a loss of 96,500 acre feet of water resulting in an increased cost to respondent of more than $34 million including the loss of revenue from hydroelectric power and the cost of fossil fuels.

In summary, counsel argues the status quo should be maintained unless serious or irreparable injury would result if the level of the lake were not maintained at 6377 feet, and that status quo has been the diversion of water since 1941.

**DISCUSSION**

A comment concerning respondents' position should be made. Counsel on more than one occasion admonished the court that this
is a preliminary injunction proceeding and not a public trust balancing process. However, counsel did not explain how the court should go about weighing the petitioners' probability of success on the merits, as it must, without taking public trust considerations into account.

The court believes Mr. Stevens definition of status quo is correct and bears repeating: "The status quo, we believe, is to attempt to preserve the status of the lake in its present condition or better. And to attempt to preserve the Public Trust values that exist in the lake." (RT, January 17, 1991, page 113 lines 23-28, and page 114, lines 1 & 2).

In its 1989 decision the court identified two distinct species of harm absent an injunction. The first harm was the fact that the nesting grounds of the California Gull population would be adversely impacted. (emphasis added)

It seemed logical to the court that if 50% to 70% of the California Gulls at Mono Lake nested on those four islets and they become land bridged because of a drop in lake level, that would have an adverse impact on their nesting grounds. Respondents' expert, Dr. Jehl, also believed that habitat was limiting but apparently no longer holds that opinion. It is not clear why Dr. Jehl has changed his opinion, but it may well be the fact that in the 1980's the population survived and seemed to maintain itself. In 1990, for reasons no one is prepared to explain, the largest ever fledgling population at the lake was documented.

The court does not want to seem flip in its comments, but after hearing all the experts' testimony concerning the California Gulls at Mono Lake, the court was as much impressed with what they
did not know or could not explain as with what they did know. There are good reasons for that. Dr. Jehl, who is an eminent authority on birds, is still studying the California Gull. As noted until recently he believed habitat was limiting; he has apparently changed that opinion. No expert could testify with clarity whether the California Gull population at Mono Lake was self-sustaining, or whether immigration was necessary to sustain a healthy colony. As more study is done, Dr. Jehl, Dr. Winkler, and Mr. Shuford will undoubtedly add to the body of knowledge concerning the California Gulls at Mono Lake. If history repeats itself, opinions may continue to evolve and change.

What history does teach is that when islands are landbridged and coyotes can invade, the gulls abandon those islands as nesting grounds. How quickly they return appears to depend on a number of factors which the experts may not yet understand. To allow continued landbridging of some or all of the four islets will have a negative impact on the nesting grounds. Whether the California Gulls would continue to flourish as they did this year or suffer a substantial population decline is unknown. It would seem logical that the public trust would dictate that the nesting grounds be protected. That the gulls be allowed to nest and rear their chicks in the safety of the islets, for there are no guarantees that if the nesting grounds for 50% to 70% of the California Gulls at Mono Lake is lost for even a short time that whatever the conditions were that caused the bumper crop of fledglings in 1990, which we do not understand, will also be repeated. To put it somewhat differently there is simply too much we don't understand about the
California Gull and its nesting habits to allow us to roll the dice by landbridging the islets and hoping for the best.

The second harm the court noted in its 1989 decision dealt with air quality problems caused by dust storms. These dust storms occur when fine particles of dust are put in the air by a process known as saltation. It is beyond dispute that air quality standards have on occasion been violated in the Mono Basin. What percentage of time or days this occurs is open to honest debate. However, there are some facts that are not open to dispute.

Because of the gentle slope of the lake bed at the elevation it is now, and will be as the lake drops, if the injunction is not granted, a large increase in exposed playa will result. The more playa that is exposed the greater fetch the wind has and the greater the area of exposed efflorescent crust. These are the factors that petitioners argue will guarantee increased violation of the air quality standards in the Mono Basin.

Respondents compare Mono Basin air quality with the air quality in other air quality districts and conclude that because the Mono Basin air is of substantially better quality, there is nothing to worry about. Respondents' experts testified that there are several reasons there should be no concern on the court's part if the standards are exceeded.

First, they testified that the standards are only slightly exceeded on any given occurrence and that those occurrences are rare. Further, because of the direction the wind blows the dust is generally away from any population center. In fact, it blows over largely uninhabited land. The last argument they tender is that for the dust to cause the harm sought to be avoided by the
standards, a person would have to breathe the air 24 hours a day for
70 years; thus, they argue the health risks from the dust storms
are de minimis and ought to be ignored by the court.

It must, however, be recognized that the Public Trust values
have not been weighed and that any exceeding on an ongoing basis
of the air quality standards caused by the lowering of the lake
level, even though it occurs only occasionally, violates the
standards lawfully adopted by the Great Basin Air Quality Pollution
Control District. There is little doubt that if respondent were
applying for a new permit and license to divert water or to build
a facility that would cause the air quality standards to be
exceeded, those permits would not be forthcoming until provision
for some offsetting mitigation measures had been made. Does the
status quo require the court to allow two more years of occasional
violations of air quality standards? One may assume that with the
increased exposure of playa and the increased wind fetch the
incidents of dust storms may increase and they may become more
intense; e.g., the standards may be violated more frequently and
the extent to which they are exceeded may increase.

Aside from the cancer risk created by the airborne dust
particles containing arsenic, there is also the aesthetic
consideration. Certainly on those days when dust storms occur they
are not pleasing to the senses. Although this may to some seem a
minor consideration, to the tourist hoping to visit an area of
great scenic beauty it may constitute a real inconvenience.

As to the effect the denial of an injunction would have on the
limnology of the lake, the court does not believe there is enough
credible evidence one way or the other on which to base an informed decision.

Absent an injunction the aesthetics of the Mono Basin will be adversely affected. The dust storms have already been mentioned; in addition large bog-like areas will result along the shoreline of the lake, making it difficult for many visitors to access much of the lake. The court does not concern itself with what some expert has opined should be the ideal visual experience or at what level the lake provides the greatest scenic resource. The court seriously doubts the average tourist would recognize a difference in any scenic value over the next two or three years if the injunction was denied.

One last area concerning the status quo should be touched on by the court. Because of the Federal Relicition Doctrine, the state has lost to date about 14,500 acres of land. If the injunction is denied and the lake level drops further, because of the gentle slope of the lake bed at elevations between 6370 and 6380 feet, another several thousand acres of land will pass into federal ownership. The State Lands Commission holds this property in trust. The State Lands Commission could not allow the loss of thousands of acres of public lands without committing waste. One may well ask what difference does it make if the land is under state or federal ownership? The difference is that under state ownership it is protected by public trust values; under federal ownership it is not.

Counsel for respondent sees this concern as a red herring. The assumption is made that if the land passes to federal ownership when the lake level drops it may well pass back to state ownership
when it rises. The logic of that assumption has not been tested in the courts. While it may be reaching, it is not beyond possibility that the federal government would do something along the shoreline of the lake that would be contrary to public trust values. For instance, the federal government could build a research or testing facility that would be incompatible with the scenic value of the lake. History supports this supposition. After World War II the United States Navy constructed a facility on the shore of the lake, the concrete abutments of which still exist. The remains of that facility, in the court's opinion, do not enhance nor are they compatible with the scenic values the public trust would seek to preserve.

While the court agrees with respondent that any adverse impact caused by federal ownership is remote, it nevertheless is possible. The long and short of it is the fact that if the injunction is denied several thousand more acres of state owned land will be lost to public trust protection.

BALANCING THE EQUITIES

If the injunction is denied and the lake is allowed to recede further, there is an obvious threat to its value as an economic, recreational and scenic resource. (National Audubon Society v. Superior Court [1983] 33 Cal.3d 419 at 431). The question is whether the threat is of irreparable harm and is this harm when weighed against the loss to respondent justifiable. National Audubon supra at page 426 instructs "that before state courts approve water diversions they should consider the effect of such diversions upon the interests protected by the public trust, and
attempt, so far as feasible, to avoid or minimize any harm to those interests."

The potential harm caused by the denial of an injunction has already been discussed. Is it feasible to avoid or minimize that harm? The answer is yes. The question then becomes whether it is equitable to do so in light of respondents' historic use of diverted water and the cost to it resulting from the loss of that water.

Recall that respondent argues if the injunction is granted and the level of the lake is restored to 6377 feet, it will lose some 96,500 acre feet of water and incur a cost of 34 million dollars. Petitioner Audubon hotly contests those figures.

First it should be stated that the interim stream flows of approximately 60,000 acre feet of water will not restore the lake to 6377 feet. To restore the lake to 6377 feet, the level ordered by the court in 1989, will require approximately 63,000 acre feet of water. In reality the status quo would be a lake level of 6377 feet had the respondent been able to comply with the court's 1989 order. No fault can justifiably be placed on respondent when the water was not available to allow it to comply. But the court is not convinced that respondent should now be able to complain that since it was not able to comply with the court's previous order it would be unfair to make it do so now. Further it should be noted, that if the mandates of Cal Trout I and II had been complied with in a timely fashion, even less water would have been needed to comply with this court's 1989 order. (California Trout, Inc. v. State Water Resources Control Board [1989] 207 Cal.App. 3d 585);
If the court’s 1989 order had been met and the lake was at 6377 feet, the water necessary to maintain it at that level pending the Water Resources Board’s hearings, in addition to the water already mandated by the interim stream flows, would be less than respondent gives to the operation of Cain Ranch for the raising of sheep. The court uses the word "gives" advisably. The evidence established that respondent receives about $30,000 a year for the lease of Cain Ranch. Along with the use of the land itself, (using respondents' own values of water), respondent supplies ("gives") the lessee approximately 10,000 acre feet of water worth in excess of two million dollars. If such a use of water does not constitute outright waste, it seems to make little sense when one weighs the water needs of respondent.

When one places the interests at stake in this action in the balance, there is little doubt the equities favor petitioners. Once the level of Mono Lake is restored to 6377 feet, and the interim stream flows are maintained as ordered by the court, the cost to respondent to maintain 6377 feet is de minimis. One could argue that the cost should be measured by the $30,000 per year respondent receives for rent on Cain Ranch.

Before issuing its 1989 injunctive order the court carefully weighed the cost to respondent against the harm to the environment of Mono Basin. The court found then as it does now that a national environmental, ecological and scenic treasure should not be experimented with even for a few brief years. Without an injunctive order much of the public trust values that must be
considered would be ignored and ultimately go unprotected for years beyond 1992. For reasons stated before, the court believes this constitutes irreparable harm.

It should not be forgotten that 6377 feet is simply a minimum level necessary to protect the resources at Mono Lake. It may well be that after the public trust values have been weighed by the Water Resources Board, it may conclude that 6377 feet is not adequate to protect those values. That is a decision this court need not make. The court, however, does believe that petitioners stand an excellent chance in the State Water Board hearings of establishing that 6377 feet is an absolute minimum elevation required to protect the environment and thus protect the public trust value. Further, the court believes petitioners have an excellent chance of prevailing on the merits at trial.

CONCLUSION

It is feasible to minimize the harm to the Mono Basin environment. Ecological values can be protected. Irreparable harm can be avoided. The cost to respondent is nominal when one considers what is at stake. Other water is available to respondent even during these drought conditions. The likelihood of petitioners prevailing on the merits is good. The status quo as set forth above must be preserved. A Preliminary Injunction shall issue.

Dated: April 17, 1991

TERENCE M. FINNEY
Judge of the Superior Court
The American River Decision:
Balancing Instream Protection with Other Competing Beneficial Uses

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ABSTRACT: Litigation on the American River in California has focused upon the conflict between instream resources and other consumptive beneficial uses. In that litigation the court has fashioned a "physical solution" intended to accommodate the competing uses rather than deciding between them. The success of the physical solution will depend, in large part, on the cooperation of entities not parties to the litigation and on the parties' own willingness to be bound by the limitations imposed by the court. There are indications, in this regard, that most involved in the effort are moving forward carefully but in a manner consistent with the court's determination.


INTRODUCTION

Balancing consumptive uses with instream protections is one of the major environmental challenges of the 1990's. In California most streams have been appropriated with little, if any, consideration of the potential instream consequences of the appropriation. With the development of a strong environmental movement, in the late 1960's, came a greater degree of sensitivity to the environmental consequences of water diversions. This sensitivity has led to consideration of instream needs in the current appropriation process.

Resolution of conflicts between consumptive and instream needs, however, is not always easy or possible. The increased need for domestic water supplies in California's growing population centers, coupled with stringent regulation of drinking water quality, has compounded the complexity of these conflicts. Simple allocation solutions, to the extent that they ever existed, no longer solve the problems posed because the quantity of water taken from the stream is no longer the sole question that needs to be answered. In addition to quantity is the question "from what location shall the water be taken?"

Entities with a responsibility to supply public drinking water argue that water must be diverted from the "best available source," a public health concept that is based upon the physical reality that the higher up in a watershed one goes to divert a water supply, the fewer contaminants or pollutants there are to be dealt with through the treatment process. The consequences of applying this theory on a broad scale are obvious. Increased upstream diversions not only affect areas of great environmental sensitivity, but also reduce or eliminate flows throughout a stream system.

Resolution of this conflict was the focus of litigation, in California, that pitted the protection of instream values on the American River against the water quality needs of a major San Francisco area water agency,
the East Bay Municipal Utility District (EBMUD). In that litigation, the court fashioned a "physical solution" that may provide a means of dealing with conflicts of this nature.

FACTUAL BACKGROUND

The American River rises in the Sierra Nevada and flows westward to its confluence with the Sacramento River. It was on the American River that John Marshall, in 1848, discovered gold, and it was between the American and Sacramento rivers where the capitol of California was established and now prospers. The American River has been the focal point of significant California and American history and has been the subject of landmark judicial decisions. For example, in People v. Goldrun (66 Cal. 155, 4 P. 1150 [1884]), the California Supreme Court determined that mining sediment associated with placer mining in the motherlode was a nuisance that impeded the utilization of water for the State's infant agricultural industry. As a consequence, the court enjoined the upstream mining practices, to the extent they interfered with the use of water for agriculture, thereby aiding agriculture's rise as California's number one industry. People v. Goldrun was also cited and accepted by the California Supreme Court as an early assertion of California's public trust doctrine in the Mono Lake case (National Audubon Society v. Superior Court, 33 Cal.3d 419 [1983]).

In recent years, the American River has been the focus of intense water development activities. Figure 1 is a schematic map of portions of the American River, showing the relative location of water development facilities and proposed diversion points as well as areas of environmental concern.

WATER DEVELOPMENT

Folsom Dam was authorized in 1949 as a United States Bureau of Reclamation (USBR) multiple purpose reclamation project (Pub. L. No. 81-356). As part of this legislation, Congress also directed the USBR to determine if further water development on the American River was possible. As a result of the USBR's continued work, the Auburn-Folsom South Unit was authorized by Congress in 1965 (Pub. L. No. 89-161). The main features of this project were Auburn Dam and Reservoir (upstream from Folsom Dam) and the Folsom-South Canal, a conveyance facility located downstream of Folsom Dam.

By 1956, Folsom Dam was completed and in operation. Construction of the Folsom-South Canal commenced in 1968, and 27 miles of the canal were completed. However, in 1972, further construction was enjoined until the USBR completed an adequate Environmental Impact Statement (EIS) (See NRDC v. Stamm, 6 ERC 1525, 4 Evt'l. L. Rep. 20, 463 [E.D. Cal. 1974]). To date, the Department of the Interior has not completed this EIS. Construction of the Auburn Dam started in 1967. Concern over the seismic safety of the dam, however, brought the project to a standstill. The dam has never been completed and the present estimated cost to complete construction is far in excess of the authorized cost ceiling. Finishing Auburn Dam will require additional authorization and appropriations by Congress before further construction can proceed.

AMERICAN RIVER AND AMERICAN RIVER PARKWAY

The 23 miles of the American River below Folsom Dam (the lower American River) is the major focus of environmental concern. The City of Sacramento and the Sacramento County, from as early as 1915, planned for development of recreational
sites along the American River. After the closure of Folsom Dam, pressure for urban development adjacent to the river spurred efforts to preserve open space along the river. In 1959, Sacramento County established a Department of Parks and Recreation to develop a detailed park plan along the American River. A systematic land acquisition program followed, and by 1986 Sacramento County had acquired over 4,000 acres of parkway land.

Today the American River Parkway consists of a series of 14 connected parks comprising a complete riparian corridor along both sides of the American River from Folsom Dam to the confluence of the American with the Sacramento River. The lower 23 miles, from Nimbus Dam to the river's mouth, are administered by Sacramento County. In 1981 the Secretary of the Interior also designated the lower 23 miles of the American River below Nimbus Dam as a recreational river under the National Wild and Scenic Rivers Act (16 U.S.C. § 1271 et seq.). In 1972, the California Legislature included the same segment in the State Wild and Scenic system (Cal. Pub. Res. Code §§ 5093.50, 5093.54[e]). The lower American River was statutorily designated as a "recreational" river in the state system in 1982 (Cal. Pub. Res. Code § 5093.545).

Recreation

The American River Parkway runs through the center of the Sacramento metropolitan area. The parkway is managed to balance the dual goals of preserving natural or open space and protecting environmental quality within the urban environment, at the same time contributing to recreational opportunities in the Sacramento area, including rafting, canoeing, kayaking, swimming, wading, and fishing, as well as biking, hiking, picnicking, and sight-seeing. The parkway contains both developed parks and areas set aside in their natural condition. The Jedediah Smith Bicycle Trail permits users to bicycle the entire length of the parkway.

Riparian Vegetation and Wildlife

The riparian vegetation acts as a buffer between the lower American River and the surrounding urban development. This vegetation and the river itself are the most prominent features of the Parkway and contribute greatly to recreational experiences. Many species of wildlife use the riparian vegetation for sources of food, cover, nesting sites, roosting areas, and migratory corridors.

The parkway supports a wide variety of
birds and wildlife. More than 220 bird species have been recorded. Sacramento County estimates that 30 mammal species, 13 reptile species, and 6 amphibian species also inhabit the parkway. The riparian habitat is important not only as breeding grounds for resident animals, but also as wintering grounds and migratory corridors for nonresident species. The parkway includes a number of off-channel ponds that have high wildlife value.

Fisheries

The lower American River has 41 reported species of fish. Of these species, nine are anadromous (they live mainly in salt water but ascend freshwater rivers to spawn). The most abundant anadromous game fish that use the river are chinook salmon, American shad, and steelhead trout.

The lower American River chinook salmon run is one of the state's most valuable fisheries, supporting significant commercial and sport fisheries in the Pacific Ocean and in the lower American River. Although some adult salmon may be found in the river year around, the population is mainly the fall-run species. The fall-run adult salmon begin to enter the river in September. Spawning occurs through January, and incubation and rearing of juvenile salmon extends through mid-July.

American shad support a popular sport fishery in the lower American River. The shad fishery draws anglers from throughout Northern California. Adult American shad enter the lower American River in May and June to spawn. Water temperature is a key factor affecting spawning and egg development of American shad.

Steelhead trout support a popular sport fishery in the lower American River. The main run of adult steelhead enter the river in the winter and early spring to spawn. The juvenile steelhead rears in freshwater for at least a year before emigrating to the ocean. The steelhead trout, like the chinook salmon, is a coldwater fish whose various life stages are affected by water temperature.

EFFORTS TO PROTECT INSTREAM RESOURCES

The instream values associated with the lower American River have, of course, been recognized for a long time. Also obvious, for some time, was the intention to divert water from the lower American River for consumptive purposes. Table 1 quantifies the amount of water either under contract or for which entities have requested contracts from Folsom Reservoir. Also shown is the amount of water that is held by entities other than the USBR. Most, if not all, of this water was intended for diversion above the mouth of the American River.

Concerns were expressed about the potential adverse effects of these diversions on the lower American River from the beginning of the USBR's development efforts. In 1958, the California State Water Resources Control Board (SWRCB) issued Decision 893 (D-893), granting the USBR permits for Auburn Dam. The board also reserved jurisdiction for the purpose of formulating terms and conditions relative to flows to be maintained in the lower American River for recreational purposes and for the protection and enhancement of fish and wildlife. These flows were actually established in 1972 by Decision 1400 (D-1400).

In D-1400 flows for fisheries were established at 1250 cfs from 15 October through 14 July and at 800 cfs from 15 July through 14 October. Minimum recreation flows were set at 1,500 cfs. Recreation flows could be eliminated and fishery flows reduced during dry years, assuming the USSR also reduced deliveries to its water supply customers. The flows in D-1400 were based on the assumption that Auburn Dam would be built and apply only to the USBR's Au-
burn permits. Because Auburn Dam has not been constructed, the D-1400 flows are not legally binding upon the USBR, and the lower D-893 flows currently control releases to the river.

In 1972, the USBR entered into a water supply contract with EBMUD. EBMUD’s contract calls for the delivery of 150,000 acre-feet of American River water from the Folsom-South Canal. The only other long-term contract on the Folsom-South Canal is held by the Sacramento Municipal Utility District for its Rancho Seco Nuclear Power Plant. That contract provides for 75,000 acre-feet annually (aaf), although only a small fraction of that water has ever been taken. The EBMUD contract resulted in extensive litigation.

PROCEDURAL HISTORY OF THE LITIGATION

Like many water cases, this litigation has a long judicial history. Filed in 1972 (Environmental Defense Fund, Inc., et al. v. East Bay Municipal Utility District, et al. [Super. Ct. Alameda County, No. 425955]), the case has been before the California Supreme Court on two occasions, and before the United States Supreme Court once, all on pleadings issues. The actual trial of this matter commenced in 1984, but the case was then referred to the SWRCB, as referee. The Reference proceedings, before the SWRCB, required 3½ years and resulted in a five-volume report, to which all parties took exceptions.

The original Complaint was filed by numerous environmental groups, including the Environmental Defense Fund (EDF) and Save the American River Association (SARA), and it focused on allegations that EBMUD’s decision to seek a supplemental supply of water from the American River violated Article X, section 2 of the California Constitution, as well as various provisions of the California Water Code, because of the location of the point of diversion at the Folsom-South Canal, upstream from the lower American River. Shortly after the environmentalists’ complaint had been filed, Sacramento County intervened on behalf of the plaintiffs, adding allegations to those already at issue, focusing on the 23 miles of the lower American River that were used by the public for scenic and recreational purposes, including boating, swimming, and fishing. The County also alleged that it had acquired land and expended funds for a parkway along the lower American River; that the 150,000 acre-feet contracted for by EBMUD, if taken from the Folsom-South Canal, would not be available for flows in the lower American River; and that D-1400 flows were less than those necessary for optimum conditions for fish and recreation.

In its first decision in this case, the California Supreme Court affirmed judgment in favor of EBMUD (Environmental Defense Fund, Inc. v. East Bay Municipal Utility District [1977] 20 Cal.3d 327 [EDF I]). The Supreme Court held that the water diversion issues were preempted by federal law. In 1978, the United States Supreme Court vacated the judgment in EDF I and remanded the case to the California Supreme Court for further consideration in light of the United States Supreme Court’s decision in California v. United States ([1978] 438 U.S. 645) (Environmental Defense Fund, Inc. v. East Bay Municipal Utility District [1978] 439 U.S. 811).

On remand, the California Supreme Court reversed its earlier decision (Environmental Defense Fund, Inc. v. East Bay Municipal Utility District [1980] 26 Cal.3d 183 [EDF II]). The Supreme Court ruled that to the extent the complaints “challenge the location of the diversion point as being violative of California law, there is no federal preemption” (EDF II at 193).

Following the decision in EDF II, plaintiffs filed amended complaints. These complaints alleged that seeking a supplemental supply of water from the American River to be diverted in a manner that would not allow the water to flow down the lower American River constituted an abuse of discretion and was an unreasonable diversion and use of water. The amended complaint was based on the argument that the proposed decision would reduce flows in the lower American River, causing harm to instream values.

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### TABLE 1

**USBR projected 2020 American River service area needs (1,000 acre-feet annually).**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Contractual and water rights entitlements</th>
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<th>Total need</th>
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**Multi-district area**

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**Sacramento County Water Agency**

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<td>FSC—Losses</td>
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**San Joaquin County**

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**City of Sacramento**

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* City of Folsom Water Right (22,000), Southern California Water Co. (10,000).
* Included in Natomas Ditch Diversion.
* Includes 15,000 acre-feet water right (city of Sacramento).
* Reported by Carmichael Water District.

In 1984, based upon the County of Sacramento's motion for an Order Referring Issues to the State Water Resources Control Board, pursuant to Water Code section 2000 et seq., the matter was referred to the SWRCB. Twenty-one specific issues, including both factual and legal matters, were referred to the State Board as referee. After the SWRCB rendered its report, a trial de novo began in the Alameda County Superior Court on exceptions to the report filed by the parties.

THE SUPERIOR COURT'S DECISION

In January 1990 the Superior Court issued its Statement of Decision, in which certain limitations were placed upon EBMUD's ability to divert water upstream from the mouth of the American River. In reaching his decision, the Superior Court Judge, Richard A. Hodge, attempted to achieve a balance by protecting instream interests while accommodating the uncertainties associated with the water quality issues raised by EBMUD. In so doing, Judge Hodge addressed the relative positions of the parties.

Sacramento County's Position

Sacramento County and the other plaintiffs and intervenors asserted the following positions:

1. EBMUD's diversion along and together with other existing and projected diversions will harm instream values in the lower American River.
2. EBMUD has reasonable, feasible alternative points of diversion, downstream from the mouth of the American River, from the Sacramento River and the Delta.
3. Any legitimate water quality concerns that EBMUD may have can be dealt with through treatment or through blending with high quality water EBMUD has from other sources.

EBMUD's Position

EBMUD asserted the following positions:

1. EBMUD's exercise of its contractual right to divert water from the Folsom-South Canal will not cause incremental harm to instream resources.
2. Any cumulative impact of diversions on the lower American River

In November 1985 the Superior Court granted leave to the California Department of Fish and Game to intervene for the limited purpose of addressing issues related to the protection and enhancement of the State's fish, wildlife resources, and associated recreational activities in the lower American River. On 16 June 1986 the California State Lands Commission was also granted leave to intervene on a limited basis related to riparian issues.

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can only be addressed if all existing and future diverters, including the USBR, are involved.
3. There are no reasonable, feasible alternatives to the Folsom-South Canal Diversion, if one considers costs and the concept of "best available source."

THE COURT'S ANALYSIS

In attempting to frame the issues before him, in light of the parties' asserted positions, Judge Hodge stated, "[p]robably no party would disagree with Sacramento County that the focus of this case is on the public trust impacts and constitutional 'reasonableness' of EBMUD's proposal to take water through the Folsom-South Canal" (Statement of Decision at 23).

In California, the public trust doctrine protects ecological, recreational, commercial, navigational, and fishery values in the navigable waters of the state (National Audubon Society v. Superior Court, 33 Cal.3d 419 [1983]). Judge Hodge had to coordinate the public trust doctrine with the "reasonable use" doctrine found in Article X, section 2 of the California Constitution, which requires that (1) waste or unreasonable use or unreasonable method of use of water be prevented, (2) the consumption of water be exercised with a view to the reasonable and beneficial use, and (3) water resources be put to beneficial use to the fullest extent of which they are capable (Statement of Decision at 27-28).

The court, following Audubon, concluded that the first goal of any court in applying these doctrines is to attempt to accommodate the competing interests rather than deciding between them. In adopting this view, Judge Hodge, in essence, accepted the first part of the proposition offered by Sacramento County and other plaintiffs, that the court postulated in its entirety as follows:

1. Audubon requires that in the allocation of water resources, the state has a duty to protect public trust uses whenever feasible, and to attempt, so far as feasible, to avoid or minimize any harm to those interests;
2. EBMUD has feasible alternative diversion sites;
3. Therefore, EBMUD may not divert at the Folsom-South Canal (Statement of Decision at 28).

The court, however, rejected the second and third aspects of the syllogism, that the only way to achieve protection for the lower American River was to make EBMUD divert its water below the confluence of the American and Sacramento rivers. Judge Hodge stated:

[If protection of public trust values can be accomplished consistently with the diversion at Folsom-South Canal, then plaintiffs and intervenors can have no sustainable complaint. In the absence of an unnecessary diminution of public trust values, plaintiff's demand for a different diversion site has no supportable legal foundation. In the absence of harm, plaintiff is not entitled simply to achieve a different diversion site as a question of policy or preference (Statement of Decision at 28).

The goal, therefore, was to find a solution that would avoid adverse effects on the instream values of the lower American River without forcing EBMUD to an alternative location. Assuming this could be accomplished, the court would then not have to face or resolve problems with respect to water quality and costs alleged to be associated with alternative points of diversion.

Judge Hodge chose to reach this goal through adaptation of the doctrine of "physical solution." The traditional application of this doctrine was developed to further the mandate of Article X, section 2 of avoiding the waste of water. The doctrine requires a court to determine, in any water rights litigation, means to avoid waste while at the same time not unreasonably and adversely affecting the vested property rights of the paramount right holder. Judge Hodge adopted this doctrine and applied it to protect instream uses while still allowing EBMUD the option to divert water from the Folsom-South Canal. The court indicated that the physical solution was mandated by Article X, section
2 of the California Constitution, in conjunction with the public trust doctrine and represented "an absolute condition of diversion by EBMUD" (Statement of Decision at 108). The physical solution adopted by the court, in relevant part, is as follows:

**PHYSICAL SOLUTION**

Physical Solution shall be accomplished as follows:

1. EBMUD may divert not to exceed 150,000 acre-feet annually (AM) from the Folsom-South Canal pursuant to its contract of December 22nd, 1970, with the U.S. Bureau of Reclamation.

2. The following instream flow requirements must be met throughout the lower American River as a condition of diversion:
   A. October 15th through February, 2000 CFS;
   B. March through June, 3000 CFS;
   C. July through October 15th, 1750 CFS;

3. An additional 60,000 AFA will be maintained in reserve at the reservoir from mid-October through June for release upon the recommendation of the Department of Fish and Game in response to specific fishery requirements.

4. EBMUD shall use its best efforts to divert as much water as possible during those times when instream flows are least required for the protection of environmental interests and public trust values.

5. The instream flow conditions set forth above are not intended to constitute operational flows that are to be met in every month of every year without regard to the hydrologic conditions that might prevail at any given time. The court anticipates that operational criteria will need to be established, based upon the various hydrologic year types (critically dry, dry, below normal, above normal, etc.) to ensure that Folsom Reservoir is not emptied and that there are flows available in the river whenever possible. However, the court intends that the instream flow requirements set forth above remain the standard that should be maintained to the fullest possible extent. Moreover, the court intends that the instream flow requirements be an absolute limit on EBMUD's ability to divert water from the Folsom-South Canal. When the instream flow requirements cannot be met, EBMUD may not divert any part of its appropriation.

6. Defendants shall not divert water except to meet the demands for customers within the EBMUD utility district.

7. EBMUD shall not market nor sell any part of its water diverted hereunder to any third party.

8. All parties hereto shall cooperate in the development and implementation of scientific studies pertaining to the fish, wildlife and habitat issues which have been identified in this litigation. These studies shall be under the supervision of the special master. EBMUD shall contribute its fair share of the cost of programs to maintain a viable fishery and riparian habitat in the lower American River. EBMUD's "fair share" shall be determined by a comparison with contributions by other users and agencies and upon the recommendation of the special master with regard to individual projects.

9. The court retains jurisdiction for the purpose of implementing the Physical Solution and providing for its modification in light of the scientific studies required in paragraph 8, and in light of the studies and information which may be developed by various of the interested governmental agencies as well as the parties.

10. The court is mindful that the strict adherence to the flow regimen could, in some circumstances, affect carryover storage in Folsom Reservoir and reduce the availability of water for instream public trust uses in subsequent months. It is the intention of the Court, however, to maintain the indicated flow regimen in the absence of convincing evidence, presented through the Special Master, that diversions accomplished during any particular month will adversely affect the ability to meet the Court's mandated flow levels in subsequent months.

11. Notwithstanding any other provisions of this Physical Solution, it is anticipated that during certain "dry year" periods, modification of the flow regimens herein may be permitted in limited circumstances to accommodate EBMUD. At such times of crises, and with the guidance of the special master, the court may temporarily modify the flow regimen if such modification can be effected without substantial harm to the fishery, habitat and other public trust values identified herein. Any such modification will be temporary and only in response to a showing of significant, specific, and immediate health risks to EBMUD. In evaluating circumstances in which a modification may be indicated, recreational in-
terests identified herein may be accorded a lower priority than they would otherwise obtain.

12. The court appoints a special master to aid and advise this court in the implementation of the Physical Solution. His duties shall include the development, coordination and monitoring of scientific research to determine optimum flows, releases, and storage patterns designed to protect the public trust values; the coordination of said studies with those of other agencies; advising the court as to developments affecting the rights of the parties hereto; evaluating dry-year flows and release patterns, and advising the court as to necessary modifications; and such other duties as the parties may request and the court require, consistent with the Physical Solution.

13. Each party may nominate an individual whose responsibility will be to communicate with the Special Master in the implementation of the Physical Solution. Said individuals will communicate regularly with the Special Master and will advance the recommendations of the parties with respect to any matters pertaining to the Physical Solution. Nothing contained in this Physical Solution, however, shall limit the right of the parties to file motions directly with the Court pursuant to its continuing jurisdiction.

The foregoing flow regimen is not merely interim in nature. It is intended as a permanent constitutionally mandated prerequisite to diversion, modifiable only upon the presentation of convincing evidence which demonstrates the need for such modification in accordance with the foregoing provisions of the Physical Solution (Statement of Decision at 108-111).

FUTURE CONCERNS

Judgment in the case was not entered until May 1990. Since January 1990, when the Statement of Decision was issued, the Special Master has been very active in initiating the studies called for within the physical solution. Moreover, Sacramento County and EBMUD have, for an interim period, agreed to evenly split all of the Special Master's costs.

In fashioning such a physical solution, Judge Hodge has in essence challenged all of the parties to work constructively toward a long-term solution to the problems presented. A major issue dealt with in the opinion, but not directly resolved in the physical solution, is the problems associated with cumulative impacts. Cumulative impacts are impacts to instream resources caused by the total diversions within a system as opposed to the incremental impact of any one diversion. Cumulative impacts on the lower American River would include all of the diversions noted in Table 1. In this regard, the court noted:

Finally the evidence is overwhelming that the cumulative impact of EBMUD's diversion along with those consumptive demands projected over the next few decades would cause irreparable damage to the American River, its fisheries and its riparian habitat. Consequently, both Article X, section 2 and [the] public trust doctrine require that this court's physical solution be considered a base line against which any future diversion or appropriation is to be measured. Cumulative impact inconsistent with the physical solution may compel a cessation of EBMUD's diversion. (Statement of Decision at 2-3).

Although the decision itself binds only EBMUD, it is clear that any ultimate solution of the problem will need to address cumulative demands on the river. Such a solution is possible. For example, certain instream flows could be mandated for the lower American River (such as apply to EBMUD) as a prerequisite to additional upstream diversions. This solution alone, however, may not adequately address the entire question at issue.

Other concerns are raised by the physical solution. For example, paragraph 3 of the physical solution reserves 60,000 acre-feet for future fishery releases. The physical solution is not clear about the source of water. Sacramento County has asserted that the water, when required, must come from EBMUD's entitlement of 150,000 afa. This appears to be the only logical reading of the provision, because the court can only control the actions of EBMUD. It cannot order the USBR, which is not a party, to
reserve or release even one drop of water. How the provision would, in fact, take effect is also not clear. EBMUD could be required to hold 60,000 acre-feet in storage from October to June or it could be precluded from diverting water unless the USBR maintains the 60,000 acre-feet in reserve.

Ambiguity over the operation of paragraph 3 may have been intended by the court. A number of provisions within the physical solution appear to read as if the court were establishing instream criteria that must be met regardless of whether EBMUD actually chooses to divert water from the river. In this regard, it appears clear that Judge Hodge intended his opinion and the flow criteria established within the physical solution to be applied as broadly as possible. It also appears that his opinion, although binding only EBMUD, was intended to set a precedent in determining whether, or to what extent, additional diversions would be allowed.

POSSIBLE LONG-TERM SOLUTIONS

Adequately protecting instream values on the lower American River requires relatively high flow rates. Establishing flows at lower rates, without knowing more about the long-term impact of low flows on instream values, runs the risk of destroying those values. High flow requirements reduce the amount of time that water will be available for upstream diversions.

Establishing low flows for interim periods with the ability to increase flows if there are adverse impacts to the instream resource, even if acceptable instream protections are provided, creates great uncertainty for upstream diversions. It may be impossible to justify the cost of an upstream diversion facility without knowing the amount of water that will be available for diversion.

The only real certainty that can be injected into the process is mandating or encouraging entities to locate diversion points as far downstream as possible. This would require analysis of all of the existing and potential cumulative demands on the lower American River (Table 1). A determination would then have to be made as to which diverters could not reasonably and feasibly divert water downstream, as would be the case with most Placer County and El Dorado County demands and some demands within the eastern portions of Sacramento County. Water for these areas would be allowed to be diverted upstream. All other diversions would need to be located downstream. Although these downstream diversions would not ensure adequate flows within the lower American River for instream protection, they could not, of themselves, contribute to instream injury within the lower American River.

In order to facilitate downstream diversions, legitimate concerns with respect to water quality would need to be addressed. A major element of this program would be watershed protection within the greater Sacramento River Basin. This could be accomplished through strict control of both point and nonpoint sources of pollution. Although this appears to be a major undertaking, existing law requires such protection. When this legal mandate is coupled with the fact that more than one-half of the population of California depends on surface water that either originates or is blended with Sacramento River water, the goal of watershed protection neither is nor should be dismissed as unrealistic.

The physical solution established by Judge Hodge has acted as a catalyst for a great deal of activity on the lower American River. The court's Special Master, in conjunction with the liaison group established by the physical solution, has had many meetings to design a workplan for the development and implementation of studies targeting instream flow needs on the lower American River. This group is also considering options to reduce the diversion pressure on the lower American River.

The SWRCB, on its own initiative, and also in response to the Hodge decision, has called all potentially affected parties together in informal meetings and intends to initiate hearings to establish new gen-
eral flow requirements for the lower American River. As part of these hearings, the SWRCB also intends to look at the question of appropriate points of diversion. Currently, there appears to be substantial cooperation between the Special Master, liaison groups, and the SWRCB.

EBMUD has initiated extensive environmental review of its water supply options, pursuant to the California Environmental Quality Act, including a review of all reasonable, feasible diversion and storage options for its American River water supply. This review has the potential of causing EBMUD to abandon its Folsom-South Canal point of diversion in favor of downstream diversion options that may not carry the severe limitations or diversions that exist within the physical solution.

Sacramento County, potentially a very large diverter of American River water, is in the process of developing a water use program that would (1) consolidate and better utilize existing surface water entitlements within Sacramento County, (2) implement conservation measures that would reduce the quantity of surface water needed within the county, (3) identify areas that can reasonably and feasibly be served from points of diversion at or near the mouth of the American River, and (4) develop a conjunctive surface and groundwater program that would allow Sacramento County to reduce or eliminate surface water diversions during dry and critically dry years.

The county's action has, in addition to the positive activities noted above, also created some counterproductive actions by potential upstream diverters. San Joaquin County, asserting that it is not bound by Judge Hodge's decision, has filed water rights applications for up to 322,000 acre-feet of water from points of diversion on the American River upstream from the protected lower river. These applications have been filed in spite of the potential impact that they might have on the instream values of the river and the fact that the county has reasonable, feasible diversion options from the Sacramento River.

In addition to these actions, the intention of the USBR is unclear at this time. Although the USBR has cooperated with the Special Master and the SWRCB, it has not taken a particularly active role in the process. This is somewhat surprising given the fact that it is the USBR that controls the flows on the lower American River.

These last points are of great significance. As noted above, the court's decision binds only EBMUD. As a matter of law, it does not bind nonparties to the litigation, including the SWRCB and the USBR. However, the court did look at the broader issues that exist on the river, and Judge Hodge stated that, in his view, the flow regime imposed on EBMUD was a "constitutionally-mandated prerequisite to diversion." Although any single future upstream diversion by entities other than EBMUD will need to be evaluated based upon reasonable and feasible diversion alternatives, the court has established an extremely strong precedent that cannot be ignored. Indeed, it may be that the precedent established by the decision is so strong that as a practical matter it will in effect bind others not parties to the litigation. That may at least in part be the driving motivation behind the court's establishment of a strong, active Special Master. There is simply no way that the court's decision will be allowed to sit dormant or be ignored by those who have or would like to have a presence on the river.

CONCLUSION

The conflict between water supply needs and instream protection has been addressed on the lower American River. A physical solution has resolved immediate concerns while acting as a powerful aid in addressing broader, long-term problems. The time-consuming and costly litigation that spawned the current activities will have been worthwhile if the parties involved use what was learned through that litigation to assist in solving the remaining problems. There is a very real potential, however, that the time and effort invested in the litigation will be wasted if parties ignore the history of the conflict with EBMUD and attempt to proceed without regard to instream concerns. In most respects, the litigation may ultimately be
viewed as the easy part of the effort to preserve instream values. The cooperative effort to achieve a long-term balance that protects instream values and also addresses adequate consumptive needs will be both challenging and rewarding. One can hope that the court's decision and analysis will serve as a constant reminder that when balance cannot be achieved, the only option left is harm to one of the competing demands.

REFERENCE


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