1982

Water Allocation in California - Legal Rights and Reform Needs

Institute of Government Studies

INSTITUTE OF GOVERNMENTAL STUDIES
University of California, Berkeley

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Institute of Governmental Studies Research Paper 1982

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Library of Congress Cataloging in Publication Data

Dunning, Harrison C.
Water allocation in California.

(IGS research paper)
1. Water-rights—California. I. Title. II. Series.
KFC791.D86 346.79404'691 82-6110
ISBN 0-87772-288-9 347.9406469 AACR2

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FOREWORD

Water supply, allocation, use and conservation are constantly debated in California, often appearing as highly charged political issues in candidates' races and on election ballots. This year is no exception, with major ballot propositions already scheduled for the June primary election and being circulated to qualify for the November general election.

Accordingly this Research Paper on legal aspects of water allocation is being published for the valuable background it affords readers wishing to learn more about the subject. The author draws on his legal expertise, as well as his experience as Staff Director of the Governor's Commission to Review California Water Rights Law. The paper emphasizes the crucial role of water rights in California water management, and it points to the need for and present lack of a political consensus on water law reform. The author concludes by suggesting forces that could bring about interest-group realignments and other developments favorable to achieving the needed consensus on water law and management reform that so far has eluded Californians.

Stanley Scott
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March 1982

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Introduction

Four aspects of the allocation of water in California are of paramount importance. First, several different types of water rights are recognized, some radically different from the others. Second, two public interest limitations on water rights exist, although generally poorly developed. Third, in some parts of the state the construction of massive water development projects and the creation of elaborate contractual arrangements have largely eclipsed the classical water rights. And fourth, the law has not been adequately developed in regard to groundwater management, the preservation of instream flows and water conservation. This paper deals with each of these four matters in turn, then concludes with an analysis of political aspects of water law reform.

Water Rights Recognized in California

Appropriative Water Rights

When gold rush fever brought thousands of prospectors to California's foothills in the late 1840s, there were several ways in which the water crucial for mining operations might have been allocated. Spanish and Mexican law had, of course, played an important role in earlier years in California, and the miners might have turned to those sources for their water law principles. The 1848 Treaty of Guadalupe Hidalgo protected land titles granted under previous regimes, and in fact the pueblo water right of municipalities was later recognized by California courts. But the coastal municipalities accepted as having pueblo water rights were far from the scene when the miners were exploring for gold in the foothills of the Sierra Nevada and the Trinity Alps, and resort was not made to the Spanish and Mexican sources.

Another possibility was the Anglo-American common law, which was well established in the eastern states from which many of the gold miners came. Common-law principles provided that water rights grew out of land rights--that the use of water was given to those who owned the land along the stream. The miners, however, were trespassers, prospecting and working lands which technically belonged to the U.S. government. Whether for that reason or perhaps because they were unfamiliar with the common-law rules, the Anglo-American approach was not utilized.

Instead the gold miners in California treated their water as they treated their gold: "first in time, first in right." Just as the first person to establish physical control over a mining site was treated in practice as having the best claim, the first to divert water from a stream to use it in washing the ore was treated as preferred. This principle, known later as the system of "prior appropriation," was quickly accepted by the California courts and later was copied throughout the Western United States. In the leading case of Irwin v. Phillips, the Supreme Court of California noted that the principle of prior appropriation was fixed by "a universal sense of necessity and propriety."[1] One may speculate that the court, part of a state government with at best a tenuous hold over the population at that time, believed it could enforce no other choice.

The appropriative water right which was thus recognized at an early date in California has several important characteristics. Most importantly, it assumes that water is an independent natural resource to be allocated separately from land. In the prior appropriation system land ownership rights do not confer water rights, nor is land ownership technically a prerequisite to the perfection of an appropriative water

right.

A significant consequence of this notion is that water once appropriated may be used where needed. It need not be used on the land along a stream, technically known as "riparian" (from the Latin word for bank), nor need it be used within the watershed. Gold miners often sent appropriated water many miles to the place of need, and later on the coastal cities developed water projects for diverting appropriated waters from the mountains to the edge of the Pacific Ocean. The most recent major water projects in California take water from north to south rather than from east to west, again on the basis of a right of prior appropriation.

Beneficial Use.--Beneficial use rather than land ownership came to be the central requirement for the appropriative water right. For land in the United States, it had been rare to require an owner to put the land to beneficial use in order to establish or maintain ownership. But for water under the appropriative rights system which has been dominant in the Western United States, the property rights rules require that the water diverted be put to beneficial use.

In the early days this requirement may have functioned as a surrogate for notice to others that certain quantities of the flow of a stream had been claimed. Notice was itself required, often no more formal than a notification nailed to a tree near the point of diversion, but the beneficial use requirement ordinarily meant that diversion works were needed, which provided notice even more clearly.

Because an appropriative water right extends only to so much water as has been put to beneficial use, the right is quantified. That is, each appropriator is entitled to the amount diverted and put to beneficial use

as of a specific moment in time. If subsequently a larger amount is diverted by a particular appropriator, the excess could be claimed only on the basis of a subsequent appropriation with a later and more junior priority date. Conversely, if in subsequent use a particular appropriator diverts less than had previously been diverted and continues the lesser diversions for the period required by the law, the appropriative water right is reduced to the amount actually diverted and put to beneficial use. It can readily be seen that the latter principle, desirable perhaps as protection against the speculative holding of water rights, is a major disincentive to water conservation measures that could reduce the amount needed, say, to irrigate a particular parcel of land. For this reason the California Water Code recently was amended to provide that reduction in the use of appropriated water because of water conservation efforts is "deemed equivalent" to a reasonable beneficial use of the water.[2]

This description of the quantified nature of appropriative water rights may give an impression of certainty which is often unwarranted. At least for the early appropriative water rights not subject to permit control by the state, there is considerable uncertainty. For one thing, although it may be relatively easy to establish the actual capacity of diversion works, there may be considerable doubt as to how much water in earlier years was actually diverted and put to beneficial use through particular works. Furthermore, particularly with regard to cities, the courts have been indulgent in allowing capacity to be expanded in later years pursuant to the presumed original intent of the city to serve its residents. Such uncertainties have been largely eliminated for surface rights acquired by appropriation since 1914, for these require the filing of an application with the state and the granting of a permit which

specifies the amount of water covered by the right. It remains true even for these rights, however, that the water right is good only for the amount actually put to beneficial use, which may be less than is shown on the face of the permit.

The Diversion Controversy.--In recent years an important controversy has raged regarding appropriative water rights as to the necessity for "diversion", i.e., some form of physical control of the water. It is clear that in the past most appropriators have diverted the water, either by sending it away from the streambed through a canal or by controlling it at the site by means of a dam. The California statutes, however, do not explicitly require such physical control nor has the California Supreme Court ever explicitly laid down such a requirement.

In two recent test cases, organizations interested in fisheries have sought so-called "instream appropriations" in order to insure minimum flows in particular streams. In the first case, California Trout, a private organization, applied to the state to appropriate three cubic feet per second of water from Redwood Creek in Marin County. No dam, ditch or other water diversion structure was planned, and California Trout made it clear it simply wished the water to be left in the stream for fishery purposes. Subsequently the State Department of Fish and Game filed a similar application for the appropriation of water from the Mattole River in Humboldt County. In both cases the State Water Resources Control Board, the administrative entity charged with the responsibility for receiving and processing applications to appropriate surface waters, returned the applications without processing them. The board took the position that California law requires "control akin to possession" in order to have an appropriative water right. Neither case went to the

California Supreme Court, but in both cases the Court of Appeal agreed with the State Water Resources Control Board.[3] The decisions noted certain statutes which imply, they said, that physical control akin to possession is required, and one decision emphasized provisions of the water code which reflect legislative solicitude for the protection of instream values by means other than an appropriation.[4]

In the contemporary administration of California's prior appropriation system of water rights, a crucial question is whether unappropriated water is available for appropriation. The water, of course, must be in a watercourse, that is, a stream flowing in a bed with banks. Thus one cannot appropriate water flowing in a diffused fashion over the surface of the earth. Such water is not in a watercourse, and it belongs to the owner of the land upon which it is found.

Unappropriated water in a watercourse and available for appropriation must not be subject to vested rights, whether appropriative or otherwise, nor must it be needed in the watercourse for the protection of beneficial uses such as fisheries.[5] Since for any particular watercourse, it is rare to have a complete and precise list of all "vested" water rights, there often is considerable doubt as to whether there is unappropriated water available for appropriation. The question is settled initially in administrative proceedings in which expertise in water resources engineering plays an important role. Often the answer is that water is available for appropriation in some seasons of the year but not in others.

Since by definition an appropriator of water acquires a priority date junior to all previously existing water rights, it may legitimately be asked how much difference it makes whether water is available for

appropriation. It might be argued that the appropriator takes his or her chances, and if no water subsequently is available for appropriation, it is that person's loss. However, the granting of an appropriative right may well create expectations in the permittee that water will be available at least at some point in time, and the existence of the "paper right" may encourage the appropriator to take acts which could result in controversy or litigation, either with those holding water rights or with those charged with protecting beneficial instream uses. In California, it appears as a rule of thumb that appropriative water rights are issued only if it may reasonably be expected that water will be available at least half the time covered by the right.

The courts protect junior as well as senior appropriators. Although "first in time, first in right" means that junior appropriator B can do nothing to interfere with senior appropriator A's diversion, B is entitled to have the stream in the condition it was when he initiated his appropriation, insofar as is necessary to protect his diversion. Thus, for example, B can object to A changing his point of diversion, say from a point upstream of B to a point downstream from B, if the resulting change in return flow to the stream works to B's disadvantage. This would be the case where B had appropriative rights to A's return flow.

This protection of junior appropriators contributes to rigidity in the pattern of allocation of appropriative water rights. The fact that many such rights are held by water districts, which acquired them to provide for water supply in the district's designated service area, contributes to this rigidity. Although in principle an appropriative water right is freely transferable independent of land ownership, these constraints mean transfers occur much less frequently than might be supposed.

There are no precise statistics in California on the particular quantities of water used on the basis of particular kinds of water rights. It is clear, however, that the appropriative water right is far and away the most important. Of the roughly 200 million acre feet which the state receives annually in precipitation, most is evaporated, evapotranspired by native vegetation, or runs off to the ocean. Approximately 37,000,000 acre feet is used for irrigation, municipal water supply, or otherwise, but since there is a certain amount of reuse of water the average annual net water demand is about 31,000,000 acre feet. Of this amount, it appears that about half is used on the basis of an appropriative right to surface water. In addition considerable quantities of groundwater are used on the basis of an appropriative right, as will be discussed further below.

Riparian Water Rights

Although the riparian water right of the Anglo-American common law was dominant in the 19th Century and remains so today throughout the eastern and midwestern United States, many western states have not recognized riparian rights at all. These states, known generally as the "Colorado Doctrine" states, repudiated the riparian water right on the ground that it is by nature unsuitable for semi-arid conditions,[6] since in principle it is thought to provide little security of investment.

California, however, followed another course. The leading case of Irwin v. Phillips applied appropriative principles rather than riparian principles, not on the ground the former were intrinsically better suited to local conditions, but rather on the ground neither litigant there had a proprietary interest which could serve as the foundation for the riparian right. For decades after Irwin v. Phillips was decided, there were doubts

as to whether California recognized riparian water rights or not, and the debate took on political as well as legal importance.[7]

The issue was finally settled in 1886 in the monumental case of Lux v. Haggin. This was truly a battle of the giants. Lux was Charles Lux of the Miller and Lux Company, which owned tremendous quantities of land throughout the San Joaquin Valley, particularly along the Kern River and the San Joaquin River. These were ranching lands, and the Miller and Lux Company relied on spring flood flows to irrigate these lands and to deposit silt upon them. As landowners, they claimed a riparian right to have these flows uninterrupted by those above them. Haggin was one of the founding partners of the Kern River Land and Cattle Company, later to become the Kern County Land Company, a powerful force in the southern part of the San Joaquin Valley. Haggin and his partners intended to divert large quantities of water upstream from Miller and Lux to use for irrigation.

The case was in the courts for nine years, which in that epoch was considered a long time for litigation, and resulted in a four-to-three decision of the California Supreme Court which covers nearly 200 pages in the official reports. Although many legal arguments were made and the decision amounts to a mini-treatise on California water rights law in the 19th Century, the gist of the decision was that in 1850 California had adopted the common law as the law of the state and the common law gives to the riparian a right to use water in the contiguous water course. Nothing in Irwin v. Phillips changed that principle, since both parties there were technically trespassers and consequently the riparian right was irrelevant. The court noted that the common-law riparian right not only exists in California but is superior to appropriative rights, except in

the rare case when the appropriative right has vested before a patent to the riparian land was issued by the government.[8]

The riparian water right, like the appropriative water right, is a right simply to use water--it is "usufructuary." All water remains "the property of the people,"[9] although it is a subject of debate whether any consequences flow from that residual public ownership.

Aside from being usufructuary, the riparian right is entirely different from the appropriative right. It depends on land ownership. It does not require use--in principle an unexercised riparian right has the same status as an exercised riparian right, although the California legislature has placed some limitation upon that principle.[10] When exercised, the riparian water right is limited to use on a riparian parcel within the watershed.[11] Apparently the latter limitation is based on the idea that land and water go together, and that water used within the watershed will, at least in part, be returned to the stream from which it was diverted.

A "Reasonable" Share.--According to the California approach to riparian water rights, each riparian is entitled to a "reasonable" share of the natural flow of the stream.[12] There is a right to storage,[13] but water may not be stored for longer than a temporary period.[14]

A variety of factors are considered in deciding what constitutes a reasonable share. The Restatement of Torts suggests nine such factors: the purpose of the use; the suitability of the use to the watercourse; the economic value of the use; the social value of the use (with domestic use given preference); the extent and amount of harm caused to another; the practicality of adjusting the use to avoid that harm; the practicality of adjusting the quantity of water used by each claimant; the burden of

requiring the user causing the harm to bear the loss; and protection of existing values of land, investments and enterprises.[15] The final factor mentioned by the restatement represents a deviation from the commonly stated idea that riparians among themselves stand on an equal footing, whether or not they have made use of their riparian right, and it may be questioned whether this factor will be accepted by the courts in California.

The states in the west which like California have recognized riparian as well as appropriative rights have been known as "California doctrine" states. With the exception of California, however, all have in one way or another very significantly limited the riparian right. California attempted to join in this pattern through provisions in the Water Commission Act of 1913 which would have limited the riparian right, for example by providing the riparian right is lost if not put to use within ten years of the statute. These limitations, however, were declared unconstitutional when challenged in court,[16] so that the riparian right in California today retains nearly the importance which it had in 1886. Given changes in the other states, one noted authority has suggested that it would be more appropriate now to refer to the "California rule" rather than the "California doctrine."[17]

Although the legal status of the riparian may be unchanged in California, there have been developments which as a practical matter have provided greater certainty as to who the riparians are and how much water they are entitled to claim. As major water development projects have been planned and constructed, such as the federal government's Central Valley Project, negotiations have taken place between the project managers and riparians, and in many cases agreements and exchanges have been worked

out. Thus, for example, riparians on the San Joaquin River have exchanged their water rights to natural flow for entitlements to project waters released from Friant Dam.

A similar process has occurred on the Sacramento River as a result of the construction of Shasta Dam. It appears today that the major users of water who claim it on the basis of riparian rights are found in the Sacramento-San Joaquin Delta, where the issue is water quality rather than water quantity. A reasonable speculation as to the amount of riparian usage statewide would appear to be ten percent of the 31,000,000 million acre feet of average annual net water demand.

Groundwater Rights

According to the common law, groundwater was allocated by a so-called rule of "absolute ownership"--whoever owned the land above the groundwater reservoir was entitled to whatever groundwater he or she could pump.[18] In fact, however, this was a rule of capture, for there was no protection against a neighbor's pumping and drawing away one's groundwater. In any event California early abandoned this approach, and in the well-known case of Katz v. Walkinshaw in 1903 laid down a series of rules that are sometimes referred to as the "doctrine of correlative rights."[19] The court there provided that the paramount right goes to an overlying owner engaged in an overlying use. Such a use must be on the land overlying the groundwater basin in question, and another early case indicates that the land must be owned by the pumper.[20] Thus, technically, a city pumping groundwater to irrigate its municipal golf course is exercising an overlying right, whereas a city pumping water from the same basin and delivering it to residents who own their own parcels is not. In case of dispute among the overlyers, the riparian principle is followed: each is

entitled to a reasonable share. Furthermore, like riparians, overlyers have rights whether these are exercised or not.

Katz v. Walkinshaw also provided that to the extent there is water surplus to the reasonable needs of overlying users, such water is available for appropriation. Among appropriators, the "first in time, first in right" principle of allocation applies. Thus the basic court regime developed at the beginning of this century for groundwater closely parallels the California surface water regime.

It is questionable how practical these rules for groundwater allocation are. Most of the major adjudications of groundwater basins which have occurred in California have utilized a different principle, that of "mutual prescription," which will be discussed below in the section on prescriptive water rights. Since a recent decision of the California Supreme Court raises serious questions as to whether the doctrine of mutual prescription will again be imposed in a groundwater adjudication,[21] the solutions of Katz v. Walkinshaw are relevant, but seem to present serious difficulties, at least for complex basins. Where a city pumps water, for example, it may be very difficult to sort out overlying uses from appropriative uses or to determine the correct priority date for the latter. In many cases of surface water utilization, the capacity for diversion was fixed early in time and the use pattern has remained relatively constant. For groundwater, however, with pumps being added from time to time and the amounts being pumped highly variable and dependant on the availability of surface water, there are problems.

Because groundwater basins typically underly a large number of surface parcels, the owners of these parcels are linked in an important way with regard to their use of ground water. When one of them pumps from the

aquifer, all are to some extent affected. Those among the surface owners who pump will receive all the benefit of the use of water, but those who do not pump, as well as those who do pump, will be subject to any ensuing detriments, such as subsidence of the surface, intrusion of sea water as the water table drops or increased energy costs for a longer pumping lift. This imbalance of benefits and burdens provides a strong incentive to each overlying user--and, to the extent there is a surplus, to any potential appropriator--to exploit the resource. Natural resource economists have frequently emphasized that in such a "common pool" situation, there is every likelihood that the resource in question will be overexploited.

Approaches to Groundwater Management.--Given this characteristic of the groundwater resource, some form of collective or public decision making is important. In California, two approaches have been utilized. In a few areas water districts have been established and given powers to enable them to manage the basin for the common good. Two areas which have achieved excellent results through the water district mechanism are Orange County and the Santa Clara Valley.[22]

A second approach has been adjudication. In Southern California more than half a dozen water basins have been adjudicated and presently are managed by water masters acting under the jurisdiction of the court.[23] As is the case with water districts, this allows a lid to be placed on aggregate pumping from the basin in particular years in order to avoid harmful impacts on all users.

Cooperation among interested parties is also necessary if the aquifer is to be managed as if it were a subsurface reservoir. In recent years water resources engineers have been more and more interested in such management, which generally is known as "conjunctive use." Conjunctive

use means that the surface reservoirs constructed by man are operated in tandem with the natural underground reservoirs, so that in dry years more is taken from the subsurface sources and in wet years more is taken from the surface sources. To many, conjunctive use principles suggest also that ground water basins at capacity should be to some extent pumped down in order to create storage space for the surplus waters available in wet years.

Fortunately, recent case law in California has greatly strengthened the legal basis for conjunctive use management. Two cases deserve particular mention. In the Niles case, the Court of Appeal declared that land owners are subject to a "public servitude" regarding the water stored in aquifers beneath their land.[24] In that case a water district had a groundwater replenishment program which was designed to conserve local runoff, regulate imported water supplies, and prevent salt water intrusion. Water put underground by the water district was, however, flooding the gravel pits being operated by a private company, and as a consequence the company was pumping water out of those pits into the San Francisco Bay. In other words, the water district and the private company were working at direct cross purposes, the one putting in water which the other then pumped out without putting it to any beneficial use. When the controversy came to the courts, it was decided that the pumping was not reasonable insofar as it interfered with a public servitude which entitled the water district to replenish the basin up to the point representing "the state of nature."

The second important case involved a controversy as to water which reached groundwater basins in the San Fernando Valley after being brought to Southern California from the Owens Valley by the City of Los Angeles.

In some cases the City of Los Angeles had directly recharged the aquifers; in others, the imported water had been delivered to customers in the San Fernando Valley, and a portion of that water had subsequently found its way into the groundwater basins. In a case decided in 1975, the Supreme Court of California affirmed the right of the importer to recapture water which it had added to the groundwater supply of the basin.[25] Since importing and recapturing water in this fashion is an essential part of conjunctive use management, the decision of the court in the San Fernando Valley case has been widely hailed as a progressive one.

Prescriptive Water Rights

The appropriative and riparian water rights which have been described are "rightful," in that an individual acted legitimately in putting water to beneficial use or in acquiring a property interest in land sufficient to support a riparian water right. Water law, however, like land law recognizes that in certain situations wrongful action by an individual may also lead to creation of a water right. Such water rights are "prescriptive," and they may exist both for surface water and for groundwater. Open use adverse to the interest of the rightful user for at least five years is required.

For surface waters, water held subject to an appropriative right is subject to prescription if the right dates from before the institution of state permit control in 1914. For many years there was controversy as to whether a prescriptive right could similarly be acquired as to water subject to appropriation after the institution of the state permit system.[26] Nothing in the statutory provisions on appropriation speaks directly to the question, but it was argued by many that the statutory appropriations system was intended to be the exclusive means for

initiating a nonriparian water right, and that state supervision of this process could not be wholly effective if an "end run" were permitted by way of prescription. In a recent decision the California Supreme Court by a four-to-three vote agreed.[27]

Thus with regard to appropriative surface water rights the role of prescription is quite limited. It remains true, however, that riparian rights are fully subject to prescription, although in order to act wrongfully a prescripter ordinarily must interfere with a reasonable use. It is not enough to divert flow which the riparian might claim but is not in fact claiming, except in the special case where the prescripter uses the water on non-riparian land.[28]

In California water rights law, prescription has enjoyed its greatest significance with regard to groundwater. In the first of a series of important groundwater adjudications in Southern California, the California Supreme Court in 1949 announced the doctrine of "mutual" prescription.[29] That adjudication involved one unit of the Raymond Basin in the Pasadena area, from which in most years more water was pumped out than went in. In other words, the safe yield was being exceeded, so that the basin was in a state of permanent overdraft.

The most enduring part of the decision by the California Supreme Court was that aggregate pumping from the basin would have to be limited to the safe yield. The question then became: who should be cut back and by how much? The court might have employed the principles enunciated in Katz v. Walkinshaw, according to which the most junior appropriators would initially be cut off, then if necessary the senior appropriators in turn would lose their pumping rights, and then the overlyers would be reduced until eventually the point of equilibrium was reached. Apparently this

result seemed inequitable to the court, for important cities which enjoyed merely the status of a junior appropriator would have been entirely cut off.

Instead of following Katz v. Walkinshaw, the court seized on the notion of prescription and declared that once overdraft had begun, each pumper was acting to an extent prescriptively vis-a-vis the others. Use of prescription in such a case seems somewhat artificial, in that prescription is rooted in hostile or adverse use, yet in the Pasadena situation all pumpers were getting all the water they wanted. The problem was that the aggregate impact was adverse to proper long-term management of the basin. So far as the individual pumpers were concerned, the impact was on the pumping lift, not on taking the water, yet it has never been established in California that there is the right to maintenance of a fixed pumping lift.

The doctrine of mutual prescription was used from 1949 to 1975 to decide a series of groundwater adjudications, many of which were terminated on the basis of a stipulated judgment. In the San Fernando decision in 1975, however, the court concluded that there can be no prescription against public entities or public utilities engaged in groundwater pumping.[30] The court based itself on a provision of the civil code enacted in 1935,[31] but not considered in the Pasadena case since all but one of the parties there had stipulated to the judgment and the nonstipulating party was a public utility not then covered by the statutory language.

It seems unlikely at the present time the doctrine of mutual prescription will be imposed in order to provide equitable solutions to groundwater controversies, since it seems most unbalanced to say that

public pumpers can acquire prescriptively against private pumpers but not the reverse. It should also be noticed that the San Fernando decision makes the doctrine of mutual prescription more difficult to apply in other ways as well, since there was a tightening up on the notice requirement, as well as a redefinition of when aggregate pumping exceeds the permissible level. The court at one point also refers to the doctrine of "equitable apportionment," previously developed by the United States Supreme Court in the context of interstate controversies, and seems to suggest that the ultimate objective of any court adjudicating a groundwater controversy ought to be an equitable apportionment.[32]

Statutorily Adjudicated Rights

Water rights disputes in California may be resolved by agreement among the parties, by an ordinary civil action brought by a water rights claimant or by a statutory adjudication.[33] A statutory adjudication is an administrative proceeding conducted by the State Water Resources Control Board ending in a determination of all the rights to water in a particular stream system. This determination is filed with a court, which then issues a decree defining each water right at to its owner, priority, amount, season of use, purpose of use, point of diversion and place of use. The decree binds all claimants to water from the stream system in question, regardless of whether a particular claimant took part in the proceedings.

As thus stated, a statutory adjudication might appear to be simply a procedure for settling water rights such as the appropriative, riparian and other water rights discussed above. Close examination of past practice in statutory adjudications, however, combined with a recent legislative change, suggest that in fact it is more accurate to regard the

statutorily adjudicated water right as an entity different from the better known "classical" water rights.

Statutory adjudications in California were first authorized by the Water Commission Act of 1913. That act was amended, however, in 1917 to exclude riparian rights, so the procedure quickly lost its comprehensiveness. Furthermore, initially, it was little used -- between passage of the statute and 1935, only five statutory adjudications were undertaken.[34]

In 1935, the legislation was amended again to include riparian rights, so that once more a statutory adjudication could lead to a comprehensive settlement of the surface water rights in a stream system.[35] Since 1935 fifteen statutory adjudications have been completed, and currently another six statutory adjudications are underway. In each of these proceedings the heart of the matter is determination of the validity of water rights claims made and grouping of these rights into priority classes.

Adjudicating Claims.--Once the State Water Resources Control Board has determined that it is in the public interest to grant a petition for a statutory adjudication, the board makes a detailed investigation of the stream system in question and calls for the filing of proofs of claim. The investigation is conducted by water rights engineers from the board, who examine all existing diversions and uses of water from the stream system. Often these engineers live for several months in the community where the investigation is being conducted, and they develop considerable acquaintance with both the stream and the various water rights claimants. Generally, the claimants themselves in filing their proofs of claim rely entirely on the information developed during the board's investigation.

Once the proofs of claim have been received and a report prepared

thereon, the board's engineers prepare a preliminary order of determination designed eventually to become a court decree. Although in principle this preliminary order is based upon the water rights of the various claimants, it is apparent that great weight is given to what appear to be the equities of a given situation. The work is done by the engineers who did the field investigation, who only occasionally consult with the board's lawyers at this stage in the proceeding.

Extensive recent interviews of board engineers and lawyers involved in statutory adjudications together with a detailed review of the files of all of these proceedings suggest that many factors play a part in preparing preliminary orders of determination.[36] The claimed water right -- riparian, appropriative or prescriptive (or, often, "all of the above") -- is the starting point, and, significantly, absent blatent error or a challenge from another claimant, the claim is ordinarily accepted at face value. This means, for example, that generally board resources are not devoted to tasks such as title searches to verify riparian claims and investigations to determine the precise moment of initiation of a pre-1914 appropriative right. Rather the emphasis is placed upon preservation and legitimization of the status quo, with a strong presumption in practice that someone who has used water for the past five to ten years has a valid water right. Heavy reliance is placed on a generalized notion of prescription to justify this presumption. Thus a non-riparian who initiated a water use after 1914 without benefit of a permit will likely be recognized as having a valid water right, the decision in People v. Shirokow notwithstanding.[37]

Establishing Priority Classes.--Once a list of water rights has been prepared, priority classes must be established. Within each class users

are treated as having equal and correlative rights, although priority dates of appropriative rights may later be resorted to if there is insufficient water to satisfy all the users in a given priority class. Invariably domestic use, whether active or dormant and regardless of the basis of the water right, is placed in the first priority class, on the theory this is required by Section 106 of the Water Code: "It is hereby declared to be the established policy of this State that the use of water for domestic purposes is the highest use of water and that the next highest use is for irrigation." This means, for example, that a riparian right for irrigation use is placed junior to a later-perfected appropriative right for domestic use. Curiously, the same logic apparently is not followed to place all rights for water for irrigation in a priority class higher than all other non-domestic uses.

Another important statutory provision used in preparing preliminary orders of determination is Water Code § 100, which incorporates the reasonable and beneficial use requirements of the state constitution. This provision is offered as justification for the practice of placing commercial stockwatering use above everything else except domestic use.

In establishing the priority class placement for rights other than those used for domestic use or for commercial stockwatering use, reliance in the past has been placed on a whole series of factors: local sentiment, the equities as seen by particular board engineers working on the statutory adjudication, the desire to effect an optimal pattern of water usage (often referred to as the need to find a "physical solution"), current use, the availability of water, the suitability of unirrigated riparian land for irrigation, prior judgments and agreements, administrative precedents and ease of administration. Although many of

these same factors may in one way or another in fact affect determinations made by a court, they seem to be taken into account more explicitly in a statutory adjudication. The practice seems to be in accord with the "equitable apportionment" which the San Fernando court implied was the proper goal of a water rights adjudication.[38] It also seems to justify the conclusion that in fact the "statutorily adjudicated" water right in California is a kind of water right separate and distinct from the riparian, appropriative or prescriptive water rights claimed by water users at the inception of the proceeding.

Aside from the equitable origin of the statutorily adjudicated water right, differences between the characteristics of this water right and either of the principal classical water rights confirm the transformation which takes place from filing of proof of claim to issuance of a preliminary order of determination. The statutorily adjudicated water right is restricted to the place of actual use at the time of the adjudication, a characteristic somewhat more restrictive than would be the case for a common law riparian right (allowing use of water anywhere on a riparian parcel within the watershed) and considerably more restrictive than would be the case for a pre-1914 appropriative right (allowing use of water anywhere, without regard to parcel lines or watershed boundaries). It is similarly restricted as to purpose of use and point of diversion, with changes in these allowed only by way of modification of the decree. It is quantified, unlike the riparian right. And, by virtue of recently enacted Water Code Section 1745, if awarded after January 1, 1981, it is freely transferable, even if riparian in origin.

Other Water Rights

The pueblo right, as noted at the beginning of this chapter,

originated in the Spanish and Mexican law. It is the paramount right of the city as successor to a pueblo to use water naturally occurring within the pueblo limits for the city's inhabitants. Only two cities in California, San Diego and Los Angeles, have been recognized by the courts as benefitting from pueblo rights,[39] although several other coastal cities may also qualify as successors to pueblos. In the case of Los Angeles, controversies over the city's pueblo right extended nearly a century. From the 1880s on, lawsuits questioned the existence and meaning of this right.[40] In the most recent lawsuit, considerable effort was made to show that earlier decisions in favor of Los Angeles had rested on faulty historical evidence. The Supreme Court of California, however, decided the case in favor of the City of Los Angeles, and the court rested its decision heavily upon the fact that Los Angeles had legitimately relied upon earlier decisions, whatever their correctness as to the historical evidence.

Another water right of benefit to governments was once thought of exclusively as an Indian water right. In 1908 the United States Supreme Court enunciated the "Winters Doctrine," to the effect that when the United States Congress set aside land in semi-arid portions of the west for the settlement of Indians, it must impliedly have set aside sufficient water for their needs.[41] For many years it was widely assumed that this sort of "reading between the lines" to find presumed Congressional intent would be done only where the land was reserved for Indian use, but the Supreme Court's landmark decision in 1963 in Arizona v. California made it clear that reserved rights may exist as a matter of federal law for other sorts of reservations as well.[42] Examples would be wildlife refuges, national parks, and national forests. In a recent case the U.S. Supreme

Court narrowed the potential for the reserved rights doctrine somewhat by distinguishing between primary and secondary uses of federal reserved lands and stating that implied water rights are reserved only to service the primary uses.[43] Nonetheless the doctrine remains an important one, and the unquantified and often very uncertain nature of the reserved right has periodically concerned state water officials who believe utilization of water pursuant to such rights may disrupt the established use regimes.

Another right benefitting governments is the so-called "navigation servitude," which exists under both federal and California law. In its federal incarnation, the navigation servitude is based upon regulatory power vested in the Congress by the Commerce Clause of the U.S. Constitution. Under this clause the federal government is permitted to regulate commerce among the states or between the states and foreign nations. Many years ago the U.S. Supreme Court determined that when such commerce clause power is being exercised by the federal government, no compensation is owed for injury to private rights, so long as land above the high-water mark is not adversely affected.[44] Thus, for example, the federal government may raise the water level in a navigable stream through construction of a dam and need not pay for injury to a hydro-electric power facility caused by decrease in the "head," that is, the drop from water stored behind the dam to the water below.[45]

The California "navigation servitude" of course does not originate in the Commerce Clause. It is a creature of state law, and it seems to express the fundamental proposition that private rights in land or water may not be exercised so as to interfere with the public interest in navigating upon, fishing in or otherwise taking general advantage of the navigable waters of the state.[46] Thus, for example, landowners may not

interfere with the public use of navigable streams for the purpose of floating pleasure craft along them.[47] In a case involving the closely related "public trust" doctrine, which in California seems to be identical to the state navigation servitude, the California Supreme Court noted several public purposes to be served in addition to fishing and navigable commerce: ecological study, open space and aesthetics were mentioned.[48]

The meaning of the public trust doctrine for California water rights is now being tested in litigation involving Mono Lake. There, pursuant to licenses granted by the State Water Resources Control Board, the City of Los Angeles is diverting most of the water which ordinarily would flow into Mono Lake, and as a consequence the level of the lake has dropped drastically in recent years. The lower lake level in turn has detrimental consequences for recreational uses of the lake, for gulls who use an island in the lake for nesting purposes, and for other public interests. The Audubon Society, Friends of the Earth and others are challenging the diversions by the City of Los Angeles, in part on the ground they are in violation of the public trust doctrine.[49]

Water-Rights Limitations Recognized in California

Reasonable and Beneficial Use

California's most important limitation on a water right is found in a constitutional amendment which grew out of the continuing tension between appropriative and riparian rights. Lux v. Haggin, discussed above,[50] established that riparian rights are recognized in California and that in most cases they are paramount to appropriative rights. By definition, the "reasonable share" concept of riparian law means riparians are limited by a standard of reasonableness among themselves. Appropriators, on the

other hand, are entitled to a quantified amount of water in accordance with their respective priorities. But in disputes between a riparian and an appropriator, the courts early in this century determined that the riparian was limited neither by a standard of reasonableness nor to a quantified amount.

This conclusion caused considerable difficulty for appropriators, and in some instances appeared to permit the waste of water in a most dramatic fashion. The most notable case was the Herminghaus decision in 1926.[51] Herminghaus, a Miller and Lux lessee on the San Joaquin River operating some of the same grazing lands at issue in Lux v. Haggin, claimed that as a riparian he was entitled to the full spring flood flow of the river in order to boost the water to the point where it became useful to him, even though less than one percent of the quantity was actually used for irrigation purposes. In litigation with those who wished to appropriate water upstream and to store that spring runoff for their own purposes, the Supreme Court of California decided for Herminghaus. In addition to refusing to impose any reasonableness standard on a riparian vis-a-vis an appropriator, the court declared that earlier legislation imposing a two-and-a-half acre foot per acre maximum on the use of water for irrigating uncultivated land was unconstitutional as beyond the police power of the state.

This extreme decision, curious even when evaluated in light of the constitutional standards prevailing at that time, led directly to amendment of the state constitution. Language was added which was intended to extend a reasonableness standard to the Herminghaus situation, but the provision is written broadly as a general prohibition of waste. The most pertinent language is as follows:

> The right to water or to the use or flow of water in or from any natural stream or water course in this state is and shall be limited to such water as shall be reasonably required for the beneficial use to be served and such right does not and shall not extend to the waste or unreasonable method of use or unreasonable method of diversion of water. California Constitution Article 14, § 3, adopted November 6, 1928. Renumbered Article 10, § 2, June 8, 1976.

Although the constitutional amendment clearly states what has become a central tenet of California water rights law, that all use of water must be reasonable and beneficial, there is little to guide one in knowing the meaning of these vague terms. The courts have been very lenient with regard to determinations that a use is "beneficial." Aside from the use of water to kill gophers during the winter season,[52] most uses have been treated as beneficial. The judiciary has been slightly more stringent with regard to what is "reasonable," but in general has insisted that reasonableness determinations must be made on a case by case basis and do not respond to any general formulas.

A recent leading case on the meaning of reasonableness in the constitutional sense is the Joslin case,[53] where a riparian sand and gravel company had relied on the flow of a stream to transport rock, sand and gravel to its site. When an upstream water district built a dam which prevented the continued flow of the building materials, the company sued for damages. The company lost, for the California Supreme Court concluded that its use of water was not reasonable vis-a-vis the competing use of the water district. The opinion seems impliedly to provide an analysis of the comparative utility of the competing uses, although it is once again stated that such determinations are made on a case by case basis. The court stated that broad public policy considerations played a major role

in its decision. It noted, for example, that "statewide considerations of transcendent importance" suggest that water is in short supply whereas building materials are not.[54] Perhaps the best conclusion is that the constitutional amendment stands today as something of a sleeping giant, which may be awakened in future years as water grows shorter in supply and the interest in water conservation increases.

The Permit and License System

Another means by which water rights are limited is the permit and license system operated by the State of California for appropriation of surface water from 1914 on. Administrative control of such appropriations was recommended by the Conservation Commission in its report of 1912,[55] was initiated by the Water Commission Act of 1913 and was approved by the people in a referendum held in 1914.[56] Interestingly enough, the Conservation Commission noted that there should also be a statutory system for regulating percolating groundwater, but stated that it had not had the time to study groundwater problems in sufficient detail to recommend a statute.[57]

A major concern of the Conservation Commission was to make effective the beneficial use limit which already existed for appropriative rights. It was feared that large interests such as power companies would hoard water and that in practice there was no way of enforcing beneficial use. There was no central agency who knew who the appropriators were, what their rights were or whether the rights were being properly exercised.

All this has changed since 1914 through the development of a certain measure of administrative control. The administrative function, now performed by the State Water Resources Control Board, provides review of applications to appropriate unappropriated water, including examination of

the question whether the vested rights of others will be adversely affected. Permits are issued which allow the diversion of water, and upon completion of the construction of water diversion projects a second step occurs when a license is issued. Generally conditions are placed in both the permits and the licenses, some of them merely repetitions of statutory and constitutional requirements, others tailor-made to fit a particular situation.[58] In any event, these provisions do limit the exercise of water rights, and violation of one of the provisions could lead to revocation of a right.

In general the administrative controls are tightest at the time when the application is being processed. Once the license has been issued, there appears to be little review by the State Water Resources Control Board, absent a complaint.

It should be noted that any limitations found in permits are much less easy to enforce if the permit is held by a federal agency. The key test case in recent years has been State of California v. United States, involving the New Melones Dam on the Stanislaus River. In this case the authority of the State of California to impose terms and conditions on the permits issued to a federal agency for operation of the dam was challenged. There is no question but that the federal government has the constitutional right to ignore any terms and conditions imposed by a state, but in Section 8 of the Reclamation Act of 1902 Congress directed that state law be observed in certain respects in reclamation projects. In a recent decision the United States Supreme Court, in what appears to be a modification of its views on the meaning of Section 8, stated that California may impose terms and conditions to the extent they are not inconsistent with a clear Congressional directive.[59] Thus terms and

conditions may be imposed on federal permittees, but for each one the question may be asked whether or not the provision conflicts with a clear Congressional directive.[60]

Partial Eclipse of Classical Water Rights in California

Thus far the various water rights historically recognized in California have been discussed, as well as certain limitations on these rights. In certain parts of the state, however, these classical water rights have been largely eclipsed by the use of other arrangements for the allocation of water. Typically this occurs where a large water development project has been constructed, water in massive quantities appropriated by the constructing agency, and arrangements of a consensual nature made to distribute the water appropriated.

The first of these major projects was the Central Valley Project,[61] initially planned by the State of California during the 1920s. Inspired by the success of the City of Los Angeles in moving large quantities of water from the Owens Valley to the Southern California coastal plain, the state developed plans to move large amounts of water from the high runoff area of the Sacramento Valley to the lower runoff but more intensively farmed area of the San Joaquin Valley. Because of the Depression, however, it proved impossible for the State of California to finance this project, and it was turned over to the federal government.

The Central Valley Project was constructed by the U.S. Bureau of Reclamation pursuant to the Reclamation Act of 1902, and it involves the wholesaling of water by the Bureau to irrigation districts who retail the water to the ultimate customers. Although the Bureau of Reclamation holds appropriative rights to allow its diversions, for example at Shasta Dam on

the upper Sacramento River, its relationships with the water districts are governed by contract. Elaborate contracts, ordinarily for at least 40 years in duration, determine the price and availability of water. They also incorporate certain federal statutory requirements such as the excess land limitation, which places a ceiling on land ownership by those receiving water at heavily subsidized prices. The districts themselves are specialized forms of local government which have service obligations to those within their boundaries. These obligations are based not on contract, but rather on the status of the recipients. A farmer receiving water from a local irrigation district, which in turn has purchased the water from the Bureau of Reclamation, is thus far from the position of the classical appropriator or riparian user.

Similar arrangements exist for the State Water Project,[62] planned after World War II and still not completely constructed. In this case the appropriator is the California Department of Water Resources, which has constructed facilities throughout the state, including those necessary to pump water over the Tehachapi Mountains into Southern California. The Department of Water Resources distributes its water pursuant to contracts entered into with various water agencies or water districts, which in turn retail the water to ultimate consumers.

Significance of Water Rights for Water Management in California

The existence of diverse types of water rights has not prevented comprehensive water management in particular instances. The Central Valley Project, the State Water Project and the management programs established for several important groundwater basins demonstrate that

integrated management can be achieved in California, although it is difficult to know how much less costly and more efficient the development of these programs might have been if the water rights system had been simpler. These projects, of course, do not provide comprehensive water management for California as a whole -- indeed, often in recent years there has been direct conflict between one program and another. Given the political realities of a federal governmental system, of powerful water agencies established at the local and regional levels, and of the different values and objectives of the public and private entities holding water rights, a single statewide water management program is out of the question.

There are, however, three matters as to which progress may occur. Of most importance is the question of groundwater management. When California chose in 1913 not to include percolating groundwater in the regulatory system established by the Water Commission Act, it departed from the pattern followed in most western states. Although groundwater and surface water form part of a single hydrologic cycle, public interest regulation was introduced for only one portion. Consequently, surface streams are to some extent protected against overdrafting, because applications to appropriate unappropriated water may be denied where necessary to protect beneficial instream uses, but protection against overdrafting of groundwater basins is provided only sporadically through the occasional water district management program or adjudication decree.

In a report submitted at the end of 1978, the Governor's Commission to Review California Water Rights Law drew attention to this problem and recommended the adoption of a state policy aimed at the eventual elimination of overdraft in most situations.[63] It was recommended further

that local governments be given the primary responsibility for achieving this goal, with a review responsibility assigned to state government.[64] The topic is politically volatile, particularly among farmers, many of whom oppose any governmental interference with their present freedom in most parts of California to pump unlimited quantities of groundwater. Many farmers believe the appropriate response to continued overdrafting of groundwater basins, which in some parts of the southern San Joaquin Valley has become extremely serious, is to construct more dams on the northern rivers, including those presently protected by the Wild and Scenic Rivers Act.

A New Groundwater Management Proposal

The "Water Resources Conservation and Efficiency Act," an initiative measure which proponents are attempting to qualify for the November 1982 ballot, deals with the groundwater management issue more narrowly than did the Governor's Commission to Review California Water Rights Law. This initiative measure, included in full for reference as Appendix A, adopts as state policy the management of groundwater so as to avoid long-term overdraft, land subsidence, water quality degradation and other significant environmental harm. It states that local economies shall be built and sustained on reliable, long-term water supplies and not upon long-term overdraft as a source of water supply. But the operational language to implement these goals is confined to the eleven groundwater basins identified by the Department of Water Resources as currently critically overdrafted.[65] For these basins local entities are called upon to establish a groundwater management authority, which in turn is mandated to develop a groundwater management program to be approved by the State Water Resources Control Board. No provision is made for state management

of the groundwater resources of these basins in the event local entities fail to fulfill their responsibilities. The initiative measure does state, however, that, absent board approval of a groundwater management program, one year after the effective date of the legislation no land within the critical groundwater overdraft area in question shall be irrigated if it lacks a recent irrigation history. Thus where local areas fail to deal effectively with groundwater overdraft by the assumption of management responsibility as contemplated by the initiative measure, there at least would be a prohibition against making matters worse by irrigating land without a recent irrigation history.

Instream Flow Preservation

A second issue for the future is preservation of instream flows. The State Water Resources Control Board presently has considerable authority to refuse or condition permits to appropriate surface waters in order to protect instream flows for purposes such as recreation and fishing.[66] It may lack, however, the authority to develop any adequate comprehensive regulatory scheme for a particular stream aimed at preservation of instream flows,[67] and it also apparently lacks the authority to grant appropriative water rights for instream uses not involving control akin to possession.[68] The Governor's Commission to Review California Water Rights Law took the position that it would be inadvisable to grant the authority to approve permanent instream water rights, because the interests being protected are diffuse and essentially public in nature.[69] The Commission however recommended that authority to develop comprehensive instream flow regulations be explicitly granted by the legislature to the State Water Resources Control Board,[70] although to date such a grant has not occurred.

On the instream flow protection question, the Water Resources

Conservation and Efficiency Act departs somewhat from the approach supported by the Governor's Commission to Review California Water Rights Law. The act endorses the notion that the State Water Resources Control Board should have clear authority to establish instream flow protection standards. But it also provides for the permanent appropriation of water for instream uses without the necessity for physical control, provided that the State Water Resources Control Board finds such appropriation to be in the public interest and otherwise in accordance with existing law. Furthermore, it requires that where conventional appropriations impact adversely on fish and wildlife dependent on instream flows, conditions to offset those impacts be imposed upon permittees.

Under the general heading of instream flow protection, the Water Resources Conservation and Efficiency Act also includes measures on the filling program for the reservoir created by New Melones Dam on the Stanislaus River. This dam, one of the most controversial ever to be built in California, has been built and is operated by federal agencies, so that any limitations imposed by state law must consider delicate questions of state-federal relations.[71] Insofar as the initiative measure would limit the federal agencies, the provisions generally correspond to those imposed by the State Water Resources Control Board. The initiative measure also, however, imposes limitations on entities contracting for water from the New Melones Project, including subdivisions of the state such as water districts. These subdivisions -- arguably within the zone of state activities immune from federal intrusion[72] -- are prohibited from entering into contracts for New Melones Project water unless (1) the contracts are conditional upon 75% of the firm yield of the project being contracted for and (2) the contracts use a pricing formula which would

eliminate a large part of the massive subsidy characteristic of federal water projects.

Water Conservation

The final topic which is bound to be of increased concern as the years go by is water conservation. It has been noted above that the constitutional amendment of 1928 lays down a broad antiwaste standard, with considerable potential for development by the courts.[73] There are, however, particular ways in which the water rights system works against conservation, for example by requiring continued beneficial use for maintenance of a water right. Additionally some groups have suggested recently that new water should not be available to importing areas until they have demonstrated an adequate commitment to use of available water conservation practices. Again, however, the legislature has been unreceptive to such urgings.[74]

The Water Conservation and Efficiency Act discussed above approaches water conservation by imposing requirements only where there are interbasin transfers of water of more than 20,000 acre-feet of water per year. Water suppliers or contractors engaged in such interbasin transfers would be required by the initiative measure to prepare and submit to the State Water Resources Control Board by January 1, 1985, a water conservation program. Furthermore, after the effective date of the legislation no new or increased interbasin transfer would be permitted until the board had determined that an adequate water conservation program had been prepared and was being adequately implemented.

Toward a Political Consensus on Water Law Reform[75]

The experience of the Governor's Commission to Review California Water

Rights Law, and that of a parallel effort in Arizona, illustrate both the difficulty of creating a future that could command the support of Californians and the ways in which those difficulties could be overcome. Although some of the commission's minor recommendations have been enacted into law,[76] the commission's principal recommendations on groundwater management and instream flow protection have never come close to legislative approval.

No Consensus in California

Four general reasons explain the failure to achieve a political consensus in favor of the commission's proposals. First, the general political climate is inhospitable to the kinds of changes proposed by the commission. At a time when the popular mood favors less government and lower taxes, as represented in Washington by limited deregulation and in California by Proposition 13, the commission recommended more government, particularly in proposing groundwater regulation for those overdrafted basins (notably in the southern part of the San Joaquin Valley) not now subject to effective district control or to court decrees. At a time when the environmental movement has been put on the defensive, the commission recommended more environmental protection, particularly in proposing strengthened instream flow preservation. And at a time with a crowded political agenda and popular fatigue with many recurring issues, the commission recommended changes which command little grassroots understanding or committed support, but which generate intense opposition from directly affected interest groups such as farmers.

Second, the commission's membership and mandate were organized in a way that made political success very difficult. The sponsor of the commission, who chaired the State Water Resources Control Board, initially

conceived of the commission as a nonpartisan, independent and expert group which would make recommendations of a "technical" nature -- something like those provided by the California Law Revision Commission. Consequently, no legislators were appointed to the commission, members were asked to serve as individuals rather than as representatives of interest groups, and lawyers with interested parties as clients were included only as a result of outside pressure. A distinguished and competent group of commission members was ultimately assembled, but the assumption that the key decisions could be treated as technical ones by impartial experts, rather than as highly political ones requiring interest-group compromises, proved untenable. The decisions, such as whether to have increased groundwater management and the respective roles of state and local governments in such management, were political, but the political gears had not been greased. The commission itself lacked political power, the various interest groups were not directly involved in the bargaining process, and the commission had no powerful political patron. It was gubernatorial in name only. Aside from one press conference given upon receipt of the commission's final report, the governor did virtually nothing to advance the commission's proposals. And the commission lacked effective political ties to the legislature, in marked contrast to the situation a decade earlier when substantial revisions in California's water quality law had been made.

Furthermore, the commission's mandate was probably stated too narrowly to allow for political consensus. Directed to study California water rights law, staff and members of the commission believed it was beyond the scope of their charge to examine either the law or current state policy concerning water development projects. Yet, as noted above, many interest

groups believe more such projects are needed and regard any effort to improve the management of existing water supplies as implicitly suggesting that additional supplies should not be developed. Thus, groups such as the Association of California Water Agencies, the California Farm Bureau Federation, and the California Chamber of Commerce, which favor further water construction projects, took strong positions against the recommendations for improved management.

In contrast, environmental groups such as the Planning and Conservation League and public interest groups such as the League of Women Voters generally supported the recommendations. However, the commission believed it lacked a mandate which would allow examination of a comprehensive approach involving a mixture of management changes and development projects. Nor did the Brown Administration see fit to link in any way the commission's management recommendations, which it nominally supported, with the development proposals it supported with great vigor.

A third reason for the commission's lack of political success was its inability to generate broad public support. There was no crisis, such as the Santa Barbara oil spill, which a decade earlier sparked federal concern over oil pollution of water. The drought, which had led to the commission's creation, ended before doing serious harm to either the economic well-being or the lifestyle of most Californians. The commission had among its members no well-known figure who could draw attention to its work, as Pardee, the popular ex-governor, had done with respect to the work of the Conservation Commission.[77] Other than the anadromous fishery losses which are associated with water development projects, it was difficult to build a dramatic and convincing factual case that business-as-usual would cause any significant harm to the general public. The

threat of federal action suggested by the early work of the Carter Administration on a new national water policy soon lost credibility. And the commission itself was unable to achieve unanimity, which may have had an adverse political effect.

A final reason for the political defeat, at least initially, of the commission's proposals was the misfortune of having its key proponents within the executive and legislative branches either removed or seriously weakened at critical junctures. The chair of the State Water Resources Control Board, who sponsored the commission - and was a highly articulate spokesman for its views and the executive branch official most thoroughly committed to pursuit of the recommended changes - was appointed to another state position, out of the mainstream of water politics, just before the commission's proposals came before the legislature. And the speaker of the assembly, who repeatedly had spoken publicly and forcefully in favor of the commission's general approach to water policy, was embroiled in a devastating leadership battle just as the commission's proposals were being considered in committee.

Why Arizona Succeeded

The immediate failure of the Governor's Commission does not necessarily mean that political consensus will never emerge; recent events in Arizona attest to that. This state radically revised its original law in 1980, to provide for state management of groundwater aimed at limiting pumping to "safe yield" in the three overdrawn areas projected to contain major urban populations by the year 2025.[78] Pump taxes, the permanent retirement of irrigated land, prohibitions on the development of subdivided land without a water supply assured for at least 100 years, and mandatory conservation measures -- including continued reductions in per

capita use -- are all provided for in new legislation which passed the Arizona legislature by an overwhelming margin.[79]

The dramatic changes in Arizona are but the latest step in a controversy over groundwater overdrafting in that state which goes back at least to 1938.[80] Several commissions have addressed the problem and, in fact, reform legislation which eventually proved ineffective was passed in 1948. But as recently as 1979, the commission then appointed to study the problem seemed stalemated. However, in a few short months political consensus was achieved.

Several factors appear to have contributed to the ability of this neighboring state to accomplish that which has proved so elusive in California. First, it was evidently clear to all that with construction of the Central Arizona Project (CAP), no significant water development projects remain to be built; there is no longer a realistic prospect of water development projects in the Pacific Northwest for the benefit of the lower Colorado basin. Thus, interest groups such as mining firms and cities were forced to look to reallocation of existing supplies to get more water. Second, a court decision in 1976 threw into question the validity of even intrabasin transfers of water,[81] much less interbasin transfers. Third, when the public process of debate within the special blue-ribbon commission on groundwater appeared ineffective, a private process of bargaining among representatives of three key interest groups -- mining, cities, and agriculture -- began. Fourth, Arizona's governor personally spent hundreds of hours involved in these private negotiations, underscoring the enormous importance of a solution for the future of the state. Fifth, at crucial junctures the United States Secretary of the Interior threatened dire consequences, such as a construction slowdown on

the Central Arizona Project or allocations of CAP water in a way unfavorable to non-Indian interests, if an adequate groundwater management law was not forthcoming. The governor was able to make effective use of these threats, to force the negotiating interests to reach a compromise solution.

It is impossible to know whether the Arizona groundwater management statute will be held valid by the courts, will be preserved in its present form by the legislature, or will prove to be effective in practice. The statute is now being tested in litigation challenging its consititutionality,[82] and recently the construction and financing industries -- not, it should be noted, groups which had participated in the private negotiating process described above -- succeeded in having some modifications in the legislation enacted.[83] Nonetheless, the mere fact that the Arizona groundwater management statute was adopted is impressive proof that a political consensus among deeply antagonistic forces can achieve major changes in the management of water.

Lessons for California

Despite obvious differences between the two states, several lessons for California may be drawn from the Arizona experience. First, consensus for serious management reforms may be achievable only when further major water development projects appear untenable to the water industry. In the context of California, this may occur only when the North Coast rivers appear as beyond reach as did the Pacific Northwest rivers to Arizona -- either because the costs of development make it unthinkable or because political limits appear effectively to have placed these rivers indefinitely out of bounds. Second, political consensus may be possible only with some interest-group realignment, so that groups with

long-standing stakes in the state's water resources decide to shift their position to support management reform. The most likely candidate for such a decision appears to be urban interests. If, for example, the Metropolitan Water District of Southern California were greatly to increase its emphasis on improved management and reallocation of developed water supplies, which might permit a moderation of its development policies, the political ramifications could be profound. The Arizona experience suggests that direct interest-group bargaining may be more efficacious than the usual commission study/legislative debate route. Finally, fortuitous factors, such as sustained federal pressure, or inspired gubernatorial leadership, could play an important part in bringing about significant water law reform based upon a durable political consensus.

NOTES

1. Irwin v. Phillips, 5 Cal. 140, 146 (1855).

2. California Water Code Section 1011 (Deering Supp. 1981).

3. Fullerton v. State Water Resources Control Board, 90 Cal. App. 3d 590, 153 Cal. Rptr. 518 (1979); California Trout, Inc. v. State Water Resources Control Board, 90 Cal. App. 3d 816, 153 Cal. Rptr. 672 (1979).

4. Id. at 820-822 and 675.

5. Cal. Water Code, Sections 1243 and 1243.5 (Deering 1977).

6. Coffin v. Left Hand Ditch Company, 6 Colo. 443 (1882).

7. State of California, The California Water Atlas 26 (1978, 1979).

8. Lux v. Haggin, 69 Cal. 255, 10 P. 674 (1886).

9. California Water Code Section 102 (Deering 1977).

10. Cal. Water Code, Section 2501 (Deering 1977); see In re Waters of Long Valley Creek Stream System, 25 Cal.3d 339, 158 Cal. Rptr. 350, 599 P.2d 656 (1979).

11. Anaheim Union Water Company v. Fuller, 150 Cal. 327, 88 P. 978 (1907).

12. Pabst v. Finmand, 190 Cal. 124, 211 P. 11 (1922).

13. Colorado Power Company v. Pacific Gas and Electric Company, 218 Cal. 559, 24 P.2d 495 (1933).

14. Id.; 23 California Administrative Code Section 685(d) provides that less than thirty days is "regulation," i.e. the temporary storage permitted a riparian.

15. American Law Institute, Restatement of the Law, Second, Torts § 850A.

16. Tulare Irrigation District v. Lindsay-Strathmore Irrigation District, 3 Cal.2d. 489, 45 P.2d 972 (1935) (ten year limit); see also Herminghaus v. Southern California Edison Company, 200 Cal. 81, 252 P. 607 (1926), cert. dismissed, 275 U.S. 486 (1927) (limit on water used on uncultivated grazing land declared beyond the police power of the state).

17. Statement of Professor Frank Trelease to the Governor's Commission to Review California Water Rights Law (July 14, 1977); cf. Trelease, Water Law 11-12 (Third edition, 1979).

18. Acton v. Blundell, 152 Eng. Rep. 1223 (Ex. 1843).

19. Katz v. Walkinshaw, 141 Cal. 116, 74 P. 766 (1903).

20. City of San Bernardino v. City of Riverside, 186 Cal. 7, 198 P. 784 (1921).

21. City of Los Angeles v. City of San Fernando, 14 Cal.3d 199, 537 P.2d 1250, 123 Cal. Rptr. 1 (1975).

22. Schneider, "Groundwater Rights in California" (Governor's Commission to Review California Water Rights Law, Staff Paper No. 2) 43-49 (1977) (Orange County experience reviewed).

23. Id. at 19-34 and 50-60.

24. Niles Sand and Gravel Company v. Alameda County Water District, 37 Cal. App. 3d 924, 112 Cal. Rptr. 846 (1974), cert. denied, 419 U.S. 869 (1975).

25. City of Los Angeles v. City of San Fernando, 14 Cal.3d 199, 537 P.2d 1250, 123 Cal. Rptr. 1 (1975).

26. Craig, "Prescriptive Water Rights in California and the Necessity for a Valid Statutory Appropriation," 42 Cal. L. Rev. 219 (1954); Kletzing, "Prescriptive Water Rights in California: Is

Application a Prerequisite?" 39 Cal. L. Rev. 369 (1951).

27. People v. Shirokow, 26 Cal.3d 301, 605 P.2d 859, 162 Cal. Rptr. 30 (1980). The decision states that defendant's claim of prescriptive rights cannot lie "as against the state" when the state seeks to enjoin a use initiated after 1914. The question of prescription good between private parties in such circumstances is left open by the court. Id. at note 15.

28. Pabst v. Finmand, 190 Cal. 124, 211 P. 11 (1922).

29. Pasadena v. Alhambra, 33 Cal.2d 908, 207 P.2d 17 (1949).

30. City of Los Angeles v. City of San Fernando, 14 Cal.3d 199, 537 P.2d 1250, 123 Cal. Rptr. 1 (1975).

31. Cal. Civil Code Section 1007 (Deering 1971).

32. City of Los Angeles v. City of San Fernando, 14 Cal.3d 199, 265, 537 P.2d 1250, 1298, 123 Cal. Rptr. 1, 49 (1975).

33. California Water Code Section 2500 et seq. (Deering 1977) treats statutory adjudications.

34. Anderson, "Statutory Adjudication of Water Rights" (Governor's Commission to Review California Water Rights Law, Staff Memorandum Number 5) 1 (1978).

35. Although statutory adjudications include rights to the (rare) subterranean stream in a known and definite channel, percolating groundwater has been included only in the case of the Scott River. See California Water Code Section 2500.5 (Deering 1977).

36. The interviews and reviews were conducted by Barbara Benson of the Class of 1982, School of Law, University of California at Davis.

37. See note 27 supra and accompanying text.

38. See note 32 supra and accompanying text.

39. City of San Diego v. Cuyamaca Water Company, 290 Cal. 105, 287 P. 475 (1930); City of Los Angeles v. City of San Fernando, 14 Cal.3d 199, 537 P.2d 1250, 123 Cal. Rptr. 1 (1975).

40. Cf. Fely v. City of Los Angeles, 58 Cal. 73 (1881) with City of Los Angeles v. City of San Fernando, 14 Cal.3d 199, 537 P.2d 1250, 123 Cal. Rptr. 1 (1975).

41. Winters v. United States, 207 U.S. 564 (1908).

42. Arizona v. California, 373 U.S. 546 (1963).

43. United States v. New Mexico, 438 U.S. 696 (1978).

44. United States v. Chandler-Dunbar Water Power Company, 229 U.S. 53 (1913).

45. United States v. Willow River Power Company, 324 U.S. 499 (1945).

46. Colburg, Inc. v. State of California ex rel. Department of Public Works, 67 Cal.2d 408, 432 P.2d 3, 62 Cal. Rptr. 401 (1967).

47. People ex rel. Baker v. Mack, 19 Cal. App. 3d 1040, 97 Cal. Rptr. 448 (1971).

48. Marks v. Whitney, 6 Cal.3d 251, 491 P.2d 374, 98 Cal. Rptr. 790 (1971). For the view that, at least in California, the state navigational servitude and the public trust doctrine are in fact one and the same, see Dunning, "The Significance of California's Public Trust Easement for California's Water Rights Law," 14 U.C. Davis L. Rev. 357, 387 n. 175 (1980).

49. See generally "The Mono Lake Litigation" in Dunning (ed.), The Public Trust Doctrine in Natural Resources Law and Management 141 (1981).

50. See note 8 supra and accompanying text.

51. Herminghaus v. Southern California Edison Company, 200 Cal. 81, 252 P. 607 (1926), cert. dismissed, 275 U.S. 486 (1927).

52. Tulare Irrigation District v. Lindsay-Strathmore Irrigation District, 3 Cal.2d 489, 569-568, 45 P.2d 972, 1007 (1935).

53. Joslin v. Marin Municipal Water District, 67 Cal.2d 132, 60 Cal. Rptr. 377, 429 P.2d 889 (1967).

54. Id. at 140, 382 and 894.

55. California Conservation Commission, Report 32-33 (1912). Appropriations of water for power purposes had been made subject to administrative control shortly before that. Id. at 21.

56. The provisions of this act are now codified in the California Water Code.

57. California Conservation Commission, Report 31 (1912).

58. Bank of America v. State Water Resources Control Board, 42 Cal. App. 3d 198, 116 Cal. Rptr. 770 (1974).

59. State of California v. United States, 438 U.S. 645 (1978).

60. Such questions are the focus of the continuing litigation over conditions imposed by the State of California on appropriations by the Bureau of Reclamation for the New Melones Project. On April 8, 1981, the U.S. District Court for the Eastern District of California entered a judgment sustaining some of these conditions and declaring others invalid. In essence this judgment permits the federal government to fill the reservoir at New Melones without regard to state limitations in order to produce power, but not to deliver water for water supply purposes. This judgment is currently on appeal in the Ninth Circuit (No. 81-4189).

61. See generally State of California, The California Water Atlas 47-50 (1978, 1979).

62. See generally id. at 50-56.

63. Governor's Commission to Review California Water Rights Law, Final Report 165-166 (1978).

64. Id. at 166-168.

65. California Department of Water Resources Bulletin 118-80 (January 1980). A map identifying these eleven basins is reproduced as Appendix B of this paper.

66. See particularly California Water Code Sections 1255, 1243 and 1243.5 (Deering 1977).

67. But see the board's assertion of authority in recent regulations promulgating procedures for protecting instream beneficial use. 23 California Administrative Code §§ 1050-1060 (promulgated May 30, 1981).

68. See cases cited at note 3 supra and accompanying text.

69. Governor's Commission to Review California Water Rights Law, Final Report 119 (1978). Authority to grant interim instream appropriations, valid until establishment of an instream flow standard for the stream in question (to be done within five years), was however recommended by the commission. Id. at 114-5.

70. Id. at 113-114.

71. See notes 59 and 60 supra and accompanying text.

72. See National League of Cities v. Usery, 426 U.S. 833 (1976).

73. See notes 51-54 supra and accompanying text.

74. See "Panel Kills Bill on Water Saving," Los Angeles Times (August 16, 1980) part I, p.3.

75. The following discussion is taken from Eugene C. Lee and Harrison C. Dunning, "Political Dynamics and Decision-making" in Competition for California's Water: Alternative Resolutions (to be published by the University of California Water Resources Center).

76. These statutes are codified at California Water Code Sections 100.5, 109, 1011 (see also 1010), 1210-1212, 1241, 1244, 1345-1348, 1704.1-1704.4, 1725-1730, 1735-1740, 1745, 1825, 1831-1836, 1840, 1845, and 1850-1851 (Deering Supp. 1981).

77. See note 56 supra and accompanying text.

78. James W. Johnson, "The 1980 Arizona Groundwater Management Act and Trends in Western States Groundwater Administration and Management: A Minerals Industry Perspective," 26 Rocky Mountain Mineral Law Institute (1980), pp. 1031-1103; Philip R. Higdon and Terence W. Thompson, "The 1980 Arizona Groundwater Management Code," 1980 Arizona State Law Journal, pp. 621-671.

79. The bill in unamended form was approved by more than a two-thirds vote in each house of the Arizona legislature. Higdon and Thompson, id. at p. 621.

80. See generally Dean E. Mann, The Politics of Water in Arizona (Tucson: The University of Arizona Press, 1963).

81. Farmers Investment Company v. Bettwy, 113 Arizona 520, 558 P.2d 14 (1976).

82. Town of Chino Valley v. City of Prescott (No. C-28568) and City of Chandler v. Kyrene Water Company (No. C-397751). Interestingly, the statute reverses the usual practice by including a nonseverability clause -- if any part of the statute

is found unconstitutional by the courts, the entire statute will fail. By this device the Arizona legislature "tried to ensure that the courts will not consider any detriment to any particular water user without also looking at the corresponding benefits to that user and the corresponding detriments to other water users." Johnson, supra note 78 at p. 1063.

83. Act of April 22, 1981, Ch. 192 § 17 and Ch. 203.

APPENDIX A

INITIATIVE MEASURE PROPOSED FOR NOVEMBER 1982 BALLOT

DIVISION 8. WATER RESOURCES CONSERVATION AND EFFICIENCY ACT

PART 1. GENERAL DECLARATIONS AND POLICY

15000. This division shall be known and may be cited as the "Water Resources Conservation and Efficiency Act."

15001. The people of the State of California find and declare as follows:

(a) The waters of the state are a limited resource subject to ever increasing demands.

(b) Conservation and the efficient management of water resources are necessary to meet the competing needs of urban communities, industry, agriculture, and recreation.

15002. In order to promote balanced development and preservation of water resources for the benefit of present and future generations of Californians, the people of the State of California further find and declare as follows:

(a) Cost-effective methods of water conservation shall be promoted.

(b) Water development and use shall conserve water in rivers, streams and lakes for fishing, recreation, wildlife support, water quality control, and related purposes.

(c) The Stanislaus River Canyon is an historical, geological, and natural treasure. At the present time, filling the New Melones Reservoir to a moderate level is an effective compromise that will provide for irrigation, flood control, power generation, and water quality enhancement, while preserving the natural and recreational qualities of the canyon.

(d) Underground water is a shared resource. Successful groundwater management programs, such as those of Los Angeles, Orange, Riverside, San Bernardino, and Santa Clara Counties, and other areas of the state, should be adapted to those parts of California known to have critically overdrafted groundwater basins.

PART 2. WATER EFFICIENCY AND CONSERVATION

15100. It is the policy of the State of California that:

(a) Conservation and the efficient use of water shall be vigorously pursued to protect both the people of the state and their water resources.

(b) Economic efficiency in water allocation and use requires that those who receive water from a water project pay their full proportionate share of the costs of developing and delivering that water; that subsidies shall be discouraged; that the use of property taxes to pay for any cost of water development or delivery shall be minimized; and that property taxes shall be phased out for payment of such costs associated with developed water supplies.

(c) Efficiency also requires that additional water importation be considered only where economically competitive water conservation programs are developed and implemented in the importing area.

15101. As used in this part:

(a) "Basin" means a hydrologic study area described in Department of Water Resources Bulletin 160-74; except that, for the purposes of this part, the Sacramento Basin and the Delta-Central Sierra Basin shall be deemed a single hydrologic basin.

(b) "Interbasin transfer" means the transfer of water for use in a basin other than the basin in which the source of the water is located.

(c) "Public agency" means (1) any state or federal agency; and (2) any city, city and county, county, or district organized, existing, and acting pursuant to the laws of this state.

15102. Every water supplier of, or contractor with the state or federal government for, more than 20,000 acre-feet of water per year, engaged in or contracting for the interbasin transfer of water on the effective date of this division, regardless of the basis of water right, shall on or before January 1, 1985, prepare and submit to the board a water conservation program as provided in Section 15104. After the effective date of this division, no such supplier or contractor shall make a new or increased interbasin transfer of water, regardless of the basis of water right, unless and until an adequate water conservation program has been prepared and is being adequately implemented, as determined by the Board.

15103. An application to appropriate more than 20,000 acre-feet of water involving an interbasin transfer of water shall include a water conservation program as provided in Section 15104. Any permit or license issued by the board for an appropriation of water to which this section applies shall contain a condition requiring the continued satisfactory implementation of the water conservation program.

15104. The water conservation program shall be consistent with the policies in this division, and shall identify all reasonable water supply alternatives, including, but not limited to (1) water conservation and other practices to achieve greater efficiency in water use, (2) waste water reclamation, (3) improved water management practices, including groundwater management and conjunctive use of ground and surface waters consistent with any groundwater management program adopted pursuant to Part 4 of this division (commencing with Section 15300), (4) any pricing and rate structure change which would result in water conservation, (5) banking of water supplies for use in water deficient years, (6) interbasin

and intrabasin transfers of developed water supplies, and (7) inbasin conventional water supply development. Any measure which would substantially impair significant wetlands shall not be deemed a reasonable water supply alternative. The water conservation program shall include, but not be limited to, a comparison of costs and a plan for implementation of alternatives. Where implementation of a water conservation program, or a portion thereof, will cost less on a marginal-cost basis than importation of additional supplies, the program, or portion thereof, shall be implemented prior to commencing additional importation projects. Implementation of alternatives shall include adoption of all necessary ordinances or regulations.

15105. Any public agency, water supplier or water contractor shall have the power to use any existing financing authority to implement a water conservation program as described in Section 15104.

15106. (a) No provision of this part shall be construed to endorse, require, or prohibit the construction, maintenance, or use of the facility authorized by subdivision (a) of Section 11255 (as added by Chapter 632, Statutes of 1980 (S.B. 200)), if Chapter 632 is effective.

(b) Nothing in this section shall affect any obligation of any person or entity under the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code).

PART 3. INSTREAM PROTECTION

CHAPTER 1. GENERAL PROVISIONS

15200. (a) It is the purpose and intent of this part to conserve a reasonable amount of water in the streams, rivers, lakes, bays, estuaries, and wetlands of the state for the benefit of present and future generations of Californians.

(b) It is hereby declared to be the policy of the state that instream uses of water be given due consideration in the state's water rights permit and license system.

15201. Water may be appropriated for reasonable and beneficial instream uses, including, but not limited to, fishery and water-related wildlife uses and recreational, aesthetic, scientific, scenic, and water quality uses in the same manner as water is appropriated for other uses pursuant to Part 2 (commencing with Section 1200) of Division 2.

15202. The appropriation of water pursuant to this part does not require the diversion or any other form of physical control of the water appropriated. No change in place of use by an appropriator under Chapter 10 (commencing with Section 1700) of Part 2 of Division 2 shall be allowed for any appropriation of water for instream use, nor shall the right to appropriate water for instream uses create in the appropriator any right to exclude others from any beneficial, reasonable instream use of that water which is consistent with and does not impair the use for which the water is appropriated.

15203. Whenever an applicant for a permit to appropriate water pursuant to Division 2 (commencing with Section 1200) proposes a project or proposes the appropriation of water which may have an adverse impact on instream uses, the board shall allow the appropriation only upon the condition that the permittee implement measures to offset those impacts. The board shall reserve jurisdiction with respect to the provisions of any condition included in a permit or a license subject to this section.

15204. The board may establish instream flow protection standards to implement this part, provided that no such standards shall impair vested water rights.

CHAPTER 2. STANISLAUS RIVER

15225. In order to prevent the waste, unreasonable use, or unreasonable method of diversion of water, as provided in Section 2 of Article X of the California Constitution, the impoundment of water behind New Melones Dam on the Stanislaus River, except as required for (1) satisfaction of vested rights, (2) releases to preserve and enhance fish and wildlife, (3) releases for water quality control purposes, (4) flood control purposes, and (5) generation of hydroelectric power only to the extent that the water is stored and released for one or more of the four purposes listed above, shall be prohibited until the project operator has entered into long-term water service contracts for specific municipal, industrial, or agricultural uses representing at least 75 percent of the firm yield of the New Melones Project, as determined by the board.

15226. No person, state agency, subdivision of the state, state-regulated agency, or entity organized under the laws of the State of California shall enter into any contract for the purpose and delivery of water from the New Melones Project unless the contract provides for the payment by the purchaser of the purchaser's proportionate share of both of the following:

(a) All operation, maintenance, and delivery costs for the New Melones Project and related conveyance facilities during the term of the contract; and

(b) The construction costs of the New Melones Project without subsidy from other facilities or other water users.

15227. For the purposes of Section 15226, "cost," means the cost as allocated to water supply elements of the New Melones Project when the Water and Power Resources Service (now the Bureau of Reclamation) of the United States Department of Interior assumed responsibility for the project from the United States Army Corps of Engineers on November 20, 1979.

15228. Any person, state agency, subdivision of the state, state-regulated agency, or entity organized under the laws of the State of California entering into an agreement for the purchase and delivery of water from the New Melones Dam Project shall condition its agreement to provide that the agreement shall not be in full force and effect until long-term water service contracts are signed representing 75 percent of

the firm yield of the New Melones Project.

15229. In complying with the terms of this chapter, the board shall, to the extent possible, restrict storage of water in the New Melones Reservoir to the area downstream of Parrott's Ferry Bridge, 808 feet above mean sea level.

PART 4. GROUNDWATER RESOURCES CONSERVATION

CHAPTER 1. FINDINGS AND DECLARATIONS OF POLICY

15300. The people of the State of California find and declare all of the following:

(a) Conditions of critical groundwater overdraft currently exist in several areas of the state, adversely affecting water resources throughout the entire state.

(b) Local groundwater resources shall be managed to avoid conditions of long-term overdraft, land subsidence, water quality degradation, and other significant environmental harm.

(c) Local economies shall be built and sustained on reliable, long-term water supplies and not upon long-term overdraft as a source of water supply.

15301. The people, however, recognize that, in certain areas, long-term overdraft cannot immediately be eliminated without causing severe economic loss and hardship. In those areas, the groundwater management programs provided for in this part shall include all reasonable measures, consistent with the policies and provisions of this division, to prevent a further increase in the amount of long-term overdraft and to accomplish continuing reduction in long-term overdraft.

CHAPTER 2. DEFINITIONS

15310. As used in this part:

(a) "Groundwater" means water beneath the surface of the earth within the zone below the water table in which the soil is completely saturated with water. Groundwater does not include water subject to the existing permit and license system administered by the board.

(b) "Local entity" means any city, city and county, or county. Local entity also means any public utility, mutual water company, or general or special district or agency, provided it is authorized to acquire, develop, replenish, or otherwise manage or regulate water supplies. Any member entity of a district, agency, or authority, including a joint powers authority, shall also be considered a local entity for the purposes of this part.

(c) "Long-term overdraft" means the condition of a groundwater basin in which the average annual amount of water extracted for a period

of five years or more exceeds the average annual supply of water for that period to the basin, plus any temporary surplus.

CHAPTER 3. CRITICAL GROUNDWATER OVERDRAFT AREAS

15320. The following groundwater basins identified in Department of Water Resources Bulletin 118-80 are hereby declared to be critical groundwater overdraft areas and shall establish groundwater management authorities and otherwise comply with the provisions of this part: (a) Santa Cruz-Pajaro Basin; (b) Cuyama Valley Basin; (c) Ventura County Basin; (d) Eastern San Joaquin County Basin; (e) Chowchilla Basin; (f) Madera Basin; (g) Kings Basin; (h) Kaweah Basin; (i) Tulare Lake Basin; (j) Tule Basin; and (k) Kern County Basin.

CHAPTER 4. GROUNDWATER MANAGEMENT AUTHORITIES

15330. Within one year after the effective date of this division, the local entities within a critical groundwater overdraft area designated in Section 15320 shall identify a responsible authority to carry out the groundwater management requirements of this part and shall transmit their nomination to the board. The board shall designate the authority nominated by the local entities as the groundwater management authority for the area unless an objection is filed with the board by a local entity in the area within 60 days after the transmittal of the nomination to the board.

15331. In making their nomination pursuant to Section 15330, the local entities in a critical groundwater overdraft area shall nominate one of the following from their area, as the responsible groundwater management authority for their area: (a) a local entity which is a public agency, (b) a joint powers authority organized under Chapter 5 (commencing with Section 6500) of Division 7 of Title 1 of the Government Code, or (c) a groundwater management district organized pursuant to law, if and when such a law is enacted.

15332. If, one year after the effective date of this division, the local entities within a designated critical groundwater overdraft area have not nominated a responsible authority as provided for in Section 15330 and 15331, or an objection to the nomination has been properly filed with the board, the board shall, after notice and opportunity for hearing, expeditiously determine whether any existing public local entity can effectively serve as the groundwater management authority for the area. Where the determination is made in the affirmative, the board shall designate a public local entity as the groundwater management authority for the area.

15333. If, pursuant to Section 15332, the board determines that no existing public local entity can effectively serve as the groundwater management authority, the board shall provide notice of the determination to all local entities within the area. Upon receipt of the notice, the local entities within the area shall, within 180 days, create a joint powers authority for the purposes of meeting the groundwater management requirements of this part, which authority shall be designated by the

board.

15334. Any groundwater management authority designated by the board pursuant to this part may exercise, as appropriate, any of the powers set forth in (a) the Orange County Water District Act (Chapter 924, Statutes of 1933 as amended on or before the effective date of this division), (b) the Sierra Valley Groundwater Basin Act (Chapter 449, Statutes of 1980), or (c) future legislation authorizing additional powers for groundwater management authorities. In addition, any such authority shall have the power to limit, control, or prohibit extraction of groundwater within the groundwater management area to respond to conditions of long-term overdraft, subsidence, water quality degradation, significant environmental harm, well interference, or the threat of any of those conditions.

CHAPTER 5. LOCAL GROUNDWATER MANAGEMENT PROGRAMS

15340. Not later than two years after a groundwater management authority is designated, the authority shall adopt a groundwater management program for the area.

15341. (a) Each groundwater management program shall include a detailed statement of groundwater management objectives. These objectives shall include, but shall not be limited to, all of the following:

(1) Reduction of water demand by means of water conservation, waste water reclamation, and other means.

(2) Preservation and improvement of water quality by means of soil and drainage management.

(3) Effective use of the storage capacity of the groundwater basins.

(4) Maintenance of groundwater supplies to provide water for wetlands.

(b) Groundwater management objectives shall be consistent with the policies and provisions set forth in this division.

15342. Each groundwater management program shall include a plan of implementation for achieving the groundwater management objectives stated. The plan of implementation shall describe the actions necessary to achieve the groundwater management objectives stated and set a time schedule for each action to be taken.

15343. Groundwater management programs shall be reviewed periodically and may be revised. Any revision of a groundwater management program shall be subject to all the requirements for the adoption of an initial groundwater management program.

15344. A groundwater management program or a revision of a program shall not become effective unless and until, after notice and opportunity for hearing, it is approved by the board.

15345. The board shall act upon any groundwater management program or revision within one year after its submission to the board.

15346. The board shall approve a groundwater management program or revision where it finds that the groundwater management objectives and implementation plans stated in the program are consistent with the policies and provisions of this division, and that the implementation plan will be adequate to achieve the groundwater management objectives stated in the program.

CHAPTER 6. PROGRAM IMPLEMENTATION

15350. One year after the effective date of this division no land within any critical groundwater overdraft area shall be irrigated unless the land has been irrigated for at least one growing season in the immediately preceding three calendar years.

15351. The restriction in Section 15350 shall remain in force in any critical groundwater overdraft area until the board has approved the program pursuant to Section 15346. Upon application, the board may grant individual exemptions to the requirements of Section 15350 where the board finds that the development would not result in the net increase of water use within the critical groundwater overdraft area and would otherwise be consistent with Section 2 of Article X of the California Constitution.

15352. The board shall not approve any application to appropriate water for an interbasin transfer to any critical groundwater overdraft basin until the board has approved the management and implementation programs for the area pursuant to the requirements and provisions of Section 15346.

CHAPTER 7. EFFECT ON LOCAL ENTITIES

15360. Nothing in this part shall be construed to preempt or otherwise interfere with any existing authority of local public entities to manage, regulate, or otherwise provide for groundwater or the extraction of groundwater in areas which are not designated as critical groundwater overdraft areas by Section 15320.

CHAPTER 8. EXEMPTION FOR SMALL GROUNDWATER FACILITIES

15370. Any well which produces less than 75 gallons of water per minute shall be exempt from any requirement imposed by this part or as a result of the requirements of this part.

PART 5. MISCELLANEOUS PROVISIONS

15400. Notwithstanding any provisions of law to the contrary, every affected public entity in California shall, to the fullest extent possible, implement the policies and the provisions of this division.

15401. The board shall adopt regulations and take all appropriate actions before executive, legislative, or judicial agencies to enforce the policies and provisions of this division. Any person may petition the board to enforce the provisions of this division, pursuant to procedures adopted by the board.

15402. (a) Any person may, within 60 days after final action by the board, file a petition for writ of mandate in the Superior Court in and for the County of Sacramento regarding the validity of any administrative action of the board in carrying out the provisions and policies of the division. Failure to file the petition within 60 days shall preclude any person from challenging the board's action in any administrative or judicial proceeding.

(b) Any person shall have standing to enforce the provisions of this division in a proceeding for declaratory or injunctive relief. Except as provided in subdivision (a), nothing in this section shall limit any other cause of action which may be available under other provisions of law.

(c) The board may request the Attorney General to seek injunctive relief and other appropriate judicial remedies in the Superior Court in and for the County of Sacramento when necessary to enforce the provisions and the policies of this division.

15403. This division may be amended or repealed by the procedures set forth in this section. If any portion of subdivision (a) is declared invalid, then subdivision (b) shall be the exclusive means of amending or repealing this division.

(a) This division may be amended to further its purpose by statute, passed in each house by rollcall vote entered in the journal, a majority of the membership concurring, and signed by the Governor, if at least 20 days prior to passage in each house the bill in its final form has been delivered to the board for distribution to the news media and to every person who has requested the board to send copies of those bills to him or her.

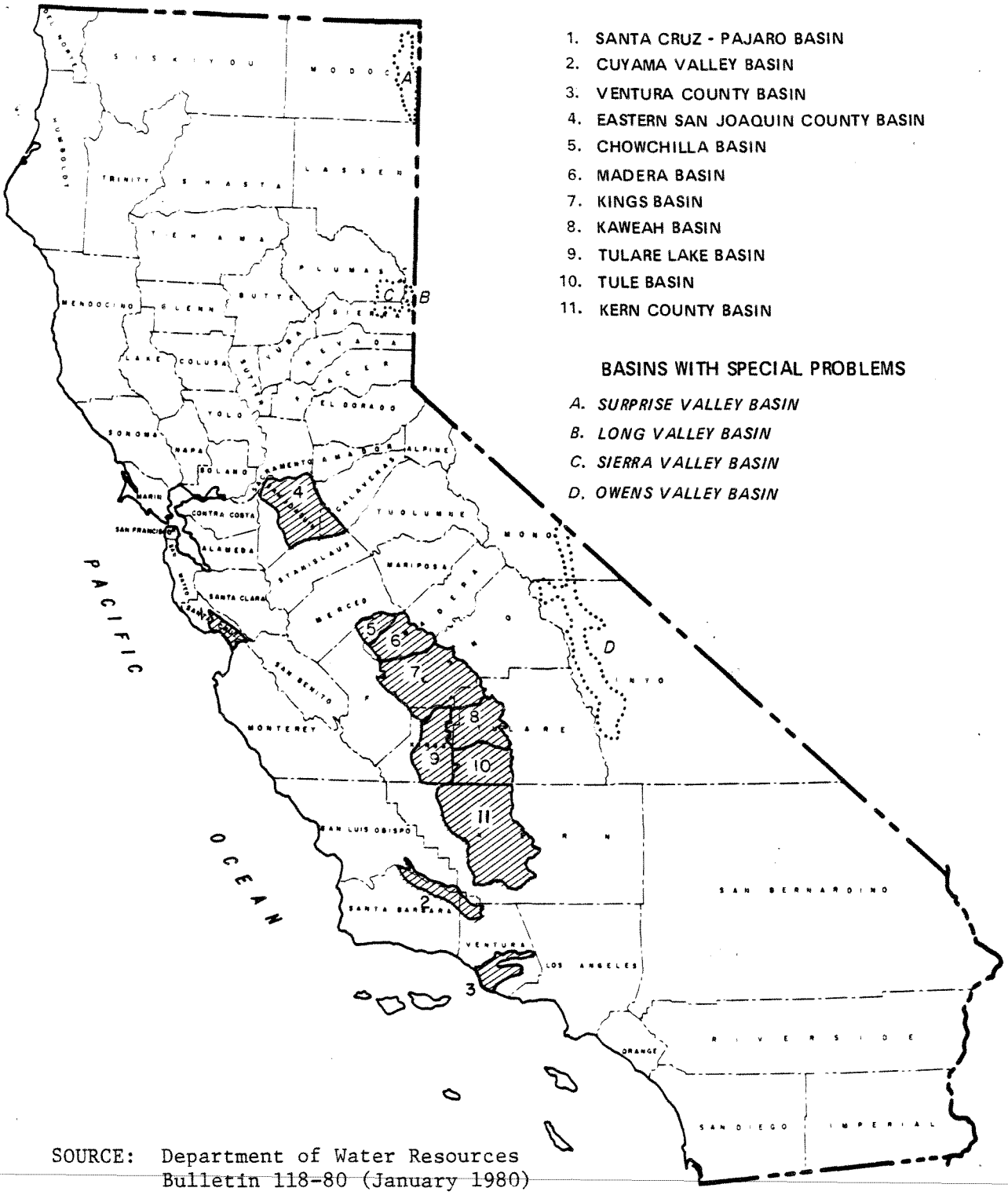
(b) This division may be amended or repealed by a statute that becomes effective only when approved by the electors.

15404. The people of the State of California find and declare that the policies and the provisions of this division are in furtherance of the policy of conservation and reasonable and beneficial use contained in Section 2 of Article X of the California Constitution and, being necessary for the health, safety, and welfare of the state and its inhabitants, shall be liberally construed.

15405. If any provision of this division or the application thereof to any person or circumstances is held invalid, the invalidity shall not affect other provisions or applications of the division which can be given effect without the invalid provision or application, and to this end the provisions of this division are severable.

APPENDIX B

BASINS SUBJECT TO CRITICAL CONDITIONS OF OVERDRAFT



SOURCE: Department of Water Resources
Bulletin 118-80 (January 1980)

BASINS SUBJECT TO CRITICAL CONDITIONS OF OVERDRAFT OR WITH SPECIAL PROBLEMS

INSTITUTE OF GOVERNMENTAL STUDIES

Eugene C. Lee, *Director*

The Institute of Governmental Studies was established in 1919 as the Bureau of Public Administration, and given its present name in 1962. One of the oldest research units in the University of California, the Institute conducts extensive and varied research and service programs in such fields as public policy, politics, urban-metropolitan problems, and public administration. The Institute focuses on issues confronting the Bay Area, California, and the nation.

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