

Reprint Number 47
JUNE 1964

Property

Proprietorship and Politics

By VINCENT OSTROM



RESOURCES FOR THE FUTURE, INC.
1755 Massachusetts Avenue, N.W., Washington, D.C., 20036

*Single copies free on request
Additional copies 25 cents each*

PROPERTY, PROPRIETORSHIP AND POLITICS:
LAW AND THE STRUCTURE OF STRATEGIC OPPORTUNITIES
IN THE CALIFORNIA WATER INDUSTRY

PROPERTY, PROPRIETORSHIP AND POLITICS:
LAW AND THE STRUCTURE OF STRATEGIC OPPORTUNITIES
IN THE CALIFORNIA WATER INDUSTRY*

Vincent Ostrom
Resources for the Future, Inc., and Indiana University

Law and the Pursuit of Opportunities

In any going society, the patterns of economic behavior are maintained by virtue of certain rules of conduct or laws which formulate the range of strategic opportunities that are available to those who function within that society. Law places parameters upon conduct by indicating the boundaries of lawful and unlawful behavior, provides a basic structure of incentives for ordering the behavior of all persons in a society, and affords certain facilities for the pursuit of opportunities. If law is to be effective, it must be enforceable. A "rule of law" exists only when enforceable rules of conduct are made explicit and when the behavior of all participants in a social structure can be held accountable in reference to the explicit standards of the law.

The specification of enforceability as an essential element of the law means that all social transactions and relationships have implicit reference to a juridic order in which special machinery or institutional facilities may be invoked to resolve conflicts and enforce conduct consonant with the rules of law. An economic transaction, for example, may be simply conceived as an exchange of goods and services between two persons. However, the very nature of the transaction depends upon the juridic position of the persons engaging in the transaction, and the nature of the exchange depends upon the legal attributes of property in the goods and services being exchanged. The consummation of a transaction depends, in turn, upon the implicit, if not explicit, law of contracts.

If the parties occupy relatively equal juridic positions with substantial independence and freedom of choice, some of the legal conditions of a market exchange can be met. Others can be met if the nature of the property right to a good tends to be exclusive, determinate, and readily transferable. The institutional facilities of a legal order are required to maintain the economic order of a market.

* The formulation of this paper has benefited significantly from earlier conversations with my colleagues J. S. Bain, R. E. Caves, and J. Margolis on the California water industry study, with my associates, especially I. K. Fox, J. V. Krutilla, A. V. Kneese, J. W. Milliman, and Aaron Wildovsky at Resources for the Future, Inc., with L. F. E. Goldie who has related interests in the study of law and with E. Scott and L. Weschler who are currently working on aspects of public entrepreneurship in the California water industry. I have found John R. Commons's formulations in his *Legal Foundations of Capitalism* to be the most helpful single source of ideas for dealing with the economic and legal relationships implicit in any economic transaction.

Under relatively optimal market conditions the legal aspects implicit in an economic transaction can be assumed without giving much attention to the specific provisions of the law.¹ Then, people engage in a relatively free exchange of goods and services with minimal friction and negligible recourse to legal processes. Under these circumstances the standard assumptions of the economist about producer "sovereignty" and consumer "sovereignty" in an economy operating under postulated conditions of "law and order" are adequate. However, such assumptions may not be an accurate characterization of the nexus of economic and legal relationships, and they may not be particularly appropriate for analyzing economic behavior under imperfect market conditions.

From a legal point of view every economic transaction or relationship can be looked upon as involving parties with certain rights, duties, exposures, and liberties. Where one has a property right, for example, others have a duty or obligation to recognize that right. An intrusion upon a person's property right may create an exposure on the part of the intruder to the claims of the proprietor owning the property. Still other relations may not be subject to an exposure, and a person in such a position is at liberty, or free, to choose his own course of action. A potential buyer, for example, is at liberty to consider an offer to sell, but once an agreement has been made to buy, a new pattern of rights and duties has been established with a commensurate structure of liberties and exposures.

All legal relationships imply that parties to an economic transaction may invoke special legal facilities to enforce their claims by recourse to adjudication. Every claim to a right implies a power or capacity to invoke legal facilities to enforce one's rightful claim against the actions of those who may have impaired or may threaten to impair the exercise of that right. A person who has unlawfully infringed on another's rights, in turn, is exposed to the imposition of sanctions in order to redress the wrong.

A purely economic transaction implies that parties are free to realize economic opportunities through private negotiation of an exchange of goods and services. The freedom of the market implies substantial liberty or freedom of choice, i.e., freedom from external sanctions. But where rights may be infringed, those claiming the right may invoke legal procedures and transform an economic relationship into a legal relationship with fundamentally different decision rules and with the imposition of sanctions to reallocate values. A decision to invoke legal processes transforms an economic relationship from a private transaction with substantial freedom to pursue opportunities into a formal public transaction subject to highly formalized procedures with recourse to an external authority able to impose formal sanctions in the enforcement of a judgment. Both types of relationships exist in contemplation of the law but involve a quite different structure of social relationships. The one is organized to facilitate negotiation; the other is organized to facilitate litigation.

The amount of litigation in any private sector of an economy may be a crude, but nonetheless effective, indicator of the failure of private proprietors to reach satisfactory solutions, or to "satisfice" under existing market conditions.² In other words, litigation may serve as a crude indicator of market failure. In turn, the willingness to invest in litigation implies that strategic opportunities are available to those who seek recourse to such

proceedings in which the pay-off from litigation can be expected to exceed the costs of litigation in relation to the consequences anticipated in the failure to litigate.

Whether the claimants who seek recourse to litigation are able to gain an adjudicated solution at which they can "satisfice" may also be problematic. If substantial investments are made in appeals to higher courts or if controversies fail to terminate in litigated judgments, then one might infer that the parties have failed to "satisfice" by recourse to adjudicatory proceedings. However, litigation may still have a value in placing boundaries upon problems by defining some of the issues, by determining the universe of interested parties, or the community of litigants, and by formulating the set of results or outcomes which could be expected from an adjudicated solution.

Once bargaining limits are established by litigation or the threat of litigation, parties to the conflict are often in a position to assess opportunity costs and explore the alternate solutions which may be available to them. In an open society with a relatively free public enterprise system, a solution may be sought by designing and organizing some form of public enterprise which will permit a community of litigants to resolve its problems as a function of the internal management and operation of such a public enterprise. Public entrepreneurship, thus, may be one of the sets of strategic opportunities for "satisficing" when market alternatives and adjudicatory proceedings have failed to "satisfice." Another set of alternatives might be pursued by changes in public policies which would regulate market conduct under new policy constraints or remove existing policy constraints.³ Still other alternatives might include efforts to correct imperfections in market conduct by reformulating the body of property and commercial law applicable to market conduct.

A market which fails to "satisfice" is clearly subject to such imperfections that optimal allocation of resources is not possible. In an open society the legal and political institutions which are available to proprietors as a function of the legal character of all economic transactions may provide other arrangements to facilitate the search for solutions which can "satisfice." Whether solutions which meet the conditions for "satisficing" also meet the conditions for "optimizing" in the use of economic resources is problematic. Answers to such a question depend upon a capacity to evaluate performance under widely varying economic and political conditions.

In exploring the range of economic and political opportunities which derive from the nexus of law to economic transactions, I shall, first, examine the law of water rights in relation to the range of opportunities and risks that are created for proprietors functioning in the California water industry. Some of the strategic opportunities that are open to proprietors by seeking recourse to the courts as a means of pursuing their interests will be considered next. Some of the opportunities that are sought through public solutions to common problems against the backdrop of litigation or the threat of litigation will then be examined. Finally I shall attempt to draw some conclusions about the relationship of property, proprietorship, and politics to the pursuit of economic opportunities in the California water industry.

Law and the Pursuit of Opportunities in the California Water Industry

The California water industry provides a useful referent in examining problems regarding law and the pursuit of economic and political opportunities under imperfect market conditions. The variety of interdependencies among the Joint and alternative uses made of any water supply system creates an extraordinarily sticky, if not impossible, range of problems for a market to handle strictly within the confines of market arrangements. At the same time, California water law with its great variety of rules and its emphasis upon correlative rights formulates an admixture of property rights which are neither exclusive, nor determinate, nor easily transferable. Given these conditions it is not surprising that entrepreneurs have failed to establish a satisfactory level of operation in the private market. Instead, litigation in the California water industry has preoccupied the state courts for much of the past century. Having failed to "satisfice" in a free market, or in the courts, proprietors have tended to negotiate various collective arrangements for using public enterprises or joint operating agencies to develop and allocate common water supplies. As a result, the law of water user organization, especially the law applicable to public enterprises, has assumed a significant role in transforming the rules of conduct in the California water industry. An increasingly large portion of the total California water supply is being distributed under the public service rules of utility operations rather than under rules of property laws applicable to individual proprietors.

Opportunities and Risks of Proprietorship Implicit in the California Law of Water Rights

One view of property is to refer to the thing or object of a property relationship. Another view is to look at the attributes of "ownership" or of "proprietorship" which accrue to the "owner" of a good. In this sense, ownership involves an authority to control or an authority to make decisions or choices in relation to the use of a property. The "property" is the good, or, in its economic sense, the set of events or services which is to be used or controlled at the discretion of an owner. "Proprietorship" is the authority or power vested in an owner to exercise control over his property, especially to exclude others except on his own terms.

In examining the opportunities and risks of entrepreneurship implicit in the California law of water rights this analysis will view property law as the rules which formulate the powers or authority which a proprietor can exercise under his property right. These rules can be stated as characteristics or attributes of proprietorship which formulate the authority that accrues to entrepreneurs in the California water industry by virtue of the different claims that can be made to the use and control of water supplies. These characteristics or attributes of proprietorship may include reference to (1) who may claim, (2) for what uses, (3) exclusiveness of claim to use, (4) exposure to the claims of others, (5) stability of the right over time, (6) transferability (7) exposure to the costs of adversities, and (8) the structure of public authority and control. Each of these attributes can be examined for the several different types of water rights which may be asserted under California law including (1) pueblo rights, (2) appropriative rights to surface waters, (3) riparian rights surface waters only), (4) overlying ground water rights, (5) appropriative ground water rights, (6) prescriptive

rights, (7) mutual prescriptive rights, and (g) servitude to the areas and counties of origin.⁴

An examination of the attributes of proprietorship in the law of water rights reveals some radical variations in characteristics among the different doctrines of California water law. Some forms of water rights, including riparian rights and overlying ground water rights, can be asserted only by proprietors who own land in defined proximity to bodies of water. Since most water utilities do not own the land being served, they are excluded from asserting a riparian or overlying ground water right for their service area. An appropriative right to either surface or ground water supplies can be asserted by any proprietor who puts water to any of a wide range of beneficial uses including the provision of utility services for others. The pueblo right can be asserted only on behalf of a very few proprietors and can be held only in public proprietorship.

No single doctrine of water law takes account of all the various uses that may be made of water. An appropriative right can be asserted for any beneficial consumptive use as specified in the license to appropriate with the implication that a water right would not accrue to non-consumptive use of the flow of a stream in its natural state. Such uses as recreation, navigation, dilution of waste, and fishing would normally be excluded from the assertion of a private property right under the appropriation doctrine. Consumptive, on-the-land uses are generally emphasized as against non-consumptive, in-the-channel uses of a flowing stream. However, any use involving storage and modification of flow patterns of a stream in order to increase the utility of the regulated flow, as in the generation of hydroelectric power, is presumed to be a consumptive use subject to appropriation.

A riparian right presumably can be asserted for any reasonable beneficial use of the customary flow of a stream for both consumptive and non-consumptive purposes in relation only to riparian lands. In California the riparian doctrine has been used predominantly to assert claims to the use of water upon riparian lands. An effort of riparian proprietors to claim a right to the use of a stream for fishing has been denied on the grounds that the assertion of such a right is an exclusive function of the state in the exercise of its proprietary control over fisheries occurring in natural water courses;⁵ and an effort by a riparian proprietor to insist upon the continuance of a flow to assure the use of a stream for stock watering purposes has been denied as an unreasonable claim.⁶ Nor can a riparian proprietor assert a riparian right to use water for sale to non-riparian users.

Some types of water rights provide for correlative use of indeterminate quantities of water. Other forms of water rights provide for exclusive use of determinate quantities of water. Similar elements of variation apply to the relative stability of water rights over time. Water rights which are correlative permit a proprietor to claim an expanding supply of water for growth opportunities if the total supply of water is adequate to meet all demands, but may expose a proprietor to an impairment of his available supply if the total supply is insufficient to meet all demands of those asserting correlative rights. Other rights may remain relatively fixed over time except where they may be subject to prior vested rights of an indeterminate character.

The California law of water rights includes a variety of constraints upon the sale of water or the transfer of water rights. A riparian right is

normally sold or transferred as a part and parcel of a property right in land. If a riparian right is conveyed to a non-riparian proprietor, apart from the riparian land to which it had been attached, the non-riparian proprietor acquires a right to the use of water upon non-riparian lands only as against the riparian proprietor who sold the right. Such a sale does not quiet the claim of other riparian proprietors for injuries which may accrue by virtue of the diversion of water to non-riparian lands. Appropriative rights may be sold or transferred subject to conditions which assure that other water users will not be adversely affected by the transfer.

Rules governing the exclusiveness of a claim under various types of water rights usually determine the types of exposure that any proprietor must bear in relation to the claims of others. A junior appropriator is exposed to the prior rights of a senior appropriator and to the vested rights of those who may claim under other doctrines of water rights. Under conditions of water shortage, the doctrine of prior appropriation would normally exclude the most Junior appropriators and the entire burden of the shortage would be borne by the most junior appropriators. The senior appropriators in their order of seniority would have prior claim to the available water supply. On the other hand the correlative doctrine of riparian right and overlying ground water rights means that each proprietor is exposed to claims of any other similar claimant to the reasonable use of the available supply and to the claims of appropriators to the use of "surplus" water. The costs of adversities presumably would be distributed on a correlative basis as among riparian and overlying proprietors.

The liberality of the California courts in permitting established proprietors to defend historic uses by asserting a prescriptive right has contributed to an even greater degree of ambiguity than was implicit in the efforts to place correlative and appropriative rights side by side. Where adverse use and possession are maintained for a period of five years or more, the statute of limitation prevents an action by the injured party to recover his property and the adverse user can perfect a clear title to the property. A claim to a property based upon adverse use and possession is a claim to a prescriptive right.

Normally the payment of the property taxes levied and assessed against a parcel of property enables a property owner to defend himself against the establishment of a prescriptive right by an adverse user. However, in the case of water rights, property taxes have rarely been levied and assessed upon the water right as such and this line of defense is generally not available to protect existing rights. The problem of defending against the assertion of a prescriptive right is greatly complicated by the elements of uncertainty as to when an invasion of an existing right has occurred. "Surplus" waters are available for appropriation, but given the long-term drought periods which may extend over periods of 15 years or more, it may be difficult to determine when an invasion of right has occurred and when a prescriptive period has begun to toll.

In recent ground water adjudications, California courts have recognized that both original owners and wrong-doers may continue to pump all of the water they need and that the injury relates only to the right to continue to pump at some future date. The continuing overdraft would make it impossible for all to pump at the same rate indefinitely into the future. Thus the

invasion of right was held to be only a partial one and all users were required to reduce their pumping proportionately to bring the draft from the basin within the limit of its safe yield.⁷ The judgments in these adjudications have been characterized as the application of a doctrine of "mutual prescription." Presumably each proprietor is partially invading the rights of others and to that extent is perfecting a right by mutual prescription.

The multiple system of water rights in California has given proprietors substantial flexibility in asserting diverse claims to water supplies. In most areas of the state, the overlying ground water right still vests in any landowner the right to become an independent water producer to meet his own consumptive requirements as an alternative or partial alternative to securing his water supply from some other source. ;There one form of water right may have built-in constraints upon the claims that a proprietor could assert, he is often free to shift legal grounds by making conjunctive use of alternative sources of supply. As a result, a demand for water based upon a claim to a water right can be readily asserted by a very wide variety of proprietors who may wish to produce their own water supply.

The easy access afforded potential proprietors to existing water supplies in California water law carries with it a commensurate exposure to the adverse claims of others. The ease with which a claim can be asserted carries a commensurate obligation of defending one's claim against the easy entry of other proprietors. The basic operational rule for proprietors in the California water industry might be formulated as an imperative to "Take what you can get and defend what you have got!" The opportunities are presented by the ease of access afforded by the legal system and the risks are posed by the costs of defending your position against others. One of the expected costs of doing business in the California water industry is a substantial investment in adjudicatory proceedings.

Where proprietors are exposed to the necessity of relatively high costs for litigation in defending their claim to property rights, one might expect substantial demands for the reformulation of the law of water rights in a way that would reduce the ambiguities and uncertainties of the law and make for the definition of a property in water that would be more exclusive, determinate, and readily transferable. However, the one and only serious effort to rationalize the law of water rights in California was made in 1913, and that effort was quite unsuccessful.⁸ During the past fifty years the only two major political demands for modifications in the law of water rights led to (1) the adoption of the so-called "reasonable use" amendment to the California Constitution and (2) the establishment of special statutory reservations for the so-called "areas of origin" or "counties of origin". Instead of rationalizing the law of water rights, these changes simply (1) assured a greater ease of access to appropriators in making claim to "surplus" waters above and beyond the reasonable requirements of riparian proprietors and (2) placed reservations upon new appropriations to assure an adequate water supply to satisfy the future growth possibilities in the areas of origin. Both of the changes sought to improve the power position of marginal sets of proprietors so that they could be better prepared to articulate claims to water rights as against the more powerful claimants.

Rather than providing conclusive and determinate solutions to conflicts over water rights, California water law would appear to provide litigants with contingent solutions where future possibilities can again be adjudicated in

view of changing water supply and demand conditions and where litigants can, through their right to their day in court, be assured that their voice will be heard in future decisions. In these circumstances the law of water rights appears to perform its most essential function by providing readily accessible procedures for articulating demands in which the interests of each party or set of parties must be taken into account by virtue of the legal power which a proprietor can mobilize in the protection of his property rights.

Strategic Opportunities in Litigation

Whenever essential equities among proprietors are violated by an impairment of right, litigation may be used to define the essential issue at stake, to designate the parties of interest and to indicate the form of relief sought if the case is pressed to its conclusion. Once formal legal action is initiated any party with competent legal counsel can begin to calculate the range of possible outcomes but the probabilities are usually sufficiently uncertain that no party can afford to act with unqualified confidence. The preparation and analysis of evidence may modify the expectations of many of the parties in the case and change their conception of the range of feasible alternatives.

The formal course of litigation, especially in the state courts, usually proceeds against an extensive background of investigation and negotiation. Even the decision to litigate may be a negotiated decision reached by the adversary parties in the context of a water users' association. Some associations may be deliberately organized to include the whole community of litigants, both the plaintiff and defendant parties, among their membership. Others may hold joint meetings and proceedings, have overlapping membership and share staff facilities even when proceedings occur between members of different associations. The court, usually with the agreement of the parties, may refer the case to the State Water Rights Board for the preparation of an engineering report on the nature of the problem. The referee's report may serve as the basis for making a finding of facts in the case as well as provide the occasion for the submission of recommendations on the possible physical solutions of the problem at issue.

In addition, formal negotiating committees are frequently established by the adversary interests. These committees, usually composed of both lawyers and engineers, often hold Joint meetings to attempt to reach some negotiated settlement. Such committees have been known to engage independent consulting engineers to undertake a Joint engineering investigation to secure data to aid the negotiations rather than to provide evidence for submission to the court. Some negotiating committees are organized to represent the interests of the adversary parties only, but others have been organized where collateral responsibility exists to report to a Joint water users' group on progress toward a common solution.

Since adjudication can occur only in relation to the limited range of alternatives directed to the prevention of some injury or to the redress of some harmful or injurious action, a wider range of collateral negotiation usually proceeds concurrently with the negotiation of the immediate issue before the court. The negotiations bearing directly upon the issues being litigated

will frequently take the form of agreements eventuating in a stipulated Judgment. Some collateral agreements such as water distribution agreements and water exchange agreements may be negotiated as essentially private contractual arrangements which may be incorporated by reference in the formal court decree. Other arrangements may be negotiated quite independent of the formal court decree and yet be significantly influenced by the anticipated effect of court action upon the bargaining opportunities and bargaining limits available to the community of litigants.

One of the primary areas of collateral negotiations pursued as an adjunct of litigation in the California water industry involves efforts to reach some form of agreement on political action which will enable the parties to undertake cooperative efforts to manage existing water supplies and develop supplementary supplies rather than limiting the solution to the redress of existing injuries. The limitations of an adjudicated solution to conflict over water supplies is often articulated by water proprietors when they observe that, "Law suits never produced a drop of water." Instead of limiting their opportunities to playing out a zero-sum game in courts these entrepreneurs have usually sought means to convert the zero-sum game into a cooperative game against nature.

Opportunities of Public Entrepreneurship

One of the political solutions frequently sought to this type of problem is to devise some form of local public enterprise which will permit local water users to undertake joint activities in their common benefit. Where an industry deals with goods subject to substantial spillover effects between individual proprietors or with goods subject to significant interdependencies among several proprietors one of the rational approaches to the problem is to organize a Joint enterprise where the spillover effects or interdependencies are deliberately brought within the scope of the enterprise. The persistence with which this solution has been sought as a means of accommodating to the ambiguities in the California law of water rights is indicated by the large variety of general laws which are available for the incorporation of public enterprises to supply water services in the state. In excess of thirty general types of public corporations may be incorporated as water service agencies under general law, including irrigation districts, reclamation districts, water storage districts, county water districts, public utility districts, metropolitan water districts, replenishment districts, and many others. In addition, a growing number of public water enterprises have been created by special statutes specifically incorporating a particular agency, such as the Orange County Water District.

The law applicable to these public enterprises introduces many fundamental transformations in the authority or power which can be exercised by public proprietors in the development, control, and allocation of water resources. Powers of eminent domain and of taxation greatly enhance the economic power of a public enterprise in comparison to the powers of the individual private proprietor to develop, control, and allocate water resources. Public enterprises are generally immune to any attempt to assert a prescriptive right to public property through continued adverse use. The balance of legal powers

and exposures associated with public proprietorship is quite different from those associated with private proprietorships.

Since public proprietorships involve the exercise of rather substantial economic powers, the task of formulating the basic rules of incorporation applicable to the operation of any such enterprise is apt to be the subject of sensitive negotiation among water users. Furthermore, general standards of public law require that the exercise of public authority must be subject to explicit formulation in contrast to the normal presumption of private law that a private proprietor is free to pursue any course of action not contrary to the law. Water user groups have been quite unwilling to run the risk of either an unrestrained exercise of power by those who function in public proprietorships or an unrestrained exercise of legislative discretion in the formulation of the statutes providing for the incorporation and operation of public water service agencies. Many different sets of laws have been designated by numerous water user groups to fit a variety of different conditions and circumstances.

Public enterprises in the California water industry are authorized to provide many different types of service. Some, such as irrigation districts, were initially designed to supply water for irrigation of agricultural crops, but in the course of time their organic legislation has been modified to authorize the provision of a wide variety of water services, including the production and distribution of irrigation, domestic, and municipal water supplies, electric energy, the provision of drainage facilities, water conservation works, etc. Other agencies may be highly specialized with their functions being circumscribed to permit both horizontal and vertical coordination with related sets of public enterprises in the water industry. The corporate powers of metropolitan water districts, for example, are primarily defined in terms of the sale and delivery of water at wholesale. Retail functions are performed by the member agencies and local utilities within the member agencies which comprise a metropolitan water district. The Replenishment District Act contains an expressed-preference for joint undertakings in order "to avoid duplication of similar operations by existing agencies and replenishment districts."⁹

All agencies supplying water for "sale, rental or distribution" do so as a public service under California law and water users or customers are entitled to a right of service in common with the class or status of users served by such an agency. The right of each user is the same as each other user in his class of service. With an adequate water supply, each user is entitled to a reasonable quantity of water for his purposes subject to reasonable methods of use. When water is in short supply no special preference can be given to any water user except as public health and safety may require. In supplying irrigation water, for example, the courts have specifically held that ". . . the earlier customers have no vested rights to water in preference to later customers, and at times of shortage of water there should be a pro-rating among them all."¹⁰

All water service agencies, in turn, have the responsibility of providing water under general terms and conditions consistent with the provisions of their organic act and other provisions of state law. Broad discretion is

usually permitted in the establishment of water service charges. Organic legislation for some districts has included particular rules for the apportionment of water within a district. Irrigation district legislation, for example, includes the following provision:

... all waters for irrigation purposes shall be apportioned ratably to each land owner upon the basis of the ratio which the last assessment of such owner for district purposes within said district bears to the whole sum assessed upon the district; provided, that any land owner may assign the right to the whole or an portion of the waters so apportioned to him.¹¹

In many irrigation districts this provision is moot when revenues are derived from tolls or service charges for the amount of water delivered rather than from assessments or taxes levied against the land. Where such assessments are made the courts have held that assignments might be made among owners within the district but an irrigation district may not be required to deliver water under an assignment for use on lands outside a district.¹²

Water rights held by any public water enterprise are held as a public trust to be discharged according to the purposes of the organic legislation creating the particular agency. In rejecting the proposition that an irrigation district is an agency for the distribution of its water to individuals for any use within or without a district that might serve their purposes, the California Supreme Court has held that, "the ultimate purpose of a district organized under the Irrigation Act is the improvement, by irrigation, of the lands within the district."¹³ The water right held by a public water agency, thus, is held in trust and dedicated to service within the district for the public purposes performed by the agency. Most districts can sell surplus water on short term sales contracts to users outside a district but the right is subject to recapture when required for use within a district.

As a result of these and many other requirements of law applicable to public water user organizations, water served by these agencies is subject to provision under quite different rules than apply to proprietors functioning directly under the law of water rights. A water right is dedicated to uses within a district consonant with the agency's public trust and neither the water right nor the use of water claimed under the right can be readily transferred or be made available for other service areas outside a district except by methods of reorganization including annexation and consolidation. Water services are subject to provision under general regulations and pricing policies which can be modified to meet changing conditions of both demand and supply. Operations can be integrated to minimize conflict and to realize a variety of economies which could not be realized by individual proprietors acting independently. When the vast array of public agencies which have been created to provide water services for different communities of water users are considered as functional elements in a water industry it becomes apparent that the law of water user organization is at least as important as the law of water rights in determining the patterns of water resource allocation in California.

Conclusion

California water law provides a means for relating property, proprietorship and politics in the development of the state's water resources. The law of water rights furnishes the basic structure of incentives by providing a variety of claims which can be easily asserted by potential water users. The ease with which a proprietor can assert a claim to water rights is matched only by the degree of his exposure to the claims of others. As conflicts are generated from competing claims to limited water supplies, legal facilities are available for the articulation of the conflict as a contest over private property rights.

Adjudication serves the purpose of defining the issues, of clarifying the evidence and of generally bounding the conflict. Once the conflict is bounded, bargaining limits have been established for further efforts to seek some form of negotiated solution. The settlement of the immediate litigable issue may be negotiated in the form of a stipulated Judgment. Collateral political settlements may also be negotiated to permit the litigant community to continue to deal with its common problems through some political instrumentality subject to local management and control. Validation of such political settlements requires the negotiators to operate within the political boundaries necessary to secure the approval of enabling legislation by the legislature and the governor.

The conditions imposed by both the judicial process and the political process require substantial unanimity for ready validation of negotiated settlements. Alternate decisions are possible but elements of risk are greatly enhanced when negotiators, in their failure to agree, pass the burden of formulating the decision to external judges or external political decision makers. An adjudicated solution without substantial consensus can be upset by the willingness of any one of the parties to pursue his legal claims to a contested Judgment or to appeal to a higher court for a review of his claims. Legislative machinery is easily immobilized by conflict and anyone possessing a substantial property right, adversely affected by legislation, may press his contention by recourse to litigation.

In general, California law provides entrepreneurs with a structure of strategic opportunities and with legal and political arrangements to facilitate the search for solutions which can "satisfice." Whether this particular structure of opportunities for entrepreneurship and lawmanship will also tend to facilitate the search for the most efficient solution depends upon a number of special conditions to be met.

The first such condition would require all types of water users to have essential equality of Juridic power in being able to articulate actionable demands to defend the value of their claims to each type of water service or water use. While California water law is open to a wide variety of actionable demands, some are excluded. Those excluded are generally the more purely public goods and services associated with in-the-channel or flow uses of a stream including fishing, recreation, navigation, flood control and waste disposal. Where these demands cannot be articulated among a community of litigants, the resulting decisions are apt to be biased toward consumptive on-the-land uses of water to the neglect of in-the-channel uses. Different forms of public entrepreneurship are required to articulate interests in relation to the more purely

public goods before the wider range of opportunity costs can be considered in seeking efficient solutions in any water supply system.

The second condition would require adequate principles of inclusion and exclusion to be developed for defining the appropriate community of interest for dealing with different sets of water problems. The conditions are approximated in current practices through the designation of the litigant community in adjudicatory proceedings and the specification of functional and territorial boundaries in the organization of public enterprises. To the extent that claimants on behalf of some sets of water users cannot effectively articulate their claims, boundary conditions are apt to be defined which neglect those interests and limit the full range of social utilities from being considered in the formulation of solutions.

A third condition would require that payment for the costs of providing water services be confined to the beneficiaries. If public enterprises can confine the assessment of costs to the community of water users who benefit from the provision of water services, public entrepreneurship can provide an efficient instrument for the development of water resources. If the burden of costs are assessed against public treasuries other than the treasury of the appropriate water-user agency, then efficient solutions cannot be expected. Under such circumstances, a community of water-users, organized as a public enterprise, may satisfice at the cost of others. What is ostensibly organized as a game against nature in pursuing programs of water resource development may be converted into a covert game against the public treasury.

Subject to these qualifications, the range of strategic opportunities available in California water law can evoke solutions which both satisfice and optimize. The opportunities in the law for private entrepreneurship, lawmanship, and public entrepreneurship are at least amenable to considerations of efficiency in the allocation of water resources. California has the potential of using its relatively free public enterprise system to build an efficient water industry. Failure to pursue public policies which evoke efficient solutions runs the risk that the water industry may become a grand political coalition seeking to impose the costs of its operations upon public taxpayers without regard for the benefits derived.

FOOTNOTES

¹ E.g., I have never seen reference to a court decision involving the sale and distribution of bottled water. This is one form in which a water product is readily amenable to allocation in a free market.

² The concept of satisficing is borrowed from Herbert A. Simon's decision theory. In developing this concept, Simon has indicated that he was seeking "to replace the global rationality of economic man with a kind of rational behavior that is compatible with the access to information and the computational capacities that are actually possessed by organisms, including man, in the kinds of environment in which such organisms exist..." Herbert A. Simon, "A

Behavioral Model of Rational Choice," *The Quarterly Journal of Economics*, LXIX (February, 1955), 99. An organism which satisfices is one that "... looks for a course of action that is satisfactory or 'good enough.'" Herbert A. Simon, *Administrative Behavior*, Second edition (New York: The Macmillan Company, 1957), p. xxv. The solution is not one that makes everyone happy but one that is "good enough" to settle for the time being. The perception of alternate possibilities may cause aspiration levels to change and lead to a search for new opportunities. Solutions which fail to satisfice are unstable. An optimal solution is the best alternative from all of the possible alternatives. One can satisfice at a level that is less than optimal but it would be a most disturbing world where the optimum failed to satisfice.

³ This second set of alternatives where litigation is used to articulate demands for changes in the conditions of water service is not pursued in this paper. Much of the litigation over the Friant Dam and related works in the Central Valley Project, for example, involved efforts to modify the water service policies of the U. S. Bureau of Reclamation.

⁴ This analysis is made in a chapter on the law of water rights as a part of a forthcoming study of the California water industry.

⁵ *Rank v. Krugg*, 90 Fed. Supp. (S. D. Calif., 1950), 773, 781, 801.

⁶ *Rancho Santa Margarita v. Vail*, 11 Calif. 2d. (1938), 501, 549-550.

⁷ *Pasadena v. Alhambra*, 33 Calif. 2d (1949), 908, 930-931.

⁸ California's failure to pursue the path of reforming its water law in a manner that would make water rights more amenable to market transfers does not exclude such a course of action as a possible avenue of reform. Market imperfections may have their source in the institutional framework or external conditioning elements as well as in internal market operations. California's solution has instead been sought through the opportunities implicit in litigation and in public entrepreneurship.

⁹ California Water Code, section 60231.

¹⁰ *Butte County Water Users Association v. Railroad Commission* 185 Calif. (1921), 218.

¹¹ California Statutes, 1887, Chapter 34, section 11, p. 34. California Water Code, sections 22250, 22251.

¹² *Jenison v. Redfield*, 149 Calif. (1900), 500.

¹³ *Ibid.*, p. 503.