

## *The Role of the State*

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The future urban, industrial, and agricultural growth of California depends upon the proper and timely conservation and control of our water resources. The time for decision on many of the state's critical water problems is upon us now.

Control of floods is among our more urgent problems. In the floods of December 1955, sixty-four persons were killed and tangible property damage probably exceeded \$200 million.<sup>1</sup> We cannot afford a recurrence of such losses.

There is now a critical need for supplemental water supplies in many areas of our state—in Alameda, Santa Clara, and San Benito counties; in the west and south portions of the San Joaquin Valley; in the Antelope Valley; in the Santa Maria Valley; and in Ventura County.<sup>2</sup>

For many years there have been severe overdrafts on the ground water basins in the south coastal area in Los Angeles, San Bernardino, and Riverside counties. San Diego County has an acute need for additional water. The supply of water to the south coastal area under rights to Colorado River waters will be fully committed and used by 1970. By 1975, or earlier, all of southern California will need more water.

Many of the foothill and mountainous areas require development works for municipal and irrigation water, to protect fish and wildlife, and to enhance the recreational potential, an important economic asset.

California's population growth has created, and will continue to create, critical water problems. In 1940 the state's population was 6,900,000. By 1950 it had increased to 10,600,000. By 1955 it was 13,000,000.<sup>3</sup> In 1950 the estimated seasonal shortage of developed water in California was more than two-and-a-half million acre-feet, largely representing an overdraft on ground water storage. Our water requirements have increased to the point that, taking into account the increased water yield from construction of works since 1950, our present water deficit is about 4 million acre-feet per year.<sup>4</sup> The ultimate annual supplemental water requirement for California is estimated to be nearly 31 million acre-feet.<sup>5</sup>

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<sup>1</sup> CAL. DEP'T OF PUBLIC WORKS, DIV. OF WATER RESOURCES, FLOODS OF DECEMBER 1955, 1 (1956).

<sup>2</sup> CAL. DEP'T OF WATER RESOURCES, DIV. OF RESOURCE PLANNING, BULL. NO. 3, THE CALIFORNIA WATER PLAN 16 (1957).

<sup>3</sup> CAL. DEP'T OF FINANCE, BUDGET DIV., CALIFORNIA'S POPULATION IN 1955, 8 (1955).

<sup>4</sup> CAL. DEP'T OF WATER RESOURCES, DIV. OF RESOURCES PLANNING, BULL. NO. 3, THE CALIFORNIA WATER PLAN 16, 213-14, 239 (1957).

<sup>5</sup> *Ibid.*

These, then, are a few of the major problems with which we are confronted. The picture is not as grim as it might be, however, because by taking into consideration its rights to Colorado River water, California has sufficient water resources to correct present water deficiencies and to meet the anticipated requirements of the future. But a continuing program for the planning and construction of conservation and control works must be established if the state is to maintain and further its amazing growth and prosperity. The job is a large one, requiring the combined efforts of the state, the federal government, local agencies, and private business and individuals.

## I

### CONSTRUCTION OF PROJECTS

In the past seventy-five years Californians have built water and hydroelectric projects valued today at about six billion dollars.<sup>6</sup> These developments have been accomplished largely by local initiative. Local interests will, and must, continue to participate in California's water development program. But in certain large multipurpose projects, it will be necessary for the state or the federal government to construct and operate projects or to assist local interests financially.

The most important factor in the solution of California's water problems is the timely construction of needed water conservation projects. Other problems—such as geographic division of water supply, water rights, and relationships between governmental agencies—must be faced squarely, but they have no chance of solution in the absence of projects making it possible to correct the maldistribution in time and place of water in the state. A second cardinal principle upon which there is increasing agreement is that the coordinated efforts of state, federal, and local interests are necessary to achieve these objectives.

#### *A. The Central Valley Project*

The need for state-wide planning and construction of trans-basin water diversion projects in California first became generally apparent in the early 1920's when the dream of controlling the Sacramento and San Joaquin Rivers for greater usefulness developed into clear necessity. To meet the water shortage that threatened the agricultural economy in large sections of the San Joaquin Valley and to allow for the development of water deficient areas, the state, through predecessors of the Department of Water Resources, conceived the Central Valley Project.<sup>7</sup>

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<sup>6</sup> Address by Harvey O. Banks, Director, State Department of Water Resources, before Central Valley Water Conference, sponsored by California State Chamber of Commerce, Fresno, California, Feb. 20, 1957.

<sup>7</sup> CAL. DEP'T OF PUBLIC WORKS, DIV. OF WATER RESOURCES, BULL. NO. 25, REPORT TO LEGISLATURE OF 1931 ON STATE WATER PLAN 89-113, 158-67 (1930).

A plan to conserve Sacramento River water, to exchange it for San Joaquin River water, and to bring the water made available by the project to the thirsty areas of the San Joaquin and Sacramento Valleys was developed. In 1933 the project was adopted by the legislature and its construction was authorized.<sup>8</sup> Later that year, this measure was confirmed in a special election by a vote of the people.<sup>9</sup> However, the great world depression made financing of the project through the contemplated sale of revenue bonds an impossibility. The state sought federal financial assistance under the Emergency Public Works programs then in progress.<sup>10</sup> However, such financial assistance was not given and the project was authorized, in 1935, as a federal reclamation project,<sup>11</sup> construction being carried forward by the federal government.

The state continued its active participation in the project through cooperative contracts with the federal government. Under these contracts the state made available its personnel, data, and studies to assist in solving the legal and physical problems facing the project. Also, the state legislature actively supported the requests of the Federal Bureau of Reclamation for the appropriations necessary to carry out the project.<sup>12</sup> The physical works have been constructed in substantial conformity with the state's plan.

The state, through the Department of Water Resources, continues to carry out its statutory responsibility<sup>13</sup> to the people through its continuing participation and cooperation in the Federal Central Valley Project. It is now established beyond question that the federal government, under the federal reclamation laws, must comply with the laws of California as to the "control, appropriation, use, or distribution" of water.<sup>14</sup>

The state is also assisting, through fact-finding and analysis, and by offering other services, in promoting the negotiation of an amicable settlement of the perplexing Sacramento River water rights problems between the federal government and the water users.<sup>15</sup>

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<sup>8</sup> Cal. Stat. 1933, c. 1042.

<sup>9</sup> Cal. Stat. 1935, xci.

<sup>10</sup> See H.R. Doc. No. 416, 84th Cong., 2d Sess. 538-43 (1956).

<sup>11</sup> See *id.* at 558-69. The Project was "reauthorized" by 50 STAT. 850.

<sup>12</sup> A.J. RES. 13, CAL. STAT. 1941, p. 214; A.J. RES. 6, CAL. STAT. 1941, p. 3289; S.J. RES. 10, CAL. STAT. 1943, p. 3215; A.J. RES. 6, CAL. STAT. 1949, p. 3045; A.J. RES. 42, CAL. STAT. 1951, p. 4732.

<sup>13</sup> CAL. WATER CODE §§ 11150, 11500(d).

<sup>14</sup> Reclamation Act of 1902 § 8, 32 STAT. 390, 43 U.S.C. §§ 372, 383 (1952).

<sup>15</sup> See, e.g., CAL. DEP'T OF PUBLIC WORKS, DIV. OF WATER RESOURCES, SACRAMENTO RIVER TRIAL WATER DISTRIBUTION (1954); CAL. DEP'T OF WATER RESOURCES, DIV. OF RESOURCES PLANNING, REPORT ON 1956 COOPERATIVE STUDY PROGRAM, WATER USE AND WATER RIGHTS ALONG SACRAMENTO RIVER AND SACRAMENTO-SAN JOAQUIN DELTA (1957). The latter was a cooperative effort of the California Department of Water Resources, the Federal Bureau of Reclamation, and the Sacramento River and Delta Water Association.

### *B. The State Feather River Project*

In the planning stages of the Central Valley Project during the 1920's, it was recognized that Oroville Reservoir, on the Feather River, would furnish a valuable source of water supply and would be of major significance in flood control protection.<sup>16</sup> It was not included in the initial phases of the Central Valley Project, because the water immediately required in that program could be stored behind the less expensive Shasta and Friant dams. By 1950 it had become apparent, however, that the water supplies that would be made available from Shasta, Friant, and Folsom reservoirs would be insufficient even for the requirements of the Sacramento and San Joaquin Valleys. This fact, when combined with the present and future needs for additional water in southern California and in other areas of the state, caused state water planners to turn again to the Feather River as a source of additional water.

The initial studies represented a cooperative effort on the part of the state government and local interests, having been carried on under a cooperative contract between the California Central Valleys Flood Control Association and predecessors of the Department of Water Resources.<sup>17</sup> These initial studies culminated in the 1951 feasibility report,<sup>18</sup> which, although preliminary in nature, indicated the feasibility of the Feather River Project from engineering, economic, and financial points of view.

Based on the data contained in this report the legislature authorized continued planning and ultimate construction of the Feather River Project as part of the State Central Valley Project.<sup>19</sup> The primary significance of this type of authorization is that the legal machinery set up for the Central Valley Project when it was authorized for state construction will be available for carrying out the new undertaking.

The following year the legislature made funds available for the continued planning and preparation of specifications for the Feather River Project, and funds have been made available since that time. In addition to continued study by state personnel, an independent report<sup>20</sup> was made, confirming the earlier conclusions of feasibility, although suggesting variations in detail and pointing out matters that required further study.

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<sup>16</sup> CAL. DEP'T OF PUBLIC WORKS, DIV. OF WATER RESOURCES, BULL. No. 25, REPORT TO THE LEGISLATURE OF 1931 ON STATE WATER PLAN 91 (1930).

<sup>17</sup> CAL. DEP'T OF PUBLIC WORKS, DIV. OF WATER RESOURCES, PROGRAM FOR FINANCING AND CONSTRUCTING THE FEATHER RIVER PROJECT 1 (1955).

<sup>18</sup> CAL. WATER RESOURCES BOARD, FEASIBILITY OF FEATHER RIVER PROJECT AND SACRAMENTO-SAN JOAQUIN DELTA DIVERSION PROJECTS PROPOSED AS FEATURES OF THE CALIFORNIA WATER PLAN (1951).

<sup>19</sup> CAL. WATER CODE § 11260.

<sup>20</sup> BECHTEL CORPORATION, REPORT ON THE ENGINEERING, ECONOMIC AND FINANCIAL ASPECTS OF THE FEATHER RIVER PROJECT TO THE JOINT COMMITTEE ON WATER PROBLEMS, CALIFORNIA STATE LEGISLATURE (1955).

In 1955 the state's second report on the Project was issued, with modifications reflecting the intervening studies. As now planned, in addition to the Oroville Dam and Reservoir and associated power plant and afterbay, major features of the Project would include: an aqueduct from the Sacramento-San Joaquin River Delta, along the west side of the San Joaquin Valley, and ultimately to southern California; an aqueduct from the Delta to the Santa Clara Valley; and the San Luis Reservoir and other regulating reservoirs and conduits in the San Joaquin Valley and southern California.<sup>21</sup> These works would provide a dependable water supply, needed flood control, and hydroelectric power for pumping and to help defray the costs of the Project. Of course, the details of the Project still are undergoing intensive study. By the time the legislature convened in 1957, however, the planning for the relocation of highways and utilities in the Oroville Reservoir site was sufficiently completed to justify an emergency appropriation of \$25,190,000<sup>22</sup> to begin the prosecution of this work. Construction has now been commenced on the first phase of the Feather River Project—three miles of tunnel required for the relocation of the Western Pacific Railroad and portions of the relocated highway US 40-A.

The Feather River Project will of necessity be a cooperative undertaking, involving state, federal, and local governmental units. However, the state will have the primary responsibilities for financing, constructing, and operating the Project. One of the Project's major purposes is the control and prevention of the destructive, recurrent floods that have plagued the lower Feather River Basin. By now this feature of multipurpose water development has been firmly established as a federal responsibility throughout the country, whether the proposed project be constructed by state, federal, or local government. The destructive effect on the national economy, the disorganization of lines of transportation and communication, and the large areas and expenditures involved have dictated this policy.

State and federal cooperation will also be necessary because the State Feather River Project must be closely coordinated with the Federal Central Valley Project. Not only will the water made available from the two projects actually intermingle in the Sacramento River and the Sacramento-San Joaquin Delta, but planned, coordinated operation will increase the benefits to the water and power users of both projects.

### *C. The San Luis Project*

The construction and operation of the proposed San Luis Reservoir on the west side of the San Joaquin Valley presents a potential area for state

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<sup>21</sup> CAL. DEP'T OF PUBLIC WORKS, DIV. OF WATER RESOURCES, PROGRAM FOR FINANCING AND CONSTRUCTING THE FEATHER RIVER PROJECT 1-2 (1955).

<sup>22</sup> Cal. Stat. 1957, c. 15.

and federal cooperation. Intergovernmental cooperation is important because storage at the San Luis site is contemplated for the state's Feather River Project and for the San Luis-West Side addition to the Federal Central Valley Project. For several years there has been generalized discussion as to who should build and operate this reservoir and associated facilities. Direct discussions between the state and the Bureau of Reclamation have been carried on for the past year or more, and satisfactory progress has been made with respect to location and definition of required project works.

Legislation to authorize construction and operation of federal-state joint-use facilities at the San Luis site was introduced in the last congressional session<sup>23</sup> but was not reported out of committee. Its approach was to authorize conclusion of a contract under which the state would acquire the reservoir site and transfer it to the federal government. The latter would construct the dam and related works. Depending on engineering determinations and negotiations, the contract could provide either that reservoir storage and project works required for the Feather River Project would be included in the original construction or be added later. The state would pay a proportionate share of the cost of project works associated with its proposed use. After completion of the facilities, operation and maintenance could be performed by the state. Upon repayment of the federal construction costs of the San Luis-West Side unit, title to all project facilities of the entire unit, including the reservoir, would be transferred to the state for future operation. State legislation along these lines<sup>24</sup> failed of adoption by the 1957 California legislature.

The approach just outlined could lead to a cooperative solution of the San Luis problem. With such cooperation, construction of these projects could be carried forward expeditiously and at a saving of millions of dollars to each agency, as compared with the cost of building separate reservoirs and other facilities.

#### *D. Financing Construction of Projects*

The financing of the water developments that are essential to California's continuing growth and prosperity is of critical importance today. Here again the state, federal, local and private interests each must play a part; none can handle the problem alone.

It is clear that one of the increasing trends is toward more jointly-financed projects, in which two or more entities share the costs. There are ample precedents for such joint undertakings. The state through its planning activities made, in effect, a substantial contribution to the costs of the Federal Central Valley Project. Also, for many years the state has pro-

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<sup>23</sup> H.R. 6035, 85th Cong., 1st Sess. (1957); S. 1887, 85th Cong., 1st Sess. (1957).

<sup>24</sup> Senate B. No. 1995 and Assembly B. No. 3222, Calif. Legislature, 1957 Reg. Sess.

vided land and rights-of-way for flood control projects, such as levees, bypasses, and channel improvements, constructed by the Corps of Engineers.<sup>25</sup> When completed, the state and local governments have been responsible for their maintenance.

The future promises many more such joint undertakings. The continuance of the well-established federal policy of bearing the costs attributable to flood control in multipurpose projects should result in federal participation, to that extent, in the costs of state-constructed facilities such as the Feather River Project. Also, the state and the federal government have joined in financing recreation benefits incident to water conservation projects.

Although joint financing of projects is likely to increase, it appears now to be generally accepted that in the future California will have to bear the major share of the financing of additional projects. An implementation of this principle was proposed in the Governor's message of April 9, 1957, to the legislature,<sup>26</sup> in which he proposed the creation of a State Water Development Fund. In addition to regular appropriations from the General Fund, proceeds from bond issues, and revenues from project operations, the Governor proposed that the Fund consist of the tideland oil revenues now in the California Investment Fund, certain annual revenues from tideland oil, and the so-called "Rainy Day Fund." Including money proposed for appropriation and continuance of the work preparatory to the construction of the Oroville Dam, more than \$200 million could be immediately available for water projects. It was emphasized that the legislature could create a Water Development Fund without prejudice to the creation of such a fund on a permanent basis by a constitutional amendment. It should also be noted that it is particularly appropriate that funds drawn from state reserves and revenues from the depletion of one natural resource—oil—should be utilized to construct permanent, revenue-producing projects that would conserve another natural resource—water—and increase the tax base on a state-wide basis.

As mentioned at the outset, by far the greatest amount of water conservation in the state has been financed by local interests. It has become increasingly apparent that in many cases local entities can no longer finance the entire costs of local projects. Also, many undertakings, such as the Feather River Project, are beyond the scope of any local interest to finance. This does not mean, however, that local participation in the development of water resources is at an end. On the contrary, it signifies that in many cases local financing can be stimulated by state or federal assistance.

In addition to flood control, federal grants and interest-free loans to

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<sup>25</sup> CAL. WATER CODE, DIV. 5 and DIV. 6, Part 6.

<sup>26</sup> *Cal. Senate Daily Journal*, April 9, 1957, p. 1798.

the extent of five million dollars are available for other programs of relatively recent origin such as local reclamation projects,<sup>27</sup> construction of distribution systems in connection with federally-constructed projects;<sup>28</sup> and control of pollution.<sup>29</sup> Many important projects which are primarily of local concern and which can be most appropriately and efficiently constructed locally do not fall within any of these federal programs, or sufficient federal funds will not be available to assist them; and yet their construction is beyond the financial ability of the locality. New state legislation<sup>30</sup> makes provision for grants or loans to such projects by the state, provided their feasibility can be demonstrated and they conform substantially to the California Water Plan. Grants may be made for enhancement of fish and wild-life preserves and for such recreational benefits incidental to the primary purposes of the projects as can be considered to have state-wide interest and importance. The state may participate in local projects to provide facilities to meet future needs. Loans may be granted where the project costs exceed the financial ability of the local agency and there is no other available source of funds.

In still another way the state is now making financial contributions to both locally and federally-constructed projects. These contributions result from planning and preliminary investigations that the state is now carrying on.<sup>31</sup>

## II

### WATER PLANNING IN CALIFORNIA

Early planning in California quite naturally centered around the Central Valley, where the need was most pressing. The studies were expanded, however, into the State Water Plan,<sup>32</sup> the first attempt at comprehensive state-wide water planning. Although a large step forward, the State Water Plan was conceived at a time when few anticipated the tremendous changes that would occur in California in the coming years. Yet, while inadequate to meet long-range demands, nonetheless it did help meet the needs of the intervening period.

In the years just preceding and during the Second World War state water planning was not carried on to the extent required. With the passage

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<sup>27</sup> Small Reclamation Projects Act of 1956, 70 STAT. 1044, 43 U.S.C. §§ 422a-k (Supp. IV, 1957).

<sup>28</sup> 69 STAT. 244 (1955), as amended, 43 U.S.C. §§ 421a-c (Supp. IV, 1957).

<sup>29</sup> Water Pollution Control Act, 62 STAT. 1155 (1948), as amended, 33 U.S.C. §§ 466-66k (Supp. IV, 1957).

<sup>30</sup> Cal. Stat. 1957, c. 2052.

<sup>31</sup> See, *e.g.*, investigations authorized by CAL. WATER CODE § 232.

<sup>32</sup> CAL. DEP'T OF PUBLIC WORKS, DIV. OF WATER RESOURCES, BULL. NO. 25, REPORT TO LEGISLATURE OF 1931 ON STATE WATER PLAN (1930).

of the State Water Resources Law of 1945,<sup>33</sup> however, it was revived and established on the scale on which it is now being carried out. The result of these efforts was the California Water Plan,<sup>34</sup> a new concept in state resource development. Although similar in name to the State Water Plan, the California Water Plan far exceeds its predecessor in scope and aim. It is a plan for the entire state from Oregon to Mexico. It includes large reservoirs and conduits for the transportation of millions of acre-feet of water from surplus areas to areas of deficiency. It also includes small projects for conserving the precious local water supplies of areas not fully developed. More important than both, it establishes the basis on which local and export projects can be coordinated to supplement rather than conflict with each other.

The scope of the Plan is unprecedented.<sup>35</sup> More than 8 million dollars has already been spent in its preparation. The cost of the works presently proposed will be about 11.8 billion dollars. These works will include about 77 million acre-feet of gross surface storage to be used in conjunction with ground water storage which, in the Central Valley alone, amounts to 31 million acre-feet. The projects will make available 29 million acre-feet of water annually.

Admittedly, it is difficult to conceive real meaning from these huge figures. Perhaps the most that they can convey is an impression of the vastness of the Plan. As some sort of yardstick, however, the expenditure involved would be a little less than twice the present value of facilities now existing in this state for water conservation. Although tremendously far-reaching, the California Water Plan need not be staggering. It is a blueprint for ultimate development and will be implemented only as the particular projects may become needed; thus it will be carried out over a period of many decades. Also, it is not proposed that construction be solely by the state, but rather that projects be built by state, federal, or local governments, or by private business, as may be required to develop California's water resources most efficiently.

Although the California Water Plan may be referred to as a "framework" and a "blueprint," the connotation of finality of these terms is not in keeping with the purposes of the Plan. It is a flexible proposal which represents the best thinking of the Department of Water Resources at the present time, and, even now, the Plan is undergoing study for the purpose of supplementation, modification, and revision. It will be necessary to continue to revise the Plan in the future to keep in step with what are bound to be constantly changing conditions.

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<sup>33</sup> CAL. WATER CODE §§ 12570-751.

<sup>34</sup> CAL. DEPT OF WATER RESOURCES, DIV. OF RESOURCES PLANNING, BULL. NO. 3, THE CALIFORNIA WATER PLAN (1957).

<sup>35</sup> *Id.* at 213-14, 242-43.

*A. Areas of Surplus and Areas of Deficiency*

For nearly thirty years the California legislature has made it clear that the policy in developing great water export projects should be one that would not deprive the areas from which water was exported of the water necessary for their development. The measures enacted provided that counties in which water originated must have water reserved to them when state applications were assigned,<sup>36</sup> and that in the operation of the Central Valley Project (which now includes the Feather River Project) the areas of origin should not be deprived of essential water.<sup>37</sup> A little over two years ago the California Attorney General reviewed these provisions.<sup>38</sup> He expressed the opinion that they were constitutional and that they gave the protected areas a right to recapture water that had been exported, should they require it.

The protection of areas of origin is not as complete as it might seem. It is limited in operation to the assignment of state applications or to the Central Valley Project. Furthermore, doubts continue to be expressed on the constitutional question. Most important of all, however, is that without funds and plans for developments to make the water available for use, the rights are of little value.

The situation is also unsatisfactory from the point of view of the areas of deficiency. Under the Attorney General's opinions,<sup>39</sup> they have no assurance that a supply of water, obtained with the expenditure of perhaps hundreds of millions of dollars, will not be reclaimed by those in the area from which it came. There is also the question whether legislative action alone can assure a dependable supply of export water, since there is authority that the state can cancel or modify contracts with its subdivisions.<sup>40</sup> With these areas, too, however, the most serious question is one of financing and constructing the needed projects.

It is now generally agreed that the most satisfactory way to protect both areas of surplus and areas of deficiency is through a constitutional amendment.<sup>41</sup> Such an amendment must guarantee that the areas of surplus will have reserved to them the water necessary for their development, while guaranteeing firm supplies for export to the water-deficient areas. To ac-

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<sup>36</sup> CAL. WATER CODE § 10505.

<sup>37</sup> *Id.* §§ 11460-63; *cf. id.* § 11128.

<sup>38</sup> 26 OPS. CAL. ATT'Y GEN. 8 (1955); *id.* 32; see 26 OPS. CAL. ATT'Y GEN. 81 (1955) and 29 OPS. CAL. ATT'Y GEN. 136 (1957).

<sup>39</sup> *Ibid.*

<sup>40</sup> *Mallon v. Long Beach*, 44 Cal. 2d 199, 282 P.2d 481 (1955).

<sup>41</sup> A number of such amendments were introduced in the last session of the legislature, but were not acted upon favorably. Senate Const. Amend. 1; Senate Const. Amend. 44; Senate Const. Amend. 47; Senate Const. Amend. 48; Assembly Const. Amend. 38; Assembly Const. Amend. 55; Assembly Const. Amend. 68; Assembly Const. Amend. 81; Assembly Const. Amend. 82; Assembly Const. Amend. 83.

comply with these objectives, however, a program of continuing construction of projects to export water to the areas of deficiency and to make water available in the areas of origin must be carried out. The immediate establishment of a Water Development Fund dedicated to these purposes is the best insurance to both types of areas—that is to say, the entire state—for adequate water supplies.

### *B. Use of Ground Water Storage*

The importance of the utilization of ground water basins as storage reservoirs is emphasized by the fact that the ground water storage in the Central Valley alone, required in connection with the California Water planned utilization of ground water basins. Such cyclic ground water storage basins will increase this figure by many millions of acre-feet. To utilize the state's ground water resources fully, there must be planned management of the basins so that they will be drawn down in periods of water shortage and replenished during wet cycles. Although simple in concept, a number of legal problems are presented in connection with carrying out such a program.

At present no governmental agency has the authority to carry out the planned utilization of ground water basins. Such cyclic ground water storage will inevitably require the adjustment and definition of the rights of those presently using ground water basins in relation to the rights of the agency storing water for later withdrawal. At present, a legal action with possible court reference<sup>42</sup> to the State Water Rights Board, is the only method of determining the rights to the use of ground water. The statutory adjudication procedure,<sup>43</sup> under which the Board investigates the physical situation and collects information from claimants as a basis for an adjudication by the superior court, is not available, for all practical purposes, for the determination of the rights to a ground water basin.

In certain counties in southern California, where ground water overdrafts are extreme, reports of withdrawals from ground water have been required<sup>44</sup> and the State Water Rights Board has been given limited authority to prevent permanent damage by sea-water intrusion.<sup>45</sup> There is no authority to prevent permanent injury from contamination from other sources of subsidence of the land which permanently reduces the available storage. There is also no provision for regulating the appropriation of ground water in most cases.

Although it is not immediately necessary, legislation to correct these defects will doubtless be required in the foreseeable future. Such legislation

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<sup>42</sup> CAL. WATER CODE §§ 2000-76.

<sup>43</sup> *Id.* §§ 2500-2865.

<sup>44</sup> *Id.* §§ 4999-5008.

<sup>45</sup> *Id.* § 2020.

should (1) give authority to the state to allow planned utilization of ground water storage; (2) allow more efficient determination of water rights by extending the statutory adjudication procedure to this subject matter and by improving it and the court reference procedure; (3) establish clear authority for the protection of ground water basins from permanent irreparable injury through deterioration in quality or subsidence; (4) require that ground water be withdrawn under a system of appropriations comparable to that with regard to surface water; (5) pending some of the more far-reaching measures, require recordation of ground water withdrawals in additional areas or on a state-wide basis.<sup>46</sup> Because state regulation, too soon imposed, may stifle rather than promote progress, these measures should be put into effect only as the need for regulation becomes clear.

### *C. Effectuation of State Planning*

It is of little avail to prepare an ultimate plan for water development unless projects are actually constructed in conformity with the plan. Since federal, local, and private agencies will be constructing some of the projects covered by the California Water Plan, some authority must exist to insure that the Plan will be followed by all agencies. Of course, a slavish adherence to every detail of the Plan as now or hereafter published is not desirable, but rather sufficient control is needed to bring about harmonious development without waste, duplication, or the construction of conflicting facilities.

At present, the authority of the state to promote compliance with the California Water Plan rests on the authority of the Director of Water Resources to grant or withhold assignments of state applications to appropriate unappropriated water.<sup>47</sup> Approximately 112 of these applications have been filed on many streams throughout the state; by no means, however, has all of the water required for the entire Plan been covered by these. Also, in many cases state applications were filed relatively recently and other applications, in some cases filed on a promiscuous basis on all water in sight, precede the applications of the state. When the California Water Plan has been formally adopted or approved by the legislature, with such modifications as it may see fit to make, it will seem appropriate to vest authority in a state agency to insure that the Plan will be the governing principle of California's water development. This might be accomplished through a direct requirement of licensing of water conservation projects as such, but because this would overlap the water rights licensing procedure

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<sup>46</sup> For an excellent and detailed exposition of some of these proposals, see the statement by Henry Holsinger, then Principal Attorney of the State Division of Water Resources, in *JOINT COMMITTEE ON WATER PROBLEMS OF THE CALIFORNIA LEGISLATURE, SEVENTH PARTIAL REPORT ON WATER PROBLEMS OF THE STATE OF CALIFORNIA* 151 (1955).

<sup>47</sup> CAL. WATER CODE § 10504 provides that assignments or releases from priority may be made "for the purpose of development not in conflict with such general or coordinated plan."

and because additional jurisdictional problems would be encountered in licensing federal agencies, the same result could be accomplished by establishing a requirement that new appropriations of water be in conformity with the Plan. Care should be taken, however, to avoid division of authority within the state on this subject.

Although such action would insure the compliance of local agencies and private business, federal legislation should be enacted to bring about conformity of some federal agencies with state planning. In view of the present responsibility of federal agencies in the water planning field, the success of state water planning depends in considerable part on such federal legislation. This is discussed further, *infra*.

### III

#### WATER RIGHTS—KEY TO PLANNING AND CONSTRUCTION

The history of California's water law and its present content has been ably discussed elsewhere.<sup>48</sup> Only the briefest excursion into this subject will be made here as a background for the important intergovernmental problems which turn on this phase of the law.

For its first sixty years California had a system of water law in which riparian and appropriative rights flourished side by side without state regulation. Although in legal theory riparian rights were paramount, in actuality the great preponderance of water put to beneficial use was under appropriations which, in many cases, ripened into prescriptive rights that superseded the rights of the riparians. During the latter portion of this period a would-be appropriator, by posting a notice, recording it, and proceeding diligently to construct his facilities, could preserve a statutory priority against other appropriators.<sup>49</sup> In 1913, with the enactment of the Water Commission Act,<sup>50</sup> the situation changed. This law required that appropriations be initiated by filing an application with a central state authority, now the State Water Rights Board, and provided that after the issuance of a permit, construction might begin. A license is issued when the water that has been appropriated has been fully applied to beneficial use.

As the original Water Commission Act was interpreted, authority to issue permits was ministerial; there was no discretion in the matter if the applicant had correctly complied with the requirements of the law.<sup>51</sup> By subsequent amendments, however, authority was established to refuse to issue permits for appropriations not in the public interest,<sup>52</sup> or to impose

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<sup>48</sup> HUTCHINS, *THE CALIFORNIA LAW OF WATER RIGHTS* (1956); Ferrier, *Administration of Water Rights in California*, 44 CALIF. L. REV. 833 (1956).

<sup>49</sup> CAL. CIV. CODE §§ 1415-20.

<sup>50</sup> CAL. WATER CODE §§ 1200-1801.

<sup>51</sup> *Tulare Water Co. v. State Water Comm'n*, 187 Cal. 533, 202 Pac. 874 (1921).

<sup>52</sup> CAL. WATER CODE § 1255.

conditions required by that interest.<sup>53</sup> It is now established that these amendments vest discretion in the State Water Rights Board in the matter of issuing permits.<sup>54</sup> By utilizing this discretion the Board could refuse to allow appropriations that are not in conformity with the California Water Plan or could impose conditions necessary to bring the proposed appropriation within its framework. But the criterion of "public interest" is too vague a standard to give one a feeling of confidence that it will suffice to implement the Plan. Legislation specifically requiring that future appropriations conform substantially with the Plan as approved by the legislature would present a more definitive solution.

The rights to divert and to store water are essential to every new water development or utilization, whether under the auspices of state, federal, or local entities. Such rights are appropriative rights which, if California's water law is to govern, must be acquired under the jurisdiction of the State Water Rights Board. Whether California's water law is to govern, however, has now been called into question in relation to the activities of various federal agencies in planning and constructing water projects.

#### IV

##### FEDERAL RELATIONSHIP TO STATE WATER LAW

Many federal agencies are involved in the planning or control of water projects in the states. Most important are the Federal Power Commission, the Bureau of Reclamation, the Corps of Engineers, and the military. A host of other federal agencies and departments have some functions or effects on water developments in the states.

The Congress has repeatedly established the principle that federal agencies should proceed in conformity with state water law. On many occasions specific provisions have been included in federal legislation applying to a number of federal agencies.<sup>55</sup> The Congress realistically recognized that there was no system of federal law to apply to the acquisition and administration of rights to the use of water and that the applicable state law should be utilized. Also, the Congress early realized that only havoc would result from disregard of this segment of state property law. Without regard

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<sup>53</sup> *Id.* § 1253.

<sup>54</sup> *Temescal Water Co. v. Department of Public Works*, 44 Cal. 2d 90, 280 P.2d 1 (1955).

<sup>55</sup> *E.g.*, Act of July 26, 1866, REV. STAT. § 2339 (1875), 30 U.S.C. § 51 (1952); Act of July 9, 1870, REV. STAT. §§ 2339-40 (1875), 43 U.S.C. § 661 (1952); Desert Land Act of March 3, 1877, 19 STAT. 377, as amended, 43 U.S.C. §§ 321-23 (1952); Reclamation Act of 1902 § 8, 32 STAT. 390, 43 U.S.C. §§ 372, 383 (1952); Federal Power Act §§ 9(b), 27, 41 STAT. 1068, 1077 (1920), 16 U.S.C. §§ 802(b), 821 (1952); Boulder Canyon Project Act § 18, 45 STAT. 1065 (1928), 43 U.S.C. § 617q (1952); Taylor Grazing Act § 3, 48 STAT. 1270 (1934), as amended, 43 U.S.C. § 315b (1952).

for state law, the vested rights on which agriculture, industry, and the whole economy of the states are based would be jeopardized, and without the assurance of vested property rights future developments would be stifled. The principle that state law should control in many other fields besides water development is now firmly established.<sup>56</sup>

The Bureau of Reclamation is required under section 8 of the Reclamation Act of 1902<sup>57</sup> to proceed in accordance with established state water law. In practice, this Bureau has generally heeded the congressional mandate and its well-established administrative policy is to acquire and to administer water rights in accordance with state law. In recent years the Supreme Court has unequivocally reaffirmed that this is the policy the Congress really intended.<sup>58</sup>

In the case of other federal laws the result has been far less satisfactory. Through judicial and administrative interpretations, and perhaps through lack of complete clarity in congressional enactments, the integrity of state water law has been whittled away and the principle that federal agencies have overriding rights has been gradually gaining ground. Often over the objections of other executive departments, the Department of Justice, in charge of litigation for federal agencies, has pressed contentions of federal supremacy which have frequently resulted in departures from well-established administrative policies.

Activities of the Federal Power Commission represent the furthest extension of federal control in the sphere of state water law. This agency has the responsibility of licensing power projects, including those of states and municipalities, that are located on navigable streams or public lands, or that affect interstate commerce. Although the Federal Power Act, under which the Commission functions, specifically provides that licensees must obtain water rights under state law as a prerequisite to a license,<sup>59</sup> these provisions, as interpreted by the courts, have lost their force. The decisions have held that federal licensing power may be exercised in complete disregard of state laws prohibiting the type of development licensed.<sup>60</sup> Among these cases was the Supreme Court's decision upholding the licensing of construction of the Pelton Dam for power production on the Deschutes River in Oregon<sup>61</sup> although a permit had been denied by the appropriate state agency. In the wake of these decisions has followed an increasing

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<sup>56</sup> *Cf. Erie R.R. v. Tompkins*, 304 U.S. 64 (1938).

<sup>57</sup> 32 STAT. 390, 43 U.S.C. §§ 372, 383 (1952).

<sup>58</sup> *United States v. Gerlach Live Stock Co.*, 339 U.S. 725 (1950).

<sup>59</sup> 41 STAT. 1068 (1920), 16 U.S.C. § 802(b) (1952).

<sup>60</sup> *Federal Power Comm'n v. Oregon*, 349 U.S. 435 (1955); *First Iowa Hydro-Electric Cooperative v. Federal Power Comm'n*, 328 U.S. 152 (1946); *Washington Dep't of Game v. Federal Power Comm'n*, 207 F.2d 391 (9th Cir. 1953), *cert. denied*, 347 U.S. 936 (1954).

<sup>61</sup> *Federal Power Comm'n v. Oregon*, 349 U.S. 435 (1955).

movement to disregard state law<sup>62</sup> and there are now many instances where federal law and administrative policies are considered controlling and state water law is being disregarded.

The present situation may have been produced in part by former deficiencies in state water law and state water planning. Forty years ago few, if any, states engaged seriously in planning the development of their water supplies. As a natural consequence state water law contained no provisions for carrying water development plans into effect. However, large-scale water planning and water development were already needed, and to fill the vacuum and to allow progress, agencies such as the Federal Power Commission and the Bureau of Reclamation, either by congressional mandate or by administrative policy, took over the functions of the states. One of the motivations for these developments was the clear need for combined responsibility for all planning in one agency.

Today the situation has changed: Many states are developing plans for the utilization of water by their inhabitants. It is increasingly apparent that future development will now be hastened by adherence of all agencies to the state plans that are being formulated. Where a stream flows through more than one state and a compact between the states has been consummated, the compact should be the controlling law, and should be recognized as such by the federal government. Recently, the legislatures of California and Oregon have adopted,<sup>63</sup> and the Congress has approved,<sup>63a</sup> a compact relating to the waters of the Klamath River. This compact and the congressional consent legislation bind federal agencies to conform with its essential terms.<sup>64</sup>

The situation has also changed with regard to the principle of unitary responsibility. Now there are a great many federal agencies dealing with water problems in each state. No single federal agency has authority to plan for all phases of water development. Only the state is in a position to prepare and to carry out a master plan for its development. Both the preservation of vested rights established in the states and the carrying out of state water development according to a state-developed, coordinated plan require federal adherence to state water law.

It has become clear that the best way to bring about the compliance of federal agencies with state water law is through new federal legislation,

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<sup>62</sup> For example, a naval depot in Nevada discontinued its established practice of complying with the state's water law. *Hearings Before the House Committee on Interior and Insular Affairs*, 84th Cong., 2d Sess., ser. 31, at 92-95 (1956). This precedent is significant because the armed forces control and are acquiring vast tracts of land in the West, on some of which large-scale water utilization is being carried out or proposed.

<sup>63</sup> Cal. Stat. 1957, c. 113; Ore. Laws 1957, c. 142.

<sup>63a</sup> Act of August 30, 1957, 71 STAT. 497.

<sup>64</sup> For a comprehensive discussion of this subject, including the Klamath River Compact, see Stinson, *Western Interstate Water Compacts*, printed elsewhere in this issue.

which would reaffirm the integrity of state water law and require federal agencies to comply with it, without, however, preventing such agencies from carrying out their proper federal functions.<sup>65</sup>

Without the passage of such legislation it appears likely that there will be no way in which to accomplish coordinated planning and development of water within the states. By way of example, failure of federal agencies to comply with California's water law, and through it with California's plans for water development, would make a shambles of the California Water Plan. For instance, the Federal Power Commission could by refusing licenses, prevent even the state itself from constructing projects planned by it. Also, without such legislation it may be confidently predicted that further inroads will be made by federal agencies on vested water rights.

At one time the concept of single responsibility for coordinated planning may have been possible of achievement only on a federal basis. This is no longer the case. Now coordination and cooperation among the various agencies involved in water development can best be achieved under the guidance and direction of a well-conceived plan administered by the state.

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<sup>65</sup> An example of such legislation is the Barrett Bill (S. 863, 84th Cong., 1st Sess. (1955); S. 863, 85th Cong., 1st Sess. (1957)), which is the subject of Corker, *The Western Water Rights Settlement Bill of 1957*, printed elsewhere in this issue.