

California Law Review

Volume XVI

MAY, 1928

Number 4

The Pending Water Amendment to the California Constitution, and Possible Legislation

(Concluded from the March Number)

VI.

THE proposed measure (a copy whereof is appended hereto) also calls upon successive developments to have reasonable consideration for each other.

Diversion of a stream is for one project at first; but soon the water descending after employment at the first place of use attracts other projects below, to use it over again. A descending chain of developments or other successive benefits of the water thus comes into existence in a new direction.

The measure's declaration for "reasonable use" is universal, and therefore it is proposed to consider the effect of the declaration upon the mutual relations of these successive developments.

(a) To discuss this invokes considering the hydraulic factor which is concerned. The new line of levels appears because of what is called "return flow."

The scientific authorities inform us that the belief, often encountered, that water diverted is water consumed, is in error. The findings of the investigators have shown that most of the diverted water passes unconsumed down from the new locality to which it has been carried. "It is doubtful whether the time will ever come when the value of water used or crops raised will be sufficient to make profitable installation of irrigation systems and preparation of land so that only the actual water consumed by the plants will need to be diverted."⁸⁰ Provision to conduct the unconsumed water

⁸⁰ Division of Water Rights, California Department of Public Works, Bulletin No. 1, May, 1923, p. 110.

off the irrigated lands in the least harmful way is authoritatively declared to be good irrigation's indispensable condition. "No enterprise can be successfully applied or carried out that does not carry with it a drainage system."⁸¹

It is authoritatively stated, furthermore, that the fact is that in irrigation this transmission of unconsumed water averages not less than two-thirds of the supply. This figure has received authoritative acceptance.⁸² From non-consumptive uses, such as water power, it is obviously still more.

There is the hydraulic fact to be given account, therefore, that use does not destroy much water. The bulk of the supply functions and, partly on the surface and partly by seepage, passes downhill as return flow by the natural depressions of the new locality to which it is brought. These thereby become new watercourses or augmented old ones. Therefrom some other project down below finds its supply, and so on in successive repetitions.

A new succession of levels appears, as with undestroyed running

⁸¹ Senator Heyburn, of Idaho, in 45 Congressional Record 2889. Similarly, "It seems in this irrigated country the question of drainage is now confronting almost every irrigated section." In re Drainage Dist. No. 1 (1916) 29 Idaho 377, 161 Pac. 315. "Drainage channels are generally required to receive all waste or surplus water from the main canals and laterals and to collect and remove the surface and underground drainage water produced by seepage and deep percolation losses." 2 Irrigation Practice and Engineering, p. 3, by Professor Etcheverry of the University of California and United States Department of Agriculture. "There are few irrigation systems where natural drainage must not be supplemented by artificial drainage and the construction of an irrigation system may ultimately require a complete drainage system." Ibid., p. 7; see also Vol. III, p. 285. "It is quite certain that drainage districts must soon be as much a feature of irrigated farming as they now are of agriculture in the humid sections." United States Dept. of Agric., O. E. S., "Development of Methods of Draining Irrigated Lands," by C. G. Elliot, Chief of Drainage Investigation (Reprint from Annual Report of O. E. S. 1910), pp. 498-499.

⁸² In irrigation "careful observations indicate that *not to exceed one-third* of the water diverted from streams or stored in reservoirs is actually used by crops in the process of growth." 1909 Report of the United States Secretary of Agriculture, p. 69. "An estimate of all losses based on water measurements and experiments shows that for every 3 gallons of water diverted from natural streams, only about 1 gallon subserves a useful purpose in nourishing plant life. In other words, the general average efficiency of irrigation water is *less than 35 per cent.*" Use of Water in Irrigation, by Professor Samuel Fortier of the University of California and United States Department of Agriculture, p. 110. As stated in a Congressional hearing: "Some engineers that have investigated it have made an estimate of the return flow in an irrigation project as high as 60 per cent. Secretary Hoover has made that statement . . . in his reference to the amount of water which could be utilized in the upper-basin states he estimated 60 per cent would be the return flow." Committee of the House of Representatives on Irrigation, Part 2, p. 279, January 11 and 12, 1928, Colorado River hearing. See, also, California R. R. Com. Decision No. 536 (1913) 2 Cal. R. C. Dec. 464; 1 Wier, Water Rights in the Western States, 3 ed., § 488 (1911).

water it always must. On one stream, measurements have shown that eight successive projects on the return flow employ the same water over again in a hundred miles; and on another stream it was being used over again four times and increasing; and "undoubtedly the same conditions exist on most of the streams of the arid region."⁸³

These results of modern investigation have therefore disclosed that *putting the water resources of the State to beneficial use to the fullest extent of which they are capable* requires using the same water over again the greatest number of times that can exist comfortably together. A large flow serving only one use is like a railroad serving one large unit like San Francisco and no other place on its line to New York. It has served only a fraction of its possibilities. Its full development value comes when the same water serves many successive stations. Progressive multiplication of second and third and succeeding uses of return flow at successively descending levels is what, by its aggregate, makes the State.

(b) How to get them comfortably adjusted presents a problem which the accompanying sketch is tendered to illustrate.⁸⁴ While the illustration is no more than the present writer's attempt to put the problem in visual form, it does, he believes, pretty closely represent an outstanding condition upon which the need for some disposition in the near future is emphasized in the 1926 report of the California Water Administration;⁸⁵ indeed, diversions have so

⁸³ A prominent observer has said: "In a report on the 'Surface Water Supply of California, 1907-8,' by W. B. Clapp and W. F. Martin, after stating in detail how the water of the Santa Ana River is utilized, the authors state, 'It is thus evident that the same water, in passing from mountain to sea, a distance of not more than 100 miles, may be used at least eight times for power and irrigation. In like manner the water in many of the tributaries may be used several times before reaching the main stream.' Similar observations on the South Platte River in Colorado, reported by the Department of Agriculture, show that the diversions from that stream in July, 1903, were slightly more than four times the visible inflow, and in August the diversions were only slightly less than three times the visible inflow. *This increase is attributed entirely to return seepage from irrigated land*, and the measurements reported in the bulletin referred to show that the return seepage was increasing from year to year. Undoubtedly the same conditions exist on most of the streams of the arid region. The soil of the stream valleys is filled with water by irrigation, and this water seeps through the soil toward the natural drainage channels and finally appears in the streams as an addition to the surface flow, which can be diverted and used again, to again contribute to return seepage further downstream. Thus, on a long stream, such as the South Platte, the same water may be used several times before passing into the air or out of the region where it is needed for irrigation." R. P. Teele, *Irrigation in the United States*, pp. 23-25. The same condition is a prominent feature in Nevada on the Truckee River and Humboldt River; and probably throughout all irrigated regions.

⁸⁴ This figure appeared also in the March issue of the Review.

⁸⁵ "Within the last few years the development of modern projects has raised questions of water law on which not any or very little light can be

affected streams that the discussion is current everywhere throughout the West.⁸⁶

The hazard to development is said to be that since lower projects continue getting installed on the return flow as industry prompts, the arrival of a dry year brings trouble for them when the high-level reservoirs diminish, divert or otherwise alter the return flow without concern for the lower developments.⁸⁷ A glance at the illustration

found either in previous water law history, court decision or the Water Commission Act. One such important question at this time revolves about the ownership of water released from storage and abandoned by the original appropriators. Reservoirs have been constructed for power purposes and the winter waters stored therein returned to the streams later in the year, after having been used to generate electric energy. This increases the flow of such streams at a time when there is a great demand for water by irrigators in the valley below. To whom does such water belong? Can the power company dispose of it by contract? Does it inure to the benefit of prior appropriators in the order of their priority, or in order of their position on the stream? Or does it go to the latter appropriator who files on this particular water? California decisions do not cover these points and the other irrigation states do not seem to have any clear precedent. However, an answer to these questions must be had in the relatively near future, and must come in the first instance from the Division." Part III, Biennial Report of the California Division of Water Rights, Nov. 1, 1926, p. 20.

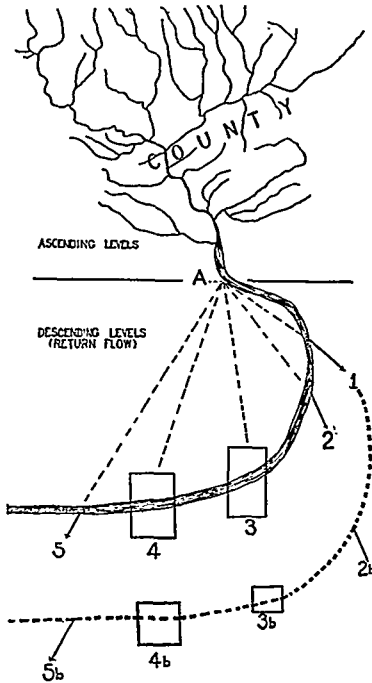
"As a result both of the cycle of dry years through which the Sacramento-San Joaquin Valleys have been passing and the greatly increased irrigation development, the flow of both the Sacramento and San Joaquin Rivers in the lower stretches has consisted almost entirely in recent years of water returned to the streams from upper irrigation operations. As a result, development on the lower stretches of the rivers and in the delta has become greatly dependent upon this return water." Part III, Biennial Report of the California Division of Water Rights, Nov. 1, 1926, p. 104.

⁸⁶ Similarly the situation is described in Colorado: "We take judicial notice of the fact that practically every decree on the South Platte River, except possibly only the very early ones, is dependent for its supply, and for years and years has been, upon return, waste and seepage waters." *Comstock v. Ramsay* (1913) 55 Colo. 244, 254, 133 Pac. 1107. A Colorado commentator presents: "The early settlers scattered almost at random along the courses of the streams. Therefore it was not possible to establish such a physical sequence of appropriations, consistent with private priorities, as would permit the primary use of water near the headwaters of the stream and a recurrent use of the return flow as it passed to lower areas along the same stream. Nevertheless, there are many cases where this would be desirable economically. It was not possible to foretell what lands or altitudes would prove most important in raising crops of the highest value, or those requiring water at specific periods of the season. It was not possible to foresee the ultimate coming of an industrial population which, though late in time, would demand water for its operations. It is for the future to determine how such matters shall be met." Henry A. Dodd of Denver, 12 Am. Bar Assn. Jnl. 679, at 685-686 (1926).

⁸⁷ It will be remembered that dry years are what test water law. So long as there is abundance of water the successive developments do pretty much as they please, without harm. The short years are what set them to thinking about the law. "The necessity for water master service does not arise during years of plentiful water supply, but is made apparent by critical years" etc. California Division of Water Rights (Dept. of Public Works), Third Biennial Report (1926), Part III, p. 17. Similarly, *In re Silvies River* (1925) 115 Ore. 27, 237 Pac. 322, 344.

may help to suggest the predicament in which successive development is thereby placed.

FORM OF STREAM SYSTEM



The observer, let us suppose, is standing at the point A. Ascending above him the gradient slopes uphill to higher levels; descending below him it slopes downhill to lower levels; and this is the "lay of the ground" at whatever place along the stream one stands. In the illustration he happens to be standing where mountain passes to lowland; and in the valley below him are examples of successive developments presented by numbers. The lower line is the return flow from diversion number 1, with the new succession of levels which it creates, often, of course, having sharp variations of direction. The illustration assumes that 2b does not take all of it. A similar return flow, not here shown, comes from the other diversions 2 and 5.

The square parcels (3 and 4, and 3b and 4b) are not concerned here, being put in for discussion at a later page.

Successive development very evidently has no other means of sustaining itself. The successive developments on the new line exist only by going through the works and operation of number 1.

The same corresponding difficulty is doubled for developments receiving the return flow of what has been carried off by 2b, and so it multiplies for each successive recipient.

On the old line (the natural flow) the successive levels are connected to the source by natural forces operating of themselves. In the illustration an attempt is made to indicate this by the dotted lines to A. They all get water from there of its own motion.⁸⁸

But (as the previous part of this paper has ventured to suggest), natural forces operate only in their own direction. The new line of succession lives only according to the operation of number 1's dams, canals and other interposing agencies—(such also as the first development's active irrigation when the lower projects rely upon seepage from it)—which the first use controls.

Number 1, as the topmost of the installations, is thus in a physical position to make good its stand dominating the developments relying upon its return flow; and there is ground to fear that it is also in the legal position to do so. Water, more or less irregularly, must doubtless come down to the other developments on the new line of return flow—in the average, as has been mentioned, two-thirds of the diversion—but unless something is done to make it reasonably obligatory it would come down in no entitled amount, place or time. What any successive lower levels on the new line get, as in short years they are coming to realize, is left to them without legal right. *In the present state of the law, so number 1 is at least apt to claim, the successive developments on the new line taken by the return flow are, in legal effect, hardly more than scavengers of its off-castings, subject to detention or to being sent elsewhere at the upper level's will.* The multitude of second and third and succeeding projects using the return flow over again at descending levels are, in that status, practically outlaws.⁸⁹ Number 1 becomes Lord of the Waters, a monopoly fully realized over all other development.

Furthermore, the new line of transmission may, and often does, broaden out underground. Diffusion from the return flow is indistinguishable in this respect from diffusion from natural flow. It may contribute to maintaining the fertility of a wide region, far to

⁸⁸ Return flow back to the stream from which it is taken is therefore secure to lower levels. For authorities see 6 California L. Rev. 199, 203 (1918).

⁸⁹ 2 Kinney on Irrigation, pp. 1151-1153; 26 Cal. Juris. 55; 1 Wiel, Water Rights, 3 ed., §§ 51-58 (1911). For example, *Garns v. Rollins* (1912) 41 Utah 260, 125 Pac. 867; *Dannenbrink v. Burger* (1913) 23 Cal. App. 587, 138 Pac. 751; *Hagerman Irr. Co. v. East Grand Plains etc. Dist.* (1920) 25 N. Mex. 649, 187 Pac. 555. See the present writer's paper in 29 Harvard L. Rev. 137 (1915).

both sides of the line, by maintaining its groundwater table. The groundwaters of San Fernando Valley,⁹⁰ Santa Clara Valley,⁹¹ San Bernardino Basin, and other important regions,⁹² have been found to be dependent upon the surface flows entering them from the mountains and absorbed into the valley depths. Wherever there are upper-level diversions, return flow therefrom furnishes to this underground diffusion an important factor of support.

So long, therefore, as upper-level works such as installation number 1 enjoy independence of legal restraint, successive development of surface flow, development by wells, and even the fertility of a wide extent of lower country, are legally underprotected. Not that the harm is uniformly likely to happen. The point is that lower developments are uniformly without legal remedy if it does. That developments at lower levels on the return flow should have relief from this predicament is forcing itself upon attention with a pressure increasing by every dry year's experience.⁹³

(c) Extinction of the natural succession of levels, by diverting the flow from them, was discussed in the March issue of the Review.

⁹⁰ *City of Los Angeles v. Hunter* (1909) 156 Cal. 603, 105 Pac. 755.

⁹¹ *Miller v. Bay Cities Water Co.* (1910) 157 Cal. 256, 107 Pac. 115.

⁹² For example, *Hudson v. Dailey* (1909) 156 Cal. 617, 105 Pac. 748; *Barton v. Riverside Co.* (1909) 155 Cal. 509, 101 Pac. 790, 23 L. R. A. (N. S.) 331; *San Bernardino v. Riverside* (1921) 186 Cal. 7, 198 Pac. 784. In a bulletin of the United States Department of Interior it is said: "The sands and gravels that underlie the coastal plain are saturated, from a point whose distance below the surface varies with locality, to bed rock, which lies at an unknown depth. *The water has been supplied chiefly by the large streams that flow across the coastal plain and derive their supply from the higher mountains*, where precipitation is greater and direct evaporation less than in the lowlands. The amount at present stored in these gravels represents slow accumulation through long periods. *Even through the summer it without doubt receives accessions from the underground flow of the larger rivers*, from slow drainage of the slopes of neighboring hills, and from return waters from irrigation; but these contributions must be very small as compared with those received through the absorption of flood waters and direct rainfall during the winter. The winter accessions are received mainly along the inner edge of the coastal plain, *where the rivers first discharge upon it, and where its sands and gravels are coarser*," etc. Department of the Interior, U. S. Geological Survey, Development of Underground Waters in the Eastern Coastal Plain Region of Southern California, p. 21. Water-supply Paper No. 137, Series O, Underground Waters, 40.

⁹³ Pomeroy long ago prophesied that "the doctrine of prior appropriation is completely at war with a system which recognizes, harmonizes, and protects the rights of all parties in the State." Compare the passage in *Lux v. Haggin*: "In our opinion, it does not require a prophetic vision to anticipate that the adoption of the rule, so called, of 'appropriation' would result in time in a monopoly of all the waters of the state by comparatively few individuals, or combinations of individuals controlling aggregated capital, who could either supply the water to purposes useful to themselves, or sell it to those from whom they had taken it away, as well as to others." *Lux v. Haggin* (1886) 69 Cal. 255, 309, 10 Pac. 674.

The natural succession is made up not alone of the *riparians* adjoining the surface flow, but also of the *subarians*—as we may conveniently call the landowners overlying the subterranean diffusion therefrom. It is becoming increasingly evident that disposing of this natural succession, whether with indemnity or without, is only half of what occurs. The diversion at the same time creates a new set of levels somewhere else.

How properly to assure a comfortable arrangement for the new succession in benefiting by the water, which thereby follows, has become a pressing problem. So long as development was at its beginning, one use of the water was all that presented itself. The pioneer ruling, noted in the March issue of the Review, emphasized that it concerned a vacant region.

But today our water resources are not vacant. Notwithstanding some assertions that vast amounts of water run unused, we are constantly reading in authoritative quarters that original sources are no longer available.⁹⁴ The accurate observation would seem to be that whether directly by surface employment, or indirectly by main-

⁹⁴ "Practically all the summer flow of California's streams that are accessible, is now in use." California Department of Public Works, Division of Engineering and Irrigation, Bulletin No. 12, p. 22. In the same way Bulletin 435, University of California, College of Agriculture, p. 31, says: "Since most of the water rights that are acquired are appropriation rights which are based upon the principle of priority of use, each year water rights are more difficult to obtain." Again: "It would appear, therefore, that the limit of benefit to be derived through waste prevention and voluntary diversion reductions was reached and that in such seasons as that of 1926 additional water can only be obtained by more drastic measures necessitating the elimination of some of the areas watered." Part III, Biennial Report of the California Division of Water Rights, Nov. 1, 1926, p. 84. *In Colorado*, many streams are already over-appropriated, says the court in *Humphreys T. Co. v. Frank* (1909) 46 Colo. 524, 105 Pac. 1093. "All the waters of the South Platte River have been appropriated, and the entire normal flow of the river is inadequate to supply the priorities for irrigation purposes already decreed from it." *Comstock v. Ramsay* (1913) 55 Colo. 244, 248, 133 Pac. 1107. "... the parties concede that the ordinary flow of the Arkansas River is sufficient to supply only priorities of a date prior to April, 1884." *Ft. Lyon Canal Co. v. Rocky Ford etc.* (1926) 79 Colo. 511, 246 Pac. 781 at 783. *In Idaho*, the entire Boise River has been appropriated says the court in *U. S. v. Burley* (1909) 172 Fed. 615. *In Nevada*, "the saturation point of water rights in the State is gradually being approached." Biennial Report of the State Engineer, 1925-1926, p. 7. *In Utah*, nearly all of the water available for irrigation by direct diversion is appropriated and future development will have to depend almost entirely upon the conservation of the winter and flood flow. Ninth Report, State Engineer of Utah, 1913-1914, p. 26. *In Wyoming*, "The rapid increase of the irrigated area, adjacent to the water courses in every part of the State, has drawn so largely from our water resources that from some streams permits can no longer be granted, and upon several others only after storage has been provided as a supplemental supply for at least a part of the season." Reports of the State Engineer of Wyoming, 1911-1912, p. 15.

taining underflow and groundwater tables—including the pressure of *floods* increasing the rate of absorption—it is in fact all used, as the judicial findings reviewed in the first part of this paper hold with very evident correctness,⁹⁵ and that we have come to the time when advance must rest upon more repetition of using it over again.⁹⁶

The California Water Administration has suggested a physical solution by intermediate reservoirs to re-regulate the supply on its descent from one use to another.⁹⁷ Like any solution depending

⁹⁵ "The mere fact that water has run into the ocean winters and always in a major *flood* does not itself indicate to what extent or under what conditions unappropriated water is available, if at all. *Rights have been established by users from the underflow which is replenished by these very floods*, and these rights as well as all other prior and vested must be respected." Part III, Biennial Report of the California Division of Water Rights (Dept. of Pub. Wks.), Nov. 1, 1926, pp. 70-71.

⁹⁶ "If the fullest practicable development of the State's water resources is to be realized [a California administrative official has declared] it is imperative therefore that some system be evolved whereby the earlier developments will be prevented from placing any unnecessary obstacles in the way of those developments which are to follow." *Journal* for January, 1928, published by the Department of Public Works, paper by Everett M. Bryan, Chief Deputy of the Division of Water Rights. As applied to oil resources, Secretary Work before the American Bar Association (52 Repts. Am. Bar Assn. 570-571) denotes the idea of unlimited prior right as "simply the desire to get the oil before someone else gets it," thus "indulging in the primitive instincts of the chase." He says the oil industry is sick of it and repentant. In the air we find the Chicago judge who vouches prior-appropriation-water-law for his decision that "first come first served" is to control radio stations, evoking a strong reaction that this impairs developing the number of stations and substitutes monopoly in place of opportunity. The electoral drift, if we may so call it, when priority is unlimitedly enforced in an extensive way, shows the people taking their recourse against the officers who do it by voting them out of office, as in the last election in the State of Nevada. There had been an abrogation long ago of riparian rights in that state in order to install the prior appropriation doctrine. In consequence of his allegiance to the latter, the Governor of the state in 1926 had the water administration deliver the whole of Humboldt River in Nevada to twenty claimants out of some 430. The election came with that experience in mind. The river counties, which had previously been the Governor's electoral stronghold, withdrew their support. The Governor was defeated for reelection by the vote of the river counties, and the water administration went out with him.

⁹⁷ ". . . reservoirs to re-regulate the flow situated at levels intermediate between the agricultural and the mountain areas, will permit the unrestricted development of hydro-electric power and mining in harmony with a complete re-use of the same water on the plains below. Large reservoirs at these intermediate elevations, therefore, are important features of a comprehensive plan to secure the greatest use from the state's waters." California Department of Public Works, Division of Engineering and Irrigation, Bulletin No. 12, p. 23. As introductory to such possible future equalizing constructions, the California legislature authorized the Department of Finance to file claims with the Division of Water Rights before May 29, 1928, for water resources that might be "required in the development and completion of the whole or any part of a general or co-ordinated plan looking towards the development, utilization or conservation of the water resources of the state." Cal. Stats. 1927, c. 286, § 1, p. 508. The State Department of Finance on July 30, 1927,

upon extensive engineering works, this is not now in sight, is very costly, and probably will not be in sight for a long time. In the meanwhile it is probably fair to say that any hope of freeing successive development from its predicament must be of a legal kind.

Some reasonable degree of obligation on an upper installation which will produce a fair compromise to enable using the water over again by installations lower, and thus give legal standing to the maximum number of repetitions that can exist comfortably together, is becoming an urgent condition upon further development if one may judge from the discussions.

2. The converse is that development multiplies uses of springs and tributaries scattered over the watershed at ascending levels *above* an appropriator. Turning back for a moment to the illustration, we may consider the country above A, one of California's counties.

We can see something of what this means in the summer homes filling up the banks of the South Fork of the American River along the Placerville road. A power company has a large development there with claim of priority running a good way back. All this higher-level summer resort and summer home development, or at least a large part of it, has come subsequently. It depends upon the streams and creeks tributary to the river.

The strong sentiment of the people for its continuance and even greater extension along other watersheds also, presents a subject upon which a call for legislation has already appeared in the California legislature.⁹⁸ It foreshadows legislation to give legality to succession of uses *from level to level above any installation*, as the previous point did for successive levels descending below it; the principle in both instances being legal security for developing uses

filed twenty-five such applications for agricultural and power purposes affecting forty-two different streams. Their value necessarily depends upon the time and manner, as yet undetermined, of future construction.

⁹⁸ The Dillinger Bill in this behalf passed two legislatures, but opposition proved to be successful in securing veto by two successive State Governors. The California Division of Water Rights has said: "One such bill worthy of mention is that which would reserve to the agricultural areas in the mountain counties of the State where development will be very slow a certain percentage of the waters of the streams which originate in said counties. *While the underlying justice of such an idea is generally admitted, the difficulty of devising a workable plan to put it into effect has so far been too great to overcome.*" Biennial Report of the California Division of Water Rights, Nov. 1, 1926, Part III, p. 23. (Italics inserted.) Governor Young has indicated a feeling that the people in the counties where water originates should be assured that all this water should not be taken away from them. It seems not unworthy of mention that the Governor has appointed Mr. Stevenot, of Calaveras County, one of the Dillinger Bill's leading sponsors, to be head of the Department of Natural Resources, although this department does not seem to include waters under its jurisdiction directly.

of the same water over again as many times as can be reasonably achieved and exist comfortably together.

3. The proposed constitutional amendment sanctions the view that obligations of such kind must be observed.

The measure says: "General welfare requires that the water resources of the State be put to beneficial use *to the fullest extent of which they are capable.*" If the surmise which we have been hazarding is correct that "the fullest extent capable" entails using the water over again the greatest number of times, the reasonable yielding to ascending entries, and the reasonable obligation to users of descending return flow, which proceed from it, will become constitutionally consecrated. *The prior reservoir or other project may very likely be called upon to share reasonably with later projects or submit to other reasonable restrictions in order that later development may also succeed.* If legislation lags, the precept for judicial action will be laid in the measure itself, for it reads: "This section shall be self executing."

The constitutional amendment takes the precaution of forestalling objection that this is depriving any appropriator of water to which he is lawfully entitled.⁹⁹ Even before the leading expression by Justice Stephen J. Field, in 1875, there was a very substantial line of decision that unreasonable superiority is not the position to which a prior appropriator is lawfully entitled. Mr. Justice Field (who has been Chief Justice of California) said for the Supreme Court of the United States:¹⁰⁰

⁹⁹ The clause reads: "Provided, however, *that nothing herein contained shall be construed* as depriving any riparian owner of the reasonable use of the water of the stream to which his land is riparian under reasonable methods of diversion and use, or *of depriving* any appropriator of water to which he is lawfully entitled." Since the measure says that unreasonable use is not lawfully entitled by any one, it very evidently proclaims that applying reasonable restrictions upon appropriators is not to be regarded as a deprivation. See 36 Cyc. 1105; 1 Fed. Stats. Ann. pp. 153-154; 36 Cyc. 1161-1164. In addition, the Field rule is that "reasonable limits" apply to what an appropriator is "lawfully entitled" judicially.

¹⁰⁰ *Basey v. Gallagher* (1874) 87 U. S. 670, 22 L. Ed. 452. "But today the science of irrigation, because it has become both a science and an institution, is very little concerned with such primitive notions as who was first in time, as the test of first in right." Page 33 of Colorado's brief in answer to brief of United States in *Wyoming v. Colorado* (1922) 259 U. S. 419, 66 L. Ed. 999, 42 Sup. Ct. Rep. 552. "Is it not possible that for the common weal, and by means hereafter to be found legal, the time may come when *the absolute and exclusive private right of an appropriator of water* in the mountain region may find itself subject to limitations for the general good which may then be found 'reasonable'?" Henry A. Dodd of Denver, 12 Am. Bar Assn. Jnl. 679, at 686 (1926). The Field rule is expounded *between appropriators* by Judge Hawley in *Barnes v. Sabron* (1875) 10 Nev. 217, 243; and *Union Co. v. Dangberg* (1897) 81 Fed. 73, at 93; Judge Morrow in *Anderson*

"Water is diverted to propel machinery in flourmills and sawmills, and to irrigate lands for cultivation as well as to enable miners to work their claims; and in all such cases the right of the first appropriator, exercised *within reasonable limits*, is respected and enforced. We say *within reasonable limits*, for this right to water like the right by prior occupancy to mining ground or agricultural land, is not unrestricted. It must be exercised with reference to the general condition of the country and the necessities of the people, and *not so as to deprive a whole neighborhood or community of its use, and vest an absolute monopoly in a single individual.*"—(In our corporation days we may read "single interest" as the same as "single individual" in this passage.)

Between this and the new measure's universal pronouncement against "*unreasonable use or unreasonable method of use*," repeated several times in order to exercise "*conservation . . . in the interest of the people and for public welfare*," the correspondence will hardly fail to develop.

A constitutional sanction which puts the Field rule in charge of what is "lawfully entitled" will enable the enforcement of reasonable obligations, on prior appropriators and the large corporate reservoirs, to find in the measure an effective charter.

There seems good ground to believe that this may prove to be the measure's vital feature.

VII.

In sanctioning reasonable obligations between successive appropriators, the measure would seem to compare with present law somewhat as follows:

It will hardly be going too far if we say that the measure's principle of insuring successive uses is, in fact, the oldest that is to be found in the judicial rulings. The latter have recognized running water's characteristic of being always on the move, descending un-

v. Bassman (1905) 140 Fed. 14, at 24, and the Idaho Waterwheel case which was affirmed by the Supreme Court of the United States in *Schodde v. Twin Falls Co.* (1912) 224 U. S. 107, 56 L. Ed. 686, 32 Sup. Ct. Rep. 470. Several expressions of like tenor appear in the California Reports, *Phoenix W. Co. v. Fletcher* (1863) 23 Cal. 481, 486; *Hill v. Smith* (1865) 27 Cal. 476, 481; *Natoma Co. v. Hancock* (1894) 101 Cal. 42 at 53-54, 31 Pac. 112, 35 Pac. 334; *Dripps v. Allison* (1919) 45 Cal. App. 95 at 100, 187 Pac. 448. Compare *Town of Antioch v. Williams Irrigation District* (1922) 188 Cal. 451, 205 Pac. 688; *Butte Association v. Railroad Commission* (1921) 185 Cal. 218, 196 Pac. 265; *Pyramid Co. v. Rowland* (1921) 51 Cal. App. 634, 197 Pac. 398; *Peake v. Harris* (1920) 48 Cal. App. 363, 192 Pac. 310; *Morris Knowles, American Society of Civil Engineers*, Paper 1256, pp. 702-703; 1 *Wiel, Water Rights in the Western States*, § 310 et seq. (1911). See also *supra*, notes 52 and 53.

consumed, most of it, whether in the original direction or some other (return flow), by aptly calling it a "tramp" mineral.¹⁰¹ It visits many successive localities. It also blends with groundwater whereby the succession in benefit spreads into regional fertility. The declaration "And by natural law itself, these things are the common property of all: air and running water" was said from the first days that there was law.¹⁰² It is the judicial expression *that repeated use of the same water over again in the successive places which it visits* must have the same realization in legal right and legal protection that it has in fact and practical employment. The new measure will have rededicated the law to this principle of the courts.

We will probably not be very wrong in following this with the observation that by allying itself to succession in right the measure necessarily allies itself also to the position that the more development advances the less can diversion go uncompensated. A large project, such as number 1 on the foregoing illustration, having drawn the flow into its direction, cannot permit another to alter it afterwards. From there down a project or projects (as numbers 2b, 5b on the illustration) draw the return flow into the direction of their own place of use and hold it fixed thereto. So on, with the succession of development. *Today's supporters of diversion are tomorrow's leaders against it.* The flow in the new direction brought about by

¹⁰¹ "*Mineral ferae naturae*": Ohio Oil Co. v. Indiana (1900) 177 U. S. 190, 44 L. Ed. 729, 20 Sup. Ct. 576; Ex Parte Elam (1907) 6 Cal. App. 233, 236, 91 Pac. 811; Clark v. State (1917) 14 Okla. Cr. 284, 170 Pac. 275; Walbridge v. Robinson (1912) 22 Ida. 236, 125 Pac. 812; Charon v. Clark (1908) 50 Wash. 191, 96 Pac. 1040; 21 Am. & Eng. Encyc. of Law, 417; 27 Cyc. 534; 1 Wiel, Water Rights in the Western States, 3 ed., §§ 33, 34 (1911).

¹⁰² Beginning with "Et quidem naturali jure, communia sunt omnium haec: aer et aqua profluens, et mare, et per hoc, littora maris," Institutes of Justinian, lib. 2, tit. 1, sec. 1; through "These things are those which the juris-consults called res communes. Marcien refers to several kinds—the air, the water which runs in the rivers, the sea and its shores," Pothier as quoted in Geer v. Connecticut (1896) 161 U. S. 519, 525, 40 L. Ed. 793, 16 Sup. Ct. Rep. 600; through the statement in the first California Water case: "It is laid down by our law writers that the right of property in water is usufructuary, and consists not so much of the fluid itself as the advantage of its use," Eddy v. Simpson (1853) 3 Cal. 249, 252; and "This court has never departed from the doctrine that running water, so long as it continues to flow in its natural course, is not, and cannot be made, the subject of private ownership. A right may be acquired to its use which will be regarded and protected as property; but it has been distinctly declared in several cases that this right carries with it no specific property in the water itself." Kidd v. Laird (1860) 15 Cal. 161, 179; and through a procession of like declarations, we come to the present day with "so long as it continues to run there cannot be that possession of it which is essential to ownership. It is in this respect similar to the air, which cannot be said to be possessed or owned by any person unless it is confined within impervious walls." Palmer v. Ry. Com. (1914) 167 Cal. 163, 168, 138 Pac. 997.

a diversion becomes constantly tightened against further change of direction unless there be compensation when being dispossessed thereof, which is the same as the common law and the *Herminghaus* case hold for lower levels upon the flow's original course.

Similarly also, with the new direction stabilized in the line which the developments occupy, they will be riparian thereto since they will have fixed the line in the direction where they are situated. The measure's declaration that they shall be controlled among themselves by the correlative term "reasonable" limits, very evidently comes to just about the same thing as, for those on the natural flow and the percolation diffusing from it, the *Herminghaus* and similar rulings already say.

Furthermore, in the illustration given a few pages back there appear square parcels that have been reserved for discussion. If the reader will be good enough to glance back at that figure for a moment, these are indicated by numbers 3 and 4, riparian to the stream (and they would be riparian if upon one bank only; it was not necessary to show them as crossing over to the other side). The new direction of flow after diversion—the lower line—passes by other landowners in like manner, 3b and 4b. Very often percolation diffusing from the underflow along the new line will raise the groundwater plane under 3b and 4b and thus increase such lands' fertility in the same way as percolation and overflow acting from a natural channel would do. Since, under the *Herminghaus* case, such accession to fertility is established to be beneficial and reasonable use, the protection which the new measure asserts for all reasonable and beneficial use may not improbably include 3b and 4b under its operation. That landowners riparian to the new line of flow will, to a large extent at least, thereby step into the shoes of those riparian to the old one, seems a not improbable result toward which the new measure moves.

The new measure may thus very well carry the riparian principles further than merely giving them the constitutional standing which the first part of this paper ventured to present that it will. The measure may eventuate in going a good way toward extending what the common law does for flow in its original direction, and make its principles applicable to flow in a diverted direction also.

If the constitutional amendment thus opens the very likely possibility that all elements of California Water Law ("appropriation" included) will be brought toward the principles that underlie the rulings of the California courts, it may be showing why the latter are also the basic law over most of the civilized world, the civil law

as well as the common law.¹⁰³ *It is because legality for benefiting from the same water over again, to the fullest extent of which it is capable, fails if any beneficiary is given an exclusive right; repeated use of the same water can have legality only when everyone in the succession has as much right to legal protection as every other—the last in succession, whether last in time or last in level, the same as the first. If carrying the water away without return were also without compensation, the essential to public welfare of sustaining rights in the same water over again “to the fullest extent of which it is capable” could pretty surely have little hope of surviving.*

VIII.

Enforcement of the reasonable consideration which the measure requires of upper toward lower levels implies increased administrative activity.

1. It is probably not far wrong to say that no other natural object involves a like repetition of employment for obtaining its benefit to the fullest extent of which it is capable. A subject-matter furnishing its benefit to one after another in succession, its flow at the same time blended with groundwater factors and other hydraulic elements invisible to the eye,¹⁰⁴ is bound to be the occasion of conflicts. Judge Shaw has said: “Our reports contain more decisions on that subject than on any other.”¹⁰⁵ The “community

¹⁰³ Advance in the law of this State has had its direction away from priority. The field of percolating water has been remade by substituting principles “analogous to those affecting land riparian to a stream,” *Burr v. McClay R. Co.* (1908) 154 Cal. 428, 436, 98 Pac. 260; “the same application of the principle,” *Hudson v. Dailey* (1909) 156 Cal. 617, 628, 105 Pac. 748; 25 Cal. Juris. 1000; a position taken upon mature consideration, in the words of the court, “to meet the conditions in this State necessitating it,” *Miller v. Bay Cities Co.* (1910) 157 Cal. 256, 279, 107 Pac. 115, 27 L. R. A. (N. S.) 772. See also *Horne v. Utah etc. Co.* (1921) 59 Utah 279, 202 Pac. 815. So also in the field of diffused surface water: “The controlling consideration is not whether there was an absolute necessity for the doing of the act, but whether the doing of it was reasonable under all the circumstances . . .,” *Jones v. California Development Co.* (1916) 173 Cal. 565, 577, 160 Pac. 823.

¹⁰⁴ “The facts or truths on which ground-water hydrology or any other branch of science is based are immutable, but they are not fully known—indeed, they are known in only small fragments . . . In the sixteen years which the writer has devoted almost exclusively to the study of ground-water he has become impressed with the large and difficult field that the subject covers and with the variety and complexity of the concepts that it involves.” Department of the Interior, U. S. Geological Survey, Water-Supply Paper 494, pp. 1, 2.

¹⁰⁵ The statement quoted was part of an address delivered by Mr. Chief Justice Shaw at a meeting of the American Bar Association in San Francisco, August 9, 1922. The address is printed in 189 Cal. 779 and 10 California L. Rev. 443. “More litigation has been caused by conflicting claims to the use

of interest" which successive use of the same thing entails is liable to constant invasion unless it is constantly guarded. An increased administrative activity is therefore important. It is, moreover, foreshadowed by the discussion which has attended the new measure.

2. The downward succession of levels necessarily determines the direction in which governmental activity is possible. By force of geography the aggressor is above. He is in possession of the lower level's stronghold, by the power to intercept the source. The victim, for whom governmental activity has occasion, is invariably the one below, from whom the source is intercepted.¹⁰⁶

The geographical disparity between the upper and lower levels is, moreover, an extreme one. While the upper installation by its dam has possession of the water, the lower party never has more than the basis for a lawsuit. He has only an argument, while his opponent's dam has possession of the water; and a lawsuit is a poor match for a dam as a means by which water can be secured. Whether the lower party invoking the law be appropriator or riparian or subarrian (as we have ventured to name landowners overlying sub-

of water than any other subject matter." Mr. Justice Coshov, concurring, in *Re Hood River* (1924) 114 Ore. 112, 193, 227 Pac. 1065. In other countries, also, we read: "Few questions have given rise to more controversy and more profoundly divide the authorities, than that of the legal condition of non-navigable and non-floatable watercourses." 1 Picard, *Traité des Eaux*, 2 ed., p. 201.

¹⁰⁶ A leading civil engineer who helped to pioneer the water administration movement, has said: "The danger in irrigation matters never begins with the community, or the State. It has its birth in the greed of one or two who, through the weakness of supervision in behalf of the public, are able to get what they are not entitled to, whereby enriching themselves at the expense of their neighbors." (Clarence T. Johnston, *American Society of Civil Engineers*, Paper 1256, p. 689.) "Able to get" by "enriching themselves at the expense of their neighbors" describes, necessarily, *going above them*. "It is often said that in an irrigated country an otherwise upright man will not hesitate in times of drouth to steal water [at an upper level necessarily], and that [at the lower levels] the most peaceable citizen under ordinary conditions may quickly become one of the most violent if he thinks his water rights are being attacked or infringed upon in any way. Certainly, water disputes are easily started and sometimes become very bitter." (*Transmission and Delivery of Reservoir Water*, presented at the Denver Convention, Am. Soc. C. E., July, 1927, by G. Clyde Baldwin, M. Am. Soc. C. E.) The California Division of Water Rights has said that "in the absence of a water master it is difficult to prevent the diverters *highest up on the stream* from making use of the water, regardless of the priority of their claims thereto" (at pages 16-17), and it speaks of the "lack of co-operation from various *upper users, who, because of their strategic position on the stream*, are apathetic regarding supervision of diversion" (at page 48). Part III, Biennial Report of the Calif. Division of Water Rights, to Accompany the Third Biennial Report. The Supreme Court of Colorado has said: "It is common knowledge that those generally using water at the tail end of a ditch usually have the poorest service . . . by reason of being subjected to the mercy of all those above them as it were." *Stuart v. Davis* (1914) 25 Colo. App. 568, 139 Pac. 577 at 580.

terranean water) the same burden confronts him here. He will be heavily burdened in either aspect by the hundreds above to bring into court, get their claims stated, prepare himself with witnesses to testify about each of them, go through a trial on all of them, have the law and facts argued and decided—the lower user may easily be too poor to go through with it, or be overcome by the years of time it may take, to say nothing of keeping a decree enforced if it were obtained.¹⁰⁷ Where the upper claimant has, in addition, the equipment for offense of being a large public utility reservoir installation, its organization and means add the usual factor of disparity that by accepted principles needs restraints against abuse in public utility operations.

It is to be presumed, on the strength of legislative loyalty to the State, that regulating the upper works, particularly the large corporate reservoirs, *for the protection of lower uses of the same water over again*, will be the aim of the increased governmental activity which the new measure foreshadows.

3. The public action usually is, and under the constitutional measure doubtless will be, of an administrative character in the first instance. Conformity to the new measure will necessarily require large reliance on "reasonable restriction" for stabilizing descending succession below the reservoir projects, and "reasonable entries" for increasing ascending successions above them; and this repeated use of "reasonable" leads to a realization that a large measure of discretion is invoked.

The measure invokes the discretion of the party deciding, to do the best he can under indefinite circumstances; and an administrative office to exercise this discretion in the first instance has, as its assets,

¹⁰⁷ This rivalry of levels is not alone between individuals. Half a century after Powell's report of great irrigation possibilities in the seven states which Colorado River traverses finds Arizona being charged with "trying to spike an understanding from purely selfish motives," to which she replies, with Utah's sympathy, that California is "trying to steal the river's power rights as well as scenery." From a peaceful inactivity, the intensity of water rivalry has turned it into a River of Mutual Distrust. In an Associated Press dispatch of August 4, 1927, we have this from Europe: "Berlin, Aug. 4, 1927 (A.P.)—Wurtemberg, and Baden, next to Bavaria the most important southern states in the German Reich, are calling each other thieves in the supreme court of Leipsic. Each maintains that the other is stealing river water. Wurtemberg claims that the Badenese are maliciously and deliberately drawing off waters from the Danube, to the detriment of Suabian industry."

Our first disposition to be startled by Elliot Smith's deduction of the origin of warfare, quoted in the March issue of the Review, may change to willingness to give his deduction closer scrutiny.

convenient informality and speedy action.¹⁰⁸ Caution and circumspection pertain to the judicial function's solicitude for absolute impartiality. These are not to be undervalued; they have made the majesty of the law in all ages. But the advantage of informal and speedy action in the first instance leads present-day tendencies to the practice of resorting to the discretion of the lighter-moving administrative in the first place, which may be further expected upon the proposed constitutional measure.¹⁰⁹

It is probably true, at the same time, that the administrative official cannot say what is "reasonable use" without exerting himself to consider the observable facts furnished by character of streams, soils, kinds of crops and the like—the entire "scenery" as we have ventured to call it when discussing this feature of the term in the March issue of the Review;¹¹⁰ just as in rate cases the administrative officer must consider everything he can observe in saying what is a reasonable rate. The function of judicial action comes when it insures the administrative officer's compliance with that requirement, by judicial process against him when his idea of reasonableness has so little accordance with the observable facts that, as may sometimes happen, only an arbitrary personal opinion or autocratic whim could have produced it.

It is the familiar check, of which we are often admonished, as not long ago by Director Stevenot of the California Department of Natural Resources, against "bureaucracy." The country property

¹⁰⁸ The law recognizes this by the established principle, requiring no constitutional amendment, that a party questioning the action of a commission must make application first to the commission for voluntary correction before asking judicial protection. It appears also in the rule allowing the commission's decision the presumption of correctness when the courts are reached.

¹⁰⁹ A "water court" of judicial nature has been suggested; but as judicial recourse is left to second instance, it would seem probable that a special court would have too infrequent occasion to justify its creation, since provision for judicial recourse does not necessarily mean that it will be often put in operation. "The lack of such appeals from the administrative officers in Wyoming and Oregon indicates that but a few appeals will be necessary." John H. Lewis, American Society of Civil Engineers, Paper 1256, p. 675. The resort to the courts (whether by "appeal" or otherwise) would be only where some one gets "excited" over administrative conduct; and that happens only occasionally. There would be little occasion for another court to handle that, just as there is none for a new court to handle complaints against the railroad commission. The regular courts are doing it very well. Moreover, a state-wide water court would make farmers and farm hands litigate away from their homes, producing not only great inconvenience and loss of time, but also added expense to the litigants, beside the expense to the State of maintaining an extensive new organization. See Niblak on Torrens System, 1912 ed., § 29, setting this forth, adding that while a special land court was formed in Massachusetts it failed to be adopted in any other state.

¹¹⁰ 16 California L. Rev. 197-199 (1928).

owner must often find himself contending with influential corporate opponents. The entirely honest advantages which large organizations and means have of efficient and insistent emphasis upon their point of view furnish them with the better chance of making an expert showing to an expert body, and getting what they want. Remark has been made in connection with water law that the supporters of administrative finality 'find themselves more enthusiastic for the Imperial administration than the Emperor himself. For Napoleon said, in 1810, to the Council of State: "There is no property or liberty whatever except through the guaranty which the courts offer. Recourse to the Council of State is far from offering a sufficient guaranty. There is no real guaranty except in the courts. It is because all questions of property are relegated to them that in France property is respected. Every citizen to whom anyone has done wrong should be allowed to complain, *not only to the administration, where favor can do a lot, which one can approach only with difficulty, which finds the facts as suits itself, and never comes to a decision or decides when it suits itself*; but to the courts, to which all have access, where everyone can have counsel, protective methods, a regular examination, a judgment, constant procedure. Look at the humble and suppliant style of a petition (to the administration) and the firm style of a complaint (to the courts), and you see the difference. A petitioner (to the administration) feels soliciting a favor, a pleader (to the courts) feels that he is asking his right. No one enjoys any civil liberty in any respect where he in whose person the law has been violated, be it by a public minister, may not complain to the courts.' "¹¹¹

Investigation would disclose that to take all resort from the courts would be in conflict with nearly uniform experience with water administrations. Absolute finality began in 1890, when Wyoming created a constitutional commission or "Water Board of Control" to have plenary (that is, final) powers. It got itself enacted for a time in Nevada, New Mexico and Texas, but they later dropped it. Today, except for Wyoming and Nebraska, the Water Codes of all Western States refuse to grant finality to commissions against the ordinary judicial channels. To that we have the Water and Power Act's attempt to create a five-man board without judicial recourse, and we have its repeated rejection.

The constitutions, in any event, leave no alternative. Without a hearing safeguarded for impartiality by an official oath to be im-

¹¹¹ Daviel, *Traité des Cours d'Eau*, 3 ed. § 995b. (1845).

partial (to which the administrative is not sworn and which it could not be required to observe too anxiously without hobbling its function), and by due notice and proper conduct of the hearing (which the administrative informality must often eliminate), any measure to create administrative finality falls, if not against State Constitutions, eventually against the Federal Constitution's guaranty of due process of law, as the Supreme Court of the United States is engaged in making plain.¹¹²

IX.

The outlook for legislation, if the constitutional amendment carries, would seem to be affected by the deviation of the measure from its first direction. Since the measure does not contain the so-called "limitation of riparian rights" which featured its introduction on behalf of the mountain installations, the necessity of conforming to the Herminghaus decision would indicate that legislation must be of the type which adherence to compensation produces.¹¹³

1. Assuming that this will be found to be the case, the course open to legislation would seem to permit proclaiming the measure of the compensation to which the country landowner is entitled;¹¹⁴

¹¹² A discussion of this at further length can be found in 38 Harvard L. Rev. 447 (1925), reprinted in 5 Oregon L. Rev. 91 (1926).

¹¹³ Discussed in the March issue, 16 California L. Rev. 175-176 (1928). The course of discussion there was: that after pronouncing in general terms for reasonable use and against unreasonable use, the new measure reads: "Riparian rights in a stream or watercourse attach to, but to no more than, so much of the flow thereof as may be required or used consistently with this section, for the purpose for which such lands are, or may be made adaptable, in view of such reasonable and beneficial use [closely identical to the Water Commission Act wording: 'In so far as such waters are or may be reasonably needed for useful and beneficial purposes']; provided, however, that nothing herein contained shall be construed as depriving any riparian owner of the reasonable use of the water of the stream to which his land is riparian under reasonable methods of diversion and use." *The consequence of the old and new provisions being so alike is thought to be less that their meaning would come to the same thing if reviewed again (although that also is tendered), than that, being the same thing, the attitude of the law is "stare decisis," and review is not entertainable; authorities were quoted to that effect.*

¹¹⁴ Discussed in the March issue, 16 California L. Rev. 177-182 (1928). The course of the discussion there was: that when the natural flow of water to land which is riparian to the flow, or the natural percolation of water under land which overlies the percolation, is permanently diverted or otherwise permanently disturbed for public use, the compensation due to the owner of the land is measured without exaggeration in the law found in the judicial rulings. *In no degree is it measured by the value of water for use independently of that land; being measured by the value of the benefit contributed by the water to the use of that land only.* The value of such benefit is determined by the depreciation, if any, which the diversion or other disturbance causes to the market value of the land, being the difference between the market value of the land before the diversion or other disturbance and the market value of the land after the diversion or other disturbance. The

enabling one person to take water from another upon paying the compensation so measured, without being a public utility;¹¹⁵ and extending the State Water Administration.

According to the present writer's understanding, the judicial rulings would justify legislation authorizing the State Water Administration to report upon what is reasonable use, *without compensation*, between parties of the same class claiming correlatively,¹¹⁶ and

party claiming compensation has the burden of proving depreciation. He may show the quality and uses of the land maintained by the natural flow or natural percolation, or maintainable thereby and having a reasonable prospect of being put into operation within a reasonable time, as factors influencing the market value of the land before the diversion or other disturbance; but anything that is remote, speculative, imaginary, uncertain or conjectural is not considered. The party causing the diversion or other disturbance for public use may prove, in mitigation, any benefit to the land which may accrue from his work. Authorities were quoted to sustain that such is the present state of judicial authority; and that it could be put into statutory form without conflict with what the reports of the courts contain.

¹¹⁵ Discussed in the March issue, 16 California L. Rev. 206-207 (1928). The course of the discussion there was that before the Supreme Court of the United States decided *Clark v. Nash* (1905) 198 U. S. 361, 49 L. Ed. 1085, 25 Sup. Ct. Rep. 697, the California decisions did not consider that an appropriation could be for public use when no one shared its use with the appropriator. But in view of the firmness of *Clark v. Nash*, helped by the wording of the pending constitutional amendment if it is carried, there seems a fair prospect that such legislation may pass judicial inspection at the present time.

The opinion in *Clark v. Nash* requires the existence of certain preliminary facts for the legislation. The situation of the state formed by long valleys between mountain ranges traversing the state's length causing unequal natural distribution of water resources among the localities of the state, and the dryness of its climate causing in most of these localities an insufficiency of water for the successful prosecution of the cultivation of the state and for the successful prosecution of its other industries, growth and development, may be such preliminary conditions. Their "general, notorious and acknowledged" existence in the state courts is a condition precedent, whose recital in legislation, while not binding the courts, would doubtless have considerable persuasive weight. Upon the findings of such preliminaries, the Federal Constitution permits, under *Clark v. Nash*, that use of water by a single person for his own irrigation or his own industry of any other kind, notwithstanding other persons do not participate in said use, may be declared to be a public use for which flow or percolation of water may be diverted or otherwise disturbed, upon making compensation. Certain conditions usually accompanying such enactment were noted in the March number of the Review; and in view of the possibility that legislation of this kind could be carried so far as to disrupt a man's industry or prosperity for the sole benefit of another man, some enactments of this character have imposed a surcharge of twenty-five per cent in addition to the actual damage.

¹¹⁶ Compensation is not due to a riparian owner for disturbance of the stream to a reasonable degree by another riparian owner's use upon land riparian to the same stream; nor to a landowner overlying percolating water for disturbance of the percolation to a reasonable degree by another overlying landowner's use upon land overlying the same body of percolating water; *nor, under the constitutional amendment, will it be due to an appropriator (being any one not in either of the other classes) for disturbance to a reasonable degree by another appropriator.*

to report upon *the amount of compensation* in issuing appropriation permits in other instances. It could be enacted that the parties may not go to court until such administrative report has been made, except where a fair administrative hearing could not be had, and that in court the report is to be accepted as *prima facie* evidence. To the best of our reading of the authorities, such provisions would not be inconsistent with what is to be found in the judicial rulings.¹¹⁷

It is fair to expect something of that nature, subject to the conditions which have been above discussed. In view of constitutional requirements, particularly the one guaranteeing a jury trial, it would seem that if the administrative report is not accepted by the parties there will have to be provisions for a *new and independent* proceeding in court.¹¹⁸ And the constitutional requirement of prepayment will, it would equally seem, lead to *unqualified injunction if diversion without payment is attempted*, subject only to the usual exceptions where injunction may be denied without prejudice to a suit for damages.¹¹⁹

Legislation requiring a report by the State Water Administration upon such reasonable degree between members of the same class, subject to the conditions above discussed, would, in substance, bring riparian owners among themselves, and landowners overlying percolating water among themselves, into the jurisdiction of the water administration the same as appropriators are. There is no reason to assume that they will always remain left out of the benefits of the administrative system, which in the long run can very much preponderate over the burdens. In a paper of the Department of the Interior it was said: "In a region where underground water supplies are as important as here, and at the same time so liable to unwise overdevelopment, it may eventually be necessary to create a state commission with power to grant or to refuse to grant permits for drilling wells or installing pumping plants. Individual wishes and individual needs are scarcely to be trusted in matters which so vitally affect the community and the state at large. Especially is this true because it is just those landowners whose wells are most favorably located who, having an abundance of water themselves, do not realize the scarcity at other points, and drain away the water most rapidly from their less favorably situated neighbors." *Department of the Interior, U. S. Geological Survey, Development of Underground Waters in the Eastern Coastal Plain Region of Southern California*, p. 30, *Water-Supply Paper No. 137, Series O, Underground Waters*, 40. Such considerations pertain to all upon natural water supplies. Riparian, appropriator, or overlying ground-water, the same liability to encroachment if not guarded against is present because of the mobile nature of the subject-matter.

¹¹⁷ Under authority, the administrative estimate has a way of being given this effect by enacting its reception as "*prima facie* evidence" in a condemnation suit, or on a cross-complaint to condemn in an injunction suit. See *Pacific Livestock Co. v. Lewis* (1916) 241 U. S. 440, 60 L. Ed. 1084, 36 Sup. Ct. Rep. 637; 30 C. J. pp. 1002-1003.

¹¹⁸ *Mojave Irr. District v. Superior Court*, — Cal. —, 256 Pac. 469.

¹¹⁹ The exceptions include: (a) Where triviality of any damage is so self-evident that there is no reasonable possibility that a jury could assess any, 32 C. J. 49-50; (b) where the landowner engages in some personal misbehavior such as delaying too long in asking the injunction—laches, estoppel, etc. *Felton W. Co. v. Superior Court* (1927) — Cal. App. —, 256 Pac. 255, 32

Upon this it is probably safe to say that there neither ought to be nor can be any weakening. Proposals to remove these conditions having been excluded by the legislature from the proposed constitutional amendment, it would seem to follow that they will have to be respected.

2. If the outcome proves to be shaped in the foregoing directions, to which the necessity of conforming to the judicial position points, the proposed measure will have eventuated in allaying the large mountain installations' fear of exaggerated awards, by evoking attention to the proper rule of measuring the compensation awarded; and the owners of country property below them, whether upon the streams or upon the groundwater tables which the streams help to sustain, will have new assurance that, properly measured, it will be paid when the fertility and resources upon which values depend in their locality have to be taken away in creating new values elsewhere.

Probably more important to the country districts is the effect which the measure can have upon the operations of corporate installations in the high levels. They are in a geographical position dominating first chance at the supply. Regulating them so that lower uses may go forward of the same water over again "to the fullest extent of which it is capable," an essential upon which country development and prosperity depend, may prove to be the measure's most vital feature. There is fresh in mind how one of such installations has collapsed and flooded a wide countryside, evoking realization of the need of disinterested control of their structure; and the damage which they may cause is not in collapsing only. It is evident that the same disinterested control is needed against their unreasonable operation in any other respect. Legislation on behalf of the country districts strengthening the State Water Administration for this purpose may come to find, in the measure as the legislature revised it, an effective charter.

In the meantime the measure's declaration that it is to be "self-executing" will doubtless consecrate the courts to that purpose as soon as the constitutional amendment is adopted.

C. J. 67, et seq.; (c) where some other extraordinary feature intervenes against injunction by the general rules of equity jurisdiction, 10 Cal. Jur. 132, such as possibly the "balance of convenience" in extreme cases, as to which see *Smith v. Staso etc. Co.* (1927) 18 F. (2d) 736, 738-9; *Scott v. Fruit Growers Co.* (1927) — Cal. —, 258 Pac. 1095, 1098; *Hulbert v. California etc. Co.* (1911) 161 Cal. 238 (adopted as the opinion of the court in *People v. Selby etc. Co.* (1912) 163 Cal. 84, 94); *Wiel, Water Rights in the Western States*, 3 ed., §§ 649-651; 32 C. J. 77; (d) where giving a bond may be allowable to stay the injunction.

It may be concluded, not without a fair prospect of proving correct, that the measure will move toward these results, and, this being true, the legislature handled the subject with discretion and produced a good measure.¹²⁰

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¹²⁰ *The following is the proposed section 3 of Article XIV of the California Constitution as it will be voted upon at the general election in November, 1928, to be number 7 on the ballot: (The measure will be found printed in Cal. Stats. 1927, c. 67, p. 2373.)*

"It is hereby declared that because of the conditions prevailing in this state the general welfare requires that the water resources of the state be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare. The right to water or to the use or flow of water in or from any natural stream or water course in this state is and shall be limited to such water as shall be reasonably required for the beneficial use to be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water. Riparian rights in a stream or water course attach to, but to no more than so much of the flow thereof as may be required or used consistently with this section, for the purpose for which such lands are, or may be made adaptable, in view of such reasonable and beneficial uses; *provided, however*, that nothing herein contained shall be construed as depriving any riparian owner of the reasonable use of the water of the stream to which his land is riparian under reasonable methods of diversion and use, or of depriving any appropriator of water to which he is lawfully entitled. This section shall be self-executing and the Legislature may also enact laws in the furtherance of the policy in this section contained."