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

A CONSTITUTIONAL AMENDMENT universalizing "reasonable use" for California Water Law of country property will appear upon the ballot to be voted upon at the general election in November, 1928.[1] The subject of the amendment is typically rural. There are so few streams through large cities that it meets the attention of the cities only so far as they draw for supply upon a country district. For the latter, however, the map is given to illustrate how state-wide its concern becomes.

California Streams

A stream of water flowing down a country mountainside is like a marble rolling down stairs. Its path is a succession of descending levels. Most of the works that have heretofore been developed along California streams have been near the bottom or lower levels. There are now being inserted above them, however, great reservoirs at the top or upper levels in the high mountains where there is first chance at the supply. The building of these will have completed itself in a decade or two, after which they will last a long time; and when the country districts come to experience the conflict of interest between the upper and lower levels in this new situation, the new measure may come to be frequently invoked. There are some who believe that it will reduce the protection of lower levels which the courts are now maintaining.

[1] A copy of this amendment is appended at the end of this paper. An editorial of the Fresno Republican of November 17, 1927, makes the comment: "We foresee a very sharp fight over this proposal. And we have reason to fear that the fight will not be along clearly defined lines . . . We shall look forward closely to the legal background that will be given to this water rights campaign."

That view is very widely questioned, on the ground that the belief is derived from proposals which failed of inclusion. Taking the measure's contents as the legislature has spoken it, the view ventured in the present paper is that the measure will much more probably, if

carried, strengthen the principles for protection of lower levels which the courts now maintain, by encompassing a constitutional sanction and adoption of them.

I.

1. The proposed measure experienced numerous alterations.

In 1926 the promoters of a land project for irrigation, as yet unconstructed, claimed a right to take away Fall River, in the northern part of the State, from a water-power subsidiary of Pacific Gas & Electric Company that was in operation at a lower level. The promoters of the land project sued to quiet title to their claim.[2] The

[2] Fall River etc. District v. Mt. Shasta etc. Corporation, 74 Cal. Dec. 275, 259 Pac. 444, decided September 1, 1927.

answer invoked the protection which is given to lower levels by the common law.

This protection, as against public uses, converts a right to water into a right to compensation. It recognizes that lands which the waters of a stream naturally reach may be damaged by the stream's removal for public use, or from one public use to a more necessary public use, and since these must proceed, it substitutes for the landowner a right to compensation for the damage, if any occurs. The lands so affected may be those that are reached by the surface flow, in which case the latin "ripa" meaning "bank" has produced the name "riparian" lands or banklands; and also—what makes it pertinent to all country property—they may be any other and more distant lands to which water from the stream diffuses underground, whose groundwater plane the percolation from the stream helps to maintain. The amount of the damage is investigated by the ordinary method, a jury, unless a jury is waived. In order to assure this, in case the diversion project refuses to consider making compensation it is told by injunction to keep away from the stream, until it is willing to have the investigation conducted. The power plant at the lower level in the Fall River case was upon riparian land; the promoters of the land project at the upper level were refusing to consider questions relating to compensation; and the trial court, following the common law, declined to quiet title for their proposed diversion under such circumstances.

The promoters of the land project appealed to the Supreme Court, and in addition initiated a movement to present to the legislature a request to remove this common law protection of lower levels, by an amendment of the State Constitution. The initial purpose was to read into the Constitution section 11 of the Water Commission Act which enacted, in brief, that the protection should apply only "in so far as such waters are or may be reasonably needed for useful and beneficial purposes upon lands riparian thereto." [3] The promoters of the land project were contending that this illegalized having the natural flow of water come to lower levels for its power effect.

While the appeal was pending and the legislature had not yet met, another case, known as the Herminghaus case,[4] came to the Supreme Court in condition permitting an earlier decision.

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[3] Cal. Stats. 1913, p. 1012, § 11.

[4] Herminghaus v. Southern California Edison Company, 200 Cal. 81, 252 Pac. 607, decided December 24, 1926. In October, 1927, the Supreme Court of the United States dismissed a writ of review therein "for want of a Federal question."

Spring floods coming down the San Joaquin River naturally irrigated a ranch on its banks by overflowing, then receding, leaving the land moistened and fertilized and thus a naturally productive property. The overflow of the Nile has been the classical example of this in an older locality. It is not uncommon in many regions.[5] Southern California Edison Company went into the mountains above the ranch for large water power storage that had the possibility, by impairing this overflow, of crippling the ranch. The company opposed making compensation for the damage, and was enjoined, in harmony with the common law protection of lower levels, until it was willing to have the damage done by it assessed and paid.

The defendant appealed. The movement which had started in the Fall River case to illegalize natural flow to lower levels for its power effect, gathered behind the endeavor of the appellant in the Herminghaus case to illegalize its natural fertilizing effect. In contrast to Pacific Gas & Electric Company (whose reliance on common law principles in the Fall River case showed that it was not opposed to compensating landowners whom the reservoirs have to damage) other corporate constructions that have to damage country properties came to the support of Southern California Edison Company. The latter's hostility to the need of compensating received sympathetic assistance from many water companies and irrigation districts that are going into the mountain headwaters to transport them to new regions to be irrigated, having to damage more or less the lower levels transported from. The Supreme Court, following previous rulings that have been applied for many years, affirmed the injunction so long as making compensation for the damage, to be ascertained in the usual way, continued to be refused.

It ruled this upon two grounds: First and principally that section 11 of the Water Commission Act does not purport the contrary, since

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[5] From early prehistoric times nature's irrigation and fertilizing scheme has made the desert of Egypt rich and fertile and habitable for mankind. The annual floods from the upper Nile every year brought the rich silt from the mountain sides of Abyssinia, and, spreading out and slowing up, deposited the water and the fertilizer over the desert on each side of the great river for thousands of miles. "Inundation canals are dependent for their water supply on the height of flood rise in the stream from which they are diverted. They are found chiefly among rivers which have built up their beds by sedimentation, the most notable being the Nile in Egypt and the Indus in India. Certain branches of the Sacramento and San Joaquin rivers in California and of the Mississippi are available for the diversion of inundation canals." American Civil Engineers' Pocket Book (Merriman), 2 ed., § 10, Art. 44, p. 1004. For like instances on rivers in Oregon, see Hood River (1924) 114 Ore. 112, 227 Pac. 1065, 1085; Silvies River (1925) 115 Ore. 27, 237 Pac. 322, 325.

the ranching was a useful and beneficial purpose, and the natural flow was reasonably needed for it.[6] (Also—secondarily only, however,—that if the Act purported to let the power company impoverish the ranchers without compensation it would be confiscatory and unconstitutional.) A conscientious devotion to the law, as disclosed by prior rulings, characterized the careful opinion, which is written by Mr. Justice Richards.

As the new legislature, under a new Governor, convened close after the Herminghaus decision, the movement for a constitutional reversal of the judicial rulings came to be based upon this case, in place of the Fall River case, from which the movement had arisen but which was still pending on appeal undecided.

2. The Supreme Court's Herminghaus opinion had referred to the competing interests:

> ". . . Quasi-public corporations or associations, which, while fulfilling certain public utility functions, are nevertheless organized primarily for private gain, as against the lesser material interests, but not less vitally important vested rights in private property, in the other scale of the balance."

The move before the legislature had a Joint Committee of the two

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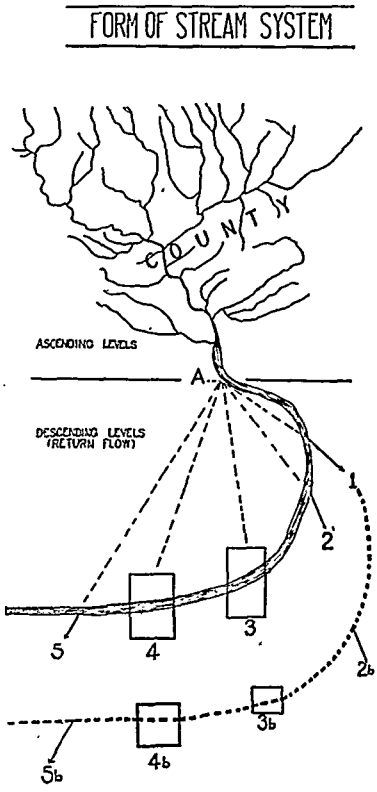
[6] "The trial court further found: 'That all the water which will flow in the San Joaquin River and its branches, as it and they were wont to flow by nature would be *beneficial* to the land of plaintiffs which is overflowed thereby as aforesaid, for the entire period and in the entire quantity that it is accustomed to so overflow said land.' The foregoing findings of the trial court are, in our opinion, sufficiently supported by the evidence in the case. We are further entirely satisfied that the foregoing utilization by the said plaintiffs of the waters of said river and the flow and underflow and overflow thereof constitutes a *reasonable use* thereof within the intent and meaning of the foregoing definitions of the riparian right of landowners along such or similar streams" . . . "In so far as the foregoing portion of said section of said act is concerned it would seem to have no application to the facts of the instant case, since, as we have seen, the trial court has found upon what we deem sufficient evidence that all of the waters flowing in the San Joaquin river down to, and upon, and over the lands of the plaintiffs herein have been and are being applied to useful and beneficial purposes upon the plaintiffs' said lands riparian thereto and have been so applied by them for more than ten consecutive years last past. It follows that such waters are not the proper subject of appropriation under the express terms of said section of said act." Herminghaus v. Southern California Edison Company (1926) 200 Cal. 81, 252 Pac. 607, 616, 621.

"The total invalidity of this provision of the statute as such is really not contended for by respondent. It is a misconception of the case of Herminghaus v. Southern California Edison Company, supra, to say that it was there held that said provision was in complete conflict with the state or federal Constitutions in any particular. The holding was that under the facts of that case the stream carried during the season in question no waters in which the riparian right did not inhere and also that respondents were making a beneficial use of the entire ordinary and natural flow of said stream as it flowed along, across and over their said lands." Fall River etc. Dist. v. Mt. Shasta Power Corp. (1927) 74 Cal. Dec. 401, 259 Pac. 444, 449.

Houses appointed (as the official report reads) "to meet with the legal representatives of public service corporations," and their associates, who proposed to the Joint Committee two amendments to the State Constitution. One took up the movement, already mentioned, to put into the Constitution the provision of the Water Commission Act regarding reasonable use, with the addition, however, of a number of



dispossession clauses ousting the common law protection of lower levels retroactively to the year 1850. The other was to reconstitute the Water Commission, possibly with the view of bringing it under control of the public service corporations.

Publication of these drafts drew remonstrances to Governor Young. When the Joint Committee reported to the legislature its

report was in favor of the Water Commission reconstitution, but it was against the dispossession measure as confiscatory.

The original measure and the Joint Committee were then abandoned by the proponents, and the proposals were re-introduced as new measures in the two branches of the legislature separately. In the discussions which this opened, the measure to reconstitute the Water Commission, which adherence to the Joint Committee would have obtained, was decisively defeated on the Senate floor. The other, affecting the common law right of lower levels to compensation, went through successive alterations. The two new committees examining it were the Assembly and Senate Committees on Constitutional Amendments. These, like the Joint Committee before (making three committees that it went through in all), would not approve it.[7] Presented in both houses without committee approval, it was found necessary to relinquish the features which would have made it do more than repeat the Water Commission Act's provision of "reasonable use." In this form it passed in the final days of the session.[8]

It came out declaring "reasonable use" to be the universal test for natural water resources, controlling not alone riparians but everyone. This has several beneficial aspects.

II.

1. It is more than likely that the principle of compensation for lower levels, when they are damaged, is not disturbed. The measure duplicates the provision of the Water Commission Act. The Act maintains, for lower-level landowners, a right to whatever flow is or may be "reasonably needed for useful and beneficial purposes" on their riparian lands; in the constitutional amendment it is "reasonable use under reasonable methods of diversion and use." The two are substantially the same.[9]

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[7] The California Bar Association Committee on Constitutional Amendments has also declined to make recommendations as to this measure.

[8] The result of abandoning the original committee in the effort to get the whole program curiously enough came to exchanging one half of the program for the other half, and the half obtained was no longer what it was in the proponents' introduction.

The Fall River appeal was not decided until several months later—September 1, 1927, when it reaffirmed the Herminghaus decision. In October, 1927, the Supreme Court of the United States in the Herminghaus case dismissed a writ of review. The power company having brought a suit to condemn after the injunction, a payment in settlement was reported by the Press in January, 1927.

[9] The act's provision sustaining the common law rights is: ". . . in so far as such waters are or may be *reasonably needed for useful and beneficial*

The meaning of these words in the Act has been interpreted. The Herminghaus and Fall River cases have passed upon them as leaving compensation to lower levels unimpaired, with the Supreme Court of the United States saying that it cannot interfere; and the courts have often said that a substantial difference must appear in a re-enactment before it can give rise to re-interpretation.[10] The words introduced to make a difference were, however, excluded by the legislature.[11]

By the "familiar rule," therefore, whether the Heringhaus interpretation of the same wording be right or wrong, it would seem that it will, as an adjudged matter not debatable again, pass into the Constitution and be part of it. The legal effect of the legislature's unwillingness to include the proposals that would have effected a change, will probably be to put the Herminghaus ruling into the Constitution attached to the re-enacted words.

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purposes upon lands riparian thereto." The constitutional amendment summarizes itself: "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."

[10] "It is a familiar rule where a statute that has been construed by the courts has been re-enacted in the same or substantially the same terms, the legislature is presumed to be familiar with its construction and to have adopted it as part of the law, unless it expressly provides for a different construction. Also where words and phrases employed in a new statute have been construed by courts to have been used in a particular sense in a former statute on the same subject, or one analagous to it, they are presumed, in the absence of a clearly expressed intent to the contrary, to be used in the same sense in the new statute as in the previous statute." Dalton v. Lelande (1913) 22 Cal. App. 481 at 486-487, 135 Pac. 54.

The rulings upon this "familiar rule" are collected in 12 C. J. 716; 5 Cal. Jur. 600; 23 Cal. Jur. 750; 36 Cyc. 1144, n. 91; people v. District Court of Appeal (1924) 193 Cal. 19, 20, 222 Pac. 353. See also People v. Elk R. Co. (1895) 107 Cal. 221, 226, 40 Pac. 531.

[11] The provisions introduced that would have made a difference will be found in Senate Daily Journal of March 4, 1927, page 12, to-wit: A provision that denied to country property below the reservoirs the common law right "to the maintenance of the natural level of a stream so as to effect a diversion of a part thereof" which was to have illegalized the hydraulic conditions upon which compensation due to landowners along the lower stream depends; Another limiting country landowners to present use, reversing the common law allowance of compensation for fall of the land's market value by loss of its available use reasonably likely to be established; A provision that "the flow of a stream or watercourse is that flow which is confined within the natural banks thereof" which was to have denied compensation for natural value of country lands maintained by sub-irrigation or overflow; And the provision which was to have carried the others back retroactively to the year 1850.

The committees of the legislature declined to recommend the measure thus drawn and it went through three.

The measure left is the Water Commission Act's declaration of reasonable use. That natural sub-irrigation and overflow are "reasonable method" is ruled also in other States. Springer v. Dunn (1926) 117 Ore. 30, 241 Pac. 991, 995; Silvies River (1925) 115 Ore. 27, 237 Pac. 322, citing cases.

The necessity under which the large mountain installations rest, of making compensation for damage to country neighborhoods at lower levels, may therefore be expected to remain unimpaired and in fact strengthened.

2. Upon this premise, the outlook seems favorable that the attention evoked by the amendment must come to some disposition of the question: What is the measure of reasonable indemnity for damage?

(a) That public improvements at upper levels should not be exposed to excessive demands is as certainly right as that they should meet fair ones. An apprehension has moved the proponents of the constitutional amendment lest at common law an owner of country property at a lower level can capitalize the water in a stream and demand payment for all of it. If so, it would soon run into millions for the riparians cumulated to the sea.

Removal of any fear of this will probably not be difficult, since it is already without legal foundation. If the common law were as the apprehension fears, it would mean that the judicial minds which have served the country well for over a century in everything else, would have become, in water cases, strangely irresponsible. But if this apprehension is unfounded, the mistake rests with those who have allowed themselves to think it. Legislation is to be expected under the new measure; and fortunately the apprehension of exaggerated damages for country property-owners is easily removable by legislation, because the common law is far from responsible for the exaggeration that is feared.[12]

The reasoning that no one owns the water as a thing to be paid for is firm common law.[13] The common law's basis of measuring the damage to lower country property is therefore not water, but the land affected. By so much as the land affected has been caused to fall in market value its owner is clearly out of pocket. And just as clearly he has lost no more, except for the expenses of litigation, of which the law ordinarily takes no cognizance. The common law measures

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[12] If the idea that every riparian can demand payment for the whole stream, running into billions for the numerous riparians cumulated to the sea, were the common law, "riparian owners could hardly have been pnt into a better position had they been granted letters of marque against all appropriators." O. C. Merrill, American Society of Civil Engineers, Paper 1256, page 720. The conclusion would be right if the premise were not so seriously erroneous.

[13] It is emphasized. for example, in Parks Canal Co. v. Hoyt (1880) 57 Cal. 44, 46, and is very strongly demonstrated in riparian cases in the leading case of City of Syracuse v. Stacey (1899) 45 N. Y. App. Div. 260, 61 N. Y. Supp. 165, 169; 1 Wiel, Water Rights in the Western States, 3 ed., §§ 1 to 19; 712 (1911).

damage by this depreciation in market value of the riparian land, which is precisely the same measure for landowners who are damaged by reservoirs at upper levels as for those who are damaged by railroad rights of way or by levees, in fact, all other public improvements.[14]

(b) Examination of the factors of "value" that may be considered will doubtless be made by the legislature as an introduction to any intelligent legislation. The fact will be found that the common law considers only factors having beneficial influence on the land sufficient to result in being reflected in lowered market value of the land if they are lost.

There is, first, the value of country property resting upon supply from *constructed works,* the mention whereof introduces the term "appropriation." What is called "the doctrine of prior appropriation" is variously defined. The term receives many different interpretations; and for the present purpose we will use the one which defines "appropriation" as having constructed work for its subject, and priority in time of work for its test of right, irrespective of the relation of the locality of the work to the natural position of the stream. If the constructed work is in fact on land adjacent to the stream (riparian land), a diversion from it at an upper level necessarily brings the same loss to the riparian as to an appropriator. The opportunity to show the jury that waste or improper use has less effect on land value than proper use would have is necessarily the same.

There are, secondly, the availabilities *likely to be constructed,* the land's favorable outlook that enters into the desirability of property. The common law, however, carefully guards against exaggeration of

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[14] De Freitas v. Town of Suisun (1915) 170 Cal. 263, 264, 149 Pac. 553; Hercules Co. v. Fernandez (1907) 5 Cal. App. 726, 735, 91 Pac. 401; Tuolumne Co. v. Frederick (1910) 13 Cal. App. 498, 506, 110 Pac. 134.

"It should not be difficult to prove value and damage in a legal manner by competent witnesses. By preliminary questions the examiner should elicit the facts relating to the qualifications of the witnesses, for example, that he has seen and examined the land, or that he knows something of its character and condition, or the market values of land in that vicinity, if such values have been established, or the values of land similarly situated, and the like. He may, thereupon, be asked to give his opinion of its respective values with and without the use of the water in question. From such evidence the court or jury can estimate the amount of damage caused by the deprivation of the water, if they shall find that there is such and that it is produced by defendant's tunnel. The weight of the testimony of such witness will, of course, depend upon the knowledge he shows in his answers to the preliminary questions and on cross-examination. He should not be asked regarding specific facts in the examination in chief. The rules controlling such examinations are well established." De Freitas v. Town of Suisun City (1915) 170 Cal. 263, 266-267, 149 Pac. 553.

these prospectives not yet in use, by forbidding the jury to consider anything that is remote, speculative, imaginary or conjectural. The jury is kept to an approximation according to reasonable probabilities only.[15] The law of prior appropriation has by no means turned its back upon such allowance for reasonable prospectives when the question has been brought before it.[16]

There is, thirdly, often a *natural value without constructions.* A contributor to a discussion in the American Society of Civil Engineers states as follows: "The private owner of upland adjoining a stream is, quite independently of any act of his or of interference with a stream by him, served with those benefits which come through the *saturation of his land* by the stream. Such a benefit may justly be termed a natural one. It is one which the earliest agricultural settler relied on in securing his location. On that saturation, certain

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[15] In fixing the fall of market value, the jury *"were not to consider 'remote,' 'speculative,' 'imaginary,' 'uncertain,' or 'conjectural,' possibilities."* Yolo Water & Power Co. v. Hudson (1920) 182 Cal. 48, 53-54, 186 Pac. 772. "The law does not require plaintiff to pay damages or compensation for . . . speculation, surmise, or conjecture." Colusa & Hamilton R. R. Co. v. Leonard (1917) 176 Cal. 109, 125-126, 167 Pac. 878. ". . . the value in terms of money which a witness might think the lands would have for some speculative use to which it was not put, and to which it might never be put, was not legitimate evidence." Oakland v. Pacific Coast Lumber etc. Co. (1915) 171 Cal. 392, 400, 153 Pac. 705. See also Sacramento Co. v. Heilbron (1909) 156 Cal. 408, 104 Pac. 979; Salstrom v. Orleans Co. (1908) 153 Cal. 551, 557, 96 Pac. 292; City of Oakland v. Parker (1924) 70 Cal. App. 295, 233 Pac. 68; Turlock Irr. Dist. v. Sierra etc. Power Co. (1924) 69 Cal. App. 150, 155-156, 230 Pac. 671; San Joaquin Canal Co. v. Stevinson (1923) 63 Cal. App. 767, 220 Pac. 427; Reclamation Dist. v. Inglin (1916) 31 Cal. App. 495, 499, 160 Pac. 1098; 10 Cal. Jur. 359 (Eminent Domain); 20 C. J. 756, 758-9, 761-765, 773, 1173; Lewis on Eminent Domain, 3 ed., §§ 707, 709 (1909); Nichols on Eminent Domain, 2 ed., § 219 (1917); 2 Kinney on Irrigation, 2 ed., 1964-5 (1912).

Availability for railway right of way, yards and terminals with no reasonable prospect of actnal devotion thereto does not enter into value. Simpson v. Shepard (1912) 230 U. S. 352, 57 L. Ed. 1511, 33 Sup. Ct. Rep. 729, 763; but where there is a good probability that land will be soon used for navigation lock and canal purpose the value for such purpose must be compensated. United States v. Chandler-Dunbar Co. (1912) 229 U. S. 53, 57 L. Ed. 1063, 33 Sup. Ct. Rep. 667; so it is a question of *nearness of consummation* whether the amount to be paid is to be affected by adaptability for a reservoir site, McGovern v. N. Y. (1912) 229 U. S. 363, 57 L. Ed. 1228, 33 Sup. Ct. Rep. 876; New York v. Sage (1915) 239 U. S. 57, 60 L. Ed. 143, 36 Sup. Ct. Rep. 25; In re Lucas [1909] 1 K. B. 16. If reasonably near to consummation it affects the market value whose depreciation is to be paid for, Mississippi Boom Co. v. Patterson (1877) 98 U. S. 403, 25 L. Ed. 206; In re Ashokan Dam (1911) 190 Fed. 413; In re Bensel (1913) 206 Fed. 369; but not if building a reservoir independently of the condemnor is remote, In re Board of Water Supply (1907) 109 N. Y. Supp. 1036; Herminghaus v. Seekatz (1907) 237 Fed. 805.

[16] 2 Kinney on Irrigation, 2 ed., 1278, 1375, 1567 (1912); 1 Wiel, Water Rights in the Western States, 3 ed., §§ 483-485 (1911).

crops may depend." [17] Judicial expressions are similar,[18] being particularly illustrated in the Herminghaus case.[19] When it occurs, the law of prior appropriation has by no means surely turned its back thereon.[20] The engineering paper notes also residences along streams whose value is impaired by turning a waterway into a dry bed, or whose accessibility is lessened by cutting off the ingress and egress by boats, the same as if a road were closed, which uniformly carries a right to compensation when it is done.

As above noted, it is by no means sure that the law of prior appropriation has found itself able to break with the common law on any of these loss-elements. Only the "single tax" advocates are to be described as surely making the break, by their idea that all but the first element ought to be taxed away. It is enough for just men, probably, to find that the law has been careful to see that the other two are not exaggerated, and, in the words of the law, "the ascertainment of value is not controlled by artificial rules. It is not a matter of formulas, but there must be a reasonable judgment having its base in a proper consideration of all relevant facts." [21] When the public utility gets property it is prolific in claiming elements of "value" for its rates.

(c) As the country landowner at the lower level has the burden of proving what is the fall in value of his land,[22] and can recover

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[17] George P. Decker, American Society of Civil Engineers, Paper 1321, page 667. "The most fertile soils are found along our streams where overflow has built up new soils containing humus," Bulletin 435, University of California, College of Agriculture, page 33.

[18] "Lands are invariably purchased in view of the benefits which they may derive from being riparian to a stream or overlying well-supplied strata of water." Miller v. Bay Cities Water Co. (1910) 157 Cal. 256, 279, 107 Pac. 115. There is a "presumption that the owner of the land acquired it with a view to the use and enjoyment of these opportunities, advantages and benefits." Turner v. James Co. (1909) 155 Cal. 82, 99 Pac. 520.

[19] "The plaintiffs in their complaint aver that . . . during these periods in the augmented natural flow of said river the waters thereof flowed naturally out and over the plaintiffs' said lands and saturated the same, and deposited thereon a very fertile silt, which enriched said land and caused an abundant growth of grasses thereon as the same would not have grown except for said natural irrigation by the overflow of said waters and the deposit of said silt; . . . The trial court, upon the particular issues thus joined, found the aforesaid averments of the plaintiffs' complaint to be true." Herminghaus v. Southern California Edison Co. (1926) 200 Cal. 81, 252 Pac. 607, 612.

[20] In re Silvies River (1925) 115 Ore. 27, 237 Pac. 322, 327, 336-337, 351; Empire Co. v. Cascade Co. (1913) 205 Fed. 123, 129, and cases there cited; Meyers v. Meyers (1922) 49 Land Decisions (U. S. Land Office) 106, 109; 1 Wiel, Water Rights in the Western States, 3 ed., § 367 (1911).

[21] Standard Oil Co. v. Southern Pac. Co. (1925) 268 U. S. 146, 69 L. Ed. 890, 45 Sup. Ct. Rep. 465; Simpson v. Shepard (1912) 230 U. S. 352, 57 L. Ed. 1511, 33 Sup. Ct. Rep. 729.

[22] Tuolumne Co. v. Frederick (1910) 13 Cal. App. 498, 506, 110 Pac. 134.

only according to the facts, the experience has been that the difference of recovery by country property-owners at lower levels, whether they be riparians or appropriators, is not very great. The award to riparians aside from constructed works is most often small—so small that except when facing real hardship the riparian seldom seeks any.[23]

A point is reached where the damage recoverable by riparians becomes nominal. Such point varies, of course, on each stream. When the projector has estimated the downward influence of his operation with good judgment, remonstrance from those further below whom he omits from his damage-assessment proceedings would be futile and seldom occurs in fact. Consequently damage-ascertainment under this measure of damages is much reduced in comparison to Water Code title-adjudication proceedings such as those under other sections of the Water Commission Act.[24] The latter, whether in the courts or before the administrative department, and as well when confined to appropriators, requires and freely invites handling the whole length of the stream and everybody on it from head to tail. The advantage which damage-ascertainment proceedings have over that is very evident.

Determining only such as are being damaged under fall-in-land-value measure of compensation seldom has entailed or would entail attention to like numbers unless underground water is involved. A stream feeding a groundwater plane may be the support of a wide area of land. A glance at the map with which this article begins ean

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[23] In a report of the New England Waterworks Association on awards in condemnation of water supply it appeared that in 206 awards the rate of compensation recovered for availability not in use averaged but 10% of the rate of compensation where there were constructed works; and the aggregate amounts seem to have averaged still less. (Journal of the New England Waterworks Association, Vol. 24, page 6, March 1910.) As noted by the commentator already quoted before the American Society of Civil Engineers: "His damages in case of diversion by the public, when confined to loss of natural benefits [without constructed works] would consist of a nominal award in most cases, and a modest award in any case—so small in most cases that he would not seek an award." George P. Decker, American Society of Civil Engineers, Paper 1321, page 668.

"It assumes that the benefit derived by riparian land from the flow through or by it of a stream is in direct proportion to the volume of the stream. Such is not the fact. In point of legal right, of course, the owner of land bordering upon a stream has a right to have the usual flow of the stream unimpaired, and may enjoin any unauthorized diminution. But the amount of damage which he will suffer by the subtraction of any fractional part of the water depends upon a multitude of circumstances. In some instances the damage resulting from the removal of a part of the flow might be very great, *while in others it might be nominal.*" San Joaquin L. & P. Co. v. Railroad Commission (1917) 175 Cal. 74, 79-80, 165 Pac. 16.

[24] Section 25 to 36f, of the Water Commission Act.

hardly help suggesting that the State has developed to such an extent with several million people that we cannot shift sources around from one place to another without, in some instances, harming considerable numbers. In such cases as drying up Santa Clara Valley or Owens Valley the damage claims could become quite a multitude. We take that as a matter of course where railroads or telegraph projects have to compensate extensive numbers in considerable amounts for their rights of way and other necessaries. But fortunately Owens Valley cases are not frequent. We are justified in concluding that under a statute pronouncing the fall-in-land-value measure of damages, the item of property damage, whose compensation is as much a necessary construction cost as any other, would find itself to be well within manageable bounds.

Public improvements, as a matter of course, should not be exposed to excessive demands. If there were any possibility that country owners could capitalize the water of natural streams and demand payment for it running into millions and perhaps billions for all of them in their succession to the sea, it could never have gone so long uncorrected. Since there is not that possibility, the current opposition to such purport can compass the full attainment of its objective and bury it under legislation without coming into conflict with the position of the courts in any way. Legislation can thereby have valuable educational influence. Examination suggests one thing plainly. This is that *the remedy rests in proper disposition upon the measure of the indemnity that is to be paid.* It is where questions of the amount of damages very evidently belong.

When legislation eventually comes to enacting a proper measure of indemnity it will, we may be pretty sure, come to this one, for a better cannot be found.[25]

III.

The premise which we have ventured is that the proposed constitutional amendment will be an affirmance of the Herminghaus case

[25] Cal. Stats. 1925, p. 251, arising apparently out of the Owens Valley situation, declares that installations conducting water beyond a watershed for municipal supply are liable to people within the watershed for damage to property, business, profession, or occupation "either directly or indirectly because of . . . decrease in value"; also enacting, however, that "nothing in this act shall confer the right to recover damages resulting directly or indirectly by reason of the constructiou, operation or maintenance of any conduit, pipeline, canal, ditch, aqueduct, reservoir, power transmission line or power house." The provisions would appear to neutralize each other, leaving the liability as it may be at common law.

upon the scope which injunction, in default of such payment, should have. Having supported this premise, if the foregoing discussion of the measure of compensation is sound, against exaggerated consequences in the awards which it secures, further support for the premise is advanced by considering the proposed constitutional amendment's terms "waste" and "reasonable use" upon their merits.

1. The office of injunction to suspend any damage to country property by the large mountain installations until the investigation and payment have been had is declared in a constitutional provision that has not been altered: "Private property shall not be taken or damaged for public use without just compensation *having first been made to,* or paid into court for the owner . . . which compensation shall be ascertained *by a jury,* unless a jury be waived . . ."[26] "Pay as you enter" is thus made a condition precedent for public improvements by a section that continues to stand. Exceptions exist where triviality of any damage is so self-evident that there is no reasonable possibility that a jury could assess any, [27] or where the landowner engages in some personal misbehavior such as delaying too long in asking the protection, or where some other extraordinary feature intervenes. Such exceptions aside, however, injunction to take nothing until the amount of damage has been investigated is the common observance of this constitutional discipline, upon which all public improvements count.[28]

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[26] Cal. Const., Art. 1, § 14.

[27] *"De minimis non curat lex,"* Cal. Civ. Code, § 3533. One-half second foot is not, however, *"de minimis."* Model etc. Co. v. Hoehne Co. (1921) 70 Colo. 484, 202 Pac. 712.

The constitutional amendment may, perhaps, serve to correct the too-sweeping dictum in which the Madera case, (1907) 155 Cal. 59, 64, 99 Pac. 502, said that the riparian's right to injunction to insure his compensation upon the removal of the stream is not limited by *any* measure of reasonableness. The amendment may be a reminder that injunctions do not issue to insure investigation of the damage when triviality of any damage can be reasonably surely foreseen in advance, as the maxim *de minimis non curat lex* admonishes.

[28] "An owner may obtain an injunction to restrain the taking or injury of his property, although such taking or injury is for a public purpose by one possessing the power of eminent domain, where such taking or injury is sought to be accomplished without the institution of condemnation proceedings." 20 C. J. 1173.

In the Herminghaus case (1926) 200 Cal. 81, 252 Pac. 607, the dissenting opinion of Mr. Justice Shenk was for fixing the amount of compensation in the injunction suit, a jury being thereby possibly waived, 20 C. J. 1156; *but this depends necessarily upon the utility's willingness to accept the issue.* Mr. Justice Richards for the court said: "There is nothing in the record herein tending in any degree to show that the defendants herein ever offered, or would be willing to offer, to reimburse the plaintiffs" etc. Also infra, note 42. Such recalcitrant attitude repudiating liability to pay the amount even if it were determined, prevents evidence or argument at the trial, by the

What injunction is required in order to make this constitutional discipline effective invokes physical fact and rests necessarily with the science of hydraulics.

2. This turns attention to the elements of stream flow as the judicial decisions have received them in determining what is waste which injunction does not require.

(a) The science of hydraulics discloses that in passing from a higher to a lower level an aggregate of the geological demands of the locality traversed by the channel must be fed, a reminder of much that the eye cannot see.

Traveling its journey from the source, the supply loses into the air by evaporation. Distance, size of surface exposed, temperature and wind make this an influential item. Seepage loss is, however, more important. Long lines of channel which narrowed or dried out in the previous summer and fall must have their bottoms refilled by seepage in the following floods of winter and spring. A stream is, in hydraulic fact, no more than a top layer of water floating over a greater—usually far greater, wider and deeper—area of water-saturated ground. In effect it is the process of flowing over a long, winding, often wide sponge, which must be filled first. Seepage absorbs the main part of what the source sends, to maintain this water-base over which the stream floats.[29] Another similarly invisible loss is transpiration from plant absorption along the banks.[30]

These natural losses, invisible to the eye, are affected by the

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utility's choice; and an opinion of Mr. Justice Shenk in a later case contains a cogent presentation in an analogous situation why such unlitigated matter must, under such circumstances, await some other proceeding where the issue on it is joined. Omnes v. Crawford (December 28, 1927) 75 Cal. Dec. 19, 262 Pac. 722.

[29] The alluvium acts as a reservoir, *absorbing a large quantity of water from the streams during flood seasons* and holding it for a time as ground water. Later, during the low-water season, a considerable part of this water is given back to the streams. The effect of this action is to lessen floods on the lower courses of the streams *and to increase the flow during low-water stages,*" Department of the Interior, Ground Water in Santa Clara Valley, California, Water-Supply Paper 519, page 55. The waters so absorbed "wet the beds of the stream channels the year round *and furnish all or a large part of the dry season flow,*" California Department of Public Works, Division of Engineering and Irrigation, Bulletin No. 5, pages 47-48. Similarly, Mead, Hydrology, page 390; Am. Civ. Engrs.' Pocket Book (Merriman), page 895.

[30] "The amount of transpiration is greater in dry than in moist air; it increases with an increase in temperature, with an increase in air currents, with the amount of sunlight, being a minimum at night; it probably decreases with an increase in the vigor of the plant. The amount of transpiration per pound of dry matter varies largely with different plants; but even for the same plants the results obtained by the different investigators do not agree, probably because of the many factors involved and the different methods used." Irrigation Practice and Engineering, by Etcheverry, Vol. I, p. 13.

texture (degree of perviousness) of earth material crossed, climate, distance, gradient, roughness of bed, shape of channel and windings, obstructions due to pools, bars and so on.

The amount that must pass a higher point to answer them and still leave enough to flow at a given point below, receives in hydraulics the designation "hydraulic head" ("booster" or "hydraulic force"). It furnishes "the force which in water *makes a stream.*" [31]

According to the distance, absorbent character of country crossed, climate and the like, the evaporation, transpiration and other natural demands will have become so great that the surface flow at the lower level naturally is very often hardly more than a few per cent of what leaves the source.

(b) If these losses could be interpreted as waste, injunction would not, of course, need to preserve them for its effectiveness.

The judicial interpretation is that physical fact excludes that designation. That there can be no private blame for natural topography is a legal axiom—Vis Major, or Act of God as the term goes—"if the condition complained of has resulted from natural causes, and not from the conduct of the defendant, the latter very evidently

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[31] "The amount or head of water needed to carry down the stream a quantity sufficient to satisfy the needs of those who have superior rights, is a question of fact . . ." Humboldt Land & Cattle Co. v. Allen (1926) 14 F. (2d) 650, 656.

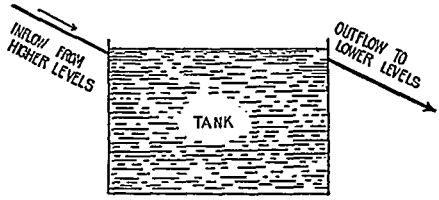
The losses of traveling water in artificial channels may be noted in a like way as in the natural ones. We read that "a part of it would be lost in transmission to the place of use by seepage and evaporation. Some loss in this way is inevitable *and it must be considered a part of that which is necessary to be taken to supply the actual use proposed,*" San Joaquin etc. Co. v. Stevinson (1912) 164 Cal. 221, 128 Pac. 924; and that allowance must be made for "the amount which must be considered—varying from thirty to fifty per cent—*for seepage and evaporation before the water reaches the land to be irrigated,*" Stinson etc. Co. v. Lemoore etc. Co. (1919) 45 Cal. App. 241, 188 Pac. 77; "The loss of from thirty to fifty per cent of water in transportation in arid districts is not uncommon," Witherell v. Brehm (1925) 74 Cal. App. 286, 240 Pac. 529. See also In re Murray (1913) Cal. R. R. Com., Decision 536, p. 44 from its first page.

Similarly, even after the water has reached the land. "To handle water economically in the laterals or distributors *a sufficient head* must be carried to furnish the requisite velocity of flow to the most remote points," American Civil Engineers' Pocket Book, page 997; and "it is necessary that the irrigators have a uniform *head* varying from four to fifteen cubic feet per second, depending upon numerous factors, among which are type of soil, crop, moisture content of the soil and condition of the land irrigated," Water Users Assn. of the Willow Canal v. Yolo Water etc. Co., Cal. R. R. Com. (1917) Decision 4426; a ruling speaks of "requiring a greater head of water" in order "to make up for the water lost by sinking while being used in irrigating appellant's premises," In re Use of Waters of Rogue River (1926) 117 Ore. 477, 244 Pac. 662, 663; there must be "an award of sufficient water to constitute a fair head of water," Boehler v. Boyer (1925) 72 Mont. 472, 234 Pac. 1086, 1089. See also Cook v. Evans (1921) 45 S. D. 31, 185 N. W. 262, 266.

cannot be held liable." [32] Losses which are natural are necessarily unavoidable until such time as we can find a way of penalizing the Almighty, who is the guilty party.

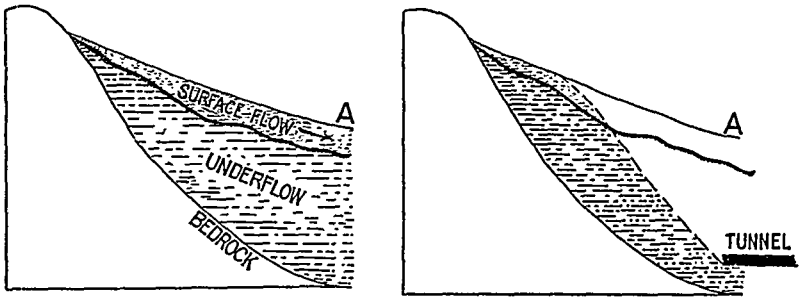
Waste, upon this principle, consists in man-made losses, occurring after the water has been taken out of its natural channel. The individual has then assumed control of it and can properly be held responsible, at least to a considerable degree, for his good or bad handling of it. That is his own conduct.

But the responsibility for the condition of the stream before it has reached him is held to be elsewhere. This judicial position may, perhaps, be illustrated in some such fashion as the tank on this page suggests.



The water needed to keep the tank full is an amount which the lower levels never receive. If it were to be said that therefore it is wasted and anyone may punch a hole in the bottom of the tank and drain it, the flow to lower levels would obviously disappear, and the right to compensation with it. And if this be true of draining the tank, the more would it be true of diverting the inflow above the tank.

The stream-bed, as in the next illustration, similarly shows a varying depth of alluvium, gravel and broken rock, which soaks up



water and therefore, like the tank, must be (and stay) filled if flow is to continue on the surface until compensation has been paid. If this absorption may be prevented from taking place, there would be

[32] 20 Cal. Jur., p. 285; 29 Cyc. 1156.

the same result as if it were taken away, which the drainage tunnel in the illustration presents. The claimant on the surface flow at A is left high and dry.

When the distance from the source to A reaches fifty, a hundred or several hundred miles, these natural demands may reduce the surface flow at A, if there is any, to but a few per cent of what the source has sent.[33] When, furthermore, the land at A', instead of bordering upon the surface flow, is situated a mile or more to one side of it over a groundwater table upheld by percolation and regional diffusion from the underflow, the amount taken into possession at A will be but a fraction of a per cent of the stream at its source. Yet these things are evidently an indispensable hydraulic essential to its arrival. Resenting Providence for creating the elements this way is very plainly fruitless. Its conditions are natural phenomena which we have to accept as we accept other essentials of the world in which we live.

(c) The judicial rulings emphasize this exclusion of natural losses from the interpretation of waste. The passage in the opinion of Mr. Justice Richards in the Herminghaus case—"The underflow of streams is, with respect to riparian rights therein, no more waste waters than is the upper flow thereof which the riparian owner uses, since, without the uplift of the former, the outflow and beneficial use of the latter could not exist. Such waters are therefore serving a useful and beneficial purpose in relation to said lands" [34]—is in har-

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[33] The amount of these losses may vary from very little on a short creek over bedrock, to everything on a long river over a sandy region. Of a stream called "characteristic of these California mountain streams," it is remarked that "nearly one-half of the water was lost in transit from seepage and evaporation." Witherell v. Brehm (1925) 74 Cal. App. 286, 240 Pac. 529. On the Humboldt River, Nevada, natural loss was said to be 43% but probably was a good deal more, Humboldt etc. Co. v. Allen (1926) 14 F. (2d) 650, 654-655. On the Walker River in Nevada, there is a reservoir at the headwaters, and the Indian Reservation at the river's lower end. In order to get water to the latter, a week's storage of the reservoir was released and allowed to flow down the river. It never reached the Indian Reservation at all, being insufficient to exceed the natural losses en route. Beside affecting the amount arriving, the natural conditions influence the time of arriving. On the Humboldt River in Nevada, it was found that by reason of evaporation, seepage and particularly the multitudinous windings, the flow took six weeks to go from Palisade to Oreana, a distance of perhaps 100 miles. On the Silvies River in Oregon, it has been estimated that the water takes six weeks to go 60 miles, (115 Ore. 27, 237 Pac. at 325). Reducing the head increased the delay, for example, "several weeks" in Huffner v. Sawday (1908) 153 Cal. 86, 94 Pac. 424, and Perry v. Calkins (1911) 159 Cal. 175, 113 Pac. 136.

[34] Herminghaus v. Southern California Edison Co. (1926) 200 Cal. 81, 252 Pac. 607, 617.

mony with a long record of judicial interpretation of the hydraulic facts.[35]

The ways of nature are entirely impartial. As stated in an "appropriation" example:

> ". . . we cannot sanction a policy which inevitably would result in depriving the prior and lower *appropriator* for the benefit of the later claimant nearer the head of the stream, because the latter would have a greater quantity of water, and consequently more benefit, and would save the seepage and evaporation *occasioned by the flow further down to the lands of the earlier settler.* The enforcement of such a doctrine would overthrow the long, well-established and just principles of the law, *and result in legal confiscation.* It would deprive *prior appropriators* down the the stream of their equities and vested rights, lead to a scramble to secure lands and divert from the heads of streams water already in use by lower proprietors, whose farms would be dried and destroyed."[36]

In not unlike terms is the following from the California Division of Water Rights:

> "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 others prior and vested must be respected." [37]

(d) The judicial rulings about these natural losses find in the science of hydraulics a further fact. The passages presented in the foregoing footnotes will have suggested it. The invisible determinants of the required hydraulic head (evaporation, seepage, transpiration and the other geological demands en route) are beyond accurate measurement.

For the most part they are hidden. They are widely extended over networks of branches and tributaries. They vary at different levels. They change, moreover, at the same level from week to week

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[35] Concerning them it appears: "This rule has been followed ever since (1899) in all cases where persons having rights in a natural stream were threatened with injury by the extraction of the percolating water which sustained and supported the stream in its flow." The Development of the Law of Waters in the West, by Hon. Lucien Shaw (1922) 189 Cal. 779, 795. The authorities that have accumulated to this effect are given in 2 Kinney on Irrigation, 2 ed., p. 2106-2107; 2 Wiel, Water Rights, 3 ed., §§ 1078-1083; 26 Cal. Jur. 264, § 474. "The low water flow of streams is due entirely to ground waters, and conditions favorable to the storage of ground water and its delivery to the stream are essential to the maintenance of dry weather flow," Hydrology, by Daniel W. Mead, p. 390.

[36] Tonkin v. Winzell (1903) 27 Nev. 88, 73 Pac. 593.

[37] Part III, Biennial Report of the California Division of Water Rights, Nov. 1, 1926, pp. 70-71.

and even from day to day. If the premise—that injunction against the mountain installations to insure compensation to lower levels shall have what is requisite for being completely effective—depended on measurements, it would very evidently be overwhelmed by the obscurity.[38] If we could change these things with knowledge that the change could not damage, we could command the wind and the rain and the heat of the sun and the depths of the earth, for it is their operation that we would know.

As a consequence, *mathematical division of streams is impossible.* We can say it in words. We can never do it in actual fact.[39]

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[38] To predict the consequence of a partial diversion is impossible. "Of necessity this would be very difficult, if not impossible. All diversions and uses by riparian owners and others in the intervening space, seventeen to fifty miles, must be taken into the account. Also the state of the weather and of the atmosphere, the possibility of rain to vary the flow of the stream, *and the losses by seepage in the stream as depleted compared with its loss if not diminished.*" E. Clemens Horst Co. v. Tarr. Min. Co. (1917) 174 Cal. 430, 439, 163 Pac. 492. See also Parker v. Swett (1922) 188 Cal. 474, 487, 205 Pac. 1065. Similarly, "It is inevitable that the subject of water rights is complicated and difficult to handle. Water is an elusive and obscure subject physically, and legally it is extremely complicated. It is difficult to measure the flow of a stream of water and impossible to accurately anticipate what it may be in the future." Part III, Biennial Report of the California Division of Water Rights, Nov. 1, 1926, p. 15. A study was necessitated in Idaho of the losses in stream beds carrying releases from a series of reservoirs. The allowance for losses in traveling down the natural stream-bed developed into a controlling problem, and the conclusion is stated: "The problem is an extremely complicated one, however, involving many variable quantities, so that even if much more money were expended and the investigation made comprehensive over a period of years there appears to be some doubt as to whether a transmission loss schedule can be evolved which will be absolutely equitable under all conditions to be encountered." 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.

[39] The law "cannot assume to make a mechanical division of a material which, from its nature and the nature of the uses to which it is applied, is incapable of any permanent division that shall do justice between the parties," McGillivray v. Evans (1864) 27 Cal. 92, 97-98. "Upon the first appeal it was distinctly held by this Court that the property of which the parties were tenants in common, viz., the water flowing iu a ditch, was not susceptible of division, and that the only partition that the Court could make which would definitely and permanently end the dispute of the parties, and do justice between them, was to order a sale and distribute the proceeds." Lorenz v. Jacobs (1881) 59 Cal. 262, 263. McGillivray v. Evans has been cited approvingly in Lanfers v. Henk (1874) 73 Ill. 405, 24 Am. Rep. 263, 5 Morr. Min. Rep. 67; Allard v. Carleton (1886) 64 N. H. 24, 3 Atl. 313; Brown v. Cooper (1896) 98 Iowa 444, 455, 67 N. W. 378, 60 Am. St. Rep. 190, 33 L. R. A. 61; Head v. Amoskeag Co. (1885) 113 U. S. 9, 28 L. Ed. 889, 5 Sup. Ct. Rep. 441. Compare Kennedy v. Scovil (1837) 12 Conn. 317, 326; Tracey Co. v. People (1914) 212 N. Y. 488, 106 N. E. 334. Compare In re Silvies River (1912) 199 Fed. 502-3, holding that a suit to determine all the rights upon a whole river "is not a separable controversy between different claimants"—that is, no separate part of a whole river is capable of handling. Affirmed in Pacific L. S. Co. v. Lewis (1915) 241 U. S. 440, 36 U. S. Sup. Ct. Rep. 637, 641. Compare Wyoming v. Colorado (1921) 259 U. S. 419, 42 Sup. Ct. Rep. 552, 558, ruling that "the river throughout its course in both states is but a

The judicial rulings proceed, therefore, upon the foundation that leaving things to speak for themselves is, in scientific fact, the only assurance lower levels can have that hydraulic conditions are being adequately maintained. " 'The appropriator took the water with the right to have the stream flow as it was wont to flow' is the language of the law, *under the Arid Region Doctrine of Appropriation,* which is as strict a rule as that of the common law of riparian rights." [40]

It is very evidently not deduced from preconception of law, but

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single stream," which cannot be cut into two parts by a state boundary line crossing it. Upon like resistance to physical handling, a water right cannot be handled by means of the action of ejectment. Reed v. Spicer (1864) 27 Cal. 57; Swift v. Goodrich (1886) 70 Cal. 103, 11 Pac. 561; Libbey v. Van Bruggen (1924) 30 N. Mex. 116, 228 Pac. 178; Angell on Watercourses, ed., p. 41. "The frequent occurrence of faults and dislocations, the alternate disappearance and recurrence of the ore bodies, so as to render their continuance in a particular direction extremely uncertain, are all elements which are proper subjects for the consideration of a court when actions of this character are brought, logically forcing the conclusion that allotments in severalty would result injuriously to the owners or some of them. Theoretically a mine may be partitioned. Practically it cannot be, but a sale must ordinarily result." 3 Lindley on Mines, 3 ed., § 792, p. 1954 (1914). In Pomponius (Rules): "It is impossible for a *share* in a via, iter (road), actus (right of way) or water-course to be made the subject of an obligation (to grant it), as the use of such rights is undivided," Digest of Justinian, Book VIII, Title I, Monro's translation, Vol. II, p. 67. "Streams and lakes are not like land, in so far as private possession is concerned. *Land can be measured and privately controlled.* Water is constantly shifting, and the supply changes every day," Clarence T. Johnston, American Society of Civil Engineers, Paper 1256, p. 678.

In Parker v. Swett (1922) 188 Cal. 474, 205 Pac. 1065, the present writer, in drafting a decree to partition a stream equally between two parties, set forth mathematical figures of amount for each. The Supreme Court (at page 487) said that if this were to mean a permanently-bound designation it would assume to control the forces of nature. The definition of right, the court said, must purport to remain simply "one-half," and subject to fluctuations which defeat an unvarying division of streams from being achieved.

[40] 2 Kinney on Irrigation, p. 1398. A subsequent appropriator has a vested right against his senior to insist upon the continuance of the *conditions that existed at the time he made his appropriation.* Handy Ditch Co. v. Louden, etc. Co. (1900) 27 Colo. 515, 62 Pac. 847; Baer etc. Co. v. Wilson (1906) 38 Colo. 101, 88 Pac. 265. "A second appropriator has a right to have the water continue to flow *as it flowed when he made his appropriation.*" Lobdell v. Simpson, 2 Nev. 274, 90 Am. Dec. 537; Bennett v. Nourse (1912) 22 Idaho 249, 125 Pac. 1038. "Each subsequent locator or appropriator is entitled to have the water flow *in the same manner as when he located.*" Union Min. Co. v. Dangberg (1897) 81 Fed. 73, per Judge Hawley.

Similarly regarding the natural head in a lake; an appropriator from the lake may "enjoin a depletion of the lake which will *lower the water surface* so as to substantially increase the cost of making the diversion it is entitled to make." Duckworth v. Watsonville etc. Co. (1907) 150 Cal. 520, 533, 89 Pac. 338. Compare Kennedy v. Niles etc. Co. (1913) 173 Mich. 474, 139 N. W. 241; Krueger v. Crystal Co. (1924) 111 Neb. 724, 197 N. W. 675, 678. The like conclusion has been applied concerning the natural level of underground water: *Lowering the water plane* so that pumping cost is increased was held to be an invasion of right. Lindsay etc. Dist. v. Superior Court (1920) 182 Cal. 315, 187 Pac. 1056.

from hydraulic fact that no law can escape, if injunction against the mountain installations is to have what is requisite for making the ascertainment and payment of compensation to lower levels effective.

(e) Under this aspect of the hydraulic factors which have determined the judicial position, reducing injunction is attainable only by reducing the occasions calling for compensation. The most important possibility of so doing will claim attention a few pages later. For present consideration there is the possibility of offering to provide a physical substitute, which the mountain installations frequently tender.

This possibility would deliver to lower levels an amount equal to the natural flow, by constructing, in place of the natural bed, some artificial conduit to the lower levels such as a pipe, to prevent the seepage, evaporation and transpiration on the way to the lower levels from operating—*in effect, putting a pipe across the top of the tank so that the flow will reach the lower levels without entering the tank.* "Salvage" of the losses by such work of walling-off the natural forces by which the losses are caused, has been sustained in many rulings.[41]

The condition upon which it rests, of furnishing such protective substitute, confirms that it called for injunction when the power company in the Herminghaus case would not let this condition be considered;[42] and even a protective substitute may fail to remove the

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[41] Pomona Co. v. San Antonio Co. (1908) 152 Cal. 618, 631, 93 Pac. 881; 25 Cal. Jur., p. 1099; 2 Kinney on Irrigation, pp. 1400, 2106-2107, 2186-2188; 1 Wiel, Water Rights, §§ 38a, 279, 1042-1062, 1078-1083.

The salvager must bear the expense. Wiggins v. Muscupiabe etc. Co. (1896) 113 Cal. 196, 45 Pac. 160; Heil v. Hubbell (1927) 80 Colo. 425, 252 Pac. 343, 345; Missoula etc. Co. v. Bitter Root Irr. Dist. (Mont. 1927) 257 Pac. 1038; Salt Lake City v. Gardner (1911) 39 Utah 30, 114 Pac. 147; Tanner v. Beers (1917) 49 Utah 536, 165 Pac. 465; Big Cottonwood etc. Co. v. Shurtleff (1919) 56 Utah 196, 189 Pac. 587, 590; Yates v. Newton (1921) 59 Utah 105, 202 Pac. 208.

[42] In the Supreme Court the attorney for the power company said: "This court has held that where an upper riparian owner wants to make a use of the water he can even deliver the amount the lower riparian owner needs in an artificial channel or in artificial conduits. The evidence shows that water can be put into the sloughs without any difficulty whatever. *Mr. Justice Richards.* Was there any offer whatever on the part of the defendant during the trial of the case to make such delivery or to create such artificial contrivances as would have resulted in delivering to the plaintiffs the water the court found reasonable to irrigate these lands? *Mr. Treadwell.* No, Your Honor, there was not. *Mr. Justice Richards.* Is it now contended by you that the defendant stood ready at any time or now stands ready to create such artificial contrivance as would give to these plaintiffs the amount of water which the court found would be proper and reasonable? *Mr. Treadwell.* I would say that if it developed that it is the law that they are entitled to have that much water of the river flow in those sloughs and could not otherwise take the water, I would certainly say we are ready to adjust the situation so that the water would flow in there. *Mr. Justice Richards.* So far

geological uncertainties entirely, depending upon where it is installed and the features of the particular stream. Moreover, it will have imposed upon lower levels the human uncertainties in the infirmity of substituted artificial in place of natural delivery—the chances of defective construction, neglected upkeep and the like. Unless, therefore, the proposer of the substitute shows by evidence that this hazard is remote enough in the specific case to invoke the rule *"de minimis non curat lex,"*[43] the same considerations have been deemed by the judicial rulings to operate respecting this possible damage as respecting other damage, namely, that there is no way that indemnity for damage that may follow at lower levels can be effectively insured, short of enjoining the substitution until condemnation has been employed to get the damage measured and paid, before it is inflicted.[44]

3. The large mountain installations, being upper level claimants, contend that the judicial interpretation, in not including head, booster

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you do not make any offer and did not during the trial? *Mr. Treadwell.* No. . . . *Mr. Justice Richards.* Are you contending that the trial court, in the absence of any offer or any indication of willingness on the part of the defendant to comply with such an order, should have made it? *Mr. Treadwell.* Why, no . . ." (Printed oral argument, pp. 18-19.) See also supra, n. 28.

[43] The party interfering with the natural conditions has the burden of proof that no damage to others can result. Miller v. Bay Cities Co. (1910) 157 Cal. 256, 284-5, 107 Pac. 115; Huffner v. Sawday (1908) 153 Cal. 86, 94 Pac. 424; Perry v. Calkins (1911) 159 Cal. 175, 180, 113 Pac. 136; Morris v. Bean (1906) 146 Fed. 423, 436; Midway Co. v. Snake Creek Co. (1921) 271 Fed. 157, 161; Greeley Co. v. Farmers Co. (1915) 58 Colo. 462, 146 Pac. 247; Spaulding v. Stone (1912) 46 Mont. 483, 129 Pac. 327; 2 Kinney on Irrigation, p. 2189 top. This is a general principle in all dealings with appropriators' invasions of the status quo. Before an appropriator changes his point of diversion or place of use it is enacted in California that "such petitioner must establish," (the act says), that such change "will not operate to the injury of any legal user of such waters," (Water Commission Act, § 16; also § 39), thereby adopting the current drift of authority that whoever alters a water supply "disturbs the existing order," New Cache etc. Co. v. Water Supply Co. (1910) 49 Colo. 1, 111 Pac. 610, and encounters the demand of "strict adherence" to the burden of proving that he will not harm others, Farmers Co. v. Wolff (1913) 23 Colo. App. 570, 131 Pac. 291. "It is not for the court, in its judgment, to attempt to forecast the future," Parker v. Swett (1922) 188 Cal. 474, 486, 205 Pac. 1065. Without the gift of prophesy we are wandering in a darkness where the appropriator, as he induces the need of speculating about the future, has necessarily the risk of any impossibility of answering it, Shoemaker v. Acker (1897) 116 Cal. 239, 48 Pac. 62. One may recall that there is no firmer principle going with this than that where damage is incapable of advance ascertainment the "impossibility to estimate damages" holds things as they are in equity until condemnation suit to look into the damages has been had.

[44] Barton v. Crafton Co. (1915) 171 Cal. 89, 97, 152 Pac. 48. Uncertainty of artificial substitute is an injury, Crockett v. Jones (1926) 42 Idaho 652, 249 Pac. 483. Compare Daniels v. Adair (1923) 38 Idaho 130, 220 Pac. 107; Weidman etc. Co. v. Mayor etc. (1913) — N. J. L. —, 91 Atl. 335; Webb v. Portland etc. Co., Fed. Cas. 17,322, 29 Fed. Cas. 506, 511 (Story, J.).

or carrier as waste is wrong. The judicial position is described as squandering ninety-nine per cent for lower levels so that they may use only one per cent. It is necessary, therefore, to view the alternative which the mountain installations offer.

(a) The alternative for which they urgently contend is, in effect, to treat a stream as a line on a map. A stream is often unguardedly so thought of. A lower level, having right to draw off an amount of water, should therefore have attention only for the amount to be drawn. The line to be drawn from does not, on a map, have to be itself fed in order to keep it up. Its unaided presence would be accepted as it there appears.

This alternative, which accepts that streams are divisible, rests very largely upon the ease with which the line on a map, a mere symbol of much that the paper never shows, is mistaken for the reality. Lack of acquaintance with the need of maintaining an hydraulic head gives this visual illusion wide currency. The confidence which it lends to denouncing, as waste any reference to the head, booster or hydraulic force becomes impressive by displaying the enormous percentage which it may reach, ninety-nine per cent of the source acting but as an adjunct to enable one per cent at the lower level to be employed. But very evidently the issue is not on a question of law.

It is very evidently an issue on the scientific fact of hydraulics; and so simple a view of hydraulics as a line on a map pretty surely cannot pass critical attention. It suggests, more than anything else, Mark Twain's Jumping Frog story. The narrative of filling a frog through its mouth with lead until so heavy that it could only give a heave and barely jump more than a few inches, as though all there is to frog is a hollow skin, parallels thinking that a stream is only a line on a map with no vital machinery that keeps it going; yet a moment's thought would convince those who so vehemently urge it that without additional flow to furnish hydraulic force or booster the piece of stream would be a dead body with no heart to keep up its circulation. In another instance there is record of the judge who solved a controversy over a statue by ordering its head cut off so as to give one claimant the head and the other the body. The Judgment of Solomon we all know, which ordered the babe cut in two for the same purpose. A common feature runs through these comparisons. They award in words and kill in substance what they purport to award.

There can very evidently be no water supply with its head cut off. Country property below the large mountain installations would be left

with only an automobile without the engine that keeps it going, a bank book without the money in the bank; the repugnancy which "keeps the word of compensation to the ear and breaks it to one's hope."

Like the words "little table, be spread" in the fairy tale, such conception of hydraulics without any head, booster or hydraulic force, very plainly mistakes the subject-matter and tenders natural impossibilities. The subject-matter is very evidently dominated by factors of hydraulics which get some appreciation in the courts through being brought out there by expert witnesses, but which, it is fair to say, fail to get accounted for in nine-tenths of other public discussion. The failure accounts for much of the animated criticism which the courts' judicial notice of the laws of nature excites in many good and sincere men. But before criticism of the law can be well founded, the scientific facts must first appear upon which the law can be otherwise.

(b) A quite equal assumption against hydraulic fact is the one in which upper installations claim a greater virtue than lower levels in public policy, through the impression that by eliminating the downward journey the natural losses are saved.

They are doubtless not saved, however. Diversion being accomplished, the flow passes on again, after its employment, in some new direction where (as will be hereinbelow further commented upon) it is called "return flow." The geological demands take their toll again from this renewed journey. At equal distances of travel the natural losses average the same irrespective of where it has been used.

The most that the mountain installations thereby invoke brings public policy to the net operation of saying "A plague on both your houses"; that both sets of levels are equally bad, producing the same result as the more likely view that all levels are equally good. The equality of public interest is very evidently not disturbed by using the darker rather than the brighter implication.

With the factors of hydraulic science such as the courts find that they are, and the opposition founded upon assumption such as noted, the conclusion would clearly seem to be that the position of the California courts on what is waste is soundly based both in hydraulic fact and in public welfare, all the more commendable and desirable as development along lower levels in the country districts spreads dependence upon compensation among the people; and therefore very likely to prevail under the new measure upon the merits, independently of the more important consideration first herein suggested, that the new measure does not reopen the inquiry.

4. The premise which this paper ventures, that the constitutional amendment will be an affirmance of the Herminghaus case, finds support also on the merits of the measure's declaration for "reasonable use."

(a) It may be first noted, in considering this term, that it is rapidly arriving in water law throughout the West. For a long time, notwithstanding the indivisible nature of a stream, attempts to adjust rights in streams by division, without attention to preserving the head, were prevalent, but they left a long trail of re-litigation because their illusory basis could not settle. According to a common picture: "More than 700 persons and corporations claim rights to use water from the Humboldt River. For the most part these claims are uncertain and indefinite; the uncertainty of each affects and adds to the indefiniteness of every subsequent appropriation."[45] According to another: "There is a library of speculation over this subject of appropriation in the Colorado decisions—yet no two complete discussions are in entire harmony. All indicate that there is something that should be reached and in every decision this something is just beyond the grasp of the court." [46] Like expressions could be quoted from all over the West. The expression grew, according to Newell, that "water is worse than whiskey in making trouble," of which he instances the Colorado River in a recent magazine article.

The indivisible natural losses essential to reaching the lowest level, California, involve evaporation in the feathered-out network of tributaries aggregating perhaps hundreds of thousands of miles. There is, furthermore, enormous seepage which these tributaries, dried out or narrowed in the hot weather, must absorb again in having their bottoms refilled when flood time returns. A compact was negotiated between the River States in 1922. The compact insisted upon mathematical division of the visible water;[47] and "Arizona has

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[45] Bergman v. Kearney (1917) 241 Fed. 884, 892. "In addition to this are the manifold and inevitable embarrassments and difficulties which arise from the fact that practically all Nevada water rights are undefined, and therefore debatable." Ibid, at 891.

[46] Clarence T. Johnston, in American Society of Civil Engineers, Paper 1256, p. 683.

[47] "Without doubt the representatives of the States of the upper basin [Colorado, New Mexico, Utah and Wyoming] had won an important victory. They had succeeded in decreasing the number of acre-feet to be delivered through the canyon to the lower states in each ten-year period, by 7,000,000 less than the number which Director A. P. Davis of the Reclamation Service said should be delivered to constitute an equal division between the respective basins. Moreover they had avoided any responsibility for the delivery of a guaranteed minimum annual flow"—that is, no head. (Olson, Colorado River Compact, pp. 34-35.)

43 per cent of the watershed and furnishes 23 per cent of the water," Arizona's Governor says, "and California furnishing none she shall get none." Colorado's principle was similar in Wyoming v. Colorado;[48] and although the Supreme Court of the United States ruled it out there, the Compact harbors the contention, as Mr. Hoover realized.[49] Its attempt to "chop up" the indivisible stream has failed to satisfy, and the Compact has never been able to become operative.

The thought that each claimant on a stream can take so much as he can beneficially use until the supply is exhausted, and that injunction can be divided to correspond, is something which experience has been disclosing to be a verbalism, something which we can say in words but cannot translate into fact or practice, for the simple reason that divisibility of streams was not one of the favors to mankind that nature carried in her basket of gifts. Those who have followed Western water law unanimously describe the intolerable confusion for lower levels into which the attempt to get along on the basis of stream division had come, urgently dwelt upon as the first reason for what is known as the Water Code legislation for a clearance by universal re-adjudication.[50]

In these widespread Water Code re-adjustments there is unmistakable evidence that the mathematical conception is being relinquished.

Lists come to be made up with clauses "that allowances *shall not be taken as granting a specific amount of water to any water user,* but shall only be taken as a rule and guide for the water master in the distribution of a maximum amount of water to any water user."[51] In another instance, "in defining the distribution of water to appropriators the State Engineer and Water Commissioners of the various

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[48] State of Wyoming v. State of Colorado (1922) 259 U. S. 419, 42 Sup. Ct. Rep. 552, 557, 558, 66 L. Ed. 999. One is led to compare this to the rule in Kansas v. Colorado as the Supreme Court in Wyoming v. Colorado repeated it on streams that are interstate: "What was there said about 'equality of right' refers, as the opinion shows, *not to an equal division of the water,* but to the equal level or plane on which all the states stand, in point of power and right, under our constitutional system."

"Not to an equal division of the water." The determination of reasonable concessions evidently is not amendable to mathematics between states more than between individuals.

[49] "Mr. Hoover: If the whole settlement were made conditional upon the creation of that storage before the compact became binding, then there would not seem to me any necessity for a guarantee flow for any one particular year, so that we might, on that line of discussion, *avoid the whole necessity of guaranteeing a minimum flow for a whole year, which seems to me to be pretty difficult.*" The Colorado River Compact, by Reuel Leslie Olson, pp. 353-354.

[50] Chandler, Elements of Water Law (Revised), c. VI; 2 Wiel, Water Rights, 3 ed., §§ 1206-1235 (1911).

[51] In re Umatilla River (1918) 88 Ore. 376, 168 Pac. 922, 172 Pac. 97, 100.

districts shall give due consideration to the head required to distribute the water over the land and to the water which returns to the stream-system and becomes available for the use of other appropriators," and a "due allowance" for losses in transmission, and other clauses for what is "reasonable." This trend, observable throughout the West as we will have occasion to note again, has its latest and strongest expression in the proposed California constitutional amendment's declaration for "reasonable use," several times repeated.

(b) In view of this experience, the question which the measure's term "reasonable use" raises is evidently no longer how far can injunction against the mountain installation be relaxed consistently with compensation to the lower country. It concerns itself with the question that was reserved for attention a few pages back: How far should the damage to the lower country, which may inhere in every disturbance, go uncompensated? The term answers that the lower country shall go uncompensated to a "reasonable degree." It raises, therefore, a question of degree, namely, how far is it likely to go?

It is fair to assume that this invocation of the discretion of the authority that is to decide, to use good judgment, will not come to mean an arbitrary personal opinion or autocratic whim.

We may feel confident that the judgment of what denial of compensation for lower localities is reasonable will have to have its basis in observable facts. These consist of the areas of both the contending parties, character of the lands of both, the kinds of crops or other uses of both, and so through whatever "surrounding circumstances" can be learned about both of them.[52] One might almost say that

[52] "They all have an equal right; one may be tempted therefore to decide that their right should be ruled by the strict law of equality, that is to say, according to the extent of their land holdings. But there are nevertheless other elements that must be taken into account, the mode of cultivation, the nature of the soil, the kind of works employed. It is impossible to lay down an absolute rule and a mathematical equality: that is why the law has left it to the discretion of the courts, as we shall see further on. Upon this point all the authorities are in accord." This is from a French writer who says, "tout le mond est d'accord," which literally is "all the world." and it is even true in that literal sense when we read in the reports of the Supreme Court of Califoruia: "We anticipate the objection that this is not an absolute rule at all, but, as said by the judges in the opinions quoted from, the very nature of the common right is such that a precise rule as to what is reasonable use by any one proprietor for irrigation cannot be laid down." 6 California L. Rev. 245, par. 8, sub. a (1918).

The term "rule of reason," one may therefore justly conclude, is only a disguise for the fact that there can be no mathematical rule. It means no more than the discretion of the party deciding. "There is no fixed law of determining what is a reasonable use." 40 Cyc. 563. No rule on what is "reasonable." Half Moon Bay v. Cowell (1916) 173 Cal. 543, 549, 160 Pac. 675. "It is declared in all the authorities upon this subject that it is impossible to lay down any precise rule which will be applicable to all cases."

since no direct answer can be obtained from the stream itself, whatever answer comes must, by force of circumstances, be an indirect one drawn from the scenery. The significance of this is that both parties are equally part of the picture; a dependence upon considering both sides which makes "reasonable use" of a stream necessarily a bilateral matter, with two sides to take eare of, and *correlative.*[53] From this it follows correspondingly that any claim of the mountain installations to be considered alone, and *exclusive* claim such as carrying a substantial part of the stream away from those below without return to them at all, contradicts the term by preventing reasonable use of what is gone, since it prevents any use of it at all, and exceeds the degree in which the term says damage need not be compensated.

Jones v. Adams (1885) 19 Nev. 78, 6 Pac. 442, 444. "Reasonable use, as applied to the appropriation of a watercourse, is as undefinable as reasonable doubt, as applied to criminal evidence. The final arbiter in each case is not so much the law as the exercise of good sound judgment." Portland etc. Co. v. Phinney (1918) 117 Me. 153, 103 Atl. 150. ". . . the limit of which has never been accurately defined and probably is incapable of accurate definition . . ." McCartney v. Londonderry Ry. [1904] A. C. 301, MacNaghten, L. J., p. 307; Embrey v. Owen [1851] 6. Exch. 353.

[53] In a very careful examination of the term this is brought out as follows: "'For the purpose of ascertaining what is reasonable, both sides of the question must be looked at.' It is not enough to ask: Is the defendant using his property in what would be a reasonable manner if he had no neighbor, i. e., if he were the only person whose interest could be affected? 'The question is, is he using it reasonably, having regard to the fact that he has a neighbor?' A use is not reasonable, if it unreasonably prejudices the rights of others. 'In determining the question of reasonableness, the effect of the use upon the interests of both parties, the benefits derived from it by one, the injury caused by it to the other, and all the circumstances affecting either of them, are to be considered.' 'We concede,' said Loomis, J., 'that the law will not interfere with a use that is reasonable. But the question of reasonable use is to be determined in view of the rights of others.'" Reasonable Use as a Defense, by Jeremiah Smith, 17 Columbia L. Rev. 383, 390-391 (1917). The contention that defendant was reasonable from his own point of view irrespective of others affected, "is ridiculous on the face of it, yet it has often been brought forward and repelled." Ibid, p. 392, n. 49.

"Hence it follows that rights, which are enjoyed by an indefinite number of persons, cannot be absolute as to any particular right, but must be relative or correlative as to all the owners on the stream." 1 Kinney on Irrigation, 2 ed., 770 (1912). "The reasonable usefulness of a quantity of water for irrigation is always relative; it does not depend on the convenience of or profitable results to the particular proprietor, but upon the reasonable use, reference being had to the needs of all other proprietors on the stream." Lux v. Haggin (1886) 69 Cal. 255, 407-408, 4 Pac. 919, 10 Pac. 674. "The comparative benefits of the respective uses, the comparative injuries caused to each by the deprivation ensuing from the use by the other . . ." Turner v. James Canal Co. (1909) 155 Cal. 82, 95, 99 Pac. 520. "Nor is the question of reasonableness to be tested solely by the needs of the upper riparian proprietor. The rights of riparian proprietors are correlative and the 'reasonable' amount to which any one riparian owner is entitled is to be measured by comparison with the needs of the other riparian proprictors." Pabst v. Finmand (1922) 190 Cal. 124, 211 Pac. 11. "Reasonable use, is a term of compromise. No landowner can always do as he pleases except by preventing other landowners from doing as they please." Jeremiah Smith in 17 Columbia L. Rev. 383 (1917).

Upon a later page the fact will be supported by authorities upon hydraulics that use does not destroy much water. Water power does not destroy any; irrigation probably less than a third of what is handled. The bulk always passes downward from the place of use, partly by surface drainage but mainly by seepage, issuing again into streams at a lower level where it can be used over again, and after that, in the same way at a level still lower. Water is universally deemed an essential of life and general prosperity. That function can be fulfilled only when this succession of the benefit of it is secured the greatest number of times. Very evidently reasonable restrictions upon upper levels *so that others below may count upon receiving the benefit of the water after them* are essential. When, consequently, there is a diversion, the reasonable restrictions must arise for those who use the return flow over again in the new locality, the new lower levels which spring up there, which will be the subject of the concluding part of this paper. And plainly no succession in its benefits is assured unless those who have successive benefits from it, wherever it runs before a diversion, are compensated for any damage they suffer when its removal from them takes place. Unless this conception of the primacy of giving security of benefit from the same water over again the greatest number of times is very wrong, carrying the water away must plainly be upon this condition.

Since the time that Story in his classical statement pioneering the common law of waters said in 1827: "There may be, and there must be, allowed of that which is common to all, a reasonable use,"[54] the common law has not been able to find that there is any escape from this distinction between correlative and exclusive claim made by the context in which the term is used, the presence of two sides in the observable facts. Quite as emphatically as anyone could wish, Story's pioneering statement said: "The law here, as in many other cases, acts with a reasonable reference to public convenience and general good, and it is not betrayed into a narrow strictness, subversive of common sense, nor into an extravagant looseness which would destroy private rights." The fact that with this earnest disposition, the common law has been unable to see how carrying the stream away from the lower levels *with no return,* can be "reasonable use" or "reasonable regulation" dispensing with compensation for any damage ensuing, must be not a little confirmation that the meaning does

[54] Tyler v. Wilkinson (1827) Fed. Cas. No. 14,312. "The principles governing this use can never be better stated than it was by Mr. Justice Story in the early case of Tyler v. Wilkinson, abstracts of which opinion are so often quoted upon different phases of the subject under consideration. We can do no better here than to quote a portion of that opinion . . ." 1 Kinney on Irrigation, 2 ed., 823 (1912).

not exist in the term when used in that context. Particularly as the measure does not confine itself to present use, and preserves equally any reasonable use for the lower level that "may be" in the future.

(c) While the constitutional amendment's term "reasonable use" may therefore confirm the common law's denial of compensation in correlative situations, a likelihood finds support on the merits that in other situations the completeness of injunction would continue against substantial interference until the payment, even if the inquiry were one which the new measure reopened.

The prospect returns, moreover, that the constitutional amendment does not reopen the discussion. Very much as the proponents claim of the new measure, the dissenting opinion in the Hermingbaus case claimed of the old one: It was the obvious purpose of section 11 of the Water Commission act that the use of all waters shall be restricted to that which is reasonable and useful for a beneficial purpose, whether the user be a riparian owner or an appropriator. When the court (as the fact that this is a dissent emphasizes) ruled that what is reasonable differs, with respect to right of compensation and injunction, in the two instances because of the different connection,[55]—the difference whether the upper party is making a correlative or an exclusive claim—the unavailability of the merger contention very evidently became established under the act.

That this forecloses it also under the new measure would seem to be a not very distant consequence of employing the same adjudicated provision and losing the proposals that sought to change it.[56]

IV.

Discussion of the measure is current without cause, if the foregoing interpretation of the measure is justified, concerning whether the measure, if it impairs compensation, would be confiscatory.

1. It is a discussion which the file of papers in the first "appropriation" case in the California reports may considerably enliven. The Clerk of the Supreme Court, Mr. Taylor, kindly made them available to the present writer. A Mexican colony had been "jazzed" by discovery of gold in the Sierra Nevada River beds while it was passing into American possession. The first mining, being by pick

[55] "It might well be that the use of the water flowing through a three-quarter inch pipe on the riparian land would be entirely reasonable, but it would not follow that the diversion of the same quantity to lands non-riparian would be reasonable." Kelly v. Nagle (1926) 150 Md. 125, 132 Atl. 587, 593.

[56] In the same way a new law of public utilities was predicated under Article XIV at its enactment in 1879, and it turned out to be simply declaratory of common law.

and shovel in the stream beds, was riparian mining, and the State's first act for law and order—the statute of 1850 establishing the common law as the general law of the locality—would have gone along very well with it. But where gold lay was uncertain. Thus in 1853, as far as can be learned from the file, one Captain Irwin, in order to increase the water supply at a gold locality and sell it to the miners there, diverted a stream thereto from a locality supposedly barren, only to find mining spread to the latter upon subsequent "strikes" in the bed of the stream which the diversion had left dry. This put in question which set of miners had the better right to mine, the water being concerned only subordinately, because it was necessary in washing the gold from the gravels.

The latter miners, who found the water gone and could not work, demanded that Captain Irwin restore the water for them to its natural course; he refused; they cut his dam; and a miners' meeting was held. It reported: "The Committee have concluded that Capt. Irwin's Reservoir is an insurmountable obstacle to (the latter miners) in the further pursuing of their labor . . . and that the said Captain Irwin cannot . . . *in any way impede the free progress of the water.* That a copy of these proceedings of this meeting be sent to Captain Irwin." Possibly some attorney present carried that it was the common law under the statute in 1850; but more likely the meeting came to the conclusion because it was the purport which would deny exclusive right to the facilities on which mining depended. It kept the water free to "reasonable use" of all who came. It thus appears that this first of any California attention to "appropriation" of waters chose the riparian principle by the popular choice, and probably on public policy.

The pronouncement of the Supreme Court, when the matter reached it, concurred in this for owners of riparian lands very positively.[57] Because all the land in the case was public land, in which none of the parties had any ownership, the latter miners, it was held, were not riparian owners and so could not resist the diversion. On this ground the "appropriation" for exclusive use was allowed, the ground being that it was from vacant public land; but the sanction which the Supreme Court conceded to resisting a diversion when private ownership of land appeared at the lower level, unless the diversion is for public use with compensation for any damage, was repeated throughout the California law from then until today, so extensively relied upon among country landowners that the courts have said: "These decisions have become and stand as a rule of

[57] Irwin v. Phillips (1855) 5 Cal. 140.

property."[58] Absorption into practice became by such declarations a fact incontrovertible either in the State courts[59] or in the United States Supreme Court,[60] coming thus within the usual guaranty against confiscation.

The Supreme Court of the United States would seem to have added its concurrence to this for California cases when it said in the year of the Water Commission Act: "It is not disputed either that if the plaintiff were the owner of riparian lands to which its water was distributed it would have a property in the water that could not be taken without compensation."[61] In the Supreme Court of California it has been often said that enactment for diverting streams without compensating lower levels for damage thereby done would be confiscatory and invalid.[62] Many rulings in other States similarly invalidate statutes impairing lower-level rights.[63] The much-discussed Pennsylvania case which held that when mining debris poured into the stream's headwaters the public interest in mining left the lower country areas without right of complaint, has lost standing in its own court.[64] "The doctrine of that case seems to have been rejected by every court to which it has been presented and it is believed to be contrary to an unbroken line of decisions in the United States and England."[65]

2. Since the Federal constitution's provision forbidding "any State" to confiscate applies whether the State confiscates by its statutes or its constitution,[66] abrogating compensation for lower levels for whom it has been established as a rule of property that compensation is due could evidently be reached only through the judicial power to retract the rulings that made the rule of property. If the situation

[58] Miller & Lux v. Enterprise Co. (1915) 169 Cal. 415, 444, 147 Pac. 567, 599; San Joaquin etc. Co. v. Worswick (1922) 187 Cal. 674, 203 Pac. 999.

[59] McDougal v. McKay (1914) 43 Okla. 251, 142 Pac. 987, 989.

[60] United States v. Title Ins. Co. (1924) 265 U. S. 472, 44 Sup. Ct. Rep. 621, 623, 68 L. Ed. 1110.

[61] San Joaquin Co. v. Stanislaus County (1913) 233 U. S. 454, 34 Sup. Ct. Rep. 652, 653, 58 L. Ed. 1041.

[62] City of Los Angeles v. Pomeroy (1899) 124 Cal. 597, 637, 57 Pac. 585; Miller & Lux v. Madera Co. (1909) 155 Cal. 59, 65, 99 Pac. 502; Palmer v. R. R. Com. (1914) 167 Cal. 163, 138 Pac. 997; San Bernardino v. Riverside (1921) 186 Cal. 7, 198 Pac. 784.

[63] Opinion of Justices (1919) 118 Me. 503, 523, 106 Atl. 865; People v. Hulbert (1902) 131 Mich. 156, 91 N. W. 211; St. Germain Co. v. Hawthorne Co. (1913) 32 S. D. 260, 143 N. W. 124, 127; Humphreys etc. v. Arsenaux (1922) 244 S. W. 280, 283 (Tex. Civ. App.); State ex Rel. Warsau Co. v. Bancroft (1912) 148 Wis. 124, 134 N. W. 330; 12 C. J. 960.

[64] Pennsylvania R. Co. v. Sagamore etc. Co. (1924) 281 Pa. 233, 126 Atl. 386, 391; McCune v. Pittsburgh etc. Co. (1913) 238 Pa. 83, 85 Atl. 1102.

[65] Bunker Hill etc. Co. v. Polak (1925) 7 F. (2d) 583, 585. Also Arminius Co. v. Landrum (1912) 113 Va. 7, 73 S. E. 459.

[66] 12 C. J. 956-957.

could be put back to where it was at the foundation of the State by overruling the decisions since then made, the rule of property might (perhaps) disappear. This the draft of the constitutional amendment originally proposed to do. As the Supreme Court held back, the measure proposed to make the constitution exercise that act of judicial power on behalf of the mountain installations without leave of the court. It proposed, in effect, to abrogate the common law respecting compensation to the owners of country property at lower levels by recalling all judicial decisions protecting it ever rendered.[67]

But this proposal was one of the first that the legislature eliminated; the recall provision went down at the first skirmish. If, therefore, request comes in the future to overrule anything, it is evident that it will remain, as it always was, an invitation to the courts to overrule themselves of their own volition.

Such invitation is occasionally accepted where there had been no great reliance on the old, as in percolating waters where the court premised that it was dealing with unsolidified matters;[68] (the change moreover was not away from the riparian principles but toward them). There are also contingencies where a rule of property once existing may have lost its reliance among the people and become a "dead letter," which perhaps the courts become released from following. A great mass of outworn rights are constantly being buried also by estoppel, laches, prescription and similar rules of repose. It would therefore be going too far to say what the Poet does of decrees of another source.[69] There are admitted exceptions in the human rule.

But it is probably correct to say that—such unsolidified or abandoned instances aside—the right to compensation as a rule of property, resting upon judicial decision (as in the present matter) throughout the State history, pledges the faith of the State to the owners of country property, under our system of stare decisis, against overruling by the courts as much as against spoliation in any other way. For a court to entertain a request for confession that it has been engaged for seventy-five years in persiflage which nobody took so seriously as to act thereon to any great extent, could hardly help reacting upon the court and put in question the extent of the

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[67] The way the proposal read, it was "intended also as a statement of the law as the same has existed continuously since by act of the legislature of California the common law of England was declared to be the rule of decision in all the courts of this state." Senate Daily Journal, March 4, 1927, p. 12.

[68] Katz v. Walkinshaw (1903) 141 Cal. 116, 132, 70 Pac. 663, 74 Pac. 766.

[69] "The moving finger writes; and having writ, Moves on, nor all your piety nor wit Shall lure it back to alter half a line, Nor all your tears wash out a word of it."

example upon all property. The loyalty of the courts to their functions will doubtless not permit expectation of it.[70]

3. No subject has greater danger to country neighborhoods than the insecurity, which their lower levels can never escape, of being dispossessed. Efforts to interfere with them without making compensation have given law upon streams its occasion for arising. This observation runs far back. Mr. Newell, formerly head of the United States Reclamation Service, says temptation of upper levels toward what he calls "stealing of water" is as old as agriculture itself. "The earliest known code of law found on fragments of ancient tablets attempted to deal with this matter."[71] It has, indeed, been suggested that until the invention of irrigation on a large scale the world really enjoyed some such Golden Age of peace as the poets describe; dissension first became general from coveting the well-watered lands of others. "Man was not driven into warfare by his instinct of pugnacity," says Elliot Smith in his *Evolution of Man*,[72] "but by the greed for wealth and power which the development of civilization itself was responsible for creating. Upon the banks of the Nile and the Euphrates extensive irrigation works had to be undertaken. This taught man to organize labor and prompted the idea of exploiting his fellow men . . ."

What we are every day learning of those places is bringing to light the small change of human nature. Little need be said concerning wildcat schemes that could be let loose by a release from paying for the ruin they bring to the country districts which they invade, nor concerning the profit for their promoters personally that has sometimes appeared to be their only noticeable accomplishment. Californians Incorporated, in its January bulletin, mentions "the old-time booster with his bluster and exaggeration." A bulletin of the California Department of Engineering has sufficiently recited their interesting history.[73] But even concerning legitimate projects, which, the

[70] "The mere fundamental precepts of the administration of justice, the providing of order and security, are priceless. The prime element in the value of all property is the public knowledge *that its peaceful enjoyment will be publicly defended.* If disorder should break out in your city, if there should be a conviction extending over any length of time that the rights of persons and property could no longer be protected by law, the value of your tall buildings would shrink to about the price of what are now water fronts of old Carthage or what are now corner lots in ancient Babylon." President Coolidge, at New York, November 19, 1925.

[71] Irrigation Management, by Newell, p. 61. The editorial in the Fresno Republican remarks also: "The people of this state generally are against water waste. We hope also that they are against 'water theft.'" Fresno Republican of November 17, 1927.

[72] Page 132.

[73] California Department of Engineering, Bulletin Number 2. With perhaps some such possibility of the measure in mind, an effort was made in the

Herminghaus case comments, "while fulfilling certain public utility functions, are nevertheless organized primarily for private gain," the Supreme Court points the obvious fact that the tendency of some promoters to oppose making compensation has its suggestion in the first instance in extending promotion profits.

There is, however, a further source of similarity to Smith's picture, which goes beyond private enterprises. The law reports throughout the country show the plight of families, villages and peaceful countrysides dispossessed in the search for more water by cities. But recently the Saturday Evening Post had an editorial containing the remark that "A few years ago it was New York, now it is Boston, and Los Angeles is almost always in the headlines for the same reason." We are finding, under our increase in size of undertakings, the same temptation to ruthlessness which Professor Smith ascribes to mass action when it first met individual rights in water matters.

Whatever advance the days in which we live have made is entirely founded, it is safe to say, in protecting the individual against this spirt of conquest, whether that spirit comes from private promotion inducements or from the urban attitude toward the country. The admiration of all of us goes out to the great public projects which we see going on around us. A country property-owner with his ranch, farm, orchard or home is, to be sure, out of comparison with a city of great population, a power distribution to a population even greater, or an irrigation district of a thousand times his area. But it is safe to say that the public today expects that these great public improvements will not be extorted from whoever happens to be living in the locality that is required, but that they will be publicly paid for.[74] Escape from making compensation for harm really done to lower country pretty surely holds the sympathy of accurately informed engineers and promoters as little as a few hit-and-run motor-

Senate to have the constitutional amendment specify, in effect, that if any rights turn out to be dispossessed by the measure the values dispossessed should not be claimed as value in the hands of the dispossessors afterwards.

[74] 17 Columbia L. Rev. 383, 394 (1917). A very clear-headed New York judge (Chancellor Kent in the leading case, Gardner v. Village of Newburgh [1816] 2 Johns. Ch. 162) in establishing very early in this country that those damaged by having water taken from them must have compensation for the loss to their lands, said that this is adopted by all temperate and civilized governments by a deep and universal sense of its justice. The law interposes against absolutely stripping one set of citizens for the benefit of some other set, and when the change is necessary it assures a *full indemnification and equivalent* for the harm done. This, he said, has been deemed of such importance that it has always been made the subject of an express and fundamental article of right for all property in our constitutions of government.

ists represent the morality of motoring. The judicial steadfastness against confiscation, while unpopular with some, will hardly be so with many.[75]

The probability, moreover, that the proposed constitutional amendment, as the legislature modified and shaped it, will result in giving the Herminghaus decision constitutional sanction rather than impair it, very evidently leaves only the memory of proposals which failed of inclusion for confiscation to discuss.

V.

The need of conforming to the judicial position upon indemnity, and injunction to secure it, continues therefore to indicate that any legislation supported by the measure will have to be such as will be consistent with what the Herminghaus case and like cases rule. In this respect, the eventual tendency of the amendment to arrive at legislation to declare the measure of indemnity may at the same time bring attention to a companion cause of irritation also legislatively remediable. This is that the terminability of injunctions by making indemnity was formerly confined to public utilities.

Between private persons the completeness of the injunction has often been irksome because the alternative of making indemnity was not available except for public use.

The way out of this was opened to legislation by decisions of the Supreme Court of the United States in a prominent line of cases.[76] These permit the State to declare, if it desires, that private water activity has enough aspect of public use to open the indemnification alternative for it. By this means the indemnification alternative in place of injunction can be made universal without restriction to public service companies. Such declarations by a State as the amendment's "beneficial use to the fullest extent capable," and "conservation with a view to the interest of the people and for the public welfare" are in line with the condition which the Supreme Court of the United States postulated for so ruling.[77]

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[75] "Procedure must be decided upon which will be fair to the riparian owner and also fair to the State program. Such procedure must permit the impounding of water in upstream reservoirs and at the same time protect the interests of riparian owners and other vested rights on the streams, *properly compensating them for any necessary interference with such rights.*" Paul Bailey, State Engineer, quoted in San Francisco Examiner, June 17, 1927.

[76] Clark v. Nash (1905) 198 U. S. 361, 25 Sup. Ct. Rep. 676, and numerous subsequent decisions reaffirming this leading case.

[77] In 2 California L. Rev. 408 (1914) is reprinted a Superior Court decision by Judge Farmer in Kern County, holding that the California act of

There is similar suggestion also from another source. Modern investigation has shown that the riparian law had its origin in France. The Code Napoleon enacted it in 1804, which was where its first formulation arose, not in England. The idea of English narrowness and that our courts followed it for technicality is seriously off the track.[78] It came to America by Kent and Story adopting it from the French Code, and from Kent and Story it went to England, getting there last not first; and when the upper level attacks upon its regard for lower levels, which we meet, arose in the French experience too, it is significant that supplementary statutes extending the indemnification alternative were found to be a practical solution. Considerable could be found from this source upon working out the details into which it develops.

It would not be going far to expect that the necessity of conforming to the judicial position regarding compensation may very possibly, in the end, bring legislation of this kind, with the proposed constitutional amendment's assistance.[79]

(To be concluded)

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1911, page 1407, covered the same ground as the statute in Clark v. Nash, and upholding an irrigation taking upon the ground of that statute and Clerk v. Nash. Authorities are collected in 1 Wiel, Water Rights in the Western States, 3 ed., §§ 607-614 (1911).

[78] 6 California L. Rev. 245 and 342 (1918); 33 Harvard L. Rev. 133 (1919).

[79] *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. (Printed in Cal. Stats. 1927, p. 2373, c. 67.)

"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 use; 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."