Comments

RECAPTURE OF RECLAMATION PROJECT GROUND WATER

In the conveyance, storage, or application of water a small percentage of the water inevitably percolates to the ground water basin.¹ This water is commonly termed "seepage."² Seepage which percolates to the subsurface is to be distinguished from "return flow" which appears on the surface after application.³ One of the most difficult questions in the area of return and seepage water rights is that of "title" to Bureau of Reclamation project waters which have percolated to the ground water basin after having been used by the landowner within the project. This question, of course, becomes increasingly important as our water supplies become more scarce. The determination of this issue is also of great importance to a controversial reclamation law dispute: whether the acreage limitations imposed by excess land laws⁴ apply to the *reuse* of subsurface seepage from reclamation project waters.⁵

The Bureau of Reclamation has not attempted to assert any right to subsurface seepage, apparently assuming it has no right to do so. It is the purpose of this Comment to show that the Bureau probably does have such a right to recapture and reuse project water and is unjustified in not asserting this right. To the extent that state law is significant, the law of California, representing a typical permissive approach to recapture, will be considered.

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THE RECLAMATION PROJECT A. The Reclamation Project in General

An individual landowner may obtain water from a local irrigation district. The district expenses incurred in obtaining its water supply will

¹ The ground water basin is simply a subterranean basin which is often filled with loose water-bearing materials.

² See United States National Resources Planning Board, State Water Law in the Development of the West 26 (1943) [hereinafter cited as NRPB, State Water Law]. As used in this Comment, "seepage" does not include water returning to the surface. This may be contrary to the definitions of others. See, e.g., Hutchins, The California Law of Water Rights 387 (1956).

³ The terms "seepage," "return flow," and "waste" are often loosely defined, and, therefore, definitions seldom coincide and overlap is inevitable. "Seepage," for example, is defined by some authorities as water which seeps through the soil and reappears on the surface. See Hutchins, op. cit. supra note 2, at 387. Water lost to the ground water basin is also often defined as "waste." See NRPB, State Water Law 24-25.

⁴ Section 5 of the original 1902 act, 32 Stat. 389 (1902), provides the initial acreage limitations. The currently applicable acreage limitation provisions are found in § 46 of the Ommibus Adjustment Act of May 25, 1926, 44 Stat. 648 (1926), 43 U.S.C. 423(e) (1958).

⁵ This latter dispute, the reclamation law question, has recently been explored by Professor Paul S. Taylor. See Taylor, *Excess Land Law: Calculated Circumvention*, 52 CALIF. L. REV. 978 (1964).

be paid from the tolls charged the individual users within the district or from special assessments levied on lands within the district or both.

One of the irrigation district's sources of water may be a Bureau of Reclamation project. Such project water will be subject to a number of federal regulations governing its use. The most controversial of these regulations is the acreage limitation.7 The acreage limitation of the Reclamation Law of 1902 and subsequent acts⁸ provide that lands in excess of 160 acres held by one individual shall not receive water from a federal reclamation irrigation project if the owner refuses to execute a valid, recordable contract for the sale of his excess lands.9 Similarly, an irrigation district is not entitled to delivery of project water until it executes a contract with the Bureau of Reclamation in which it agrees not to furnish "project waters" to excess lands of owners who have not signed the required recordable contracts.10 Thus, if seepage remains project water within the meaning of the reclamation laws, the Bureau of Reclamation must be assured that the excess landowner does not pump this water from the ground water basin without executing such a recordable contract. To insure against such pumping the Bureau could either recover the water itself¹¹ or insist that the irrigation district recover the water lost through seepage and redistribute it according to acreage limitation provisions.

Even if seepage is not project water for purposes of excess land laws, the Bureau should consider recapturing seepage for supplementing surface supplies in cases of shortage and for application on other projects. However, it is uncertain whether the Bureau of Reclamation has the legal right to elect to recapture project seepage.

⁶ See notes 86-88 infra and accompanying text.

⁷⁴⁴ Stat. 649 (1926), 43 U.S.C. 423(e) (1958).

⁸ Ihid.

⁹ In practice, a 10-year period is provided for disposal. The sale price, however, cannot exceed the approved appraised value of the excess lands made without reference to the proposed irrigation facilities. If the lands are not disposed of within the prescribed 10-year period the Secretary of the Interior is authorized to dispose of the lands at the appraised value. See 44 Stat. 649 (1926), 43 U.S.C. 423(e) (1958).

^{10 44} Stat. 649 (1926), 43 U.S.C. 423(e) (1958).

¹¹ Recovery by the Bureau would necessitate the acquisition or installation of surface wells which could be extremely costly. See Holsinger, San Luis Unit: A Report on the Feasibility of Water Supply Development 34 (1955). The plans for the San Luis Unit Project contemplate that approximately 400 existing wells be integrated into the distribution system. See Hearing Before Senate Committee on Interior and Insular Affairs . . . on Proposed Contract Between the Secretary of the Interior and Westlands Water District for Construction of a Water Distribution and Drainage Collector System in the San Luis Unit, Central Valley Project, California, 88th Cong., 2d Sess. 4 (July 8, 1964) [hereinafter cited as 1964 Westlands Hearing].

B. The San Luis Unit

Recently, the Bureau of Reclamation stated that the San Luis Reclamation Project¹² in the San Joaquin Valley of California will be administered without any claim by the United States to project subsurface seepage.¹³

The Water Service Contract between the United States and Westlands Water District, a special district occupying over three-quarters of the San Luis Unit Service Area, evidently represents what the Bureau of Reclamation thinks to be its legal position with regard to return and seepage waters. The contract reserves to the United States certain rights in return and seepage while apparently abandoning others.

The provisions in the contract dealing with recapture are section 9(c) and section 23(b). Section 9(c) states in part:

Provided that the United States reserves the right to the use of all waste, seepage, and return-flow water derived from water furnished to the District hereunder and which escapes or is discharged beyond the District's boundaries and nothing herein shall be construed as an abandonment or a relinquishment by the United States of the right to use any such water, but this shall not be construed as claiming for the United States any right, as waste, seepage, or return flow, to water being used pursuant to this contract for surface irrigation or underground storage within the District's boundaries by the District or those claiming by, through, or under the district.¹⁵

Section 23(b) provides:

If project water furnished to the District pursuant to this contract reaches the underground strata of excess land owned by a large land-owner [land not entitled to water under reclanation law] ... and the

¹² The San Luis Unit is a one-half billion dollar joint-use project of the United States Bureau of Reclamation and the State of California. The project is designed to service 500,000 acres in the northwest San Joaquin Valley. It will be a major addition to the Bureau's extensive Central Valley Project and to the California Water Plan in general.

The proposed construction of the project is in response to an urgent need of more than 400,000 developed acres for an imported water supply. Ground water now provides the only source of irrigation water (rainfall is less than 7 inches per year) and due to extensive irrigation the ground water table has been seriously overdrawn. Only a portion of the fertile area can now be irrigated in any one year. See Hearings Before the Subcommittee on Irrigation and Reclamation of the Committee on Interior and Insular Affairs, 85th Cong., 2d Sess. 11 (1958). See generally Holsinger, op. cit. supra note 11.

¹³ See Memorandum from Assistant Secretary of the Interior Kenneth Holum to the Secretary of the Interior, 1964 Westlands Hearing at 178. See Taylor, supra note 5, at 986, 991. See also note 23 infra and accompanying text.

¹⁴ See Memorandum from Assistant Secretary of the Interior Kenneth Holum to the Secretary of the Interior, 1964 Westlands Hearing at 178.

¹⁵ Westlands Water Service Contract, June 5, 1963, § 9(c), on file at the Bancroft Library, University of California, Berkeley. (Emphasis added.)

landowner pumps such project water from the underground, the District will not be deemed to have furnished such water to said lands within the meaning of this contract if such water reached the underground strata of the aforesaid excess land as an *unavoidable result* of the furnishing of Project water by the District to nonexcess lands or to excess lands with respect to which a recordable contract has been executed.¹⁶

The provision in section 9(c) stating that waste, seepage, and return flow within the district's boundaries are not claimed by the United States might be a meaningless clause inasmuch as it does not literally grant any rights in these waters to the district or to the individual landowners.¹⁷ So construed, any right the Bureau of Reclamation may have to return flow or seepage within the district's boundaries could still be asserted, irrespective of the contract.

Despite the inclusive language of Section 9(c), it is doubtful that the section was meant to apply to ground water. Because recapture is framed in terms of boundary limitations it is probable that the section was conceived from the well-recognized state law surface recapture notion that an irrigator has a right to recapture imported water as long as it remains on his property. With regard to percolating ground water within a basin, traditional state law extends a district's right in such water to areas underlying other districts, and, therefore, geographical limitations are inapplicable. Furthermore, rights to ground water are specifically covered by Section 23(b) of the Water Service Contract.

Section 23(b) of the Water Service Contract relates to ground water and contains the much debated "unavoidable clause." The section has been inserted in virtually all Bureau of Reclamation contracts¹⁹ since

¹⁶ Westlands Water Service Contract, June 5, 1963, § 23(b), on file at the Bancroft Library, University of California, Berkeley. (Emphasis added.)

¹⁷ Seepage can, of course, be disposed of by contract prior to abandonment. Haun v. DeVaurs, 97 Cal. App. 2d 841, 218 P.2d 996 (1950). Similarly, a district can recapture foreign return flow from a natural channel outside its boundaries when the first right is reserved by a contract with the lower district. Stevinson Water Dist. v. Roduner, 36 Cal. 2d 264, 223 P.2d 209 (1950). But it would not seem that a declaration of intention to abandon would irrevocably bind the declarant.

¹⁸ This is the rule in most states. See, e.g., Stevens v. Oakdale Irr. Dist., 13 Cal. 2d 343, 90 P.2d 58 (1939). See generally Hutchins, op. cit. supra note 2, at 397-401; Note, 11 Wyo. L.J. 39 (1956). Some states have enacted statutes to this effect. See, e.g., Mont. Rev. Codes Ann. § 89-122 (1947); N.D. Rev. Code § 61-0235 (1943). The Colorado rule, however, is to the contrary. Comstock v. Ramsay, 55 Colo. 244, 133 Pac. 1107 (1913).

¹⁹ The provisions involved are the same as those used for the past 18 years throughout the Central Valley Project in districts carrying on similar programs. See Statement of Ralph M. Brody, Manager-Chief Counsel, Westlands Water District, 1964 Westlands Hearing at 112.

The water service contract, executed on June 5, 1963, is the second contract between Westlands Water District and the United States. The first, the Distribution System Repay-

Section 46 of the 1926 Reclamation Act required that the contract with the district provide for delivery of project water only to nonexcess lands or excess lands which have been covered by recordable contracts.²⁰

At the present time over seventy percent of the lands within Westlands Water District—nearly one half the entire San Luis Unit Service Area—are ineligible to receive project water because of the excess land law. Yet, because the district overlies an underground basin,²¹ these excess landowners will be permitted to pump ground water which has been paid for by the eligible landowners. Professor Taylor has recently argued that besides being inequitable, allowing ineligible landowners to pump water "unavoidably lost" to the ground water basin circumvents federal reclamation law itself since such ground water remains project water.²² In the past, however, pumping of subsurface seepage has not been considered by the Bureau of Reclamation to be receipt of project water.²³

Whether or not water unavoidably lost is considered to be project water, there is nothing in the contract which abandons the federal right to recapture or limits federal control over such water. The contract provision merely provides that water unavoidably lost to the ground water basin is not to be considered project water. Thus it would seem that the Bureau of Reclamation is free to exercise any existing rights it may possess to recapture this subsurface seepage. This leaves the ineligible

ment Contract, executed on June 3, 1960, provides the terms for repayment to the United States of costs incurred in the construction of the distribution facilities and is the largest repayment contract ever negotiated in the history of the Bureau.

These agreements are required by 44 Stat. 649 (1926), 43 U.S.C. 423(e) (1958): "No water shall be delivered . . . until a contract or contracts approved by the Secretary of the Interior shall have been made with an irrigation district . . . providing for payment by the district . . . of the cost of constructing, operating, and maintaining the works . . . " The Bureau has required that the district hold a taxing power. This is, of course, to insure repayment.

^{20 44} Stat. 649 (1926), 43 U.S.C. 423(e) (1958).

²¹ See U.S. Bureau of Reclamation, Sacramento, Geology and Ground-Water Resources, San Luis Service Area, Central Valley Project 17 (1963).

²² See Taylor, supra note 5.

²⁸ See Letter of the Secretary of the Interior to the Committee on Interior and Insular Affairs, 1964 Westlands Hearing at 33. That letter provides: "The realization of this benefit seepage lost by irrigation has not been treated as the receipt of project water by such excess landowners, and while he is required under State law to pay for benefits received as a result of construction of the project, he has not been required to sign a recordable contract." But see Ivanhoe Irr. Dist. v. McCracken, 357 U.S. 275, 294 (1958). It is conceivable that the Court in Ivanhoe has indicated by way of dicta that water unavoidably lost to the ground water basin is not project water. The holding of Ivanhoe was merely that the possible benefit to the ground water basin was a sufficient benefit to the ineligible landowner to justify assessing him, along with eligible owners, for repayment costs. Ivanhoe Irr. Dist. v. McCracken, supra.

landowner's right to pump seepage subject to divestment by the United States if the United States can assert a right to recapture.

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FEDERAL "TITLE" TO WATER

In appropriating water for a federal project, the United States has usually complied with state appropriation procedures.²⁴ The water right, a mere right of use, obtained by the federal government vests in and becomes appurtenant to the private land within the project.²⁵ While the initial right of use is granted to the private landowner, the remaining "title" is retained by the United States.²⁶

In the often quoted case of Ickes v. Fox,27 the United States Supreme Court held that an appropriation by the United States for the beneficial use of private land attached to and vested in the land irrigated, and the United States "was and remained simply a carrier and distributor of the water . . . , with the right to receive the sums stipulated in the contract as reimbursement for the cost of construction and annual charges for the operation and maintenance of the works."28 It is quite clear, however, that Ickes v. Fox, does not deny the United States' right in project water which has been distributed to individual users.20 The Supreme Court in Ide v. United States³⁰ held that the government's right in the water furnished to the landowner attaches to his seepage, waste, and return flow, thereby affording the government priority in the use thereof for further irrigation. Federal cases have consistently held that the United States' right as a "distributor and storer" is supplemented by a right of recapture, enabling the project to mature its plans to make the most beneficial use of the water appropriated.81

²⁴ See Section 8 of the Reclamation Law, 32 Stat. 390 (1902), 43 U.S.C. 383 (1958); Ivanhoe Irr. Dist. v. McCracken, 357 U.S. 275 (1958). But see City of Fresno v. California, 372 U.S. 627, 630 (1963). The Fresno case subrogates state law to an inconsequential role when the federal acquisition is by eminent domain. It is possible that the case could be extended to abrogate the necessity of complying with state acquisition procedures in general.

^{25 32} Stat. 390 (1902), 43 U.S.C. §§ 372, 383 (1958).

²⁶ Ide v. United States, 263 U.S. 497, 505 (1924).

^{27 300} U.S. 82 (1937).

²⁸ Id. at 95.

²⁹ The language of *Ickes v. Fox* was never meant to hinder the United States in administering a project in accordance with the purposes of reclamation law. See Sax, *Problems of Federalism in Reclamation Law*, 37 U. Colo. L. Rev. 49, 62-65 (1964).

³⁰ Ide v. United States, 263 U.S. 497 (1924).

⁸¹ See, e.g., Nebraska v. Wyoming, 325 U.S. 589 (1945); Ide v. United States, 263 U.S. 497 (1924); Hudspeth County Conserv. & Rec. Dist. No. 1 v. Robbins, 213 F.2d 425 (5th Cir. 1954); United States v. Tilley, 124 F.2d 850 (8th Cir. 1941); United States v. Haga, 276 Fed. 41 (S.D. Idaho 1921); Ramshorn Ditch Co. v. United States, 269 Fed. 80 (8th Cir. 1920).

Although a right of recapture vests in the United States, it is not clear whether federal or state law governs the manner and extent to which recapture can be implemented. Courts will undoubtedly adhere to the law of the state when state law permits the project to mature its plans to develop project water. 32 This policy is in accord with the language of Section 8 of the Reclamation Act which provides that with regard to water within a state "nothing . . . shall be construed as affecting or intended to affect or in any way interfere with the laws of any state "33 But until a state actually demies a project the right to recapture, the real significance of state law will remain in question. While reclamation law does not attempt to vest the United States with greater "ownership" of appropriated water than provided by state law, it would be unwise to concede that section 8 will be allowed to impede the efficient operation of a reclamation project. Even if state law must be complied with when acquiring the water right, a proposition upon which there may be some doubt today, when the issue is the loss of a water right,34 state law will probably be subordinated to federal expediency. That is, the federal appropriation may actually entail greater rights of use than would a private appropriation. 35 The case of Ivanhoe Irrigation District v. McCracken 36 did much to emasculate section 8 by holding that Section 5 of the Reclamation Law, the acreage limitation provisions, could not be overridden by contrary state law. In Ivanhoe the Court felt that the Congressional policy pertaining to project operation required that conflicting state law be ignored.37

The most recent Supreme Court case construing section 8 is City of Fresno v. California.³⁸ In that case the Supreme Court denied Fresno's claim that section 8 required compliance with California statutes giving preference to domestic uses over irrigation uses and also refused to recognize state county of origin statutes to prevent acquisition of the water by the Bureau.³⁹ This decision, which may have other implications, can clearly be read as emancipating the Bureau from state law

³² See, e.g., United States v. Tilley, supra note 31, at 858-59, 861-62. See also Trelease, Reclamation Water Rights, 32 ROCKY Mr. L. Rev. 464, 466 (1960); Martz, Seepage Rights in Foreign Waters, 22 ROCKY Mr. L. Rev. 407, 421 (1950).

^{83 32} Stat. 390 (1902), 43 U.S.C. 383 (1958).

³⁴ See Ivanhoe Irr. Dist. v. McCracken, 357 U.S. 275 (1958); Nebraska v. Wyoming, 295 U.S. 40 (1935); Comment, 45 CALIF. L. REV. 763, 769 (1957).

³⁵ See Hutchins, Policies Governing the Ownership of Return Waters from Irrigation, U.S. Dept. Agriculture Tech. Bull. No. 439 34 (1934).

^{36 357} U.S. 275 (1958).

³⁷ Id. at 291. See also Goldberg, Interposition—Wild West Water Style, 17 Stan. L. Rev. 1, 35 (1964).

^{88 372} U.S. 627 (1963).

³⁹ Ibid.

in the distribution of project water, at least where the federal distribution is in accordance with well defined reclamation purposes.

Congress has not provided any regulation with respect to recapture. However, the Secretary of the Interior is authorized by reclamation law to adopt any regulation necessary and proper for the purpose of carrying out the provisions of reclamation laws.⁴⁰ As yet no regulation governing recapture of ground water has been adopted under this power, but it has been suggested that such regulations would be proper.⁴¹ In light of *Ivanhoe* and *City of Fresno* it would be unreasonable to contend that the Secretary of the Interior in regulating or administering a reclamation project is required to follow state law merely because Congress has not spoken. He should not let state law force him to neglect efficient project operation, conservation of water, or distribution of water in accordance with the defined purposes of reclamation law.⁴²

TII

SURFACE RECAPTURE OF FOREIGN WATER: STATE LAW

Although it appears that the importance of state law in reclamation controversies diminishes with each decision construing section 8, the absence of any defined federal policy with regard to recapture makes it apparent that state recapture decisions still have considerable vitality as applied to the Bureau of Reclamation.

The San Luis Water Service Contract reserves to the Bureau of Reclamation a right to recapture surface return and waste water outside the boundaries of Westlands Water District.⁴³ In most instances this will also be outside the project's boundaries. If California law were to be applied to such recapture, it is possible that such a right would be denied.⁴⁴ This is because foreign water once outside the project's boundaries may be deemed abandoned.

Water from a watershed other than the watershed where the water is applied, as is that imported by the San Luis Project, is termed "foreign water." In California, riparian and existing appropriative rights apparently do not attach to the return flow from this water. 46 The return

^{40 32} Stat. 390 (1902), 43 U.S.C. § 373 (1958).

⁴¹ See, e.g., Nebraska v. Wyoming, 325 U.S. 589, 635 (1945); Ide v. United States, 263 U.S. 497 (1924).

⁴² See Ivanhoe Irr. Dist. v. McCracken, 357 U.S. 275 (1958); City of Fresno v. California, 372 U.S. 627 (1963). See generally Sax, supra note 29, at 51-57.

⁴⁸ See Westlands Water Service Contract, § 9(c), on file at the Bancroft Library, University of California, Berkeley.

⁴⁴ See notes 56-57 infra and accompanying text.

⁴⁵ See NRPB, STATE WATER LAW 26.

⁴⁶ See HUTCHINS, THE CALIFORNIA LAW OF WATER RIGHTS 394-97 (1956). Whether there must be an independent appropriation has not been conclusively decided in California.

flow from foreign water which has been abandoned by the original appropriator is therefore subject to independent appropriation.⁴⁷ Abandonment is primarily a question of intent,⁴⁸ although possession is oftentimes the controlling factor.⁴⁹

Abandonment of "water particles"—the actual corpus of specific water—must be distinguished from abandonment of the "water right" the continuing right to use a certain amount of water.⁵⁰ Once water particles are abandoned they are no longer legally subject to recapture by the original appropriator, but a right to recapture water particles from later withdrawals is not lost simply because water particles were once abandoned. In the California case of Stevens v. Oakdale Irrigation District, 51 an irrigation district was permitted to recapture from a point within the district's boundaries foreign return flow used within the district. Although the district had abandoned such waters for twenty-two years, a right of recapture was held good against a lower landowner who had previously legally appropriated the return flow. In Stevens, the California Supreme Court stated: "When possession of the actual water, or corbus, has been relinquished, or lost by discharge without intent to recapture, property in it ceases. This is not the abandonment of a water right, but merely an abandonment of specific portions of water, i.e., the very particles which are discharged or have escaped from control."52

An intent to recapture water is essential to the right of a second use. If water escapes beyond the control of the initial user when he had no plans for reusing the water, he has abandoned those particles.⁵³ On the other hand, if the initial user contemplated recapture for a second beneficial use at the time he lost control, the intent to recapture is satisfied.⁵⁴ If the water particles are captured within the boundaries of the district

Riparian rights on a stream, however, do not attach to foreign return water which indicates that existing appropriative rights similarly do not attach. See Stevinson Water Dist. v. Roduner, 36 Cal. 2d 264, 223 P.2d 209 (1950); Bloss v. Rahilly, 16 Cal. 2d 70, 104 P.2d 1049 (1940); E. C. Horst Co. v. New Blue Point Min. Co., 177 Cal. 631, 171 Pac. 417 (1918). See also Crane v. Stevinson, 5 Cal. 2d 387, 54 P.2d 1100 (1936).

⁴⁷ See HUTCHINS, op. cit. supra note 46, at 393-97.

⁴⁸ See Wiel, Water Rights in the Western States 37 (3d ed. 1911).

⁴⁹ See, e.g., Eddy v. Simpson, 3 Cal. 249 (1853).

⁵⁰ See generally Hutchins, op. cit. supra note 46, at 286-88; Kinney, Irrigation and Water Rights 2005 (2d ed. 1911). See also Stevens v. Oakdale Irr. Dist., 13 Cal. 2d 343, 350-53, 90 P.2d 58, 62-63 (1939).

^{51 13} Cal. 2d 343, 90 P.2d 58 (1939).

⁵² Id. at 350, 90 P.2d at 61-62.

⁵³ See E. C. Horst Co. v. New Blue Point Mining Co., 177 Cal. 631, 171 Pac. 417 (1918); Davis v. Gale, 32 Cal. 26 (1867); Weel, op. cit. supra note 48, at 37; 89 A.L.R. 200, 204.

⁵⁴ Stevens v. Oakdale Irr. Dist., 13 Cal. 2d 343, 90 P.2d 58 (1939); Wiel, op. cit. supra note 48, at 38 and cases collected at n.9.

the right to reuse these particles is not lost provided there is a diligent reapplication to a beneficial purpose.⁵⁵ Whether the right to recapture extends outside the district's boundaries is still an open question. There is little reason to allow recapture within the boundaries of a district and to deny it without. The reason given in Stevens for allowing recapture within the boundaries of the district was that foreign return flow is the private property of an appropriator while it is in his possession. 66 If return flow can in fact be recaptured only when in the possession of the appropriator, no right of recapture outside the district's boundaries would be possible since possession of those waters has been lost. 57 In California, however, all water is owned by the public⁵⁸ and must be applied to beneficial uses at all times.⁵⁹ Thus, foreign return flows cannot be subject to private ownership. In fact, possession of water particles is authorized only when the water is being beneficially used. Since "ownership" or "possession" of the corpus of water are illusory concepts, it was illogical for the court in Stevens to base the right of recapture on such property notions. Thus, these reasons should certainly not be applied to forbid recapture outside the district's boundaries.

It is well established in California that an appropriator or riparian owner who could use or has been using foreign return flow, discharged from neighboring property, cannot compel a continued discharge. When the appropriated water is foreign water, later appropriators of its return flow are not actually harmed if the water is recaptured before it reaches them, since the water was developed by the prior appropriator

⁵⁵ Stevens v. Oakdale Irr. Dist., supra note 54.

⁵⁶ Stevens v. Oakdale Irr. Dist., 13 Cal. 2d 343, 352, 90 P.2d 58, 61 (1939). The water was actually recovered from a natural channel, but since the water could be identified it was still within the control of the original appropriator. See also Wiel, *Mingling of Waters*, 29 Harv. L. Rev. 137, 147 (1915); Hutchins, Selected Problems in the Law of Water Rights in the West 17 (1942); Cal. Water Code § 7075.

⁵⁷ But see City of Los Angeles v. Glendale, 23 Cal. 2d 68, 142 P.2d 289 (1943). The Supreme Court of California mentioned with approval United States v. Ide, 263 U.S. 497 (1926) and United States v. Haga, 276 Fed. 41 (S.D. Idaho 1921) which allowed recapture outside the district's boundaries.

⁵⁸ CAL. WATER CODE § 102 provides: "All water within the state is the property of the people of the State, but the right to the use of water may be acquired by appropriation in the manner provided by law." But see City of San Bernardino v. City of Riverside, 186 Cal. 7, 198 Pac. 784 (1921).

⁵⁹ Article XIV, section 3 of The California Constitution provides in part as follows: "The right to water or to the use or flow of water in or from any natural stream or water course in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water" See also Peabody v. City of Vallejo, 2 Cal. 2d 351, 40 P.2d 454 (1933).

⁶⁰ See Stevens v. Oakdale Irr. Dist., 13 Cal. 2d 343, 90 P.2d 58 (1939); E. C. Horst Co. v. New Blue Point Mining Co., 177 Cal. 631, 171 Pac. 417 (1918).

outside the local watershed and any increment to other users is, in a sense, simply a windfall. Thus, if the original appropriator can deny foreign return flow to these later appropriators by not importing the water, or by recapturing it within his boundaries, there seems to be no reason to bestow upon later users a right to a windfall simply because the original appropriator does not attempt to recapture the water until it is outside his boundaries.

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GROUND WATER RECAPTURE OF FOREIGN WATER: STATE LAW

Recapture of water lost into the ground water basin from irrigation seepage is an undeveloped phase of California water law. The extensive California Water Plan provides for widespread use of ground water reservoirs in conjunction with surface reservoirs and conduits. Mere storage in ground water basins is by statute considered to be a beneficial use of water if after recovery from storage, the water is applied to a beneficial use. The questions of "ownership" of water furnished by a federal project and "unavoidably lost" into the ground water basin are wholly unsolved.

Recapture of foreign seepage is roughly analogous to recapture of foreign surface return flow, and it can be argued that the principles governing surface recapture should also apply to subsurface recapture. However, to a certain extent recovery of percolating ground water poses different considerations, and, therefore, a categorical application of surface principals is not accurate. By analogy to surface recapture a project might be limited to recovering seepage remaining within the project's boundaries. However, because the surface boundaries of a project will not neatly coincide with the ground water basin, seepage upon reaching the ground water basin may be dispersed outside the project's boundaries⁶³ and the project may not have an opportunity to capture seepage while it is still within its boundaries. If the project is to be given an opportunity to reuse this appropriated water, surface

⁶¹ See Report of Department of Interior, Central Valley Basin, S. Doc. No. 113, 81st Cong., 1st Sess. 102 (1949).

⁶² Water Code § 1242 provides: "The storing of water underground, including the diversion of streams and the flowing of water on lands necessary to the accomplishment of such storage, constitutes a beneficial use of water if the water so stored is thereafter applied to the beneficial purposes for which the appropriation for storage was made."

⁶³ The movement of ground water is an extremely difficult area of Ground Water Hydrology. There are actually several types of subsurface movements ranging from very rapid and turbulent to nearly motionless. See Tolman, Ground Water 43-59 (1937). An understanding of such principles of hydrology is considered a necessity in ground water litigation. See Wiel, Law and Science: Their Cooperation in Ground Water Cases, 13 So. Cal. L. Rev. 377 (1940).

rules which might prohibit recapture outside the project's boundaries must be disregarded with respect to ground water.

To draw again from the law of surface recapture, it may be argued further that there is no right to recapture water "unavoidably lost" to the ground water basin because no control or possession has been retained by the project over the water.64 This point was argued in the California Supreme Court case of City of Los Angeles v. City of Glendale.65 In that case, Los Angeles brought suit against Glendale to establish title66 to water imported by Los Angeles from the Owens Valley which had found its way to the ground water basin by (1) direct charge for the purpose of storage and conveyance, and (2) as a result of seepage loss from irrigation by overlying landowners who had purchased the water from Los Angeles. The Supreme Court held that since the city imported the water and did not abandon it, it retained title to all the water. 67 As to the water directly inserted into the basin for storage and conveyance, the court relied upon California Water Code Section 7075, which authorizes the use of surface channels to transport water as long as no natural water is taken in the process.⁶⁸ Similarly, the court did not think that the water returning to the ground water basin as a result of private irrigation—the water sold to the farmers by Los Angeles was lost beyond the control of Los Angeles. 69 Control of the water was not lost because the water, "once within the basin, en route to plaintiff's

⁶⁴ It does not seem arguable that water contained in an underground basin is within the possession of the landowner. Normally the water will flow in the basin to a point outside his boundaries. But even if the water remains under his land it is not in any sense within his possession. In addition, unlike surface recapture from a stream, the water is not purposely discharged into the basin for conveyance. It is simply unavoidably lost, and, therefore, the control over the water is substantially less. The Supreme Court of California in Los Angeles v. Glendale, 23 Cal. 2d 68, 142 P.2d 289 (1943), however, held that there was no loss of control where there was a planned recapture and the basin was being used for conveyance. See also Wiel, op. cit. supra note 48, at 147.

^{65 23} Cal. 2d 68, 142 P.2d 289 (1943).

⁶⁶ It should be noted that the case did not permit recapture from outside the boundaries of Los Angeles, but, rather, only established Los Angeles' "title" to the water.

⁶⁷ City of Los Angeles v. City of Glendale, 23 Cal. 2d 68, 77-78, 142 P.2d 289, 295 (1943).

⁶⁸ Id. at 77, 142 P.2d at 294. The court also relied on cases permitting the use of streams and dry canyons for transporting water. See, e.g., Stevens v. Oakdale Irr. Dist., 13 Cal. 2d 343, 90 P.2d 58 (1939); Butte Canal & Ditch Co. v. Vaughn, 11 Cal. 143 (1858); Hoffman v. Stone, 7 Cal. 46 (1857).

If this analogy is pursued further, it can be concluded that a ground water basin can be used without constituting an interference or a taking of an overlying landowner's property. This conclusion follows inasmuch as surface canyons and stream beds which are privately owned can be used for conveying water. See Cal. Civ. Code § 830; Cal. Water Code § 7075. But see Cal. Civ. Code § 829.

⁶⁹ City of Los Angeles v. City of Glendale, 23 Cal. 2d 68, 76-77, 142 P.2d 289, 295 (1943).

diversion works, . . . was in effect within plaintiff's reservoir."⁷⁰ Since possession was retained, the water was not abandoned. The court again noted that if a stream can be used for conveyance, the same should hold true for the underground basin.⁷¹

Los Angeles v. Glendale is a strong indication that project ground water recapture is allowable under California law. To this, however, there are two disconcerting factors: (1) Los Angeles retained a considerable amount of control over the water since the conveyance was pre-planned, and, in addition, the water rights within the basin were wholly owned by Los Angeles; and (2) because Los Angeles owned all the water in the basin there was no problem of identification, commingling, or conjunctive operation of the ground water basin.⁷²

The identification problem introduces an issue that may play a significant role in ground water recovery.73 In the San Luis Project, for example, the Bureau of Reclamation presently does not intend to assert any right to subsurface seepage water.74 The Bureau apparently still believes that its engineers know of no way by which project water commingled with natural supplies can be identified.75 However, where water is introduced into the ground water basin for storage, the amount can be determined. The percentage of applied water which seeps into the ground water basin seems to be capable of estimate to within two to three percent. 76 If the amount of project water percolating to the ground water basin is thus calculable, the identification problem seems no more acute than if the water was purposely introduced for storage. Water lost to the basin could simply be treated similarly to water being stored by the project. Since storage of water underground is considered a beneficial use of water only when a beneficial surface use is contemplated upon withdrawal, the project would have to plan for recovery and reuse itself or permit private or district recovery.77

To protect a ground water right a project in some way would have to establish this right judicially. Probably only an adjudication of the rights of others in the entire basin would satisfy this requirement.⁷⁸ An

⁷⁰ Id. at 77-78, 142 P.2d at 295.

⁷¹ Thid.

⁷² See Krieger and Banks, Ground Water Basin Management, 50 Calif. L. Rev. 56 (1962).

⁷³ See Op. Leg. Counsel, 1957 A.J., 4034-35 (1957).

⁷⁴ See 1964 Westlands Hearing at 178.

⁷⁵ Id. at 179.

⁷⁶ Ibid.

⁷⁷ If the project did not intend to diligently apply the stored water to a subsequent beneficial use, "title" to that water would be lost by abandonment. See notes 51-55 supra and accompanying text.

⁷⁸ See Krieger and Banks, supra note 72, at 69.

adjudication would serve to determine the Bureau's right in the basin and would fix the rights of other claimants to the water within the basin. While the Bureau would have the right to all project water, other claimants to the basin will be entitled to withdraw only an amount of water which equals the "safe annual yield" of the basin. The "safe annual yield" of a basin is simply the amount contributed yearly, figured on an average of several years, by natural recharge. Such "decreed rights" would assure the Bureau of Reclamation of a constant water table level, thereby protecting the accessibility to water hypothetically stored by the Bureau within the basin.

Gronnd water litigation⁸¹ is expensive, complex, and extremely time consuming, but the absence of a streamlined procedure is not reason enough to prevent a full utilization of the ground water basin. A great deal of progress has been made in ground water investigations, data collection, and management, and in light of these advancements the commingling of percolating water should no longer be a prohibitive problem.⁸² The California legislature in authorizing underground storage certainly recognized the inescapable identification problem and was not dissuaded by it.

V

THE ROLE OF THE IRRIGATION DISTRICT

The irrigation district is a state agency acting for the landowners within the district.⁸³ The district is limited to receiving and distributing water to its constituent members.⁸⁴ Most existing irrigation districts

⁷⁰ City of Pasadena v. City of Alhambra, 33 Cal. 2d 908, 207 P.2d 17 (1949), cert. denied, 339 U.S. 937 (1950). If judicially established, these claimants would also be entitled to that amount of "seepage" which had resulted from the application of non-project water. 80 Id. at 927-28, 207 P.2d 30.

⁸¹ There are two procedures available for such an adjudication: An action pursuant to the Code of Civil Procedure, and an action initiated under the Code of Civil Procedure in which reference is made by the court to the State Water Rights Board. CAL. WATER CODE §§ 2000-50. Reference can also be made from the federal courts. CAL. WATER CODE §§ 2075-76. See City of Pasadena v. City of Alhambra, 33 Cal. 2d 908, 207 P.2d 17 (1949), cert. denied, 339 U.S. 937 (1950); HUTCHINS, op. cit. supra note 46.

⁸² See Krieger and Banks, supra note 72; Assembly Interim Committee Reports, Ground Water Problems in California, A Report of the Assembly Interim Committee on Water to the California Legislature, 29-33 (1961).

⁸³ See Cal. Water Code § 20570. An irrigation district is not strictly a "municipal corporation," Turlock Irr. Dist. v. White, 186 Cal. 183, 198 Pac. 1060 (1921), or a "political subdivision of the state," Wood v. Imperial Irr. Dist., 216 Cal. 748, 17 P.2d 128 (1932). The district is better described as a "state agency" through which water is put to a "public use." Fletcher v. Mapes, 62 F. Supp. 351 (N.D. Cal. 1945). See also Nev-Cal Elec. Sec. Co. v. Imperial Irr. Dist., 85 F.2d 886 (9th Cir. 1936); Williams v. Merced Irr. Dist., 4 Cal. 2d 238, 48 P.2d 664 (1935); Sutro Heights Land Co. v. Merced Irr. Dist., 211 Cal. 670, 296 Pac. 1088 (1931).

⁸⁴ See Williams v. Merced Irr. Dist., supra note 83; Turlock Irr. Dist. v. White, supra note 83.

were formed to furnish surface supplies and have not yet become involved in rights to percolating water. A maximum utilization of water resources requires, however, a coordination of surface and ground water supplies. Progress in this direction will be dependent upon the willingness and ability of irrigation districts to control and manage ground water basins.

The district as supplier and distributor is authorized to contract with the Bureau of Reclamation for water supplies. To meet its financial obligation with the Bureau, the district may obtain revenue by selling water to its landowners, and if such "toll" charges are inadequate, by making assessments on district lands. These assessments are levied on all lands within the district regardless of eligibility for project water as long as the land is in any way benefited. The courts are liberal in finding the requisite benefit, as, for example, where the water table is increased due to a decrease in pumping by eligible landowners. Between the courts are liberal in finding the requisite benefit, as, for example, where the water table is increased due to a decrease in pumping by eligible landowners.

The district is also burdened with repayment obligations to the United States for construction charges and distribution facilities.⁸⁹ Typically, repayment will be provided, in part, by a district land assessment and, in part, by an increase in the toll⁹⁰ charged to eligible users

⁸⁵ See Cal. Water Code § 23195; Ivanhoe Irr. Dist. v. All Parties & Persons, 53 Cal. 2d 692, 350 P.2d 69, 3 Cal. Rptr. 317 (1960).

⁸⁶ CAL. WATER CODE § 22280: "Any district may in lieu in whole or in part of levying assessments fix and collect charges for any service furnished by the district, including any and all of the following: (a) Use, sale, or lease of water, which may include a stand-by charge whether the water is actually used or not. . . ."

⁸⁷ CAL. WATER CODE §§ 25503, 25650 and 25652.

⁸⁸ Albonico v. Madera Irr. Dist., 53 Cal. 2d 735, 350 P.2d 95 3 Cal. Rptr. 343 (1960). A landowner can petition the district board for exclusion. Cal. Water Code § 26700. The petitioner is entitled to a hearing before the board. Cal. Water Code § 26725. The board is required to grant the petition when the "land will not be benefited by the operations of the district." Cal. Water Code §§ 26728, 26729. In such a proceeding the burden of proof is on the landowner seeking exclusion. Albonico v. Madera Irr. Dist., supra.

The benefit need only be indirect and California courts have been extremely liberal in this respect. Indirect benefit has been found when the benefit is a general increase in the neighboring property values. Santa Barbara County Water Agency v. All Parties & Persons, 47 Cal. 2d 699, 306 P.2d 875 (1957), rev'd on other grounds, 357 U.S. 275 (1958); Los Angeles County Flood Control Dist. v. Hamilton, 177 Cal. 119, 169 Pac. 1028 (1917). See also Ivanhoe Irr. Dist. v. McCracken, 357 U.S. 275, 296 (1958); Hobe v. Madera Irr. Dist., 128 Cal. App. 2d 9, 274 P.2d 874 (1954); Ralph, Inc. v. Shep, 106 Cal. App. 2d 65, 212 P.2d 27 (1958).

⁸⁹ Repayment for the distribution system is provided for in the Distribution System Repayment Contract which was approved by Congress on April 23, 1964. The contract provides for fixed semi-annual installments over a forty-year period. This contract is the largest distribution system repayment contract executed in the history of the Bureau of Reclamation, heing estimated at over \$157 million. See 1964 Westlands Hearing at 177.

⁹⁰ The total charge must, of course, be less than what it costs to pump ground water, otherwise all landowners would pump water. But since Westlands Water District is controlled by excess landowners it is evident that the excess landowners will exercise this con-

of surface water supplies. It has been vigorously argued that this repayment scheme is unjust because if the excess landowner is permitted to pump seepage water from the ground water basin without cost for use on his excess land, the small landowner using project surface water pays two charges toward repayment while the ineligible landowner only one, and both receive the imported water. ⁹¹ If the eligible landowner is required to pay a repayment charge for the use of surface imported water, it would seem that the excess landowner should contribute a similar sum for the use of the imported water, even though he pumps it from the ground water basin.

The irrigation district's function does not end when the water has been distributed to member landowners. The district is also obligated to conserve water within its control and assure that those who benefit from the water imported by the district will bear a corresponding burden. By statute the district is given broad powers of control over the water appropriated for the beneficial use of its inhabitants. The powers of the district apply only to water within the "control" of the district. It is clear that a district does not control water which it has abandoned. Similarly, water which another agency has power to control is not within the control of the irrigation district. With respect to federal project water, the project would possess the initial right of recapture. Only when this water has been abandoned or lost by the project would the district be able to assert control over it. The district's "control" would be dependent upon its right to recapture the water, in the absence of which the water would become part of the natural supply.

If the district could establish a right to recapture seepage it would follow that the excess landowner could be required to pay a "toll" for pumping it.⁹⁶ This type of charge would be authorized by Irrigation

trol by charging the highest possible tolls to the eligible owners in order to reduce assessments on their own land.

⁹¹ See Taylor, Excess Land Law: Calculated Circumvention, 52 CALIF. L. Rev. 978 (1964).

⁹² See Ivanhoe Irr. Dist. v. All Parties & Persons, 47 Cal. 2d 597, 306 P.2d 824 (1957), rev'd on other grounds, 357 U.S. 275 (1958).

⁹³ Water Code § 22078 provides: "A district may control, distribute, store, spread, sink, treat, purify, recapture and salvage any water... for the beneficial use or uses of the district or its inhabitants or the owners of rights to waters therein."

⁹⁴ CAL. WATER CODE § 22076. See also Stevens v. Oakdale Irr. Dist., 13 Cal. 2d 343, 90 P.2d 58 (1939).

 $^{^{95}}$ Stevens v. Oakdale Irr. Dist., supra note 94. See notes 52-56 supra and accompanying text.

⁹⁶ A "toll" charge should not be confused with a "pump tax" which is not within the powers of the district. A "pump tax" is an excise tax and can be levied on the use of natural supply of water. See Assembly Interim Committee Reports, Ground Water Problems

District Law which allows a district to charge for water supplied to landowners in order to meet certain obligations.⁹⁷

The irrigation district may also find it advantageous to actually recapture the water itself by operating pumping facilities and then redistributing it on the surface. Whether the district itself pumps the water or whether it allows overlying landowners to pump it, presumably the district must allocate the water in proportion to the last district ad valorem assessment, assuming the water is not federal project water which would cause the federal acreage limitation provisions to apply.⁹⁸

Water which seeps to the ground water basin may move laterally to an area outside the district allowing overlying owners to pump the water free of charge. As against those users, the district could probably obtain an injunction halting any pumping. This result would be clear were it not for the commingling problem which might ultimately require an adjudication of the rights in the basin. This type of situation makes apparent the need either to control ground water storage locally or to organize districts which correspond to the entire ground water basin. The same storage locally or to organize districts which correspond to the entire ground water basin.

CONCLUSION

It seems clear that California will allow seepage recapture in some instances. It is difficult to make any accurate predictions as to the exact instances since the matter has rarely been before the courts. Although

in California, A Report of the Assembly Interim Committee on Water to the California Legislature (1961).

When the rights to the basin have been adjudicated a "pump tax" cannot be levied on water pumped under such an established right. CAL. WATER CODE § 60350.

⁹⁷ CAL. WATER CODE § 22280.

⁹⁸ CAL. WATER CODE § 22250. See Ivanhoe Irr. Dist. v. All Parties & Persons, 47 Cal. 2d 597, 636, 306 P.2d 824 (1957), rev'd on other grounds, 357 U.S. 275 (1958). The first Ivanhoe decision indicates that section 22250 will apply regardless of whether or not the water is partially paid for by tolls. Previously, this had been questionable. See Willard v. Glenn-Colusa Irr. Dist., 201 Cal. 726, 258 Pac. 959 (1927). See also Ivanhoe Irr. Dist. v. All Parties & Persons, 47 Cal. 2d 597, 648, 651-53, 306 P.2d 824, 855, 856-58 (1957), (Gibson, C.J., dissenting), rev'd on other grounds, 357 U.S. 275 (1958).

There are two alternative methods of distribution, neither of which apply. Water Code §§ 23197 & 23200 in essence provide that water may be distributed in accordance with a contract with the United States or the rules and regulations of Congress.

⁹⁹ See notes 78-81 supra.

¹⁰⁰ See Krieger and Banks, supra note 72, at 69.

¹⁰¹ To change existing irrigation district boundaries to conform with ground water basins would be impracticable. The replenishment district, however, offers a better solution. A replenishment district could be superimposed upon the irrigation district structure with the purpose and powers to recharge and preserve the ground water basin. Such an agency is authorized only in seven Southern California counties. See Cal. Water Code §§ 60000-449. It is generally believed that this type of district could also serve urgent needs of northern counties. See Krieger and Banks, supra note 72, at 75-78.

the Bureau of Reclamation is in no way assured of a right to recapture seepage, it is no longer justified in maintaining the supposition that it has no such right to recover this water. When surface recapture principles are applied to ground water, the inevitable conclusion is that there is a way.

The Bureau of Reclamation, wishing to capitalize on this right, may find it less troublesome to require the irrigation district to recapture seepage and either return the water to the project or distribute it according to a contractual provision. In any event some attempt should be made to recapture and reuse the water in order to insure the greatest possible utilization of the Reclamation Project Waters.

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