Subterranean Blues: Groundwater Classification in California

By Andrew H. Sawyer^{*}

An adjudication: "need not determine the rights of users of all hydrologically-related water sources. As one authority has noted: '[s]cientists have long delighted in pointing out to lawyers that all waters are interrelated in one continuous hydrologic cycle. As a result, it has become fashionable to argue that an effective legal regime should govern all forms and uses of water in a consistent and uniform manner. The law is otherwise." (*United States v. Oregon* (9th Cir. 1994) 44 F.3d 758, 769 cert. denied (1995) 516 U.S. 943, quoting 1 Beck, Water and Water Rights (1991) § 6.02.)

"The notion of 'subflow' is significant in Arizona law, for it serves to mark a zone where water pumped from a well . . . should be governed by the same law that governs the stream. Yet the notion of subflow is an artifice . . . that rests on a hydrological misconception." (*In re General Adjudication of All Rights to Use Water in the Gila River System and Source* (1999) 195 Ariz. 411, 415 [989 P.2d 739, 743] cert. denied (2000) 530 U.S. 1250.)

"There will always be great difficulty in fixing a line, beyond which the water in the sands and gravels over which a stream flows, and which supply or uphold the stream, ceases to be a part thereof and becomes what is called 'percolating water.'" (*Hudson v. Dailey* (1909) 156 Cal. 617, 627-628 [105 P. 748, 753].)

"The pump don't work 'Cause the vandals took the handles." (Bob Dylan, Subterranean Homesick Blues)

I. Codification of the "Subterranean Stream" Classification

A. Classification of groundwater, based on whether it is part of a subterranean stream in known and definite channels, followed in *City of Los Angeles v. Pomeroy* (1899) 124 Cal. 597, 632-34 [57 P. 585, 598].

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- 1. Earlier cases recognized the subterranean stream concept the basis for classification. (E.g., *Hale v. McLea* 53 Cal. 578, 583-584 (1879).)
- 2. Pomeroy adopted formulation in Kinney on Irrigation (1894).
- B. Classification disregarded in later cases.
 - 1. *Katz v. Walkinshaw* ((1903) 141 Cal. 116 [74 Pac. 766])) defined groundwater rights in accordance with the same principles as surface water rights.
 - 2. *Hudson v. Dailey* (1909) 156 Cal. 617, 627 [105 P. 748, 753] adopted "common source" or "correlative rights" doctrine, providing that where surface and groundwater rights are interconnected, water rights are integrated:

[I]n the case of percolating waters feeding the stream and necessary to its continued flow . . . [t]here is no rational ground for any distinction between such percolating waters and the waters in the gravels immediately beneath and directly supporting the surface flow, and no reason for applying a different rule to the two classes, with respect to such rights, if, indeed, the two classes can be distinguished at all.

(Ibid.)

- C. Classification retained in Kinney's second edition. (1 Kinney on Irrigation and Water Rights (2d ed. 1912) § 323, p. 523; 2 *id.* §§ 1153-1165, pp. 2097-2118.)
 - 1. Kinney recognized the effect of recent California cases, but established a subcategory of percolating groundwater, "percolating waters tributary to surface waters," instead of abandoning distinction between subterranean streams and percolating groundwater. (2 *id.* §§ 1187, 1194, 2151, pp. 2163-2166)
 - Kinney's classification scheme included "subflow" or "underflow" as a subcategory of subterranean streams. (2 *id.* § 1161, pp. 2106-2110. See also *Maricopa County Municipal Water Conservation Dist. No. 1 v. Southwest Cotton Co.* (1931) 39 Ariz. 65 [4 P.2d 369] [adopting Kenney's concept of "subflow" for classification of Arizona groundwater].)
- D. Classification distinguishing between subterranean streams and percolating groundwater adopted in Water Commission Act. (Stats. 1913, ch. 586, § 42, p. 1033.)
- E. Classification followed administratively. (See, e.g., Decision 119 (1926) pp. 11
 ["Percolating waters may or may not be subject to appropriation [under the Water Commission Act] depending on whether or not they are flowing through a known

and definite channel."]; *id.* pp. 12-14 [following *Pomeroy*]; Decision 432 (1938) pp. 12-13.)

F. Classification Retained in the 1943 Water Code. (Wat. Code, § 1200):

Whenever the terms stream, lake or other body of water, or water occurs in relation to applications to appropriate or permits or licenses pursuant to such applications, such terms refer only to surface water, and to subterranean streams flowing through known and definite channels.

(Ibid.)

II. Effect of Classification

- A. The Water Code classifies groundwater to determine when a diversion from groundwater needs a permit from the State Water Resources Control Board (SWRCB), or is subject to the SWRCB's statutory adjudication authority. (See *id.*, §§ 1200, 2500. See also *id.*, §§ 1205, subd. (a), 5100, subd. (b).)
- B. Classification as subterranean stream has little effect on riparian or overlying users.
 - 1. If an overlying user is found to be pumping from a formation that is part of the stream, the user has an overlying right. (*Hudson v. Dailey* (1909) 156 Cal. 617, 626-627 [105 P. 748, 752].)
 - 2. The right of an overlying user may be better protected if the source is classified as a subterranean stream, because appropriations from the same source will be subject to the permit system.
 - 3. Classification as subterranean stream makes the water potentially subject to a statutory adjudication. (Compare *In re Waters of Long Valley Creek System* (1979) 25 Cal.3d 339 [158 Cal.Rptr. 350, 599 P.2d 656] [decree in statutory adjudication may assign a lower priority to unexercised riparian rights than to currently active rights] with *Wright v. Goleta Water District* (1985) 174 Cal.App.3d 74 [219 Cal.Rptr. 740] [court administering adjudication of groundwater not subject to statutory adjudication procedures cannot subordinate priority of unexercised overlying rights].)
 - 4. Classification of the source as a subterranean stream does not enlarge the overlying right, however. Ownership of land overlying the underground flow of a stream does not include a right to divert from the surface channel unless the parcel is contiguous with the surface channel. (*Anaheim Union Water Co. v. Fuller* (1907)150 Cal. 327, 332 [88 P. 978, 981].)

- C. Classification of the source as a subterranean stream has little effect on rights of appropriators initiated before December 19, 1914. The applicability of the permit system will help protect those rights when subsequent appropriations are proposed, and the waters are potentially subject to a statutory adjudication.
- D. Classification as a subterranean stream may have a substantial effect on rights initiated or proposed after 1914.
 - 1. Diverters cannot claim a prescriptive right. (Wat. Code, § 1225; *People v. Shirokow* (1980) 26 Cal.3d 301 [162 Cal.Rptr. 30, 605 P.2d 859].)
 - 2. The requirements of the water right permit system apply, including modern environmental requirements that may not have been in effect when a diversion was initiated.
- E. Many issues are not affected. Where Water Code provisions apply for other reasons, however, the potential for impacts on groundwater diversions that are not from a subterranean stream does not make those provisions inapplicable.
 - 1. The Water Code does not use the term subterranean stream to define "surface water" (Wat. Code, § 1200) or to define what constitutes a "natural channel" when surface water is being diverted. (See *id.*, 1201.)
 - a. A diversion from a river or lake or other surface water body is subject to the water right permit or license system, whether or not the bed and banks are sufficiently impermeable to meet the definition of subterranean stream.
 - b. Whether wetlands are considered part of a surface water channel may not depend on the presence of a subterranean stream. (Cf. 40 C.F.R. § 122.2 [definition of "waters of the United States" treating adjacent wetlands as part of surface waters they adjoin for purposes of the applicability of the federal Clean Water Act.].)
 - The SWRCB's investigatory and regulatory powers include the power to determine whether groundwater diversions that are claimed to be exempt from water right permitting requirements are in fact diversions from subterranean streams. (See Wat. Code, § 1051, 1052; cf. *Weinberger v. Hynson, Wescott, & Dunning, Inc.* (1973) 412 U.S. 609, 627 [An administrative agency's "jurisdiction to determine whether it has jurisdiction" is a power "essential to its effective operation"].)
 - 3. The classification of groundwater does not change the SWRCB's responsibility to consider impacts on groundwater of the activities it regulates, and does not limit the SWRCB's authority over permitted diversions.

- a. In reviewing applications to appropriate surface water, and in conducting statutory adjudications, SWRCB must consider impacts on interconnected groundwater. (See SWRCB Order WR 2000-13, pp. 25-26; SWRCB Decision 1614 (1987), p. 2.)
- b. Where a surface water diversion involves storage of water underground, the SWRCB's authority over the permittee includes authority to regulate the rediversion and use of the stored water. (See Wat. Code, §§ 1243, 1253; Cal. Code Regs., tit. 23, § 722.)
- The classification of groundwater is relevant to decisions under the portions of Division 2 of the Water Code governing water right permits and licenses and statutory adjudications. (Wat. Code, §§ 1200 et seq.; 2500 et seq.) This classification scheme does not apply to other sections. (See *id.* § 102, 1005.1, 5000, subd. (a), 13050, subd. (e), 60015, 3114.74, subd. (c), 71683; SWRCB Decision 1474 (1977) [Water Code section 275 applies to groundwater].)

III. Recent SWRCB Decisions

- A. Carmel River (SWRCB Order WR 95-14; SWRCB Decision 1632 (1995).)
 - 1. Proceeding arose from complaints filed between 1987 and 1991 against a water company diverting through wells, and an application for a new reservoir originally filed in 1982.
 - 2. The water company held rights dating back to before 1914, but the amount diverted far exceeded the amount that could be supported by its pre-1914 rights.
 - 3. By the time the hearing was held in 1994, there was general agreement that the aquifer was a subterranean stream. Despite the participation of many parties with unpermitted diversions from the aquifer, testimony that the aquifer was a subterranean stream was not contested. (Order WR 95-10, pp. 11-14.)
 - 4. Many protests were filed by parties diverting from the same aquifer, seeking a reversal of priority as between their diversions and the application before the SWRCB. The SWRCB included a term in the permit, allowing the protestants to apply for and obtain permits in the amount of their existing diversions, with a priority ahead of the permit issued on the 1982 application. (Decision 1632, pp. 41-50.)
- B. Garrapata (SWRCB Decision 1639 (1999).)
 - 1. Procedural Matters

- a. Superior Court order. (*Garrapata Water Co. v. SWRCB* (Super. Ct. Monterey County, 1998, No. 39441.)
- b. Proceedings focused on CEQA issues. (See SWRCB Order WR 99-08 [order on reconsideration].)
- c. Separation of Functions. SWRCB permitting team, subject to the same ex parte rules as other parties, presented evidence as to classification of groundwater. (See generally Gov. Code, § 11425.10(a) (4) & (8).)
- 2. Ruling on Subterranean Streams
 - a. Follows Pomeroy
 - b. Concludes that for there to be a subterranean stream, the following conditions must be present:
 - A subsurface channel must be present;
 - The channel must have relatively impermeable bed and banks;
 - The course of the channel must be known or capable of being determined by reasonable inference; and
 - Groundwater must be flowing in the channel.

(Decision 1639 at p. 4.)

- C. Pauma and Pala Basins. (SWRCB Decision 1645 (2002) [non-precedential decision; cannot be relied upon in SWRCB proceedings].)
 - 1. Hearing held in 1997 based on applications to divert from Pala and Pauma Basins along the San Luis Rey River. Applications filed in case the SWRCB determined the basins were subterranean streams. In 1992, the Chief of the Division of Water Rights issued a memorandum concluding the Pala Basin was a subterranean stream.
 - 2. Other Pauma Basin diverters protested the Pauma Basin applications.
 - 3. Separation of functions, with an SWRCB staff team participating in the hearing and presenting testimony, subject to the same ex parte rules as other parties.
 - 4. Decision put on hold.
 - a. Workshops on general issue of groundwater classification.

- b. Sax Report (Sax, Review of the Laws Establishing the SWRCB's Permitting Authority Over Appropriations of Groundwater Classified as Subterranean Streams and the SWRCB's Implementation of Those Laws (2002). Recommends that the SWRCB adopt formal regulations replacing *Pomeroy*/Garrapata bed and banks test with impact test.
- c. SWRCB immediately announces it will not follow Sax Report recommendation.
- 5. Decision issued, following *Pomeroy*/Garrapata test and applying test to conclude that Pala Basin is a subterranean stream, while there is inadequate evidence to establish that Pauma Basin is a subterranean stream.

IV. Modification of the Classification Scheme is Unlikely

- A. Expect the SWRCB to stick with the *Pomeroy*/Garrapata bed and banks test.
 - 1. With a long history of following the test and a large number of permits issued for diversions from subterranean streams, including over 300 permits on the Russian River alone, the SWRCB cannot abandon the concept and limit its review of subsurface diversions.
 - 2. Proposed alternatives are unsatisfactory, and would impact the stability of water rights.
- B. Courts are unlikely to change the concept either.
 - 1. Stare decisis. (Cf. *City of Los Angeles v. City of San Fernando* (1975) 14 Cal.3d 199, 232 [123 Cal.Rptr. 1, 25, 537 P.2d 1250, 1274] [Applying doctrine of stare decisis, concluding that reexamining water right doctrine at issue "would unjustly impair legitimate interests built up over the years in reliance on our former decisions."].)
 - 2. There is no clear path to a better approach. Short of expanding the concept of "subterranean stream" to include groundwater tributary to the surface stream, there does not appear to be any alternative that is clearly superior to the bed and banks approach. But a classification based on tributary groundwater is inconsistent with the language and legislative history of the Water Code, and would upset expectations of diverters relying on the current classification system.
- C. Don't expect help from the Legislature on the issue of groundwater classification.

- 1. The Legislature is reluctant to tackle California's groundwater management problem. See generally Trelease, *Legal Solutions to Groundwater Proglems A General Overview*, 11 Pacific L.J. 863 (1980).
- 2. When and if the Legislature addresses groundwater management, it need not, and probably will not, revisit the groundwater classification issue.
 - a. The areas where groundwater management is most needed are not areas that could be categorized as subterranean streams, and in large measure involve aquifers that would not be addressed even if administration of surface waters were expanded to include tributary groundwater.
 - b. Groundwater management legislation may simply adopt the current classification scheme, and establish a program for waters not covered by the current permit and license system. (See *id.* § 10752, subd. (a). [adopting subterranean stream concept for purposes of determining when groundwaters are not subject to local agency groundwater management plans].)