

**CERTIFIED FOR PUBLICATION**

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA  
FIFTH APPELLATE DISTRICT

NORTH KERN WATER STORAGE  
DISTRICT,

Plaintiff, Cross-complainant, Cross-defendant  
and Appellant,

v.

KERN DELTA WATER DISTRICT,

Defendant, Cross-complainant, Cross-  
defendant and Appellant;

CITY OF BAKERSFIELD,

Cross-complainant, Cross-defendant and  
Respondent.

F047706

(Super. Ct. No. 96-172919)

**OPINION**

APPEAL from a judgment of the Superior Court of Tulare County. Melinda M. Reed, Judge.

Young Wooldridge, Ernest A. Conant, Scott K. Kuney, Steven M. Torigiani; Best Best & Krieger, Arthur L. Littleworth, Gregoro K. Wilkinson and Jill N. Willis for Plaintiff, Cross-complainant, Cross-defendant and Appellant.

McMurtrey, Hartsock & Worth, Gene R. McMurtrey, Daniel N. Raytis, James A. Worth; Smiland Khachigian Chester, William M. Smiland and Theodore A. Chester for Defendant, Cross-complainant, Cross-defendant and Appellant.

Virginia A. Gennaro, City Attorney; Duane Morris, Colin L. Pearce and Matthew K. Kliszewski for Cross-complainant, Cross-defendant and Respondent.

North Kern Water Storage District (North Kern) appeals and Kern Delta Water District (Delta) cross-appeals from a judgment entered on retrial, after we reversed a prior judgment. The present judgment declared a forfeiture of certain previously appropriated waters of the Kern River. Plaintiff and appellant North Kern contends that the trial court erred in selecting the timeframes against which to measure nonuse of the water, that the court should have measured differently the nonuse of water by junior water rights holders, that the court erroneously precluded North Kern from asserting that senior rights holders' use of water was unreasonable, and that the court should have awarded the forfeited water to North Kern instead of declaring it available for appropriation through the statutory permit procedure. Defendant and appellant Delta contends the court erred in precluding its defense of estoppel and in measuring the forfeiture against Delta's full appropriation even when the river had insufficient water to provide the full appropriation. Respondent City of Bakersfield, holder of rights junior to some of Delta's rights and senior to North Kern's rights, generally supports the judgment entered on retrial.

As we will explain, we reverse the judgment.

### **I. Facts and Procedural History**

This matter was before us in case No. F033370 and a complete statement of the facts is contained in the unpublished opinion in that case, filed January 31, 2003. We will not repeat the facts here in that level of detail.

A. *Summary of Legal Principles from Prior Opinion*

The parties use water from the Kern River pursuant to rights originally established in the late 19th century. As with all water rights in California, exercise of the right is conditioned on reasonable use of the water for a beneficial purpose. (See Cal. Const., art. X, § 2.) In other words, the owner of the right to a quantity of water or to the flow of water (for example, for power generation) is not entitled to waste water or to use it unreasonably. (*City of Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224, 1241-1242.) The owner of a common law right<sup>1</sup> to appropriate water from a natural watercourse, such as the Kern River, has the right to change the purpose and place of use of the water, so long as any change does not injure others with rights in the watercourse. (See Wat. Code, § 1706.) (We refer to this as the no-injury rule. (See Slater, Cal. Water Law and Policy (1995) § 10.02, p. 10-8.)) Common law appropriative rights are freely transferable, subject to the no-injury rule and to the reasonable and beneficial use requirement applicable to all water rights. (*Id.* at § 2.18, p. 2-77.)

Water rights are a form of property and, as such, are subject to establishment and loss pursuant to the doctrines of prescription, adverse possession, and abandonment. (See *Smith v. Hawkins* (1895) 110 Cal. 122, 126.) In addition, however, due to the scarcity of water generally in California, its societal importance, and the peculiar nature of common and multiple rights to water from the same watercourse, the courts have recognized that water rights may be forfeited through nonuse under certain circumstances. (*Id.* at p. 127.)

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<sup>1</sup> A procedure for establishment and regulation of rights to appropriate water was adopted in the Water Commission Act (now incorporated, as amended, in the Water Code), which became effective in 1914. (See Wat. Code, § 1225.) Our discussion in the present case concerns only pre-1914 water rights. (See generally Hutchins, *The California Law of Water Rights* (1956) p. 86 et seq.)

Forfeiture of the right to appropriate water from a natural watercourse can be established through a quiet title or declaratory judgment action brought by one with a conflicting claim to the unused water, such as the owner of a junior right to use water from the same watercourse. In the present case, North Kern sued to establish that Delta had forfeited the portion of its appropriative right that exceeded Delta's historical use of the water.

A forfeiture may be of an entire water right, or the forfeiture may be limited to a portion of the water right or to a portion of the year, or both. (See *Smith v. Hawkins* (1898) 120 Cal. 86, 88.) In order to establish a forfeiture, the plaintiff must prove that the defendant failed to use some portion of its water entitlement over a span of five years immediately prior to the plaintiff's assertion of its conflicting right to the water. A portion of our remand in this case directed the trial court to determine the beginning and ending dates of this five-year period. (We will refer to the relevant five-year period as the forfeiture period.)

#### *B. The Forfeiture Methodology Established in the Prior Opinion*

Once it determined the forfeiture period, the trial court was directed to select the relevant increment of time in which to measure use and nonuse. (We will refer to the relevant period as the measurement period; the parties refer to this period as the "time-step.")

In our prior opinion we held that the measurement period must be based on the nature of the original appropriation and the historical beneficial use. (Slip opn. at p. 39.) Use during each measurement period, whether a month, day, growing season, or otherwise, is then to be compared across the forfeiture period. The amount forfeited, if any, is the difference between the highest use in any period within the span and the overall entitlement to water established by the appropriation, subject to certain refinements and limitations we will discuss in detail below. (Slip opn. at p. 41.) For example, if the trial court selected a monthly period of measurement and the defendant's

highest use of water in any February during the five-year span was 85 units of an initial appropriation of 100 units, a forfeiture of the right to divert 15 units of February water would be required. (See slip opn. at pp. 38-39.)<sup>2</sup>

In the last part of the 19th century, there were many irrigation companies with claims on the waters of the Kern River. Delta, Bakersfield, and North Kern each has purchased several of the separate appropriative rights. The individual rights owned by, for example, Delta have not merged into one another but continue to be measured separately, and each right has a distinct set of customers to whom Delta sells water.

Pursuant to common law, appropriative rights are afforded priority based on the date of their establishment. The appropriation that was first in time therefore had first priority to that quantity of water, and the priority of subsequent appropriators was similarly established. When the flow of the river is insufficient to satisfy all appropriative claims, each claim is entitled to its full appropriation before the next junior claimant becomes entitled to any water; in other words, there is no mandatory proration of water among appropriators when, as is usually the case, river flow is insufficient to fully satisfy all appropriations. (See *City of Barstow v. Mohave Water Agency*, *supra*, 23 Cal.4th at p. 1241.)

Delta is the owner of six separate appropriative rights that are involved in the present appeal. Delta's primary appropriation, known as Kern Island 1st (hereafter, Kern Island), is the most senior appropriative right on the Kern River and consists of a

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<sup>2</sup> Our prior opinion sometimes describes forfeiture in terms of the appropriative right lost, as in our example in the text, and sometimes in terms of forfeiture of all rights in excess of the amount beneficially used. (See slip opn. at 40.) For reasons we will discuss, *post*, we believe this latter description is more useful and less confusing; we ultimately will direct that any further determination of forfeiture be stated in these terms. Thus, in the example in the text, forfeiture would be of any right to divert more than 85 units.

right to divert 300 cubic feet per second (cfs) of river water.<sup>3</sup> Kern Island is senior to Bakersfield's appropriative rights and all six of Delta's rights are senior to the various rights owned by North Kern.

C. *"Paper" and "Theoretical" Entitlements*

As a result of litigation among certain of the predecessor irrigation companies, a declaratory judgment was entered in 1901, known as the Shaw Decree, which formalized the existing common law rights. (See slip opn. at p. 7.) That decree memorialized each appropriator's right in terms of cubic feet per second, a figure referred to as the appropriator's "paper entitlement." In addition, the decree established that at each particular stage of the river (that is, the flow of the river in its natural channel), measured daily at a fixed point, each junior appropriator was entitled to all, some, or none of the water for which it had appropriative rights, a figure referred to as an appropriator's "theoretical entitlement." Thus, under the Shaw Decree, an appropriator with, for example, a 100 cubic feet per second (cfs) paper entitlement might have only an 85 cfs theoretical entitlement when the river stage is 512 cfs, but a 100 cfs theoretical entitlement if the river stage is 527 cfs or greater.

In addition to paper and theoretical entitlements, an appropriator is entitled to divert water if a senior appropriator does not claim its entire allocation that day: When an appropriator has not diverted its entire theoretical entitlement on a given day, the excess water is "released to the river." In that case, the next most senior appropriator is

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<sup>3</sup> For purposes of this litigation, Delta has the right to the first 300 cfs of the river--that is, until the flow exceeds 300 cfs, no other appropriator has the right to divert water. In reality, however, there are other rights and claims to the Kern River that modify this right. For example, there is mention in the testimony that certain power generators have claims to the flow of the river and that in some circumstances this right to power their turbines impacts and reduces Delta's right to divert 300 cfs even when the natural flow exceeds that amount. Similarly, there appear to be evaporation and seepage amounts that must be satisfied before Delta is entitled to its full 300 cfs. Our recitation of facts is not intended to describe the parties' relationships with nonparty river users.

entitled to divert released water to, in effect, augment the stage or natural flow of the river; the junior appropriator then may divert water for which it has no theoretical entitlement, up to the full paper entitlement of that user. Any release water not claimed by a more senior user becomes available to the next junior user in the same manner until the water supply is exhausted.

#### *D. The Judgment of the Trial Court*

##### 1. Introduction.

The present litigation involves North Kern's claim that Delta has forfeited all or a portion of its appropriative rights through nonuse. After a trial to the court, judgment was entered in favor of North Kern. We reversed the initial judgment and remanded the matter for retrial pursuant to guidelines established in our unpublished opinion.

After preliminary hearings and briefing in the trial court, the trial court entered an extensive order designating issues for retrial and excluding other issues from the retrial. The court designated as the primary issues whether Delta forfeited any part of its entitlement, based on an appropriate methodology adopted pursuant to the guidelines in the prior opinion; North Kern's entitlement to any such water forfeited; and North Kern's claim for damages if Delta had been using forfeited water that belonged to North Kern. The trial court precluded retrial of all defenses to forfeiture except actual use pursuant to an appropriate methodology and, in particular, precluded Delta's proffered defense of equitable estoppel. The court precluded retrial of North Kern's constitutionally based cause of action for "unreasonable use" of water by Delta. Finally, the court precluded the City of Bakersfield from asserting any claim to water found to have been forfeited.

On the primary issue of forfeiture, the nature of the case changed somewhat at the retrial. In addition to its challenge to Delta's Kern Island right, which had been the focus of the initial trial and our prior opinion, North Kern also asserted a claim of

forfeiture directed to Delta's junior rights.<sup>4</sup> North Kern, in essence, contended release water was to be treated as ordinary river water subject to forfeiture by Delta's junior rights if not used by Delta when such release water became available to it. Delta argued that this forfeiture methodology would be unfair because in most instances a senior rights holder would have already forfeited the release water and North Kern's methodology would result in the "same water" being forfeited repeatedly and cumulatively, resulting in forfeiture of water that did not exist. Delta contended forfeiture could occur only from nonuse of a holder's theoretical entitlement, regardless of the water actually available to that rights holder.

2. Determination of Forfeiture Period and Measurement Period.

After a lengthy trial, the trial court issued a statement of decision establishing the forfeiture period. It determined that the period would comprise the years 1972 through and including 1976. The court also determined that the relevant measurement period would be monthly.

3. Resolution of Kern Island Issues.

With respect to the Kern Island appropriation, the trial court found a forfeiture in four months, applying the following reasoning: The Kern Island appropriation had a paper entitlement to any flow of the river up to 300 cfs per month. (For a month with 31 days, for example, this is equivalent to 18,446 acre-feet for the month.) The trial court reviewed the parties' compilations of diversion data to first exclude any month during the forfeiture period in which Delta used all of the Kern Island water available to it, on the basis that forfeiture can arise only from nonuse of available water. Then the

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<sup>4</sup> No party has questioned the use of the same forfeiture period for both the Kern Island right and the junior rights. While it appears to us there may have been no "clash of rights" as to the junior rights until North Kern asserted its claims after remand from this court, no party has raised an issue concerning the necessity of a different, much later forfeiture period for the junior rights.

court determined that during the forfeiture period Delta's greatest diversion of water (in those months in which it did not use all water available to it) was as follows :

January	8,493 acre-feet
October	6,989 acre-feet
November	3,375 acre-feet
December	2,050 acre-feet

The trial court then determined the maximum amount of entitlement for each month based on Delta's right to 300 cfs (for example, 18,446 acre-feet per month for the 31-day months of January, October, and December). Finally, the court subtracted the greatest amount diverted in any of the five Januaries, for example, in the forfeiture period, from the monthly entitlement. The result was the amount forfeited from Delta's Kern Island right for all future Januaries. The trial court concluded Delta had forfeited from its Kern Island right the following amounts for the designated months:

January	9,953 acre-feet
October	11,457 acre-feet
November	14,476 acre-feet
December	16,396 acre-feet

Thus, the court concluded Delta had not forfeited any of its primary water rights for the months of February through September, but had suffered substantial forfeiture in January and October through December of each year. In reaching this result, the trial court resolved issues identified and discussed in our prior opinion, and there were only a few matters about which the parties disagreed.

#### 4. Resolution of Junior Appropriation Issues.

When the court turned to possible forfeiture of rights from Delta's junior appropriations, it became apparent to the parties and to the court that there were serious methodological issues as to the junior rights that had not been presented or discussed in the prior appeal. Our earlier opinion provided general guidance about the law of

forfeiture but, with respect to the junior rights issues, the court and the parties were required to apply that general guidance to factual issues not contemplated in the first appeal.

There were two critical differences between the Kern Island right and the junior rights. These differences arose from the fact that for virtually every relevant month the flow of the river was such that the Kern Island paper entitlement equaled its theoretical entitlement, and both entitlements were the same as the volume of physical water actually available to Delta for diversion. Thus, for the Kern Island right, the concept of nonuse involved a straightforward comparison between Delta's actual diversion of water and the maximum entitlement reflected in the Shaw Decree.

The first critical difference for the junior rights is that for virtually every relevant month the theoretical entitlement for each junior right was less (and usually far less) than the paper entitlement for that right. (Stated differently, the river usually was at a stage insufficient to satisfy all claimants.) As a result, the question arises as to the entitlement against which actual use is measured to determine nonuse.

The second critical difference for the junior rights concerns the availability of release water. It will be recalled that for each stage (that is, level of measured flow), each rights holder has a theoretical entitlement. The theoretical entitlement at a given stage of flow does not change, regardless of what senior appropriators divert or do not divert. The amount of water a junior appropriator is entitled to take on a given day, however, may be greater than its theoretical entitlement if senior appropriators do not divert all water available to them. As we have seen, for Kern Island the issue is simply whether Delta did or did not use the full paper entitlement, which is almost always available to it. For junior rights, the paper entitlement is seldom available, and the theoretical entitlement is zero, but water released by senior rights holders is almost always available, often in quantities sufficient to satisfy a junior appropriator's paper

entitlement. As a result, the question arises whether the nonuse of available “release” water constitutes nonuse for forfeiture purposes.

After trial and extensive argument by counsel, the court determined that there would be no nonuse where a particular junior right had a theoretical entitlement of zero for a given month. Further, where release water was actually taken under a junior right and that right has a zero theoretical entitlement, available release water not actually claimed under the junior right (that is, released to the river by the junior right holder) would not be considered unused water subject to forfeiture by the junior right holder. Employing this methodology, the trial court determined there was no forfeiture from any of the junior appropriative rights owned by Delta, with one exception: the court found a forfeiture of 8,613 acre-feet for the month of August from the Farmers Canal Company right.

5. Disposition of “Forfeited Water.”

North Kern claimed that forfeited water should be awarded to it. Instead, the trial court declared that all of the forfeited water “reverts to the ‘public’ and is available for appropriation through the ‘permit procedures’ of the California Water Code, specifically Section 1241.”

*E. This Appeal*

North Kern filed a timely appeal and Delta cross-appealed.

**II. Discussion**

*A. North Kern’s Appeal*

1. The Forfeiture Period.

North Kern contends the trial court selected an inappropriate forfeiture period. In our earlier opinion, we stated that “the period selected must bear a direct temporal relationship to the time [North Kern’s] contrary claim [to the water] was made.” (Slip opn. at p. 35.) We stated: “[T]he appropriate five-year period must be no later than the five years immediately preceding 1976 ....” (*Id.* at p. 36.) By footnote, we added:

“We do not define the exact period of measurement but leave that for the trial court because we recognize there are other issues and evidence relevant to selecting the appropriate time period. Both parties represent that there were tolling agreements and earlier suits and objections arising from the clash of rights. These may well play a role in selecting the appropriate [forfeiture period].” (*Id.* at p. 36, fn. 37.)

In resolving this issue at the new trial, the court gleaned from our earlier opinion a requirement that the “contrary claim” (also referred to as a “clash of rights”) “must consist of: (1) a formal claim by a party to the lawsuit (or its predecessor in interest) providing notice to a prior appropriator that the claimant has a right to the prior appropriator’s entitlement based on nonuse by the prior appropriator and that the subsequent appropriator’s water rights have been interfered with, injured, or invaded by the original appropriator, and (2) an objection by the original appropriator to the subsequent claim of right.” North Kern objects to imposition of these requirements, contending that “the trial court was unable to cite any statute, case law or ruling from the Opinion directing it to apply this ‘test’.”

The trial court’s requirements follow logically from our prior opinion: Until there is a formal claim to the water, use is permissive. (Slip opn. at p. 27.) After such a claim to the water, a failure to object by the senior appropriator may well work an abandonment or commence a period of adverse possession but, in the absence of an objection (whether verbal or by the act of using the disputed water), there is no clash of rights sufficient to permit establishment of a forfeiture.<sup>5</sup>

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<sup>5</sup> In addition to its contention discussed in the text, North Kern also contends by means of footnote in its brief that the trial court erred in using the forfeiture standards of Water Code section 1241 instead of the more general requirement of Water Code section 1240 that an “appropriation must be for some useful or beneficial purpose, and when the appropriator or his successor in interest ceases to use it for such a purpose the right ceases.” The issue of the applicability of Water Code section 1241 was conclusively resolved against North Kern in our prior opinion and is not now open to a different

North Kern contends, however, that we acknowledged the apparent “ambiguity of the existing authorities on the subject” of the starting date for measuring the five-year period of nonuse and, accordingly, we could not have directed the trial court to use a formal claim-and-objection requirement. North Kern relies on an Idaho decision recognizing that mere use by a junior appropriator can begin the period of measurement for forfeiture purposes. (See *Sagewillow, Inc. v. Idaho Department of Water Resources* (2003) 138 Idaho 831, 839 [70 P.3d 669, 677].) The rule adopted by the *Sagewillow* court, that mere beneficial use of water by a junior appropriator constitutes a “claim of right” to the water, directly conflicts with this court’s prior holding that such use is permissive and does not constitute a claim of right. (See slip opn. at p. 27.) Accordingly, North Kern’s present argument is barred by the doctrine of law of the case. (See *Morohoshi v. Pacific Home* (2004) 34 Cal.4th 482, 491.)

North Kern next contends the trial court should have used a five-year measurement period beginning with 1971 and continuing through 1975. Instead, the court used a period beginning in 1972 and continuing through 1976. North Kern’s position is based on language in our previous opinion that stated: “Therefore, we believe the appropriate five-year period must be no later than the five years immediately preceding 1976.” (Slip opn. at p. 36.)

We conclude the trial court properly interpreted our holding in light of the evidence presented in the retrial. Although there was preliminary sparring between the parties as early as May of 1975 (when North Kern objected to Delta’s proposal to increase its usage), at that time Delta did not own the water rights in question and was merely negotiating and preparing for purchase of those rights. It is clear that there was a “clash” between the parties in 1975, but it was not a clash of rights, since Delta had no

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resolution. (See slip opn. at p. 32 (“The controlling law of forfeiture, for both pre- and post-1913 rights, is section 1241 and the interpretive case law.”))

rights at that time: Delta did not buy its water rights until December of 1976. At that time, but not before, the clash became a “clash of rights.”

North Kern suggests no reason why we would have, or the trial court should have, ignored the final year before there was a clash of rights, namely, January through December of 1976. Our directive, in essence, was to measure water use in the five consecutive years prior to the occurrence of the clash of rights or, as we phrased the matter elsewhere in the opinion, “the five-year span before the 1976 claim ....” We did not determine precisely when that clash of rights occurred, but we agree with the trial court that it occurred on December 23, 1976, when Delta’s purchase of the water rights became final. It was, therefore, reasonable and correct to include 1976 in the five-year measurement period.

## 2. The Measurement Period.

### a. *Why the measurement period matters.*

North Kern contends the trial court should have used two measurement periods per year, the irrigation season and the nonirrigation season. As our prior opinion showed, and as the trial court noted, the choice of a measurement period affects the overall level of forfeiture since the amount of forfeiture is the appropriator’s entitlement less the highest actual use in any of the five years. If a daily measurement is used, as North Kern points out, forfeiture is based on a worst-case scenario for each May 1, for each May 2, and so forth, even though the hottest May 1 is in 1974 and the hottest May 2 is in 1972. The result is a preserved entitlement higher than the amount Delta actually used in any given May.

Yet, as Delta argues, if a monthly measurement is used, there is a greater likelihood that the need on a particular May 1 will exceed the average daily use in the May of highest overall use during the five-year period. And if a seasonal measurement is used, it is virtually certain that daily usage during the hottest weeks of the season will exceed the average usage for the whole season. (See slip opn. at pp. 38-40.)

The evidence showed that the parties to this litigation, and their predecessors, have always accepted orders from their irrigation customers on a daily basis; the orders are in acre-feet. Therefore, in the case of Delta's right to appropriate and sell 300 cfs, it must know how many acre-feet per day its right will produce.<sup>6</sup> (It turns out this is about 595 acre-feet per day and, based on a 365-day year, 217,191 acre-feet per year. See [http://www.western-water.com/CFS\\_formulas.htm](http://www.western-water.com/CFS_formulas.htm), accessed Sept. 28, 2006.) This amount, 595 acre feet, is the maximum amount of water available to Delta each day pursuant to its primary right.

Water need on a given day for an agricultural irrigation customer is based on a number of factors. Based on such factors as temperature, rainfall, and type of crop and stage of growth, the farmer can estimate irrigation needs for the next day and place an order with the irrigation district.

Irrigation districts usually receive orders from agricultural customers a day in advance, although they will sometimes accept orders covering a two- or three-day period. The district must then look at its total of daily orders and determine which orders can be filled, based on the water likely to be available the next day.<sup>7</sup> In the case of Delta's primary right, if the total of daily orders is less than 595 acre-feet, assuming the flow of the Kern River is at least 300 cfs on that day, Delta is able to fill all orders.

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<sup>6</sup> The water right that became Delta's primary and senior right was originally established in the amount of 300 cfs. At some later point, the common measurement for water became acre-feet, that is, the volume of water required to cover one acre in one foot of water. This measurement is of a fixed volume of water, with no element of entitlement through time from a flowing or recurring source. Therefore, in order to quantify in acre-feet a right to 300 cfs, one must first assign a time period, whether a second, an hour, a day, or longer, for which to measure the flow.

<sup>7</sup> The stage of the river varies from day to day and throughout each night and day based on such factors as storms in the watershed or the temperature changes during the period. River stage is measured and recorded in real time, but flow for the next day or for a longer period is only an estimate.

If current orders total less than 595 acre-feet, Delta, historically, has any released surplus water for use by junior appropriators.

The composite of the needs of each irrigation company's farmers is likely to be different on, e.g., the first day of May in each of the five years in which forfeiture is to be measured. Similarly, the average of such need for water for each separate month of May in the forfeiture period is likely to differ from each other month, since each May will be warmer or colder and wetter or dryer than any other May in the period. And customer demand for the growing season is likely to differ from year to year across the forfeiture period, based not only on weather for each season, but upon crop choices informed by market factors and the district's forecast for availability of water that year.

The parties recognize, and we demonstrated by use of various examples in our prior opinion, that as the period of measurement increases, there is likely to be less fluctuation over the five-year forfeiture period. Thus, Delta's use at 11:37 a.m. on each May 1 is likely to vary more from year to year because the gate operators got to work early or late, had an extra meeting, or had a cup of coffee before they went out to open a gate--one year they may have opened a particular gate at 11:39 or 11:15, thereby affecting the total use of water at 11:37.

By contrast, these considerations become less important if use is measured for an entire day, since changes in routine are subsumed by getting the day's work done, even if one May 1 is hotter or cooler than another. Similarly, measured by month, daily temperature fluctuations are tempered through averaging. Measuring season-to-season, even the effects of a cooler than usual month will be moderated. Annual measurement would further temper the effects of an early start to a particular growing season or of a late harvest in a particular year. As noted above, if the amount of water right forfeited is determined on a monthly average, there is a greater likelihood the need on any particular day in the month will be above the amount of the unforfeited average. If nonuse is determined on a daily basis, however, a hypothetical year will be composed

only of high-use days and will preserve a volume of water use that is much greater than the amount actually used in any real year.

The negative effects arising from any measurement period, of course, reflect the simple fact that the river is not a mathematical abstraction that can be averaged: the river is a specific depth at each particular moment and water not used at the moment it reaches a canal gate is never available for use there again.

In the early days of irrigation in California, there was no significant ability to store large volumes of water as it flowed down from the Sierra Nevada. An appropriator whose needs were reduced on a particularly cool or rainy May 1 had no ability to save the water for use on a hot day in June. An appropriator had no right to roll-over its allocation or otherwise defer exercise of today's right of appropriation until tomorrow's need for water: the unused water was "released to the river" for immediate use by junior appropriators.

Accordingly, in terms of the law of water rights, water use was not averaged. An appropriator entitled to 300 cfs could take no more than that at any instant in time; it could not take 600 cfs for half as long on a particular day, because junior appropriators and other downstream users are entitled at any given moment to any flow over 300 cfs. However, because of variations in natural flow over the course of a day, releases are not precise. Notwithstanding the structure of water use prescribed by legal doctrines, as a practical matter appropriators make up lost use or overuse within informal limits; use by each appropriator is reconciled by the watermaster over the course of several days, so that shortages or overages from one day will be made up within a few days. Thus, practical necessity results in some averaging of measured use, but not to a sufficient extent to consistently make up for subaverage use on, e.g., May 5, with higher than average use on May 25. The selection of a measurement period therefore continues to affect the resulting finding of forfeiture.

After the construction of storage reservoirs in the first half of the twentieth century--in the present case, the Lake Isabella reservoir--appropriators had an increased ability to defer use of water. Depending on its available capacity in a reservoir, an appropriator could “release to storage” some or all of its unused, e.g., May 1 entitlement for later sale to its customers when demand exceeded its entitlement on that hypothetical hot day in June. (When the stored water is released to customers, it is not part of the river’s natural flow and does not count toward the appropriator’s current allocation of river water.)

If storage capacity were limitless and free of cost, the problem with averaging use over the measurement period largely would disappear. An “average” year’s volume of water could be distributed over the warmer and cooler months as needed, and water not needed in cooler, wetter years could be preserved.

Appropriators are required to pay for storage of water in Lake Isabella, and Delta’s maximum storage right is relatively small. Consequently, it does not serve Delta’s interest to attempt to store water that is not likely to be used relatively soon. The evidence in this case shows that Delta continued to release water to the river even after the construction of Lake Isabella.

The ability to store water lessens the effects of the choice of the period for measurement of use. However, to the extent appropriators continue to release water to the river, which the evidence shows to still be an extensive practice, the selection of a measurement period continues to affect the resulting finding of forfeiture for the same reasons existing before storage reservoirs became available.

b. *“Initial need and historical beneficial use.”*

As we have already stated, it appears from the record that, as a historical practice, the parties have used a daily measurement of entitlement. However, it also appears from the evidence that, at least during the forfeiture period, the parties did not retain the

records of use for each day but, instead, consolidated those daily records into monthly reports, which were preserved as the official records of the irrigation districts.

This court directed the trial court on remand to determine a measurement period based on evidence of “the initial need and historical beneficial use” of Delta’s primary appropriative right. (Slip opn. at p. 41.) Further, “[w]hen the nature of the initial beneficial use is linked to a particular time of day, a certain month, or a particular season of the year, the finding of forfeiture must also be thus linked.” (Slip opn. at p. 39.)

It is undisputed that the initial need and historical beneficial use of water from the Kern River was agricultural. And it is not disputed that agricultural use in the areas served by the parties is primarily seasonal. Finally, it is agreed that, since at least 1888, water was allocated among the various appropriators pursuant to a different formula during the growing season, as defined to include specified months each year, and during the nongrowing season, through a mechanism known as the Miller-Haggin agreement.

North Kern asserts that all of these considerations require as a matter of law the selection of a seasonal measurement period. It contends the trial court erred in adopting a monthly measurement period.

*c. Examination of the trial court’s “monthly measurement” reasoning.*

If water storage were limitless and costless, seasonal measurement might provide the fairest structure for determining forfeiture. As we have explained at some length, however, under actual conditions, measurement across an entire season will inevitably result in a greater forfeiture than measurement across a shorter period.

Forfeiture, as the trial court observed, is generally disfavored in the law. In particular, in the present context, forfeiture is neither punitive (such as civil forfeiture arising from criminal conduct) nor does it reflect any breach or default by a party to a contract.

In the water rights context, the rights holder is subject to forfeiture for *not using* water, a practice generally thought to be socially responsible and usually called “conservation.” Thus, forfeiture occurs not because the rights holder is misusing the resource but, instead, so the state can assign the water right to someone who will use it. As a result of these considerations, we agree with the trial court’s conclusion that, since no measure of forfeiture is exact, minimization of forfeiture is preferable to maximization: if there must be an error, it should occur in the direction of preserving to the senior appropriator a sufficient water entitlement to accomplish the purpose for which the appropriator continues to beneficially use the water.

The trial court weighed the evidence concerning the historical and beneficial use of Delta’s water right and determined that a daily measurement period would best protect Delta’s entitlement to a volume of water sufficient to meet historical uses. That is, the court impliedly concluded daily measurement would preserve an entitlement to enough water to fulfill orders for, e.g., the highest-use May 1 in the five-year forfeiture period and, thus, it was less likely the orders for water on any future May 1 would exceed that demand. Impliedly (but clearly, nonetheless), the trial court concluded that the fact that many, or even most, years the requirements on May 1 would be less than the peak demand, was sufficiently counterbalanced by the need to deem forfeited only the amount of water Delta had not ever used. This determination is supported by the evidence.

The trial court also found, however, that accurate daily records did not exist for the forfeiture period. It found as a fact that the parties maintained monthly records as part of their historical beneficial use of water for irrigation. Accordingly, the court weighed the parties’ historical practice as a consideration in determining the measurement period that fairly measured the potential forfeiture. The court adopted the monthly measure as providing the closest available basis for evaluating the parties’ actual daily use of water. That determination, too, is supported by the evidence.

d. *North Kern's objections.*

North Kern contends the court erred in selecting a daily use measurement as theoretically most appropriate (that is, appropriate except for the absence of records sufficient to implement that choice) because the initial need for water, pattern of use of the water, and historical beneficial use of the water was for seasonal irrigation. According to North Kern, evidence of “the current mechanics and frequency of water ordering and record keeping ... is irrelevant to the *pattern of initial need* and beneficial *use*” of the water.

One primary reason this court did not itself select a measurement period in our earlier opinion is that such concepts as “pattern of initial need” and “historical beneficial use” are concepts with broader and narrower meanings, more than one of which is valid. For example, the pattern of initial need could validly be viewed as the seasonal use necessary to bring a crop to maturity. But the pattern of initial need could equally validly be viewed as the daily need for water to sustain the growth of the crop until the next water becomes available. In this case, the evidence showed that irrigators determined need on a daily basis, even though that resulted in seasonal patterns of use. Ample evidence supports the trial court’s conclusion that daily measurement reflected the historical pattern of beneficial use of Kern River water.<sup>8</sup>

It is true that daily records do not exist for the relevant period. As a result, the trial court was forced to substitute the next-shortest measurement period for which there

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<sup>8</sup> North Kern also contends the seasonal measurement period would have been “appropriate” and would “more accurately” reflect historical usage. Even if this were true, and for reasons in the text we do not believe it to be true, our task on substantial evidence review is to determine whether the finder of fact’s conclusion is supported by the evidence, not to determine whether a different conclusion also would be supported by the evidence. “When two or more inferences can be reasonably deduced from the facts, the reviewing court is without power to substitute its deductions for those of the trial court.” (*Crawford v. Southern Pacific Co.* (1935) 3 Cal.2d 427, 429.)

are records, namely, calendar months. Not only was this choice reasonable, it did not prejudice North Kern: as shown above, each increase in the measurement period results in greater forfeiture through the effects of averaging. Because selection of a daily period was fully supported by the evidence, North Kern is not prejudiced by substitution of a longer period that works to its advantage.

### 3. Forfeiture of Junior Appropriative Rights.

The next issue presented by North Kern involves a calculation that was not overtly addressed in our previous opinion. Once again, it will be useful to pause for additional practical background before addressing, or even setting forth, North Kern's legal claim.

#### *a. Junior rights were not discussed in the prior opinion.*

Kern Delta and North Kern each owns multiple, separate water rights. Each right has, apparently for historical reasons, different customers for water taken pursuant to that right. Even though all six of Delta's rights are senior to any of North Kern's rights, records for both allocation and actual use are maintained for each right separately. In our prior opinion, we stated that "it is clear the parties are primarily fighting over the Kern Island rights, which have first priority and provide the measure for all [relevant] rights." (Slip opn. at p. 7, fn. 6.) Accordingly, our prior opinion discussed the issues arising from claims that Delta had forfeited Kern Island rights.

Nevertheless, the opinion recognized that Delta had an entitlement to more water than was available under the Kern Island right. That right resulted in a paper entitlement to 217,187 acre-feet per year. For rights junior to the Kern Island right, actual entitlement to water can differ dramatically from the right's paper entitlement, since the river's flow is seldom sufficient to satisfy all claims. Our prior opinion reported Delta's average consolidated entitlement as 250,277 acre-feet per year. Therefore, Delta had an average of about 33,000 acre-feet per year as a result of its junior appropriations, the equivalent of 45.5 cfs. On remand, the nature and use of this

water from junior appropriations became an issue, while it had not expressly been so on the first appeal. Accordingly, we will need to describe the manner in which the junior appropriations are allocated water on a daily basis.

*b. Entitlements of Junior Appropriators.*

In addition to the paper entitlement, the appropriative rights also have a “theoretical entitlement” at each stage of river flow. To calculate Delta’s theoretical entitlement for a given day for the Kern Island right and each of the five junior rights, one must determine the daily flow of the river, then allocate that flow down the chain of junior rights until the flow is exhausted or until all claims are filled. To use an example based on paper entitlements specified in the Shaw decree:

<b>Delta’s rights in order of seniority</b>	<b>Paper entitlement</b>	<b>Theoretical entitlement at river flow of 350 cfs</b>	<b>Theoretical entitlement at river flow of 550 cfs</b>	<b>Theoretical entitlement at river flow of 850 cfs</b>
Kern Island	300 cfs	300 cfs	300 cfs	300 cfs
Buena Vista	80 cfs	50 cfs	80 cfs	80 cfs
James	120 cfs	0	120 cfs	120 cfs
Anderson	20 cfs	0	20 cfs	20 cfs
Stine	150 cfs	0	30 cfs	150 cfs
Farmers	150 cfs	0	0	150 cfs
<b>Total for all Delta rights</b>	820 cfs	350 cfs	550 cfs	820 cfs

The evidence also showed that Delta’s actual average use during these periods was 225 cfs in the years that included the forfeiture period. In no year did Delta actually use an average of 300 cfs for a year from its Kern Island appropriation.

*c. The additional problems presented by junior rights.*

The primary focus of the parties' dispute about forfeiture of the junior rights arises from the substantial difference between the theoretical entitlement of a junior user and the volume of water actually available to that user on a given day. To continue with our example based on the foregoing table, assume that in a year of 350 cfs average flow, Delta used 200 cfs of Kern Island entitlement. Buena Vista has a theoretical entitlement to 50 cfs at that stage of river flow. But because Kern Island has released to the river 100 cfs of its entitlement, there is sufficient water physically in the river from which Buena Vista could satisfy and, as the next most-senior right, is entitled to satisfy its full claim of 80 cfs.

That much is relatively straightforward. But the matter becomes more complicated with each successive, junior right. James, as shown in the table, had a theoretical entitlement of zero at the 350 cfs stage of river flow. Nevertheless, James is entitled to all water left over from Kern Island and Buena Vista, up to its full paper entitlement. If we assume for purposes of this example that Buena Vista used only 25 cfs and released the remainder to the river, there would be 125 cfs (Kern Island's 100 cfs and Buena Vista's unused 25 cfs) of unclaimed water in the river. James would have an actual entitlement to its full 120 cfs, even though its theoretical entitlement at this river stage is zero.

Anderson, also with a theoretical entitlement of zero at the 350 cfs stage, would have at least 5 cfs available to it, and more if James did not use its entire paper entitlement of 120 cfs. We could continue our examples through all of the junior rights, but it is clear that if more-senior rights do not claim the Kern Island and Buena Vista release water, then even the Farmers right could have water actually available to it at the 350 cfs stage, even though it does not have any theoretical entitlement until the river stage reaches 671 cfs.

In our example, and in actuality, junior users have no right to demand that senior users release water to the river but, once the water is released by senior users, each successive junior user has the right to released water up to its maximum paper entitlement.

The point of the foregoing discussion is that in the prior appeal the parties did not present, and we did not decide, issues of forfeiture of *junior* appropriations. As can be seen from the foregoing discussion, the fact patterns are varied and complex; the legal issues have not been decided by any cases we or the parties have discovered. Those issues are the subject of North Kern's next contentions on appeal.

d. *Junior appropriators have an "actual entitlement" to available release water.*

North Kern contends the trial court should have considered all water available to each junior appropriator as its "actual entitlement," up to the amount of its paper entitlement. Thus, it contends the trial court should have included an appropriator's theoretical entitlement at a particular daily stage of flow as well as any water released by a senior appropriator that is available to the junior appropriator. It bases this contention on the simple proposition that the junior appropriator was "actually entitled" to water in the combined amount, and if the appropriator is actually entitled to the water, it is fair to measure its "actual entitlement" on the basis of the water actually available to it. It asserts this methodology is in accord with our directive that "what is forfeited is what is actually not used for the entire statutory five-year period ...." (Slip opn. at p. 38.)

The trial court concluded, and Delta contends on appeal, that release water cannot form the basis for measurement of actual entitlement because the amount of such release cannot be known in advance of the day of use. The trial court concluded:

“[B]asic principles of due process demand that prior to the loss of a right, knowledge of the right is essential.”<sup>9</sup>

We agree with North Kern’s position and conclude the trial court erred in this regard. The trial court’s conclusion would permit a dramatic windfall for Delta’s junior rights; its conclusion fails the essential requirement that water rights forfeited through nonuse “must be calculated by reference to the maximum quantity beneficially used” during the forfeiture period. (Slip opn. at p. 41.) Several considerations inform our decision.

*i. Constitutional limitations on ownership of water rights.*

The fundamental consideration is the nature of ownership of water rights under article X, section 2, of the California Constitution. Pursuant to that section, the extent of a water right is the reasonable and beneficial use of water diverted. (*City of Barstow v. Mohave Water Agency* (2000) 23 Cal.4th 1224, 1241.)

The section provides that it is self-executing but “the Legislature may also enact laws in the furtherance of the policy in this section contained.” (Cal. Const., art. X, § 2.) Section 1241 of the Water Code constitutes one way in which the Legislature has implemented the constitutional requirement that the extent of a water right is the reasonable and beneficial use of water pursuant to the right.<sup>10</sup> In essence, section 1241

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<sup>9</sup> Kern Delta also contends release water should not be subject to forfeiture because the watermaster accounts for this water separately, designating the theoretical entitlement as “entitlement” water and any order in excess of that as “release” water. We reject this contention: even though separately designated, all water diverted is subject to a particular right’s paper entitlement. Thus, a rightholder is not entitled to take unlimited water just because it is designated “release” water. For purposes of the right to take water, release water is simply a part of the current flow of the river.

<sup>10</sup> In the context of forfeiture claims, section 1241 provides express delimitation of the extent of reasonable and beneficial use. Accordingly, we reject North Kern’s contention that the trial court erred in prohibiting North Kern from litigating reasonable and beneficial use in the abstract as a separate ground for forfeiture. North Kern contends it was entitled to prove that Delta’s use of water in excess of its historical

provides that the extent of reasonable and beneficial use, when there is another claimant to the water, is the maximum use during the five-year period immediately prior to the assertion of the rival claim.

Thus, the California Constitution and the Water Code mandate a forfeiture analysis that reflects the actual, historical use of water.

*ii. The evidence in this case.*

The general considerations set out in the previous section are reflected in four specific aspects of the evidence; all four lead us to the conclusion that Delta's use of available release water must be considered in determining the issue of forfeiture.

First, unlike the full-season availability of water under the Kern Island right, "the other rights are at best a partial supply and are highly variable, and in no circumstance or very rarely would they have supply available during an entire growing season," according to Marvin Dan Schmidt, Delta's designated expert on usage of Kern River water rights. As a result, he testified, farmers served by the junior rights do not primarily rely on river water for irrigation: these farmers own their own wells and "more or less" supplement that irrigation water with river water. We conclude, therefore, that the "beneficial use for which the water was appropriated" (slip opn. at p. 37) did not depend upon predictable availability of water but, instead, the beneficial use was as supplemental water, useful despite its predictability.

Second, the testimony established that, when customers of a particular right ordered more water than was available on a given day, those orders were filled the next day or were filled from supplies of stored water. As a result, the uncertainty of the exact amount of release water available on a given day did not present a structural

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maximum use was unreasonable under the constitutional provision. As we discuss more fully, *infra*, the inquiry in a forfeiture proceeding is exactly the same as that proposed by North Kern, except that the statute limits the concept of "historical maximum use" to use in the five years prior to the clash of rights between rival water claimants.

obstacle to use of release water to fully satisfy the beneficial needs of the customers of the junior appropriators. In other words, over the course of the forfeiture period, nothing prevented the junior appropriators from using all the water they beneficially could, and the maximum amount of actual use during a measurement period establishes the base against which forfeiture is to be determined.

Third, during the entire forfeiture period, large quantities of release water were regularly available--enough, in fact, that North Kern was able to divert an average of approximately 63,000 acre-feet per year pursuant to its own appropriative rights, even though these were junior to all of the Delta rights. Therefore, there was an element of predictability not only from year to year, but also from day to day, that release water was likely to be available for use by the junior appropriators. Given the historical record, it is not correct to assert that junior appropriators and their customers did not know they had water available: both had access to a reasonable estimate of water available for several days in advance and, based on historical trends, had available an estimate of availability for the season that, if not precise, was far more than a blind guess. Further, Delta filled all orders from its junior rights customers whenever it had them, even if the theoretical entitlement was zero.

Finally, Delta's expert testified that, using the no-release-water methodology, the minimal level of forfeiture calculated for Delta's junior appropriations would permit those junior rights to divert, in essence, their entire paper entitlements, to the extent natural flow *or release water* was available. The witness testified he was aware of plans Delta had made for future use of additional river water for groundwater recharge purposes, thereby increasing use of the junior rights over historical levels.

For these reasons, we conclude as a matter of law that the actual entitlement of a junior appropriator must include all water in the river to which it has a right of access,

including release water actually available to it.<sup>11</sup> The next question, given this conclusion, is: what is the amount forfeited? On this the parties also disagree.

*e. The amount forfeited from junior appropriative rights.*

Delta argues that North Kern's proposed methodology not only forfeits water that did not exist, but that it also forfeits the same water repeatedly. A further example will help clarify Delta's claim that North Kern's methodology would result in multiple forfeiture of the same water. If we assume a river stage of 300 cfs and assume that Delta takes 200 cfs pursuant to the Kern Island right, Delta would forfeit the 100 cfs of Kern Island release. If Delta then takes 25 cfs pursuant to the Buena Vista right, it would forfeit 55 cfs of the same water when Buena Vista releases its surplus to the river, according to Delta's interpretation of North Kern's position. Then the James right would forfeit any of the physically-present 75 cfs that it failed to use, even though that is the "same" water already forfeited by Delta from the Kern Island and Buena Vista rights. One hundred cfs of actual, unused water would, in this view, produce a forfeiture of up to 230 cfs (assuming James diverted no water). Delta contends this methodology must be wrong, because it cannot forfeit water that is not actually in the river.

North Kern, by contrast, views the forfeiture as being not of water itself but of the right to divert water. Thus, in our example of a 300 cfs river flow, Delta (by using 200 cfs) can forfeit the right to divert 100 cfs under the Kern Island right, 55 cfs under the Buena Vista right (by using 25 cfs of the release water), and 70 cfs under the James right (if it diverted 5 cfs under this right), but these are three separate and not cumulative forfeitures. Thus, each right forfeits its right to use water from the same 100 cfs flow of the river, but the forfeitures are sequential: each right is exercised in turn

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<sup>11</sup> As noted above, "storage" water is not considered part of the flow of the river for forfeiture purposes.

with respect to water actually available to it, and it is the failure to fully exercise each right to the available water that is the cause of forfeiture.

Delta also contends North Kern's methodology, in addition to forfeiting the same water repeatedly, results in forfeiture of water that was never actually available to the rightholder. As an example of Delta's argument, assume Kern Island took 250 cfs when the river flow is at 350 cfs; then Buena Vista took 25 cfs from the remaining 100 cfs, leaving 75 cfs of physical water; and then James took 5 cfs of this water, leaving 70 cfs for junior appropriators. In Delta's view, North Kern's methodology would result in a forfeiture of 115 cfs from the James right (that is, its paper entitlement of 120 cfs less the 5 cfs it used). Delta argues that this is the equivalent of forfeiting 40 cfs of water that never existed, since it forfeits 115 cfs when only 75 cfs was ever available to it. North Kern, by contrast, explains that even though James never had available to it the full 120 cfs of its paper entitlement, James never used even the lesser quantity that was physically available to it. Because supply was not the limiting factor, in its view, James must forfeit its entire right in excess of what it actually used during the forfeiture period.

North Kern's methodology, in our view, correctly applies the law of water rights forfeiture, even though, at first glance, that methodology seems harsh and counterintuitive. Upon close examination, it is neither.

The problem with Delta's approach to this issue is that it views the forfeiture as being of physical water, which it is not. The forfeiture is of the right to divert water in excess of each appropriator's highest beneficial use during the forfeiture period.

The highest level of beneficial use, historically, established the limit of an appropriator's original claim, memorialized in this case as the Shaw decree paper entitlement. In circumstances like those in the foregoing examples, however, the paper entitlement has ceased to function as the limit on the rightholder's use of water; the paper entitlement is merely a historical artifact. Instead, the rightholder's need for and ability to beneficially use water during the forfeiture period has resulted in a new level

of maximum use. In effect, the law of forfeiture serves to *redefine* a paper entitlement based on the same measure that established the right in the first instance, namely, the “historical beneficial use.” (See slip opn. at p. 38.) But under the law of forfeiture, the “historical beneficial use” becomes the highest use during the five-year history encompassed in the forfeiture period when, as in our examples, such use was not constrained by the actual availability of water to divert.<sup>12</sup> What is forfeited is the unexercised portion of the historical paper entitlement; what is left to the rightholder is a new paper entitlement established in a more recent historical period.<sup>13</sup> In this sense, it does not matter whether an appropriative right was initially established at 200 cfs or 20 cfs; what matters is how much the rightholder beneficially used during the historical period specified by the forfeiture statute.

Forfeiture, then, is not forfeiture of water itself, as Delta suggests; as a result, there is neither double forfeiture of the same water nor forfeiture of water that does not exist, as Delta contends. Instead, what is forfeited is the right to appropriate water in excess of historical beneficial use as reflected in the forfeiture period.<sup>14</sup>

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<sup>12</sup> As pointed out in our prior opinion, this availability constraint may arise from climatic conditions (causing senior appropriators to use more, and release less, water) or from drought conditions that reduce the volume of water released by senior appropriators.

<sup>13</sup> That is why there is no forfeiture when an appropriator has used its full paper entitlement at any time during the forfeiture period: the appropriator’s original “historical beneficial use” is the same as the beneficial use established in the statutory “historical” period and its paper entitlement therefore remains the same. (Slip opn. at p. 39.)

<sup>14</sup> For clarity, when redetermining forfeiture in accordance with the principles we have set out, the trial court should express the resulting forfeiture, if any, in terms of forfeiture of “all right to divert water in excess of X cfs,” and not forfeiture of “the right to divert [paper entitlement minus X].” Thus, the conclusion in the trial court’s statement of decision that Delta forfeited 9,953 acre-feet of water for each January from the Kern Island right does not clearly state the court’s underlying, and correct,

It is not clear to us whether the data compilations in the record are sufficient to permit the trial court to redetermine forfeiture for Delta's junior rights without receiving further evidence. If sufficient evidence is already in the record to permit the trial court to apply the correct methodology after receiving points and authorities from the parties, we will direct it to do so; if the determination requires further data compilations or other evidence, the court will be directed to conduct such further hearings as are necessary. We reject the City of Bakersfield's request that we engage in this exercise of factfinding; although we are empowered to determine facts in some circumstances (see Code Civ. Proc., § 909), that power is seldom to be used (*Tyrone v. Kelley* (1973) 9 Cal.3d 1, 13), and certainly not given the extensive and complex findings required.

*f. The forfeiture period for junior appropriative rights.*

As discussed above, the goal of water-rights forfeiture law is to reallocate water rights to users who will put the water to reasonable and beneficial use. The Legislature in Water Code section 1241 and the Supreme Court in *Smith v. Hawkins, supra*, 110 Cal. 122, have established five years as a sufficient and appropriate period for assessing the level of beneficial use by appropriators with conflicting claims. As a result, our prior opinion concluded the forfeiture analysis must be made across a period of five consecutive measurement periods (e.g., Januarys) in which the senior appropriator's diversion of water was limited only by its needs and not by physical unavailability of water. When release water is included as "available water," as we have held it must be, the record shows there has almost always been sufficient water to supply the full needs of the customers of Delta's junior rights; in fact, there was still enough water left over after satisfying Delta's needs to permit North Kern to take an average of 63,000 acre-feet per year pursuant to its more-junior rights.

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conclusion that Delta has forfeited the right to divert water in excess of 8,493 acre-feet in any January under the Kern Island right.

In some instances, however, it may be necessary to work back from the 1972-1976 forfeiture period, as noted in our prior opinion, to ensure that supply of water has not artificially limited the exercise of a junior right, but those instances are likely to be few. The goal is to obtain an accurate picture of Delta's actual water use from a five-year history. As such, each monthly measurement period must begin in the year of the clash of rights, 1976. For example, data for the January measurement period, showing actual use less than available supply in all five Januaries back through 1972, may make 1972 through 1976 the forfeiture period for January measurements. Data for August, by contrast, might show that in 1973 and 1975, the right holder diverted the entire amount actually available to it, but 1970 and 1971 may show surplus water in excess of the appropriator's August diversions. In that case, the August forfeiture period would be 1970 through 1976, but only the five years within that consecutive span would contain Augusts with the relevant data. (The foregoing methodology is inapplicable, as stated in our prior opinion, when an appropriator has used its full paper entitlement at any time during the forfeiture period: if the appropriator has used its maximum paper entitlement at any time during the period, there is no forfeiture for that period. (Slip opn. at p. 39.))

#### 4. What Happens to the "Forfeited Water"?

North Kern's final contention on appeal is that the trial court erred in concluding that "all water forfeited by Kern Delta reverts to the 'public' and is available for appropriation through the 'permit procedures' of the California Water Code, specifically Section 1241." Once again, we largely agree with North Kern's position; once again, the problem seems to arise from viewing "water" as being forfeited when, in reality, the right to appropriate water is what is forfeited. (See *State of California v. Superior Court*

(2000) 78 Cal.App.4th 1019, 1023-1033 [extensive discussion of physical “ownership” of water vs. “ownership” of right to use and regulate use of water].)<sup>15</sup>

When a natural watercourse is fully appropriated, as the Kern River is, forfeiture of an appropriative right may or may not result in a new water right that can be awarded to an applicant through the statutory permitting system administered by SWRCB. That is, a river may be so oversubscribed by pre-1914 common law rights that any water released to the river by forfeiture of a senior rights holder will be claimed in full by existing junior rights holders. Even if the forfeiture results in the existence of new water rights that can be awarded by SWRCB, the fundamental first-in-time, first-in-right nature of appropriative rights means that a newly permitted SWRCB appropriative right will be junior to all existing pre-1914 rights.

Accordingly, the parties misconceive the relevant legal relationships to the extent that they picture Delta as forfeiting “water” that could, for example, be awarded to North Kern, loaded into tanker trucks, and delivered to its recharge fields. Or in the alternative, awarded to a permitted appropriator by SWRCB and delivered to the new appropriator. These misconceptions arise from conceiving of what is forfeited as “water” and not at “water rights.” In reality, water rights, and not water, is what is forfeited.

It may be recalled that the overarching goal of the law of forfeiture, in the context of water rights, is to reallocate legal entitlements in a way that reflects the actual reasonable and beneficial use of the water historically, using the five-year forfeiture period as the historical measure. In keeping with this goal, the result of a declaration of

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<sup>15</sup> In the present case, we reemphasize, all of the contending water rights are pre-1914 common law appropriative rights. The discussion that follows in the text is limited to such rights. We express no opinion concerning the ability of the State Water Resources Control Board (SWRCB) to reorder seniority of entitlements after forfeiture of statutory appropriative rights. (Cf. Slater, *op. cit. supra*, § 2.14, at 2.55.)

forfeiture in this case can be viewed as giving legal imprimatur to the established practices on the river, in essence, confirming to all users the amount of water reasonably and beneficially used during the forfeiture period, but no more than that.<sup>16</sup> If those resulting limitations on appropriation might result in a determination that the Kern River is no longer fully appropriated, that determination must be made by SWRCB on the petition of a potential appropriator of the excess. Any new permit for such an appropriation, however, will be “last in time” and, at least with respect to pre-1914 appropriators, last in right.

In summary, the trial court was incorrect in its finding that the forfeiture created unappropriated water subject to appropriation through the SWRCB process; instead, the initial determination whether the forfeiture creates an allocable excess is reserved in the first instance to SWRCB. All that can be said as a result of the present proceeding is that, where forfeiture has been found, Delta will be entitled to divert only its preserved entitlement for each right and in each month, as will be specified by the trial court on remand.

### B. *Delta's Appeal*

Delta raises two issues, both of which largely have been dealt with in the previous discussion of North Kern's appeal. First, Delta contends the trial court erred in precluding it from defending the forfeiture action with an equitable estoppel defense at the retrial. Second, Delta contends the trial court declared Delta had forfeited water that was never available to it for use.

#### 1. Equitable Estoppel.

Because of the constitutional requirement that water be used reasonably and for beneficial purposes, and the reflection of that requirement in the forfeiture provisions of

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<sup>16</sup> That is, North Kern's paper entitlements will not increase as a result of Delta's forfeiture, even though North Kern's access to water under its *existing* entitlements may increase.

Water Code section 1241, we hold that on the facts of this case equitable estoppel is not available to Delta as a defense.

As a general matter, equitable estoppel will not be invoked against a governmental entity to contravene specific constitutional or statutory limitations. (*Longshore v. County of Ventura* (1979) 25 Cal.3d 14, 28-29.) Here, even if the facts supported the contention, permitting the parties to freeze entitlement to appropriated water, regardless of nonuse by one of the parties, would directly contravene the important public policy embodied in Water Code section 1241 and California Constitution, article X, section 2, namely, that all water shall be used reasonably and for beneficial purposes.

Further, in the present case, assertion of a defense of equitable estoppel is precluded by the law of the case. First, Delta has not convincingly distinguished a defense of equitable estoppel (which was not, in those terms, rejected in the prior opinion) from the defense we described as “[creation of] an implied promise not to claim a forfeiture,” which we expressly found to be an unmeritorious defense. (Slip opn. at p. 29.) Second, in the prior proceedings before this court, and in testimony during retrial, Delta established that *lack of demand* was the cause of its failure to use all available water, not the purported assurance from North Kern that it would not assert a forfeiture. Any version of equitable estoppel requires the party asserting the defense to show that it acted to its detriment in reliance on the words or conduct of the opposing party. (See 13 Witkin, Summary of Cal. Law (10th ed. 2005) Equity, § 191, p. 527.) On the present record, Delta properly was prevented from attempting to show such reliance.

## 2. Forfeiture of “Unavailable Water.”

Delta contends the trial court erred in determining it had forfeited the amount of water between actual use and paper entitlement, even where there was insufficient water to supply the paper entitlement. As we have discussed above, this argument is based on

a misconception of the nature of forfeiture in this context. What is forfeited is the right to appropriate water in excess of the greatest use, as determined in the measurement period and the forfeiture period. Thus, it is a right to appropriate water, not water itself, that is forfeited, and the amount *not* forfeited is the greatest amount Delta has used under a given appropriative right at any time in the forfeiture period. Accordingly, Delta's claim that it has forfeited that which it never had an opportunity to use is without merit.

### **III. Disposition**

The judgment is reversed. The matter is remanded for further proceedings in accordance with the views expressed in section II (3), above. In addition, the trial court shall modify the judgment concerning the Kern Island appropriation to express the forfeiture in terms consistent with the discussion in section II (3), above. North Kern is awarded its costs on appeal.

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VARTABEDIAN, Acting P. J.

WE CONCUR:

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GOMES, J.

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HILL, J.