HERRINGTON V. STATE OF N.M. EX REL OFFICE OF STATE ENG'R, 2006-NMSC-014, 139 N.M. 368, 133 P.3d 258

CASE HISTORY ALERT: see ¶2, ¶51 - affects 2004-NMCA-062

ELLIS B. and LAVERNE HERRINGTON,
Petitioners,
v.
STATE OF NEW MEXICO ex rel.
OFFICE OF THE STATE ENGINEER,
Respondent.

Docket No. 28,628

SUPREME COURT OF NEW MEXICO

2006-NMSC-014, 139 N.M. 368, 133 P.3d 258

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ORIGINAL PROCEEDING ON CERTIORARI, V. Lee Vesely, District Judge

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JUDGES

RICHARD C. BOSSON, Chief Justice. WE CONCUR: PAMELA B. MINZNER, Justice, PATRICIO M. SERNA, Justice, PETRA JIMENEZ MAES, Justice, EDWARD L. CHÁVEZ, Justice

AUTHOR: RICHARD C. BOSSON

OPINION

BOSSON, Chief Justice.

{1} The Herringtons, long time irrigators in the Rio de Arenas Valley in southwestern New Mexico, applied to the New Mexico State Engineer for a supplemental well. The Herringtons claimed their surface right had been diminished by groundwater wells in the basin, having a priority date junior to the surface right of the Herringtons. Applying the principles of fairness that underscore the doctrine in *Templeton v. Pecos Valley Artesian Conservancy District*, 65 N.M. 59, 332 P.2d 465 (1958), the Herringtons sought to supplement their surface water rights with a well.

{2} We granted certiorari to clarify certain confusion that adheres to the *Templeton* doctrine generally, and as applied to this case by the district court and the Court of Appeals. We also briefly discuss the important distinctions that continue to exist between a *Templeton* well and a statutory transfer of water rights pursuant to state statute. We reverse and remand to the district court with instructions for further proceedings consistent herewith.[1]

BACKGROUND[2]

{3} The Rio de Arenas is a tributary of the Mimbres River in southwestern New Mexico, originating in the mountains northeast of Silver City. The Herringtons' history as irrigators in the Rio de Arenas Valley extends back many years as does the Herringtons' contentious history with the State Engineer. The Herringtons' relationship with the State Engineer began over 25 years ago, during the general stream adjudication of the Rio Mimbres stream system.

{4} During the adjudication, the Herringtons claimed a pre-1907 right to divert a total of 49.73 acre-feet of water per year from the Rio de Arenas, or 2.7 acre-feet per year per acre on their 18.42 acres of land. The State Engineer contested this claim, arguing that groundwater discharged through springs becomes baseflow in the Rio de Arenas. The State Engineer therefore likened the Herringtons' case to *Templeton,* and asserted the Herringtons had not only the right, but the responsibility to drill a supplemental well to preserve their right and avoid abandonment. As a result, the State Engineer concluded that the Herringtons were not actually using water in that amount and had abandoned their water right. *See Templeton,* 65 N.M. 59, 332 P.2d 465; *see also State ex rel. Reynolds v. South Springs Co.*, 80 N.M. 144, 452 P.2d 478 (1969). Ultimately, the State Engineer's abandonment argument was rejected, and the Herringtons prevailed in establishing a pre-1907 water right for 49.73 acre-feet of water per year.

{5} In 1982, on the heels of the adjudication, the Herringtons filed an application to change their point of surface diversion from the original point at the Frazier-Bateman Ditch to a 100-foot-deep well. In pursuing the application, the Herringtons relied on the

State Engineer's hydrologic assessment during the adjudication proceedings that their case was similar to the *Templeton* case, and therefore warranted a supplemental well. The Herringtons argued that groundwater pumping by upstream junior appropriators had diminished the surface water available at their existing point of diversion, thereby requiring the Herringtons to seek an alternative means of drawing water from the same source. The proposed well was to be located roughly a quarter mile downstream of the original diversion point, and would reach a depth of 100 feet. At this depth, the well would tap fractured sandstone and shale, or the "fractured bedrock aquifer," which underlies the alluvium. Potentially, the well could be screened to draw water from any depth down to 100 feet. No protests were filed with the State Engineer from neighboring well owners. Nonetheless, the State Engineer opposed the well, despite having suggested just such a well during the earlier stream adjudication.

{6} In 1983, the State Engineer denied the application. The Herringtons sought a hearing in front of a hearing examiner from the State Engineer. Inexplicably, the State Engineer did not set a hearing for eighteen years. At the 2001 hearing, the State Engineer reversed its position taken during the earlier adjudication and argued that the Herringtons' surface diversion consisted only of flood flows, and not of baseflow. The State Engineer also argued that the groundwater diversion would cause impairment to existing water rights owners, despite the fact that none of those other well owners filed a protest. Thus, according to the State Engineer, the Herringtons were not entitled to a supplemental well because the well would draw from a different source of water and comprise a new appropriation that would impair others. Agreeing with the State Engineer, the hearing examiner denied their application.

{7} The Herringtons appealed de novo to the district court as provided by NMSA 1978, Section 72-7-1 (1971). Both parties presented significant evidence regarding the effect of the proposed well on neighboring wells. The district court concluded that pumping at a rate of 49.73 acre-feet per year would impair existing rights, but pumping at a rate of 24.86 would not. Regarding the source of the Rio de Arenas streamflow, the Herringtons argued that the Rio de Arenas is a perennial stream fed by both flood flow and baseflow, and that a portion of the baseflow had been depleted by groundwater wells. The State Engineer argued to the contrary that the Rio de Arenas consisted only of flood flows, and is therefore an ephemeral stream. Significantly for the appeal before us, the district court accepted the Herringtons' view of the hydrology, finding that the Rio de Arenas is an interrupted perennial stream fed by baseflow, and that the Herringtons' supply had been diminished by local groundwater wells.

{8} However, the district court also appeared to find that at the proposed depth of 100 feet, the Herringtons' well would draw from a different source of water than that which supplied their original surface diversion. Finally, the district court found that moving the point of diversion to a downstream location conflicted with its understanding of principles announced under the *Templeton* line of cases, which permit a supplemental well under specific hydrologic conditions. As a result, the district court denied the application.

{9} The Court of Appeals affirmed the district court. The Court of Appeals agreed that both the topographic location and the depth of the proposed well would result in the Herringtons' access to a new source of water, and thus ran contrary to the *Templeton* doctrine. *Herrington v. State ex rel. Office of State Engineer*, 2004-NMCA-062, ¶¶ 13-14, 135 N.M. 585, 92 P.3d 31. The Court of Appeals also concluded that the Herringtons did not have a right to change their point of diversion to a groundwater well independent of the requirements of *Templeton*, even under statutory provisions. *Id*. ¶¶ 17-20; NMSA 1978, §§ 72-5-23, -24 (1985).

{10} The Herringtons petitioned for certiorari to this Court, arguing that theirs is a paradigmatic *Templeton* case, under which they have a legal right to a well that draws water from the same source that formerly fed the stream. The Herringtons argue that in rejecting the well application, both the district court and Court of Appeals misinterpreted the law surrounding the *Templeton* line of cases. Given the importance of the *Templeton* doctrine to water policy in New Mexico, we granted certiorari to address significant legal issues raised by this petition.

DISCUSSION

Templeton Doctrine

{11} Both parties agree that *Templeton* is the central legal authority for this case, and that the Herringtons must satisfy the *Templeton* predicates to be successful in their well application. *Templeton*, 65 N.M. at 68, 332 P.2d at 471, defines a specific hydrologic circumstance where junior wells intercept groundwater that previously discharged to the surface, thereby depriving a senior appropriator of their water right. To address this circumstance, this Court in *Templeton* fashioned an equitable remedy to allow senior surface water appropriators, impacted by junior wells, to timely reassert their priority by drilling a supplemental well. *Id.* Through the well, the senior surface right owner can supplement existing surface supply, if any, by drawing upon groundwater that originally fed the surface water supply. Although the New Mexico prior appropriation doctrine[3] theoretically does not allow for sharing of water shortages, the *Templeton* doctrine permits both the aggrieved senior surface appropriator and the junior to divert their full share of water. NMSA 1978, § 72-1-2 (1907).

{12} The only two cases decided by this Court in which the applicants were granted a right to drill *Templeton* supplemental wells are the original *Templeton* case, and *Langenegger v. Carlsbad Irrigation District*, 82 N.M. 416, 417, 483 P.2d 297, 298 (1971). Both parties here agree that a successful supplemental well application depends on whether the Herrington facts track *Templeton* or *Langenegger*. It is therefore important to understand the specific facts of these two cases.

{13} The applicants in *Templeton,* 65 N.M. at 61, 332 P.2d at 466, had surface water rights to the Rio Felix, a tributary to the Pecos River. The Rio Felix originated in the Sacramento Mountains and consisted of both flood flow and baseflow from the shallow aquifer, known as the Roswell Shallow Water Basin. The shallow aquifer underlying the

Rio Felix was composed of up to 215 feet of topsoil, sand, gravel, shale, clay, and boulders. *Id*. at 62, 332 P.2d at 466. In certain areas, and during periods of flooding, water levels in the shallow aquifer would rise to meet the stream bed and discharge baseflow, or groundwater, into the Rio Felix, creating a perennial, interrupted stream. *Id.*

{14} As groundwater pumping in the area increased, the amount of baseflow decreased. *Id*. To supplement their decreasing surface water, the Templetons sought a supplemental well to tap into the shallow aquifer, and thereby obtain the full amount of their appropriation. *Id*. at 61, 332 P.2d at 466. Based in part on principles of fairness, we approved the well, holding that:

> Applying the foregoing principles to this case would lead to the conclusion that the appellees were entitled to the waters of the Valley Fill that flowed into the Rio Felix at the time of their [surface] appropriation. It seems that there is nothing in the law that would prevent them from following this water through an application for a change of point of diversion, provided that it does not impair any other existing rights. *In other words, their applications do not amount to a request for a new appropriation in the underground water basin, but merely a request to follow the source of their original appropriation*.

Id. at 68, 332 P.2d at 471 (emphasis added).

{15} *Langenegger*, 82 N.M. at 417, 483 P.2d at 298, the second case permitting an applicant to drill a *Templeton* supplemental well, represents a narrow, fact-specific corollary in which we expanded the *Templeton* doctrine. The applicants in *Langenegger* were appropriators of surface water from the Pecos River. Two aquifers underlie the Pecos River: the shallow aquifer, and the deeper artesian, or pressurized, aquifer. The Pecos Red Beds, a semi-confining layer, separates the two aquifers by restricting the flow of water from one aquifer to the other. *See id.* at 417-18, 483 P.2d at 298-99. Surface flows consisted both of flood flow and baseflow, which had diminished substantially due to withdrawals by local wells. The applicants proposed to tap the deeper aquifer to meet their shortfall.

{16} Evidence at trial established that there was upward leakage from the artesian aquifer to the shallow aquifer. This leakage ultimately fed the surface flow by virtue of the hydrologic connection, even though the connection was indirect. This Court found for the applicants. Because the artesian aquifer was an indirect source of the Pecos River at the location where the groundwater well was proposed, the requirements of *Templeton* were satisfied. As a result, we allowed the senior appropriator to install the well and draw from the artesian aquifer. The artesian basin was hydrologically connected to the shallow basin, and thus, to the surface.

{17} Aside from the unique circumstances of *Langenegger*, the remaining cases emphasize the narrowness of the original *Templeton* requirements. *See Brantley v. Carlsbad Irrigation Dist.*, 92 N.M. 280, 587 P.2d 427 (1978)*; Kelley v. Carlsbad Irrigation Dist.*, 76 N.M. 466, 415 P.2d 849 (1966). In *Brantley* and *Kelley*, we carefully analyzed

whether groundwater actually fed the surface as baseflow, and whether the proposed *Templeton* well would draw from the same groundwater source of the original surface diversion. Both the New Mexico Attorney General's Office and the Interstate Stream Commission, amici curiae in this case, emphasize the importance of the *Templeton* baseflow requirement, and we take this opportunity to explore the baseflow requirement through the lens of *Brantley* and *Kelley*.

{18} Baseflow is that portion of streamflow coming from groundwater that discharges into a stream or river. Where the groundwater table intersects with the ground surface, groundwater discharges to the surface and becomes surface water in the form of wetlands, lakes, streams, or springs. This often occurs at the lower elevations of a valley. Baseflow provides a consistent contribution of groundwater to perennial rivers, and is the primary source of stable streamflow between rainstorms.

{19} A corollary to the baseflow requirement in *Templeton,* 65 N.M. at 61, 332 P.2d at 466, is that neighboring wells reduce surface flows by intercepting groundwater that, but for the interception, would still discharge into the surface stream. If the stream derives its flow only from flood waters, and not from groundwater, groundwater wells in the area would have no effect upon the streamflow.

{20} The baseflow requirement was pivotal in *Kelley* and *Brantley*, both of which involved applications for *Templeton* supplemental wells that were ultimately unsuccessful. The applicant in *Kelley* operated a farm near the Hondo River, downstream of the Hondo Reservoir. *Kelley*, 76 N.M. at 470, 415 P.2d at 853. The Hondo Reservoir was part of a federal project to divert and store water from the Hondo River, and then release to downstream irrigators. However, the reservoir contained holes and most of the diverted water quickly infiltrated into the Roswell Artesian Basin. *Id*. at 467, 415 P.2d at 852. Mr. Kelley sought a permit to divert Rio Hondo surface flow into the abandoned reservoir, and install a well to capture the water that percolated into the ground.

{21} This Court determined that *Templeton* did not apply because the *Templeton* baseflow relationship did not exist. Mr. Kelley did not seek to capture groundwater that had once fed his surface supply; instead, he sought to pump surface water that infiltrated into the Roswell Artesian Basin. "The water sought to be used from the well in this instance is not underground water which, if not intercepted, would reach and become a part of a natural stream," *Id*. at 472, 415 P.2d at 853. The well application was denied.

{22} We also determined that a *Templeton* supplemental well was unavailable to the applicant in *Brantley*. *Brantley*, 92 N.M. at 281, 587 P.2d at 428. The applicant in *Brantley* owned rights to surface water that traveled a 25-mile long canal from the point of diversion to reach his property. The applicant sought to recapture the water lost to seepage beneath the canal, through a well drilled into the valley fill or shallow aquifer. *Id*. As in *Kelley*, the applicant's water right did not originate from baseflow. "There is no evidence that the ground water under Brantley's farm is a source of the surface flow of

the Pecos at Avalon Dam." *Id*. at 282, 587 P.2d at 429. Instead of the groundwater discharging to the surface, the surface flows recharged the groundwater. *Id.* Moreover, we observed that the proposed well might draw from a hydrologically distinct aquifer, frustrating the *Templeton* requirement that the supplemental well draw from the same source that fed the surface. *Id.* Again, the well application was denied.

{23} These cases articulate the narrow circumstances under which a *Templeton* supplemental well is permissible. A senior surface water appropriator diverts surface water that consists in part of baseflow. The senior's water supply is then depleted by junior wells in the area. The senior can follow the source of the baseflow into the local aquifer that fed the surface system, and install a well to draw from the same source used by the offending junior wells. In a *Langenegger* type of case, a senior can tap into a deeper, separate aquifer only if the deeper aquifer feeds the shallow aquifer, and ultimately the surface flow, because the water in the deeper aquifer is under pressure forcing it upward, as in an artesian aquifer. The senior continues using water in the manner, amount, and location originally intended. Therefore, the core requirements for a successful *Templeton* supplemental well include: (1) a valid surface water right; (2) surface water fed in part by groundwater (baseflow); (3) junior appropriators intercepting that groundwater by pumping; and (4) a proposed well that taps the same groundwater that was the source of the applicant's original appropriation.

How *Templeton* Fits the Herringtons' Well Application

{24} In applying the *Templeton* predicates to the Herrington's application, we first observe that the validity and seniority of the Herringtons' water right is not in dispute. At the heart of this case lie the other *Templeton* requirements: whether the Herringtons' surface diversion was fed by baseflow, and if so, whether the Herringtons' proposed well will draw from the same source that fed the baseflow.[4]

{25} At trial, the issue of baseflow was a primary focus. Originally, the State Engineer likened this case to *Kelley*, arguing unsuccessfully before the district court that the Rio de Arenas consisted only of flood flow, and therefore a *Templeton* supplemental well was unavailable to the Herringtons. The Herringtons presented a different view of the Rio de Arenas hydrology. The Herringtons asserted that groundwater fed the stream system, as in *Templeton*. On this vital point, the Herringtons prevailed:

> [**Finding of Fact 16:**] The Rio de Arenas is naturally an interrupted *perennial* stream with dry and flowing reaches that vary in length depending on climate and usage conditions. Groundwater above elevation 6,200 feet converges onto the Rio de Arenas watercourse and is the *source of baseflow* and discharge by riparian vegetation.
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> . . . .
>
> [**Finding of Fact 17**:] The Rio de Arenas at [the] Herrington's property previously was an *interrupted perennial stream*, and is now an interrupted intermittent

> stream. The frequency *of surface flow* in the Rio de Arenas has declined in more recent years *due to numerous upstream junior diversions of water by well*.
>
> . . . .
>
> [**Finding of Fact 19**:] Rio de Arenas moves down gradient from north to south. As the stream flows, at times and places it falls below the surface. At other times and places, it may resurface when it confronts various dikes that form underground barriers to the underground flow. As the water moves to the surface, it creates surface flow for a time, and will then sink back below the ground surface.

(Emphasis added).

{26} The district court also found that the groundwater that fed the surface was intercepted by junior wells drawing from the fractured bedrock aquifer, as required by *Templeton*:

> [**Finding of Fact 36:**] The valley of the Rio de Arenas has a history of well depletion, followed by the drilling of new wells, or the deepening of old wells. *This is caused by the pumping and depletion of pockets of water in the fractured bedrock aquifer*.
>
> . . . .
>
> [**Conclusion of Law 7:**] The level of the flow of surface water rights is lower at the current point of diversion at the Frazier-Bateman Ditch *because of upstream junior drillers* and the upstream impoundment of surface waters.
>
> [**Conclusion of Law 8:**] Herringtons' surface water rights have been reduced at the current point of diversion because of a *lowering of the water table as a result of the junior drillers* and the upstream impoundments.

(Emphasis added).

{27} These uncontested findings and conclusions establish the initial *Templeton* predicates enumerated above. The Herringtons have a valid surface water right that consists of surface water fed in part by groundwater. Junior appropriators have intercepted groundwater that fed the surface, thereby diminishing the Herringtons' surface flows. Notably, Finding of Fact 36 is specific that neighboring wells completed at the depth of the "deep bedrock aquifer," deplete the Rio de Arenas, and as we shall see, the fractured bedrock aquifer occurs at roughly the same depth as the well proposed by the Herringtons. This particular finding supports the Herringtons' claim that they are merely reasserting their priority by tapping the same source as the junior appropriators who have depleted their surface right. Or, as stated in *Templeton*, the Herringtons appear not to request "a new appropriation in the underground water basin,

but merely a request to follow the source of their original appropriation." 65 N.M. at 68, 332 P.2d at 471. The other findings and conclusions above remain unchallenged by the State Engineer, and are therefore the law of the case. *See Trujillo v. City of Albuquerque*, 1998-NMSC-031, ¶ 40, 125 N.M. 721, 965 P.2d 305.

{28} These factors that appear undisputed strongly suggest that the same principles of fairness that underlie *Templeton* apply here as well. As a result, the Herringtons would appear entitled to some relief in the form of a supplemental well, at least at some depth and at some location. A holder of a senior water right is generally entitled to protection in our courts of law from the effects of junior interceptors. However, the question remains whether the Herringtons senior rights entitle them to this particular well, at the proposed depth and the proposed location. For that answer, we look to the remaining conditions of *Templeton*.

{29} In addressing these remaining questions, the district court found that the Herringtons' proposed well did not satisfy the source requirement of *Templeton*. Despite finding that the Herringtons' surface appropriation consisted of baseflow intercepted by junior wells, the district court found that both the completion of the well in the fractured bedrock aquifer and the downstream location of the well precluded application of *Templeton* because it would grant the Herringtons access to a new source of water.

{30} On appeal, the Herringtons argue that the findings and conclusions relative to the proposed well result from an incorrect interpretation, and perhaps confusion, regarding New Mexico law governing supplemental groundwater wells, specifically the *Templeton* doctrine. We review the question of whether the district court properly interpreted the applicable law de novo, and the findings of fact for sufficiency of the evidence. *See Gallegos v. State Bd. of Educ*., 1997-NMCA-040, ¶ 11, 123 N.M. 362, 940 P.2d 468 (holding that this court is "not bound by the conclusions of law reached by the trial court, and the applicable standard of review for such issues is de novo"). We address, in turn, the issues of the well depth and the well location, in relation to the *Templeton* source requirement.

The Depth of the Proposed Well -- Completion Into the Fractured Bedrock Aquifer

{31} The key Findings of Fact and Conclusions of Law relied upon by the district court and the Court of Appeals, and disputed by the Herringtons, are as follows:

> [**Finding of Fact 27:**] There is no evidence that the groundwater from the deep bedrock aquifer underlying [the] Rio de Arenas contributes to the flow of the Rio de Arenas at Herringtons' point of diversion on the Frazier-Bateman Ditch.
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> . . . .
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> [**Finding of Fact 31:**] A well this deep will not capture the water that would be available to [the] Herringtons as surface water, or surface water that has seeped

into the ground, because the depth of the well will extend into the deep bedrock aquifer which does not contribute to the flow of the Rio de Arenas.

. . . .

[**Conclusion of Law 10:**] The proposed well sought by Herringtons goes into the deep bedrock aquifer and there is no evidence of an upward leakage from the aquifer that contributes to the flow of surface water at Herringtons' current point of diversion on the Frazier-Bateman Ditch.

{32} The parties agree that the proposed well is to extend 100 feet into fractured shale and sandstone (the fractured bedrock aquifer) which underlie the alluvial sediments. The State Engineer seems to characterize the underlying system as consisting of two aquifers: the shallow aquifer, and the deeper fractured bedrock aquifer. Under this view, the fractured bedrock aquifer would be like the artesian aquifer in *Langenegger* that was separated from the higher, shallow aquifer by an impermeable barrier. Consistent with *Langenegger*, the Herringtons would have to show that the deep bedrock aquifer contributes water via leakage through an impermeable, or semi-permeable layer to the shallow aquifer and ultimately to the Rio de Arenas.

{33} The Herringtons, however, claim that this is a one-aquifer case like *Templeton*, and not a two-aquifer case like *Langenegger*. The Herringtons argue that no semi-confining, impermeable layer separates the alluvium from the fractured bedrock aquifer where they propose their well. As a result, the Herringtons maintain that both the alluvium and fractured sandstone are parts of the same continuous, hydrologically connected aquifer that feeds the Rio de Arenas baseflow. Therefore, the Herringtons conclude that a well that pumps water from this depth draws from the same source as the baseflow, exactly as in *Templeton*.

{34} In analyzing how the district court viewed the system, we discern an analogy between this case and *Langenegger*. The disputed Findings of Fact and Conclusions of Law stating that there is no upward leakage from the deep aquifer up to the shallow aquifer address the requirement in *Langenegger*, that in order to drill a *Templeton* well into a deeper, hydrologically discontinuous aquifer, the applicant must demonstrate that the lower aquifer leaks upward, through the semi-confining layer, into the shallow aquifer as happens in an artesian system under pressure. *Langenegger*, 82 N.M at 421-22, 483 P.2d at 302-03. The district court therefore may have treated the Rio de Arenas aquifer system as consisting of two separate aquifers, and raised the inquiry of leakage from the fractured sandstone up to the shallow alluvium and surface flow. As stated by the Court of Appeals, "[i]n addition, we note that the Herringtons repeatedly assert on appeal that there is no impermeable layer between the deep and shallow aquifers. This directly contradicts the district court's finding that there is no leakage from the deep to the shallow aquifer."

Herrington, 2004-NMCA-062, ¶ 34.

{35} Yet other findings of the district court appear to assume that the underlying alluvium and fractured sandstone are all part of the same, continuous aquifer, as in *Templeton*. In Finding of Fact 24, the district court specifically found no subsurface impermeable separation within the underlying aquifer. The district court also suggests a direct hydrologic connection between the surface and the proposed well depth in Finding of Fact 36, stating that the Rio de Arenas Valley had experienced depletion from wells specifically from "the pumping and depletion of pockets of water in the *fractured bedrock aquifer*," which appears to be the same description of where the Herringtons seek to put their well (emphasis added). This finding is significant because if junior domestic wells completed in the fractured sandstone intercepted water that fed the Rio de Arenas, and the Herringtons seek to drill a well to the same depth, they may be tapping the same source that fed the surface stream.[5] Again, this finding is at odds with other findings that the groundwater from the deep bedrock aquifer does not contribute to the Rio de Arenas flow, and that the Herrington's well would capture surface water that had seeped into the ground.

{36} Ultimately, this case presents a series of irreconcilable and conflicting findings and conclusions that only the district court can resolve. It is clear that the Herringtons may be entitled to a well of some depth, as they have demonstrated the *Templeton* predicates discussed *supra*. We therefore think the fairest solution is to remand to the district court for an opportunity to clarify its findings and conclusions. *See State ex rel. Human Servs. Dep't v. Coleman*, 104 N.M. 500, 505-06, 723 P.2d 971, 976-77 (Ct. App. 1986) (stating if ambiguity or doubt exists as to the trial court's findings of fact, court can remand when the ends of justice so require), *abrogated on other grounds by State v. Alberico*, 116 N.M. 156, 861 P.2d 192 (1993). Specifically, the court is to determine whether the proposed well in this case taps one aquifer, or two aquifers separated by an impermeable or semipermeable boundary. If the proposed well taps the same, hydrologically continuous aquifer that feeds baseflow to the Rio de Arenas and provides water to the offending wells as discussed herein, then the proposed well at this depth may not be prohibited under *Templeton*. If the well taps a second deeper aquifer, then the well is prohibited under *Templeton* and *Langenegger*, because the trial court has already established that there is no upward leakage at a depth of 100 feet.

Downstream Location of the Well

{37} The district court concluded that because the Herringtons propose to place their supplemental well roughly 1500 feet downstream of the original point of diversion, *Templeton* could not apply:

> [**Conclusion of Law 9:**] The proposed well sought by Herringtons will be located downstream from the current point of diversion at the Frazier-Bateman Ditch and, therefore, this application is not governed by the principles announced in *Templeton* . . . .

The Court of Appeals affirmed this conclusion as a correct interpretation of the law, relying upon *Brantley v. Carlsbad Irrigation Dist.*, *supra,* and *State ex rel. Martinez v.*

City of Roswell, 114 N.M. 581, 588, 844 P.2d 831, 838 (Ct. App. 1992) (hereinafter "*Roswell*"), for the proposition that a *Templeton* supplemental well must be located upstream.

{38} The Herringtons challenge this conclusion. They argue that a *Templeton* supplemental well need not, in all cases, be positioned upstream of a surface point of diversion. The challenge is well-taken. Specifically, the Herringtons question whether *Brantley,* the case cited by *Roswell* as the source of the upstream requirement, actually imposes such a requirement. *See Herrington*, 2004-NMCA-062, ¶¶ 9, 10. The Herringtons also call into question the reasoning posited by the Court of Appeals to support a universal requirement that a supplemental well can never be placed downstream of a surface diversion point. Interestingly, the State Engineer has requested that we refrain from recognizing such a universal requirement, and amici curiae Stein and Draper strongly question the propriety of the requirement. We therefore take this opportunity to examine the original language of this Court in *Brantley*, and the Court of Appeals' reasoning for the upstream requirement.

{39} We begin by noting the documentary evidence provided by amici curiae Stein and Draper, demonstrating that Mr. Templeton's supplemental well was actually located *downstream* of his original point of diversion. Strangely, if we were to apply the upstream requirement, Mr. Templeton would not be entitled to a supplemental well today, under the very doctrine that bears his name. This suggests that something may be amiss.

{40} In concluding that a *Templeton* supplemental well cannot be positioned downstream of the point of surface diversion, *Roswell* relied upon its reading of *Brantley*, in which the applicant proposed to place a well 25 miles downstream of the point of diversion (as opposed to the 1500 feet sought by the Herringtons). In *Brantley*, this Court found that there was no baseflow, and that Mr. Brantley sought to drill into a separate aquifer. We concluded in *Brantley* that "the `Templeton Doctrine' does not apply since Brantley seeks to drill *below* his point of diversion into waters which are not a source of his surface right." *Brantley*, 92 N.M. at 282, 587 P.2d at 429. The location of the well was clearly an important factor, but was tied to the fact that the well drew water from a distinct aquifer. *Id.* We never intended to say in *Brantley* that the well could not be a short distance downstream if it drew from groundwater that was the *same* source of the surface right. Thus, the question in *Brantley* was not so much the particular location of the proposed well as it was whether, at that location, the proposed well would draw from the same source as the surface right.

{41} The Court of Appeals' explanation in this case for the upstream requirement also warrants clarification. The Court of Appeals concluded that by definition, a downstream well would necessarily draw upon different water than the original diversion.

> A downstream ground water well necessarily draws on seepage and percolation that occurs after, i.e., downstream from, the surface water diversion. That seepage and percolation could not have been a source of the surface water to

> which the applicant has a right, and, as in *Brantley* and *Kelley*, it is more likely that the surface water is the source of the ground water at that location.

Herrington, 2004-NMCA-062, ¶ 13.

In so stating, the Court of Appeals suggests that all downstream wells result in a new appropriation.

{42} This suggestion is overly broad. As described in *Templeton*, and in the district court's Findings of Facts 16, 19, and 24 in this case, water may often recharge an aquifer in the mountainous portion of the basin, and migrate downward through the aquifer to discharge as baseflow at the lower elevations of the valley. *Templeton*, 65 N.M. at 62, 332 P.2d at 466-67. In contrast to the suggestion by the Court of Appeals, very little rainfall and runoff across the Mimbres basin floor actually recharges the groundwater. In the Mimbres Basin, less than two percent of the rainfall recharges the groundwater. *See generally* New Mexico Water Resources Research Institute & California State University, Trans-International Boundary Aquifers In Southwestern New Mexico (2000). Furthermore, if the water table in an aquifer is lowered by wells, the same water that formerly discharged at one surface location may now discharge to the surface downstream, at a point of lower elevation. Finally, amici curiae Stein and Draper point out the confusion related to the upstream requirement, and describe the ease with which the requirement can be circumvented.[6]

{43} We therefore take this opportunity to clarify *Brantley.* A downstream location of the proposed well may be, but is not necessarily, an indicator of whether the new well draws from groundwater that is the same source of the surface right. The determination of the source of water for a well is always case-specific. It all depends on whether an applicant's proposed point of diversion will tap "into waters which are not a source of his surface right." *Brantley*, 92 N.M. at 282, 587 P.2d at 429. A downstream location may properly be a cause for concern, placing a burden on the applicant to demonstrate that their proposed well draws water from the same source that fed the baseflow at the original point of diversion. But the downstream location, particularly if only a short distance from the point of diversion, is not dispositive of an otherwise valid *Templeton* application. Therefore, any upstream well requirement is not, and cannot be, a universal requirement.

{44} We must note that the Herringtons may not position the well such that seepage losses are eliminated. The Court in *Roswell* properly stated that an appropriator may not move a well to capture seepage lost along a conveyance canal. "If it were otherwise, every irrigator with surface rights could drill supplemental wells seeking to capture their own irrigation water return flow, upon which downstream surface appropriators rely." *Roswell*, 114 N.M. at 586, 844 P.2d at 836. As noted by the State Engineer, the Mimbres Basin is fully appropriated, and the Herringtons' ditch seepage is therefore part of the fully appropriated system. If, on remand, the district court determines that the proposed well location will result in a greater appropriation to the Herringtons, the Herringtons' pumpage must be reduced accordingly. *See City of Roswell v. Reynolds*,

86 N.M. 249, 251, 522 P.2d 796, 798 (1974) (holding that permits involving changes in points of appropriation may be conditioned to reduce pumpage).

The Herringtons May Be Entitled to a Supplemental Well at a Depth of 100 Feet Under the Transfer Statute

{45} In addition to the analysis of the Herringtons' *Templeton* claim, the Court of Appeals examined whether the Herringtons qualified for a statutory transfer. *See* §§ 72-5-23, -24. The Court of Appeals concluded that even statutory transfers must meet the *Templeton* source requirements, and as a result, the Herringtons did not qualify. *Herrington*, 2004-NMCA-062, ¶¶ 17-20. In this appeal, both parties to this case as well as amici Stein and Draper support reversal of this point. As noted by the Herringtons, no source requirement is articulated either in the transfer or supplemental well statutes, nor in *Clodfelter v. Reynolds*, 68 N.M. 61, 66, 358 P.2d 626, 630 (1961). *See* § 72-5-24 (1985); NMSA 1978, § 72-12-24 (1959).

{46} As stated by this Court in *Clodfelter*, "the right to change the point of diversion, or place of use, of water which has been obtained as a result of an appropriation, is one of the incidents of ownership." 68 N.M. at 66, 358 P.2d at 630 (citing *Lower Latham Ditch Co. v. Bijou Irrigation Co.*, 41 Colo. 212 (1907)). Yet the statutory right to transfer is subject to close review by the State Engineer. Section 72-5-24 directs the State Engineer to determine whether the proposed transfer will be detrimental to existing water rights, will not be contrary to the conservation of water in the State, and will not be detrimental to the public welfare of the state. *See W. S. Ranch Co. v. Kaiser Steel Corp.*, 79 N.M. 65, 69, 439 P.2d 714, 718 (1968); *Pub. Serv. Co. v. Reynolds*, 68 N.M. 54, 60, 358 P.2d 621, 625 (1960). Embedded within the requirement that the transfer not result in a new appropriation is the condition that water at the move-to location be hydrologically connected to water at the move-from location. The State Engineer must therefore inspect proposed transfers closely to ensure that the applicant will draw from the same hydrologic unit.

{47} Ensuring that a transfer occurs within a continuous hydrologic unit is different from applying the narrow *Templeton* same-source requirement. *Templeton* supplemental wells service the original parcel, while statutory transfers may apply to new uses for the water, over significant distances. *See, e.g.*, *Turner v. Bassett*, 2005-NMSC-009, 137 N.M. 381, 111 P.3d 701 (groundwater applied to irrigation transferred to municipal applications); *Montgomery v. N.M. State Eng'r*, 2005-NMCA-071, 137 N.M. 659, 114 P.3d 339 (surface water applied to irrigation transferred to groundwater use two counties north of original diversion), *cert. granted*, 2005-NMCERT-006, 137 N.M. 767, 115 P.3d 230. Imposing *Templeton* same-source requirements would greatly restrict such transfers, curtailing State Engineer administrative discretion, and threatening sound water policy.

{48} Holding that all surface water to groundwater transfers are bound by the *Templeton* same-source requirements would unduly restrict the administrative authority of the State Engineer to evaluate the facts in each specific case, and determine the

propriety of a proposed supplemental well or transfer. Although surface to ground transfers require a hydrologic connection, this may be a more general determination than the *Templeton* baseflow source requirement. Significant discretion is afforded to the State Engineer in making this determination. *See* § 72-5-24; *City of Albuquerque*, 71 N.M. at 434, 379 P.2d at 77; *Clodfelter*, 68 N.M. at 61, 358 P.2d at 626. Current administrative schemes, such as the requirement that groundwater appropriators in the Middle Rio Grande acquire surface rights to offset the surface depletions caused by pumping, or future attempts by municipalities to acquire agricultural surface diversions, are dependent upon more flexibility than permitted by the restrictive *Templeton* source requirement. Accordingly, we specifically reject any statement in the opinion below that would impose the *Templeton* predicates on all statutory transfers.

{49} In analyzing whether the Herringtons maintain an independent statutory right to transfer their surface right to the ground, we observe that the district court has already determined that a supplemental well pumping at a maximum rate of 24.86 acre-feet per year would not impair existing rights, and would not exceed the drawdown profiles established for the basin. The State Engineer has not appealed those conclusions. Therefore, at some depth within the aquifer feeding the Rio de Arenas stream, a supplemental well drawing at no more than 24.86 acre-feet per year is permissible under Sections 72-5-23 and 72-5-24. Yet, as with the *Templeton* analysis, the question remains whether at 100 feet a supplemental well will draw from a different aquifer altogether, hydrologically unrelated to the Rio de Arenas, rendering the well a new, and impermissible, appropriation. This determination is for the district court on remand.

{50} Parenthetically, we note the difficulty presented by NMSA 1978, Section 72-12-1.1 (2003), which directs the State Engineer to issue permits to domestic well applicants subject to municipal ordinances. This requirement complicates the State Engineer=s efforts to manage a limited water supply in a sustainable way. Furthermore, we recognize the practical difficulty of terminating continued use of existing junior domestic wells when they result in a shortfall to senior appropriators. As a result, protecting the surface rights of senior appropriators, like the Herringtons, may prove difficult when many domestic wells draw from the same basin.

CONCLUSION

{51} For the foregoing reasons, we reverse the Court of Appeals and remand to the district court for further proceedings consistent with this Opinion.

{52} IT IS SO ORDERED.

RICHARD C. BOSSON, Chief Justice

WE CONCUR:

PAMELA B. MINZNER, Justice

PATRICIO M. SERNA, Justice

PETRA JIMENEZ MAES, Justice

EDWARD L. CHÁVEZ, Justice

1The Court is grateful for the amici curiae efforts of attorneys Jay Stein and John Draper, who responded to this Court's request for advice pursuant to Rule 21-300(B)(7)(b) NMRA, and amici curiae the New Mexico Attorney General's Office and the New Mexico Interstate Stream Commission.

2Due to the technical nature of this case, the following terms are defined:

> **groundwater** - water moving or residing beneath the earth's surface
>
> **baseflow** - the sustained low flow of a stream, usually groundwater inflow to the stream channel
>
> **flood flow** - portion of precipitation that flows over the land surface
>
> **alluvium** - sediments deposited by a flowing watercourse
>
> **ephemeral stream** - streams that form only during and immediately after precipitation
>
> **perennial stream** - stream that flows throughout the year, generally fed in part by baseflow
>
> **intermittent stream** - stream that flows for part of the year, can be fed by flood flow and/or baseflow

3Under the doctrine of prior appropriation, the right to use water is determined by the date of appropriation. Section 72-1-2; Yeo v. Tweedy, 34 N.M. 611, 617, 286 P. 970, 974 (1929). For an in-depth discussion, see State ex rel. Martinez v. City of Las Vegas, 2004-NMSC-009, 135 N.M. 375, 89 P.3d 47.

4The trial court found that a supplemental well drawing 24.86 acre-feet per year, half the Herringtons' water right, would not impair other appropriators. Because the Herringtons have agreed that their well will be limited to pumping at a maximum rate of 24.86 acre-feet per year, we limit our analysis to this amount without discussing whether a Templeton well could properly impair other, junior appropriators. See City of Albuquerque v. Reynolds, 71 N.M. 428, 379 P.2d 73 (1962).

A table of neighboring wells in the basin, compiled by the Herringtons for analyzing the effect of their proposed well on other wells, indicates that of 73 local wells where the depth information is known, 8 have a well depth of less than 100 feet, and 52 wells have a depth of 150 feet or greater. The Herringtons propose a depth of 100 feet.

6Amici note that an appropriator could first move the surface point of diversion downstream, and then apply for a supplemental well at the desired downstream location.