No. 137, Original

In the

Supreme Court of the United States

STATE OF MONTANA, Plaintiff

v.

STATE OF WYOMING

and

STATE OF NORTH DAKOTA, Defendants

MEMORANDUM OPINION OF THE SPECIAL MASTER ON WYOMING'S MOTION FOR SUMMARY JUDGMENT

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MEMORANDUM OPINION OF THE SPECIAL MASTER ON WYOMING'S MOTION FOR SUMMARY JUDGMENT

Wyoming has moved for summary judgment for all of the years remaining at issue in this action. For the reasons explained below, I have concluded that Wyoming's motion should be denied, except that Wyoming is entitled to partial summary judgment on the question of the quantum of liability for all years except 2001, 2003, 2004, and 2006. All other issues, including liability for CBM groundwater production during the years at issue, must be resolved at trial.

I. THE SUMMARY JUDGMENT STANDARD

While not binding, the Federal Rules of Civil Procedure "serve as useful guides" in original actions. Nebraska v. Wyoming, 507 U.S. 584, 590 (1993). As I did in earlier summary judgment motions in this action, I therefore look to the well-established standards under Rule 56 in deciding Wyoming's motion. Summary judgment is appropriate only "when there is no genuine issue of material fact and the moving party is entitled to judgment as a matter of law." Id. In deciding whether Wyoming is entitled to summary judgment, moreover, I must review the record in the light most favorable to Montana. See United States v. Diebold, Inc., 369 U.S. 654, 655 (1962) (requiring record to be read in the light most favorable to the non-moving party). "Summary judgment … is inappropriate when the evidence is susceptible of different interpretations or inferences by the trier of fact." Hunt v. Cromartie, 526 U.S. 541, 553 (1999). "If reasonable minds could differ as to the import of the evidence, summary judgment should not be granted." Anderson v. Liberty Lobby, Inc. 477 U.S. 242, 250 (1986).

Montana's obligation to establish a genuine issue of material fact, however, is not meaningless. Rule 56(e) provides that an adverse party's response to a motion for summary

judgment, by affidavit or other permissible evidence, "must set forth *specific facts* showing that there is a genuine issue for trial." Fed. R. Civ. P. 56(e) (emphasis added). See Lujan v. National Wildlife Federation, 497 U.S. 871, 888-889 (1990) (emphasizing the requirement of "specific facts" showing that there is an issue that must be resolved through trial).

II. THE 1992 AGREEMENT

Wyoming contends that the Agreement between the State of Montana and the State of Wyoming dated February 20, 1992 (the "1992 Agreement") precludes Montana from (1) claiming a right to water used by post-1950, pre-1980 appropriators in Wyoming, and (2) insisting on a winter pass-through of more than 75 cfs and a maximum winter carryover. Wyoming's Memorandum in Support of Motion for Summary Judgment, p. 31 ("Wyoming Memorandum"). While the 1992 Agreement does not always exemplify the height of clarity, its language cannot be reasonably strained to reach this result.

A. The Northern Cheyenne-Montana Compact & Water Model

In 1991, the Northern Cheyenne Tribe (the "Tribe") and the State of Montana agreed on a compact that quantifies the Tribe's water rights. Mont. Code § 85-20-301 (the "Northern Cheyenne Compact"). Congress subsequently ratified the Compact in the Northern Cheyenne Indian Reserved Water Rights Settlement Act of 1992, 106 Stat. 1186 (1992).

In negotiating the Compact, Montana developed models to predict the amount of water in the Tongue River system "that was likely to be available to satisfy the Tribe's rights" under any compact. Declaration of Karen Barclay Fagg, Aug. 2, 2013, ¶ 6 ("Barclay-Fagg Declaration"). The models consisted of two elements: a Water Allocation Model, and a Reservoir Operations Model. Bob Anderson & Bill Bucher, Tongue River Modeling Study, July 20, 1990, p. 6 (attached as Exhibit E to the Second Affidavit of Gordon W. Fassett in Support of Wyoming's

Motion for Summary Judgment, June 27, 2013 (Second Fassett Affidavit)) ("Modeling Study"). The models were used to analyze several questions, including the "effects of various levels of Tribal rights" and the "firm annual yield" of the new proposed Tongue River Reservoir "under various assumptions, such as different levels of Wyoming water use." Id., p. 27.

The purpose of the Water Allocation Model was to "determine the water to be stored by a new Tongue River Dam project" after allocating water between Montana and Wyoming under the Compact. Modeling Study, p. 6. The Water Allocation Model started with the historical record of streamflows at the state line, and adjusted these streamflows for both "historical Wyoming water use" and "Wyoming supplemental diversions and return flows." Id., pp. 6, 8. The output of the model was a "set of Miles City flows" that could be allocated under the third tier of the Compact between Montana and Wyoming. Id., pp. 7-8. The "model assumed the 1980 level of development for existing users to be non-allocable water"—i.e., supplemental water that would be satisfied before the division of water under Article V(B) of the Compact. Id., p. 11. The model also assumed a "winter pass-through requirement of 75 cfs." Id., p. 12-13. According to Karen Barclay-Fagg, who participated in the negotiations on behalf of Montana, the models were "intentionally conservative" so that they "did not over-predict the amount of water available for [Northern Cheyenne] Compact purposes." Barclay-Fagg Declaration, ¶ 6.

The Reservoir Operations Model had "two main purposes: to determine water supply capabilities of a new reservoir on the Tongue River and to identify which users encounter shortages." Id., p. 15. The primary input for this model was the allocable flow as estimated by the Water Allocation Model. Id. As the Modeling Study noted, these flows "varied considerably depending on the assumptions used in the model." Id., p. 17. See also id., p. 27 (Wyoming's water use varied "depending on the objective of the investigation"). The model assumed that 75

cfs "was released year round for instream flow" and that the "winter pass-through requirement was 75 cfs." Id., pp. 18, 20. The model also assumed that the "reservoir capacity" was 80,300 acre-feet. Id., pp. 27, 51.

Montana made different assumptions in different runs of the model for purposes of determining what proposals to make to the Tribe. At least some of the models used "60th percentile flows." Id., p. 26. At least one analysis also "assumed that Wyoming does not use any of the supplemental or allocable water to which it is entitled." Id., pp. 30, 39. Different runs of the models also made different assumptions regarding the status of any Tribal right, including the date of the right. Id., p. 54.

The final Northern Cheyenne Compact incorporates the Reservoir Operations Model in three different places.[1] First, Article II.A.2.b of the Northern Cheyenne Compact provides that the availability to the Tribe of 20,000 acre/feet per year of storage "depends, as provided in the Tongue River Water Model, upon the annual schedule utilized by the Tribe for diversions of Tongue River direct flows." Second, under Article II.A.2.c., how shortages due to low flows are shared between the Tribe and Montana depends on whether a decrease in stored water is caused by "[r]eservoir inflows lower than those assumed in the Tongue River Water Model." Compare Northern Cheyenne Compact, art. II.A.2.c.i (Tribal water rights are subject to shortages that are "consistent with the period of record used in the" model, subject to specified caps) with id., art. II.A.2.c.ii (shortages caused by inflows lower than assumed in the model are "shared pro rata among all users"). Finally, Article II.A.2.d provides that the Tribe has "the first right to use

[1] More specifically, the Northern Cheyenne Compact incorporates the "Tongue River Water Model," which it defines as "the Tongue River Reservoir Operations computer model that is documented in: Tongue River Modeling Study, Final Report, submitted on July 20, 1990, to the Engineering Bureau of the Water Resources Division of the Montana Department of Natural Resources and Conservation, or any revision agreed to by the parties. The Final Report and any agreed revisions are incorporated herein by reference as though set forth in full." The "Tongue River Modeling Study, Final Report" would appear to be the same as the Modeling Study submitted by Wyoming in support of its motion.

excess water," defined as "increases in the Tongue River basin water supply resulting from conditions different from those assumed in the Tongue River Water Model" (id., art. I.9).

B. The 1992 Agreement

During the negotiations, "Wyoming became and expressed concern that it's [sic] existing and future water uses, allocations and interests, contained within the Yellowstone River Compact, could be affected by the terms of the proposed reserved water rights Compact" and therefore "began a dialogue about the effects of the proposed Compact." Second Fassett Declaration, ¶ 2. In letters to the Wyoming Congressional delegation, the State Engineer stated that the "model correctly places" Wyoming's 1980 water uses, as well as "projected supplemental supply," "ahead of determining the flows available for negotiation with the Northern Cheyenne," but worried that, "other than the reference to the model [in the Northern Cheyenne Compact], this assumption is not clearly spelled out in the Compact itself." Id.

On May 21, 1991, Gary Fritz of the Montana Department of Natural Resources and Conservation wrote to the Wyoming State Engineer to assure him that the "water allocated to the Tribe from the Tongue River is water available over and above Wyoming uses. These uses include not only all of Wyoming's present uses, but also its rights to supplemental water in the basin as recognized in the 1951 Yellowstone River Compact." Letter from Gary Fritz to Gordon W. Fassett, May 21, 1991, p. 1 (Exhibit B to the Second Fassett Declaration). According to Mr. Fritz, the "recognition of Wyoming's present and future uses, while not written into the Northern Cheyenne Compact itself, is a basic assumption of the water model used in negotiating the Compact," and Mr. Fritz noted that the model "is legally incorporated into the Compact." Id.

If Wyoming felt it needed "additional assurances," Mr. Fritz proposed an "Interstate Memorandum of Understanding" between the two states" in which "Montana agrees not to

consent to any change in the model that pertains to Wyoming without first consulting you or your successor." Id. Mr. Fritz included a draft Memorandum of Understanding ("MOU") that provided in pertinent part that

> The Montana Department of Natural Resources and Conservation agrees that it will not consent to any change, amendment, or modification of the Northern Cheyenne Compact or of the water model incorporated in the Compact that affects or may affect the ability of Wyoming water users to exercise water rights in the Tongue River or future Tongue River water rights as recognized in the Yellowstone River Compact, without prior consultation with the Wyoming State Engineer.

Id., attachment dated May 21, 1991, p. 1.

On June 24, 1991, the Wyoming State Engineer wrote to Ms. Barclay in her role as Director of the Department of Natural Resources and Conservation. Letter of Gordon W. Fassett to Karen Barclay, June 24, 1991 (Exhibit I to Barclay-Fagg Declaration). In the letter, Mr. Fassett expressed his interest in adding a provision to the Congressional legislation that would ratify the Northern Cheyenne Treaty, to read:

> (e) Nothing in this Act shall be construed or interpreted to in any way limit or otherwise adversely affect all water rights, entitlements, vested interests, and apportionment of waters of the State of Wyoming, established, recognized and protected under law prior to the enactment of this Act, and as attained by Wyoming under the provisions of the Yellowstone River Compact (Act of October 30, 1951, 65 Stat. 663).

Id., p. 2. Alternatively, Mr. Fassett suggested that the two states enter into a modified version of the MOU sent by Mr. Fritz. Mr. Fassett included a revised draft MOU as an enclosure to his letter. The draft MOU included a new provision that would have read:

> 2. The State of Montana, the Northern Cheyenne Tribe and the United States agree that the delivery, use, administration and regulation of water under the terms of the Northern Cheyenne Compact will not injure, limit or otherwise adversely affect any current water rights and their associated rights for supplemental supply under Wyoming law existing as of the effective date of the Northern Cheyenne Compact, located within the Wyoming portion of the Tongue River basin.

Draft Agreement, dated June 21, 1991, p. 2. Mr. Fassett also suggested that all parties to the Northern Cheyenne Compact should sign the MOU because he was "not confident Montana, by itself, can provide the assurance we seek." Fassett Letter, p. 2.

The Governors of Montana and Wyoming, along with Ms. Barclay, Mr. Fritz, and Mr. Fassett, signed the final 1992 Agreement on February 20, 1992. The 1992 Agreement explicitly references the water model "incorporated in the Northern Cheyenne Compact" and notes that the model "cannot be changed except by mutual consent of the Northern Cheyenne Tribe, the United States, and the State of Montana." 1992 Agreement, 3rd & 4th Whereas clauses. According to the agreement, the model "contains the assumption that existing and supplemental water use in Wyoming is deducted from the Tongue River flows prior to the allocation of flows between Montana and Wyoming under the Yellowstone River Compact and that Wyoming's entitlements under the Yellowstone River Compact are deducted prior to the model's simulation of Tongue River reservoir operations." Id., 3rd Whereas clause. For purposes of Wyoming's motion, the Agreement also provides:

> The State of Montana will not consent to any change, amendment, or modification of the Tongue River Water Model that affects or may affect the right of Wyoming water users to exercise existing water rights in the Tongue River Basin or future use and development of Wyoming Tongue River Basin water rights as recognized and apportioned from the water allocated to Wyoming in the Yellowstone River Compact without prior consultation and written consent of the State of Wyoming.

Id. ¶ 1. The 1992 Agreement does not contain the new paragraph suggested by Mr. Fassett in his June 21, 1991 letter to Montana, nor does it add the Tribe or the United States as parties (as Mr. Fassett suggested in the same 1991 letter). The 1992 Agreement, however, includes a final paragraph that affirms the parties' "intent that use of the Tongue River Model incorporated in the Northern Cheyenne Compact, and Wyoming's assent to the use of that model, shall not be

deemed an admission by either Party as to the correct interpretation of the Yellowstone River Compact." Id. ¶ 4.

According to Mr. Fassett, the 1992 Agreement "provides assurance to Wyoming that Montana would not solve its reserved water rights issues using Wyoming water by recognizing and removing existing and supplemental water uses and future Compact allocations in Wyoming before estimating the amount of water available to the reservoir and to satisfy the Tribe's negotiated reserved water rights." Second Fassett Affidavit, ¶ 5. According to Ms. Barclay-Fagg, however, Montana "did not intend to affect the Yellowstone River Compact in any way, or establish any interpretation of the Yellowstone River Compact." Barclay-Fagg Declaration, ¶ 17.

C. Analysis

As the Supreme Court has recently observed in the context of an interstate compact, the "express terms" of an agreement are "the best indication of the intent of the parties." Tarrant Regional Water Dist. v. Herrmann, 133 S. Ct. 2120, 2130 (2013). I therefore start with the language of the 1992 Agreement.

Paragraph 1 of the 1992 Agreement, *if read by itself and without any context*, would seem to make little sense. Under that provision, Montana cannot "consent to any change, amendment, or modification of the Tongue River Water Model that affects or may affect" existing or future Wyoming water rights. A model by itself, however, cannot affect a water right. As defined by the Oxford Dictionary, a model is simply a "simplified description, especially a mathematical one, of a system or process, to assist calculations and predictions." A change in a model therefore does nothing other than change "calculations and predictions." A model can impact a

water right only where it is used in a particular context to guide specific actions or define specific rights.

Other provisions of the 1992 Agreement provide that needed context and make clear that the purpose of paragraph 1 is to circumscribe Montana's ability to consent to a change in the model as it is used in carrying out the Northern Cheyenne Compact. The whereas clauses of the 1992 Agreement make clear that the "Tongue River Water Model," as referenced in paragraph 1, refers to the water model that "is incorporated in the Northern Cheyenne Compact." 1992 Agreement, 3rd Whereas clause. As the whereas clauses also observe, the Northern Cheyenne Compact does not permit changes in or revisions to that model "except by mutual consent of the Northern Cheyenne Tribe, the United States, and the State of Montana." 1992 Agreement, 4th Whereas clause. Paragraph 1 of the 1992 Agreement thus adds another restriction on changes in the model as used in the Northern Cheyenne Compact: if a change would affect Wyoming water rights, Montana must consult with Wyoming and get its written consent before Montana itself can consent to the change.

The Northern Cheyenne Compact provides further context. As described above, that compact incorporates the "Tongue River Reservoir Operations computer model" and uses it to determine the water rights of the Tribe. Article I.20 of the Northern Cheyenne Compact provides that the model can be revised, but only if "agreed to by the parties." Montana therefore must consent to any change in the model as used in the compact.

None of the parties to the Northern Cheyenne Compact, however, currently seeks to change or revise the model. As a result, there is no need for Montana to "consent" to any such change or revision. Paragraph 1 therefore is irrelevant to the facts of this case. By its own terms,

paragraph 1 only applies in situations where Montana must consent to a change in the model pursuant to the Northern Cheyenne Compact.

Wyoming would read paragraph 1 to restrict Montana's right to make a call on post-1950, pre-1980 water rights in Wyoming, requiring Montana instead to treat "pre-1980 rights in Wyoming as if they were pre-1950 rights under Article V(A) of the Yellowstone River Compact." Wyoming Memorandum, p. 32. Wyoming's interpretation of paragraph 1, however, faces multiple hurdles.

First, Wyoming's interpretation would revise the language of paragraph 1 to read, "Montana will be bound by the assumptions of the Tongue River Water Model in all of its actions and claims involving the Tongue River." But as described above, the 1992 Agreement is far more circumscribed. The 1992 Agreement limits only Montana's right to "consent" to a change in the model, and the only situation where Montana must consent to a change is under the terms of the Northern Cheyenne Compact. To adopt Wyoming's interpretation, the Supreme Court would need to ignore both the word "consent" and the specific context of the 1992 Agreement. Given the clear wording of paragraph 1, this hurdle by itself is sufficient to reject Wyoming's contention.

Second, however, even if paragraph 1 were interpreted to require Montana to adopt the assumptions of the models, the assumptions would not prohibit Montana from complaining about water use by post-1950, pre-1980 water users in Wyoming that interfere with pre-1950 uses in Montana. The models did not treat post-1950 water use in Montana as pre-1950 rights subject to the protections of Article V of the Yellowstone River Compact. Instead, the models assumed that such water use constituted "supplemental water supplies" under Article V(B) of the Yellowstone River Compact.

This specific assumption made sense in the context of the 1990 water modeling effort. Post-1950 water rights clearly were not pre-1950 appropriative rights covered by Article V(A). The purpose of the Water Allocation Model, moreover, was to determine the flow of water at Miles City that could be allocated under the percentage formula of Article V(B) of the Yellowstone River Compact. Modeling Study, pp. 6-8. Under Article V(B), supplemental water rights are met before the "remainder of the unused and unappropriated water" is allocated 40% to Wyoming and 60% to Montana. To run the model, therefore, Montana needed to know how much of Wyoming's existing, post-1950 water use constituted supplemental use. To simplify the model, be conservative, and protect Wyoming water rights, Montana chose in the model to assume that all such water was supplemental water. Id., pp. 6-8, 11. See also Tongue River Water Model Draft, July 9, 1991, pp. 3-8 (attached to Wyoming's Motion for Summary Judgment).

Nowhere in the Modeling Study is there any indication that any post-1950 water rights in Wyoming were treated as pre-1950 rights, nor were either of the models apparently used to determine what would happen if there was insufficient water to meet all pre-1980 water rights. The assumptions in the Modeling Study thus are irrelevant to the question involved in this case – whether Wyoming has violated the Yellowstone River Compact by making post-1950 water uses during the years at issue.

Third, Wyoming's interpretation would raise difficult questions regarding the authority of the governors of Montana and Wyoming to change the terms of the Yellowstone River Compact as those terms apply in the Tongue River system. Congress generally must consent to an interstate water compact. See, e.g., Cuyler v. Adams, 449 U.S. 433, 439 (1981) (Congressional consent is "at the heart of the Compact Clause"). And Congress explicitly approved the

Yellowstone River Compact, making it a federal statute as well a compact among the three signatory states. While governors and administrators of a state are presumably free in most situations to enter into operational agreements that are consistent with the terms of an interstate compact, the 1992 Agreement, as interpreted by Wyoming, would completely change the status of supplemental water rights in direct contravention of Article V of the Compact. And while states can certainly enter into settlement agreements resolving differences of view regarding the provisions of a Compact without going through all of the approval steps of an interstate compact, there is no suggestion in the record that the 1992 Agreement was meant to resolve a legal dispute between Montana and Wyoming over the status of the post-1950, pre-1980 water rights in Wyoming. Wyoming's interpretation of the 1992 Agreement thus would raise difficult legal issues under the Compact Clause of the United States Constitution. Thankfully, the factors already discussed require that Wyoming's interpretation of the 1992 Agreement be rejected without reaching these constitutional issues.

Other less decisive factors also militate against Wyoming's interpretation of the 1992 Agreement. For example, the assumptions regarding the post-1950, pre-1980 Wyoming water rights were part of the Water Allocation Model, but only the Reservoir Operations Model was explicitly incorporated into the Northern Cheyenne Compact and thus, by reference, the 1992 Agreement. Wyoming's interpretation of the 1992 Agreement also appears to be relatively contemporaneous, undermining Wyoming's contention that its interpretation is consistent with the original meaning of the agreement.[2] Finally, paragraph 4 of the 1992 Agreement provides

[2] Montana also complains that Wyoming did not raise the 1992 Agreement as an affirmative defense in its Answer to Montana's Complaint and argues that Wyoming therefore has waived the argument. Montana's Brief in Opposition to Wyoming's Motion for Summary Judgment, pp. 32-35. As Montana notes, however, courts have permitted such arguments to be made where the failure to raise them in an answer has not prejudiced the non-moving party. See, e.g., Owens v. Kaiser Foundation Health Plan, Inc., 244 F.3d 708, 712 (9th Cir. 2001). Because Wyoming's argument raises a purely legal question regarding the meaning of paragraph 1 of the 1992 Agreement, there is no reason to believe that Montana has been prejudiced by the late entrance of this issue.

that the "use of the Tongue River Model incorporated in the Northern Cheyenne Compact … shall not be deemed an admission by either Party as to the correct interpretation of the Yellowstone River Compact," which would be an odd provision if in fact the purpose of paragraph 1 was to fundamentally reorder the compact rights of appropriators in the Tongue River basin.[3]

Wyoming may have hoped, and even believed, that it was gaining more protection of its water rights than it achieved in the 1992 Agreement. As noted above, Wyoming originally proposed that the 1992 Agreement include language that would have explicitly provided that the

> delivery, use, administration and regulation of water under the terms of the Northern Cheyenne Compact will not injure, limit or otherwise adversely affect any current water rights and their associated rights for supplemental water under Wyoming law existing as of the effective date of the Northern Cheyenne Compact, located within the Wyoming portion of the Tongue River basin.

Draft Agreement, dated June 21, 1991, p. 2. That provision, however, was not included in the final agreement signed by the two states. Wyoming thus knew how to provide clearer protection for its existing water rights, but settled for the language of the 1992 Agreement. As discussed earlier, that language is clear when read in the context of the Northern Cheyenne Compact, which it explicitly references, and does not require Montana, in operating the Tongue River Reservoir or in seeking to enforce its rights under the Yellowstone River Compact, to treat post-1950, pre-1980 rights in Wyoming as pre-1950 appropriative rights. Because the language is clear, there is no basis for resorting to extrinsic evidence.

[3] Given that the 1992 Agreement does not change the terms of the Northern Cheyenne Compact but merely limits Montana's ability to consent to changes under that Compact, Wyoming's interpretation would also appear to be inconsistent with Article VI(A)(10) of the Northern Cheyenne Compact, which provides that nothing in that compacts shall be "so construed or interpreted … [to] alter or amend any provisions of the Yellowstone River Compact." See also Northern Cheyenne Compact, art. VI(A)(6) (nothing shall be construed or interpreted to "authorize the taking of a water right which is vested under state or federal law"); Northern Cheyenne Indian Reserved Water Rights Act of 1992, 106 Stat. 1186 (1992) (nothing in the federal act approving the Northern Cheyenne Compact "shall be construed to alter or amend any provision of the Yellowstone River Compact").

For similar reasons, paragraph 1 of the 1992 Agreement does not limit the winter pass-through in the Tongue River Reservoir to 75 cfs or prohibit Montana from setting a maximum winter carryover.[4] As the use of higher pass-throughs and a maximum winter carryover in recent years suggests, there is nothing in the Northern Cheyenne Compact that would suggest that any of the parties to that compact must consent to any "change" in the model for these purposes. As a result, paragraph 1 of the 1992 Agreement does not require Montana to consult with Wyoming and obtain its consent before using a higher pass-through or setting a maximum winter carryover.

III. THE TIMING OF POST-1950 DIVERSIONS IN 2004

Wyoming next contends that Montana cannot establish liability based on post-1950 water uses in 2004 because there is no expert testimony or other evidence that would permit the Supreme Court to determine what amount of post-1950 water use occurred after Montana made a written call on Wyoming on May 18, 2004. According to Wyoming, "it would be pure speculation on the part of the Court to presume what portion, if any, of this water was available to Montana after the date of the call." Wyoming Memorandum, p. 33.

For purposes of summary judgment, however, Montana has presented expert testimony sufficiently attributing post-1950 water use to periods after May 18, 2004. Thus, Mr. Allen's expert report regarding evapotranspiration in the Tongue River basin of Wyoming in 2004 includes data by month for the period from April through October. See Expert Report Prepared by Richard G. Allen, January 4, 2013, pp. 10-12. Mr. Aycock in his rebuttal report also estimates the timing of post-1950 storage in Wyoming for the period after the formal May 18, 2004 call. See Rebuttal Expert Report Prepared by Gordon L. Aycock, P.E., June 4, 2013, pp. 18, 27, 32, 34.

[4] This opinion addresses only the question of whether paragraph 1 of the 1992 Agreement limits the winter pass-through or prohibits a maximum winter carryover. It does not address the question of how the winter pass-through or maximum carryover should be taken into account more generally in determining the issue of liability.

In its reply brief, Wyoming challenges the credibility and reliability of this and other evidence that Montana cites in its opposition papers. Wyoming challenges the Allen testimony on the ground that the METRIC analysis cannot show the specific dates when water was applied to any given parcel. See Wyoming Memorandum, pp. 14-15. As Mr. Allen notes in his deposition, monthly ETrF values cannot determine "when exactly" a field received water with a "high level of precision." Deposition of Richard Allen, P.E., February 19, 2013, pp. 133-134. Thus, a METRIC analysis cannot determine whether a particular field was receiving water on a specific date like May 19, 2004. Id. That does not necessarily mean, however, that the analysis is so imprecise that it cannot be used to establish liability for the period after May 18, 2004. The degree of precision provided by METRIC, and the appropriate use of METRIC in making findings of fact regarding liability, are appropriately left for trial in this case.

Similarly, Wyoming challenges Mr. Aycock's estimates on the grounds that they used a "complicated formula that he made up on his own for purposes of this litigation" and are "at best speculation offered in the absence of any evidence showing when water was actually stored." Wyoming Memorandum, pp. 16-17. Although Mr. Aycock stated at his deposition that he did not know whether there was a "standard methodology" for the calculations that he made, he also testified that he had conducted some checking of the results and felt comfortable with his approach:

> I don't know that there's any standard methodology for it. It was to try to find a reasonable way that I felt could give us some fairly accurate results. I did look at some other stations to see if those flows appear to be in the ballpark and they did once they were adjusted, so I felt fairly comfortable with them.

Deposition of Gordon Aycock, July 19, 2013, p. 84. Based on Mr. Aycock's rebuttal expert report and the portions of his deposition included in the record, there is no basis for rejecting his

conclusions at this stage. The accuracy and reliability of Mr. Aycock's calculations are again best addressed at trial.

For these reasons, Wyoming is not entitled to summary judgment for the year 2004. Two additional issues raised by Montana in its opposition, however, deserve addressing because of their implications for trial. First, Montana argues that the question of when, if at all, Montana provided notice or a call to Wyoming matters only in the remedies phase and not to issues of liability. Montana's Brief in Opposition to Wyoming's Motion for Summary Judgment, pp. 47-49. Montana is correct that Wyoming, in its earlier Motion for Partial Summary Judgment, argued that Montana should be precluded only from "claiming damages or other relief" for periods when Wyoming had not received notice or a call. See Wyoming Motion for Partial Summary Judgment, September 12, 2011, p. 1. For that reason, my memorandum opinions on Wyoming's motion addressed only when Montana could seek damages and did not explicitly address whether notice was also relevant to the question of liability. See Memorandum Opinion of September 12, 2012, p. 17; Memorandum Opinion of December 20, 2011, p. 7.

The logic for requiring some form of notice in order to pursue damages, however, arguably extends to the question of whether notice is required in order to establish liability. Similarly, there would not appear to be any clear justification for requiring notice at the remedy stage but not at the liability stage. Nonetheless, I recognize that the states have not had an opportunity to brief this issue. Nor has Wyoming formally raised the issue. Rather than resolve this issue now, I therefore leave this question open for future resolution if the issue arises. Montana, however, should recognize that my prior rulings do not stand for the proposition that notice is not required to establish liability.

Second, in arguing that it does not need to show when in 2004 Wyoming was engaged in post-1950 uses, Montana notes that I have previously ruled that Montana can recover damages for periods prior to a call or other notice, so long as Montana acted diligently in providing the notice. See Memorandum Opinion of December 20, 2011, p. 8; Memorandum Opinion of September 28, 2012. While Montana is correct, it is worth emphasizing the proviso: in order to collect damages (or perhaps establish liability) for periods prior to a call or other notice, Montana must show that it acted with diligence. Given the river system and the natural vagaries of water flows, Montana will often not immediately know that post-1950 appropriators in Wyoming are using water to the detriment of pre-1950 appropriative rights in Montana. Montana, however, must still demonstrate that it acted diligently to determine when there was a possible violation and then to notify Wyoming of the need to reduce post-1950 diversions.

IV. CBM WATER

In my First Interim Report to the United States Supreme Court, I concluded that the Yellowstone River Compact "protects Montana's pre-1950 uses from interference by at least some forms of groundwater pumping that dates from after January 1, 1950 where the groundwater is hydrologically interconnected to the surface channels of the Yellowstone River and its tributaries." First Interim Report of the Special Master, February 10, 2010, p. 90. However, I also concluded that the "question of the exact circumstances under which groundwater pumping violates Article V(A) is appropriately left to subsequent proceedings in this case." Id. See also id., pp. 53-54.

In its summary judgment motion, Wyoming argues that Montana should not be able to make out a violation for CBM groundwater production in Wyoming because "both States have implicitly and explicitly determined that the connection between CBM groundwater production

and the surface waters is too tenuous to warrant regulation under the doctrine of appropriation." Wyoming Memorandum, pp. 34-37. *Amicus* Anadarko Petroleum similarly argues that the Yellowstone River Compact does not reach CBM groundwater production because "neither Montana nor Wyoming regulates coalbed methane groundwater under the law of prior appropriation as tributary to surface streams." Memorandum of *Amicus Curiae* Anadarko Petroleum Corporation in Support of Wyoming's Motion for Summary Judgment, p. 16 ("Anadarko Memorandum"). Anadarko also argues that the compact does not reach CBM groundwater production because of the definition of the Yellowstone River System in the compact, the *de minims* nature of any surface impacts, the practical issues presented by including CBM groundwater in the compact framework, and the futile call doctrine.

A. The First Interim Report

In addressing the question of CBM groundwater production, it is worth reviewing and highlighting the reasons why I concluded in the First Interim Report that the Yellowstone River Compact covers at least some forms of groundwater. As noted in that report, at least three (and perhaps four) aspects of the compact's language establish the compact's applicability to at least some forms of groundwater.

First and foremost, "Article V(A) provides without any limitation that pre-1950 rights 'shall continue to be enjoyed.' Article V(A) does not protect pre-1950 rights only from surface diversions or storage; instead, it provides broadly for the continued enjoyment of such rights." First Interim Report, p. 44. In this respect, the Yellowstone River Compact is similar to other compacts that the Supreme Court has found to cover groundwater. See Kansas v. Colorado, 543 U.S. 86, 91 (2004) (1949 Arkansas River Compact); Kansas v. Nebraska, 530 U.S. 1272 (2000) (1942 Republican River Compact). As the Special Master observed in discussing the Republican

River Compact in Kansas v. Nebraska, the compact governed streamflow, which "comes from both surface runoff and groundwater discharge. …. Interception of either of those stream flow sources can cause a State to receive more than Compact allocation and violate the Compact." First Report of the Special Master, Kansas v. Nebraska, No. 108, Orig., p. 22 (Jan. 28, 2000).

Second, the definition of the "Yellowstone River System" in the Compact reflects an intent to cover all waters including groundwater. First Interim Report, pp. 45-46. As I noted, both the terms "springs" and "swamps" are closely tied to groundwater. More importantly, however, the definition of the "Yellowstone River System" incorporates the Yellowstone River and tributaries, including springs and swamps "from their sources to the mouth of the Yellowstone River." Yellowstone River Compact, art. II(D). And groundwater is a significant source of water for many rivers and streams.

Third, I noted that Article V(A) mandates that pre-1950 appropriative rights "shall continue to be enjoyed in accordance with the laws governing the acquisition and use of water under the *doctrine of appropriation*" (emphasis added) and that the prior appropriation system has long recognized the need to integrate surface water with at least some forms of groundwater. First Interim Report, pp. 48-51. In this regard, I reviewed the law of both Montana and Wyoming. Id., pp. 49-51. Montana, as I noted, has long integrated at least some types of groundwater with surface rights and, when it adopted a permit system in 1973, applied it on a unitary basis to both surface and groundwater. Id. at 49-50. Wyoming law was less clear at the time of the compact, but in 1957 explicitly provided for the legal integration of groundwater and surface water where they are "so interconnected as to constitute in fact one source of supply." Id. at 50-51, quoting Wyo. Stat. Ann. § 41-3-916.

Finally, I noted that the Compact's "definition of 'diversion' in Article II would appear to provide further support" for regulating at least some forms of groundwater under the Compact. Article V(B) provides that "diversions" of water for "beneficial use on new lands" must come from "unused and unappropriated" waters – i.e., such diversions cannot come from the waters needed to satisfy pre-1950 appropriative rights protected by Article V(A). Article II(G), in turn, defines "diversion" as the "*taking* or *removing* of water from the Yellowstone River or any tributary thereof when the water so taken or removed is not returned directly into the channel of the Yellowstone River or of the tributary from which it is taken" (emphasis added). As I noted, the pumping of groundwater that is hydrologically interconnected to the surface channel of a tributary "would appear to quite literally 'take' or 'remove' water from that tributary." First Interim Report, p. 52. I declined to rely on this last point, however, because of potential implications for the administration of Articles V(B) and V(C).

B. Current Montana and Wyoming Practice

Under Wyoming water law, "Where … underground waters and the waters of surface streams are so interconnected as to constitute in fact one source of supply, priorities of rights to the use of all such interconnected waters shall be correlated and such single schedule of priorities shall relate to the whole common water supply." Wyo. Stat. Ann. § 41-3-916. CBM groundwater rights, however, "are not regulated under a single schedule of priorities with any surface rights in accordance with the doctrine of appropriation." Affidavit of Patrick T. Tyrrell, July 1, 2013, ¶ 7. More specifically, the relevant Wyoming officials in the Tongue River basin have not been authorized by the State Engineer to "regulate or administer coal bed methane groundwater rights under a single schedule of priorities with any surface rights in accordance with the doctrine of appropriation." Id., ¶ 8.

This does not mean, however, that Wyoming law would ignore interference in situations where it occurs. Section 41-3-916 addresses when interconnected waters should be governed by a single schedule of priorities. Wyoming water law separately provides that any Wyoming appropriator of surface water "may file a written complaint alleging interference with his water right by a junior right." Wyo. Stat. Ann. § 41-3-911(b). Upon the filing of such a complaint, the State Engineer must "undertake an investigation to determine if the alleged interference does exist." Id.; Tyrell Affidavit, ¶ 9. If the State Engineer finds that there is interference, he "may suggest various means of stopping, rectifying or ameliorating the interference or damage caused thereby." Wyo. Stat. Ann. § 41-3-911(b). To date, however, no surface water appropriator in Wyoming has filed a written complaint with the State Engineer "alleging interference with his right by [a] coal bed methane groundwater right." Tyrell Affidavit, ¶ 10.

As noted in my First Interim Report, Montana applies its appropriation permit system to both surface and groundwater as part of a unitary system, and junior groundwater rights therefore may not impair or adversely affect senior rights. Mont. Code Ann. §§ 85-2-109(19), 85-2-311(1)(b). See Declaration of Tim Davis, Aug. 2, 2013, ¶ 2. The State's Water Resources Division, moreover, "has accepted the principle that, absent proof otherwise, all groundwater is ultimately connected to surface water and subject to surface water priorities." Id., ¶ 4.

Montana, however, does not currently consider the incidental production of groundwater in connection with CBM to be the diversion or withdrawal of water for a beneficial use. Davis Declaration, ¶ 6. See In the Matter of the Designation of the Powder River Basin Controlled Ground Water Area, Final Order at Findings of Fact ¶ 8 (Dec. 1999). As a result, Montana does not require an appropriation permit for such groundwater production. Id., ¶¶ 5-6. See Mont. Code Ann. § 85-2-102(a)(1) ("appropriate" means to "divert, impound, or withdraw . . . a

quantity of water for a beneficial use"). The fact that Montana does not require an appropriation permit for incidental CBM groundwater production "does not mean that groundwater withdrawn during CBM production is not connected to surface water or cannot adversely affect surface water users." Davis Declaration, ¶ 6.

While surface water users in Montana who believe that purely incidental CBM water production is impacting their water rights cannot pursue relief as a matter of prior appropriation law, Montana has provided separate protection through the Montana Coal Bed Methane Act of 2001. Mont. Code Ann. §§ 76-15-901 et seq. Under that Act, coal bed methane protection programs developed under the Act by local conservation districts can "compensate private … water right holders for damage caused by coal bed methane development." Id. § 76-15-905(1). "An eligible recipient for compensation includes private … water right holders who can demonstrate … a reduction in the quantity or quality of water available from a surface water or ground water source that affects the beneficial use of water." Id. § 76-15-905(3). In addition, where "a CBM producer intends to put groundwater to beneficial use, the groundwater use is subject to analysis and all of the requisite proof" involved in obtaining an appropriative permit, "including analysis of the hydrological connection between the source groundwater aquifer and surface water." Davis Declaration, ¶ 5.

C. Analysis

Montana and Wyoming law is informative, but not determinative, of when groundwater production in Wyoming violates Article V(A) of the Compact. See Kansas v. Nebraska, 530 U.S. 1272 (2000) (concluding that the Republican River Compact governs groundwater even though none of the compact states regulated groundwater for the protection of surface water at the time the compact was negotiated). Even if neither Montana nor Wyoming regulated any

groundwater pumping, the withdrawal of hydrologically interconnected groundwater could still jeopardize the continued enjoyment of pre-1950 appropriative rights in Montana. As noted in the First Interim Report, however, current Montana and Wyoming water laws, which provide for conjunctive management of hydrologically interconnected groundwater and surface water, support the conclusion that the Compact extends to at least some forms of groundwater.

The two states' current treatment of CBM groundwater production does not weaken this conclusion. Neither state provides that CBM groundwater production and interconnected surface water shall be governed by a single administrative permit system, at least where the groundwater production is purely incidental. Yet both states do provide protection for holders of surface water rights who can demonstrate that CBM groundwater production is interfering with their rights. In Wyoming, as noted earlier, such surface-water users can file a complaint with the State Engineer, who then must investigate the alleged interference and can recommend "various means of stopping, rectifying or ameliorating the interference." Wyo. Stat. Ann. § 41-3-911(b). In Montana, a surface-water user who can "demonstrate … a reduction in the quantity" of water available can seek compensation under a local coal bed methane protection program. Id. § 76-15-905. Neither state, in short, would ignore real and injurious interference if and when it could be shown.

Nor is there anything in the abstract about CBM groundwater production that would exclude it from coverage under the Yellowstone River Compact. As noted earlier, the language of the Compact is broad and, at least in theory, could readily encompass at least some cases of CBM groundwater production. Whether particular CBM operations are covered by the Compact is a mixed question of law and fact rather than a purely legal issue.

Wyoming suggests that the fact that neither state is conjunctively regulating CBM groundwater production together with surface water rights on a unitary basis demonstrates that "both parties have determined that the production of the CBM groundwater at issue in this litigation does not have the requisite level of hydrologic connection to warrant regulation under the doctrine of appropriation." Wyoming Memorandum, p. 37. There is nothing in the record, however, to indicate that officials in either state have done a completely factual analysis of the CBM wells at issue to determine their potential impact on surface flows and have concluded, on the basis of such a technical study, that the wells have only a tenuous connection, at best, with surface flows. Even if state officials had conducted such a study and made such a factual determination, the Supreme Court is the ultimate arbiter of the connection between CBM groundwater production and surface flows for purposes of determining whether there has been a violation of the Yellowstone River Compact in this case.

In summary, there is no basis for carving a flat exemption for CBM groundwater production from Article V(A) of the Compact. Montana, moreover, has provided expert testimony that CBM groundwater production in Wyoming has depleted and will continue to deplete water available for appropriators in Montana. See Expert Report of Steve Larson, January 4, 2013 (attached as Exhibit W to Montana's opposition); Expert Rebuttal Report of Steven Larson, June 4, 2013 (attached as Exhibit X to Montana's opposition).

None of this means that Montana will ultimately prevail on its claim that CBM groundwater production in Wyoming is violating Article V(A) of the Compact. That again is an issue for trial. Wyoming, however, is not entitled to summary judgment at this stage based on the current record.

A major question for trial, of course, will be the appropriate factual standard for determining whether particular CBM groundwater production is covered by the Compact. While Wyoming's motion does not require resolution of that question, it is worth setting out my initial thinking on these questions, subject to further briefing by counsel as part of the pre-trial and trial proceedings.

First, the comprehensive protection of pre-1950 appropriative rights under Article V(A) of the Compact would suggest that the standard for determining when groundwater should be regulated is equally comprehensive. If specific groundwater production reduces the surface flow needed by pre-1950 appropriators in Montana, this reduction would seem to interfere with the enjoyment of the pre-1950 appropriative rights under Article V(A) of the Compact no less than equivalent surface diversions. However, considerations of practicality, the actual practices of the two states, and contemporaneous practice in other interstate compacts may ultimately suggest that such a flat rule must be tempered (e.g., by excluding groundwater pumping with only *de minimis* or immaterial impacts on surface flows). See, e.g., Arkansas River Compact, art. IV(D) (1949) (precluding only "material" depletion).

Second, the burden of proof of showing the requisite connection should probably lie with Montana as the downstream state. The two states would appear to follow different presumptions. According to Montana, its water officials follow "the principle that, absent proof otherwise, all groundwater is ultimately connected to surface water and subject to surface water priorities." Davis Declaration, ¶ 4. Wyoming, however, apparently presumes that "waters are not connected unless proven otherwise." Barbara Tillman, Why Has Integrated Management Succeeded in Some States But Not in Others?, 1065 Water Resources Update 13, 15 (1996). Given that Montana must show that Wyoming has interfered with its pre-1950 appropriative rights in order

to establish a violation of the Compact, however, it would seem most appropriate to require that Montana affirmatively demonstrate the nature of the connection between CBM groundwater production and surface flows.

Third, an open issue is how to deal with the fact that groundwater production today may impact surface water flows not only now, but also in future years. See Anadarko Memorandum, pp. 10, 14-15. This is a complexity, of course, presented by the regulation of any groundwater pumping that does not have a relatively immediate and complete impact on surface flows. As Montana notes, the delay does not reduce the potential impact on its pre-1950 appropriative rights in water-short years. For this reason, the delayed impact does not mean that Article V(A) does not cover the groundwater production. But the delay means that Wyoming cannot totally cure the problem by simply shutting down the CBM production immediately upon receiving a call by Montana, thus presenting a remedial challenge. The answer to the remedial challenge may simply be that Wyoming must find other means of increasing streamflows in water-short years when prior CBM groundwater production is reducing water needed by pre-1950 appropriators in Montana. See Montana's Reply to Anadarko Petroleum Corporation's Memorandum on Summary Judgment, p. 12 (suggesting that Wyoming might meet its obligation through "augmentation, purchasing additional rights, or not irrigating acreage in Wyoming"). Or another remedial approach may be needed.

Amicus Anadarko Petroleum argues that the time delay demonstrates that any call on CBM groundwater production in Wyoming would be futile (because there is no evidence that curtailment of CBM production would "provide any contemporaneous benefit to a senior user in Montana") and thus demonstrates that the Compact does not cover CBM groundwater production. Anadarko Memorandum, pp. 22-26. Anadarko, however, misunderstands the nature

of a call under the Compact. The Compact does not contemplate calls of particular post-1950 water users in Wyoming. Instead, the Compact requires Wyoming, as a signatory thereto, to take whatever actions are required to ensure that any post-1950 appropriations in Wyoming do not interfere with pre-1950 appropriations in Montana. Wyoming can meet this requirement in any way that it wishes. Wyoming is free to permit CBM groundwater production, even when that production is likely to impact surface flows in the Yellowstone River system. But Wyoming must be prepared, under Article V(A) of the Compact, to avoid, and where necessary, remedy any impact on pre-1950 appropriative rights in Montana that could result therefrom.

V. LACK OF EXPERT TESTIMONY FOR SOME YEARS

Next, Wyoming argues that the Supreme Court should grant summary judgment for all years other than 2001, 2003, 2004, and 2006 because Montana has not presented expert testimony for those years showing that post-1950 uses in Wyoming resulted in insufficient water to meet Montana's pre-1950 appropriative rights. I agree in part and conclude that Wyoming is entitled to partial summary judgment for those years.

To establish a violation of the Compact in any given year, Montana must "show at a minimum [that] at least some pre-1950 appropriative rights are unsatisfied and that they went unsatisfied because Wyoming instead delivered that water to post-1950 appropriators." Hearing Transcript, July 29, 2011, p. 26. Montana also must demonstrate a causal connection between the two. For summary judgment purposes only, Montana has presented sufficient evidence that pre-1950 appropriative rights in Montana went unsatisfied in the years currently at issue. See, e.g., Book Rebuttal Report, p. 32; Declaration of Roger Muggli, August 2, 2013, ¶¶ 4, 7; Declaration of Art Hayes, Jr., August 2, 2013, ¶¶ 10-11. However, Montana has provided affirmative evidence regarding the amounts of post-1950 appropriations in Wyoming only for

2001, 2003, 2004, 2006 (and, in the case of CBM groundwater production, also for 2002). Moreover, Montana has provided expert evidence regarding the size of the impact of post-1950 uses in Wyoming on pre-1950 water rights in Montana (the necessary causal connection) only for 2001, 2003, 2004, and 2006.

Montana argues that it has produced evidence from which a trier of fact can nonetheless conclude that violations of the Compact occurred in years other than 2001, 2003, 2004, and 2006. In particular, Montana cites to evidence that neither the Interstate Ditch nor the lower mainstem of the Tongue River were regulated during the years at issue. See, e.g., Deposition of Francis Patrick Boyd, November 14, 2012, pp. 63, 105, 109; Deposition of Michael Whitaker, pp. 51, 63. Montana contends that the evidence as a whole, including (1) the fact that particular waterways with post-1950 appropriators were not regulated, and (2) evidence that post-1950 appropriators used water in other years, is sufficient to allow the trier of fact to infer that post-1950 appropriators in Wyoming used water in all the years still at issue.

Looking at the current record in the light most favorable to Montana, I have concluded that Wyoming is entitled to partial summary judgment for all years except 2001, 2003, 2004, and 2006 on the size of any Compact violation. The current phase of this case involves two related questions. First, did Wyoming violate the Compact in any year at issue? Second, if so, what was the size of the violation? Montana clearly has not presented sufficient evidence to permit a trier of fact to reach a conclusion regarding the size of any violation. Absent relevant expert testimony, any estimation of the size of the violation would be pure speculation. As a result, Montana will not be entitled to prove the size of any violation for years other than 2001, 2003, 2004, and 2006 and, as a result, it also will not be able to seek damages for those years in the remedies phase of this case.

Montana, however, may want to present evidence at trial for other years merely to establish that a violation occurred and thus to support a future request for prospective relief. Montana will be entitled to present evidence for this limited purpose. Although the required inferences often seem tenuous on the record in front of me, I conclude that the record nonetheless provides sufficient evidence to permit Montana to go to trial on the simple question of liability (but not the size of any liability) for the years at issue other than 2001, 2003, 2004, and 2006.

VI. EVIDENCE OF CONTEMPORANEOUS DEMAND

Wyoming also argues that, to establish liability, Montana must show that it had a "contemporaneous demand" for the water that it alleges Wyoming has failed to furnish pursuant to the Compact. Wyoming Memorandum, pp. 38-39. Wyoming is correct in several aspects of its argument on this issue. First, as the Supreme Court has ruled, the Yellowstone River Compact does not guaranty Montana a set quantity of water. Montana v. Wyoming, 131 S. Ct. 1765, 1779 (2011).

Second, appropriative rights in the West, and thus Montana's rights under Article V(A) of the Compact, are governed by the concept of beneficial use. As the Montana Supreme Court announced over a century ago,

> It is a fundamental principle of water right law that a prior right may be exercised only to the extent of the necessities of the owner of such prior right and when devoted to a beneficial purpose within the limits of the right. When the one holding the prior right does not need the water, such prior right is temporarily suspended and the next right or rights in the order of priority may use the water until such time as the prior appropriator's needs justify his demanding that the junior appropriator or appropriators give way to his superior claim.

Cook v. Hudson, 103 P.2d 137, 146 (Mont. 1940). Both Montana and Wyoming courts have repeatedly emphasized this point. See, e.g., McDonald v. State, 722 P.2d 598, 605 (Mont. 1986)

("*beneficial use* shall be the *basis*, the *measure* and the *limit* of all rights in the use of water" – emphasis in original); McDonald v. State, 722 P.2d 606, 608-609 (Mont. 1986) (petition for rehearing) (the "extent of an appropriation of water is limited to beneficial use"); Quigley v. McIntosh, 290 P. 266, 268 (Mont. 1930) ("Whenever the owners of the superior water rights … have no use for the water, or are not making use of it for a useful and beneficial purpose, it is the right of the [junior appropriator] to use the same by virtue of his junior appropriation"); Parshall v. Cowper, 143 P. 302 (Wyo. 1914) ("The volume of water to which an appropriator is entitled at any particular time is that quantity, within the limits of the appropriation, which he can and does apply to the beneficial uses stated in his certificate of appropriation"). Even if the law of prior appropriation were in doubt, Article V(A) of the Compact makes the importance of beneficial use clear by protecting "[a]ppropriative rights to the *beneficial uses* of the water of the Yellowstone River System" (emphasis added). And the Compact defines beneficial use as "that use by which the water supply of a drainage basin is depleted when *usefully employed* by the activities of man." Yellowstone River Compact, art. II(H) (emphasis added).

The importance of water and the aridity of the West make the beneficial use doctrine essential, both generally and under the Compact. As the Montana Supreme Court has emphasized, "it is to the interest of the public that water be conserved for use, rather than be permitted to go to waste, to the end that the arid lands of the state may be put under irrigation and thus be made productive." Quigley v. McIntosh, 290 P. at 268. The importance of the beneficial use standard, moreover, has grown over time as demand for water in the West has grown: "As the pressure of population has led to the attempt to bring under cultivation more and more lands, and as the demands for water to irrigate these lands have become more and more pressing, the decisions have become increasingly emphatic in limiting the appropriator to the

quantity reasonably necessary for beneficial uses." McDonald v. State, 722 P.2d at 605-606. See also id. at 608 (on petition for rehearing), quoting Allen v. Petrick, 222 P. 451, 452 (Mont. 1924) ("the principal of beneficial use [is of] paramount importance").

As a result, Wyoming does not need to provide water to Montana pursuant to Article V(A) of the Compact, and is therefore not liable under the Compact for failure to do so, if Montana did not need the water for actual beneficial use under pre-1950 appropriative rights. In prior interstate water disputes, the Supreme Court has held that a state need not show injury in an enforcement action. See, e.g., Nebraska v. Wyoming, 507 U.S. 584, 592 (1993) (no showing of injury required when state seeks to enforce a judicial decree); Wyoming v. Colorado, 309 U.S. 572, 581 (1940) (same). The current action, however, is quite different. Here, Montana is seeking to establish liability under a compact that, rather than providing for a fixed quantum of water, provides for the continued enjoyment of "[a]ppropriative rights to the beneficial uses of the water of the Yellowstone River System … in accordance with the laws governing the acquisition and use of water under the doctrine of appropriation." Yellowstone River Compact, art. V(A).

The general principle of "beneficial use," however, does not necessarily mean that Montana must prove "contemporaneous demand" at every moment and point in time. The complexities and difficulties of administering a significant river system, including the impossibility of instantaneous deliveries of water from reservoirs or locations that can be several days of "river time" away, require the beneficial use doctrine to be applied in a practical and implementable fashion, designed to ensure that senior appropriators receive the water to which they are entitled and have a need without unreasonably wasting water that could be used elsewhere. For purposes of summary judgment, Montana has provided sufficient evidence to

raise a triable issue of fact regarding beneficial use for the years still at issue. At trial, however, Wyoming is free to try to establish that Montana administered water rights on the Tongue River in the years at issue in a fashion that did not guarantee beneficial use, that any additional water flowing to Montana would have constituted waste, and that Wyoming was therefore not obligated to provide any additional waters pursuant to Article V(A) of the Compact.[5]

VII. APPROPRIATENESS OF CONTINUED PROCEEDINGS

In a footnote, Wyoming argues that the amount of water still involved in this case is "remarkably small" and would justify the court "if it chose to simply dismiss the entire case immediately under the maxim *de minimis non curat lex.*" Wyoming Memorandum, p. 24 n.8. Immediately prior to the hearing of Wyoming's motion, I raised the similar question of whether the action still meets the Supreme Court's standard for hearing and resolving interstate disputes. As I noted, the Supreme Court has announced in prior cases that it will "not exert its extraordinary power to control the conduct of one State at the suit of another, unless the threatened invasion of rights is of serious magnitude and established by clear and convincing evidence." Connecticut v. Massachusetts, 282 U.S. 660, 669 (1931).

Whether the Supreme Court would have accepted jurisdiction over this case if it had known the small amount of water that would ultimately be involved is an open and interesting question. However, I have concluded that the current action should continue to trial, despite the small amounts of water still involved in the years in question, for two reasons. First, the Supreme Court originally decided that this case met its jurisdictional standard and granted Montana leave to file its Complaint (552 U.S. 1175 (2008)), so the question now is whether the

[5] An open issue for trial is who has the burden on the issue of beneficial use. The only relevant case that I have found to date would seem to suggest that the burden of proof should be on Wyoming. See Parshall v. Cowper, 143 P. 302 (Wyo. 1914) ("We think the defendants should have been allowed to plead and prove, if they could, that plaintiffs were permitted to use all the water that was being then applied or that they were then in a position to and desired to apply to beneficial uses under the adjudication").

contours of the case have so dramatically changed to justify dismissing the case before final resolution. Second, the Supreme Court has continued to hear and decide other interstate water disputes that appear to have involved similarly small quantities of water. Thus, in Colorado v. New Mexico, 459 U.S. 176 (1982), a Colorado corporation obtained a conditional right to divert 75 cfs of water from the headwaters of the Vermejo River, leading to an interstate dispute between New Mexico (who argued that the river was fully appropriated) and Colorado. Following discovery and a trial on the merits, the Special Master in that case recommended that Colorado be permitted a diversion of 4,000 acre-feet per year. Id. at 177. New Mexico objected, and the Supreme Court not only heard the objection, but remanded the case to the Special Master for specific factual findings, and then heard the case a second time. See Colorado v. New Mexico, 467 U.S. 310 (1984). The lessons of interstate disputes such as this case and Colorado v. New Mexico may well be that no amount of water, no matter how small by comparison to many river systems, is unimportant in the parched lands of the western United States, particularly when they involve the allocation of water between sovereign state governments.

VIII. CONCLUSION

As explained above, I conclude that Wyoming's motion for summary judgment should be denied, except that Wyoming is entitled to partial summary judgment on the quantum of liability for all years other than 2001, 2003, 2004, and 2006.