Syllabus

NOTE: Where it is feasible, a syllabus (headnote) will be released, as is being done in connection with this case, at the time the opinion is issued. The syllabus constitutes no part of the opinion of the Court but has been prepared by the Reporter of Decisions for the convenience of the reader. See *United States* v. *Detroit Timber & Lumber Co.*, 200 U. S. 321, 337.

SUPREME COURT OF THE UNITED STATES

Syllabus

KANSAS *v.* COLORADO

ON EXCEPTIONS TO REPORT OF SPECIAL MASTER

No. 105, Orig. Argued March 19, 2001– Decided June 11, 2001

The Arkansas River rises in Colorado and flows through Kansas and several other States before emptying into the Mississippi River. In 1949, Congress approved the Arkansas River Compact (Compact), which Colorado and Kansas negotiated, and which provided in Article IV–D that, *inter alia,* future development of the river basin could not materially deplete the usable quantity or availability to other users of the river's waters. In 1986, Kansas filed a complaint alleging that Colorado had violated the Compact. In his first report, the Special Master found that post-Compact increases in groundwater well pumping in Colorado had materially depleted the waters in violation of Article IV–D; in his second report, he recommended that damages be awarded to Kansas; and in his third report, he recommended that such damages be measured by Kansas' losses attributable to Compact violations since 1950, be paid in money not water, and include pre-judgment interest from 1969 to the date of judgment. Colorado has filed four objections to the third report, Kansas has filed one, and the United States submits that all objections should be overruled.

Held:

1. The recommended damages award does not violate the Eleventh Amendment. Thus, Colorado's first exception is overruled. Colorado contends that that the Amendment precludes damages based on losses sustained by individual Kansas farmers, as the Report recommends. Kansas has unquestionably made the required showing that it has a direct interest of its own and is not merely seeking recovery for the benefit of individuals who are the real parties in interest. *Oklahoma ex rel. Johnson* v. *Cook*, 304 U. S. 387, 396. This is but one of several proceedings in which Kansas' own interest in preventing upstream diversion of the river has justified the exercise of this Court's original jurisdiction. Kansas has been in full control of this

Damage to state not just individuals

litigation since its inception, and its right to control the disposition of any recovery of damages is unencumbered. The injury to individual farmers is but one component of the formula adopted by the Special Master to quantify damages here. When a State properly invokes this Court's original jurisdiction, neither the measure of, nor the method for calculating, damages can retrospectively negate that jurisdiction. Nor would jurisdiction be affected by Kansas' postjudgment decision about whether to deposit the money recovered in its general coffers or use the money to benefit those who were hurt by the violation. Pp. 3–6.

2. The unliquidated nature of Kansas' money damages does not bar an award of prejudgment interest. Thus, Colorado's second exception is overruled. This Court has long recognized that the common-law distinction between liquidated and unliquidated damages is unsound, *Funkhouser* v. *J. B. Preston Co.*, 290 U. S. 163, 168, and that a monetary award does not fully compensate for an injury unless it includes an interest component, see, *e.g., Milwaukee* v. *Cement Div., National Gypsum Co.*, 515 U. S. 189, 195. The Special Master acted properly in declining to follow this long-repudiated common-law rule. Pp. 6–9.

interest should be included from 85-on also includes inflation.

3. The Special Master determined the appropriate rate for the prejudgment interest award and determined that interest should begin running in 1969. Colorado's third exception is overruled insofar as it challenges the interest rates and sustained insofar as it challenges the Special Master's recommendation that the interest should begin to accrue in 1969. Kansas' exception that the interest should begin to accrue in 1950 is overruled. Pp. 9–14.

(a) Because this Court has decided that Kansas could measure a portion of its damages by individual farmers' losses, the interest rates applicable to individuals in the relevant years, rather than the lower rates available to States, may properly be used to calculate damages. Pp. 9–10.

(b) The Special Master concluded that interest should be awarded according to fairness considerations rather than a rigid theory of compensation for money withheld. Kansas' argument that this Court has effectively foreclosed that equities-balancing approach has some merit, but this Court cannot say that by 1949 the Court's case law had developed sufficiently to put Colorado on notice that prejudgment interest would automatically be awarded from the time of injury for a Compact violation. Therefore, the Special Master acted properly in analyzing this case's facts and awarding only as much prejudgment interest as was required by balancing the equities. The equities support an award beginning on a date later than the date of first violation. The factors the Special Master considered— that no one thought that the pact was being violated in the early years after it was signed and that a long interval passed between the original injuries and these proceedings, as well as the dramatic impact of compounding interest over many years– fully justify his view that prejudgment interest should not be awarded for any years before either party was aware of the excessive pumping. Colorado suggests that prejudgment interest should begin to accrue in 1985, the year the complaint was filed, rather than 1969, when Colorado knew or should have known that it was violating the Compact. Though the issue is close, the equities favor the later date. In overruling Colorado's exceptions to the second report, this Court held that Kansas was not guilty of inexcusable delay in failing to complain more promptly about the post-Compact pumping because the nature and extent of the violations were unclear even years after the violation became obvious. That conclusion is a double-edged sword. Both States' interests would have been served had the claim been advanced promptly after its basis became known, and it was clear that once the proceedings started they would be complex and protracted. Given the uncertainty over the damages' scope that prevailed from 1968 and 1985 and the fact Kansas had the power to begin the process by which those damages would be quantified, Colorado's request that the Court deny prejudgment interest for that time is reasonable. Pp. 10–13.

4. The Special Master properly determined the value of the crop losses attributable to Compact violations. Thus, Colorado's fourth exception is overruled. Kansas and Colorado disagreed as to how much additional crop yield would have been produced with the missing water. Kansas' experts relied upon the hypothesis of a generally linear relationship between water available for use and increased crop yields. Colorado, whose own expert recanted an alternative proposal for calculating damages, attempts to poke holes in Kansas' methodology through a speculative application of economic theory. That attack is unpersuasive, given Colorado's inability to mount an effective challenge to Kansas' experts on their own terms and its complete failure to provide a plausible alternative estimate of crop damage. Pp. 14–17.

Colorado's exceptions sustained in part and overruled in part; Kansas' exception overruled; and case remanded.

STEVENS, J., delivered the opinion of the Court, Parts I, IV, and V of which were unanimous, and Parts II and III of which were joined by REHNQUIST, C. J., and KENNEDY, SOUTER, GINSBURG, and BREYER, JJ. O'CONNOR, J., filed an opinion concurring in part and dissenting in part, in which SCALIA and THOMAS, JJ., joined.

SUPREME COURT OF THE UNITED STATES

No. 105, Orig.

STATE OF KANSAS, PLAINTIFF *v.* STATE OF COLORADO

ON EXCEPTIONS TO REPORT OF SPECIAL MASTER

[June 11, 2001]

JUSTICE STEVENS delivered the opinion of the Court.

The Arkansas River rises in the mountains of Colorado just east of the Continental Divide, descends for about 280 miles to the Kansas border, then flows through that State, Oklahoma, and Arkansas and empties into the Mississippi River. On May 20, 1901, Kansas first invoked this Court's original jurisdiction to seek a remedy for Colorado's diversion of water from the Arkansas River. See *Kansas* v. *Colorado,* 185 U. S. 125, 126 (1902) (statement of case). In opinions written during the past century, most recently in *Kansas* v. *Colorado,* 514 U. S. 673, 675–678 (1995), we have described the history and the importance of the river. For present purposes it suffices to note that two of those cases, *Kansas* v. *Colorado,* 206 U. S. 46 (1907), and *Colorado* v. *Kansas,* 320 U. S. 383 (1943), led to the negotiation of the Arkansas River Compact (Compact), an agreement between Kansas and Colorado that in turn was approved by Congress in 1949. See 63 Stat. 145. The case before us today involves a claim by Kansas for damages based on Colorado's violations of that Compact.

The Compact was designed to "[s]ettle existing disputes and remove causes of future controversy" between the two

States and their citizens concerning waters of the Arkansas River and to "[e]quitably divide and apportion" those waters and the benefits arising from construction and operation of the federal project known as the "John Martin Reservoir." Arkansas River Compact, Art. I, reprinted in App. to Brief for Kansas A–1, A–2. Article IV–D of the Compact provides:

> "This Compact is not intended to impede or prevent future beneficial development of the Arkansas River basin in Colorado and Kansas by Federal or State agencies, by private enterprise, or by combinations thereof, which may involve construction of dams, reservoir, and other works for the purpose of water utilization and control, as well as the improved or prolonged functioning of existing works: Provided, that the waters of the Arkansas River, as defined in Article III, shall not be materially depleted in usable quantity or availability for use to the water users in Colorado and Kansas under this Compact by such future development or construction." *Id.*, at A–5.

It is the proviso to that paragraph that is of special relevance to this case.

In 1986, we granted Kansas leave to file a complaint alleging three violations of the Compact by Colorado. See 514 U. S., at 679–680. After taking evidence in the liability phase of the proceeding, Special Master Arthur L. Littleworth filed his first report, in which he recommended that two of the claims be denied, but that the Court find that post-Compact increases in groundwater well pumping in Colorado had materially depleted the waters of the river in violation of Article IV–D. See *id.*, at 680. We overruled Colorado's exceptions to that recommendation, including an argument that Kansas was guilty of laches. *Id.*, at 687–689. We remanded the case to the Special Master to determine an appropriate remedy for the violations of Article IV–D. *Id.*, at 694.

After further proceedings the Special Master filed a second report recommending an award of damages. Colorado filed Exceptions to that report, arguing that the Eleventh Amendment barred an award based on losses incurred by Kansas citizens, and that the report improperly recommended the recovery of prejudgment interest on an unliquidated claim. We overruled those exceptions without prejudice to their renewal after the Special Master made a more specific recommendation for a remedy. 522 U. S. 1073 (1998). He did so in his third report, and we are now confronted with exceptions filed by both States.

In the third report, the Special Master recommends that damages be measured by Kansas' losses, rather than Colorado's profits, attributable to Compact violations after 1950; that the damages be paid in money rather than water; and that the damages should include prejudgment interest from 1969 to the date of judgment. Colorado has filed four objections to the report. It contends (1) that the recommended award of damages would violate the Eleventh Amendment to the United States Constitution; (2) that the damages award should not include prejudgment interest; (3) that the amount of interest awarded is excessive; and (4) that the Special Master improperly credited flawed expert testimony, with the result that Kansas' crop production losses were improperly calculated. On the other hand, Kansas has filed an objection submitting that prejudgment interest should be paid from 1950, rather than 1969. The United States, which intervened because of its interest in the operation of flood control projects in Colorado, submits that both States' objections should be overruled.

I

We have decided that a State may recover monetary damages from another State in an original action, without running afoul of the Eleventh Amendment.[1] See, *e.g.*, *Texas* v. *New Mexico*, 482 U. S. 124, 130 (1987) ("The Court has recognized the propriety of money judgments against a State in an original action, and specifically in a case involving a compact. In proper original actions, the Eleventh Amendment is no barrier, for by its terms, it applies only to suits by citizens against a State" (citations omitted)); see also *Maryland* v. *Louisiana*, 451 U. S. 725, 745, n. 21 (1981); *South Dakota* v. *North Carolina*, 192 U. S. 286, 317–321 (1904). Colorado contends, however, that the Eleventh Amendment precludes any such recovery based on losses sustained by individual water users in Kansas.

It is firmly established, and undisputed in this litigation, that the text of the Eleventh Amendment would bar a direct action against Colorado by citizens of Kansas. Moreover, we have several times held that a State may not invoke our original jurisdiction when it is merely acting as an agent or trustee for one or more of its citizens. For example, in *New Hampshire* v. *Louisiana*, 108 U. S. 76 (1883), we refused to assume jurisdiction over an action to recover payment on defaulted bonds that had been formally assigned to the state plaintiffs but remained beneficially owned by private individuals. And, in *North Dakota* v. *Minnesota*, 263 U. S. 365 (1923), we held that, while the plaintiff State could obtain an injunction against the improper operation of Minnesota's drainage ditches, the Eleventh Amendment precluded an award of damages based on injuries to individual farmers, where the damages claim was financed by contributions from the farmers

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[1] That Amendment provides: "The Judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or Subjects of any Foreign State."

and the State had committed to dividing any recovery among the farmers "in proportion to the amount of [their] loss." *Id.*, at 375.

Those cases make it clear that a "State is not permitted to enter a controversy as a nominal party in order to forward the claims of individual citizens." *Maryland* v. *Louisiana,* 451 U. S., at 737; see also *New Hampshire* v. *Louisiana,* 108 U. S., at 89 (Eleventh Amendment applies and acts to bar jurisdiction where "the State and the attorney-general are only nominal actors in the proceeding"). The "governing principle" is that in order to invoke our original jurisdiction, "the State must show a direct interest of its own and not merely seek recovery for the benefit of individuals who are the real parties in interest." *Oklahoma ex rel. Johnson* v. *Cook,* 304 U. S. 387, 396 (1938).

Kansas has unquestionably made such a showing. Indeed, the present proceeding is but one of several in which Kansas' own interest in preventing upstream diversions from the Arkansas River has justified an exercise of our original jurisdiction. In *Cook* we even offered as an example of proper original jurisdiction one of the prior original suits between Kansas and Colorado, see *id.*, at 393–394 (citing *Kansas* v. *Colorado*, 206 U. S. 46 (1907)), and in *Texas* v. *New Mexico* we held that enforcement of an interstate water compact by means of a recovery of money damages can be within a State's proper pursuit of the "general public interest" in an original action, 482 U. S., at 132, n. 7.

Moreover, the record in this case plainly discloses that the State of Kansas has been in full control of this litigation since its inception. Its right to control the disposition of any recovery of damages is entirely unencumbered. The injury to individual farmers is but one component of the formula adopted by the Special Master to quantify the damages caused by Colorado's violation of its contractual obligations. In short, there is simply nothing in the record to suggest that the State of Kansas is merely a "nominal party" to this litigation or that the individual farmers are "the real parties in interest."

When a State properly invokes our jurisdiction to seek redress for a wrong perpetrated against it by a sister State, neither the measure of damages that we ultimately determine to be proper nor our method for calculating those damages can retrospectively negate our jurisdiction. Nor would our jurisdiction to order a damages remedy be affected by Kansas' postjudgment decisions concerning the use of the money recovered from Colorado. As we have previously recognized, it is the State's prerogative either to deposit the proceeds of any judgment in "the general coffers of the State" or to use them to "benefit those who were hurt." *Texas* v. *New Mexico*, 482 U. S., at 132, n. 7.

We overrule Colorado's first exception.

II

Colorado next excepts to the Special Master's conclusion that the damages award should include prejudgment interest despite the fact that Kansas' claim is unliquidated.[2] At one point in time, the fact that the claim was unliquidated would have been of substantial importance. As a general matter, early common-law cases drew a

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[2] Though final damages have not yet been calculated, the importance of this issue is illustrated by breaking down the damages claimed by Kansas. Of $62,369,173 in damages so claimed, $9,218,305 represents direct and indirect losses in actual dollars when the damage occurred. Of the remaining $53,150,867, about $12 million constitutes an adjustment for inflation (a type of interest that Colorado concedes is appropriate) while the remaining amount (approximately $41 million) represents additional interest intended to compensate for lost investment opportunities. Third Report of Special Master 87–88 (hereinafter Third Report). The magnitude of prejudgment interest ultimately awarded in this case will, of course, turn on the date from which interest accrues. See Part III–B, *infra*.

distinction between liquidated and unliquidated claims and refused to allow interest on the latter. See, *e.g.*, Comment, Rothschild, Prejudgment Interest: Survey and Suggestion, 77 Nw. U. L. Rev. 192, 196, and n. 26 (1982) (discussing history and collecting sources). This rule seems to have rested upon a belief that there was something inherently unfair about requiring debtors to pay interest when they were unable to halt its accrual by handing over to their creditors a fixed and unassailable amount. See, *e.g.*, *id.*, at 196.

This common-law distinction has long since lost its hold on the legal imagination. Beginning in the early part of the last century, numerous courts and commentators have rejected the distinction for failing to acknowledge the compensatory nature of interest awards.[3] This Court allied itself with the evolving consensus in 1933, when we expressed the opinion that the distinction between cases of liquidated and unliquidated damages "is not a sound one." *Funkhouser* v. *J. B. Preston Co.*, 290 U. S. 163, 168 (1933). The analysis supporting that conclusion gave no doubt as to our reasoning: "Whether the case is of the one class or the other, the injured party has suffered a loss which may be regarded as not fully compensated if he is confined to the amount found to be recoverable as of the time of breach and nothing is added for the delay in obtaining the award of damages." *Ibid.* Our cases since 1933 have

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[3]For sources from the early part of the century criticizing, qualifying, or rejecting the distinction, see, *e.g.*, *Faber* v. *New York*, 222 N. Y. 255, 262, 118 N. E. 609, 610–611 (1918); *Bernhard* v. *Rochester German Ins. Co.*, 79 Conn. 388, 398, 65 A. 134, 138 (1906); Restatement of Contracts §337, p. 542 (1932); C. McCormick, Law of Damages §51, p. 210 (1935); 1 T. Sedgwick, Measure of Damages §315 (9th ed. 1912); cf. 3 S. Williston, Law of Contracts §1413, p. 2508 (1920) ("The disinclination to allow interest on claim of uncertain amount seems based on practice rather than theoretical grounds"). For a thorough modern treatment of the issue, see D. Dobbs, Law of Remedies §3.6(3) (2d ed. 1993).

consistently acknowledged that a monetary award does not fully compensate for an injury unless it includes an interest component. See, *e.g.*, *Milwaukee* v. *Cement Div., National Gypsum Co.*, 515 U. S. 189, 195 (1995) ("The essential rationale for awarding prejudgment interest is to ensure that an injured party is fully compensated for its loss"); *West Virginia* v. *United States*, 479 U. S. 305, 310–311, n. 2 (1987); *General Motors Corp.* v. *Devex Corp.*, 461 U. S. 648, 655, n. 10 (1983).

Relying on our cases, the Special Master "concluded that the unliquidated nature of Kansas' money damages does not, in and of itself, bar an award of prejudgment interest." Second Report, §XV, reprinted in App. to Third Report 43. In reaching that conclusion, the Special Master was fully cognizant of both the displaced common-law rule and the subsequent doctrinal evolution. In addition, he gave careful consideration to equitable considerations that might mitigate against an award of interest, concluding that "considerations of fairness," *Board of Comm'rs of Jackson Cty.* v. *United States*, 308 U. S. 343, 352 (1939), supported the award of at least some prejudgment interest in this case.

We find no fault in the Special Master's analysis of either our prior cases or the equities of this matter. While we will deal with the amount of prejudgment interest below, to answer Colorado's second objection it is sufficient to conclude that the Special Master was correct in determining that the unliquidated nature of the damages does not preclude an award of prejudgment interest.[4]

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[4] JUSTICE O'CONNOR argues that the state of the law was insufficiently evolved by 1949 for Colorado to have had notice that the courts might award prejudgment interest if it violated its obligations under the Compact. See *post*, at 3–7 (opinion concurring in part and dissenting in part). Though the law was indeed in flux at that time, this Court had already made it clear that it put no stock in the traditional com-

Colorado's second exception is overruled.

III

Colorado's third exception takes issue with both the rate of interest adopted by the Special Master and the date from which he recommended that interest begin to accrue. As to the second of these two concerns, Colorado submits that, if any prejudgment interest is to be awarded, it should begin to accrue in 1985 (when Kansas filed its complaint in this action), rather than in 1969 (when, the Special Master concluded, Colorado knew or should have known that it was violating the Compact). On the other hand, Kansas has entered an exception, arguing that the accrual of interest should begin in 1950. We first address the rate question, then the timing issue.

A

The Special Master credited the testimony of Kansas' three experts who calculated the interest rates that they thought necessary to provide full compensation for the

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mon-law prohibition, see *Funkhouser* v. *J. B. Preston Co.*, 290 U. S. 163, 168 (1933), and had stated explicitly that such interest may accrue when "considerations of fairness" demand it, see *Board of Comm'rs of Jackson Cty.* v. *United States*, 308 U. S. 343, 352 (1939). The contemporary Restatement of Contracts was in accord. See Restatement of Contracts §337(b), p. 542 (1932) ("Where the contract that is broken [is not for a set or easily ascertainable amount of money], interest may be allowed in the discretion of the court, if justice requires it, on the amount that would have been just compensation if it had been paid when performance was due"). Under those circumstances, we think it is clear that, in 1949, an informed contracting party would not have concluded that an agreement's silence on the issue deprived a reviewing court of the authority to award compensatory interest if the party willfully violated its contractual obligations. Moreover, under JUSTICE O'CONNOR's reasoning, States who entered into interstate compacts before 1987, see *post*, at 4, would retain a perpetual incentive to breach their contractual obligations and reap the benefits of such a breach with the full knowledge that the courts lack the authority to order a fully compensatory remedy.

damages caused by Colorado's violations of the Compact in the years since 1950. As a result of inflation and changing market conditions those rates varied from year to year. In their calculation of the damages suffered by Kansas farmers, the experts used the interest rates that were applicable to individuals in the relevant years rather than the (lower) rates available to States.

Colorado argues that the lower rates should have been used because it is the State, rather than the individual farmers, that is maintaining the action and will receive any award of damages. But if, as we have already decided, see Part I, *supra*, it is permissible for the State to measure a portion of its damages by losses suffered by individual farmers, it necessarily follows that the courts are free to utilize whatever interest rate will most accurately measure those losses. The money in question in this portion of the damages award is revenue that would– but for Colorado's actions– have been earned by individual farmers. Thus, the Special Master correctly concluded that the economic consequences of Colorado's breach could best be remedied by an interest award that mirrors the cost of any additional borrowing the farmers may have been forced to undertake in order to compensate for lost revenue.

B

Although the Special Master rejected Colorado's submission that there is a categorical bar to the award of prejudgment interest on unliquidated claims, he concluded that such interest should not " 'be awarded according to any rigid theory of compensation for money withheld,'" but rather should respond to " 'considerations of fairness.' " Third Report 97 (quoting *Jackson Cty.*, 308 U. S., at 352). Kansas argues that our decisions subsequent to *Jackson County* have effectively foreclosed the equities-balancing approach that the Special Master adopted. There is some merit to Kansas' position. See *National Gypsum Co.*, 515

U. S., at 193 (affirming a decision of the Court of Appeals that had read our cases as "disapproving of a 'balancing of the equities' as a method of deciding whether to allow prejudgment interest").

However, despite the clear direction indicated by some of our earlier opinions, we cannot say that by 1949 our caselaw had developed sufficiently to put Colorado on notice that, upon a violation of the Compact, we would automatically award prejudgment interest from the time of injury. Given the state of the law at that time, Colorado may well have believed that we would balance the equities in order to achieve a just and equitable remedy, rather than automatically imposing prejudgment interest in order to achieve full compensation. See *Jackson Cty.*, 308 U. S., at 352 (prejudgment interest award limited by "considerations of fairness"); *Miller* v. *Robertson*, 266 U. S. 243, 258 (1924) ("[W]hen necessary in order to arrive at fair compensation, the court in the exercise of a sound discretion may include interest or its equivalent as an element of damages" on unliquidated claims); Restatement of Contracts §337, p. 542 (1932) (prejudgment interest on unliquidated claims "may be allowed in the discretion of the court, if justice requires it"). While we are confident that, when it signed the Compact, Colorado was on notice that it might be subject to prejudgment interest if such interest was necessary to fashion an equitable remedy, we are unable to conclude with sufficient certainty that Colorado was on notice that such interest would be imposed as a matter of course. We, therefore, believe that the Special Master acted properly in carefully analyzing the facts of the case and in only awarding as much prejudgment interest as was required by a balancing of the equities.

We also agree with the Special Master that the equities in this case do not support an award of prejudgment interest from the date of the first violation of the Compact, but rather favor an award beginning on a later date. In reaching this conclusion, the Special Master appropriately considered several factors. In particular, he relied on the fact that in the early years after the Compact was signed, no one had any thought that the pact was being violated. Third Report 106. In addition, he considered the long interval that passed between the original injuries and these proceedings, as well as the dramatic impact of compounding interest over many years. *Id.*, at 99–101; see also n. 3, *supra*.

In its exception, Kansas argues that the Special Master's reasoning would be appropriate if damages were being awarded as a form of punishment, but does not justify a refusal to provide full compensation to an injured party. Moreover, Kansas argues, a rule that rewards ignorance might discourage diligence in making sure that there is full compliance with the terms of the Compact. Kansas' argument is consistent with a "rigid theory of compensation for money withheld," but, for the reasons discussed above, we are persuaded that the Special Master correctly declined to adopt such a theory. The equitable considerations identified by the Special Master fully justify his view that in this case it would be inappropriate to award prejudgment interest for any years before either party was aware of the excessive pumping in Colorado.

In its third exception, Colorado argues that, if prejudgment interest is to be awarded at all, the equities are best balanced by limiting such interest to the time after the complaint was filed, rather than the time after which Colorado knew or should have known that it was violating the Compact. Specifically, Colorado suggests that prejudgment interest should begin to accrue in 1985 rather than 1969. The choice between the two dates is surely debatable; it is a matter over which reasonable people can– and do– disagree. After examining the equities for ourselves, however, a majority of the Court has decided that the later date is the more appropriate.[5]

When we overruled Colorado's objections to the Special Master's second report, we held that Kansas was not guilty of inexcusable delay in failing to complain more promptly about post-Compact well-pumping. 514 U. S., at 687–689. In saying that the delay was not inexcusable, we recognized that the nature and extent of Colorado's violations continued to be unclear even in the years after which it became obvious that the Compact was being violated. *Id.*, at 688–689. That conclusion is something of a two-edged sword, however. While Kansas' delay was understandable given the amorphous nature of its claims, there is no doubt that the interests of both States would have been served if the claim had been advanced promptly after its basis became known. Once it became obvious that a violation of the Compact had occurred, it was equally clear that the proceedings necessary to evaluate the significance of the violations would be complex and protracted. Despite the diligence of the parties and the Special Master, over 15 years have elapsed since the complaint was filed. Given the uncertainty over the scope of damages that prevailed during the period between 1968 and 1985 and the fact that it was uniquely in Kansas' power to begin the process by which those damages would be quantified, Colorado's request that we deny prejudgment interest for

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[5] JUSTICE O'CONNOR, JUSTICE SCALIA, and JUSTICE THOMAS would not allow any prejudgment interest. See *post*, at 1. JUSTICE KENNEDY and THE CHIEF JUSTICE are of the opinion that prejudgment interest should run from the date of the filing of the complaint. JUSTICE SOUTER, JUSTICE GINSBURG, JUSTICE BREYER, and the author of this opinion agree with the Special Master's view that interest should run from the time when Colorado knew or should have known that it was violating the Compact. In order to produce a majority for a judgment, the four Justices who agree with the Special Master have voted to endorse the position expressed in the text.

that period is reasonable.

For these reasons, we overrule Kansas' exception. We also overrule Colorado's third exception insofar as it challenges the interest rates recommended by the Special Master, but we sustain that objection insofar as it challenges the award of interest for the years prior to 1985.

IV

Colorado's final objection challenges the Special Master's determination of the value of the crop losses attributable to the Compact violations, the largest component of Kansas' damages claim. The Special Master accomplished the calculation by estimating the amount of farmland affected by Colorado's violations, the crops planted on that farmland, the price of those crops, and the difference in yield between what the affected land would have produced with the additional water and what the land actually produced with the water it received.

The parties were in agreement concerning most of the facts bearing on the Special Master's calculation. They agreed that water was in short supply in the affected area each year, 178 Tr. 127–128; they agreed on the amount of the shortage that resulted from Colorado's violations, *ibid.;* and they generally agreed on which crops were planted on the affected farmland as well as the prices of those crops in the relevant years. See Third Report 46.

The only issue on which the parties disagreed was the exact effect of the diverted water on the crop yields for the farmland in question. On that score, both Kansas and Colorado accepted the general notion that "[u]p to the point where crops no longer can make use of additional water, more water produces more crop yield." *Id.*, at 47. But they parted ways on the question of precisely how much additional yield would have been produced with the missing water.[6] Kansas' experts relied upon the hypothesis of a generally linear relationship between water available for use and increased crop yields. With figures drawn from a number of studies, Professor Norman Whittlesey, Kansas' principal expert,[7] developed quantitative estimates of the lost yield, per unit of water, for the various crops grown on the affected farmland. Although Colorado's expert initially attempted to propose his own model, he ultimately abandoned his position when confronted with flaws in his data. 197 Tr. 44–46.

Its own expert having recanted his alternative proposal for calculating the effects of the diverted water on crop yield, Colorado attempts to poke holes in Kansas' methodology through a speculative application of abstract economic theory. Kansas' numbers (for crop losses due to diverted water) cannot be correct, Colorado argues, because if they were, it would have been economically profitable for the affected farmers to drill wells and obtain

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[6] As the Special Master noted, "Colorado experts did not dispute, in general, the linear relationship between [water usage] and crop yield. . . . However, they were of the view that the particular linear crop yield coefficients used by Kansas were not sufficiently reliable to determine the increase in yields that would have occurred if there had been no depletions of headgate deliveries to the [affected] lands." Third Report 47. Colorado suggests that Kansas' model, based as it is upon academic studies, does not adequately account for reductions in crop yield from such real-world conditions as "weather, disease, and pests." Brief for Colorado 44, n. 12. But, as the Special Master correctly noted, Kansas' experts reduced the predicted crop yield by 25% in order to account for such possibilities. Third Report 51 ("The 25% reduction was calculated to adjust the controlled experimental data to 'realistic long-term type conditions' in western Kansas, including high temperatures, winds, insects, and other stressful conditions").

[7] Professor Whittlesey served for 20 years as a full professor and agricultural economist at Washington State University. His publications, many of which concern the kind of issues presented by this case, fill 14 pages on his curriculum vitae. See Kan. Exh. 891.

water from underground sources rather than suffer the reduced yield from the shortage of surface water. Brief for Colorado 41–49. Because Kansas farmers did not install wells, Colorado concludes, we can know that the diverted water was not as valuable as Kansas' experts claim.

The Special Master did not question Colorado's assertion that digging wells would, in retrospect, actually have been profitable for Kansas farmers, but he declined to employ Colorado's argument as a basis for rejecting Kansas' expert testimony on the extent of crop losses. His thoughtful analysis is worth quoting in full:

> "Given the hindsight of present day economists, it might have been profitable for everyone to drill supplemental wells . . . . However, there are many reasons why this may not have been done, and the failure to drill wells does not by itself indicate that Kansas' estimate of crop losses is too high. The favorable economics of drilling wells may not have been understood at the time. Quality information regarding costs and returns was not readily available. [211 Tr.] 31. Some farmers, for reasons of age or otherwise, may not have wanted to go into long term debt. Some farmers may not have had the available capital, or the credit to borrow. Many farmers were 'cash poor.' *Id.* at 32. Some farmers may have been averse to risk. Some farmers may have been tenants, and the landlord may not have been willing to undertake the necessary investment. Some farms may have been small in terms of total acreage, or the acreage spread out over space, so that it was not feasible or practical to consider a well investment. [208 Tr.] 37–39. Capital for well investments, with three to ten year repayment periods, was less available than for long-term investments. [211 Tr.] 32." Third Report 60–61.

We agree with the Special Master that accepting Colorado's argument requires a good deal of speculation, not only about the comparative advantages of wells as opposed to irrigation, but also about the ability of the farmers fully to understand or to implement different choices without the benefit of expert hindsight. Given Colorado's inability to mount an effective challenge to Kansas' experts on their own terms and its complete failure to provide a plausible alternative estimate of the crop damage that resulted from its violations of the Compact, we conclude that its attack on Kansas' conclusions is unpersuasive.[8]

Colorado's fourth exception is overruled.

V

We remand the case to the Special Master for preparation of a final judgment consistent with this opinion.

It is so ordered.

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[8] We also agree with the Special Master's decision to disregard the Colorado expert's comparison of the numbers produced by Kansas' model with numbers drawn from the literature on the various crops planted on the affected farmland. As Colorado admits, see Brief for Colorado 46, the water values in the literature were not based on "a 'short-short run' situation, that is, an intra-seasonal transaction in which no capital costs were involved, and only additional harvesting and irrigation costs would be required." Third Report 63. Because the circumstances in Kansas involved short-short run situations, and because such short-short run situations generally involve higher values for water, values derived from other contexts are of limited use in evaluating Kansas' model. See *ibid.*

SUPREME COURT OF THE UNITED STATES

No. 105, Orig.

STATE OF KANSAS, PLAINTIFF *v.* STATE OF COLORADO

ON EXCEPTIONS TO REPORT OF SPECIAL MASTER

[June 11, 2001]

JUSTICE O'CONNOR, with whom JUSTICE SCALIA and JUSTICE THOMAS join, concurring in part and dissenting in part.

I agree with the Court's disposition of this case as to Colorado's first and fourth exceptions to the Special Master's Third Report, concerning the award and determination of damages. I therefore join Parts I, IV, and V of the Court's opinion. I do not concur in Parts II and III of the Court's opinion because I believe that the award of prejudgment interest to Kansas, coming over half a century after the Arkansas River Compact's (hereinafter Compact) negotiation and approval, is clearly improper under our precedents.

We are dealing with an interstate compact apportioning the flow of a river between two States. A compact is a contract. It represents a bargained-for exchange between its signatories and "remains a legal document that must be construed and applied in accordance with its terms." *Texas* v. *New Mexico,* 482 U. S. 124, 128 (1987); see also *Petty* v. *Tennessee-Missouri Bridge Comm'n,* 359 U. S. 275, 285 (1959) (Frankfurter, J., dissenting) ("A Compact is, after all, a contract"). It is a fundamental tenet of contract law that parties to a contract are deemed to have contracted with reference to principles of law existing at the time the contract was made. See, *e.g., Norfolk & Western R. Co.* v. *Train Dispatchers,* 499 U. S. 117, 129–130 (1991); *Farmers* *and Merchants Bank of Monroe* v. *Federal Reserve Bank of Richmond,* 262 U. S. 649, 660 (1923); see generally 11 Williston on Contracts §30:19 (4th ed. 1999). The basic question before the Court is thus one of "the fair intendment of the contract itself." *Virginia* v. *West Virginia,* 238 U. S. 202, 233 (1915). Specifically, the question is whether, at the time the Compact was negotiated and approved, Colorado and Kansas could fairly be said to have intended, or at least to have expected or assumed, that Colorado might be exposing itself to liability for prejudgment interest in the event of the Compact's breach. Cf. *id.,* at 232–236 (awarding interest to Virginia in a suit against West Virginia for breach of a contract to assume "an equitable proportion" of Virginia's interest-bearing public debt upon finding that "there is no escape from the conclusion that there was a contract duty on the part of West Virginia to provide for accruing interest as a part of the equitable proportion assumed").

I fail to see how Colorado and Kansas could have contemplated that prejudgment interest would be awarded. The "venerable ... rule" at common law was that prejudgment interest was unavailable on claims for unliquidated or, even more significantly, unascertainable damages. *Milwaukee* v. *Cement Div., National Gypsum Co.,* 515 U. S. 189, 197 (1995). Contrary to the Court's suggestion, see *ante,* at 6–8, 11, that rule had not been abandoned by the period between 1943 and 1949, the years of the Compact's negotiation and ultimate approval by Congress. By that time, the state of the law in general regarding awards of prejudgment interest for unliquidated claims was uncertain at best, as the Court itself recognizes. See *ante,* at 6–8, and n. 3; cf. *ante,* at 11; see also *Funkhouser* v. *J. B. Preston Co.,* 290 U. S. 163, 168 (1933) (noting "the numerous, and not harmonious, decisions upon the allowance of interest in the case of unliquidated claims," and that "the rule with respect to unliquidated claims has been in evolution"). To be sure, we had by then, along with other courts, criticized the common law rule that prejudgment interest was recoverable on claims for liquidated but not for unliquidated damages. See *ibid.* But in the absence of a statute providing for such interest, many courts, including our own, still denied and would continue to deny prejudgment interest on claims for unliquidated and unascertainable damages in a great many, and probably most, circumstances. See, *e.g., Board of Comm'rs of Jackson Cty.* v. *United States,* 308 U. S. 343, 353 (1939); *Blau* v. *Lehman,* 368 U. S. 403, 414 (1962); *Lineman* v. *Schmid,* 32 Cal. 2d 204, 211, 195 P. 2d 408, 412 (1948) (Although "there is authority to the effect that the distinction formerly existing between liquidated and unliquidated demands is practically obliterated, . . . further reading . . . discloses, with citation of many cases, that the general rule is almost uniformly adhered to, namely, that interest is not allowable where the damages depend upon no fixed standard and cannot be made certain except by accord, verdict or decree"); D. Dobbs, Remedies §3.5, p. 165 (1973) ("Most courts, in the absence of a statute to the contrary, would not award interest on unliquidated pecuniary claims, the amount of which could not be ascertained or computed, even in theory, without a trial"); see generally C. McCormick, Law of Damages §51, p. 210 (1935) (explaining evolution of rule in America); see also 1 D. Dobbs, Law of Remedies §3.6(1), p. 336 (2d ed. 1993) ("The most significant limitation on the recovery of prejudgment interest is the general rule that, apart from statute, prejudgment interest is not recoverable on claims that are neither liquidated as a dollar sum nor ascertainable by fixed standards" (footnotes omitted)).

Awards of such interest on claims for unliquidated and unascertainable damages for breach of a contract appear to have been rarer still. See, *e.g., Williams* v. *Idaho Potato Starch Co.,* 73 Idaho 13, 24, 245 P. 2d 1045, 1051–1052 (1952); *Meyer* v. *Strom,* 37 Wash. 2d 818, 829–830, 226

P. 2d 218, 224 (1951); *Lineman* v. *Schmid, supra,* at 207–213, 195 P. 2d, at 410–413; see also 3 Williston on Contracts §1413, p. 2508 (1920) ("Interest is not generally allowed . . . where market rates or prices furnish no definite or exact test of the amount due" (footnote omitted)); 1 T. Sedgwick, Measure of Damages §315, p. 614 (9th ed. 1912) ("Generally speaking, no interest can be recovered for breach of a contract, where the damages are in their nature unliquidated, until the amount is ascertained" (footnote omitted)). In fact, at the time, they were not allowed in either Colorado or Kansas. See, *e.g., Clark* v. *Giacomini,* 85 Colo. 530, 536–537, 277 P. 306, 308 (1929); *Denver Horse Imp. Co.* v. *Schafer,* 58 Colo. 376, 390, 147 P. 367, 372 (1915); *Roe* v. *Snattinger,* 91 Kan. 567, 568, 138 P. 581, 582 (1914); *Evans* v. *Moseley,* 84 Kan. 322, 332–333, 114 P. 374, 378 (1911).

Finally, and most important to this case, an award of prejudgment interest on unliquidated and unascertainable damages for breach of an interstate compact was unheard of at the time of the Compact's negotiation and approval. Unlike cases involving bonds or other instruments of credit, see, *e.g., Virginia* v. *West Virginia, supra,* at 232–36; *South Dakota* v. *North Carolina,* 192 U. S. 286, 317–321 (1904), monetary damages in cases of this sort, involving the apportionment of water between States, are notoriously difficult to ascertain. Indeed, despite 15 years of litigation over the Compact, and resort to a great deal of data, expert testimony, complicated methodologies, and sophisticated analyses on the subject, the final value of Kansas' damages still has yet to be determined. See *ante,* at 6, n. 2; see also Third Report §§III to X (detailing and analyzing the numerous variables and data elements necessary to arrive at a determination of Kansas' damages). It thus is not surprising that, until 1987, we had never even suggested that monetary damages could be recovered from a State as a remedy for its violation of an interstate compact apportioning the flow of an interstate stream. And when we first allowed such damages in *Texas* v. *New Mexico*, 482 U. S. 124 (1987), we did so partially at the behest of New Mexico, the breaching State. See *id.*, at 129–132. How, then, can one say that, at the time the Compact was negotiated and approved, its signatories could fairly be said to have intended, or at least could reasonably be said to have expected or assumed, that Kansas might recover prejudgment interest on damages caused by Colorado's breach? The necessary predicate to such a recovery was neither recognized nor even contemplated by this Court or, apparently, by the state parties to original actions of this sort; until some 40 years thence.

In light of this history, it seems inescapable that any participant in the drafting and negotiation of the Compact would, if asked at the time, have reacted with marked surprise to the notion that the Compact rendered its signatories liable for an award of prejudgment interest such as that sanctioned by the Court today. As both the Compact itself and the parties' post-Compact course of dealing make clear, the "fair intendment" of the Compact very probably was simply for the in-kind recovery of water as a remedy for its breach. The Compact says nothing about the availability of prejudgment interest on money damages as part of any remedy or, for that matter, about the availability of money damages as a remedy in the first instance. It contemplates the delivery of water from Colorado to Kansas, pure and simple. See Arkansas River Compact, reprinted in App. to Brief for Kansas A–1. When Kansas filed its complaint in this matter, "it sought only a decree commanding Colorado to deliver the waters of the Arkansas River in accordance with the provisions of the Arkansas River Compact.'" Third Report §XI, at 98. Cf. *Colorado* v. *Kansas*, 320 U. S. 383, 391 (1943) (discussing Kansas' prayer for relief in the form of "an apportionment in second feet or acre feet"). Not until our decision in *Texas* v. *New Mexico, supra,* did Kansas amend its complaint to include a claim for monetary damages. See Third Report §XI, at 98. Neither Kansas nor Colorado appears ever to have anticipated or assumed, much less expected, that the Compact might result in a monetary award of prejudgment interest over half a century after its signing.

The Court ignores all of this in awarding prejudgment interest to Kansas, seizing instead upon the compensatory rationale behind the criticism of the common law rule and awards of prejudgment interest on unliquidated claims for damages in general. See *ante,* at 7–8. I do not dispute that awards of interest are compensatory in nature or that, as a general matter, "a monetary award does not fully compensate for an injury unless it includes an interest component." *Ante,* at 8; see also *National Gypsum Co.,* 515 U. S., at 195, n. 7. But, as the Court itself recognizes, see *ante,* at 8, our precedents make clear that, at least today and in the absence of a governing statute, awards of prejudgment interest on unliquidated claims for damages are governed not by any "rigid theory of compensation for money withheld," but rather by "considerations of fairness." *Blau,* 368 U. S., at 414 (internal quotation marks and citation omitted); see, *e.g., General Motors Corp.* v. *Devex Corp.,* 461 U. S. 648, 651–653, and n. 5 (1983); *Funkhouser,* 290 U. S., at 168–169. This is especially so where, as here, we are dealing with suits by one governmental body against another. See *West Virginia* v. *United States,* 479 U. S. 305, 309–312 (1987); *Board of Comm'rs of Jackson Cty.,* 308 U. S., at 349–353.

There is nothing fair about awarding prejudgment interest as a remedy for the Compact's breach when all available evidence suggests that the signatories to the Compact neither intended nor contemplated such an unconventional remedy. Many compacts between States are old; suits involving compacts concerning water rights are late in starting and are invariably long pending; and, because statutes of limitation or the doctrine of laches is rarely available to preclude the steady buildup of prejudgment interest, the amount of such interest can become quite large, as Kansas' claim for approximately $41 million illustrates. See *ante*, at 6, n. 2. One would think that, particularly in such circumstances, even the most rudimentary conception of fairness would dictate that the Court ought not to interpret a contract between two States as exposing one of them to liability under a novel legal principle some 50 years later without some indication that the States might have contemplated such exposure in conjunction with the contractual rights and duties expressed in their compact. Contrary to the Court's apparent belief, see *ante*, at 8, n. 4, nothing about such a contextualized historical approach would create an across-the-board incentive for the continued breach of interstate compacts entered into before 1987, especially given the prospect of large and uncertain damages awards. Had Kansas and Colorado anticipated or even suspected what the Court today effects, they almost certainly would have negotiated a provision in the Compact to address the situation. States in the future very likely will do so in the wake of the Court's decision, which creates a very different backdrop from the one against which Kansas and Colorado operated. In the absence of such a provision, however, "the loss [as to interest] should remain where it has fallen." *Board of Comm'rs of Jackson Cty.* , *supra*, at 353; see Third Report §XI, at 101 ("Prejudgment interest here neither takes from those who benefitted, nor goes to those who were injured").

For the foregoing reasons, I respectfully dissent from the Court's award of prejudgment interest.