

agricultural users within California’s San Joaquin Valley. In 1983 plaintiffs entered into separate contracts (the “1983 Contracts” or the “Contracts”) with the United States Bureau of Reclamation (“Reclamation”) for the appropriation of water from the New Melones Reservoir. Reclamation breached the Contracts in the years 1999 to 2004 when it failed to provide specified volumes of water to plaintiffs. Stockton E. Water Dist. v. United States, 583 F.3d 1344, 1356-69 (Fed. Cir. 2009) (“Stockton III”), reh’g en banc granted in part, 638 F.3d 781 (Fed. Cir. 2011), aff’g in part, rev’g in part, and remanding, Stockton E. Water Dist. v. United States, 75 Fed. Cl. 321 (Fed. Cl. 2007) (“Stockton I”), modified, 76 Fed. Cl. 470 (2007) (“Stockton II”). The Federal Circuit remanded the case to this court for a determination of damages for the breaches that occurred from 1999 through 2004. Id. at 1369. The Federal Circuit also vacated this court’s dismissal of plaintiffs’ takings claim and tasked this court with deciding plaintiffs’ takings claim on remand. Id.

In October 2011, following briefing by the parties, this court granted defendant’s motion to dismiss plaintiffs’ takings claim. Stockton E. Water Dist. v. United States, 101 Fed. Cl. 352, 362 (2011) (“Stockton IV”). The parties proceeded with discovery regarding contract damages, and this court held an eight-day damages trial during September 2012. On remand the parties adopted the convention of filing separate briefs. Because both plaintiffs presented distinct proofs and proceeded separately at trial, the court has issued separate opinions regarding the contract damages for Stockton East and Central. The “Discussion” section of this opinion concerns only the contract damages of Central. However, the “Facts” section of the separate opinions makes findings with respect to both districts because the proofs addressed joint issues or otherwise overlapped.

Plaintiff Central seeks: (1) damages of \$194,650.00 to account for its costs of mitigation and (2) expectation damages of between \$10,654,417.00 and \$15,326,360.00.

FACTS 1/

The factual background and circumstances underlying the 1983 Contract were recited in the Federal Circuit’s 2009 opinion in Stockton III, 583 F.3d 1344, and this court’s 2007 opinion on liability, Stockton I, 75 Fed. Cl. 321. Accordingly, this opinion discusses only those facts necessary to resolve the damages issues that were tried.

1/ The facts set forth in the “Facts” and “Discussion” sections of this opinion constitute the court’s findings of fact pursuant to RCFC 52(a)(1). The legal standards governing claims for contract damages sought by plaintiffs frame the context in which relevant facts are found, so the particular findings appear in the “Discussion” section. Rulings on mixed questions of fact and law also are set forth in the “Discussion” section.

I. The Central Valley Project and New Melones Unit

The Central Valley Project (the “CVP”)—the largest federal water management project in the United States—is situated entirely in California and is operated by the United States through Reclamation. Stockton III, 583 F.3d at 1349. The CVP was built to serve the water needs of California’s Central Valley Basin and contains numerous dams, reservoirs, power plants, canals, and other facilities. Id. Completed in 1979, the New Melones Unit of the CVP consists of a large concrete dam on the Stanislaus River and a reservoir with a storage capacity of 2.4 million acre-feet of water. 2/ Id.

The Flood Control Act of 1962, which modified the authorization of the New Melones project, required Reclamation to “determine the quantity of water required to satisfy all existing and anticipated future needs within [the Stanislaus River] [B]asin.” Pub. L. No. 87-874, 76 Stat. 1173, 1191; see also Stockton III, 583 F.3d at 1350. In a 1980 Special Report, Reclamation estimated that 180,000 acre-feet of water would be available annually for agricultural, municipal, and industrial uses. Stockton III, 583 F.3d at 1350. Relying upon the 1980 Special Report, Reclamation issued a Record of Decision in 1981, which recommended that Reclamation allocate a portion of the New Melones water supply to Stockton East and Central. PX 15, at 00336; see also Stockton I, 75 Fed. Cl. at 337.

II. The 1983 Contracts

The damages trial provided a forum for explicating several provisions of the 1983 Contracts. 3/ Accordingly, the court summarizes the provisions relevant for determining contract damages, citing prior undisturbed or affirmed rulings from this court’s 2007 liability opinion and the Federal Circuit’s 2009 opinion as necessary.

1. Purposes of the Contracts

In the early 1980s, Reclamation began contract negotiations to sell New Melones water to Stockton East and Central. Stockton III, 583 F.3d at 1350. On December 19, 1983, Stockton East and Central signed nearly identical contracts with Reclamation for delivery of

2/ An acre-foot is the volume of water necessary to cover one acre of land with water to a depth of one foot.

3/ The term “Contract” refers to the respective 1983 Contracts of either Stockton East or Central.

water from the New Melones Reservoir. PX 36; ^{4/} PX 37. Both contracts recite that “[Reclamation] is constructing and operating the Central Valley Project, California for the purpose, among others, of furnishing water for irrigation, municipal, industrial, domestic, and other beneficial uses[.]” PX 36, at 00352; PX 37, at 00382. The Contracts also state, “[I]nvestigations by [Reclamation] indicate that [each district] has a present and potential need for an irrigation and a municipal and industrial water supply[.]” and “[each district] has sought a long-term water supply from the Folsom South Canal of the Central Valley Project which is not currently available[.]” PX 36, at 00353; PX 37, at 00383. Stockton East and Central both entered into their respective contracts due to depleted groundwater and the need for surface water as both an alternative source and as a means of avoiding further depletion of groundwater. Joint Stipulation of Fact, filed Aug. 31, 2012, ¶ 2 (“Jt. Stipl.”).

2. Reclamation’s obligation to provide minimum quantities of water

Article 3 of the Contracts sets forth the formula by which Reclamation was to make water available to Stockton East and Central. See Stockton III, 583 F.3d at 1351-52; Stockton I, 75 Fed. Cl. at 364-66. Article 3(c) of Stockton East’s Contract provides that “[Reclamation] shall make available and [Stockton East] shall pay for, as a minimum, such quantities of agricultural water as specified[.]” PX 36, at 00357; see Stockton I, 75 Fed. Cl. at 365. Central’s contract contains an identical provision. PX 37, at 00388; see Stockton I, 75 Fed. Cl. at 365. Subsection (c)(1) states that for the first five years of contract performance, beginning with the first full year after Reclamation notified the districts that water was available for delivery, Reclamation was to make available the amount of agricultural water that the districts requested. PX 36, at 00357; PX 37, at 00388. For years six through ten, Subsection (c)(2) specifies a minimum volume of agricultural water that increases from years eight to nine. PX 36, at 00357-58; PX 37, at 00389. If the districts requested more water than the annual minimum during this period, however, the requested amount became the new minimum for each subsequent year until exceeded by other contractual minimums. PX 36, at 00357-58; PX 37, at 00389. The amount of water scheduled in the eleventh year would be the minimum amount for each remaining year of the Contract. PX 36, at 00358; PX 37, at 00389.

Article 3(d) of Stockton East’s contract provides that “[Reclamation] shall make available and [Stockton East] shall pay for, as a minimum, such quantities of M&I [municipal and industrial] water as specified” and includes a table listing minimum quantities of M&I water for each year of contract performance. PX 36, at 00358-59. Subsection (d) of both contracts allows the districts to convert the agricultural water specified in Subsection

^{4/} Both Stockton East and Central denoted their exhibits as “PX.” Exhibits introduced by Central that are cited in this opinion are numbered beginning with 600, with the exception of PX 37.

(c) to M&I use. PX 36, at 00358, 00360; PX 37, at 00389. These provisions, taken together, provide the following Build-Up Schedule of annual minimum quantities of water (in acre-feet) that Reclamation was obligated to make available from 1993 through 2004:

Year	Stockton East Build-Up	Central Build-Up
1993	500	0
1994	23,350	28,000
1995	23,450	28,000
1996	25,550	28,000
1997	46,400	56,000
1998	46,500	56,000
1999	47,200	56,000
2000	47,900	56,000
2001	48,600	56,000
2002	49,300	56,000
2003	50,000	56,000
2004	50,700	56,000

See Jt. Stipl. ¶ 7; Stockton II, 76 Fed. Cl. at 489; see also Stockton III, 583 F.3d at 1351-52. ^{5/} Article 3 of both Contracts also specifies a maximum amount of water that

^{5/} Shortly after this court issued its February 20, 2007 liability opinion, plaintiffs filed a Motion to Amend or Modify Decision. See Stockton II, 76 Fed. Cl. at 471-72. In response to defendant’s assertion that the court miscalculated the minimum volumes of water with respect to Stockton East for the years 1999 through 2004, the court amended its February 2007 opinion to correct the computation for those years. Compare Stockton I, 75 Fed. Cl. at 365, with Stockton II, 76 Fed. Cl. at 479-80, 489. The Federal Circuit’s opinion, however, noted a Build-Up Schedule that was almost identical to the one appearing in the trial court’s original opinion and therefore included incorrect minimum volumes for the six breach years. Compare Stockton III, 583 F.3d at 1352, with Stockton II, 76 Fed. Cl. at 489. Prior to the damages trial, the parties stipulated to the quantities specified in Stockton East’s Build-Up Schedule for the years 1999 through 2004. Jt. Stipl. ¶ 7. The stipulated quantities for those years differed from the quantities listed in this court’s amended liability opinion. Compare

Reclamation would make available annually. PX 36, at 00356-60; PX 37, at 00387-90; see also Stockton III, 583 F.3d at 1350-51.

This court found that Reclamation’s failure to provide the minimum quantities of water listed in the Build-Up Schedule violated the requirements of Article 3, but held that Reclamation would not be liable for breach if it had a valid excuse under the Contracts for its non-performance. Stockton II, 76 Fed. Cl. at 489; Stockton I, 75 Fed. Cl. at 365-66. The Federal Circuit affirmed this court’s finding that, absent a valid excuse, Reclamation would be liable for breach of contract for its failure to deliver the minimum quantities of water listed in the Build-Up Schedule. Stockton III, 583 F.3d at 1356-57 (“The record establishes and the trial court found as a fact that Reclamation failed to provide the water that was promised under the 1983 contracts for the years 1994, 1995, and 1999-2004. . . . Absent an affirmative defense, that failure by the Government would constitute a breach of the contracts and render the Government liable for damages for the breach.”). Reclamation’s non-performance in the years 1999 through 2004 was not excused, and therefore Reclamation was liable for breaching the Contracts in those years. Id. at 1364-65.

3. “Take or pay” provision

This court previously found that Article 3 not only obligated Reclamation to provide the minimum amounts of water listed in the Build-Up Schedule, but also required each district to purchase such amounts of water. Stockton I, 75 Fed. Cl. at 365 (referring to the Build-Up Schedule as a “minimum purchase and supply schedule”). The Federal Circuit affirmed that finding. Stockton III, 583 F.3d at 1351 (“Article 3 also establishes for each year of the contract a *minimum* amount of water that Reclamation is obligated to make available, and for which the Districts must pay[.]”).

At the damages trial, Reid W. Roberts, Central’s General Counsel, testified as to his understanding that Article 3 contained a provision requiring Central to purchase the minimum quantities of water. Transcript of Proceedings, Stockton E. Water Dist. v. United States, No. 04-541L (Fed. Cl. Sept. 10-19, 2012) (“Tr.”), at 1643-44 (Roberts). 6/ Mr.

5/ (Cont’d from page 5.)

Jt. Stipl. ¶ 7, with Stockton II, 76 Fed. Cl. at 489. Consequently, and representing a final consensus, the Build-Up Schedule listed above includes the stipulated quantities for the years 1999 through 2004.

6/ Parentheses attribute statements by counsel and witnesses. Statements by counsel do not constitute testimony or evidence, although they may prove useful for setting forth litigating positions and for explaining uncontested terms.

Roberts also testified, however, that Reclamation had a practice of requiring Central to pay for only the volume of water that actually was delivered during both the breach and non-breach years:

Q. The practice in the 1999 to 2004 period was for Central to only pay for water actually delivered from the Bureau of Reclamation, correct?

A. That's correct[.]

....

Q. So both before and after the period 1999 to 2004, the practice between Central and the Bureau of Reclamation was to pay for the volume of water actually delivered under the New Melones contract.

A. That was the practice that we engaged in. Yes.

Tr. 1821, 1827 (Roberts). The evidence adduced at the damages trial therefore shows that Reclamation did not enforce the “take or pay” provision with respect to Central. Although no witnesses provided similar testimony regarding Reclamation’s enforcement of the “take or pay” provision with respect to Stockton East, the latter impliedly concedes in its post-trial brief that it paid only for the volumes of water Reclamation actually delivered. See Pl. Stockton East’s Br. filed Nov. 9, 2012, at 8 (citing records depicting actual deliveries under the Contract—PX 411 and PX 434—as evidence of the volumes that Stockton East purchased under its Contract).

4. The Article 9(a) shortage provision

Although Article 3 of the 1983 Contracts requires Reclamation to make minimum quantities of water available to the districts annually, the Contracts also provided for certain exceptions. One such exception, the shortage provision of Article 9(a), states that the United States shall not be liable “if a shortage does occur in any year because of drought, or other causes which . . . are beyond the control of the United States.” PX 36, at 00368; PX 37, at 00398; see also Stockton III, 583 F.3d at 1352, 1361-62. This court found that Reclamation’s failure to provide the minimum amounts of water specified in the Build-Up Schedule for the years 1994 and 1995 was excused due to the shortage provision of Article 9. Stockton I, 75 Fed. Cl. at 364. The Federal Circuit affirmed this court’s holdings with respect to the years 1994 and 1995, Stockton III, 583 F.3d at 1363-64, 1369, explaining that Article 9 is a *force majeure* provision that applies to causes “beyond the control of the United States,” such as a drought, earthquakes, an internal failure of the dam, or other such causes, id. at 1361-62. Citing the liability trial testimony of Edward M. Steffani, Stockton East’s

former General Manager, and Central’s General Counsel Mr. Roberts, the Federal Circuit further explained that when the parties executed the 1983 Contracts, both districts understood that Article 9(a) provided for shortages caused by external circumstances, including dry years, physical problems with the reservoir, or earthquakes. Id. at 1362.

5. The districts’ obligation to submit annual schedules to Reclamation

Article 4(a) of the 1983 Contracts requires the districts to submit annual schedules to Reclamation “indicating the amounts of agricultural and M&I water required monthly.” PX 36, at 00361; PX 37, at 00391; see also Stockton III, 583 F.3d at 1352; Stockton I, 75 Fed. Cl. at 362. Stockton East submitted valid schedules pursuant to the requirements of Article 4(a) from 1994-1996 and in 1998, and Central submitted a valid schedule in 1995. Stockton I, 75 Fed. Cl. at 362. This court held, however, that the districts’ failure to submit valid schedules in other years did not excuse Reclamation’s failure to provide the minimum amount of water listed in the Build-Up Schedule. Stockton I, 75 Fed. Cl. at 363, 365-66. The failure to provide valid schedules did not excuse Reclamation’s non-performance because the districts’ payment for water and construction of conveyance facilities pursuant to the 1983 Contracts constituted substantial performance. 7/ Id. The Federal Circuit affirmed, and the parties did not further dispute, this court’s ruling that the districts’ failure to submit schedules did not excuse any breach of contract by Reclamation. See Stockton III, 583 F.3d at 1352.

6. Central’s so-called “priority right” to Stockton East’s water

Article 9(b) of Stockton East’s Contract states: “During such water short years, the quantity of water available to [Stockton East] pursuant to the terms of this contract shall be reduced, as necessary, to meet the full needs of the Basin contractors and the needs of Central San Joaquin Water Conservation District for its firm and interim water supply.” 8/ PX 36, at 00368. Defendant asserts that this language granted Central a “priority right” as a third-party beneficiary to Stockton East’s Contract and therefore entitled Central take all available New Melones water during the six-year breach period. See Def.’s Br. filed Dec. 21, 2012 [366], at 11; see also Transcript of Proceedings, Stockton E. Water Dist. v. United States, No.

7/ The districts’ construction of water conveyance facilities is discussed in greater detail later in this section of the opinion.

8/ Article 9(b) of Central’s Contract includes a similar provision, although it does not specifically name Stockton East. See PX 37, at 00398 (“During such water short years, the quantity of water available for [Central’s] firm and interim water supply pursuant to the terms of this contract shall be reduced, as necessary, to meet the full needs of the Basin contractors.”).

04-541L (Fed. Cl. Jan. 4, 2013) (“Closing Arg. Tr.”), at 156-58 (Harrington). Defendant cites two separate contracts between the districts (the “forbearance agreements”) signed in 1995 and 1996, see DX 847 and DX 864, as evidence of the “priority right” granted to Central in Article 9(b) of Stockton East’s Contract. Closing Arg. Tr. at 157 (Harrington). The “whereas” clauses of the forbearance agreements both state: “Stockton-East is entitled to water under its contract [with Reclamation] only after Central has received or forgone the water to which it is entitled[.]” DX 847, at SE17892; DX 864, at CSJW_005386. Defendant also points to the deposition testimony of Mr. Roberts and Grant O. Thompson, Chairman of Central’s Board of Directors, that Central had the option to take the first 80,000 acre-feet of water that Reclamation allocated. DX 1184 (Deposition of Reid W. Roberts, May 3, 2012), at 64; DX 1185 (Deposition of Grant O. Thompson, May 22, 2012), at 98-99. Central responds that no such “priority right” existed under the 1983 Contracts and that Messrs. Roberts and Thompson “appear to have mistakenly believed” that such a priority right existed. Pl. Central’s Br. filed Dec. 10, 2012, at 13.

Although the forbearance agreements and deposition testimony of Messrs. Roberts and Thompson manifest the districts’ understanding that Central had the option to request the first 80,000 acre-feet of New Melones water, the evidence does not probatively demonstrate that a priority right was, in fact, granted to Central under Article 9(b) of Stockton East’s Contract. Indeed, the language of Article 9(b) in Central’s Contract shows that Central did not have such a priority right because the “quantity of water available for [Central]” in water short years “shall be reduced, as necessary, to meet the full needs of the Basin contractors.” PX 37, at 00398. Rather than granting a right to Central, Article 9(b) in Stockton East’s contract may operate as a defense for Reclamation in the event that Reclamation determined it was “necessary” to reduce Stockton East’s allocation to meet the full needs of Central in a “water short” year. See PX 36, at 00368.

7. Transfers of New Melones water

The 1983 Contracts also limit the ability of each district to sell water outside of its respective service area. Article 10 of the Contracts—entitled “Transfers or Exchanges of Water”—provides that “[w]ater furnished to the Contractor pursuant to this contract shall not be sold, exchanged, or otherwise disposed of for use outside the Contractor’s service area without prior written consent from the Contracting Officer.” PX 36, at 00368; PX 37, at 00398.

In 1993 Reclamation adopted Interim Guidelines (the “Water Transfer Guidelines”) for implementation of the water transfer provisions of § 3405(a) of the Central Valley Project Improvement Act (the “CVPIA”). See PX 602. The Water Transfer Guidelines acknowledge that § 3405(a) of the CVPIA authorizes transfers of New Melones water:

Section 3405(a) authorizes all individuals or districts who receive [CVP] water under water service or repayment contracts . . . to transfer, subject to certain conditions, all or a portion of the water subject to such contracts to any California water user or agency, State or Federal agency, Indian Tribe or private non-profit organization for [CVP] purposes or any purpose recognized as beneficial under State law.

Id. at 1. The Water Transfer Guidelines further explain that § 3405(a) is supplemental to “Reclamation’s existing authority to allow annual transfers between Project water users, which have historically been allowed and which are encouraged under existing contracts for efficient and effective Project water management.” Id. Section 1 of the Water Transfer Guidelines outlines the Guidelines’ three objectives: “to address all water transfers equitably, to provide for a more efficient and effective use of the water supply developed by the [CVP], and to provide greater flexibility to water users in transferring water developed by the [CVP][.]” Id. Angela K. Slaughter, Chief of the Water Contracts and Policy Branch for Reclamation, Sacramento, CA, testified that Reclamation has used the Water Transfer Guidelines since 1993 in determining whether CVP contractors are permitted to transfer New Melones water. Tr. 1709, 1718-19 (Slaughter).

Section 5 of the Water Transfer Guidelines specifies the criteria for transfers authorized under § 3405(a). PX 602, at 3-6. Criterion H, for example, states that “[a]ll transfers will be limited to [CVP] water that would have been consumptively used or irretrievably lost to beneficial use during the year or years of the transfer.” Id. at 4. Ms. Slaughter testified that Criterion H requires a transferor to show that the water previously had been used within the transferor’s district and would be used in the transferor’s district but for the transfer. ^{9/} Tr. 1721-24 (Slaughter). In addition, Criteria L and M require a transferor to comply with federal and state law, including the National Environmental Policy Act, the Endangered Species Act, the Fish & Wildlife Service Coordination Act, the California Environmental Quality Act (“CEQA”), and the California Endangered Species Act. PX 602, at 4-5; Tr. 1724-25 (Slaughter).

8. Construction of water conveyance facilities

Article 7(b) of the 1983 Contracts requires the districts to “construct and install, without cost or expense to the United States, facilities required by [the districts] to take and convey the water from the point or points of delivery.” PX 36, at 00364; PX 37, at 00394; see also Stockton III, 583 F.3d at 1351; Stockton I, 75 Fed. Cl. at 363.

^{9/} Ms. Slaughter clarified that Criterion H is “subject to [Criterion] J,” Tr. 1724 (Slaughter), which means that “[t]ransfers between [CVP] contractors within counties, watersheds or other areas of origin” satisfy the requirements of Criterion H. PX 602, at 4.

Kevin M. Kauffman, Stockton East’s General Manager since June 1993, testified at the damages trial that Stockton East completed construction of the New Melones Conveyance System (the “NMCS”) in 1993 at a cost of \$65 million. ^{10/} Tr. 70, 95 (Kauffman). Stockton East financed construction of the NMCS with a bond offering. Tr. 98 (Kauffman). The NMCS conveys New Melones water from the Goodwin Dam to Stockton East via the Goodwin Tunnel, Upper Farmington Canal, a natural creek system, and the Lower Farmington Canal. See Tr. 90-91 (Kauffman) (discussing PX 518). The water enters Stockton East through the Lower Farmington Canal at the Copperopolis Gates. Tr. 464 (Kauffman) (discussing PX 518).

Although Central did not fund construction of the NMCS described above, see Stockton I, 75 Fed. Cl. at 363 n.17, Central financed construction of a separate distribution system with bonds at a total cost of \$7.4 million. Tr. 1623, 1626 (Roberts) (latter discussing PX 812). Central’s distribution system “tie[d] . . . together” a series of natural streambeds and channels within Central’s boundaries. Tr. 1605-06 (Roberts) (discussing PX 518). Central receives New Melones water from Reclamation at the Goodwin Dam, at which Stockton East “wheels” the water through its conveyance system to Central’s boundary on the western side of the Farmington dam. See Tr. 634-35 (Kauffman); Tr. 1692 (Roberts). Central’s water then flows through the Farmington Dam and into its distribution system of natural streambeds and creeks. Tr. 1605-06 (Roberts).

9. Water rates under the Contracts

The parties stipulated to the water rates under the 1983 Contracts for the six-year breach period. Jt. Stipl. ¶¶ 3-5. From 1999 through 2004, Stockton East and Central were required to pay the following rates, per acre-foot, for water purchased from Reclamation under the 1983 Contracts:

Year	Stockton East’s Water Rate		Central’s Water Rate (Ag Water)
	Ag Water	M&I Water	
1999	\$9.24	\$46.75 (Jan. - Sept.)	\$9.24

^{10/} The court’s 2007 liability opinion found that the cost of the NMCS was approximately \$60 million, according to the testimony of Stockton East’s former General Manager from 1983-1999 Edward M. Steffani. See Stockton I, 75 Fed. Cl. at 363 n.17 (citing Transcript of Proceedings, Stockton E. Water Dist. v. United States, No. 04-541L (Fed. Cl. Oct. 30, 2006) (“Liab. Trial Tr.”), Tr. 415). As is evident from the varying water delivery schedules in the different stages of this litigation, the parties have refined the evidence and, unless a significant point is invalid, the court accepts the most recent iteration.

		\$46.99 (Oct. - Dec.)	
2000	\$10.44	\$43.80 (Jan. - Sept.) \$44.16 (Oct. - Dec.)	\$10.44
2001	\$11.14	\$43.04 (Jan. - Sept.) \$43.56 (Oct. - Dec.)	\$11.14
2002	\$10.53	\$40.77 (Jan. - Sept.) \$41.07 (Oct. - Dec.)	\$10.53
2003	\$11.85	\$41.87 (Jan. - Sept.) \$42.13 (Oct. - Dec.)	\$11.85
2004	\$13.42	\$44.36 (Jan. - Sept.) \$44.59 (Oct. - Dec.)	\$13.67

Jt. Stipl. ¶¶ 3-5.

III. Reclamation's performance under the Contracts

1. 1988-1992

In 1988 Reclamation notified Stockton East and Central that water was available and that the initial delivery date for purposes of the Contracts was January 1, 1989. Stockton III, 583 F.3d at 1351; Stockton I, 75 Fed. Cl. at 343. From 1989 through 1992, Stockton East and Central did not request water from the New Melones Reservoir, as construction of the NMCS had not been completed. See Stockton III, 583 F.3d at 1351; see also Tr. 95 (Kauffman) (stating NMCS was not completed until 1993). Reclamation did not deliver any water to Stockton East or Central during the 1988-1992 time period. Stockton III, 583 F.3d at 1351; Stockton I, 75 Fed. Cl. at 343.

2. 1993

In the spring of 1993, following the enactment of the CVPIA, 11/ Stockton East and Central requested a meeting with representatives of Reclamation and the United States Fish and Wildlife Service ("FWS") to discuss how the CVPIA would affect the Contracts. Tr.

11/ In 1992 Congress enacted the CVPIA, which directed Reclamation to dedicate annually 800,000 acre-feet of water from the CVP for fish, wildlife, and habitat restoration needs. See Stockton III, 583 F.3d at 1351. For a more detailed discussion of the CVPIA, see id. at 1354-56; Stockton I, 75 Fed. Cl. at 338-42.

792 (Zolezzi). Jeanne M. Zolezzi, Stockton East's General Counsel in 1993, testified that the districts requested the meeting because FWS had made an initial prescription in March 1993 that over 200,000 acre-feet of water from the New Melones Reservoir would be allocated for environmental uses. See id. During a June 1993 meeting, representatives of Reclamation and FWS confirmed that 250,000 acre-feet of New Melones water had been re-allocated from CVP contractors to fish. Tr. 792-94 (Zolezzi); see also Tr. 1636 (Roberts). Reclamation and FWS also told the districts that they had made a "back of an envelope" determination that this same amount would be needed for fish in every year. Tr. 792 (Zolezzi). According to Ms. Zolezzi, Reclamation and FWS made clear that "this prescription would continue and in only the wettest years might [the districts] see some water." Tr. 795 (Zolezzi); see also Tr. 1636 (Roberts) ("[A]t that meeting, Frank Dimmick, I believe his name is and Wayne White, Dimmick was there representing the Bureau, Mr. White was there representing Fish and Wildlife Service, spoke about what had transpired over the past year and basically said there was not going to be any water to honor the contracts it had to make. . . . [T]here was the passage of the CVPIA[.]"). Despite defendant's skepticism that Ms. Zolezzi's recent testimony was so specific, the court found Ms. Zolezzi credible on this point, as consistent with other testimony during the 1996 liability trial. 12/

The testimony during the liability trial almost six years earlier of both Messrs. Steffani and Roberts was substantially the same on this issue. Compare Liab. Trial Tr. 425-26 (Steffani) ("And we were told at that meeting [which he placed in spring 1993] that we would be getting no water. And the people in attendance were about ready to throw the people out from the Bureau [of] Fish and Wildlife, especially after we asked Fish and Wildlife representatives if they could document the need for the 200,000 acre-feet for fish flow: How did you determine that you need that much water for fish in the Stanislaus River this year? We want to know all of the science behind this. And I believe it was Jim McKevitt from the Fish and Wildlife Service said, 'Well, we really don't have anything much except what we've written on the back of an envelope.'"), with Liab. Trial Tr. 170 (Roberts) ("[T]he Reclamation official whose name was Frank Dimmick . . . indicated that no water was going to be delivered to either district that year. That all the water was going to go to meet the requirements of the CVPIA.").

In 1993 Stockton East submitted an oral request, on behalf of both Central and Stockton East, for a total of 20,000 acre-feet of water, with 10,000 allocated between each district. Stockton III, 583 F.3d at 1352; Stockton I, 75 Fed. Cl. at 343. Reclamation did not deliver any water under the Contracts in 1993. Stockton III, 583 F.3d at 1352; Stockton I, 75 Fed. Cl. at 343.

12/ Although Ms. Zolezzi's testimony at the liability trial referenced the 1993 meeting with Reclamation and FWS, her testimony did not focus on that meeting. See Liab. Trial Tr. 1024-26 (Zolezzi).

3. 1994-1995

For 1994 Stockton East requested 75,000 acre-feet of water, and Central requested 25,000 acre-feet of water. Stockton III, 583 F.3d at 1352; Stockton I, 75 Fed. Cl. at 343-44. In February of that year, Reclamation announced an initial forecast of “zero water supply” for the districts based on “conditions caused by California’s fourth driest year in 85 years.” Stockton III, 583 F.3d at 1352; Stockton I, 75 Fed. Cl. at 343-44. Reclamation later informed the districts that no water could be delivered due to insufficient rain and snowfall conditions, explicitly invoking the shortage provision of Article 9(a) of the Contracts. Stockton III, 583 F.3d at 1352, 1361-62; Stockton I, 75 Fed. Cl. at 343-44. Neither Stockton East nor Central received any water under the Contracts in 1994. Stockton III, 583 F.3d at 1353; Stockton I, 75 Fed. Cl. at 344.

For 1995 Stockton East initially requested 65,000 acre-feet of water, and Central initially requested 50,000 acre-feet. Stockton III, 583 F.3d at 1353, 1364; Stockton I, 75 Fed. Cl. at 344. Reclamation informed the districts that a total of 37,000 acre-feet would be made available to the districts, citing the general drought and water level conditions in the New Melones Reservoir. Stockton III, 583 F.3d at 1353; Stockton I, 75 Fed. Cl. at 344. Following a dispute regarding the districts’ water conservation plans, their water requests for the year were reduced. Stockton III, 583 F.3d at 1353, 1364; Stockton I, 75 Fed. Cl. at 344. Reclamation was unable to meet the districts’ requests for water in 1995. Stockton III, 583 F.3d at 1353.

The Federal Circuit affirmed this court’s ruling that Reclamation’s failure to provide the minimum volumes of water in 1994 and 1995 was excused because the shortage provision of Article 9(a) applied to those years. Stockton III, 583 F.3d at 1363-64.

4. 1996

For 1996 Stockton East initially requested 32,400 acre-feet, and Central requested 40,000 acre-feet. Stockton III, 583 F.3d at 1353; Stockton I, 75 Fed. Cl. at 345. Reclamation announced an allocation of 49,000 acre-feet to the districts in 1996 and made available all of the water that Stockton East initially requested for that year. Stockton I, 75 Fed. Cl. at 345. Stockton East later significantly reduced its requested amount to 4,000 acre-feet, citing “the wet ’95-’96 winter, and because of the unusually large amount of storage in New Hogan Reservoir, [Stockton East’s] primary source.” Id.; see also Stockton III, 583 F.3d at 1353.

In 1996 Reclamation delivered 12,969 acre-feet to Stockton East, PX 434, 13/ and 17,508 acre-feet to Central, Stockton III, 583 F.3d at 1353; Stockton I, 75 Fed. Cl. at 345.

5. 1997-1998

In 1997 the parties completed and agreed to an Interim Plan of Operations (the “IPO”), which allocated water to the districts based upon annual storage and inflow at the New Melones Reservoir. Stockton III, 583 F.3d at 1353. Stockton East and Central agreed to the IPO as a short-term modification to the Contracts for 1997 and 1998. Id. In each of those years, the districts were allocated a combined total of 50,000 acre-feet, and Reclamation’s water deliveries complied with the terms of the IPO. Id.

6. 1999-2004

Although the IPO was intended to be operational for 1997 and 1998, Reclamation continued to use the IPO formulas to allocate water to the districts from 1999 through 2004. Id. The following chart summarizes the volumes of water (in acre-feet) that the districts requested and that Reclamation allocated to the districts from 1999 through 2004:

Year	Amount Requested by Stockton East	Amount Requested by Central	Amount Allocated (Total)
1999	23,000	None	60,000
2000	24,000	None	90,000
2001	24,000	None	34,000
2002	3,500	12,000	15,500

13/ The columns labeled “USBR M&I” and “USBR AGR” in PX 434 show the amount of water that Reclamation delivered to Stockton East under the Contract for the years 1995 to 2011. Tr. 126 (Kauffman). The summary chart depicted in PX 434 is based upon monthly reports that Stockton East and Central submitted to Reclamation depicting the daily flows to both districts. See Tr. 121 (Kauffman). The amounts listed in PX 434 differ slightly from the delivery quantities recited in this court’s liability opinion and the Federal Circuit’s opinion. Compare PX 434, with Stockton III, 583 F.3d at 1352-53, and Stockton I, 75 Fed. Cl. at 347. Because the discrepancies are immaterial and both parties cite PX 434 as evidence of Reclamation’s deliveries to Stockton East, the court accepts PX 434 as an accurate representation of the quantities of water that Reclamation delivered to Stockton East.

2003	10,000 (combined with Central)	10,000 (combined with Stockton East)	10,000
2004	None	25,000	15,000 (Central only)

Id.; Stockton I, 75 Fed. Cl. at 347. ^{14/} Reclamation delivered the followings volumes of water to Stockton East and Central under the 1983 Contracts from 1999 through 2004:

Year	Amount Delivered to Stockton East			Amount Delivered to Central (Ag Water)
	M&I Water	Ag Water	Total	
1999	23,078	5,112	28,190	33,786
2000	2,939	4,254	7,193	27,759
2001	4,671	2,359	7,030	25,750
2002	2,066	1,422	3,488	10,503
2003	1,260	1,135	2,395	9,845
2004	0	1,486	1,486	13,605

^{14/} At closing argument defendant pointed to PX 551 as evidence that Stockton East and Central failed to take large volumes of water that Reclamation allocated to the districts in 1999 and 2000. Closing Arg. Tr. 153 (Harrington) (discussing PX 551); see also Tr. 91, 156 (Harrington). Figure 2-13 in PX 551, Stockton East’s Water Supply Plan dated December 2008, presents a bar graph showing unused CVP allocations in two of the breach years—1999 and 2000. See PX 551, at 2-13. Although PX 551 shows an “East Side CVP Allocation” of 90,000 acre-feet in 1999, this court previously found that Reclamation allocated a total of 60,000 acre-feet to Central and Stockton East in 1999. Compare PX 551, at 2-13, with Stockton I, 75 Fed. Cl. at 347; see also Stockton III, 583 F.3d at 1353. Defendant has not adequately accounted for this material discrepancy and has not shown that the unused “East Side CVP Allocation” illustrated in PX 551 was allocated only to Central and Stockton East. See, e.g., Tr. 2124-25 (Kauffman). The court therefore finds that its 2007 liability opinion accurately reflects the amount of water allocated by Reclamation to Central and Stockton East.

See PX 434; Jt. Stipl. ¶ 6. 15/

Reclamation's failure to provide the minimum quantities of water listed in the Build-Up Schedule violated the requirements of Article 3 of the Contracts. Stockton III, 583 F.3d at 1364; Stockton II, 76 Fed. Cl. at 489. In contrast to the years 1994 and 1995, Reclamation's non-performance during the 1999-2004 time period was not excused by the shortage provision of Article 9(a), and Reclamation therefore was liable for breaching the Contracts in the years 1999 through 2004. Stockton III, 583 F.3d at 1364, 1369.

IV. Central's purchases of water from SSJID in 2002, 2003, and 2004

Central entered into three separate water sale contracts with South San Joaquin Irrigation District ("SSJID") from 2002 to 2004. See DX 996 (2002 contract); DX 978 (2003 contract); DX 996 (2004 contract). 16/ Pursuant to those contracts, Central purchased from SSJID 20,000 acre-feet of water in 2002, 15,000 acre-feet of water in 2003, and 10,000 acre-feet of water in 2004. Tr. 1648-51, 1668, 1676 (Roberts); see also Stockton III, 583 F.3d at

15/ As discussed supra note 13, the columns labeled "USBR M&I" and "USBR AGR" in PX 434 show the volumes of water that Reclamation delivered to Stockton East. See PX 434. Central and Reclamation stipulated to the amounts delivered to Central for the years 2001 through 2004. Jt. Stipl. ¶ 6. For deliveries to Central in 1999 and 2000, the amounts listed in the chart above reflect the findings of fact from this court's liability opinion and the Federal Circuit's opinion. See Stockton III, 583 F.3d at 1353; Stockton I, 75 Fed. Cl. at 347.

Defendant relies on Central's interrogatory responses for the amounts delivered to Central in 1999 and 2000. See DX 1099 at 4. Central's interrogatory response for 2000, however, lists a delivery amount of 28,153 acre-feet—approximately 400 acre-feet greater than the amount listed in the prior opinions. Mr. Roberts also testified at the damages trial that 28,153 acre-feet was the correct amount of water that Central purchased from Reclamation in 2000. See Tr. 1661-62, 1665-66 (Roberts). Raising a hearsay objection and citing Fed. R. Evid. 403, counsel for Central objected to defense counsel's questioning Mr. Roberts about Central's interrogatory responses. Tr. 1662-63 (Marzulla). Although this objection is due to be overruled and Mr. Roberts agreed with defendant's figures, this discrepancy is immaterial in view of the court's ultimate findings on Central's expectancy damages.

16/ The record includes a copy of the 2004 contract—DX 996—that was not signed by both parties to the contract. See DX 996, at 4. Mr. Roberts reported that Central could not locate a copy of the contract with both signatures. Tr. 1682 (Roberts).

1370. Paragraph 3 of each contract states that Central will pay SSJID \$15 per acre-foot for the water made available to Central. 17/ DX 966, at 2; DX 978, at 2; DX 996, at 2.

PROCEDURAL HISTORY

A trial court takes note when its appeals court encourages an expedited resolution on remand. See Stockton E. Water Dist., 638 F.3d at 785. The facts are that this case sat for over eleven years in federal district court; after transfer to the United States Court of Federal Claims and the revival of proceedings in April 2004, it was bifurcated at the parties' request and thereafter litigated on liability until May 2007; and it was on appeal and rehearing until April 2011 when it was returned for trial on damages. See generally Stockton IV, 101 Fed. Cl. at 354-55 (setting forth chronological history to date).

This case began in 1993, when plaintiffs filed a complaint in the United States District Court for the Eastern District of California and enumerated five untitled claims for relief. "As characterized by the district court, these claims were (1) impairment of 'vested rights under . . . water contracts[] in violation of the Fifth Amendment due process clause'; (2) violation of the National Environmental Policy Act for failure to prepare an environmental impact statement; (3) violation of the CVPIA, § 3410; (4) arbitrary and capricious action by the Government; and (5) violation of the Fifth Amendment's takings clause." Stockton IV, 101 Fed. Cl. at 354 (dismissing takings claim) (quoting Westlands Water Dist. v. United States, No. CV-F-93-5327 (E.D. Cal. Feb. 11, 1994) (consolidated cases)).

On January 29, 2004, the district court transferred the takings claim to the Court of Federal Claims. Id. at 355 (citing Stockton E. Water Dist. v. United States, Nos. CV-F-93-5896, CV-F-96-5738 (E.D. Cal. Jan. 30, 2004) (order transferring cases) (consolidated cases)). This court received the transferred action on April 1, 2004, and plaintiffs filed their Amended Complaint on April 20, 2004, seeking relief for a taking and breach of contract. See Amended Compl. filed Apr. 20, 2004. Defendant filed a motion to dismiss on June 21, 2004, *inter alia*, seeking to dismiss the breach of contract claim, which this court denied by order entered on September 3, 2004. See Stockton E. Water Dist. v. United States, 62 Fed. Cl. 379 (2004).

After the parties filed a Joint Status Report on October 22, 2004, requesting the court to bifurcate the case, with liability to be tried first, and damages thereafter only if liability was found, an order entered on October 27, 2004, bifurcated the liability and damages phases of the case. In 2005 the parties filed cross-motions for summary judgment regarding the

17/ Although Central's contracts with SSJID list a purchase price of \$15 per acre-foot, the parties dispute whether Central actually paid this amount to SSJID. The court addresses this issue in the "Discussion" section of the opinion.

breach of contract claim. The court granted in part defendant's summary judgment motion, denied plaintiffs' partial summary judgment motion, and identified the issues for trial. See Stockton E. Water Dist. v. United States, 70 Fed. Cl. 515, 536 (2006).

Trial on liability was held October 23, 2006, through November 2, 2006. The court awarded judgment for defendant on the breach of contract claims for 1993 through 2004 and dismissed the takings claim. See Stockton I, 75 Fed. Cl. at 376 (determining liability and entering judgment on the merits). The court subsequently granted in part and denied in part plaintiffs' motion to alter or amend the judgment, Stockton II, 76 Fed. Cl. at 482, and denied plaintiffs' motion for reconsideration, Stockton E. Water Dist. v. United States, 76 Fed. Cl. 497, 512 (2007). Plaintiffs appealed to the United States Court of Appeals for the Federal Circuit, which affirmed this court's judgment of non-liability as to plaintiffs' breach of contract claims for 1994 and 1995, reversed this court's judgment of non-liability as to plaintiffs' breach of contract claims for 1999 through 2004, and vacated this court's dismissal of plaintiffs' takings claim. Stockton III, 583 F.3d 1344, reh'g en banc granted in part, aff'd, 638 F.3d 781. Plaintiffs did not appeal this court's judgment of non-liability as to the breaches alleged in 1993, 1996, 1997, and 1998. See id. at 583 F.3d at 1354. This court was tasked with deciding plaintiffs' takings claim and determining damages for the breaches that occurred from 1999 through 2004. Id. at 1369.

Since April 11, 2011, this matter has been before the court on remand from the Federal Circuit. On July 19, 2011, defendant moved to dismiss the complaint for lack of jurisdiction, invoking the United States Supreme Court's decision in United States v. Tohono O'Odham Nation, 131 S. Ct. 1723 (2011). Tohono construed 28 U.S.C. § 1500 (2006), to foreclose the Court of Federal Claims from hearing any claim based on the same operative facts underlying a claim encompassed in a pending, prior-filed action in federal district court. See Tohono, 131 S. Ct. at 1731. Following briefing by the parties, plaintiffs filed a Motion for Voluntary Dismissal of Their Claim for Taking Without Just Compensation. Defendant responded to plaintiffs' motion, arguing that jurisdiction—a threshold issue—must be resolved before the court could entertain plaintiffs' motion for voluntary dismissal. On October 31, 2011, this court dismissed plaintiffs' takings claim, but denied defendant's motion to dismiss as to plaintiffs' breach of contract claim. Stockton IV, 101 Fed. Cl. at 362.

On June 18, 2012, defendant moved for summary judgment with respect to the claims of both Stockton East and Central. Plaintiffs filed cross-motions for summary judgment, which the court denied because adjudication of the cross-motions did not comport with the deadline for filing dispositive motions set by an earlier order. Order entered July 10, 2012, ¶ 2. However, all arguments made in support of plaintiffs' cross-motions were considered as complementing their respective briefs in opposition to summary judgment. Id. On July 19, 2012, the court granted defendant's motion with respect to Central only insofar as Central was seeking a "market value" measure of damages representing the measure of damages for

a takings claim. Order entered July 1, 2012 [260]. The court otherwise denied defendant's motions with respect to both plaintiffs without prejudice to any party raising issues that are appropriate for ruling on motions *in limine*. Id.; Order entered July 1, 2012 [259].

After the close of discovery, the parties submitted a total of twenty-three motions *in limine* and other pre-trial motions. On August 24, 2012, the court held a pretrial conference and entered a lengthy epistle discussing each of the motions. 18/ See Order entered Aug. 24, 2012 (the "pretrial order"). The pretrial order noted that the "appeals court affirmed this court's findings on the scope of the breach, i.e., failure to deliver a minimum quantity of water for each of the breach years." Id., ¶ 12. Accordingly, the court ruled that the "non-breaching buyer's recovery is limited by that minimum quantity and whatever damages can be attributed to the failure to deliver up to that quantity." Id., ¶ 5.

The damages trial was held in Sacramento, CA, from September 10, 2012, through September 19, 2012. 19/ At the conclusion of Stockton East's case-in-chief, defendant

18/ In its pretrial order, the court deferred ruling on some arguments raised in the motions *in limine*. For example, in response to defendant's motion *in limine* arguing that Stockton East's stranded costs claim was tantamount to a claim for interest, the court noted that trial will "provide the appropriate context for ascertaining whether the incurred financing costs are overhead or interest." Order entered Aug. 24, 2012, at 18-19. The court explained, however, that "Stockton East is aware that it can recover overhead in the form of fixed costs and will present its claim as incurred costs that it could not recover due to the breach." Id. The rulings in the pretrial order therefore do not supersede this court's rulings at trial or in this opinion.

19/ Although the court has considered the testimony of every witness, discussion of each is not necessary to render a comprehensive decision. Stockton East proceeded first at trial and presented the following witnesses: (1) Kevin M. Kauffman, General Manager of Stockton East; (2) Mark J. Madison, former Director of Utilities of the City of Stockton; (3) Jeanne M. Zolezzi, former General Counsel of Stockton East; (4) Francis S. Ferraro, Vice-President of California Water Service Company; (5) Timothy O'Laughlin, counsel for Oakdale Irrigation District; (6) Clay J. Landry, Managing Director of WestWater Research and an expert in western water markets; (7) Elpedio V. Jamosmos, Finance Director of Stockton East; (8) Elaine Vastis Conti, Manager of Raftelis Financial Consultants and an expert in identifying and allocating the costs of water conveyance facilities; and (9) Everett P. Harry, Partner of Harry Torchiana LLP and an expert in the analysis and computation of breach of contract damages.

Central then presented the following witnesses: (1) Timothy J. Durbin, an expert in the hydrology of the Eastern San Joaquin Groundwater Basin; (2) Reid W. Roberts, General

moved for judgment on partial findings, pursuant to RCFC 52(c), with respect to Stockton East's damages claims for "groundwater recharge" and "stranded costs." Tr. 1332-33 (Harrington). The court declined to grant the motion, noting that it was in the interest of justice to have a full record, especially in light of the lengthy history of this litigation. Tr. 1377-79. Post-trial briefing was completed on December 21, 2012, and closing arguments were held on January 4, 2013.

DISCUSSION

I. Cost of cover

1. Standard for awarding damages for cost of cover

Central seeks \$194,560.00 in damages to recover its mitigation costs associated with its water sale contracts with SSJID. See Pl. Central's Br. filed Nov. 9, 2012, at 34. "A non-breaching party may generally recover its mitigation costs incurred in a reasonable effort to avoid loss caused by a breach, even if its efforts prove unsuccessful." Old Stone Corp. v. United States, 450 F.3d 1360, 1368 (Fed. Cir. 2006) (citing Restatement (Second) of Contracts §§ 350 cmt. h, 347 cmt. c (1981)). Mitigation damages "are intended to reimburse a non-breaching party to a contract for the expenses it incurred in attempting to rectify the injury the breach caused it." Citizens Fed. Bank v. United States, 474 F.3d 1314, 1320 (Fed. Cir. 2007).

A non-breaching party has a duty to mitigate its damages. Ind. Mich. Power Co. v. United States, 422 F.3d 1369, 1375 (Fed. Cir. 2005); Robinson v. United States, 305 F.3d 1330, 1336 (Fed. Cir. 2002) ("As a general rule, a party cannot recover damages for loss that

19/ (Cont'd from page 20.)

Counsel of Central; (3) Angela K. Slaughter, Chief of the Water Contracts and Policy Branch of Reclamation's Sacramento, CA office; (4) Grant O. Thompson, Chairman of Central's Board of Directors; and (5) Dr. Rodney T. Smith, President of Stratecon, Inc., and an expert in California water markets.

Defendant presented the following witnesses: (1) Steven P. Emrick, General Counsel for South San Joaquin Irrigation District; (2) Mr. Kauffman; (3) Ali Shahroody, a water research engineer for Stetson Engineers, Inc. and an expert in water resources and agricultural engineering; and (4) Dr. David L. Sunding, Professor in the College of Natural Resources at the University of California, Berkeley and an expert in natural resource economics, economic damages, agricultural economics, and the economics of water resources.

he could have avoided by *reasonable efforts*.” (quoting Restatement (Second) of Contracts § 350, cmt. b (1981))). The obligation to mitigate damages arises “[o]nce a party has reason to know that performance by the other party will not be forthcoming[.]” Ind. Mich. Power Co., 422 F.3d at 1375 (quoting Restatement (Second) of Contracts § 350, cmt. b). A non-breaching party therefore may recover its costs of mitigation even if it incurred those costs prior to the breach. Id. When mitigating damages from a breach, the non-breaching party must “make only ‘those efforts that are fair and reasonable under the circumstances.’” First Heights Bank, FSB v. United States, 422 F.3d 1311, 1316 (2005) (quoting Home Sav. of Am., FSB v. United States, 399 F.3d 1341, 1353 (Fed. Cir. 2005)).

One way for a buyer to reasonably mitigate a seller’s breach is to “cover” or, in other words, to enter into a transaction to obtain substitute goods from another seller. See Hughes Commcn’s Galaxy, Inc. v. United States, 271 F.3d 1060, 1066 (Fed. Cir. 2001) (explaining that the Uniform Commercial Code “provides useful guidance in applying general contract principles”); LaSalle Talman Bank, F.S.B. v. United States, 317 F.3d 1363, 1373 (Fed. Cir. 2003) (“[R]eduction of loss through a substitute transaction is generally a direct mitigation of damages.”); see also Restatement (Second) of Contracts § 350 cmt. e (discussing meaning of “substitute”). To constitute reasonable cover, the substitute goods need not be identical to those involved in the contract, as long as they are “‘commercially usable as reasonable substitutes under the circumstances.’” Hughes Commcn’s, 271 F.3d at 1066 (quoting U.C.C. § 2-712 cmt. 2); see also Restatement (Second) of Contracts § 350 cmt. e (“Whether an available alternative transaction is a suitable substitute depends on all the circumstances, including the similarity of the performance and the times and places that they would be rendered.”). When a buyer covers, the buyer’s remedy for the seller’s breach equals the difference between the cover price and the contract price plus any other losses, such as consequential or incidental damages. See Hughes Commcn’s, 271 F.3d at 1066 (citing U.C.C. § 2-712; Farnsworth on Contracts, § 12.11 (2d ed. 1988)).

2. Analysis

1) The amount of Central’s payments to SSJID

Central argues, and defendant does not contest, that its purchases of water from SSJID constitute mitigation. Accordingly, Central is entitled to the difference between the price that it paid to SSJID and the price that it would have paid for that amount of water had it been provided by Reclamation. It is law of the case that Central purchased 20,000 acre-feet of water in 2002, 15,000 acre-feet of water in 2003, and 10,000 acre-feet of water in 2004 from SSJID. See Stockton III, 583 F.3d at 1370. The parties disagree, however, as to the amount paid to SSJID for that water.

Central takes the position that it paid SSJID \$15 per acre-foot for the water purchased in 2002, 2003, and 2004. See Pl. Central's Br. filed Nov. 9, 2012, at 20. Central points first to the language of the water purchase agreements, each of which states the purchase price as \$15 per acre-foot in Paragraph 3. See id.; DX 966, at 2; DX 978, at 2; DX 996, at 2. 20/ Next, Central cites the testimony of its General Counsel Mr. Roberts, who stated repeatedly that the purchase price was \$15 per acre-foot. See Pl. Central's Br. filed Nov. 9, 2012, at 20-22; Tr. 1647-51 (Roberts). Central also cites the testimony of its board's chairman, Mr. Thompson, and SSJID's General Counsel Steven P. Emrick, both of whom testified to the \$15 per acre-foot price. See Pl. Central's Br. filed Nov. 9, 2012, at 20-22; Tr. 1972-73 (Thompson); Tr. 2080-84 (Emrick). Central therefore asserts that it paid SSJID \$675,000.00 (45,000 total acre-feet at \$15 per acre-foot) for water purchased in 2002, 2003, and 2004. 21/ See Pl. Central's Br. filed Nov. 9, 2012, at 21.

Defendant takes the position that Central paid SSJID \$300,000.00 for water based upon Central's audited financial statements for the years 2002, 2003, and 2004. See Def.'s Br. filed Nov. 29, 2012 [361], at 11-12. Central's audited financial statements reflect payments of \$75,000.00 to SSJID in each of 2002 and 2003, and of \$150,000.00 in 2004. See DX 1169, at CJ03678; DX 1068, at CSJW_005276; see also Tr. 1913-14 (Roberts). Defendant further points to Mr. Roberts's agreement with the proposition that the audited financial statements "should provide an honest and accurate description of [Central's] finances[,]" Tr. 1848 (Roberts), and Central's stipulation that it "[did not] have reason to believe that they are incorrect[,]" Tr. 1873 (Marzulla). Although an earlier version of Central's 2004 audited financial statement reflected a payment to SSJID of \$375,000.00 in 2004, see DX 1170, at CSJW_005259, Mr. Roberts testified that \$150,000.00 was likely the

20/ Central cites PX 610, PX 616, and PX 660 for its references to the water purchase agreements, see Pl. Central's Br. filed Nov. 9, 2012, at 20 n.58, but those exhibits were not entered into evidence. Defendant introduced the water purchase agreements as exhibits DX 966, DX 978, and DX 996, which were received in evidence. See Tr. 1668-69 (admitting DX 966); Tr. 1676-77 (admitting DX 978); Tr. 1682-84 (admitting DX 996).

21/ Central argues in passing and without citation that its cost of cover is \$825,000.00, representing the \$675,000.00 that it asserts was paid to SSJID, plus the \$150,000.00 purchase price, at \$15 per acre-foot, for 10,000 acre-feet of water that Central was entitled to, but did not, purchase from SSJID in 2002. See Pl. Central's Br. filed Nov. 9, 2012, at 33. The purchase price for cover water that Central could have purchased but did not cannot be included in Central's cost of cover; Central properly is understood to have forgone costs of cover in favor of other measures of damages with respect to that water. See U.C.C. § 2-712(3) ("Failure of the buyer to effect cover within this Section does not bar him from any other remedy."), cmt. 3 ("The buyer is always free to choose between cover and damages for non-delivery[.]").

correct amount, based upon the purchase of 10,000 acre-feet at \$15 per acre-foot in 2004, see Tr. 1917-18 (Roberts). Moreover, defendant asserts, Messrs. Thompson and Emrick testified only as to the contract price for water in the water purchase agreements, not the amounts paid. See Tr. 1972-73 (Thompson); Tr. 2080-84 (Emrick).

Defendant also offered the testimony of Dr. David L. Sunding, who was qualified as an expert to offer opinions on natural resource economics, economic damages, agricultural economics, and the economics of water resources. See Tr. 2315. Based upon total payments of \$300,000.00 as reflected in the audited financial statements and a total volume of water purchased of 45,000 acre-feet, Dr. Sunding opined that the price Central paid to SSJID per acre-foot was \$6.67. Tr. 2354-56 (Sunding).

Defendant calculates that Central would have paid Reclamation a total of \$525,050.00 for the amount of water purchased from SSJID:

Year	Volume Purchased from SSJID (acre-feet)	Reclamation Price	Total Cost
2002	20,000	\$10.53	\$210,600.00
2003	15,000	\$11.85	\$177,750.00
2004	10,000	\$13.67	\$136,700.00
		Total:	\$525,050.00

See Def.’s Br. filed Nov. 29, 2012 [361], at 12 (citing DX 1186; Jt. Stipl. ¶ 5). Accordingly, defendant argues, Central paid \$300,000.00 to SSJID—less than the \$525,050.00 that it would have paid to Reclamation for the same amount of water—and Central therefore is not entitled to any mitigation damages. Id. Even if one uses the \$375,000.00 figure for payments to SSJID reflected in the earlier version of Central’s 2004 audited financial statement, defendant points out, the total payments to SSJID in Central’s audited financial statements would be \$525,000.00. Id. at 25. That amount is still less than the amount that Central would have paid to Reclamation, and Central thus has no costs of cover. Id.

Central rests on its introduction, in its rebuttal case, of an offer of proof 22/ consisting of copies of five checks made out to SSJID by Central, arguing that they show that Central

22/ The court allowed Central to put its evidence in the record pursuant to Fed. R. Evid. 103(a)(2). See Tr. 2492. Defendant reasonably objected that the rebuttal improperly constituted proof of Central’s case-in-chief. As discussed more fully in the body of this opinion, the court now admits the checks on the ground that Central offered the best evidence, *i.e.*, copies of checks, after defendant put the payment in doubt through the use of Central’s own conflicting financial statements.

paid SSJID a total of \$675,000.00. See Pl. Central’s Br. filed Nov. 9, 2012, at 20-21. The first check, dated May 17, 2002, is in the amount of \$225,000.00 and is accompanied by a letter from Mr. Roberts to Mr. Emrick referencing the water purchase agreement between Central and SSJID and stating that the payment is for 15,000 acre-feet of water at \$15 per acre-foot. PX 663. The second check, dated July 17, 2002, is in the amount of \$75,000.00 and also is accompanied by a letter from Mr. Roberts to Mr. Emrick, stating that the payment is for 5,000 acre-feet of water. PX 664. The third check, dated May 14, 2003, is in the amount of \$225,000.00. PX 665. It is not accompanied by a letter, but the memorandum line states that it is for “Water Sale.” Id. The fourth check, dated April 23, 2004, is in the amount of \$75,000.00 and states in the memorandum line that it is for “Payment for water sale for 2004.” PX 666. It is also accompanied by a letter from Mr. Roberts to Steve Stroud, SSJID’s General Manager, stating that the payment is for the purchase of water for the 2004 water year. Id. The fifth and final check, dated June 3, 2004, is in the amount of \$75,000.00 and states in the memorandum line that it is for “Purchase of 5,000 ac. ft. water[.]” PX 667. The check is accompanied by a letter from Mr. Roberts to Mr. Stroud, stating that the payment is for 5,000 acre-feet of water. Id.

In determining Central’s cost of cover damages, the court first must find the amount that Central paid to cover defendant’s breach. It already has been established that Central purchased a total of 45,000 acre-feet of water from SSJID, see Stockton III, 583 F.3d at 1370, and the water purchase agreements between Central and SSJID recite that the purchase price was \$15 per acre-foot, see DX 966, at 2; DX 978, at 2; DX 996, at 2. These facts, however, do not resolve the question of what Central actually paid to SSJID to cover Reclamation’s failure to deliver water.

Central’s General Counsel Mr. Roberts testified at several points that Central paid SSJID \$15 per acre-foot of water in each year that it purchased water from SSJID:

A. Well, [SSJID was] willing to sell us water for \$15 an acre-foot, and they did[.]

.....

Q. 2002, yes, and how much water were you able to purchase?

A. We had an understanding or an agreement for up to 30,000, and we purchased 20,000.

Q. And what was the purchase price?

A. \$15 an acre-foot.

....

Q. How about in 2003? Did Central purchase water from South San Joaquin?

A. Yes, we did. We purchased 15,000 acre-feet from them[.]

Q. And at what price?

A. \$15 an acre-foot.

....

Q. Was Central able to purchase water in 2004?

A. Yes, we were.

Q. How much?

A. 10,000 acre-feet.

Q. Also from South San Joaquin?

A. Yes.

Q. Also \$15 an acre-foot?

A. Yes.

Tr. 1647, 1649-51 (Roberts). Contrary to defendant's assertion, Mr. Thompson, Chairman of Central's Board of Directors, did not testify only to the contract price. Like Mr. Roberts, he testified, albeit briefly, to the price Central paid for water from SSJID. See Tr. 1973 ("Q. But South San Joaquin told you it would sell you water for \$15 per acre foot, is that correct? A. Yeah. Yeah. Q. And that's what you paid. A. Right."). Central therefore presented evidence showing that it paid \$675,000.00 to SSJID for 45,000 acre-feet of cover water at \$15 per acre-foot.

Defendant ventured to impeach Mr. Roberts's testimony on cross-examination, introducing the audited financial statements showing payments by Central to SSJID of \$75,000.00 in 2002, \$75,000.00 in 2003, and either \$375,000.00 or \$150,000.00 in 2004. See Tr. 1913-14, 1917-18 (Roberts). After Mr. Roberts testified that \$150,000.00 was likely the correct amount for 2004 because Central had purchased 10,000 acre-feet at \$15 per acre-

foot from SSJID in 2004, see Tr. 1917-18 (Roberts), defendant's expert, Dr. Sunding, opined that Central had paid \$6.67 per acre-foot for water from SSJID, based upon total expenditures of \$300,000.00 reflected in the audited financial statements. See Tr. 2354-56 (Sunding). Defendant's evidence, accordingly, shows that Central paid \$300,000.00 to SSJID for 45,000 acre-feet of cover water at \$6.67 per acre-foot.

Defendant makes much of the representation of Central's counsel regarding the audited financial statements, asserting that "Central stipulated to the accuracy of all line items in all of its audited financial statements[.]" Def.'s Br. filed Dec. 21, 2012 [366], at 16. That statement somewhat mischaracterizes what was a qualified stipulation, however, to wit, that Central "[did not] have reason to believe that they are incorrect." Tr. 1873 (Marzulla). Mr. Roberts's testimony was similarly qualified. See Tr. 1848 ("Q. Central's audited financial statement, it should provide an honest and accurate description of the district's finances. A. Yes, it should."). While the record contains evidence that the audited financial statements are incorrect, the court acknowledges defendant's frustration in reasonably relying on Central's qualified stipulation.

Dr. Sunding testified, based upon calculations performed using the figures from the audited financial statements, that Central paid \$6.67 per acre-foot for water from SSJID. Dr. Sunding's figure seems rather low, given the contract price of \$15 per acre-foot and the testimony that Central paid that amount, and particularly in light of the cross-examination testimony of SSJID's General Counsel Mr. Emrick that SSJID's board considered even the \$15 per acre-foot price to be less than market value. See Tr. 2084 (Emrick).

Moreover, Dr. Sunding performed his calculation in the aggregate, dividing the total price paid as postulated by defendant, \$300,000.00, by the total volume purchased, 45,000 acre-feet. Calculating the price paid on a per-year basis yields figures that are even further afield. The audited financial statement for 2002, the year in which Central purchased the most water from SSJID, reflects that Central paid \$75,000.00 to SSJID. See DX 1169, at CJ03678. When that figure is divided by the 20,000 acre-feet purchased in 2002, the purchase price for 2002 appears to be \$3.75 per acre-foot. A similar calculation for 2003, dividing \$75,000.00, see id., by the 15,000 acre-feet purchased in that year, yields a per-acre-foot price of \$5.00. Only 2004, for which the audited financial statement reflects payment of \$150,000.00 for 10,000 acre-feet of water, see DX 1068, at CSJW_005276, is in line with both the contracts and the testimony of Messrs. Roberts and Thompson. Notably, if credence is given to the earlier version of the 2004 audited financial statement, which reflected a payment to SSJID of \$375,000.00, see DX 1170, at CSJW_005259, the calculated per-acre-foot price for that year is \$37.50. These disparate deviations from the contract price, which was the same for each year and which SSJID's board believed to be below-market, suggest that the audited financial statements are less than accurate.

The parties spent much time at trial debating the extent to which the court may rely upon the checks introduced in Central's rebuttal case. See Tr. 2431-43, 2486-92. Although the court initially expressed the view that Central could use the checks only to resolve the apparent discrepancy between the two audited financial statements for 2004, see Tr. 2442-43, it noted that Dr. Sunding had put in issue the price that Central paid to SSJID for water, and that the offer of proof went to the price paid, see Tr. 2514-15, 2519.

The parties have not cited any relevant precedent as to the proper scope of rebuttal evidence, and it is a subject upon which it does not appear the Federal Circuit has ruled. As the United States Court of Appeals for the First Circuit and other federal appellate courts have stated,

“Rebuttal is a term of art, denoting evidence introduced by a plaintiff to meet new facts brought out in [the] opponent's case in chief.” Morgan v. Commercial Union Assurance Cos., 606 F.2d 554, 555 (5th Cir. 1979) (emphasis omitted). “The determination of what constitutes proper rebuttal evidence [lies] within the sound discretion of the [district court].” Hickok v. G.D. Searle & Co., 496 F.2d 444, 447 (10th Cir. 1974).

Lubanski v. Coleco Indus., Inc., 929 F.2d 42, 47 (1st Cir. 1991). The court rules that the checks introduced by Central properly constitute rebuttal evidence to Dr. Sunding's opinion testimony that Central paid SSJID \$6.67 per acre-foot of water. Defendant characterizes Dr. Sunding's opinion as merely a calculation and argues that rebuttal evidence can go only to whether that calculation should have been based upon a particular version of the 2004 audited financial statement. See Tr. 2432-33 (Harrington). Defendant is correct in the sense that Central was entitled to present rebuttal evidence that fairly meets the assumptions underlying Dr. Sunding's calculations. As Dr. Sunding testified, his opinion was based upon the amounts shown in the audited financial statements. See Tr. 2355 (Sunding). The checks introduced in Central's rebuttal case raise questions about those audited financial statements, and consequently Dr. Sunding's calculations. They therefore properly are admitted as rebuttal evidence.

The checks reflect that Central made payments to SSJID in 2002 of \$300,000.00, in installments of \$225,000.00 and \$75,000.00; in 2003 of \$225,000.00; and in 2004 of \$150,000.00, in two equal installments of \$75,000.00. See PX 663, 664, 665, 666, 667. Those amounts are consistent with the price paid, per the testimony of Messrs. Roberts and Thompson; the contract price of \$15 per acre-foot; and the volumes purchased. Twenty-thousand acre-feet purchased in 2002 at \$15 per acre-foot yields a total of \$300,000.00; 15,000 acre-feet purchased in 2003 at \$15 per acre-foot yields a total of \$225,000.00; and 10,000 acre-feet purchased in 2004 at \$15 per acre-foot yields a total of \$150,000.00. The

checks, each of which either bore or was accompanied by indicia that it was for the purchase of water, thus suggest that the audited financial statements are unreliable. 23/

Defendant further objected to the introduction of the checks on the ground of prejudice, as they were not on Central's exhibit list. See Tr. 2507-10 (Harrington). While it certainly may have behooved Central to present the checks as part of its case-in-chief, likely eliminating what became a donnybrook at trial, as well as obviating the need for this lengthy discussion, the court finds that any prejudice is minimal. Defendant argued at trial that it lost the opportunity to explore whether there was an alternative explanation for the amounts shown on the checks. See Tr. 2509 (Harrington). Ironically, the audited financial statements that defendant seeks to credit undercut defendant's position on that point. Not one of those statements contains a line item for payment to SSJID for anything other than water fees. See DX 1068, 1169, 1170. Furthermore, the checks and/or the letters accompanying them indicate that they are payment for water purchases. See PX 663, 664, 665, 666, 667. Defendant also argued that it would have questioned SSJID's General Counsel Mr. Emrick about the discrepancy between the checks and the audited financial statements. See Tr. 2509-10 (Harrington). Mr. Emrick, however, gave testimony regarding a chart that he prepared, entitled "Actual Use 2001-2011," showing Central's purchases of 20,000 acre-feet of water in 2002, 15,000 in 2003, and 10,000 in 2004. See Tr. 2056-59, 2065 (Emrick); DX 1156. That chart also shows a purchase price in each year of \$15. See DX 1156. Mr. Emrick's testimony therefore corroborates the checks, as well as the testimony of Messrs. Roberts and Thompson regarding water purchases. To the extent that defendant was prejudiced by the introduction of the duplicate checks, such prejudice is overcome by the resolution of the discrepancies in the record by accepting the checks as best evidence of payment, see Fed. R. Evid. 1003, and warrants their introduction into evidence and the court's reliance thereon.

The court finds that Central paid SSJID \$15 per acre-foot for 45,000 acre-feet of water during the period of 2002-2004, totaling \$675,000.00, based upon the language of the contracts, the testimony of Messrs. Roberts, Thompson, and Emrick, and the checks introduced in Central's rebuttal case. For the reasons discussed above, the court finds that the audited financial statements, and consequently the testimony of Dr. Sunding as to the price paid per acre-foot, are not determinative.

23/ Interestingly, if all of the audited financial statements are totaled, *i.e.*, \$75,000.00 (2002) plus \$75,000.00 (2003) plus \$375,000.00 (2004) plus \$150,000.00 (2004), the resulting sum is \$675,000.00. Central's counsel adverted to this at trial, positing that the 2004 audited financial statements may not have been alternative to one another. See Tr. 2487 (Marzulla) ("Yes, and I guess what I'm posing, Your Honor, is perhaps they're both correct. That is that they are additive and not alternative. It's not the case that they are inconsistent, but rather that the numbers all add up.").

2) Payment of wheeling charges

The parties do not address the role of wheeling charges in their discussion of Central's cost of cover damages. When Central receives New Melones water, it is "wheeled" by Stockton East to Central's conveyance system. See Tr. 634-35 (Kauffman); Tr. 1692 (Roberts). Central is to pay for that service pursuant to contracts between the two water districts. See Tr. 1692 (Roberts); Tr. 635-36, 2115 (Kauffman); DX 1185, at 48, 50. The water that Central purchased from SSJID also came from the New Melones Reservoir and had to be wheeled by Stockton East to Central's conveyance system. See DX 1185, at 47-48. It is therefore fair to infer, and the court finds, that any wheeling charges that Central avoided by Reclamation's breach are equal to any wheeling charges incurred in connection with Central's purchase of water from SSJID. Wheeling charges do not enter into the calculation of Central's cost of cover damages.

3) Cost of cover

The parties agree as to the price Central would have paid to Reclamation for the amounts of water purchased from SSJID. Compare Pl.'s Br. filed Nov. 9, 2012, at 33, with Def.'s Br. filed Nov. 29, 2012 [361], at 12 (citing DX 1186; Jt. Stipl. ¶ 5). The total amount that Central would have paid to Reclamation is \$525,050.00. Subtracting that figure from the \$675,000.00 that Central paid to SSJID, the court finds that Central is entitled to cost of cover damages in the amount of \$149,950.00.

II. Expectancy damages

1. Standard for awarding expectancy damages

Central seeks expectancy damages in an amount between \$10,654,417.00 and \$15,326,360.00. Pl. Central's Br. filed Nov. 9, 2012, at 34. The purpose of expectancy damages is to make the non-breaching party whole by providing it with the benefits it expected to receive from the contract had the breach not occurred. Fifth Third Bank v. United States, 518 F.3d 1368, 1374 (Fed. Cir. 2008) (citing Glendale Fed. Bank, FSB v. United States, 239 F.3d 1374, 1379 (Fed. Cir. 2001)). The Federal Circuit has cautioned, however, that "[a] non-breaching party is [generally] not entitled, through the award of damages, to achieve a position superior to the one it would reasonably have occupied had the breach not occurred." Kan. Gas and Electric Co. v. United States, 685 F.3d 1361, 1366 (Fed. Cir. 2012) (quoting LaSalle Talman Bank, 317 F.3d at 1371 (first alteration in original)); see also Old Stone Corp., 450 F.3d at 1378 ("[T]he non-breaching party should not be placed in a better position through the award of damages than if there had been no breach." (citations and internal quotation marks omitted)). Although expectancy damages

can include lost profits, they are not limited to lost profits. Fifth Third Bank, 518 F.3d at 1374 (citing Glendale Fed. Bank, 239 F.3d at 1379).

A party is entitled to expectancy damages if it can make three showings. Id. First, the damages must have been reasonably foreseeable at the time the parties entered into the contract. Id. (citing Cal. Fed. Bank v. United States, 395 F.3d 1263, 1267 (Fed. Cir. 2005)). Second, the damages must be caused by the breach. Id. (citing Cal. Fed. Bank, 395 F.3d at 1267). Third, the measure of damages must be reasonably certain. Id. (citing Cal. Fed. Bank, 395 F.3d at 1267).

Foreseeability, causation, and proof of damages to a reasonable certainty are all issues of fact to be determined by the trial court. Id. at 1375 (citing Home Sav. of Am., 399 F.3d at 1347); Bluebonnet Sav. Bank, F.S.B. v. United States, 266 F.3d 1348, 1355-57 (Fed. Cir. 2001) (“Bluebonnet III”) (explaining that “[f]oreseeability is a question of fact reviewed for clear error[.]” “[c]ausation is also a question of fact reviewed under the clear error standard[.]” and reviewing a finding of reasonable certainty under the clear error standard). The burdens of proving causation, foreseeability, and proof of damages lie with the claimant. See Anchor Sav. Bank, FSB v. United States, 597 F.3d 1356, 1362 (Fed. Cir. 2010) (discussing burden in context of lost profits claim); Precision Pine & Timber, Inc. v. United States, 596 F.3d 817, 833 (Fed. Cir. 2010) (“[T]he party seeking damages has the burden of proving them with ‘reasonable certainty.’”); Yankee Atomic Electric Co. v. United States, 536 F.3d 1268, 1273 (Fed. Cir. 2008) (discussing plaintiff’s burden to prove causation).

1) Foreseeability

As the Federal Circuit has held, the party seeking expectancy damages “must show that the claimed damages were within the realm of reasonable foreseeability at the time the contract was entered into[.]” Fifth Third Bank, 518 F.3d at 1374 (citing Cal. Fed. Bank, 395 F.3d at 1267). Actual foresight is not required, and the “specific loss in question” need not be “within the contemplation of the parties at the time of contracting.” Anchor Sav. Bank, 597 F.3d at 1364. Reasonable foreseeability requires “‘merely that the injury actually suffered must be one of a kind that the defendant had reason to foresee and of an amount that is not beyond the bounds of reasonable prediction.’” Id. (quoting 11 Joseph M. Perillo, Corbin on Contracts § 56.7, at 108 (rev. ed. 2005)). The breaching party will not be liable, however, “‘for a particular type of loss that was so unusual as not to be foreseeable.’” Id. (quoting E. Allen Farnsworth, Farnsworth on Contracts § 12.14, at 262 (3d ed. 2004)).

2) Causation

A plaintiff seeking expectancy damages also must establish that the breach caused the damages. Fifth Third Bank, 518 F.3d at 1374. In Winstar cases and Spent Nuclear Fuel

(“SNF”) cases, the Court of Federal Claims has applied two different standards in determining causation of damages: the “but-for” test and the “substantial factor” test. See Citizens Fed. Bank, 474 F.3d at 1318-20. In the “but-for” test, the plaintiff must establish that the damages would not have occurred “but for” the breach. Cal. Fed. Bank, 395 F.3d at 1267. However, the breach need not be “the sole factor or sole cause” of the damages, and therefore “[t]he existence of other factors operating in confluence with the breach will not necessarily preclude recovery based on the breach.” Id. at 1267-68 (affirming trial court’s decision to apply “substantial factor” test) (citing Farnsworth on Contracts § 12.1, at 150-51). Under the “substantial factor” standard, in contrast, the plaintiff must show that the breach is a “substantial causal factor” in the damages. See Ind. Mich. Power Co., 422 F.3d at 1374 (citing Energy Capital Corp. v. United States, 302 F.3d 1314, 1320 (Fed. Cir. 2002)).

The Federal Circuit has explained that the “selection of an appropriate causation standard depends upon the facts of the particular case and lies largely within the trial court’s discretion.” Citizens Fed. Bank, 474 F.3d at 1318. Although the Federal Circuit has affirmed trial court decisions applying the “substantial factor” test in Winstar and SNF cases, the Federal Circuit has stated a preference for the “but-for” test. See Yankee Atomic, 536 F.3d at 1272 (explaining that the “but-for” test is the “traditional” and “preferred” standard for determining causation). Accordingly, this court will apply the “but-for” standard of causation to Central’s claim for damages.

Regardless of the causation standard applied, the Federal Circuit has held that “‘it is incumbent upon [a plaintiff seeking expectancy damages] to establish a plausible ‘but-for’ world.’” S. Nuclear Operating Co. v. United States, 637 F.3d 1297, 1304 (Fed. Cir. 2011) (quoting Yankee Atomic, 536 F.3d at 1273); see also Kan. Gas and Electric, 685 F.3d at 1371 (citing Yankee Atomic, 536 F.3d at 1273; Bluebonnet Sav. Bank, FSB v. United States, 67 Fed. Cl. 231, 238 (2005) (“Bluebonnet VI”)); Energy Nw. v. United States, 641 F.3d 1300, 1308 (Fed. Cir. 2011) (“[T]he burden of proving the non-breach world . . . lie[s] with [the plaintiff].”); Yankee Atomic, 536 F.3d at 1273 (quoting Bluebonnet VI, 67 Fed. Cl. at 238). In other words, the plaintiff bears the burden of demonstrating “what might have been” absent the breach. Glendale Fed. Bank, 239 F.3d at 1380.

Plaintiffs have been denied expectancy damages where the Court of Federal Claims “could not accurately assess [plaintiffs’] damages” because there was insufficient evidence to “perform the necessary comparison between the breach and non-breach worlds[.]” Kan. Gas and Electric, 685 F.3d at 1371; Yankee Atomic, 536 F.3d at 1273 (“Without record evidence about [plaintiffs’] condition with full Government performance, the Court of Federal Claims could not perform the necessary comparison between the breach and non-breach worlds and thus could not accurately assess the [plaintiffs’] damages.” (citations omitted)). In Kansas Gas and Electric, for example, an SNF plaintiff could not obtain damages for a spent fuel storage study because the record showed that the plaintiff would

have been required to pursue a similar study regardless of the breach, and the plaintiff did not provide record evidence comparing the costs of the studies in the breach and non-breach worlds. 685 F.3d at 1371. In Bluebonnet Savings Bank, a Winstar case, the Federal Circuit similarly rejected an expectancy damages claim based on a failed but-for model. Bluebonnet III, 266 F.3d at 1358; see also Bluebonnet IV, 67 Fed. Cl. at 238 (explaining that “the Federal Circuit recognized that plaintiffs were responsible for establishing the ‘but-for’ world”). The plaintiffs in Bluebonnet Savings Bank had contended that, in the “but-for” world, they would have obtained capital infusions through loans at a “speculative” interest rate and that they would have repaid their debt promptly. Bluebonnet III, 266 F.3d at 1358. However, the plaintiffs presented no evidence “that anyone would have loaned [plaintiffs] the funds[,]” and the only witness who testified as to the interest rate predicated the availability of the rate on contingencies for which no evidence was introduced. Id.

A proper calculation of expectancy damages accounts for avoided costs—costs that a plaintiff would have incurred in the non-breach world but has not incurred in the breach world. See S. Nuclear Operating Co., 637 F.3d at 1303-04 (citations omitted); Yankee Atomic, 536 F.3d at 1273 (discussing plaintiff’s failure to account for avoided costs); Bluebonnet Sav. Bank, F.S.B. v. United States, 339 F.3d 1341, 1345 (Fed. Cir. 2003) (“Bluebonnet V”). The plaintiff’s recovery must be reduced by the amount of avoided costs, “[i]n order to ensure that the [damages award] . . . does not represent an overstatement of the loss fairly attributable to the breach.” Bluebonnet V, 339 F.3d at 1345; see also Carolina Power & Light Co. v. United States, 573 F.3d 1271, 1277 (Fed. Cir. 2009) (affirming trial court finding that plaintiff did not avoid certain costs). Although the plaintiff bears the burden of persuasion with respect to avoided costs, the plaintiff’s burden to “incorporate those saved costs into its formulation of a plausible but-for world” arises only when the defendant first “move[s] forward by pointing out the costs it believes the plaintiff avoided because of the breach.” S. Nuclear Operating Co., 637 F.3d at 1304 (instructing on remand that, “[s]hould the government fail to timely point out specific shortcomings in the plaintiff’s causation proof on the issue of saved costs and, in appropriate circumstances, produce supporting evidence, the court is entitled to treat the issue as waived”).

3) Proof of damages to a reasonable certainty

A party seeking expectancy damages also must prove its damages to a reasonable certainty. Fifth Third Bank, 518 F.3d at 1374; Cal. Fed. Bank, 395 F.3d at 1267. However, “where responsibility for damage is clear, it not essential that the amount thereof be ascertainable with absolute exactness or mathematical precision[.]” Bluebonnet III, 266 F.3d at 1355; see also San Carlos Irrigation & Drainage Dist. v. United States, 111 F.3d 1557, 1563 (Fed. Cir. 1997) (citing Elec. & Missile Facilities, Inc. v. United States, 416 F.2d 1345, 1358 (Ct. Cl. 1969)). When damages are not proved with mathematical precision, “the court’s duty is to ‘make a fair and reasonable approximation of the damages.’” Bluebonnet

III, 266 F.3d at 1356-57 (quoting Ace-Fed. Reporters, Inc. v. Barram, 226 F.3d 1329, 1333 (Fed. Cir. 2000)). “If ‘a reasonable probability of damage can be clearly established, uncertainty as to the amount will not preclude recovery[.]’” Fifth Third Bank, 518 F.3d at 1374-75 (quoting Cal. Fed. Bank, 395 F.3d 1267). Recovery of speculative damages, however, is precluded. Ind. Mich. Power Co., 422 F.3d at 1373 (citing San Carlos Irrigation & Drainage Dist., 111 F.3d at 1563).

2. The volume of water that Central would have taken but for Reclamation’s breach

The evidence and the parties’ arguments focused largely on establishing the “but-for” world, *i.e.*, what would have happened absent Reclamation’s breach. A primary component of that scenario is the amount of water that Central would have taken in the breach years if Reclamation had made full allocations available; if Central would not have taken water that was unavailable due to Reclamation’s breach, it follows that it suffered no damages as a result of Reclamation’s breach. Central argues that it would have taken 56,000 acre-feet of water in each breach year, based upon the language of the 1983 Contract, evidence of Central’s agricultural demand for surface water, and potential sales of surface water by Central. See Pl. Central’s Br. filed Nov. 9, 2012, at 3-4. The court addresses each argument in turn.

1) The 1983 Contract’s “take or pay” provision

Central argues that it would have taken 56,000 acre-feet of water in each of the breach years because Article 3 of the 1983 Contract obligated Central to pay Reclamation for at least that much water. See id. at 9-10. In Central’s view it would be irrational for it to pay for 56,000 acre-feet of water and not to request that amount. See id. at 11. Central points to the Federal Circuit’s finding that Article 3 required Central to pay for at least 56,000 acre-feet of water per year in the breach years, see id. at 10 (citing Stockton III, 583 F.3d at 1351), and the testimony of Mr. Roberts that it was his understanding that Central would have had to pay for at least 56,000 acre-feet of water per year if Reclamation had not breached, see id. (citing Tr. 1643-44 (Roberts)).

Defendant responds that Central ignores the testimony of its General Counsel Mr. Roberts that, in practice, Central paid Reclamation only for water that was actually delivered, not for the minimum amounts under the 1983 Contract. See Def.’s Br. filed Nov. 29, 2012 [361], at 16-17 (citing Tr. 1821-23, 1827, 1867 (Roberts)). Consequently, the only circumstance under which Central would have paid for 56,000 acre-feet of water was if Central actually requested that much water from Reclamation. See id. at 18.

Central rejoins that defendant has not provided any reason why Reclamation would not have insisted on enforcement of the “take or pay” provision if Reclamation had fully

performed under the 1983 Contract. See Pl. Central’s Br. filed Dec. 10, 2012, at 8. With respect to the practice of paying only for water delivered, Central posits that Reclamation could not have required compliance with the “take or pay” provision in years during which Reclamation failed to make full allocations. See id. at 9.

In Stockton III the Federal Circuit did recite in its factual summary that Article 3 in the 1983 Contract is a “take or pay” provision. See 583 F.3d at 1351 (“Article 3 also establishes for each year of the contract a *minimum* amount of water that Reclamation is obligated to make available, and for which the Districts must pay[.]”). No finding appears in that opinion, however, that the provision was enforced. Mr. Roberts’s testimony establishes that the provision, in fact, was not enforced. As he stated, Central paid Reclamation only for water that was delivered during the breach years. See Tr. 1821 (Roberts) (“Q. The practice in the 1999 to 2004 period was for Central to only pay for water actually delivered from the Bureau of Reclamation, correct? A. That’s correct[.]”).

Mr. Roberts further testified that the provision also was not enforced in non-breach years:

Q. Mr. Roberts, before 1999, was the practice then also to pay only for the amount delivered by the Bureau of Reclamation?

A. My understanding was that once the interim plan of operations was put in, that that was how it was working, yes.

.....

Q. And what about the year 1996? You did get water from the Bureau of Reclamation in 1996, correct?

A. Yes, we did.

Q. You only paid for the volume of water in 1996 that the Bureau of Reclamation actually delivered.

A. I believe that’s the case.

.....

Q. In 1996, in fact, you only paid for the volume of water that was actually delivered to Central.

A. I think that's true.

....

Q. And so your understanding is that the amount paid for water in 2005 was based on the actual delivery of water to Central.

A. Yes.

Q. So both before and after the period 1999 to 2004, the practice between Central and the Bureau of Reclamation was to pay for the volume of water actually delivered under the New Melones contract.

A. That was the practice that we engaged in. Yes.

Tr. 1822-23, 1827 (Roberts). This evidence undercuts Central's argument that Reclamation's failure to enforce the "take or pay" provision was the product of Reclamation's own breach of the 1983 Contract. Moreover, Central points to no evidence in the record supporting that assertion. As discussed in Part II.1.2) supra, it is Central's burden, as plaintiff, to establish the "but-for" world. For that reason, Central's argument that defendant has not shown why Reclamation would not have insisted on compliance with Article 3 if it were making full deliveries also is unavailing.

The court finds that, while Article 3 is a "take or pay" provision, the evidence establishes that the provision would not have been enforced absent Reclamation's breach. The practice of the parties, in both breach and non-breach years, was for Central to pay only for water actually delivered by Reclamation. Central's position is that it was obligated to pay for 56,000 acre-feet of water per year and, therefore, that it would have requested that amount each year. The evidence shows that Central would not have been so obligated. 24/ Accordingly, the terms of the 1983 Contract do not support a finding that Central would have taken 56,000 acre-feet of water in each of the years 1999-2004 if Reclamation had not breached.

24/ Central's position that the "take or pay" provision alone supports a finding that it would have taken 56,000 acre-feet per year also ignores the fact that, for New Melones water requested from Reclamation, Central incurs wheeling charges beyond the delivery payment to Reclamation. See DX 1185, at 50; see also Tr. 2130-31 (Kauffman) (stating that amount of wheeling charges depended in part upon amount of water). That additional charge provides at least one reason for Central not to request the 1983 Contract minimum amount even if the "take or pay" provision were enforced.

2) Central's agricultural demand for surface water

Next, Central argues that the evidence of demand for surface water shows that Central would have taken 56,000 acre-feet of water in each of the breach years. See Pl. Central's Br. filed Nov. 9, 2012, at 11-18. The thrust of Central's position is that demand existed by its farmers sufficient to take that amount of New Melones water each year, but that Reclamation's failure to make the contract minimums available in the breach years dampened that demand.

Central begins its survey of the evidence with that regarding demand for supplemental surface water around the time of the 1983 Contract. Central points, first, to a July 8, 1983 memorandum in which the Commissioner of Reclamation estimated Central's New Melones water requirements at 72,000 acre-feet per year. See id. at 12 (citing PX 601); Closing Arg. Tr. 113-14 (Marzulla) (citing PX 601). Central's General Counsel Mr. Roberts testified that studies prior to and contemporaneous with the 1983 Contract had indicated that Central required 80,000 acre-feet of supplemental surface water per year. See Pl. Central's Br. filed Nov. 9, 2012, at 12 (citing Tr. 1588 (Roberts)). He further stated that, at the time the 1983 Contract was executed, no one from Reclamation or Central expressed the view that Central would be unable to take up to 80,000 acre-feet of New Melones water per year. See id. at 13 (citing Tr. 1603 (Roberts)). Finally, Central draws the court's attention to the March 8, 1983 order of the State of California Water Resources Control Board amending Reclamation's reservoir permit, in which it was noted that Reclamation had entered into a contract with Central for 80,000 acre-feet of water per year. See id. at 13-14 (citing JX 7); Closing Arg. Tr. 116-17 (Marzulla) (citing JX 7).

Central proceeds to turn to evidence surrounding Central's construction of its water conveyance system, first to a report commissioned by Central and performed by the engineering firm CH2M Hill Consulting Engineers ("CH2M") regarding the design and cost of the water conveyance system Central would need to build to use New Melones water. See Pl. Central's Br. filed Nov. 9, 2012, at 14-15 (citing DX 812; Tr. 1611-12, 1622-23 (Roberts)); Closing Arg. Tr. 120-21 (Marzulla) (citing DX 812). The report, dated November 21, 1990, states that farmers had signed letters of intent to take approximately 65,000 acre-feet per year, which CH2M reduced by 20% for revenue projection purposes, to 50,000 acre-feet per year. See DX 812, at CJ02318; Pl. Central's Br. filed Nov. 9, 2012, at 14-15 (citing DX 812). According to the testimony of Timothy J. Durbin, who was qualified as an expert on the hydrology of the Eastern San Joaquin Groundwater Basin, see Tr. 1501-02, a conveyance loss of 30% occurs as water travels from the New Melones Reservoir to the agricultural land in Central's district, see Tr. 1535-37 (Durbin). Central therefore argues that, in order to meet the demand for 50,000 acre-feet of water, over 70,000 acre-feet would need to be released to account for the conveyance loss. See Pl. Central's Br. filed Nov. 9, 2012, at 14-15.

Central next cites the testimony of Mr. Roberts regarding a farmer survey that he conducted after delivery of the CH2M report. See id. at 15 (citing Tr. 1625 (Roberts)); Closing Arg. Tr. 121-22 (Marzulla). Mr. Roberts stated that he conducted a survey of farmers in the district in March 1991. Tr. 1624-25 (Roberts). After he tabulated responses showing demand for 55,000 acre-feet of water per year, he reviewed the responses with Central's board and turned them over to CH2M. Id. Thereafter, Central's board approved the issuance of \$7.4 million in bonds to finance construction of the water conveyance system. Tr. 1623, 1626 (Roberts). Mr. Roberts stated that farmer response to the then-underway project was positive. Tr. 1632-33 (Roberts). Central places blame for flagging enthusiasm on Reclamation, arguing that there is "no evidence that Central's farmers would not have taken the full allocation of surface water . . . but for the Government's announcement that there would be little or no New Melones water under the contract. Nothing else had changed, and no reason appears why the farmers would have been any less enthusiastic about surface water in the but-for world where the Government actually performed as promised." Pl. Central's Br. filed Nov. 9, 2012, at 17. Central further cites the testimony of Mr. Roberts that, absent Reclamation's breach, Central would have requested a full allocation of 80,000 acre-feet of water in each of the breach years. See id. at 17-18 (citing Tr. 1642-43 (Roberts)).

Finally, Central lists its requests for 25,000 acre-feet in 1994, 50,000 acre-feet in 1995, and 40,000 acre-feet in 1996. See Closing Arg. Tr. 123-24 (Marzulla).

Defendant's primary argument with respect to Central's agricultural demand is that the evidence does not show an unmet demand, as Central fulfilled all farmer requests for surface water during the breach years, and there was water available to Central in the breach years that it did not take. See Def.'s Br. filed Nov. 29, 2012 [361], at 7-11. Defendant asserts that Central chose to forgo Reclamation water that was delivered to Stockton East and for which Central had a priority right, as well as Reclamation water that was not requested by either Central or Stockton East. See id. Furthermore, defendant states, Central did not seek to purchase additional water from SSJID that was available during the breach years and made no attempts to purchase water from other sources. See id.

Defendant disputes that the evidence cited by Central can support a finding that Central would have had any demand for surface water beyond that met by Central in the breach years. Thus, Central's reliance on the estimates of surface water demand made around the time of the 1983 Contracts is misplaced. See id. at 18. As defendant points out, those estimates were made at least fifteen years prior to the beginning of the breach period. See id. They therefore have little bearing on actual farmer demand for surface water during the breach period. See id.

Turning to the evidence contemporaneous with Central's financing of its water conveyance system, defendant notes that Central did not have copies of the letters of intent referenced in the CH2M report, and no evidence has been introduced regarding their content. See id. (citing Tr. 1792-93 (Roberts); DX 1184, at 202-03). Defendant points to Mr. Roberts's trial and deposition testimony that the letters of intent were neither commitments to take water nor binding contracts. See id. (citing Tr. 1792-94 (Roberts); DX 1184, at 202). With respect to the survey that Mr. Roberts allegedly conducted, defendant remarks that Central did not present any written evidence of that survey, thereby making it impossible to know the questions asked and the responses thereto. See id. at 18 n.6.

Defendant discounts Central's argument that farmer enthusiasm for surface water fell after the 1993 meeting with Reclamation and FWS in which it was made clear that Reclamation would not make full deliveries under the 1983 Contracts. See id. at 19. Defendant notes that Central did not present any testimony from farmers within the district, to the end that Central's enthusiasm argument is speculative. See id. at 19 n.7. While defendant concedes that it is "conceivable" that some farmers did not invest in surface water delivery systems because of Reclamation's failure to deliver water in the mid-1990s, the Federal Circuit found no breach in those years. See id. at 19 (citing Stockton III, 583 F.3d at 1363-64). Defendant argues that Central therefore cannot predicate its damages claim, whether directly or indirectly, on non-delivery in those years. See id. (citing Stockton III, 583 F.3d at 1363-64).

As discussed above, the court finds that Central had no priority right to New Melones water, and defendant's argument that Central's failure to take advantage of that priority right evinces lack of demand for surface water accordingly fails. Moreover, defendant's argument that Central could not have had more demand for surface water than that satisfied by Reclamation and SSJID water during the breach years also is unavailing. In determining damages, the court is to look to the "but-for" world, not the breach world. While the breach world may provide a point of reference, to find it identical to the "but-for" world is to beg the question the court must answer, *viz.*, what would have occurred absent the breach?

Correspondingly, Central's invocation of demand for the non-breach years 1994 and 1995 reflects, in a sense, the breach world, *i.e.*, the world in which Reclamation did not make full allocations available, because 1994 and 1995 were drought years. The Federal Circuit upheld the court's findings that absolved Reclamation of liability in those years. See Stockton III, 583 F.3d at 1363-64. However, for 1996 Central made a request for 40,000 acre-feet against Reclamation's allocation of 49,000 acre-feet for both Stockton East and Central. See Stockton I, 75 Fed. Cl. at 345. Although Stockton East initially requested 32,400 acre-feet, it later reduced its request to 4,000 acre-feet. See id.; see also Stockton III, 583 F.3d at 1353. Thus, the two districts requested 44,000 acre-feet total against Reclamation's allocation of 49,000 acre-feet, and the full 40,000 acre-feet that Central

requested was available to it. In that year, however, Central took only 17,508 acre-feet of New Melones water. See Stockton III, 583 F.3d at 1353; Stockton I, 75 Fed. Cl. at 345. Thus, for the one year that would be indicative of the non-breach world, Central took less water than it demanded or that Reclamation allowed to it. That illustrative example therefore provides no support for the notion that Central had farmer demand of 40,000 acre-feet of New Melones water in a non-breach world.

In Central's view agricultural demand for a full allotment of New Melones water would have been present during the breach years but for Reclamation's failure to make those full allotments available. That is a credible theory, but the evidence presented by Central does not permit the court to endorse it.

With respect to the 1983 documents regarding Central's surface water demand, those documents are temporally too far removed from the breach years to provide a plausible indication as to Central's agricultural demand for surface water from 1999 to 2004. Furthermore, they are planning documents whose apparent purpose was to estimate Central's yearly agricultural demand for surface water. While they provide evidence of what Reclamation, Central, and the State of California Water Resources Control Board believed, in 1983, about what Central's surface water needs would be in the future, they are not probative of what farmer demand for surface water would have been absent Reclamation's breach in the years 1999 to 2004.

A similar problem arises with Central's reliance upon the CH2M report. Those efforts were undertaken to support Central's decision to move forward with construction of its water conveyance system, and they tend to establish that Central believed there was sufficient farmer demand for surface water to approve construction of Central's surface water conveyance system. They are not, however, probative evidence of farmer demand for surface water. Central did not introduce the letters of intent referenced in the CH2M report into evidence, and the court therefore is left only with their characterization by Mr. Roberts as the non-binding expressed intentions of Central's farmers. See Tr. 1792-94 (Roberts).

As Mr. Thompson testified, a farmer must install equipment to be able to use surface water. See Tr. 1949 (Thompson). Installing that equipment requires an investment of time and money on the farmer's part; Mr. Thompson stated that it may take up to "a few months" to install the equipment and that the necessary equipment may cost anywhere from \$6,000.00 to \$30,000.00. See id. at 1949-50 (Thompson). Mr. Thompson also testified regarding applications to Central's capital improvement program, which showed equipment costs ranging from \$8,200.00 to \$136,396.59, and averaging roughly \$35,000.00. See Tr. 1961-82 (Thompson); DX 1172, at 4960, 4963, 4965, 4968, 4971, 4973, 4976, 4979, 4984, 4987, 4989, 4993, 4995, 4997, 4999, 5003, 5005. As described by Mr. Thompson, the capital improvement program permitted a farmer to take a \$10.00-per-acre-foot credit on imposed

surface water fees up to a maximum of \$150.00 per acre improved to help defray the costs of installing surface water equipment. See Tr. 1952-53 (Thompson). In the absence of the letters of intent referenced in the CH2M report, it is impossible to determine whether and to what extent those letters addressed the costs associated with the use of surface water, and therefore the nature of farmer enthusiasm apparently expressed in the letters of intent. 25/

Similarly to the 1983 documents, the CH2M report provides evidentiary support for a finding that Central believed there would be sufficient agricultural demand for a full allotment of New Melones water from Reclamation. It provides little support, however, that such demand would have materialized in response to full deliveries of the contractual minimums by Reclamation, particularly in the absence of the letters of intent the CH2M report remarked upon. The CH2M report therefore is entitled to little weight as an indicium of the extent to which farmers would have availed themselves of surface water—the demand for surface water—procured from Reclamation had it been allocated.

Mr. Roberts’s testimony regarding the survey that he conducted in March 1991 merits less weight than the CH2M report. Whereas the CH2M report was introduced into evidence, see DX 812, Central presented no documentary evidence of either Mr. Roberts’s survey or the responses thereto. Mr. Roberts stated that the responses indicated a “commit[ment] to take a quantity of water[,]” Tr. 1625 (Roberts), but without the responses themselves, the court cannot gauge the nature of that “commitment.” For example, it is impossible to determine the survey’s treatment of the costs associated with making use of surface water. Again, this testimony at most suggests that Central determined that farmer demand for surface water was sufficient to justify construction of Central’s surface water conveyance system. It does not provide credible evidence that such demand would have translated into actual utilization of surface water by those farmers in the absence of Reclamation’s breach in any given breach year, let alone for 1994-1998, which were prior non-breach years. Any finding that utilization would have existed at any given level for any year would be wholly speculative.

Given Central’s position that its farmers were enthusiastic about using surface water until it became clear that the surface water Central planned to receive from Reclamation was not forthcoming, the absence of testimony from any farmers regarding their surface water plans is conspicuous. Central highlights what it characterized at closing argument as “the uncontradicted testimony of Mr. Roberts and of Mr. Thompson that the farmers were uniformly enthusiastic about accepting this surface water,” Closing Arg. Tr. 123 (Marzulla),

25/ Furthermore, given Mr. Thompson’s testimony that the capital improvement program did not begin until 1999, see Tr. 1860 (Thompson), it appears unlikely that the letters of intent would have taken into account any assistance with the costs of installing surface water equipment.

but that testimony provides no direct evidence of farmer enthusiasm whether generally or quantitatively, and it is a thin reed upon which to rest a finding regarding Central's surface water demand.

Central did indicate at the outset of its case that it would be presenting testimony from five farmers regarding their decisions to use surface water. See Tr. 37 (Marzulla). Defendant promptly objected to Central's calling these witnesses on the ground that their names did not appear on Central's witness list. See Tr. 244-45 (Harrington). The witnesses were listed as "may call" witnesses by defendant and were subpoenaed for that reason, but Central did not incorporate defendant's witness list into its own. See Tr. 245-46 (Harrington). Defendant argued that it would be prejudiced by their testimony, as defendant had canceled their scheduled depositions during discovery based upon the representation by Central's counsel that the witnesses would not be called at trial. See Tr. 245 (Harrington). Central responded that it had not intended to call the witnesses, but that its plans changed when defendant served the witnesses with subpoenas. See Tr. 247-48 (Marzulla). The court sustained defendant's objection, but left open the possibility that Central might be permitted to call the farmers as rebuttal witnesses. Tr. 249-51. Ultimately, neither party called the farmers to testify.

Central suggests in its post-trial reply brief, without citation to rule or precedent, that, because defendant prevented Central from calling the farmers as witnesses and then did not call them itself, the court "may properly infer that the farmers' testimony would have supported Central's claim that its farmers were enthusiastic about surface water and would have embraced it if Reclamation's water deliveries had been more stable in accordance with the contract." Pl. Central's Br. filed Dec. 10, 2012, at 11. No such adverse inference is warranted. Defendant's opposition to the testimony properly was grounded in prejudice. With respect to defendant's decision not to call the farmers as witnesses, it is Central's burden to establish the "but-for" world. See Part II.1.2) supra. It is not incumbent upon defendant to prove a different version of that world; defendant may show the implausibility of Central's proffered scenario. As the colloquy surrounding defendant's objection to the farmers' testimony demonstrates, that is precisely why defendant included the farmers on its witness list. See Tr. 245 (Harrington) ("[T]he only reason we put them on was if there was a discrete issue that we wanted to rebut, and they are simply may call witnesses on our list."). Defendant was prepared to call the farmers only to raise doubts about Central's evidence, and its decision not to call them gives rise only to the inference that it was unnecessary to elicit their testimony to do so. No inference arises that, if defendant had called the farmers, they would have testified that they "were enthusiastic about surface water and would have embraced it if Reclamation's water deliveries had been more stable in accordance with the contract." See Pl. Central's Br. filed Dec. 10, 2012, at 11.

Central's argument that the evidence shows it had farmers ready and willing to take 56,000 acre-feet of water per year until Reclamation failed to make available the contractual minimums verges on *res ipsa loquitur*. In Central's telling, Reclamation would not have undertaken the New Melones project, in part, if Central's farmers had not demonstrated their desire for surface water. Central would not have constructed its water conveyance system if that desire for surface water had not been genuine and reliable. Whether Reclamation and Central believed that Central's farmers would be able to use 56,000 acre-feet of New Melones water each year and whether that ability would have materialized, however, are two separate inquiries. Central has provided little evidence to answer the latter question.

Central argues that the evidence establishes that farmer enthusiasm for surface water was present prior to Reclamation's breach and that, because there is "no evidence that Central's farmers would not have taken the full allocation of surface water . . . but for the Government's announcement that there would be little or no New Melones water under the contract[,] . . . no reason appears why the farmers would have been any less enthusiastic about surface water in the but-for world where the Government actually performed as promised." Pl. Central's Br. filed Nov. 9, 2012, at 17. This line of argument ignores that it is Central's burden affirmatively to prove the "but-for" world, see Part II.1.2) supra, and attempts to place the burden on defendant to prove that the demand for New Melones water would not have developed if Reclamation had made full allocations. Central has not adduced persuasive evidence demonstrating how much New Melones water its farmers, having made the required financial investment, plausibly might have requested in the 1999-2004 non-breach world where Reclamation made full allocations under the 1983 Contract, 26/ and it

26/ The capital improvement applications, about which Mr. Thompson testified, see Tr. 1961-82 (Thompson), provide some insight into surface water demand in the years following the breach period, as almost all are dated between 2005 and 2011. See DX 1172, at 4960, 4963, 4965, 4968, 4971, 4973, 4976, 4979, 4984, 4987, 4993, 4997, 4999, 5003, 5005. (One application, Mr. Thompson's, bears a date of "Dec, 1994," but also indicates that it is for the "2005 Capital Improvement Program." See DX 1172, at 4989. Mr. Thompson's testimony did not clarify whether the application was made in 1994 or 2005, see Tr. 1963-64 (Thompson), but both years fall outside the breach period.) There is one capital improvement program application, dated February 2003, from the breach period. See DX 1172, at 4995. A comparison of applications during the breach years with those filed in the years following the breach period might have demonstrated a flagging of farmer enthusiasm for surface water during the breach years. As it happens, though, a number of the capital improvement program applications from the breach years were destroyed, which became the subject of a spoliation motion filed by defendant. See Order entered Aug. 24, 2012, at 19-20 (discussing motion). Defendant sought an order establishing that Central was unable to increase demand for surface water beyond that supplied by Reclamation during the breach period. See id. at 20. After "a robust and persuasive refutation" by Central, the court ruled that defendant

accordingly has not demonstrated that its farmers plausibly would have taken 56,000 acre-feet of water in each of the breach years.

3) Water sales

To the extent that Central's farmers would not have used the minimum New Melones water allocations in the "but-for" world, Central posits that it would have sold any unused water at a profit. See Pl. Central's Br. filed Nov. 9, 2012, at 18-19. Central points to a written policy adopted by Reclamation in 1993 to facilitate water transfers. See id. (citing PX 602). The policy states that water transfers "have historically been allowed." Id. at 19 (quoting PX 602). Central also cites the testimony of Ms. Slaughter, Chief of the Water Contracts and Policy Branch for Reclamation, Sacramento, CA, that Reclamation approves all but 2% of water transfer requests each year, as well as a list of transfers that were approved during the breach years. Id. (citing Tr. 1705-08 (Slaughter); PX 622). Central concludes that there is no reason to believe that Central could not have transferred any surplus water to another district during the breach years. Id.

Defendant responds that the 1983 Contract prohibited Central from selling New Melones water to another district without written consent of Reclamation's contracting officer and that Central never sought or received permission to make any such sales. See Def.'s Br. filed Nov. 29, 2012 [361], at 12 (citing PX 37; Tr. 1688, 1690-92 (Roberts); Tr. 1714-15, 1738 (Slaughter)). Defendant further cites the deposition testimony of Mr. Roberts that, if Reclamation had not breached, Central would not have sold New Melones water to another district. See id. at 13 (citing DX 1184, at 150 (Q. Would Central have sold water it received from the Bureau of Reclamation outside the district? A. No. We never had any plans to sell water outside the district. It was for—to address our overdraft as a supplemental supply for our farmers, and that was our understanding of our contract. Q. And so if the Bureau of Reclamation had delivered full contract quantities of water in the years 1999 to 2004 Central[] wouldn't have been selling that water outside the district? A. Not—in retrospect, not that I can see.”)).

26/ (Cont'd from page 43.)

would be permitted to elicit testimony about the missing documents and reserved ruling for trial. See id. Defendant chose not to question Central's witnesses about the missing documents, and the court accordingly finds that no prejudice has inured to defendant. In light of the lack of prejudice to defendant, and the distinct likelihood that the document destruction detracted from Central's ability to prove its case, defendant's motion for sanctions based on spoliation is denied. Central's cross-motion for sanctions is denied, as well.

Central counters Mr. Roberts’s deposition testimony with his trial testimony, in which he took the position that, if Central had been unable to use all of its New Melones water within the district, it would have sold any excess water to other districts. See Pl. Central’s Br. filed Dec. 10, 2012, at 11 (citing Tr. 1644 (Roberts)).

Central’s evidence establishes that it would have been possible for Central to make sales of water. While the 1983 Contract places certain limits on water transfers and conditions them on Reclamation approval, see PX 37, at 00398; PX 602, at 3-6, Ms. Slaughter’s testimony revealed that, in practice, Reclamation disapproved very few transfer requests, see Tr. 1705-08 (Slaughter). Ms. Slaughter did advert to potential “compliance issues” that might have affected Central’s ability to transfer water, see Tr. 1732-34 (Slaughter), but defendant withdrew the questions regarding that subject, see Tr. 1738 (Snyder), and that testimony consequently does not factor into the court’s finding that it was possible for Central to make transfers of water.

This predicate finding, however, does not resolve the issue of whether Central actually would have made sales of surplus water if the contractual minimums had been made available to it. On that point Central presented no credible evidence. Mr. Roberts gave conflicting testimony at his deposition and at trial regarding Central’s plans to sell surplus water. Compare DX 1184, at 150, with Tr. 1644 (Roberts). The evidence does not reflect that Central was approached regarding a transfer or that Central ever explored making a transfer, whether during the breach period or outside of it. Central characterizes the evidence as establishing that “there is quite simply no reason to believe that Central could not have transferred any surplus water to another water district.” Pl. Central’s Br. filed Nov. 9, 2012, at 19. That argument both misplaces the burden and ignores Central’s obligation to introduce evidence to identify potential purchasers, volumes, years—in other words, a scenario for such sales 27/—showing that it plausibly would have made such transfers, not merely that it was not contractually prohibited from doing so. Central has not adduced evidence to show that it would have sold excess New Melones water if Reclamation had made the contractual minimums available. Central therefore is not entitled to expectancy damages based upon the possibility of lost unquantified interdistrict sales.

3. Central is not entitled to expectancy damages

Central has not presented evidence establishing that, in the “but-for” world, *i.e.*, the world in which Reclamation makes the contractual minimums of New Melones water

27/ As discussed in the following section of this opinion, Dr. Rodney T. Smith identified a spot market during the beach period and examined twenty-one transactions during the period 1998-2004. See Tr. 1993-2010 (Smith). This testimony did not posture Central as a player or a potential player in that market.

available during the breach years, Central would have taken more New Melones water from Reclamation than the amounts delivered in the breach world. The evidence shows that the 1983 Contract's "take or pay" provision would not have been enforced. The evidence is insufficient to find that Central's farmers would have used more Reclamation water than was delivered. The evidence also is insufficient to find that Central would have sold any water that its farmers would not have used. "[I]t is incumbent upon [a plaintiff seeking expectancy damages] to establish a plausible 'but-for' world." S. Nuclear Operating Co., 637 F.3d at 1304 (quoting Yankee Atomic, 536 F.3d at 1273). Central has failed to carry that burden. 28/ Consequently, Central is not entitled to expectancy damages.

4. The putative measure of Central's expectancy damages

Given this matter's lengthy history and in an abundance of caution, a discussion of the putative measure of Central's damages is appropriate. Had Central proven that it was damaged by Reclamation's breach, the court ruled in its pretrial order that the measure of Central's damages, whether for cover water it could not afford to purchase or for additional quantities of Reclamation water that it would have requested absent the breach, was the difference between the market price of water less the Reclamation price and operation and maintenance costs. See Order entered Aug. 24, 2012, at 20-21.

To that end, Central presented the testimony of Dr. Rodney T. Smith, who was qualified as an expert on the spot-market value of water with respect to Central during the breach period. See Tr. 1992. Dr. Smith examined eighteen one-year water transactions involving water rights originating on the San Joaquin River or its tributaries during the breach period, as well as three from 1998 because no such transactions occurred in 1999. See Tr. 1997-2002, 2009-10 (Smith). Using those data, Dr. Smith opined that the spot-market value of water was \$60 per acre-foot in 1999, \$80 in 2000, \$90 in 2001, \$135 in 2002, \$85 in 2003, and \$120 in 2004. See Tr. 2009-18 (Smith). Dr. Smith did not include

28/ At closing argument Central discounted the possibility that conducting after-the-fact surveys of farmers and presenting that evidence through expert testimony would have provided support for Central's "but-for" scenario, dismissing any such studies as subject to attack by defendant as having been conducted by paid experts in contemplation of litigation. See Closing Arg. Tr. 124 (Marzulla). After-the-fact testimony has been credited, however, in other opinions determining the contours of a "but-for" world. See, e.g., Anchor Sav. Bank, 597 F.3d at 1366-67; Fifth Third Bank v. United States, 71 Fed. Cl. 56, 66-68, 88 (2006), aff'd 518 F.3d 1368 (Fed. Cir. 2008). But see Fifth Third Bank of W. Ohio v. United States, 55 Fed. Cl. 223, 238-242 (2003) (granting summary judgment for defendant on plaintiff's after-the-fact expert report on lost profits for failing to identify specific investment opportunities lost). The court does not fault Central for the type of proof it presented, but the proof that Central advanced must show a plausible but-for world, which it failed to do.

Central's purchases of water from SSJID at \$15 per acre-foot in 2002-2004 in his analysis because his opinion was that those transactions constituted mutual aid agreements and were not representative of the market. See Tr. 2029-32 (Smith).

Defendant's expert witness Dr. Sunding agreed in general with Dr. Smith's methodology, but disagreed with the latter's decision to exclude the SSJID transactions. See Tr. 2322-24 (Sunding). The court finds that Dr. Smith's exclusion of the SSJID transactions was proper. As discussed above, SSJID's General Counsel Mr. Emrick testified that SSJID's board considered the \$15 per acre-foot price used in those transactions to be less than market value. See Tr. 2084 (Emrick); see also Tr. 899 (Timothy O'Laughlin, attorney for Oakdale Irrigation District ("OID"), testifying that OID was unwilling to sell water at \$15 per acre-foot to Central because it was less than market price). It is clear to the court that the \$15 per acre-foot price did not reflect market value, and the SSJID transactions therefore appropriately were excluded from Dr. Smith's analysis.

The court also heard testimony as to the market price of water from Mr. O'Laughlin and Stockton East's expert witness, Clay J. Landry. Neither witness's testimony is entitled to as much weight as that of Dr. Smith. Mr. O'Laughlin testified only as to the price that OID wanted to charge for transfer water during the breach period, which was \$100 per acre-foot. See Tr. 899-900 (O'Laughlin). Such a limited data set is less reflective of the broader market examined by Dr. Smith. Mr. Landry's testimony is not as probative as Dr. Smith's for a similar reason. Although Mr. Landry examined short-term contracts within the San Joaquin basin, as Dr. Smith did, he examined only transactions in which Reclamation acquired water, excluding other transactions to protect data gathered by his company that he considered proprietary. See Tr. 956-57 (Landry). Mr. Landry testified that he found the Reclamation transactions to be representative, but offered no further support for that statement. See Tr. 957 (Landry). Thus, Mr. Landry's analysis is less reliable than Dr. Smith's, and the court gives his testimony less weight than that of Dr. Smith.

Consequently, if Central had proved that it was damaged by Reclamation's breach, the proper spot-market price to use in any damages calculation would be that advanced by Dr. Smith. That price would not apply to the 10,000 acre-feet of SSJID water forgone by Central in 2002, for which the contract price of \$15 per acre-foot would provide the proper measure of damages.

Determining the spot-market price would not end the inquiry, however. As discussed in Part II.1.2) supra, Central also bears the burden of incorporating avoided costs into its damages calculation once defendant has identified the nature of such avoided costs. See S. Nuclear Operating Co., 637 F.3d at 1304. Defendant has done so, invoking the wheeling charges Central was contractually obligated to pay to Stockton East for the delivery of New Melones water. See Def's Br. filed Nov. 29, 2012 [361], at 2-3; Def.'s Br. filed Dec. 21,

2012 [366], at 14-15. Central argues that it would not have incurred any wheeling charges if Reclamation had performed fully, as Central obtained dismissal with prejudice of a lawsuit filed to collect wheeling charges. See Pl. Central's Br. filed Dec. 10, 2012, at 13-14. That argument is premised on what occurred in the breach world, not what would have happened in the "but-for" world, and Central has put forth no evidence showing that it would have incurred no wheeling charges if Reclamation had made full allocations during the breach years. ^{29/} Ascertaining the amount of wheeling charges that Central would have incurred if the contractual minimums were available during the breach period therefore would be necessary to a calculation of Central's putative expectancy damages.

The evidence regarding how Central's wheeling charges were calculated is murky. The wheeling agreement is not in evidence. See Pl. Central's Br. filed Dec. 10, 2012, at 13; Def.'s Br. filed Dec. 21, 2012 [366], at 15. Central objected to cross-examination of Mr. Roberts regarding wheeling charges because those charges were then the subject of litigation between Central and Stockton East, and Central was concerned that evidence regarding those charges in this matter might be used in that litigation. See Tr. 1694 (Marzulla). The court invited Central and Stockton East to provide a sealed stipulation as to the wheeling rates for the breach period solely for the purpose of this matter, see Tr. 1698, but plaintiffs ultimately declined to do so. Stockton East's General Manager Mr. Kauffman testified that wheeling charges were calculated using both capital and use components, but did not go into detail as to how those calculations were made. See Tr. 2127-32 (Kauffman). His testimony did not reflect that the wheeling charge was not consistent from year to year on a per-acre-foot basis, as the calculated per-acre-foot claimed wheeling charge was \$25.51 per acre-foot in 2001 and \$13 per acre-foot in 2002. See Tr. 2128-29 (Kauffman). Defendant directs the court's attention to the CH2M report, which states that "Stockton East Water District has agreed to wheel this water to [Central] at a charge of \$10 per acre-foot." DX 812, at CJ02330; see Def.'s Br. filed Nov. 29, 2012 [361], at 3 (citing DX 812). That document predates the construction of Central's water conveyance system and the accrual of any wheeling charges; it therefore is of limited utility in calculating wheeling charges, particularly in light of Mr. Kauffman's testimony that, on a per-acre-foot basis, the wheeling charge varied from year to year.

A proper calculation of Central's putative expectancy damages would have to account for costs that Central avoided by Reclamation's breach. The wheeling charges that Central was contractually obligated to pay to Stockton East for New Melones water wheeled through Stockton East's facility are just such avoided costs. Once defendant identified those costs, it was incumbent upon Central to prove their amount and incorporate them into its damages

^{29/} Unlike the "take or pay" provision in the 1983 Contract, no evidence reflected a practice of Central and Stockton East that Central would not pay any wheeling charges.

model. See Pt. II.1.2) supra. Central did not do so. Any attempt to calculate Central's putative expectancy damages would be speculative.

CONCLUSION

Based on the foregoing, Central is entitled to an award of \$149,950.00 as damages for cost of cover and to no award of expectancy damages. By separate order entered this date in No. 04-541L, the Clerk of the Court has been instructed to enter judgment for Stockton East. The Clerk of the Court shall enter judgment for plaintiff Central in the amount of \$149,950.00.

IT IS SO ORDERED.

No costs.

/s/ Christine O.C. Miller

Christine Odell Cook Miller
Judge