

In the United States Court of Federal Claims

No. 04-541L
(Filed February 28, 2013)

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STOCKTON EAST WATER *
DISTRICT and CENTRAL SAN *
JOAQUIN WATER CONSERVATION *
DISTRICT, *
 Plaintiffs, *
 v. *
THE UNITED STATES, *
 Defendant. *
 ***** *

* Contract damages; expectation
 * damages; cost of cover;
 * reasonableness of mitigation;
 * foreseeability; causation of
 * damages.

Jennifer L. Spaletta, Stockton, CA, for plaintiff Stockton East Water District. Jeanne M. Zolezzi and Alexis K. Galbraith, Herum Crabtree, Stockton, CA, of counsel. Roger J. Marzulla, Washington, DC, for plaintiff Central San Joaquin Water Conservation District. Nancie G. Marzulla, Marzulla & Marzulla, Washington, DC, of counsel.

David A. Harrington, Barbara E. Thomas, Sharon A. Snyder, Washington, DC, and Terry M. Petrie, Denver, CO, with whom was Principal Deputy Assistant Attorney General Stuart F. Delery, for defendant. Amy Aufdemberge, Assistant Regional Solicitor, U.S. Department of the Interior, Sacramento, CA, and Shelly V. Randel, Office of the Solicitor, Washington, DC, of counsel.

MEMORANDUM OPINION AND ORDER ON CLAIMS
OF STOCKTON EAST WATER DISTRICT

MILLER, Judge.

This case, before the court on remand from the United States Court of Appeals for the Federal Circuit, involves a dispute over two water supply contracts. Plaintiffs Stockton East Water District (“Stockton East”) and Central San Joaquin Water Conservation District (“Central”) (collectively, “plaintiffs” or the “districts”) are water agencies organized under the laws of California with the authority to provide water to municipal, industrial, or

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 Stockton East. 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 Stockton East seeks: (1) expectancy damages of \$18,818,509.00 or, in the alternative, \$5,398,033.00; (2) damages of \$6,740,890.78 to account for its costs of mitigation; and (3) \$1,599,960.00 in consequential damages related to the “stranded costs” for the portion of the New Melones Conveyance System (the “NMCS”) that remained unused as a result of the breach.

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

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.

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.

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 (“ROD”) 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 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.) \$46.99 (Oct. - Dec.)	\$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.

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. 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

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.

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. Stockton East's 1997 Transfer Agreement

In 1993 Stockton East began pursuing a water transfer agreement with Oakdale Irrigation District ("OID") and South San Joaquin Irrigation District ("SSJID"). Tr. 1791-92 (Zolezzi). OID and SSJID are two of the largest water rights holders on the Stanislaus River with rights to the first 600,000 acre-feet of annual inflow to the New Melones Reservoir. Tr. 891-93 (O'Laughlin); see also Tr. 791 (Zolezzi). The City of Stockton (the "City"), California Water Service Company ("Cal Water"), the County of San Joaquin, and Central

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.

joined Stockton East in negotiating directly with OID and SSJID for transfer water. 16/ Tr. 795 (Zolezzi).

On April 1, 1997, Stockton East entered into a ten-year water transfer agreement with OID and SSJID (the “1997 Transfer Agreement”). See PX 450. The City, Lincoln Village Maintenance District, and Colonial Heights Maintenance District also signed the 1997 Transfer Agreement, which referred to those entities, in addition to Stockton East, as the “Purchasers.” See PX 450, at 1. The term of the 1997 Transfer Agreement was for ten years, beginning with the date on which water was first delivered. PX 450, at 3. Paragraph 5(a) required OID and SSJID to deliver water under every year of the agreement. Id. For years in which the forecast of inflow to the New Melones Reservoir equaled 500,000 acre-feet or more, OID and SSJID were required to deliver 30,000 acre-feet. Id. In drier years the delivery amount was reduced to 12,500 acre-feet and 8,000 acre-feet. Id.

The 1997 Transfer Agreement was a “take or pay” contract requiring Stockton East to purchase the water regardless of the amount used. Id.; Tr. 801-02 (Zolezzi). For years in which the forecast of inflow to the New Melones Reservoir equaled 450,000 acre-feet or more, the price of the water was \$55 per acre-foot. PX 450, at 3. In drier years, when the delivery amount was reduced to 8,000 acre-feet, the price of the water was \$90 per acre-foot. Id. The price of the water was to be adjusted annually based upon changes to the Consumer Price Index. Id. at 3-4.

In 1999 Stockton East began receiving water from OID and SSJID under the 1997 Transfer Agreement. Tr. 807 (Zolezzi). Because deliveries were based upon the “water year” – October 1 through September 30 – Stockton East received deliveries from October 1999 through September 2009. PX 454, at 2-7; see also PX 450, at 3. Utilizing a summary of Stockton East’s monthly accounting records prepared by Stockton East’s Finance Director, Elpedio V. Jamosmos, see PX 454, at 2-7; Tr. at 1098 (Jamosmos), Stockton East’s damages expert, Everett P. Harry, compiled the following summary of Stockton East’s purchases from OID and SSJID under the Transfer Agreement:

Year	Amount of Water Purchased (acre-feet)	Amount Paid
1999 (Oct. - Dec.)	4,115.20	\$226,355.50
2000	33,352.80	\$1,848,369.17
2001	25,479.00	\$1,456,975.67

16/ The substance of these negotiations and Stockton East’s purposes in seeking an agreement with OID and SSJID are included in the “Discussion” section of this opinion.

2002	29,815.00	\$1,746,144.14
2003	30,000.00	\$1,786,440.35
2004	30,146.50	\$1,834,402.62
2005	30,120.01	\$1,884,236.23
2006	30,000.00	\$1,948,500.00
2007	30,000.00	\$2,017,550.00
2008	30,000.00	\$2,064,850.00
2009 (Jan. - Sept.)	25,000.00	\$1,791,750.00

PX 403A; Tr. 1269-70, 1272-73 (Harry). ^{17/} Stockton East used the NMCS to convey the water it purchased from OID and SSJID. Tr. 130 (Kauffman).

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,

^{17/} Mr. Harry testified to the calculations in PX 403. Stockton East later realized, however, that PX 403 included transactions that were not part of the 1997 Transfer Agreement with OID and SSJID. See Tr. 1311-13 (Harry). The parties stipulated to an amended exhibit – PX 403A – that excluded purchases of water unrelated to the 1997 Transfer Agreement. See PX 403A; Tr. 1807 (Spaletta).

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 being tried first, and damages being tried 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 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.

^{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.

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 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 argument were held on January 4, 2013.

^{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 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.

DISCUSSION

I. Expectancy damages

1. Standard for awarding expectancy damages

Plaintiff Stockton East seeks expectancy damages of \$18,818,509.00 or, in the alternative, \$5,398,033.00. Pl. Stockton East's Br. filed Nov. 9, 2012, at 30. 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, F.S.B. v. United States, 317 F.3d 1363, 1371 (Fed. Cir. 2003) (first alteration in original)); see also Old Stone Corp. v. United States, 450 F.3d 1360, 1378 (Fed. Cir. 2006) (“[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., FSB v. United States, 399 F.3d 1341, 1347 (Fed. Cir. 2005)); 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 v. United States, 474 F.3d 1314, 1318-20 (Fed. Cir. 2007). 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 E. Alan Farnsworth, Farnsworth on Contracts § 12.1, at 150-51 (3d ed. 2004)). 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. v. United States, 422 F.3d 1369, 1374 (Fed. Cir. 2005) (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 Stockton East’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 (remanding to the trial court and instructing 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 parties’ arguments

1) Additional M&I and agricultural water use but-for the 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 Stockton East would have taken in the breach years if Reclamation had made full allocations available; if Stockton East 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.

To support its claim for expectancy damages, Stockton East offered evidence that it would have purchased an additional 82,955 acre-feet of water under the 1983 Contract. Stockton East’s estimate of additional water demand in the but-for world is based upon: (1) the testimony of its General Manager Mr. Kauffman, including Mr. Kauffman’s opinions as a lay witness within the scope of Fed. R. Evid. 701; 20/ (2) testimony from representatives of its Urban Contractors – Mark J. Madison, former Director of Municipal Utilities for the City, and Francis S. Ferraro, Vice-President of Cal Water; 21/ and (3) evidence of water deliveries and infrastructure improvements that actually occurred in the years following the 1999-2004 breach period. See Pl. Stockton East’s Br. filed Nov. 9, 2012, at 23-24.

Mr. Kauffman prepared a spreadsheet – PX 563 – showing that, if Reclamation had not breached the Contract, Stockton East would have requested during the breach years an additional 62,908 acre-feet of water for M&I purposes and an additional 20,047 acre-feet of water for agricultural and groundwater recharge purposes. See PX 563; Tr. 358-59, 372-77 (Kauffman) (discussing PX 563). The spreadsheet indicates that Stockton East would have requested the following additional acre-feet of water during the breach period:

Year	M&I Water	Ag Water and Groundwater Recharge	Total Water (M&I + Ag / Recharge)
1999	3,152	5,122	8,274
2000	3,139	4,217	7,356

20/ Mr. Kauffman provided lay testimony and was not qualified as an expert witness under Fed. R. Evid. 702. Prior to trial defendant filed a motion *in limine* to exclude or limit the testimony of ten experts, including Mr. Kauffman. The court found that, although Mr. Kauffman was a long-time, experienced employee, he did not have the background to qualify as an expert witness. Order entered Aug. 24, 2012, at 16-17. Mr. Kauffman testified as a fact witness and offered lay testimony pursuant to Fed. R. Evid. 701.

21/ Cal Water and the City each have contracts with Stockton East (the “Second Amended Contract”) to purchase M&I water from Stockton East. Tr. 175-76 (Madison); Tr. 862 (Ferraro); see DX 807 (the Second Amended Contract). The City and Cal Water are two of Stockton East’s largest Urban Contractors, collectively providing roughly 98% of the Stockton metropolitan area with M&I water. See Tr. 860-61 (Ferraro). The City and Cal Water are each entitled to slightly less than half of the M&I water available from Stockton East. See Tr. 212 (Madison). Stockton East’s other Urban Contractors are Lincoln Village Maintenance District and Colonial Heights Maintenance District – two political divisions governed by San Joaquin County. See DX 807, at 00429.

2001	12,760	5,287	18,047
2002	11,492	152	11,644
2003	16,746	1,144	17,890
2004	15,619	4,125	19,744
Total (1999-2004)	62,908	20,047	82,955

PX 563 (columns M, N, and O).

Stockton East’s ability to take 62,908 acre-feet of M&I water in the but-for world was contingent upon certain enhancements that Stockton East would have made to its Drinking Water Treatment Plant (the “DWTP”) and the Peters Pipeline. See Tr. 363-71 (Kauffman) (discussing columns H-K in PX 563). Mr. Kauffman prepared a demonstrative exhibit – PX 435 – comparing the actual implementation of the enhancements with the enhancements that would have occurred had Reclamation not breached the Contract. Tr 231-32 (Kauffman); see PX 435. According to Mr. Kauffman, if Reclamation had not breached the Contract, Stockton East would have received requests from its Urban Contractors to accelerate several planned infrastructure improvements to the DWTP and thus would have hastened its ability to treat New Melones water at the DWTP for sale to the Urban Contractors. Tr. 238-43, 363-71 (Kauffman) (discussing PX 563). The first group of enhancements – involving the completion of a study required by the California Department of Public Health (“CDPH”) and improvements to the DWTP low-lift pump station – would have been implemented in 1999 and therefore would have increased the rated capacity of the DWTP from 40 million gallons per day (“mgd”) to 45 mgd beginning in 1999. 22/ Tr. 238-39, 363-64 (Kauffman). In actuality, Stockton East completed the CDPH study in 2000 and the improvements to the low-lift pump station in 2002. Tr. 233-35 (Kauffman).

The second series of enhancements to the DWTP – labeled “Enhancement #3 and #4” in column J of PX 563 – consisted of improvements to the DWTP’s high-service pump station and sedimentation basin. Tr. 240-41, 367-68 (Kauffman); see also PX 563. Mr. Kauffman testified that these enhancements and an additional CDPH study would have been completed in 2000 and therefore would have increased the rated capacity of the DWTP from 45 mgd to 60 mgd beginning in 2000. Tr. 240-41, 367-68 (Kauffman); see also PX 435; PX

22/ In order to operate the DWTP at a higher capacity, Stockton East often was obligated to obtain approval from the CDPH by completing a study demonstrating that it could meet drinking water standards while operating the DWTP at a higher capacity. Tr. 234-35 (Kauffman).

563. In the real world, Stockton East did not complete the high-service pump station and sedimentation basin improvements until 2007, nor did Stockton East obtain approval to operate the DWTP at a capacity of 60 mgd until 2008, upon completion of additional CDPH studies. Tr. 236-37 (Kauffman); see also PX 435. Mr. Kauffman's analysis also shows that an additional CDPH study would have been completed in 2002, thereby increasing the rated capacity of the DWTP to 65 mgd in 2002. See PX 435; PX 563. This study actually was completed in 2010 – the year that Stockton East began operating the DWTP at its current capacity of 65 mgd. Tr. 237 (Kauffman). Due to the acceleration of these enhancements in the but-for world, Mr. Kauffman estimated that Stockton East would have been able to treat an additional 55,386 acre-feet of water from 1999-2004. 23/ Tr. 371 (Kauffman) (discussing column K in PX 563).

Mr. Kauffman's estimate of Stockton East's M&I water use in the but-for world also depended on the acceleration of an additional infrastructure project – the extension to the Peters Pipeline. Tr. 239-40, 366 (Kauffman). Upon reaching Stockton East's boundary at the Copperopolis Gates, New Melones water flows through the Lower Farmington Canal for roughly a mile and a half before entering the Peters Pipeline. Tr. 464-65, 467-68 (Kauffman). The water then travels westerly and southwesterly through the Peters Pipeline before reaching the DWTP. Tr. 465 (Kauffman). Prior to 2006, however, only a portion of the Peters Pipeline had been constructed, and New Melones water therefore had to flow through a different pipeline – the Belotta Pipeline – for six miles before reaching the DWTP. Tr. 465-66, 569 (Kauffman). It was Mr. Kauffman's opinion – as General Manager of Stockton East – that if Reclamation had not breached the Contract, Stockton East would have received requests from its Urban Contractors to accelerate the Peters Pipeline project, and Stockton East therefore would have completed the six-mile Peters Pipeline extension in 2000 – six years prior to its actual completion. Tr. 239-40, 366-70 (Kauffman). With a completed Peters Pipeline, Stockton East would have been able to deliver additional water to the DWTP and thus could have treated water at a rate of 60 mgd in 2001 and 65 mgd from 2002-2004. Tr. 240-41, 366-68 (Kauffman).

Mr. Kauffman also estimated that Stockton East's agricultural customers would have used an additional 20,047 acre-feet of New Melones water during the breach period if

23/ Mr. Kauffman explained that approximately 14% of the M&I water purchased from Reclamation at the Goodwin Tunnel constituted “system losses” resulting from evaporation and percolation in the NMCS and DWTP. Tr. 361-62, 371, 621-25 (Kauffman). Accordingly, Mr. Kauffman estimated that Stockton East would have needed to request 62,908 acre-feet of water from Reclamation to treat 55,386 acre-feet of water for its Urban Contractors. Tr. 621-22 (Kauffman) (discussing PX 563).

Reclamation had not breached the Contract. 24/ Tr. 372-73 (Kauffman) (discussing column N in PX 563); see also PX 563. Stockton East operates an “incentive program” that assists farmers in financing the capital improvements necessary to convert from groundwater to surface water use. Tr. 379 (Kauffman). As General Manager of Stockton East, Mr. Kauffman works with agricultural customers who are interested in participating in the program and converting to surface water. Tr. 378-79 (Kauffman). Mr. Kauffman testified that during the six-year breach period farmers within Stockton East expressed little interest in converting to surface water because Stockton East’s surface water was unreliable. Tr. 379-80 (Kauffman). However, when Stockton East began receiving a full allocation of New Melones water under the Contract in 2005, agricultural customers began expressing more interest in converting to surface water. Tr. 379-80 (Kauffman). Mr. Kauffman stated that, based on a comparison of 2010 agricultural use and agricultural use during the breach years, his staff and he estimated how many more agricultural properties may have hooked up to the system during the breach years and therefore would have taken New Melones water but for the breach. Tr. 372-73 (Kauffman). According to Mr. Kauffman, from 1999-2004 the highest volume of agricultural use – 5,287 acre-feet – would have occurred in the year 2001. Tr. 376-77 (Kauffman) (discussing column N in PX 563). In that year 40,000 acres of farmland in Stockton East were irrigated with groundwater. Tr. 377 (Kauffman). To provide agricultural users with 5,287 acre-feet of New Melones surface water in 2001, Stockton East would have needed to convert 800 to 1,500 acres from groundwater to surface water use. Tr. 376-77 (Kauffman). Mr. Kauffman related that, since the breach period, Stockton East actually exceeded that level of conversion. Tr. 377 (Kauffman).

In addition to Mr. Kauffman’s testimony, Stockton East supported its claim for expectancy damages with the testimony of representatives of two Urban Contractors. Messrs. Madison and Ferraro – representatives of the City and Cal Water, respectively – each testified that their respective entities utilized a conjunctive-use program to meet water needs, meaning that both surface water and groundwater were used. Tr. 175 (Madison); Tr. 860-64 (Ferraro). During the breach years, both the City and Cal Water had a policy or practice of maximizing surface water use and reducing groundwater pumping to improve the conditions of the groundwater basin. Tr. 174-75, 216-17 (Madison); Tr. 863-65 (Ferraro). Given the Urban Contractors’ preference for using surface water, Messrs. Madison and Ferraro testified that, if Reclamation had made additional water available to Stockton East from 1999-2004, the Urban Contractors would have used that surface water to meet their customers’ M&I water needs. Tr. 176-77, 215 (Madison); Tr. 868-69 (Ferraro). Stockton East also relied upon Messrs. Madison and Ferraro in an attempt to corroborate Mr. Kauffman’s testimony

24/ Mr. Kauffman testified that his estimate of agricultural use in the but-for world accounted for “system losses” ranging from 10 to 30% because agricultural system losses “var[y] depending on how close the customer is to the conveyance system.” Tr. 375-76 (Kauffman).

that Stockton East would have received requests from the Urban Contractors to accelerate planned infrastructure improvements. Pl. Stockton East's Br. filed Dec. 10, 2012, at 5-6.

Stockton East argues that Mr. Kauffman's analysis is supported by evidence of infrastructure and water deliveries that actually occurred in the years following the 1999-2004 breach period. See Pl. Stockton East's Br. filed Nov. 9, 2012, at 23-24. According to Mr. Kauffman, 2005 was the first year that Stockton East received a full allocation of water under the 1983 Contract. Tr. 380 (Kauffman). Mr. Kauffman further explained that, "[o]nce Reclamation starting making the water more reliable from this contract the urban contractors became believers" in Stockton East's planned infrastructure improvements, Tr. 239 (Kauffman), and Stockton East consequently completed the Peters Pipeline extension in 2006 and improvements to DWTP's high-service pump station and sedimentation basin in 2007, Tr. 235-36 (Kauffman); see also Pl. Stockton East's Br. filed Nov. 9, 2012, at 10.

Stockton East also relies on post-breach evidence to corroborate Mr. Kauffman's analysis of agricultural use in the but-for world. See id. at 10. Mr. Kauffman's analysis shows that from 1999-2004 the highest volume of agricultural use – 5,287 acre-feet – would have occurred in the year 2001. See PX 563. To provide agricultural users with 5,287 acre-feet of New Melones surface water in 2001, Stockton East would have needed to convert a maximum of 1,500 acres from groundwater to surface water use. Tr. 376-77 (Kauffman). Mr. Kauffman testified that from 2005 to 2010 the actual conversion of farmland within Stockton East exceeded that amount. Tr. 377-78 (Kauffman). He further indicated that those conversions were facilitated by the increased reliability of New Melones water immediately following the breach period. Tr. 379-80 (Kauffman).

Defendant responds that Stockton East's claim for expectancy damages fails because it is based on an implausible but-for model. Def.'s Br. filed Nov. 29, 2012 [362], at 31-37. Defendant offers three principal criticisms of Stockton East's analysis of the but-for world. First, defendant charges that "[c]onceptually, Stockton East's but-for model is an exercise in hindsight untethered to any specific facts in the record." Id. at 32. Defendant emphasizes that Mr. Kauffman developed the timeline of accelerated infrastructure improvements, see PX 435, without reviewing contemporaneous records from the breach period or consulting with the Urban Contractors, see Def.'s Br. filed Nov. 29, 2012 [362], at 32 (citing Tr. 539-42 (Kauffman)). Citing Mr. Kauffman's testimony regarding his methodology, defendant argues that Mr. Kauffman simply "reasoned backward" to develop a scenario under which Stockton East would have been able to take deliveries of the minimum quantities listed in the Build-Up Schedule. Id. at 32-33.

Second, defendant contends that Mr. Kauffman's but-for model lacks factual support and is contradicted by evidence of record. Id. at 33-34. Defendant points out, for example, that the DWTP was already operating at the 45 mgd level in 1999 and 2000, as evidenced by

data included in an August 2000 permit application that Stockton East submitted to CDPH. See id. at 33 (citing PX 525). Defendant also emphasizes that Stockton East’s timeline of accelerated infrastructure improvements fails to explain how Stockton East would have rapidly obtained \$7 million to construct the Peters Pipeline extension. Id. at 34. Defendant additionally takes issue with Stockton East’s estimate of agricultural demand in the but-for world, contending that Stockton East provided no probative evidence that farmers would have converted to surface water beginning in 1999 if Reclamation began complying with the Build-Up Schedule in that year. Id. at 35-36.

Third, defendant argues that Stockton East’s model of the but-for world is fundamentally flawed because it fails to account for avoided costs. Id. at 36-37. Citing Stockton East’s financial statements, defendant shows that Stockton East incurs operating expenses associated with the DWTP to transport, treat, and distribute the water. See id. at 37 (citing PX 500, at 32). Because Stockton East’s but-for model makes no reference to these costs that Stockton East avoided due to Reclamation’s breach, defendant argues that Stockton East’s but-for model cannot serve as the basis for an expectancy damages award. Id.

2) Stockton East’s calculation of expectancy damages

Stockton East proposes two alternative methods for calculating its expectancy damages related to the 82,955 acre-feet of water that it would have requested but for the breach. Stockton East’s preferred approach, which the court will refer to as the “groundwater recharge” method, aims to measure the value of the groundwater recharge that Stockton East lost due to the breach. See Pl. Stockton East’s Br. filed Nov. 9, 2012, at 27-28. Part of Stockton East’s mission is to address the overdraft of the Eastern San Joaquin Groundwater Basin by engaging in activities that facilitate groundwater recharge. See Tr. 382-83 (Kauffman); PX 5, at 00004-5, 00009. There are two general ways for Stockton East to accomplish groundwater recharge: in-lieu recharge and direct recharge. Tr. 383 (Kauffman). In-lieu recharge occurs when users substitute groundwater for surface water. Id. For example, in-lieu recharge takes place when a farmer converts to surface water or when an Urban Contractor uses surface water instead of pumping groundwater. Id. In contrast, direct recharge can occur through flooding a field, basin, or pond with surface water. Tr. 384 (Kauffman). The surface water then seeps into the ground and ultimately reaches the groundwater basin. Tr. 638 (Kauffman).

Mr. Kauffman testified that, if Stockton East had not breached the Contract, Stockton East would have used the additional 82,955 acre-feet that it would have requested to effectuate in-lieu recharge. Tr. 393 (Kauffman). Because it is now operating its facilities at maximum capacity for in-lieu recharge, Tr. 399-400 (Kauffman), Stockton East advances the argument that it lost the opportunity to attain the in-lieu recharge that it would have

achieved during the 1999-2004 breach period. Tr. 444-45 (Spaletta). Stockton East therefore proposes that the court measure the value of this lost opportunity based upon the cost of achieving direct recharge over the next three years. See Pl. Stockton East's Br. filed Nov. 9, 2012, at 28; Tr. 1286-91 (Harry).

Stockton East relies on the testimony of Messrs. Kauffman and Harry to compute its expectancy damages under the groundwater recharge method. Mr. Kauffman testified that Stockton East is currently pursuing a direct recharge project (the "north site facility"), which would be able to recharge 26,500 acre-feet of water annually. Tr. 400-01 (Kauffman). Stockton East has estimated that it would cost over \$8 million to construct the facility, in addition to \$5.1 million to purchase the 230 acres on which the facility would be located. Tr. 401-09 (Kauffman); see also PX 440; PX 442, at SEWD 123742-D. Based on Mr. Kauffman's testimony, Mr. Harry calculated that the cost of accomplishing direct recharge of 69,919 acre-feet 25/ at the north site facility would be \$272.64 per acre-foot. Tr. 1286 (Harry). This sum includes a cost of \$236.42 to acquire each acre-foot of water over the next three years, in addition to \$36.22 per acre-foot representing the costs of constructing, operating, and maintaining the north site facility. Tr. 1286-89 (Harry); see also PX 554, at 2. Accordingly, Mr. Harry calculates that Stockton East's expectancy damages under the groundwater recharge method are \$18,818,509.00. Tr. 1294 (Harry); see also PX 554, at 1.

In its post-trial brief, Stockton East offered an alternative method for calculating its expectancy damages – the "proxy cost of cover" approach. 26/ See Pl. Stockton East's Br. filed Nov. 9, 2012, at 25-27. Under this method Stockton East computes its expectancy damages for each breach year by (1) multiplying the amount of water that it would have requested from Reclamation but for the breach by the spot-market price of water 27/ and then (2) subtracting from that amount the price that it paid to Reclamation. See id., Ex. B. Based

25/ Mr. Harry based his analysis on Mr. Kauffman's estimate that Stockton East would have requested an additional 82,955 acre-feet of water but for the breach. See Tr. 1292-93 (Harry); PX 554, at 5. Assuming that 15.72% of the water would have been system losses, Mr. Harry concluded that 69,919 acre-feet of groundwater would not have been pumped but for the breach. Tr. 1292-93 (Harry).

26/ Both in the pretrial order, see Order entered Aug. 24, 2012, at 3, and during trial, see Tr. 419-20, 1373-74, the court suggested that Stockton East's counsel should explore the cost of cover as an alternative method for potentially valuing the water that Stockton East claims would have been requested but for the breach.

27/ The spot-market price refers to the price of buying water on a short-term basis, usually for a one-year term. See Tr. 936-37 (Landry); Tr. 1993-94 (Smith).

on the “proxy cost of cover” method, Stockton East alternatively seeks expectancy damages of \$5,398,033.00. 28/ See id. at 30.

Defendant responds that neither of Stockton East’s expectancy damages calculations is founded upon recognized principles of contract law. Def.’s Br. filed Nov. 29, 2012 [362], at 38. Defendant asserts that “Stockton East’s claim for \$18.8 million in ‘damages’ for the projected cost to construct a groundwater recharge facility eight years after the breach ended, and to supply ‘market rate’ water to that facility for three years, is unprecedented and unsound.” Id. at 41. Defendant mounts three challenges to Stockton East’s groundwater recharge calculation. First, citing California property law, defendant points out that the overlying property owners – not Stockton East – own the groundwater in the East San Joaquin Groundwater Basin, with the result that Stockton East cannot recover the alleged damages incurred by those overlying property owners. Id. at 41-42. Second, defendant contends that Stockton East has not incurred any monetary loss of its own as a result of groundwater pumping by farmers and the Urban Contractors during the breach period. Id. at 42-43. Third, defendant emphasizes that Stockton East’s groundwater recharge calculation is speculative and unsound because it is based upon the construction of a direct recharge facility that has not been built and may never be built. Id. at 43-44.

Regarding Stockton East’s “proxy cost of cover” method of calculating of damages, defendant argues that the use of a spot-market price is inappropriate because Stockton East sold water to its customers at a price far below the spot-market price. Id. at 46. Moreover, defendant contends that Stockton East’s “proxy cost of cover” calculation cannot be based upon the premise that Stockton East would have sold any New Melones water outside the district but for the breach. Id. at 47-48. Defendant adds that Stockton East did not identify any potential buyer for its water and notes that Article 10 of the Contract limited Stockton East’s ability to sell water outside its service area. See id.

28/ Three witnesses testified regarding the spot-market price of water from the Stanislaus River and San Joaquin River Basin during the six-year breach period. Timothy O’Laughlin – an attorney representing OID – testified that the average market price of water from 1999-2004 was \$100 per acre-foot. Tr. 899-900 (O’Laughlin). Mr. Landry – an expert on water markets – testified that the spot market price of water in the San Joaquin River Basin during the six-year breach period ranged from a low of \$61.25 per acre-foot to a high of \$136.67 per acre-foot. Tr. 940-42 (Landry); PX 426, at 6. Dr. Rodney T. Smith – an expert on California water markets – testified that the spot-market price of water in the San Joaquin River Basin ranged from a low of \$60 per acre-foot to a high of \$135 per acre-foot. Tr. 2010-18 (Smith); see PX 622, Att. 3. Plaintiff provided separate “proxy cost of cover” computations based on the spot-market prices provided by each of these witnesses. See Pl. Stockton East’s Br. filed Nov. 9, 2012, Ex. B. The average of the three computations is \$5,398,033.00. See id. at 25.

3. Analysis of Stockton East's proof of expectancy damages

1) Stockton East's analysis of M&I water use in the "but-for" world

Stockton East's model of the but-for world rests primarily on Mr. Kauffman's testimony and the two key exhibits he developed: (1) a spreadsheet – PX 563 – showing M&I and agricultural water use but for the breach, and (2) a timeline – PX 435 – depicting the acceleration of planned infrastructure improvements but for the breach. During direct examination Mr. Kauffman testified that he and his staff developed the but-for model by comparing evidence of M&I and agricultural water use in 2010 and the six-year breach period. ^{29/} Tr. 358, 372-73 (Kauffman). Mr. Kauffman explained that the 2010 data were relevant because "it [sic] was the most current data we had at the time when we did the analysis, and it included the expansion of the treatment plant and the fact that our urban, or our agricultural customers were beginning to see the value of the water coming from the CVP contract through the [NMCS]." Tr. 358-59 (Kauffman). In other words, Stockton East relied upon evidence of post-breach water deliveries and infrastructure improvements as a proxy of what would have occurred from 1999 to 2004 had Reclamation not breached the Contract. This analysis ultimately failed to account for other factors that impeded Stockton East's ability to accelerate its planned infrastructure improvements during the breach period and therefore take additional M&I water from 1999 to 2004. More fundamental were the problems with PX 563 itself.

Defendant's objections to PX 563 were manifold. See Tr. 369-70, 380-81 (Harrington). The court admitted the exhibit as the product of Mr. Kauffman's analysis, *i.e.*, without it his testimony would have been unmoored and incomprehensible. Tr. 381-82. The lengthy examinations of Mr. Kauffman concerning PX 563 by both Stockton East and defendant attest to its importance to Stockton East's case on expectancy damages. See, e.g., Tr. 359-82, 393, 527-29, 533-39, 580-81 (Kauffman). It strikes the court as odd were Stockton East permitted to trumpet an exhibit as embodying an analysis tantamount to that sponsored by an expert when the proponent witness did not qualify as an expert under Fed. R. Evid. 702. PX 563 has no inherent evidentiary value apart from Mr. Kauffman's

^{29/} On cross-examination defense counsel impeached Mr. Kauffman with deposition testimony in which Mr. Kauffman admitted that he created PX 435 without personally relying on any documents and that the timeline was based upon his conversations with Jeanette Thomas, Stockton East's Assistant General Manager. Tr. 541-42 (Kauffman). Mr. Kauffman explained, however, that Ms. Thomas was "leading the effort" to develop the but-for analysis. Tr. 540 (Kauffman). The court therefore finds that Mr. Kauffman's but-for model was developed through conversations with Ms. Thomas, although Ms. Thomas and Stockton East staff likely relied upon historical and 2010 water use data to perform the analysis.

testimony, and the court finds that testimony did not withstand defendant's cross-examination as to its calculated or derived elements, as will be discussed.

Stockton East bases its estimate of M&I water use in the but-for world upon its ability to accelerate its planned infrastructure improvements during the breach period. See PX 563 (columns H-K). The six-mile extension of the Peters Pipeline, in particular, is critical to Mr. Kauffman's analysis. Prior to the actual construction of the extension in 2006, New Melones water needed to flow through the Belotta Pipeline before reaching the DWTP. Tr. 465-66, 569 (Kauffman). Mr. Kauffman admitted during cross-examination, however, that the Belotta Pipeline had a delivery capacity of 48 mgd and therefore functioned as the "bottleneck" in Stockton East's water conveyance system. Tr. 568-69 (Kauffman). Without the six-mile extension to the Peters Pipeline, Stockton East could not deliver more water from the New Melones Reservoir to the DWTP. Tr. 198-99 (Madison); Tr. 569 (Kauffman). The parties do not dispute this fact. See Pl. Stockton East's Br. filed Dec. 10, 2012, at 15.

Mr. Kauffman testified that, but for the breach, Stockton East would have completed the Peters Pipeline extension in 2000 – six years earlier than its actual completion – and thus would have been able to deliver additional water to the DWTP from 2000-2004. Tr. 239-41, 366 (Kauffman). Crucially, Mr. Kauffman's testimony did not demonstrate that Stockton East plausibly could have obtained the financing to construct the extension in 2000. The Peters Pipeline extension cost over \$7 million to construct, see Tr. 570 (Kauffman), and Stockton East admittedly did not have enough money in 2000 to accelerate its planned improvements to the DWTP and Peters Pipeline extension, Tr. 562-63 (Kauffman). Stockton East submitted a grant proposal to the State of California in December 2001 – the first year in which such a grant proposal could be submitted – seeking \$3.5 million to fund the Peters Pipeline extension. Tr. 570-71 (Kauffman). The State denied the grant application, and Stockton East resubmitted the application in June 2003. Id. Ten months later – in April 2004 – the State notified Stockton East that its application for \$3.5 million in funding had been approved, but that the funding might not be available from the State in fiscal years 2004 and 2005 due to the State's budgetary problems. Tr. 571-72 (Kauffman). Once the grant application had been approved, Stockton East's Urban Contractors agreed in July 2004 to fund the remaining \$3.5 million. Tr. 572 (Kauffman).

Mr. Kauffman explained that Stockton East did not have the funding in 2000 for the Peters Pipeline extension because the Urban Contractors "saw the New Melones supply as unreliable and didn't want to fund these [infrastructure] projects." Tr. 563-64 (Kauffman). Indeed, Mr. Madison testified that "[i]f additional water was made available [under the 1983 Contract] I believe that the [C]ity would have been much more inclined to work cooperatively with Stockton East to advance the construction of the Peters pipeline." Tr. 210 (Madison). Mr. Ferraro echoed that "Cal Water would have required more certainty associated with the availability of water from [Reclamation], and because of the history of

[Reclamation] not providing the water under the terms of the contractual agreement with Stockton East, we didn't have that certainty." Tr. 875-76 (Ferraro). Mr. Ferraro added, "[I]f we're going to be paying for additional facilities, and [Reclamation] is not delivering the water to utilize those facilities, then that's a waste of money." Tr. 871 (Ferraro).

While this testimony suggests that the City and Cal Water may have agreed to finance the Peters Pipeline extension at an earlier date if additional New Melones water had been available, it does not plausibly demonstrate that \$7 million in financing was forthcoming or that the Peters Pipeline would have been built in 2000 absent the breach. As Mr. Madison testified, the water supply from the 1983 Contract was just one factor affecting the City's ability to finance construction of the Peters Pipeline extension. When Stockton East first proposed the Peters Pipeline project in 1999, the City was concerned about the cost of the project and therefore considered a more economical option, which involved adding slip lining to the Belotta Pipeline to improve its ability to transport water at high pressures. Tr. 182-83, 199 (Madison). In fact, the City responded to Stockton East's Peters Pipeline proposal with a letter stating that the City "ha[d] serious concerns regarding the proposed financing plan" for the project. 30/ DX 929, at SEWD042688-D.

During that time period, the City also had other priorities, including its plans for the South Stockton Aqueduct – a buried pipeline that conveys treated surface water from the DWTP to the south part of the City. Tr. 185, 201-02 (Madison). Before construction of the South Stockton Aqueduct in 2006, the south part of the City was not served with any surface water and had to rely solely on groundwater. Tr. 185 (Madison); DX 1000. Accordingly, the City prioritized that project over enhancements to the DWTP. Tr. 203 (Madison); see also DX 1000. Despite the long-standing importance of the South Stockton Aqueduct to the City, the City's monetary concerns prevented the aqueduct from being constructed until 2006. Tr. 201-02 (Madison). The City was not able to begin construction of the aqueduct until 2004 when it obtained \$6 million in federal funding for the \$10 million project. Id. Given the financial obstacles faced by the City in constructing the South Stockton Aqueduct – a project that it prioritized over the DWTP – it is not plausible that the City would have agreed to finance construction of the Peters Pipeline extension as early as 1999. 31/

30/ Mr. Kauffman noted his understanding that this specific language referred to Reclamation's breach of the Contract. Tr. 575 (Kauffman). Nonetheless, Mr. Kauffman admitted that the letter made no specific reference to Reclamation. Tr. 576 (Kauffman).

31/ Defendant argues that the City withheld funding for the Peters Pipeline in 1999, in part, because the City and Stockton East were embroiled in a lawsuit. See Def.'s Br. filed Nov. 29, 2012 [362], at 11. Citing Mr. Kauffman's trial testimony, defendant claims that the City "later threatened to sue the district if it went forward with the project." See id. (citing Tr. 552 (Kauffman)). The cited testimony, however, does not state explicitly that any lawsuit

A lack of funding was not the only factor affecting construction of the Peters Pipeline. Mr. Kauffman explained during cross-examination that construction of a new pipeline involves acquisition of a right-of-way, compliance with regulatory and environmental procedures, and consultation with Stockton East's Urban Contractors. Tr. 544-45 (Kauffman). Indeed, the City's November 1999 response to Stockton East's Peters Pipeline proposal identifies several "[p]otentially [s]ignificant" land use, planning, and environmental concerns with the proposed project:

According to the Project Description, this project will require the acquisition of 3,650 feet of thirty-foot wide easements by [Stockton East]. As major water transmission pipelines inherently impose impacts and restrictions on landowner's usage of property (maintenance roads, inspection/access points, cathodic protection equipment, etc.), this project will have a potentially significant impact on those affected landowners and their property. Consequently, in accordance with CEQA requirements, an Environmental Impact Report must be prepared detailing these impacts and any proposed mitigation measures.

....

The Initial Study [of the Peters Pipeline project] fails to identify and assess other project alternatives that may satisfy the stated project needs without resulting in the adverse environmental impacts as described . . . above.

DX 929, at SEWD042687 to 688-D. Noting that "[t]hese alternatives may be less costly [and] less impacting to the environment," the City's November 1999 letter recommended that the alternatives "should be fully evaluated, together with the input of all affected parties,

31/ (Cont'd from page 37.)

between the City and Stockton East was related to the pipeline project. See Tr. 552 (Kauffman). Three witnesses – Messrs. Madison, Kauffman, and Ferraro – testified regarding a lawsuit that the Urban Contractors filed against Stockton East in the 1998-2001 time period. All three witnesses merely testified that the lawsuit involved the way Stockton East was spending the Urban Contractors' money. See Tr. 199-200, 221 (Madison); Tr. 575-76 (Kauffman); Tr. 871 (Ferraro). Moreover, Mr. Ferraro directly denied that the lawsuit was connected with the Peters Pipeline. See Tr. 871 (Ferraro). The nature of the lawsuit was not further developed through testimony or documentary evidence, so the court is not in a position to make a finding on the impact of the lawsuit on Stockton East's ability to finance its planned infrastructure improvements.

prior to the adoption of any environmental document for the project.” Id. at SEWD042688-D.

The record reflects that such regulatory, environmental, and other factors unrelated to financing likely would have prevented Stockton East from constructing the Peters Pipeline six years earlier. Despite obtaining \$3.5 million in financing from the Urban Contractors in July 2004, Stockton East did not award a contract to begin construction of the pipeline until February 2005. Tr. 572 (Kauffman). Due to problems that occurred during construction, work on the project still was continuing in December 2006 – almost two-and-one-half years after Stockton East secured financing from the Urban Contractors. 32/ Tr. 572-73 (Kauffman). Even if Reclamation had not breached the Contract in 1999 and Stockton had obtained full funding from the Urban Contractors later that year, Stockton East has not met its burden of producing evidence that it plausibly would have completed the required regulatory and environmental process and construction of the pipeline at a faster pace. In fact, when cross-examined, Mr. Kauffman stated that Reclamation’s breach did not cause Stockton East to defer its plans for the Peters Pipeline project:

Q. Stockton East did not defer the Peters pipeline in 1999 at all, did it? It continued pushing forward with that project.

A. We pushed hard for that project from whoever would provide the funding. That’s correct.

Q. So Stockton East didn’t defer the Peters pipeline because of the breach at all. It continued pushing forward with the project.

A. Absolutely we pushed forward with that project. We pushed forward with all of the projects.

Tr. 551-52 (Kauffman). Mr. Kauffman confirmed that, when Reclamation announced the water allocation in the first part of 1999 and began breaching the Contract, Stockton East’s Board of Directors took no action to delay or defer the planned infrastructure improvements described in Mr. Kauffman’s but-for model. Tr. 549-51 (Kauffman).

Stockton East argues that Mr. Kauffman’s analysis of accelerated infrastructure improvements is plausible because it is “truth-tested against what actually happened at the

32/ Mr. Kauffman testified earlier that it took “about one year” to actually construct the Peters Pipeline. Tr. 240 (Kauffman). His testimony on cross-examination, however, clarified that construction was ongoing almost two years after Stockton East awarded a construction contract. Tr. 572-73 (Kauffman).

district post-breach.” Pl. Stockton East’s Br. filed Dec. 10, 2012, at 14. In other words, Stockton East contends that Mr. Kauffman’s but-for model is reasonable because it comports with infrastructure improvements that actually occurred after the breach period when Reclamation began making more water available. See Pl. Stockton East’s Br. filed Nov. 9, 2012, at 24; Tr. 239-40 (Kauffman). The evidence adduced at trial, however, does not indicate that the Urban Contractors began supporting the infrastructure improvements due to a perceived or actual increased reliability or availability of New Melones water. According to Mr. Kauffman, 2005 was the first year that Stockton East received a full allocation of water under the 1983 Contract. Tr. 380 (Kauffman). Yet, the Urban Contractors agreed to finance the Peters Pipeline during the prior year – in July 2004 – when Reclamation was still breaching the Contract. See Tr. 572 (Kauffman). This fact undermines Stockton East’s attempt to draw a causal link between Reclamation’s performance under the Contract and the Urban Contractors’ eventual decision to finance the Peters Pipeline.

In fact, Mr. Madison testified that the City’s eventual support of the Peters Pipeline was not driven by the availability of New Melones water. According to Mr. Madison, the City decided to support the Peters Pipeline primarily because it was concerned about the reliability of the Belotta Pipeline:

A. Later on our position about the Peters pipeline changed because we became concerned about reliability of the Belotta pipeline.

There was a particular event involving a pickup driven by one of the employees of Stockton East that backed up or drifted into a canal, and the supply, the sole supply, was potentially contaminated and we were concerned about water supply to the entire Stockton metropolitan area. And so that was one of the catalyst issues that led us to become concerned about the reliability of having a single pipeline feeding Stockton East water treatment plant from the east.

And I think that and more discussion in general led the city at least – I can’t speak on behalf of Cal Water, but certainly the city – to think well, maybe it is time to construct the Peters pipeline, and then shortly thereafter the Peters pipeline was designed and built.

Q. Did the amount of water that [Reclamation] was allocating to Stockton East under the contract during that time period influence the city’s position on the Peters pipeline?

A. Not really. I don’t believe so. Certainly as engineers and water purveyors we like to have more capacity if we can get it, but from memory I remember

that the predominant thinking of myself and I think others at the city was it was primarily intended to enhance reliability.

Tr. 183-84 (Madison). Although Mr. Madison later indicated in his answer that the availability of New Melones water was a factor affecting the City's support for the pipeline project, the "catalyst" and "predominant" factor influencing the City's eventual decision to support the pipeline project was the reliability of the Belotta Pipeline. *Id.* The balance of Mr. Madison's testimony therefore belies Stockton East's assertion that it would have obtained financing from the Urban Contractors in 1999 but for the breach.

Stockton East also contends that Mr. Kauffman's analysis of accelerated infrastructure improvements is reasonable because it is based upon a 1989 design report of the DWTP indicating that the DWTP was designed to be expanded to the 60-mgd level. *See* Pl. Stockton East's Br. filed Dec. 10, 2012, at 14 (citing PX 531; Tr. 227-28 (Kauffman)). However, the cited trial testimony does not state that the 1989 design report was the foundation of Mr. Kauffman's analysis, *see* Tr. 227-28 (Kauffman), and the design report is of little relevance because it does not appear to indicate when Stockton East expected to achieve a 60-mgd capacity at the DWTP. *See* PX 531. In fact, a contemporaneous 1989 report of the NMCS actually stated that the capacity of the DWTP was projected to increase to 60 mgd in the year 2010 – eight years after Mr. Kauffman estimated that the DWTP would have achieved a 60-mgd rated capacity but for the breach. PX 444, at SEWD123726-D ("The sedimentation basin capacity will be doubled in the year 2010 to increase the overall plant capacity to 60 MGD[.]"). 33/

Stockton East has failed to meet its burden of establishing a plausible but-for world regarding its M&I water use in the years 2001 to 2004. *See, e.g., S. Nuclear Operating Co.*, 637 F.3d at 1304 ("Because plaintiffs . . . are seeking expectancy damages, it is incumbent upon them to establish a plausible 'but-for' world" (quoting *Yankee Atomic*, 536 F.3d at 1273)); *Energy Nw.*, 641 F.3d at 1308 ("[T]he burden of proving the non-breach world . . . lie[s] with [the plaintiff]."). Stockton East's estimate of M&I water use from 2001-2004 is predicated upon its ability to complete construction of the Peters Pipeline project by 2000. *See* PX 563. The record reflects that numerous contingencies, in addition to the availability of New Melones water, would have substantially affected the ability of Stockton East to construct the Peters Pipeline by that time. The proposition that the grant money would have been available six years prior lacks record support, and the City had financial concerns and

33/ The court admitted PX 444, over defendant's objection, to the extent it was cited during trial. Tr. 1184-85. In restricting lengthy documents to the extent that they are the subject of testimony, or, if not objected to, argument by counsel, the court reserved the right to read other portions for context. This reference falls within that scope, although Stockton East sought to admit PX 444, including the page cited above. *Id.*

other priorities – namely, the South Stockton Aqueduct – at that time. Tr. 201-02 (Madison). Completion of the project also required Stockton East to acquire easements, complete environmental assessments, comply with other regulatory steps, and procure a contractor. See DX 929. Even though Stockton East admittedly continued “pushing forward” with the project despite the breach, see Tr. 551-52 (Kauffman), construction of the project still was ongoing almost two-and-one-half years after Stockton East secured financing, Tr. 572-73 (Kauffman). Mr. Kauffman’s but-for model of infrastructure improvements, see PX 435; PX 563, which was based upon his “brainstorming session” with Stockton East staff, Tr. 238 (Kauffman), failed to account for the complexity and contingencies involved in constructing this project. 34/ The court therefore finds it implausible that Stockton East would have completed construction of the pipeline in 2000 and taken additional M&I water from 2001-2004 if Reclamation had not breached the Contract beginning in 1999. 35/

For the years 1999 and 2000, Stockton’s but-for analysis of its M&I water use was not contingent upon the acceleration of the Peters Pipeline project. See PX 563 (column H); Tr. 363-64 (Kauffman) (describing “Enhancement #1” in PX 563). Mr. Kauffman projected that Stockton East would have been able to take additional M&I water in 1999 and 2000 due to the acceleration of other enhancements that would have increased the capacity of the DWTP from 40 mgd to 45 mgd beginning in 1999. Tr. 238-39, 363-64 (Kauffman). However, the evidence adduced at trial demonstrates that the DWTP already was operating at a capacity

34/ See supra note 20.

35/ To its credit, Stockton East showed that Cal Water and the City could have used additional surface water during the breach years. The Urban Contractors submitted annual reports to Stockton East during the breach years depicting how much surface water and groundwater the Urban Contractors used for M&I purposes. See Tr. 140-41, 155-56 (Kauffman) (discussing PX 432). The court admitted PX 432 as a summary of those annual reports. See PX 432, at SEWD122942-D to 43-D; Tr. 159. Those reports show that for each year of the breach the total amount of groundwater pumped by the Urban Contractors was greater than the amount of surface water that Stockton East purportedly would have run through the DWTP but for the breach. Compare PX 432, at SEWD122942-D to 43-D (columns labeled “wells”), with PX 563 (column K). Because the Urban Contractors had a policy or practice of maximizing surface water use and reducing groundwater pumping, see Tr. 174-75, 216-17 (Madison); Tr. 863-65 (Ferraro), the Urban Contractors would have replaced most of their groundwater pumping with the additional surface water that would have been available from Stockton East, Tr. 212-17 (Madison); Tr. 866-68 (Ferraro) (discussing PX 432). However, the Urban Contractors’ demand for additional surface water does not entitle Stockton East to expectancy damages, because Stockton East did not show that it would have had the facilities in place to treat and deliver the additional water. See Tr. 223-24 (Madison).

of 45 mgd in 1999 and 2000. As part of its application to the CDPH to increase the rated capacity of the DWTP from 40 to 45 mgd, Stockton East placed particle counting equipment on its filters to test the ability of the DWTP to properly treat water while operating at the 45-mgd level. Tr. 233-35 (Kauffman). In 1999 the CDPH gave Stockton East approval to operate the DWTP at the 45-mgd level for purposes of collecting data from the particle counting equipment. Tr. 451 (Kauffman); see also PX 525. The CDPH's approval of Stockton East's application contains a chart showing that Stockton East operated the DWTP at the 45-mgd level during the majority of months in the May 1999 to August 2000 time period. See Tr. 596 (Kauffman); PX 525, at SEWD 122436-D to 37-D. 36/ Moreover, on September 26, 2000, the CDPH approved Stockton East's application and granted Stockton East a permit to operate the DWTP at a rated capacity of 45 mgd, meaning that the DWTP was operating at a rated capacity of 45 mgd for at least the last three months of 2000. 37/ See Tr. 598 (Kauffman); PX 525. Because the DWTP was already operating at a 45-mgd capacity in 1999 and 2000 in the non-breach world, Stockton East has not shown that it would have been able to treat additional water in those years but for the breach.

Stockton East's but-for model of M&I water use also fails to incorporate the costs that it avoided due to Reclamation's breach. A plaintiff's expectancy damages recovery must be reduced by the amount of avoided costs "in 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, 573 F.3d at 1277. In Southern Nuclear the Federal Circuit held that the breaching party bears the burden of production on avoided costs and therefore must "identify the nature" of the costs that were avoided because of the breach. 38/ See 637 F.3d at 1304. Defendant in this case identified the nature of the costs

36/ Although these two pages were not admitted into the record, Mr. Kauffman testified as to the former. See Tr. 596 (Kauffman). These pages therefore fall within the scope of the court's rule that, in restricting the admission of lengthy documents to the extent that they are the subject of testimony, the court reserves the right to read other portions for context. See supra note 33.

37/ Stockton East argued in its post-trial reply brief, without citation to the record, that the DWTP did not operate at 45 mgd "consistently" in 1999 and 2000. See Pl. Stockton East's Br. filed Dec. 10, 2012, at 15. However, Stockton East has not quantified this inconsistency, and Mr. Kauffman's analysis did not appear to take this contemporaneous indication of the DWTP's operating capacity into account. See Tr. 233-35 (Kauffman).

38/ Although the Federal Circuit in that case noted the defendant's "remarkable silence about the nature and amount" of the avoided costs, the court remanded with instructions that the defendant "must identify the nature of the avoided costs in question on remand." S. Nuclear Operating Co., 637 F.3d at 1304. The court reasoned that "[p]laintiffs

that Stockton East would have avoided if it would have been able to take more M&I water – the costs of transporting, treating, and distributing the water through the treatment plant. See Def.’s Br. filed Nov. 29, 2012 [362], at 37 (citing PX 500, at 32). Defendant cites Stockton East’s March 31, 2002 financial statement, which lists specific “Treatment Plant Expenses” under several categories, including “Transmission & Distribution” and “Water treatment.” PX 500, at 32; see Def.’s Br. filed Nov. 29, 2012 [362], at 37 (citing PX 500, at 32).

Once the breaching party points out the nature of the avoided costs, the “burden shift[s] to the plaintiff to incorporate those saved costs into its formulation of a plausible but-for world.” S. Nuclear Operating Co., 637 F.3d at 1304. Neither Mr. Kauffman’s formulation of M&I water use in the but-for world nor Mr. Harry’s calculation of Stockton East’s damages, which was based upon Mr. Kauffman’s analysis, incorporated the water treatment expenses that Stockton East avoided because of Reclamation’s breach. ^{39/} During closing argument Stockton East’s counsel explained that avoided costs were a “nonissue” in the case because “the vast majority of the cost that Stockton East incurs in its operation are facilities costs, which are essentially fixed.” Closing Arg. Tr. 35-36 (Spaletta). However, Mr. Ferraro testified that Stockton East incurs variable operating costs, which the Urban Contractors then reimburse to Stockton East:

[W]hat we pay Stockton East is a fixed amount based on their facilities, the cost of their facilities, and then an incremental amount based on the actual operating cost of those facilities, so . . . we would have been paying to Stockton East . . . those additional incremental operating costs[.]

Tr. 869 (Ferraro). Stockton East argues that these avoided costs would have been offset with forgone revenue from the Urban Contractors and therefore should not be included in Stockton East’s formulation of its expectancy damages. See Pl. Stockton East’s Br. filed Dec. 10, 2012, at 17; see also Tr. 1329-30 (Harry). The court is perplexed why Stockton East takes this position on expectancy damages, given its arguments in support of its mitigation

^{38/} (Cont’d from page 43.)

cannot be expected to brainstorm every possible cost they would have saved in the non-breach world. Hence, a defendant must move forward by pointing out the costs it believes the plaintiff avoided because of its breach.” Id. (citing Mech-Con Corp. v. West, 61 F.3d 883, 886 (Fed. Cir. 1995)).

^{39/} To the extent that Mr. Harry did address avoided costs, it was only to opine that the amount that Stockton East would have paid to Reclamation in the but-for world would have been offset by additional revenue to Stockton East. See Tr. 1329-30 (Harry).

damages claim. Stockton East argues that it is entitled to mitigation damages even though the Urban Contractors ultimately reimbursed Stockton East for its mitigation costs – the amount paid to OID and SSJID for water purchased under the 1997 Transfer Agreement. ^{40/} See Pl. Stockton East’s Br. filed Nov. 22, 2012, at 22-23. Stockton East cites no legal authority explaining why the court should treat avoided costs and mitigation costs differently for purposes of assessing the impact of offsetting revenue from the Urban Contractors. See id. The purpose of deducting avoided costs from an expectancy damages award is 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. Avoided costs therefore should be deducted from a potential damages award, regardless of whether Stockton East passed its cost savings on to its customers. Stockton East failed to meet its burden of establishing a but-for scenario that incorporated the water treatment expenses avoided due to the breach. See S. Nuclear Operating Co., 637 F.3d at 1304 (holding that plaintiff bears the burden of persuasion with respect to avoided costs).

2) Analysis of Stockton East’s projected agricultural water use but for the breach

Defendant’s damages expert, Ali Shahroody, noted that Mr. Kauffman’s analysis of agricultural use but for the breach varied from a low of 152 acre-feet in one breach year to a high of over 5,287 acre-feet in another breach year. Tr. 2188 (Shahroody); see also PX 563 (column N). Based on this observation, Mr. Shahroody concluded that Stockton East’s projection of agricultural use in the but-for world was a “paper exercise[.]” Tr. 2188 (Shahroody). In other words, Stockton East’s estimate of agricultural use in the years 2000-2004 was merely the delta between (1) the Build-Up Schedule (column Q in PX 563), Stockton East’s actual total use of New Melones water (column G in PX 563), and (2) Stockton East’s estimate of its M&I use but-for the breach (column M in PX 563). See Tr. 2188-89 (Shahroody).

In its post-trial reply brief and at closing argument, Stockton East admitted that Mr. Kauffman “artificially capped” his estimate of agricultural use but for the breach. Pl. Stockton East’s Br. filed Dec. 10, 2012, at 14-15; Closing Arg. Tr. 21-22 (Spaletta). Stockton East points out that Mr. Kauffman initially included greater amounts of agricultural use in his but-for analysis, but revised those numbers downward to comply with the court’s pretrial ruling that Stockton East could not seek damages exceeding the minimums listed in the Contract’s Build-Up Schedule. Pl. Stockton East’s Br. filed Dec. 10, 2012, at 14-15; Closing Arg. Tr. 21-22 (Spaletta). Because Reclamation’s breach in the years 1999-2004 was based on its failure to deliver the minimum volumes in the Build-Up Schedule, see

^{40/} The court addresses these arguments in greater detail in Part III of the “Discussion” section of this opinion.

Stockton III, 583 F.3d at 1356-57, 1364-65, this court ruled that Stockton East could not present evidence that it would have requested more than the Contract minimums for each year of the breach. See Order entered Aug. 24, 2012, at 2-4

Stockton East chose to present its model of the but-for world in a chart with calculations that combined both its M&I and agricultural use. See PX 563. This court's pre-trial ruling did not require Stockton East to put on its case in this manner. See Order entered Aug. 24, 2012, at 2-4. Stockton East's estimates of M&I and agricultural use in the but-for world rested on different premises: although its M&I use was contingent upon the Peters Pipeline extension and the DWTP improvements, Stockton East did not need to use such facilities to deliver water to some of its agricultural customers. Tr. 776-78 (Kauffman). Given the different assumptions underlying its M&I and agricultural demand, Stockton East could have presented an independent analysis of its agricultural use. Based on that independent model, Stockton East could have argued in the alternative that, if the court declined to award damages for M&I water, Stockton East had shown its expectancy damages for agricultural water alone. The court instead is left with a projection of agricultural use that represents the difference between the Build-Up Schedule and Stockton East's M&I water use. Thus, Stockton East's calculation simply assumes that agricultural demand would equal whatever supply of New Melones remained after Stockton East satisfied its M&I demand.

Such an estimate cannot form the basis of a plausible but-for model because the evidence shows that numerous factors, in addition to the breach, would have affected agricultural demand for New Melones water. Mr. Kauffman indicated that the lack of availability of New Melones water was not the only reason that it proved difficult for Stockton East to convince farmers to convert from groundwater to surface water. Tr. 630-31 (Kauffman). To convert to surface water, a farmer must pay to install the necessary infrastructure to connect to a pipeline or to divert the surface water from a natural stream course. Id. For properties abutting the Peters Pipeline, which has some existing connections, the cost for farmers would be at least \$15,000.00 to \$20,000.00. Tr. 630 (Kauffman). In contrast, a diversion from a natural stream course could cost a farmer at least \$50,000.00. Tr. 631 (Kauffman). Mr. Kauffman also agreed that it was "difficult" to convert farmers to surface water during the breach years because Stockton East charged farmers a higher rate for surface water than for groundwater. Id.

Stockton East insists that its estimate of additional agricultural use is plausible because it reflects a conversion of 800 to 1,500 acres of farmland to surface water during the breach years and Stockton East actually exceeded that level of conversion post-breach. See Pl. Stockton East's Br. filed Nov. 9, 2012, at 10. Although Mr. Kauffman stated that Stockton East has converted more than 1,500 acres of farmland "since the breach period to 2010[.]" Tr. 377 (Kauffman), Stockton East did not present any evidence that such conversions plausibly would have occurred during the 1999 to 2004 period if Reclamation

began making the minimums available beginning in 1999. 41/ Under cross-examination Mr. Kauffman revealed that his methodology for estimating additional agricultural use in the but-for world involved only a simple comparison of agricultural use in 2010 and the 1999-2004 breach period:

Q. How much of this agricultural water couldn't have been delivered if the Peters pipeline had not been constructed at that period?

A. I did not estimate that. As I explained before, once we saw the numbers, comparing 2010 numbers to 1999 and 2004 numbers, I did no further analysis, I just noted it was considerably more, so it wasn't a concern of mine to split those numbers up.

Tr. 605 (Kauffman).

On redirect Mr. Kauffman pointed to a large map of the Central Valley – PX 518 – and explained that, without the six-mile extension to the Peters Pipeline, Stockton East would have been able to serve the agricultural areas along Mormon Slough, Potter Creek, and the portion of the Peters Pipeline extending from the constant head vault to the Mormon Slough. Tr. 776-78 (Kauffman). Stockton East cites this testimony as evidence that these properties “would easily hook-up and take the water.” See Pl. Stockton East’s Br. filed Dec. 10, 2012, at 6 (citing Tr. 776-78 (Kauffman)). Contrary to Stockton East’s assertion, Mr. Kauffman did not present any testimony regarding the approximate number of acres in these corridors that had connections to the New Melones supply during the breach period. See Tr. 776-78 (Kauffman). To the extent this acreage did not have connections, Stockton East presented no analysis showing how many acres converted to surface water post-breach and projecting when those conversions would have occurred absent a breach. 42/ Given the dearth of

41/ In fact, Stockton East’s records of actual agricultural use suggest that such conversions may not have taken place until five or six years after the end of the breach period. See PX 434 (column labeled “USBR AGR”) (showing a spike in the use of New Melones water for agricultural purposes in the years 2010 and 2011).

42/ One exhibit in the record – PX 437 – contains a chart entitled “Estimated Timing of Potential Surface Water Users” and shows agricultural acres listed next to each breach year. See PX 437, at SEWD122954-D. This exhibit was discussed only during Mr. Kauffman’s cross-examination, and that discussion did not include a specific reference to the chart in question. See Tr. 605-13, 2473-74 (Kauffman). Stockton East did not affirmatively rely on PX 437 to prove its estimate of additional agricultural demand, and the court was provided with little information regarding its significance. See id. That exhibit therefore cannot form the basis of Stockton East’s expectancy damages award for agricultural use.

evidence regarding Stockton East's projected demand for agricultural water and Stockton East's own admission that other factors made it difficult to convert farmers to surface water, Stockton East has not met its burden of establishing a plausible but-for model of its agricultural use. ^{43/}

3) Analysis of Stockton East's groundwater recharge and "proxy cost of cover" methods for calculating expectancy damages

A plaintiff seeking expectancy damages bears the burden of establishing a "plausible but-for world." See, e.g., S. Nuclear Operating Co., 637 F.3d at 1304 (citation omitted); Kan. Gas and Electric, 685 F.3d at 1371 (citations omitted). As discussed above, Stockton East has not met its burden of demonstrating that it plausibly would have had the ability to take additional M&I and agricultural water during the breach years. Both the groundwater recharge and "proxy cost of cover" methods for calculating damages rest upon Mr. Kauffman's flawed analysis that Stockton East would have had the ability to request an additional 82,955 acre-feet of water during the breach years. See Tr. 1292-93 (Harry); PX 554, at 5; Pl. Stockton East's Br. filed Nov. 9, 2012, Ex. B. Accordingly, the court rejects Stockton East's expectancy damages calculations because they are not based on a plausible but-for model.

Even assuming that Mr. Kauffman's analysis plausibly established Stockton East's additional water use in the but-for world, the court is not in a position to award expectancy damages based upon Stockton East's groundwater recharge calculation because Stockton East's groundwater recharge approach to calculating its damages is speculative and inherently unreliable. See, e.g., Ind. Mich. Power Co., 422 F.3d at 1373 (explaining that recovery of speculative damages is precluded) (citing San Carlos Irrigation & Drainage Dist., 111 F.3d at 1563). Although Stockton East has an option to purchase the property on which the north site facility would be located, it has not exercised that option and does not have another opportunity to exercise that option until October 15, 2013. See Tr. 639-40 (Kauffman). Furthermore, Stockton East has not completed the environmental work associated with the north site facility, and its Board of Directors has not voted to approve construction of the project. Tr. 640-41 (Kauffman). Stockton East also has not obtained the considerable financing it needs to build the project. Id. Although Stockton East is in

^{43/} Stockton East has not argued that it would have requested additional water but for the breach for purposes of selling water outside its boundaries. Article 10 of the Contract 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 of the Contracting Officer." PX 36, at 00368. Stockton East presented no evidence regarding whether the contracting officer would have provided such written consent in the but-for world.

negotiations with the Urban Contractors to obtain financing, the Urban Contractors have not agreed to finance the project. Id. Mr. Kauffman admitted on cross-examination that the north site facility may never be built. Tr. 641-42 (Kauffman). Stockton East's effort to monetize its expectancy damages thus rests on a wholly speculative construct. Stockton East may be tasked to recharge the groundwater basin, but it has never built this recharge facility. No case decided by the Federal Circuit involving expectancy damages has endorsed an award for an activity undertaken in the but-for world that has been pyramided exclusively on assumptions regarding its hypothesized construction and operation in the future. Given the numerous uncertainties associated with the north site recharge facility, Stockton East's groundwater recharge method is speculative and unreliable.

Citing the Restatement (Second) of Contracts, Stockton East argues that its groundwater recharge method for calculating damages is proper because expectancy damages “take account of any special circumstances that are peculiar to the situation of the injured party, including his . . . own needs and opportunities.” Pl. Stockton East's Br. filed Nov. 9, 2012, at 15 (quoting Restatement (Second) of Contracts § 344 cmt. a (1981)); see also Closing Arg. Tr. 7-10 (Spaletta). The court is mindful of Stockton East's mission to address the overdraft of the groundwater basin and acknowledges that Stockton East as a non-profit may have sold its Contract water at a loss to effectuate its public mission. Nonetheless, the law of contracts does not provide for an award of damages based upon the construction of a facility that was not contemplated by the Contract, was not foreseeable under the Contract, has not been built, and may never be built. The Restatement commentary cited by Stockton East illustrates no scenario under which a court should award such damages to take account of the non-breaching party's peculiar circumstances. In fact, the sentence immediately following the “special circumstances” language states: “In practice, however, the injured party is often held to a more objective valuation of his expectation interest because he may be barred from recovering for loss resulting from such special circumstances on the ground that it . . . cannot be shown with sufficient certainty.” See Restatement (Second) of Contracts § 344 cmt. b. In this case Stockton East's groundwater recharge computation is speculative and therefore cannot form the basis of its damages.

Stockton East also characterizes its groundwater recharge calculation as a form of “consequential damages[.]” See Pl. Stockton East's Br. filed Dec. 10, 2012, at 18-19. Stockton East cites two cases for the proposition that “[c]onsequential damages are based on estimates of what would have been if the contract had been performed, rather than on actual expenditures made.” See id. (citing Simeone v. First Bank Nat'l Ass'n, 73 F.3d 184 (8th Cir. 1996); Nyquist v. Randall, 819 F.2d 1014 (11th Cir. 1987)). Neither case, however, is analogous to the damages claim in the case at bar. In Simeone the Eighth Circuit upheld an award of consequential damages for defendant's breach of a contract related to the sale of a vintage automobiles and parts. 73 F.3d at 188-89. The consequential damages award was based on the market value of the vehicles and parts at the time of the breach, in addition to

their appreciated value two years after the breach. Id. at 189. Plaintiff’s damages award in Simeone did not include specific performance or the costs of actually building the facilities to construct or re-create the vehicles and auto parts. Id. Simeone therefore does not support Stockton East’s claim that it is entitled to damages based upon the costs of constructing a direct recharge facility to replenish the basin with the water it would have purchased but for the breach. In Nyquist the Eleventh Circuit affirmed an award of consequential damages, based upon lost profits, to a cattle buyer who lacked the financial capacity to purchase substitute cattle. 819 F.2d at 1017-19. Nyquist also is distinguishable from the present case because the buyer’s lost profits in Nyquist were established based upon a pre-existing lease that the buyer had arranged with a third party at the time of the contract. Id. at 1015-17. In contrast, Stockton East’s claim for groundwater recharge damages is speculative because it is based upon the hypothetical cost of constructing a facility that was not contemplated at the time of contracting and may never be built.

To the extent Stockton East had established a plausible but-for model, its “proxy cost of cover” method may have provided a legally cognizable basis for computing its expectancy damages. 44/ See Restatement (Second) of Contracts § 344 cmt. b (explaining that when

44/ Given this matter’s lengthy history and in an abundance of caution, a discussion of the proper computation of Stockton East’s “proxy cost of cover” damages is appropriate. Central presented the expert testimony of Dr. Smith, who was qualified as an expert on the spot-market value of water with respect to Central during the breach. See Tr. 1992. Dr. Smith examined twenty-one one-year water transactions involving water rights originating on the San Joaquin River or its tributaries – the geographic market where both Central and Stockton East are located. See Tr. 1997-2002 (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). The evidence offered by Central would be appropriate for consideration in determining an annual spot-market price for Stockton East.

The court also heard testimony as to the spot-market price of water from Messrs. O’Laughlin and 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 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).

non-breaching party with special circumstances “cannot recover for loss that he could have avoided by arranging a substitute transaction on the market . . . his recovery is often limited by the objective standard of market price.” (citation omitted)). However, Stockton East also failed to meet its burden of establishing a but-for scenario that incorporated the water treatment expenses that it avoided due to the breach. Accordingly, the court cannot award expectancy damages in this case based upon the “proxy cost of cover” method.

II. Costs of unused overhead

1. Standards for awarding damages for overhead costs

Stockton East also seeks to recover the “stranded costs” associated with the portion of the NMCS that went unused as a result of Reclamation’s breach. Pl. Stockton East’s Br. filed Nov. 9, 2012, at 28-29. Damages for overhead costs are recoverable where the Government’s breach caused the non-breaching party to incur the overhead costs. See Energy Nw., 641 F.3d at 1309-10 (explaining that plaintiff must “present a sufficient basis for making the trial court reasonably certain that the claimed damages [for overhead expenses] were caused by the breach”); cf Precision Pine & Timber, 596 F.3d at 834 (declining to award damages for fixed costs associated with operating sawmill because costs “were not directly related to the . . . contract [at issue] and not a direct result of the [breach]”). In the SNF context, for example, the Government’s breach caused the plaintiffs to mitigate by constructing and maintaining new facilities for SNF storage. See, e.g., S. Cal. Edison Co. v. United States, 655 F.3d 1319, 1322 (Fed. Cir. 2011) (affirming an award for overhead costs associated with building, staffing, and maintaining new facility for SNF storage). Because the overhead costs associated with the facilities were incurred as a result of the breach, the utilities were entitled to recover damages for the overhead expenses. See id. (distinguishing an SNF plaintiff from the plaintiff in Precision Pine “[b]ecause the [SNF storage] facilities had not existed prior to the Government’s breach, and indeed were necessitated by the breach”); Energy Nw., 641 F.3d at 1308-10 (affirming recovery of overhead expenses allocated to mitigation projects undertaken because of Government’s breach).

Courts also have awarded damages for overhead expenses when the Government imposed a delay or suspension of the contract work and thereby interrupted or reduced the

44/ (Cont’d from page 50.)

Thus, Mr. Landry’s analysis was less reliable than Dr. Smith’s, and the court gives his testimony less weight than that of Dr. Smith. Accordingly, if Stockton East had proven its expectation damages, the proper spot-market price to use in any damages calculation is that advanced by Dr. Smith’s testimony.

contractor's stream of income. See, e.g., Interstate Gen. Gov't Contractors, Inc. v. West, 12 F.3d 1053, 1057-58 (Fed. Cir. 1993). If the suspension or delay prevents the contractor from taking additional work to absorb its overhead costs, the contractor may be entitled to recover damages for those costs. See, e.g., Nikon, Inc. v. United States, 331 F.3d 878, 882-83 (Fed. Cir. 2003); Melka Marine, Inc. v. United States, 187 F.3d 1370, 1374-75 (Fed. Cir. 1999). In such cases the contractor's overhead damages are calculated using the three-step Eichleay formula. Capital Electric Co. v. United States, 729 F.2d 743, 747 (Fed. Cir. 1984) (restating formula of Eichleay Corp., ASBCA No. 5183, 60-2 BCA ¶ 2688 (1960), aff'd on reconsider., 61-1 BCA ¶ 2894); see also Nikon, 331 F.3d at 882-83.

2. The parties' arguments

To support its damages claim for "stranded costs," Stockton East primarily relies upon the testimony of Mr. Kauffman and two experts – Elaine Vastis Conti and Mr. Harry. See Pl. Stockton East's Br. filed Nov. 9, 2012, at 13-14. Ms. Conti was qualified as an expert in identifying and allocating the costs of water conveyance facilities, Tr. 1173-74, and performed a calculation purporting to represent the costs that Stockton East incurred for the portion of the NMCS that went unused as a result of Reclamation's breach, Tr. 1161, 1202-03 (Conti). Ms. Conti relied upon data from Stockton East's audited financial statements and documents from Stockton East depicting the costs of the NMCS. Tr. 1175-80 (Conti) (discussing PX 490 and PX 497-503). Ms. Conti also based her analysis on Stockton East's water flow data in the breach world, PX 411, and Mr. Kauffman's estimate of Stockton East's additional water use in the non-breach world, PX 563; see Tr. 1175, 1195-97 (Conti).

Ms. Conti's testimony regarding her methodology distills to the following level of coherence. First, she calculated the annual depreciation expense of the NMCS by dividing the actual construction cost of each component of the NMCS by the expected service life of each component. Tr. 1187-91 (Conti); see, e.g., PX 556, at 1 (column c). Second, Ms. Conti computed the rate of return for this annual depreciation expense by weighting Stockton East's costs of debt and equity in each breach year. Tr. 1191-92 (Conti); see, e.g., PX 556, at 1 (column j). Using this rate of return, Ms. Conti calculated an annual return on investment, see, e.g., PX 556, at 1 (column k), which represents a proxy for the interest that Stockton East paid in each breach year to finance its debt service for the NMCS. Tr. 1192-93 (Conti). Ms. Conti then compared the water flows that would have occurred in the NMCS in the but-for world, see PX 563, with the water flows that occurred in the actual world, see PX 411; Tr. 1195-97 (Conti); PX 557, at 1. Based upon that comparison, Ms. Conti determined a percentage of each component of the NMCS that went unused as a result of the breach in each year from 1999 to 2004. Tr. 1197-99 (Conti); PX 557, at 2. Finally, Ms. Conti multiplied those percentages by the sum of the annual depreciation and the annual return on investment for each year. Tr. 1200 (Conti); see, e.g., PX 556, at 1 (column o). That calculation represents her estimate of the cost of the unused portion of the NMCS in

each breach year. Tr. 1203 (Conti); see PX 555. Based on Ms. Conti’s analysis, Stockton East seeks recovery of “stranded costs” in the amount of \$1,599,960.00. PX 555; Pl. Stockton East’s Br. filed Nov. 9, 2012, at 29; see Tr. 1205 (Conti).

Stockton East points out that its damages expert Mr. Harry reviewed Ms. Conti’s analysis and concluded that it was part of a “lost profits” analysis. Pl. Stockton East’s Br. filed Nov. 9, 2012, at 14 (citing Tr. 1278 (Harry)). Mr. Harry also confirmed the accuracy of Ms. Conti’s computations and opined that her approach was conservative. Id. (citing Tr. 1280-81 (Harry)).

Defendant challenges Stockton East’s “stranded costs” claim on three separate grounds. ^{45/} First, defendant points out that Stockton East’s stranded costs model is not based upon the assumption that Reclamation’s breach deprived Stockton East of revenues that Stockton East would have used to absorb its fixed costs. Def.’s Br. filed Nov. 29, 2012 [362], at 38-39. In that respect Stockton East’s stranded costs claim is distinct from those cases where overhead damages are awarded based on the Eichleay formula. Id. at 39. Second, defendant argues that Stockton East would have incurred its overhead costs regardless of the breach. Id. at 38-39. Stockton East’s stranded costs claim therefore is not analogous to the overhead damages awarded to the SNF plaintiffs. Id. at 39-40. Third, defendant contends that the “rate of return” component of Stockton East’s stranded costs claim is nothing more than the addition of interest to Stockton East’s claim for depreciation costs and therefore is unrecoverable under the no-interest rule set forth in 28 U.S.C. § 2516. Id. at 40.

3. Analysis of Stockton East’s “stranded costs” damages

Ms. Conti’s calculation of “stranded costs” relied upon Mr. Kauffman’s estimate of Stockton East’s additional water use but for the breach. See Tr. 1175, 1195-97 (Conti); PX 557, at 1. As discussed in Part I.3. supra, Mr. Kauffman’s analysis – summarized in PX 563 – did not demonstrate that Stockton East would have had the ability to take an additional 82,955 acre-feet of water from Reclamation during the breach years. Mr. Kauffman’s estimate of Stockton East’s additional M&I and agricultural water use but for the breach consequently was not established, even given the relaxed plausibility standard used in but-for scenarios. Because Ms. Conti’s methodology was based upon that flawed analysis, Stockton East’s “stranded costs” claim fails.

^{45/} See supra note 18. The pretrial order allowed Stockton East to make its overhead damages claim, but did not rule on whether Stockton East’s methodology for presenting it had been recognized in the case law. See Order entered Aug. 24, 2012, at 18-19.

Even assuming that Mr. Kauffman's analysis plausibly shows that Stockton East would have taken an additional 82,955 acre-feet of New Melones water but for the breach, Stockton East has not established that its "stranded costs" are a recoverable form of damages in the case at bar. The court ruled at trial that Ms. Conti was not qualified to testify as to whether her analysis was supported by reliable principles and methodologies with respect to calculating damages in a breach of contract case involving unused capacity in a water conveyance system. Tr. 1174. Stockton East's counsel proffered that it did not call Ms. Conti to opine on such matters and that Mr. Harry would vouch for the propriety of claiming stranded costs as an item of damages in this case. Tr. 1157 (Spaletta).

Mr. Harry testified on direct examination that Stockton East's "stranded costs" claim was a proper measure of damages because it was "one part of" a "lost profits" or "lost contribution margin" approach to damages:

Q. [T]urning to the second category of damages that you described relating to the costs of the New Melones conveyance system, first can you describe for me why you identified that as a proper measure of damages.

A. Because it is one part of the normally accepted lost profits approach to calculating damages, and it's a very focused, conservative portion of that. So if you were doing a full lost profits computation, you first would project all of the lost sales volume and attended [sic] revenue. But the total of those amounts would overstate damages because to have attained those lost revenues, you would have had to spend certain amount of monies that were not incurred or saved. They're called saved expenses.

So typically the damages are the difference between the lost revenue and all of the saved expenses, which is the net lost profits or the lost contribution margin towards coverage of all otherwise fixed costs.

All that has been done in this claim is to target into that contribution marginal loss and only claim the portion of that that would have gone towards coverage of the already incurred fixed costs for the [NMCS].

Tr. 1277-78 (Harry). When cross-examined, Mr. Harry clarified that the standard practice for calculating lost profits is to subtract the additional costs that a plaintiff would have incurred if the breach had not occurred from plaintiff's lost revenue. Tr. 1315-16 (Harry).

As Mr. Harry testified, a lost profits analysis takes into account both revenues and costs. Yet, Ms. Conti revealed under cross-examination that she had little knowledge of how the Urban Contractors actually paid Stockton East for the New Melones water. Ms. Conti did not know, for example, whether Reclamation's breach caused any changes to the Urban Contractors' payments to Stockton East or whether the Urban Contractors paid a higher

monthly payment when the NMCS was operating at a higher capacity. Tr. 1222-25 (Conti). Ms. Conti also admitted that she did not know if Stockton East would have received an additional \$1.6 million in revenue – the approximate amount of Stockton East’s “stranded costs” – absent the breach. Tr. 1224 (Conti).

During voir dire Ms. Conti explained that she had experience calculating rates for water and wastewater utilities, Tr. 1148 (Conti), and that her methodology was very similar to her approach for calculating wholesale rates, Tr. 1154-55 (Conti). Under this approach a water utility can determine the amount of its fixed costs that can be factored into the wholesale rates that it charges each customer. Tr. 1160 (Conti). Although Ms. Conti’s methodology may provide an acceptable means of discerning how a utility should set its rates to recapture its costs, her methodology does not measure how Stockton East would have generated revenues to absorb its costs. As discussed in Part III.3. *infra*, ¶¶ 4-5 of the Second Amended Contract – not the rate-making approach described by Ms. Conti – govern the calculation of the Urban Contractors’ base monthly payment to Stockton East. *See* DX 807, at 14, 16-17. Because Ms. Conti’s analysis ignored how Stockton East generates revenues from its customers, it is not the “lost profits” approach to damages defined by Mr. Harry.

Mr. Harry explained on cross-examination that it was not necessary for Ms. Conti to consider how much revenue Stockton East would have received but for the breach because her model isolated only the fixed costs attributable to those portions of the NMCS that went unused as a result of the breach. Tr. 1317 (Harry). He concluded that this “conservative” approach therefore measured only the “unrecovered” or “unabsorbed” fixed costs. *Id.* Ms. Conti’s model, however, did not account for how Stockton East would have been paid by its Urban Contractors under the Second Amended Contract and consequently cannot measure how much of its fixed costs Stockton East would have absorbed if Reclamation had not breached. 46/

Although Mr. Harry considered Stockton East’s “stranded costs” claim to be a “lost profits” analysis, his testimony indicates that the claim is more akin to a claim for unabsorbed

46/ Defendant justifiably moved to strike Ms. Conti’s testimony. Tr. 1167-70 (Snyder). After defendant renewed its motion to strike following re-direct, Tr. 1238-45 (Snyder), the court deferred ruling on the motion, Tr. 1255-56. Ms. Conti’s testimony stretched her expertise; her professional experience involved calculating rates for water utilities, and she had never calculated damages or stranded costs in any context. Tr. 1153-55 (Conti). For the reasons discussed above, the court denies defendant’s motion to strike, but affords no weight to Ms. Conti’s testimony.

overhead damages based upon the Eichleay formula. ^{47/} In those cases overhead damages are awarded when the Government imposes a delay or suspension of contract work and thereby interrupts or reduces the contractor's stream of income. See, e.g., Interstate Gen. Gov't Contractors, 12 F.3d at 1057-58. As discussed above, if the contractor can show that the suspension or delay prevented it from taking on other work to absorb its fixed overhead costs, the contractor may be entitled to recover damages for those unabsorbed overhead costs. See, e.g., Nikon, 331 F.3d at 882-83; Melka Marine, 187 F.3d at 1375. In the instant case, neither Ms. Conti nor Mr. Harry correlated Ms. Conti's methodology for calculating wholesale utility rates to the actual rate structure employed by Stockton East. Because Ms. Conti's calculation ignored how Stockton East's customers would have reimbursed Stockton East for the undelivered New Melones water, Stockton East has not shown that it would have absorbed its fixed costs in the but-for world.

Stockton East also appears to analogize its "stranded costs" claim to the overhead damages in the SNF cases. See Pl. Stockton East's Br. filed Nov. 9, 2012, at 29 (citing Kansas Gas & Electric, 95 Fed. Cl. at 303). In those cases the Government's breach caused the utilities to mitigate by constructing and maintaining new facilities for SNF storage. See, e.g., S. Cal. Edison, 655 F.3d at 1321 (affirming award for overhead costs associated with building, staffing, and maintaining new facility for SNF storage). Because the overhead expenses associated with the facilities were incurred due to the breach, those plaintiffs were entitled to recover damages for the overhead costs. See Energy Nw., 641 F.3d at 1308-10 (affirming recovery of overhead expenses allocated to mitigation projects undertaken because of Government's breach); Kansas Gas & Electric, 95 Fed. Cl. at 303 (collecting cases), aff'd in part, rev'd in part, 685 F.3d 1361. Unlike the SNF plaintiffs, however, Stockton East has not shown that it incurred its overhead costs as a result of the breach. See Tr. 1224 (Conti) ("Q. In fact, it is not your opinion that Stockton incurred an additional \$1.6 million in costs as a result of the breach. Isn't that right? A. That's correct."); Tr. 1246 (Spaletta) ("There really is no dispute that the actual costs of the [NMCS] during the breach period did not change as a result of the breach as far as the total cost."). Although the Contract required Stockton East to construct the NMCS, see Tr. 95 (Kauffman); PX 36, at 13 (¶ 7(b)), Stockton East admits that it would have incurred the costs of the NMCS regardless of the

^{47/} On cross-examination Mr. Harry also testified, as follows:

Q. Your understanding of what the term "stranded costs" means as it is being used in this litigation is that the term refers to the investment in the [NMCS] that was left there unrecovered because of the breach. Is that right?

A. Yes.

Tr. 1316 (Harry).

breach, see Tr. 1246 (Spaletta). Stockton East’s reliance on the SNF cases is misplaced, and therefore the court cannot award overhead damages on that basis.

III. Cost of cover

1. Standard for awarding damages for cost of cover

Stockton East also seeks \$6,740,890.78 in damages to recover its mitigation costs associated with the 1997 Transfer Agreement. See Pl. Stockton East’s Br. filed Nov. 9, 2012, at 17-23. “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., 450 F.3d at 1368 (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, 474 F.3d at 1320.

A non-breaching party has a duty to mitigate its damages. Ind. Mich. Power Co., 422 F.3d at 1375; Robinson v. United States, 305 F.3d 1330, 1336 (Fed. Cir. 2002) (“As a general rule, a party cannot recover damages for loss that 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., 399 F.3d at 1353).

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 Comm’n’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, 317 F.3d at 1373 (“[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 Comm’n’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. The parties' arguments

Stockton East contends that it "covered" for Reclamation's failure to deliver water under the Contract by purchasing more expensive New Melones water from OID and SSJID pursuant to the ten-year, 1997 Transfer Agreement. See Pl. Stockton East's Br. filed Nov. 9, 2012, at 17-18. Stockton East therefore seeks mitigation damages of \$6,740,890.78, which represent the difference between the cover price of the water that Stockton East purchased from OID and SSJID from October 1999 through September 2009 and the Contract price of that same amount of water. See id.; PX 403A.

Citing the purposes of the Contract and Stockton East's investment in the NMCS, Stockton East argues that the 1997 Transfer Agreement was foreseeable mitigation. Pl. Stockton East's Br. filed Nov. 9, 2012, at 19-20. Stockton East also contends that it would not have entered the 1997 Transfer Agreement but for Reclamation's failure to perform under the Contract. Id. at 18. Although the 1997 Transfer Agreement was negotiated and signed prior to the 1999-2004 breach period, see Tr. 791-96 (Zolezzi), Stockton East points out that it began pursuing a substitute water supply in response to its June 1993 meeting with Reclamation and FWS, when the Government indicated that it would not honor the Contract due to its obligations under the CVPIA, Pl. Stockton East's Br. filed Nov. 9, 2012, at 19; see Tr. 791-96 (Zolezzi). Stockton East therefore analogizes its pre-breach mitigation efforts to those of the SNF plaintiffs who, in response to the Government's 1994 announcement that it would not meet its contractual obligations in the future, began taking mitigatory steps prior to the breach. See Pl. Stockton East's Br. filed Nov. 9, 2012, at 19-20 (citing Kan. Gas & Electric, 95 Fed. Cl. at 275; Ind. Mich. Power Co., 422 F.3d at 1375).

Stockton East also emphasizes that the terms of the 1997 Transfer Agreement – including its duration, price, and "take or pay" provisions – were reasonable in light of the prevailing market conditions at the time Stockton East negotiated the 1997 Transfer Agreement. See id. at 20-21 ("In short, this was the best deal that Stockton East could make under the circumstances."). To prove that its mitigation options were limited, Stockton East relies on the testimony of Ms. Zolezzi and Mr. O'Laughlin regarding their negotiation of the 1997 Transfer Agreement. Id.

Defendant responds that Stockton East is not entitled to mitigation damages because Stockton East had no duty to mitigate when it entered the 1997 Transfer Agreement. Def.'s Br. filed Nov. 29, 2012 [362], at 18-21. Relying on Indiana Michigan, defendant argues that

the duty to mitigate prior to the time for performance arises only when the breaching party expressly repudiates its obligation to perform and “unequivocally announce[s]” that it will be unable to meet its contractual obligations. See id. at 18 (quoting Ind. Mich. Power Co., 422 F.3d at 1375). Defendant minimizes the impact of Stockton East’s 1993 meeting with Reclamation and FWS, charging that “an off-the-cuff remark by an official who is unfamiliar with the contract in question is hardly an authoritative statement regarding the likelihood of the Government’s future performance.” Id. at 20-21. Any uncertainty regarding Reclamation’s future performance, defendant postulates, resulted from uncertainty that was inherent in the Contract itself – not the breach. Id. at 18-19. Defendant observes, for example, that Reclamation’s non-performance in 1994 and 1995 was excused under the shortage provision of Article 9, and the parties understood at the time of contracting that little or no water might be available to Stockton East under the Contract due to drought conditions. See id. at 19-20.

For similar reasons defendant also contends that Stockton East’s decision to enter into the 1997 Transfer Agreement was not caused by Reclamation’s impending breach, but instead resulted from Stockton East’s desire to obtain a “continual” and guaranteed water supply that would not vanish in dry years. See id. at 21-22 (citing Tr. 799-800 (Zolezzi)). Because the Contract’s shortage provision did not guarantee such a guaranteed supply to Stockton East, defendant urges that Stockton East entered into the 1997 Transfer Agreement for “sound business reasons” that “had nothing to do with any future breach by Reclamation.” Id. at 22-23.

Defendant also argues that the 1997 Transfer Agreement did not constitute reasonable or foreseeable mitigation. Id. at 23-28. Defendant reasons that a transaction functioning as a “true substitute” for Reclamation’s performance (1) would not require water deliveries in critically dry years, (2) would allow for the purchase of varying amounts of water each year, and (3) would have a short term. Id. at 24. Because the 1997 Transfer Agreement was a “take or pay” contract, defendant concludes that it was not a true substitute and therefore was not a reasonable approach to mitigation. Id. at 24-26. Given the terms of the 1997 Transfer Agreement, defendant also charges that it was not a foreseeable form of mitigation. Id. at 27-28.

Even if the court were to find that the 1997 Transfer Agreement constituted foreseeable and reasonable mitigation, defendant argues, Stockton East is precluded by law from recovering \$4,472,698.36 in mitigation costs for the cover water that it purchased in the years following the 1999-2004 breach period. Id. at 28-29. Because no court has determined that Reclamation has breached the Contract in any year from 2005 to 2009, recovery for those years is not legally permissible. Id. Relying on SNF cases, defendant argues that, because Stockton East is claiming a partial breach, Stockton East may recover as damages only “those costs incurred prior to the date of its suit,” which in this case is the

date of the amended complaint – April 20, 2004. Id. at 29 (quoting Ind. Mich. Power Co., 422 F.3d at 1377).

Defendant finally contends that Stockton East is not entitled to an award of mitigation damages because Stockton East actually did not bear any costs associated with the purchase of water under the 1997 Transfer Agreement. See id. at 29-31. Defendant emphasizes that the Urban Contractors were the ultimate end users of the purchased water, see Tr. 879 (Ferraro), and the 1997 Transfer Agreement actually referred to the Urban Contractors as the “Purchasers,” PX 450, at 1; see Def.’s Br. filed Nov. 29, 2012 [362], at 9, 29. In fact, Stockton East and the Urban Contractors contemporaneously entered into a second agreement, which required the Urban Contractors to pay Stockton East for the payments Stockton East made to OID and SSJID under the 1997 Transfer Agreement. See DX 873, at SJ04504; Def.’s Br. filed Nov. 29, 2012 [362], at 9; Tr. 475-76 (Kauffman). Because the Urban Contractors were required to pay Stockton East for the costs of the transferred water, defendant maintains that an award of mitigation damages to Stockton East would violate the fundamental rule that “the non-breaching party should not be placed in a better position through the award of damages than if there had been no breach.” Def.’s Br. filed Nov. 29, 2012 [362], at 29 (quoting Bluebonnet V, 339 F.3d at 1344-45).

Stockton East rejoins that the Urban Contractors’ reimbursement for the transfer water is irrelevant under the precedent of the Court of Federal Claims and the Federal Circuit. See Pl. Stockton East’s Br. filed Nov. 9, 2012, at 22-23; Pl. Stockton East’s Br. filed Dec. 10, 2012, at 13-14. Stockton East primarily relies on Hughes Communications, arguing that the Court of Federal Claims ruled that the Government may not assert a defense that contract damages recovery should be reduced because the plaintiff recovered from its customers the costs caused by the Government’s breach. See Pl. Stockton East’s Br. filed Nov. 9, 2012, at 22 (citing Hughes Commc’ns Galaxy, Inc. v. United States, 38 Fed. Cl. 578, 581-82 (1997), aff’d, 271 F.3d 1060). Stockton East notes that the court in Hughes Communications rejected defendant’s “pass-through” or indemnification defense based on the following rationale:

The breaching party is the wrongdoer and should not be able to take advantage of such arrangements by shifting those costs to third parties. Whether the contracting party who suffers the breach is getting paid twice for its costs is a question best worked out between it and its customers. The court should not be in the position of assessing whether the prices to the customers reflect the risk of such pass-through, or whether there is an obligation to repay any recovery from the government to those customers.

Id. at 22-23 (quoting Hughes Commc’ns, 538 Fed. Cl. at 581-82). Arguing that the same rationale should apply to the case at bar, Stockton East asks the court similarly to reject

defendant's claim that Stockton East is not entitled to cost of cover damages due to the payments it received from the Urban Contractors. Id.; Pl. Stockton East's Br. filed Dec. 10, 2012, at 13-14.

Stockton East also counters that defendant misconstrues Stockton East's claim for cost of cover damages incurred from 2005 to 2009. Pl. Stockton East's Br. filed Dec. 10, 2012, at 12-13. Stockton East argues that its damages claim for the years 2005 to 2009 is not based on the Reclamation's anticipated future non-performance in those years, but, rather, is "part and parcel of Stockton East's mitigation of the breach from 1999-2004." See id. at 13.

3. Analysis of costs of cover damages

1) Recovery of mitigation damages prior to the 1999-2004 breach period

Stockton East negotiated and signed the 1997 Transfer Agreement prior to the 1999-2004 breach period. See Tr. 791-96 (Zolezzi). Relying on Indiana Michigan, defendant argues that Stockton East had no duty to mitigate because such a duty arises only when one party expressly repudiates by "unequivocally announc[ing]" that it will be unable to meet its contractual obligations. See Def.'s Br. filed Nov. 29, 2012 [362], at 18-21. In Indiana Michigan the Federal Circuit held that pre-breach mitigation damages could be recoverable, noting that "[i]t is beyond debate that because the government unequivocally announced in 1994 that it would not meet its contractual obligations beginning in 1998, the utilities were in fact obligated to take mitigatory steps." Ind. Mich. Power Co., 422 F.3d at 1375. However, the Federal Circuit clarified in a subsequent case that, in the SNF context, the duty to mitigate could have attached before the Government made its "unequivocal" 1994 announcement:

[T]he Government seeks to minimize its exposure by clinging to individual words and phrases in the Indiana Michigan opinion. In particular, the Government urges this court to enforce the statement: "It is beyond debate that because the government unequivocally announced in 1994 that it would not meet its contractual obligations beginning in 1998, the utilities were in fact obligated to take mitigatory steps." [Ind. Mich. Power Co., 422 F.3d at 1375.] This statement, however, does not set 1994 as the earliest possible date for any duty to mitigate. Rather, this passage reveals that this court in Indiana Michigan viewed 1994 as the latest possible date for the utilities' duty to mitigate, not the earliest. The full context of the statement shows this meaning. In the introductory clause ("It is beyond debate"), this court recognizes that no one could reasonably dispute that a duty to mitigate existed in 1994. This statement, however, is not a ruling that the duty to mitigate did

not arise until 1994, but instead suggests that the duty could have arisen earlier.

Yankee Atomic, 536 F.3d at 1275.

Defendant in the case at bar likewise cannot rely on Indiana Michigan to argue that Stockton East's duty to mitigate did not arise until Reclamation unequivocally announced in any given year that it would not meet the Build-Up Schedule. As the Federal Circuit explained in Indiana Michigan, "[m]itigation is appropriate where a reasonable person, in light of the known facts and circumstances, would have taken steps to avoid damage." 422 F.3d at 1375 (citing Robinson, 305 F.3d at 1334). The appropriateness of a plaintiff's pre-breach mitigation is a fact-specific inquiry. See Yankee Atomic, 536 F.3d at 1275-77 (contrasting factual records in Indiana Michigan and Yankee Atomic).

Stockton East first contacted OID and SSJID regarding substitute water supplies in 1993 because of a meeting with Reclamation and FWS that occurred earlier that year. Tr. 790-95 (Zolezzi). Ms. Zolezzi testified that, during a June 1993 meeting, representatives of Reclamation and FWS confirmed to Stockton East that 250,000 acre-feet of New Melones water had been re-allocated from CVP contractors to fish. Tr. 792 (Zolezzi). 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 as a result of the CVPIA. Id. 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." 48/ Tr. 795 (Zolezzi). In response to the representations made at the 1993 meeting, Stockton East soon began negotiating with OID and SSJID to obtain substitute surface water supplies that it could deliver through its newly-constructed NMCS. Tr. 792 (Zolezzi). Given the representations made by Reclamation and FWS at the June 1993 meeting, Stockton East had reason to know that Reclamation would not perform in the future. Therefore, it was appropriate and reasonable for Stockton East to begin taking mitigatory steps as early as 1993.

The court disagrees with defendant's assertion that, by the time Stockton East signed the 1997 Transfer Agreement, "Stockton East had ample reason to believe that Reclamation would perform under the [Contract]." See Def.'s Br. filed Nov. 29, 2012 [362], at 18. In

48/ Defendant blithely dismisses the importance of the June 1993 meeting. See Def.'s Br. filed Nov. 29, 2012 [362], at 20-21. As discussed in the "Facts" section of this opinion, the court finds Ms. Zolezzi's testimony on point credible. Her testimony regarding the June 1993 meeting echoed Mr. Roberts's testimony at the damages trial, see Tr. 1636 (Roberts), and the testimony during the liability trial almost six years earlier of Messrs. Steffani and Roberts, see Liab. Trial Tr. 170 (Roberts); Liab. Trial Tr. 425-26 (Steffani).

1994 and 1995, Reclamation failed to provide the minimum volumes of water listed in the Build-Up Schedule. Stockton III, 583 F.3d at 1352-53. After more than a decade of litigation in federal district court and transfer of the case to the Court of Federal Claims in 2004, the parties received a ruling by this court in 2007, later affirmed by the Federal Circuit, that Reclamation’s non-performance in 1994 and 1995 was excused because the shortage provision of Article 9 applied to those years. See id. at 1363-64. The operation of the IPO in 1997 and 1998 also did not give Stockton East reason to believe that Reclamation would perform in the future. The districts agreed to the IPO in early 1997 as a short-term modification of their water allocations under the Contracts for 1997 and 1998. Stockton III, 583 F.3d at 1353; Stockton I, 75 Fed. Cl. at 346. Stockton East understood at the time that the IPO was an “interim stopgap measure” that would give time to the parties to “negotiate a more equitable long-term operations agreement.” Stockton I, 75 Fed. Cl. at 356 (citations and internal quotation marks omitted). Contrary to defendant’s assertion, Stockton East therefore did not have ample reason to believe that Reclamation’s full performance would be forthcoming after the two-year period in which the IPO was intended to operate.

Due to the Government’s representations at the June 1993 meeting, in addition to the events that transpired in the following years, it was reasonable for Stockton East to begin taking steps to mitigate Reclamation’s breach. Furthermore, a multi-year water transfer involves compliance with CEQA’s substantial environmental requirements, and accordingly can be difficult and time-consuming to implement. See Tr. 811-14 (Zolezzi); Tr. 918 (O’Laughlin). Given the lengthy process involved in obtaining water under such an agreement, Stockton East’s decision to begin pursuing mitigation shortly after the June 1993 meeting was reasonable under the circumstances.

Defendant urges this court to avoid “expanding the holding” of Indiana Michigan beyond the SNF context, where ““an action for . . . total breach . . . [was] foreclosed by statute[.]”” Def.’s Br. filed Dec. 21, 2012 [365], at 5-6 (quoting Ind. Mich. Power Co., 422 F.3d at 1374). The Federal Circuit in Indiana Michigan disagreed with the trial court in that case that pre-breach mitigation damages are *per se* unrecoverable in cases of a partial breach. Ind. Mich. Power Co., 422 F.3d at 1374. The court’s reasoning was not limited to the SNF context:

Holding pre-breach damages unrecoverable, or that pre-breach damages are recoverable only for anticipatory repudiation leading to a total breach, would, however, compromise a party’s obligation to mitigate damages. The general rule must be reconciled with a party’s obligation to mitigate damages which befall it during the periods both antedating and postdating the breach. . . . Our breach-of-contract cases have dealt only with the duty to mitigate damages incurred after a total breach. But we see no reason why efforts to avoid damages in contemplation of a partial breach should not also be recoverable.

. . . Hence, mitigation damages are available for pre-breach costs should the obligee elect to treat the obligor's breach as partial[.]

Id. at 1375 (internal citations omitted). As the SNF plaintiffs did, Stockton East received notice of defendant's future non-performance and began taking mitigatory steps shortly thereafter. 49/ The fact that Stockton East began pursuing a cover transaction before the breach should not foreclose recovery of damages for its cost of cover during the breach years.

2) Causation

A party seeking mitigation damages must prove causation. See, e.g., Yankee Atomic, 536 F.3d at 1275-77. At the damages trial, Ms. Zolezzi repeatedly stated that Stockton East pursued a water supply from OID and SSJID in response to the June 1993 meeting. Tr. 792-95, 821, 851-52 (Zolezzi). The representations made by Reclamation and FWS at the June 1993 meeting caused Stockton East to be concerned that its newly-built, expensive conveyance facility would go unused. Tr. 851-52 (Zolezzi). Shortly thereafter Stockton East began seeking a substitute surface water supply from the New Melones Reservoir, Tr. 852 (Zolezzi), and naturally looked to obtain that substitute supply from OID and SSJID, two of the largest water-rights holders on the Stanislaus River, Tr. 792-93 (Zolezzi). Mr. O'Laughlin – the OID representative involved in negotiating the 1997 Transfer Agreement – similarly testified as to his understanding that Stockton East was seeking transfer water as an “alternative supply of water to help meet [its] needs.” Tr. 889 (O'Laughlin).

Defendant ignores the impact of the 1993 meeting and urges this court to find that Stockton East entered into the 1997 Transfer Agreement for an entirely different reason – to secure a dry-year water supply. Def.'s Br. filed Nov. 29, 2012 [362], at 7-9. To support this argument, defendant relies upon Ms. Zolezzi's trial testimony that Stockton East wanted to obtain a “reliable” and “continual” water supply from OID and SSJID. See id. at 7, 22-23 (citing Tr. 799-800 (Zolezzi)). Contrary to defendant's repeated assertions, Ms. Zolezzi's references to a “reliable” and “continual” water supply do not support the notion that Stockton East entered the 1997 Transfer Agreement for the sole purpose of obtaining a dry-year water supply. See Tr. 799-800 (Zolezzi). Furthermore, the 1997 Transfer Agreement actually did not guarantee Stockton East a continuous water supply that persisted through critically dry years. OID and SSJID were required to deliver only 12,500 acre-feet in years for which the forecast of inflow to the New Melones Reservoir was between 450,000 and

49/ The court also observes that, unlike the SNF plaintiffs, Stockton East is not seeking damages for mitigation costs incurred in the years prior to the breach. See, e.g., Ind. Mich. Power Co., 422 F.3d at 1372. Stockton East seeks mitigation damages for the six breach years – 1999 to 2004 – and the five years following the breach period. See PX 403A.

499,000 acre-feet; in years for which the forecast was less than 450,000 acre-feet, OID and SSJID were required to deliver only 8,000 acre-feet. See PX 450, at 3.

Defendant reasons that, because the 1983 Contract did not guarantee a reliable and continuous water supply, Reclamation did not enter the 1997 Transfer Agreement to avoid losses that would result from Reclamation's breach. See Def.'s Br. filed Nov. 29, 2012 [362], at 2; Def.'s Br. filed Dec. 21, 2012 [365], at 4. Defendant appears to exaggerate the uncertainties inherent in the 1983 Contract, as it mistakenly claims that "Reclamation was not required to offer the Build-Up allocations, or any allocations at all, to Stockton East in years in which the agency reasonably determined that a water shortage existed." Def.'s Br. filed Dec. 21, 2012 [365], at 4 (citing Stockton III, 583 F.3d at 1363-64; Stockton I, 75 Fed. Cl. at 364). The Federal Circuit did not hold that the water shortage provision could be invoked upon Reclamation's reasonable determination that a water shortage existed. See Stockton III, 583 F.3d at 1363-64, 1369. Rather, the Federal Circuit explained 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. The 1983 Contract required Reclamation to make available the minimum quantities listed in the Build-Up Schedule, but provided that Reclamation would not be liable in any year where the *force majeure* provision properly applied. See id. Stockton East's search for a "reliable" surface water supply from OID and SSJID therefore constituted an effort to mitigate losses that would result from Reclamation's impending breach of the 1983 Contract.

The record reflects that Stockton East also had other reasons – in addition to mitigation – for negotiating and signing the 1997 Transfer Agreement. When cross-examined, Ms. Zolezzi agreed that Stockton East was concerned about receiving as much water as possible from OID and SSJID during dry years. Tr. 841 (Zolezzi). Mr. O'Laughlin testified that a "myriad of factors" – including drought and hydrology – factored into the unreliability of the New Melones water supply and thus motivated Stockton East's search for transfer water. Tr. 889-90 (O'Laughlin); see also Tr. 903, 909-11 (O'Laughlin). Although Stockton East also was influenced by its desire to obtain a surface water supply in drought years, its primary goal – in light of the statements made at the June 1993 meeting – was to obtain a replacement supply of New Melones water. Tr. 835-36, 855-56 (Zolezzi). Stockton East is not precluded from obtaining its cost of cover damages because it had multiple reasons for entering into the 1997 Transfer Agreement. See Cal. Fed. Bank, 395 F.3d at 1268 (explaining that 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" (citing Farnsworth on Contracts § 12.1, at 150-51)); cf. Ind. Mich. Power Co., 422 F.3d at 1376 (affirming denial of mitigation damages because plaintiff's purported mitigation "was *purely* a business judgment which it would have had to pursue irrespective of [defendant's] breach" (emphasis added)).

3) Reasonableness

A party seeking mitigation damages also must demonstrate that its mitigation efforts are “fair and reasonable under the circumstances.” See First Heights Bank, 422 F.3d at 1316 (quoting Home Sav. of Am., 399 F.3d at 1353). Stockton East reasonably mitigated in the years 1999-2004 by obtaining surface water supplies from the same water source – the New Melones Reservoir – at a price below the spot-market price in the years Reclamation breached the Contract. See 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.”).

In arguing that Stockton East’s mitigation was not reasonable, defendant emphasizes the differences between the 1983 Contract and the 1997 Transfer Agreement. See Def.’s Br. filed Nov. 29, 2012 [362], at 24. Defendant specifically notes that the 1997 Transfer Agreement guaranteed water deliveries in dry and critically dry years, whereas the 1983 Contract did not. Id. As discussed above, defendant misunderstands the nature of the Contract’s shortage provision; Article 9 is a *force majeure* provision that applies only to causes “beyond the control of the United States[.]” Stockton III, 583 F.3d at 1361-62. To the extent the 1983 Contract and 1997 Transfer Agreement contained different requirements regarding deliveries in critically dry years, those discrepancies do not render the 1997 Transfer Agreement unreasonable. See Hughes Commcn’s, 271 F.3d at 1066 (explaining that, 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” (quoting U.C.C. § 2-712 cmt. 2)).

Defendant also contends that the 1997 Transfer Agreement was an unreasonable form of mitigation because it contained a “take or pay” provision requiring Stockton East to take a certain quantity of transfer water in every breach year, regardless of the amount allocated by Reclamation under the Contract. Def.’s Br. filed Nov. 29, 2012 [362], at 25. Two participants involved in negotiating the 1997 Transfer Agreement – Ms. Zolezzi and Mr. O’Laughlin – testified at the damages trial. According to Ms. Zolezzi, Stockton East did not want the “take or pay” provision in the 1997 Transfer Agreement, but OID and SSJID “insisted” on including that provision in the agreement. Tr. 802 (Zolezzi). Ms. Zolezzi explained that the take-or-pay provision was necessary for OID and SSJID because “their goal of entering into a water transfer agreement was to obtain consistent income . . . and [OID and SSJID] needed to be able to know each year how much they were going to have to fund their system improvements and that they would have it over the term of the contract.” Tr. 802 (Zolezzi). Mr. O’Laughlin – the lead negotiator for OID and SSJID – echoed Ms. Zolezzi’s testimony, explaining that OID and SSJID “would know that X amount of dollars would be coming in every year, and then based on those dollars coming in, [OID and SSJID]

could then have a revenue stream that they could price projects, do conservation measures and things that they wanted to do.” Tr. 895-96 (O’Laughlin). Both Ms. Zolezzi and Mr. O’Laughlin indicated that this consistent stream of income, made possible by the “take or pay provision,” eventually enabled OID and SSJID to undertake a variety of infrastructure improvements and conservation programs. 50/ Tr. 801 (Zolezzi); Tr. 916 (O’Laughlin).

Given the tenor of the negotiations, it was reasonable for Stockton East to accept the demands of OID and SSJID regarding the “take or pay” provision. Negotiations were contentious and broke down several times. Tr. 795-97 (Zolezzi). The market conditions also influenced the negotiating leverage of the parties. Following the June 1993 meeting, Stockton East looked to obtain a substitute surface water supply from the New Melones Reservoir because New Melones water easily could be conveyed through the NMCS. Tr. 793 (Zolezzi). OID and SSJID are two of the largest water rights holders on the Stanislaus River, Tr. 791 (Zolezzi); Tr. 891-93 (O’Laughlin), and few other water rights holders on the Stanislaus were looking to sell water at that time, Tr. 805-06 (Zolezzi). Ms. Zolezzi also testified that other entities, including Reclamation and FWS, were looking to buy water from OID and SSJID. Tr. 806 (Zolezzi). Because the market conditions dictated that OID and SSJID had negotiating leverage over Stockton East, it was reasonable for Stockton East to agree to their demands to include the “take or pay” provision in the 1997 Transfer Agreement.

Defendant points to the year 2000 as a “paradigmatic example” of how the “take or pay” provision rendered Stockton East’s mitigation unreasonable. See Def.’s Br. filed Nov. 29 [362], 2012, at 25. In that year Reclamation allocated a total of 90,000 acre-feet to both Stockton East and Central. Stockton III, 583 F.3d at 1353; Stockton I, 75 Fed. Cl. at 347. However, in 2000 Stockton East purchased only 7,193 acre-feet from Reclamation under the Contract, see PX 434, and 33,352 acre-feet from OID and SSJID pursuant to the 1997 Transfer Agreement, see PX 403A. According to Mr. Kauffman, Stockton East took deliveries under the 1997 Transfer Agreement – rather than the 1983 Contract – due to the “take or pay” nature of the 1997 Transfer Agreement. Tr. 760-61 (Kauffman). However, because it was reasonable for Stockton East to agree to include the “take or pay” provision in the 1997 Transfer Agreement, the court finds that Stockton East’s award for cost of cover

50/ While pointing to the testimony described above, defendant asserts – without citation to other record evidence – that Stockton East’s desire for a dry-year water supply influenced its decision to agree to the “take or pay” provision. See Def.’s Br. filed Nov. 29, 2012 [362], at 8. However, Mr. O’Laughlin testified that, to obtain the dry-year water supply, Stockton East agreed to take a reduced amount of water in dry years in exchange for a higher price. Tr. 903 (O’Laughlin); see also PX 450, at 3-4. The court is satisfied with this explanation.

damages should not be reduced due to its failure to exhaust the allocations made by Reclamation in the year 2000. 51/

Defendant also contends that the mitigation was unreasonable because Stockton East could have purchased water on the spot market through a series of one-year transactions. Def.'s Br. filed Nov. 29, 2012 [362], at 26. Such transactions were possible, in defendant's view, because Central made three one-year agreements with SSJID from 2002-2004, and Stockton East itself purchased water on a short-term basis from OID and/or SSJID from 2007-2009. Id. Although the evidence suggests that Stockton East could have covered by purchasing water on the spot market, it would not have been able to obtain the price that it desired by entering into one-year agreements. Stockton East wanted to obtain a substitute supply of water at a price similar to the price that it would have paid Reclamation, Tr. 804 (Zolezzi), and ultimately obtained a cover price roughly \$10 per acre-foot greater than the Contract price for M&I water, Compare PX 450, at 3, with Jt. Stipl. ¶ 5. According to the three witnesses who provided testimony regarding the spot-market price of water during the six-year breach period, the spot-market price generally far exceeded the price Stockton East paid under the 1997 Transfer Agreement. 52/ See Tr. 899-900 (O'Laughlin); Tr. 940-42 (Landry); Tr. 2010-18 (Smith); PX 426, at 6; see PX 622, Att. 3. Stockton East therefore acted reasonably by forgoing the spot market to obtain a substitute supply at a lower price through a multi-year transaction. 53/

4) Foreseeability

Defendant disputes the characterization of the 1997 Transfer Agreement as foreseeable mitigation because it contained a "take or pay" provision. See Def.'s Br. filed

51/ For similar reasons defendant also contends that Stockton East's damages award should not include its costs of cover for the year 1999. See Def.'s Br. filed Nov. 29, 2012 [362], at 26-27. Defendant points to the graph in PX 551 indicating an unused "East Side CVP Allocation" of roughly 30,000 acre-feet of the 90,000 acre-feet allocated in 1999. See id.; see PX551, at 2-13. As discussed supra note 14, the court finds that Reclamation allocated only 60,000 acre-feet to the districts in 1999, as reflected in this court's 2007 liability opinion.

52/ Defendant does not assert, and the record does not show, that Stockton East would have been able to obtain the \$15 per acre-foot price that Central received from SSJID for its spot purchases from 2002-2004.

53/ However, as discussed in the court's discussion of Stockton East's mitigation damages for the years 2005 to 2009, Stockton East did not show that the price of its transfer water was contingent upon agreeing to a ten-year term.

Nov. 29, 2012 [362], at 28 (“Reclamation could not have foreseen that its failure to comply with the Build-Up Schedule in some years would cause Stockton East to commit itself to purchases of water in *every* year, without regard to Reclamation’s actual performance in that year.”). Although the Federal Circuit has applied a foreseeability analysis to mitigation damages, see Vt. Yankee Nuclear Power Corp. v. United States, 683 F.3d 1330, 1344-45 (Fed. Cir. 2012); Yankee Atomic, 536 F.3d at 1275 (noting Indiana Michigan’s acknowledgment of “the propriety of pre-breach mitigation damages for plaintiffs who can prove foreseeability, causation, and reasonableness”), defendant misunderstands the foreseeability requirement. 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.” Anchor Sav. Bank, 597 F.3d at 1364 (quoting 11 Joseph M. Perillo, Corbin on Contracts § 56.7, at 108).

Reclamation had reason to foresee that Stockton East would seek to mitigate by obtaining substitute surface water supplies from water-rights holders on the Stanislaus River from 1999 to 2004. The 1983 Contract recites that Reclamation was furnishing the water for “irrigation, municipal, industrial, domestic, and other beneficial uses” and that “[I]nvestigations by [Reclamation] indicate that [each district] has a present and potential need for an irrigation and a municipal and industrial water supply[.]” PX 36, at 00352-53. Moreover, the Contract expressly required Stockton East to construct conveyance facilities to transport water from the New Melones reservoir to Stockton East’s boundaries. PX 36, at 00364. Given the location of the required conveyance facilities, Reclamation should have been aware that Stockton East’s options for obtaining a substitute supply in the event of a breach would be limited to the Stanislaus River. OID and SSJID are two of the largest water rights holders on the Stanislaus River (followed by Reclamation), Tr. 791 (Zolezzi); Tr. 891-93 (O’Laughlin), and few other water rights holders on the Stanislaus were looking to sell water at that time, Tr. 805-06 (Zolezzi). As discussed above, Stockton East therefore had little leverage in negotiating the 1997 Transfer Agreement, and the “take or pay” provision was reasonable, given the negotiating positions of OID and SSJID. The court accordingly finds that Reclamation had reason to foresee that Stockton East would cover by purchasing the substitute supplies from OID and SSJID from 1999 to 2004.

5) Recovery for the years 2005 to 2009

Although Stockton East seeks over \$6 million in cost of cover damages, more than \$4 million of that amount represents the difference between the cover price and the Contract price for water purchased in the years 2005 to 2009. See PX 403A. As defendant correctly observes, no court has determined that Reclamation breached the Contract in any year from 2005 to 2009. See Def.’s Br. filed Nov. 29, 2012 [362], at 28; Def.’s Br. filed Dec. 21, 2012 [365], at 8. Because no ruling issued on liability as to those years, recovery for those years is precluded to the extent that Stockton East seeks damages based upon Reclamation’s non-

performance from 2005 to 2009. The Federal Circuit confronted this result in Indiana Michigan, where the SNF plaintiff sought damages for its forecasted future investment in the construction of a private storage facility for housing SNF. 422 F.3d at 1372-73. The court concluded that, because the plaintiff’s claim was premised upon a partial breach – in contrast to a total breach – “damages were limited to those costs incurred prior to the date of its suit.” Id. at 1377-78. In the present case, Stockton East treated Reclamation’s breach as a partial breach of the Contract, and it therefore may not recover damages based upon Reclamation’s non-performance in the years following the breach period. See id.; Scott Timber Co. v. United States, 692 F.3d 1365, 1379 (Fed. Cir. 2012) (quoting Yankee Atomic, 536 F.3d at 1280).

In its post-trial reply brief, Stockton East postured that the holding in Indiana Michigan regarding future damages is inapplicable to this case because Stockton East does not allege that its mitigation costs incurred from 2005-2009 “are based on [Reclamation’s] future non-performance.” See Pl. Stockton East’s Br. filed Dec. 10, 2012, at 13. Stockton East instead characterizes these costs as “part and parcel of Stockton East’s mitigation of the breach from 1999-2004.” Id. Although Stockton East provided the court with little additional guidance on how to conceptualize its 2005-2009 costs, Stockton East’s damages claim for those years falls under the category of incidental damages. 54/

When a buyer covers, the buyer’s remedy equals the difference between the cost of cover and the contract price, in addition to any incidental losses. Hughes Commc’ns, 271 F.3d at 1066 (citing U.C.C. § 2-712; Farnsworth on Contracts § 12.11). Incidental losses include “costs incurred in a reasonable effort, whether successful or not, to avoid loss[.]” Restatement (Second) of Contracts § 347 cmt. c, § 350 cmt. h (“Under the rule stated in § 347, costs incurred in a reasonable but unsuccessful effort to avoid loss are recoverable as incidental losses.”); Am. Fed. Bank, FSB v. United States, 72 Fed. Cl. 586, 597 (2006) (quoting Restatement (Second) of Contracts § 347 cmt. c)). The U.C.C. clarifies that incidental damages resulting from a seller’s breach must be “reasonable” or “reasonably

54/ In response to the court’s suggestion at closing argument that the 2005-2009 costs represented incidental damages, Stockton East’s counsel replied:

I suppose you could characterize them as incidental damages . . . but, frankly, they’re part of the cost of cover because when Stockton East mitigated by purchasing the transfer water it was obligated to pay for 30,000 acre-feet of water for 10 years. That was the price tag for the mitigation.

Closing Arg. Tr. 32-33 (Spaletta).

incurred[.]” 55/ U.C.C. § 2-715; see also U.C.C. § 2-712 (instructing that a buyer’s damages for cost of cover includes incidental damages as defined by U.C.C. § 2-715).

The evidence adduced at trial did not show that the costs incurred by Stockton East under the 1997 Transfer Agreement for the years 2005 to 2009 were reasonable mitigation. Citing Ms. Zolezzi’s trial testimony, Stockton East posits that “the 10-year term secured the reliable supply [Stockton East] needed at an affordable price.” Pl. Stockton East’s Br. filed Dec. 10, 2012, at 13 (citing Tr. 800, 804, 806). The evidence demonstrates that Stockton East would not have been able to obtain the price that it desired by entering into a one-year transfer agreement, but the evidence does not show that the price was contingent upon Stockton East’s agreeing to a ten-year term. In contrast to the “take or pay” provision, the ten-year term was not a contractual provision that OID and SSJID insisted upon including in the 1997 Transfer Agreement. Compare Tr. 802 (Zolezzi), with Tr. 804 (Zolezzi). In fact, Ms. Zolezzi explained that Stockton East pushed for a longer-term of “15 to 20 years” but that the “term ended up at 10 because . . . [OID and SSJID] were stretching themselves” in terms of projecting their long-term water supplies and demands. Tr. 805-06 (Zolezzi). Ms. Zolezzi also added that the parties “didn’t know if they could get along well enough to have a long-term agreement” and therefore negotiated an “out in the contract” that would enable the agreement to be terminated prior to its expiration. 56/ Tr. 806-07 (Zolezzi). The record does not support Stockton East’s position that purchasing 30,000 acre-feet of water each year from 2005-2009 was the “price tag” of Stockton East’s mitigation during the breach years. See Closing Arg. Tr. 33 (Spaletta). Stockton East consequently has not shown that its purchases for the years 2005-2009 were a reasonable expense that it incurred to mitigate Reclamation’s breaches in the years 1999 to 2004. 57/

55/ Although the Uniform Commercial Code is a model code, Linear Tech. Corp. v. Micrel, Inc., 275 F.3d 1040, 1048 (Fed. Cir. 2001), the Federal Circuit has explained that the “Uniform Commercial Code provides useful guidance in applying general contract principles[.]” Hughes Commcn’s, 271 F.3d at 1066.

56/ The “out” clause referenced by Ms. Zolezzi appears to be included in ¶ 3 of the 1997 Transfer Agreement: “Once all approvals are obtained and water is delivered to Purchasers under this Agreement, Purchasers may terminate this Agreement upon two years prior notice after the first five years.” PX 450, at 3.

57/ Under Stockton East’s theory of mitigation, its incidental losses far exceed its actual cost of cover for the six breach years. See PX 403A. If Stockton East had succeeded in obtaining the twenty-year term it desired, see Tr. 805 (Zolezzi), its “incidental” losses would extend to the year 2019 and likely would be several times greater than the differential between the cover price and the Contract price for the six breach years. Such an absurd result further undercuts the notion that Stockton East reasonably incurred the costs of purchasing water in the five years following the six-year breach period.

Relying on Yankee Atomic, Stockton East's fallback position is that it is entitled to recover its mitigation costs for 2005-2009 even though the transfer water may have been "unnecessary" during those years. Pl. Stockton East's Br. filed Dec. 10, 2012, at 13 (citing Yankee Atomic, 536 F.3d at 1276). In Yankee Atomic some of the plaintiff's mitigation costs ultimately proved unnecessary because the plaintiff shut down some of its facilities more than a decade earlier than it had initially planned. Yankee Atomic Electric Co. v. United States, 73 Fed. Cl. 249, 278-79 (2006); see also Yankee Atomic, 536 F.3d at 1276. Nonetheless, the plaintiff's mitigation expenses were recoverable because the court found that the mitigation was reasonable, foreseeable, and caused by the Government's breach. Yankee Atomic, 536 F.3d at 1276-77. In contrast, Stockton East has not shown that its expenses for the years 2005 to 2009 were reasonable costs incurred in mitigating Reclamation's breach for the years 1999 to 2004.

6) Reimbursement by the Urban Contractors

Once again, the parties have left the court with the task of fleshing out the interstices of the contracts involved in this dispute. Although the 1997 Transfer Agreement refers to both the Urban Contractors and Stockton East as the "Purchasers," PX 450, at 1, that contract does not appear to contain a provision requiring the Urban Contractors to reimburse Stockton East for the transfer water. At the damages trial, two witnesses – Messrs. Ferraro and Kauffman – briefly testified regarding how Stockton East received payments from the Urban Contractors for water purchased under the 1997 Transfer Agreement. Mr. Ferraro explained that the costs of the transfer water "were passed on into the base monthly payment to both Cal Water and the other urban contractors." Tr. 879 (Ferraro). On cross-examination Mr. Kauffman agreed that, under a contemporaneous agreement between Stockton East and the Urban Contractors, the Urban Contractors had to pay Stockton East the amount of money that Stockton East paid to OID and SSJID. Tr. 476 (Kauffman). Paragraph 2(b) of that contemporaneous agreement concerned such payments, Tr. 475 (Kauffman), and stated: "Water and costs shall be apportioned among the Urban Contractors in the manner set forth in Paragraph 4 H of the Second Amended Agreement." DX 873, at SJ04504. Paragraph 4H of the Second Amended Contract establishes a formula by which Stockton East calculates the annual percentages of water "produced" by each Urban Contractor. See DX 807, at 14. Those percentages are applicable to ¶ 5 of the Second Amended Contract, see id., which deals with the Urban Contractors' payments to Stockton East, see id. at 16. However, ¶ 5 contains numerous sub-paragraphs affecting the amount of the base monthly payment made by the Urban Contractors. See, e.g., id. at 17 (¶ 5A(4)). These multiple provisions and complex mechanisms governing the Urban Contractors' base monthly payment to Stockton East were not developed adequately at trial. Further explication of the Second Amended Contract therefore is necessary to understand the extent to which Stockton East received reimbursement from the Urban Contractors through the base monthly payment.

To understand how Stockton East “passed through” its mitigation costs to the Urban Contractors, this court must piece together the provisions of three different contracts – the 1997 Transfer Agreement, the companion agreement between Stockton East and the Urban Contractors, and the Second Amended Contract. This case therefore demonstrates precisely why the Federal Circuit has noted that “a standard for pass-through reductions [in breach of contract actions] would entail extremely difficult burdens for the trial court.” Hughes Commc’ns, 271 F.3d at 1072. As the Federal Circuit explained in Hughes Communications, “The answer is not difficult. The general tendency of the law, in regard to damages at least, is not to go beyond the first step. As it does not attribute remote consequences to a defendant so it holds him liable if proximately the plaintiff has suffered a loss.” Id. (quoting S. Pac. Co. v. Darnell-Taenzer Lumber Co., 245 U.S. 531, 533-34 (1918)).

In the case at bar, it is not necessary for the court to go beyond the first step. Reclamation breached its Contract with Stockton East, and Stockton East mitigated by entering into a substitute transaction with OID and SSJID. The terms of that substitute transaction – the 1997 Transfer Agreement – provided that Stockton East was the obligor for payment. The “take or pay” provision, for example, required Stockton East to pay OID and SSJID regardless of whether the “Purchasers” – Stockton East or the Urban Contractors – wanted the water. PX 450, at 3. In the event that a balance remained unpaid thirty days after the due date, Stockton East was required to pay OID and SSJID annual interest of 10% on that balance. Id. at 4. These provisions establish that Stockton East was the obligor under the 1997 Transfer Agreement and consequently did not function merely as the conduit for the Urban Contractors.

Stockton East has established that it reasonably incurred its mitigation damages for the years 1999 to 2004. It therefore is entitled to recover its cost of cover in the amount of \$2,268,192.42, which is the difference between the amount that Stockton East paid for the water it purchased from OID and SSJID in the years 1999 to 2004 and the amount it would have paid to Reclamation for that water under the 1983 Contract. 58/ See PX 403A.

58/ The parties do not address the role of Stockton East’s water treatment costs in their discussion of Stockton East’s cost of cover damages. As discussed in Part I.3.1) supra, Stockton East incurs some incremental costs to treat the New Melones water that it purchases from Reclamation. The water that Stockton East purchased from OID and SSJID also came from the New Melones Reservoir and was conveyed through the NMCS and treated at the DWTP for use by the Urban Contractors. See Tr. 636 (Kauffman) (“Q. And Stockton East used the New Melones conveyance system to convey the water purchased under the 1997 transfer agreement to the district’s water treatment plant during [the 1999 to 2004] period. A. Yes, we did.”). This evidence supports an inference, and the court so finds, that any water treatment costs that Stockton East avoided by Reclamation’s breach are equal to any

CONCLUSION

Based on the foregoing, Stockton East is entitled to an award of \$2,268,192.42 as damages for cost of cover and to no award of expectancy damages or damages for overhead. By separate order entered this date in No. 04-541L, the Clerk of the Court has been instructed to enter judgment for Central. The Clerk of the Court shall enter judgment for plaintiff Stockton East in the amount of \$2,268,192.42.

IT IS SO ORDERED.

No costs.

/s/ Christine O.C. Miller

Christine Odell Cook Miller
Judge

58/ (Cont'd from page 73.)

water treatment costs incurred in connection with Stockton East's purchase of water from OID and SSJID. Stockton East's water treatment costs therefore do not enter into the calculation of Stockton East's cost of cover damages.