
◆

Non-binding Arbitrations Before
Jeffrey C. Fereday, Arbitrator

◆

Initiated Pursuant to Final Settlement Stipulation
Kansas v. Nebraska & Colorado
No. 126, Orig., U.S. Supreme Court
Decree of May 29, 2003, 538 U.S. 720

◆

Nebraska's Alternative Water Short Year Plan
(Arbitration Initiated February 8, 2013)

and

Nebraska's Rock Creek Augmentation Plan
(Arbitration Initiated March 21, 2013)

◆

**PRE-FILED TESTIMONY OF KANSAS WITNESS
DAVID L. POPE, P.E.**

August 21, 2013

1 **Q: What is your professional background?**

2 A: I hold BS and MS degrees in Agricultural Engineering from Oklahoma State
3 University, where I specialized in irrigation and water resources engineering. I
4 am a licensed Professional Engineer in Kansas. After graduation in 1971, I
5 worked for Kansas State University as an Extension Irrigation Engineer, served
6 as Manager of the Southwest Kansas Groundwater Management District No. 3
7 and then as Assistant Chief Engineer of the Division of Water Resources,
8 Kansas Department of Agriculture.

9
10 I served as Chief Engineer and Director of the Division of Water Resources
11 between 1983 and 2007. In that capacity, I had statutory responsibility for the
12 administration of water in Kansas, including authority over the permitting and
13 perfection of water rights, regulation and distribution of surface water and
14 groundwater in accordance with the Kansas Water Appropriation Act. I was also
15 responsible for the administration of some 25 other statutes related to the
16 conservation, management, use and control of water and watercourses in
17 Kansas. I served as a member of each of the four interstate river compact
18 administrations or commissions established by the compacts to which Kansas is
19 a party. I was heavily involved in two U.S. Supreme Court cases during my
20 tenure as Chief Engineer: *Kansas v. Colorado*, No. 105, Original (Arkansas
21 River) and *Kansas v. Nebraska and Colorado*, No. 126, Original (Republican
22 River), and actively participated in the settlement of the Republican River case. I

1 testified several times as an expert witness during various phases of the *Kansas*
2 *v. Colorado* trial.

3
4 After retiring as Chief Engineer in 2007, I established Pope Consulting, LLC and
5 have provided water related consulting services to a series of clients through the
6 current time. These included the Missouri River Association of States and Tribes,
7 the State of Kansas, the Garden City Company and others.

8
9 All of these positions included significant involvement in water management,
10 water administration and water policy issues.

11
12 **Q: What has been your involvement with the Republican River Compact and**
13 **related issues?**

14 A: As Chief Engineer, I served as the Kansas Commissioner to the Republican
15 River Compact Administration (RRCA). For many years, I directly participated in
16 various attempts to resolve Kansas' concerns about administration and
17 enforcement of the Republican River Compact through the RRCA in the 1980's
18 and 1990's, as well as through separate negotiations with Nebraska officials.
19 After Kansas was unable to resolve its concerns, Kansas initiated litigation in
20 1998 to enforce the terms of the Compact. Early in the litigation after some
21 significant legal issues were decided, the States, with the involvement of the
22 United States, entered into settlement discussions. I led the settlement team for
23 Kansas and participated in all significant negotiations that led to the adoption of

1 the Final Settlement Stipulation (FSS) in late 2002. After a hearing on the
2 proposed settlement on January 6, 2003, the FSS was recommended for
3 approval by Special Master McKusick and it was subsequently adopted by the
4 U.S. Supreme Court in its May 19, 2003 Decree in *Kansas v. Nebraska and*
5 *Colorado*, No 126, Orig.

6
7 Since my retirement as Chief Engineer, I have provided consulting services for
8 the State of Kansas related to the Republican River Compact. This has included
9 testimony during two previous arbitrations and in the 2012 and 2013 trial
10 segments in *Kansas v. Nebraska and Colorado*.

11
12 **Q: What was the nature of the hearing before Special Master McKusick on**
13 **January 6, 2003, and what was your role at the hearing?**

14 A: The purpose of the hearing was to allow the States to brief the Special Master on
15 the provisions of the FSS. In preparation for the hearing, the States and
16 representatives of the United States met in advance to prepare and make
17 assignments for their respective presentations before the Special Master. This
18 preparation was intended to ensure that the States and the United States would
19 be speaking with one voice before the Special Master, in an appropriate and
20 organized presentation. While introductory and closing comments were made by
21 Counsel for the parties and the United States, and they responded to questions
22 from the Special Master, each of the lead negotiators--Hal Simpson (Colorado),
23 Roger Patterson (Nebraska), and me (Kansas)--provided comments about

1 certain portions of the FSS by mutually agreed assignment. Through discussion
2 among the participants before the hearing, the content of this joint presentation
3 was developed. As a result, each participant was speaking with considerable
4 confidence that a clear and accurate presentation of the States' shared positions
5 was being provided to the Special Master.

6
7 **Q: What was the role of other members of the Kansas negotiation team that**
8 **led to the approval of the FSS?**

9 A: The Kansas negotiation team included engineers David Barfield and Dale Book
10 and attorneys John Draper and Lee Rolfs, with assistance from other individuals
11 as needed. In particular, Steve Larson assisted Kansas greatly by serving on the
12 Modeling Committee and playing a key role in the development of the RRCA
13 Groundwater Model. Dale Book and David Barfield also served on the Modeling
14 Committee. David Barfield was my key staff technical advisor and also served
15 on the accounting work group, with assistance from Dale Book, who was a key
16 consultant on various aspects of the negotiations. Because of his extensive
17 involvement on the negotiation team, the Modeling Committee and the
18 accounting work group that developed the RRCA Accounting Procedures, Mr.
19 Barfield became especially knowledgeable about the FSS, including its various
20 appendices, many of which he helped develop. After the FSS was adopted in
21 late 2002, the RRCA Groundwater Model was approved by the States and
22 submitted to the Special Master by July 1, 2003, as required by the schedule.
23 Mr. Barfield and I also worked together on the implementation of the FSS through

1 the RRCA, where he served on the RRCA Engineering Committee. He also
2 played a key role in the monitoring of compliance with the FSS for Kansas.
3 When I retired as Chief Engineer in 2007, he was appointed as the next Kansas
4 Chief Engineer, so the continuity for Kansas was very good as he was already
5 very familiar with the duties of the Chief Engineer position, especially as they
6 related to the Republican River Compact and FSS. In addition, he and I had also
7 worked closely on most other interstate water issues, such as those related to
8 the Missouri and Arkansas Rivers.

9
10 **Q: Why did Kansas approve the FSS, and what were Kansas' expectations**
11 **from the Settlement?**

12 A: There were a variety of reasons why I recommended approval of the FSS to the
13 Governor and Attorney General of Kansas. In general, we expected Kansas to
14 benefit from the protections the FSS promised to provide: to receive its
15 entitlement under the Compact, especially for the benefit of its water users who
16 had suffered shortages due to upstream overuse for many years; to resolve a
17 long standing dispute with Nebraska on what we thought were clear terms; to
18 resolve issues regarding the administration of the Compact and how to measure
19 compliance, by using the jointly developed RRCA Groundwater Model and the
20 RRCA Accounting Procedures, both of which could only be changed by
21 unanimous agreement of the Compact Administration; and to avoid protracted
22 litigation. During the negotiations, it also appeared that a good working
23 relationship and trust had been developed among the States and that they were

1 committed to both the implementation of the FSS and compliance with the
2 Compact and the U.S. Supreme Court Decree. However, the cost of agreement
3 was substantial to Kansas: Kansas gave up its damage claim and made a
4 number of concessions during the negotiations to develop an overall settlement
5 package that was acceptable to all the States and to the United States.
6

7 **Q: What are some of the key provisions of the FSS, especially related to the**
8 **provisions in dispute during this Arbitration?**

9 A: Without attempting to list all the provisions, I would generally note that Section I
10 of the FSS, Ex. WSY/RC J64, includes provisions related to resolution of the
11 litigation, waiver of existing claims, and agreement to undertake the obligations
12 provided for in the FSS and to specify actions to be undertaken by the RRCA,
13 such as adoption of the RRCA Accounting Procedures. Section II includes many
14 important definitions. Section III deals with existing development, including a
15 moratorium on the drilling of new wells above Guide Rock, Nebraska, with certain
16 exceptions, as well as acceptance of the restrictions on new wells imposed by
17 existing laws and regulations in the portion of the basin in Northwest Kansas and
18 Colorado. Section IV includes some of the major provisions of the FSS related to
19 Compact Accounting, including use of the RRCA Groundwater Model and RRCA
20 Accounting Procedures.
21

1 Section IV.H, as further described in Subsection III.B.1.k, notes that
2 Augmentation credit shall be calculated in accordance with the RRCA Accounting
3 Procedures and the RRCA Groundwater Model.
4

5 Section V deals with the additional requirements related to an important location
6 in the basin at Guide Rock, Nebraska, where the Superior-Courtland Diversion
7 Dam is located and water is diverted by the Kansas and Nebraska Bostwick
8 Irrigation Districts. It provides for additional water administration under certain
9 conditions and special provisions related to Water-Short Year Administration, as
10 specified Subsection V.B. Of particular importance to this proceeding,
11 Subsection V.B.2.e.i provides the methodology for determining Nebraska's
12 compliance with Subsection V.B.2: it will be calculated on a two-year running
13 average, as computed above Guide Rock, with any Water-Short Year
14 Administration year treated as the second year of the two-year average and
15 using the prior year as the first year. Subsection V.B.2.e.ii provides an
16 alternative, in that Nebraska may submit an Alternative Water-Short Year
17 Administration Plan to the RRCA for approval in accordance with the procedures
18 set forth in Appendix M.
19

20 **Q: What is your understanding of the Augmentation Plan provisions of the**
21 **FSS?**

22 **A:** Section IV.H of the FSS requires that Augmentation credit, as further described
23 in Subsection III.B.1.k, shall be calculated in accordance with the RRCA

1 Accounting Procedures and by using the RRCA Groundwater Model. Subsection
2 III.B.1.k was included as an exception to the moratorium related to augmentation
3 wells acquired or constructed by a State for the sole purpose of offsetting stream
4 depletions in order to comply with its Compact Allocations. It provides specific
5 criteria, such as the requirement that such wells shall not cause any new net
6 depletions to stream flow either annually or long-term, and how this would be
7 done, as well as a requirement for RRCA evaluation and approval.

8
9 My understanding of the intent of including these subsections related to
10 augmentation plans is the same as described by Hal Simpson, Colorado State
11 Engineer and lead FSS negotiator for Colorado, to Special Master McKusick at
12 the hearing on January 6, 2003 (see the transcript of that hearing, Ex. WSY/RC
13 J67, at pages 81-83). Mr. Simpson noted that: "And in particular, the States have
14 agreed that a State could acquire existing wells, eliminate the consumptive use
15 of water by these wells, and pump groundwater from these wells or even a new
16 well to a stream to be used as an offset to depletions caused by other
17 consumptive uses or wells in the basin." He went on to say: "We have agreed
18 that the use of these augmentation wells shall not cause any new net depletions
19 to the stream either annually or long term." I understood his reference to "or
20 even a new well" to recognize that an existing well field may need to be
21 reconfigured for augmentation purposes and that such a reconfiguration might
22 involve a new well. Mr. Simpson gave an example of how an augmentation plan
23 would work. He noted that Colorado brought up the idea of augmentation plans

1 as something to be considered as a last resort to come into compliance under
2 the Compact. Mr. Simpson also said: “But I want to make it clear, we just can’t
3 do it without first having the Compact Administration’s approval in advance of the
4 plan and how it would operate.”

5
6 I concur that the provision requiring RRCA approval was included to specifically
7 allow the details of the plan to be reviewed carefully and approved by all the
8 States. Roger Patterson, the Director of the Nebraska DNR and lead FSS
9 negotiator for Nebraska, responded to a question by the Special Master during
10 the same hearing (at page 17), noting that Hal Simpson was the expert on
11 augmentation plans and that he would cover them in more detail later in the
12 hearing. Mr. Patterson pointed out that prior to any State developing an
13 augmentation plan, it would have to come to the Compact Administration for
14 review and approval.

15
16 In summary, I do not believe the negotiators thought the FSS would allow
17 additional groundwater pumping, in addition to the amount of historical
18 consumptive use that was occurring, for augmentation because of the clear
19 restriction prohibiting any new stream depletion. This was especially the case
20 above Swanson Reservoir. See FSS, Subsection III.A.3.

21
22 **Q: What is your understanding of the Alternative Water-Short Year**
23 **Administration provisions of the FSS?**

1 A: As noted in response to the earlier question about key provisions of the FSS
2 related to this dispute, I noted that Subsection V.B.2.e.ii of the FSS provides an
3 alternative: Nebraska may submit an Alternative Water-Short Year Administration
4 (AWSYA) Plan to the RRCA for approval in accordance with the procedures,
5 criteria and schedule set forth in Appendix M. Paragraph 2 of Appendix M clearly
6 states that such a plan shall indicate the actions which Nebraska would
7 undertake to reduce its Computed Beneficial Consumptive Use (CBCU) from the
8 base condition and the amount of reduction expected from those actions. It
9 further notes that the Plan's designed reductions in CBCU shall be evaluated
10 using methods consistent with the RRCA Accounting Procedures and the RRCA
11 Groundwater Model. The base condition was not specifically defined, but I
12 believe it was meant to be the condition that would exist if an AWSYA Plan was
13 not developed or implemented.

14
15 Paragraph 4 of Appendix M provides that if an approved Plan is implemented,
16 Nebraska's CBCU of its Allocation above Guide Rock in Water-Short Year
17 Administration shall be calculated on a three year running average of the current
18 year plus the two previous years. However, notwithstanding compliance under a
19 three year running average, another important criteria is required: "...the two
20 year sum of Nebraska's current and previous year's CBCU in excess of its
21 Allocation above Guide Rock, pursuant to Subsection V.B.2., of the Stipulation
22 shall not exceed the amount of the CBCU that the plan was designed to reduce
23 above Guide Rock." In other words, Nebraska can develop an AWSYA Plan,

1 with certain defined actions, but it has to include an expected reduction of CBCU
2 from these actions. The expected reduction would have to be quantified,
3 because Paragraph 4 requires that the two year sum of Nebraska's current and
4 previous year's CBCU in excess of its Allocation above Guide Rock shall not
5 exceed the amount of the CBCU that the Plan was designed to reduce above
6 Guide Rock. I do not see how an AWSYA Plan could be evaluated by the RRCA
7 without a solid estimate of expected reduction of CBCU, and this information
8 would also then be needed to determine compliance with Appendix M and
9 related portions of the FSS.

Pursuant to 28 U.S.C. §1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 21, 2013.


