
IN RE: NON-BINDING ARBITRATION PURSUANT TO THE FINAL
SETTLEMENT STIPULATION, KANSAS v. NEBRASKA and
COLORADO
No. 126 Original, U.S. Supreme Court

TRANSCRIPT OF ARBITRATION PROCEEDINGS
before
KARL J. DREHER, ARBITRATOR

Tuesday, April 14, 2009

VOLUME X

BE IT REMEMBERED that the above-entitled matter came on for Arbitration before KARL DREHER, Arbitrator, held at Byron Rogers Building, 1929 Stout Street, Room C-205, Denver, Colorado on the 14th of April, 2009.

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1 ARBITRATOR DREHER: Good morning.

2 It's about 8:37, or so, on April 14, and
3 this is the last day of hearing in the Nonbinding
4 Arbitration regarding Republican River matters
5 initiated in October pursuant to the Final Settlement
6 Stipulation in Kansas v. Colorado and Nebraska No.
7 126 Original.

8 I do see at least one new face here. So
9 maybe for the record, we should have counsel identify
10 themselves.

11 MR. DRAPER: Yes, Your Honor, I am John
12 Draper. I might just mention the name of the people
13 who are at counsel table with me this morning.

14 Across from me is Chris Gruenwald. Next
15 to him is Burke Griggs. Coming around the table,
16 Dale Book. And next to me David Barfield.

17 ARBITRATOR DREHER: Thank you.
18 Nebraska.

19 MR. WILMOTH: Good morning, Mr.
20 Arbitrator.

21 This is Tom Wilmoth, appearing on behalf
22 of the State of Nebraska. I have with me at counsel
23 table, Don Blankenau, also from my firm, Husch
24 Blackwell & Sanders; and also Mr. Justin Lavene and
25 Mr. Marcus Powers from the Attorney General's office.

1 A new face, I will let him introduce
2 himself.

3 MR. CHAFFIN: Mr. Dreher, my name is
4 John Chaffin. I'm an attorney with the United States
5 Department of Interior, Solicitor's office, and I'm
6 here today as part of the testimony of the two Bureau
7 of Reclamation employees.

8 And if it would please you, at the
9 beginning, I have a short statement about their
10 appearance here today that the Secretary has asked me
11 to put on the record.

12 And other than that, I hope you don't
13 hear from me for the rest of the time.

14 ARBITRATOR DREHER: Thank you.
15 Colorado.

16 MR. AMPE: My name is Peter Ampe. With
17 me at counsel table is Autumn Bernhardt.

18 ARBITRATOR DREHER: All right. Before
19 we get started, Mr. Draper, how do you propose to
20 proceed? Are you going to call the Bureau witnesses
21 or is --

22 MR. DRAPER: I would propose to call
23 first Mr. Thompson and then Mr. Swanda and ask them
24 questions with regard to the documents that we have
25 identified and provided to you late last week.

1 ARBITRATOR DREHER: Regarding the
2 documents that you provided, I spent some time
3 Saturday looking through them, and it appears that
4 there is some duplication between Kansas and
5 Nebraska.

6 How do you propose to deal with that?

7 MR. DRAPER: Well, there is inevitably a
8 little bit of duplication in a case.

9 If Nebraska wishes to -- when it's
10 numbering its exhibits -- I don't know if we have the
11 final numbering or not. They may choose to simplify
12 things by relying on the fact that some of those
13 documents have already been included in the record as
14 a Kansas exhibit.

15 I think if they would like to have their
16 own version so they can refer to it as an Nebraska
17 exhibit, that is their prerogative as well.

18 MR. WILMOTH: We don't mind just
19 referencing the Kansas exhibits; if they are
20 introduced and accepted, that's fine.

21 ARBITRATOR DREHER: All right.

22 MR. WILMOTH: The only caveat to that, I
23 guess, is if Kansas elects not to move to admit a
24 particular exhibit, we might want to introduce our
25 own copy of that and do so; but beyond that, we will

1 certainly try to eliminate duplication.

2 ARBITRATOR DREHER: And do you intend to
3 put on some kind of a response today?

4 MR. WILMOTH: Well, we would like to do
5 that. We have not been able to reach accommodation
6 with Kansas on that point.

7 I believe -- well, I will let Kansas
8 speak for itself, but I believe Kansas' position is
9 there should not be a responsive component to this
10 hearing today.

11 Our response to that is quite simple.

12 Throughout the course of the deposition
13 of two individuals you will hear from today, it
14 became apparent that much of the testimony that
15 they provided is reliant on information that they
16 perceived to be received from the State of
17 Nebraska.

18 And on account of that fact, we would
19 like to be able to call Mr. Schneider -- excuse me,
20 Dr. Schneider to provide some context for those
21 perceptions and that information.

22 We would propose to limit our response
23 strictly to the matters that are raised by the Bureau
24 and not attempt to introduce any new exhibits or,
25 obviously, reargue any other component of the case.

1 But that is our position. I don't
2 believe that the State of Kansas has agreed to that.

3 ARBITRATOR DREHER: All right.

4 Mr. Draper.

5 MR. DRAPER: That's right, Your Honor,
6 we do not agree.

7 This is not the type of testimony that
8 one would expect to call for either a responsive case
9 or rebuttal by Kansas and Nebraska.

10 This is testimony by employees of a
11 Federal agency that are testifying today under strict
12 impartiality rules of the agency and we had never
13 expected to do any rebuttal or expected Nebraska to,
14 suddenly at this point, come up with a suggestion
15 that they would put on a witness that they had not
16 notified us of before late Friday afternoon.

17 And, of course, they have given us no
18 opportunity to inquire into what this witness's views
19 or whether it's going to be expert testimony or lay
20 testimony, what exhibits that witness would address,
21 and otherwise allow us to prepare proper
22 cross-examination.

23 It also means that we are not in a
24 position today to provide a rebuttal case. We
25 haven't -- we haven't had a chance to inquire what we

1 would be rebutting. They didn't even notify us until
2 4:00 on Friday afternoon.

3 So again, the timing was interesting
4 that they would have gone through this whole process,
5 especially when we, on the record I think with your
6 direction, were instructed to come back today to
7 present Bureau testimony and give closing arguments,
8 period.

9 There was never any suggestion that it
10 would go beyond that into responsive cases and
11 rebuttal cases.

12 So we are strongly opposed to this. We
13 think that this type of evidence doesn't call for a
14 response.

15 It's an independent Federal agency
16 response. These are not witnesses that are either
17 employed by one of the parties or have been hired as
18 consultant by one of the parties to provide testimony
19 or opinions in this case.

20 They are simply here to identify certain
21 documents and answer any questions that the parties
22 may have and the Arbitrator may have about these
23 documents.

24 ARBITRATOR DREHER: Well, I'm going to
25 think about this as we proceed and we will hear what

1 the testimony is and then come back and revisit how
2 best to treat any response, if any. We will see what
3 they have to say.

4 Colorado, do you have any views about
5 this?

6 MR. AMPE: Seems to me this is not so
7 much a supplemental hearing as we have,
8 unfortunately, taken a couple of witnesses out of
9 turn. So had we not had this accelerated schedule,
10 perhaps we would have been able to meet the Bureau's
11 timetable; these two witnesses would have testified
12 in the initial Kansas direct case, as was intended;
13 and to the extent at that point Nebraska would have
14 been able to address that testimony in the responsive
15 case, then I suppose they could have.

16 So, to me, I look at it that way, rather
17 than looking at a supplemental hearing.

18 ARBITRATOR DREHER: All right.

19 Is it Mr. Shane?

20 MR. CHAFFIN: Chaffin.

21 ARBITRATOR DREHER: Why don't you begin
22 with an opening statement, please.

23 MR. CHAFFIN: Mr. Dreher, my name again
24 is John Chaffin. I'm an attorney with the United
25 States Department of Interior with the Solicitor's

1 Office. And I'm here today as part of the request
2 the State of Kansas made to have two Bureau of
3 Reclamation employees provide testimony at this
4 hearing. Those were done pursuant to regulations
5 found at 43 Code of Federal Regulations 2.8, more
6 commonly known as the Touhy regulations.

7 As a part of those regulations, the
8 Secretary has set out what the authorizing officer is
9 to authorize and within the request that he received
10 from the parties, the people that are to testify are
11 then given directions as to what the boundaries of
12 their testimony have been.

13 And in our response back that has been
14 provided to all three States, there were boundaries
15 on what the witnesses were authorized to testify to
16 and the Secretary's office has asked that I be here
17 today to monitor that.

18 I see no reason why the States won't
19 follow that. They are very aware of it; it is
20 pursuant to that authorization that they are here
21 today.

22 ARBITRATOR DREHER: All right.

23 MR. CHAFFIN: Appreciate it.

24 ARBITRATOR DREHER: Mr. Draper, you may
25 proceed.

1 MR. DRAPER: Just before we get started,
2 I might note for the record that I did provide to
3 you, Mr. Arbitrator, Volume 5 of 5 of the Final
4 Settlement Stipulation, as we had agreed I would at
5 the last time that we were together in hearing.

6 This morning we have also provided an
7 updated list of Kansas exhibits that includes the
8 exhibits we intend to ask the Bureau of Reclamation
9 witnesses about. And it also includes some
10 corrections that we made in the designation of some
11 of the earlier exhibits.

12 With that, we would call to the stand
13 Mr. Aaron M. Thompson.

14 ARBITRATOR DREHER: All right.

15 Mr. Thompson, would you raise your right
16 hand, please.

17 AARON M. THOMPSON,
18 having been first duly sworn, was examined and
19 testified as follows:

20 DIRECT EXAMINATION

21 BY MR. DRAPER:

22 Q Good morning, Mr. Thompson.

23 Would you please state your full name
24 and professional address for the record.

25 A Aaron M. Thompson, I'm an area manager

1 with the Bureau of Reclamation.

2 Q And where is your office located?

3 A I'm in -- I'm located in Grand Island,
4 Nebraska.

5 Q And when did you start as area manager?

6 A I started as area manager in Grand
7 Island in October of 2007.

8 Q I will ask you just a few questions
9 about your background.

10 Where did you grow up?

11 A I grew up in a small farming community
12 called Broken Bow, Nebraska. It's right -- it's
13 right in the center of the state.

14 Q What college degrees do you hold?

15 A I went to the University of
16 Nebraska-Lincoln and obtained a bachelor of science
17 mechanical engineering. And then from the University
18 of Phoenix, I received a master's in business
19 administration.

20 Q Have you held other positions with the
21 Bureau of Reclamation?

22 A I have. I started with the Bureau of
23 Reclamation in 2001 at Hoover Dam, where I was a
24 mechanical engineer.

25 I then moved down to Davis Dam as a

1 facility manager in February of 2004. From there, I
2 moved up to Billings, Montana to serve as the
3 regional director's special assistant. That was in
4 February of 2006.

5 In August of 2006, I moved to our
6 Wyoming area office, which covers all of the projects
7 in Wyoming and in a small part of the North Platte
8 River to North Platte, Nebraska. And I served as the
9 deputy area manager in Wyoming.

10 And then in August of 2007, I started my
11 move and I think officially was there full-time in
12 October of 2007, in Nebraska.

13 Q Did you hold other professional
14 positions before joining the Bureau of Reclamation?

15 A I did. I worked for a company out of
16 Kansas City -- Overland Park, Kansas, I guess, called
17 Black and Veatch. I was a mechanical engineer for
18 their engineering power plant, engineering design
19 group.

20 Q What are your responsibilities as area
21 manager?

22 A As area manager, I'm responsible for the
23 projects that we have in the Nebraska/Kansas area
24 office. We have 15 large projects, roughly half in
25 Nebraska and half in Kansas, and we have one project

1 in Colorado: Bonny Reservoir.

2 Responsibilities include meeting all
3 project needs; making sure we are in compliance with
4 any of our natural resource responsibilities; making
5 sure we are in compliance with our contracts with our
6 customers, our irrigation districts which I refer to
7 as our customers; and assuring that the Bureau of
8 Reclamation is being responsible for their -- their
9 projects.

10 Q In the carrying out of your
11 responsibilities, do you have interactions with
12 officials of the State of Nebraska and its political
13 subdivisions?

14 A Yes, I do. I tend to meet with
15 different parts of the state of Nebraska. We have
16 contracts with some of our managing partners
17 throughout the state of Nebraska. We have obviously
18 irrigation district contracts. We interact between
19 them and the Department of Natural Resources.

20 Q And in addition to that, do you have
21 interactions with Republican River Compact
22 Administration?

23 A I do. I regularly attend the RRCA
24 meetings and also have interaction with the
25 Republican River Coalition that was formed by the

1 NRDs.

2 Q I'm going to ask you a set of questions
3 about a series of documents that we have marked as
4 exhibits, and I have provided you with a set of
5 those.

6 Do you have those there?

7 A I do.

8 Q As you may have just heard, these
9 documents have been provided a short time ago to
10 Mr. Dreher, so he will have some familiarity with
11 these; but I would like to walk through these
12 documents, if I may, and ask you to pick out certain
13 points that you may consider significant.

14 I would start in that regard with Kansas
15 Exhibits 74.

16 Do you recognize this letter?

17 A I do recognize this.

18 Q Would you describe it generally, please.

19 A It's a letter from yourself asking us
20 for some documentation under the Touhy Request in
21 preparation for this nonbinding arbitration.

22 Q Do you keep documents like this as part
23 of your normal duties as area manager?

24 A Yes, I do.

25 Q And I would draw your attention at the

1 bottom of the first page and the top of the second
2 page. There is a recital of some of the previous
3 involvement that the Bureau of Reclamation and the
4 United States has had with the matters which are the
5 subject of this arbitration.

6 Was that information accurate, in your
7 view?

8 A In my view, this is accurate. We were
9 involved with the Republican River Compact, the Final
10 Settlement Stipulation and other items that I see
11 listed.

12 Q And then there are a number of subjects
13 that are specifically listed as areas of inquiry.

14 Did you participate in responding to
15 those requests for information?

16 A Yes, I did. I have had my staff gather
17 most of the information, but I participated as we --
18 as we gathered the information for the request.

19 Q And just turning, then, to page 4, there
20 is a list of criteria that apply to cooperating with
21 the request like the one described in this letter.

22 Do you see the second criterion
23 regarding maintaining impartiality in any actions
24 that the Bureau might take?

25 A Yes, I do.

1 Q And is your testimony today in line with
2 that requirement?

3 A Yes, it is.

4 Q I might draw your attention to the next
5 criterion concerning minimizing the possibility that
6 the Department of Interior would become involved in
7 issues that are not related to its mission or
8 programs.

9 In your knowledge of the subject matter
10 of this proceeding, does this proceeding involve
11 issues that are related in important ways to the
12 mission programs of the Bureau of Reclamation?

13 A Yes, it does.

14 Q And turning to the last page of the
15 letter, other counsel, including Department of
16 Interior counsel, were copied on this request; is
17 that right?

18 A Correct.

19 Q There is an attached letter that is
20 actually a separate exhibit that we will get to
21 later.

22 The last page is the transmitting email
23 that includes the noted persons on the cc list in the
24 letter; in addition, also other counsel for the three
25 States; is that right?

1 A Correct.

2 Q Now, the Bureau of Reclamation responded
3 to this request; is that right?

4 A Yes, we did, on March 4.

5 Q And is that response contained in what
6 has been designated Kansas Exhibit 75?

7 A Yes, it is.

8 Q Was much of this information provided in
9 electronic form?

10 A I believe all of it was -- with the
11 exception of the cover letter, was provided in
12 electronic form.

13 Q I think there was also some hard copy
14 emails and so on that hadn't been scanned, if I
15 recall. Would that be possible?

16 A Yes.

17 Q Turning to the third page of the exhibit
18 in the last major paragraph of the letter, the
19 regional director specifies the scope of the
20 testimony that you and Mr. Swanda are authorized to
21 give in this proceeding; is that right?

22 A Yes, it does.

23 Q And that is generally consistent with
24 what we heard just now from Mr. Chaffin?

25 A Yes, it was.

1 Q Would you just state briefly what the
2 scope of your testimony is specified to be.

3 A Briefly, my testimony is -- the scope or
4 the sideboard I'm supposed to follow within our past
5 and current policies and any projects in the
6 Republican River Basin where we had water contracts
7 or agreements with the States, specifically for the
8 development -- agreements that were developed to
9 assist Nebraska with Compact compliance.

10 Q And if I read this correctly, in
11 contrast, Mr. Swanda, the other Reclamation witness,
12 will be testifying not to the policy positions of the
13 Bureau, but rather to hydrologic and operational
14 engineering type issues; is that right?

15 A That's correct.

16 Q I would like to turn, then, to the next
17 Kansas exhibit, which is Exhibit No. 77. I wouldn't
18 ask you to go through this in detail, but can you
19 identify what this document is, generally.

20 A This was part of our narrative response
21 to three questions you had from your January 29 Touhy
22 Request.

23 Q Does it show the projects of the Bureau
24 of Reclamation in the Republican River Basin?

25 A I apologize, I'm on Kansas Exhibit 76.

1 Q Yes, 76, it's a map --

2 A Yes.

3 Q -- entitled "Nebraska-Kansas Area Office
4 Republican River Projects."

5 A Correct. This was provided in the --
6 also in the Touhy Request.

7 Q And I will, since Mr. Swanda is going to
8 be testifying with respect to operational aspects of
9 the Bureau's work, I will pass on now, if I may, to
10 what has been marked as Kansas Exhibit 77.

11 Were you involved in the preparation of
12 this document?

13 A Yes, I was.

14 Q And what is the title?

15 A The title that I commend is "Reclamation
16 Statement on Concerns with Project Viability in the
17 Republican River Basin," dated March 4, 2009. It's a
18 narrative response to Questions 1, 8 and 10.

19 Q Thank you.

20 I will try to observe the distinction
21 between the areas that you would like to cover and
22 that Mr. Swanda will cover.

23 There are three parts of this document,
24 as I read it. I would ask you to comment just
25 briefly as to what is in the first section of the

1 document entitled, "Bureau of Reclamation Involvement
2 and Major Interests in the Republican River
3 Basin," if you would.

4 A It's kind of -- it starts off with a
5 prehistory to our projects. It starts by talking
6 about the devastating floods and how the Bureau
7 became interested in designing and developing
8 projects in the basin. It talks a little bit about
9 our involvement with the States and the interest the
10 Federal Government had in the three States entering
11 into a compact before the United States went ahead
12 with their projects.

13 It follows by talking about
14 Reclamation's participation, not only with the
15 technical data or the hydrology of the system, but
16 how the Bureau of Reclamation would design their
17 projects to fit within the three-state Compact after
18 it was signed.

19 It continues to talk about how many
20 projects we developed throughout the Republican River
21 Basin and how these projects were expected to pay for
22 themselves or pay for their portion or their
23 responsibility of their irrigation component.

24 It talks a little bit about the total
25 cost -- the total construction cost of the projects

1 in the basin, 233 million was the total construction
2 cost, of which 139 million was allocated to
3 irrigation. Out of that 133 million of construction
4 cost, 39 million was to be repaid by the districts.

5 And then it talks a little bit about the
6 total conservation expected -- the total conservation
7 water that was expected to be in the basin and how
8 many acres that was to irrigate.

9 Q And would you read the last sentence of
10 that section that starts, "Each of the Federal
11 projects" -- just above the next heading.

12 A Oh. "Each of the Federal projects was
13 granted state water rights and water use by these
14 projects is an integral part of the river system and
15 the Compact allocation of water for each state."

16 Q I will leave the next section to ask
17 Mr. Swanda about, but ask that we turn to the last
18 page of this Exhibit 77.

19 What is the section that appears on that
20 page?

21 A This is a section where we address
22 Nebraska Republican Basin Natural Resources District
23 Integrated Management Plans, or IMPs, and the
24 protection of Reclamation's major interest in the
25 basin.

1 Q From your point of view with respect to
2 the policies and positions of the Bureau of
3 Reclamation, what is important about this section?

4 A I think it's -- it was important that
5 the Bureau of Reclamation testified to the Natural
6 Resources Districts on their IMPs.

7 I think -- I think the most important
8 part, I guess to me, is that the Federal Government
9 has an interest in protecting the viability of their
10 projects. The Federal Government has an interest in
11 how much each State is in compliance with not only
12 the other States, but within the design of the
13 Federal projects.

14 I think the second-to-last paragraph
15 hits that, kind of how the Bureau of Reclamation's
16 Federal storage projects were intended to -- were
17 intended to help the -- not only the irrigation
18 districts store water from year to year, but they
19 were also intended to help -- to help out in low
20 water years, be able to move water when the
21 irrigation districts have low water years, which does
22 help out the States in Compact compliance from time
23 to time.

24 I think -- I think it's important to
25 note it talks about groundwater pumping and other

1 upstream uses are progressively depleting reservoir
2 inflows. Reading the last sentence, "Without
3 additional limits and controls on groundwater
4 pumpers, irrigation deliveries and other important
5 project benefits will continue to decline."

6 And that goes strictly into the
7 irrigation district's responsibility to repay their
8 share of the construction cost and the O&M
9 allocations that they have been designated.

10 Just to finish my thought on the end of
11 that, it also -- it tries to highlight that with
12 reduced baseflows, with reduced inflows comes reduced
13 storage into our Federal reservoirs and that makes it
14 more difficult to provide water to assist a state --
15 State of Nebraska in Compact compliance activities.

16 Q And before we leave this section, at the
17 end of the first paragraph would you read that
18 sentence for us, that starts, "It is our position" --

19 A "It is our position that groundwater
20 consumptive use must be reduced to allow base flows
21 to recover to a level that will allow both Colorado
22 and Nebraska to consistently comply with the
23 Compact."

24 Q And when you say "groundwater
25 consumptive use must be reduced," by that, do you

1 mean beyond that what is currently required by the
2 IMPs?

3 A It is my belief that it needs to be
4 beyond what is currently required in the IMPs. We
5 have numerous resources that tell us, maps from USGS,
6 we have irrigation deliveries over time being
7 declining, we have groundwater tables declining, we
8 have reservoir streamflows declining.

9 We didn't get there overnight and it's
10 -- and the effects from groundwater mining can't be
11 replaced overnight, from what I'm told by my experts
12 and what I hear from experts from other states; and
13 that further -- further reductions are, in my
14 opinion, necessary to not only come into compliance,
15 but have equity among water users.

16 Q Let's turn now, if you will, to Kansas
17 Exhibit 78.

18 If you have a copy of that in front of
19 you, would you describe that for the Arbitrator,
20 please.

21 A This is a November 1 letter with -- to
22 the Upper Republican Natural Resources District. It
23 has our attached testimony on their Integrated
24 Management Plan.

25 Q And was this document prepared under

1 your supervision?

2 A Yes, it was.

3 Q And was this presented to the Upper
4 Republican Natural Resources District at the time it
5 was considering its current Integrated Management
6 Plan for adoption?

7 A Yes, it was.

8 Q Would you point out within the scope of
9 your testimony today what the important parts of this
10 written testimony might be.

11 A I think, just turning to the first page
12 of the written testimony, I think one of the most
13 important parts of this testimony is the graph that
14 is on the first page. In my office, we call it the X
15 Graph. And it shows the number of wells that were
16 put into, I believe, Chase County, Chase County
17 wells, and it also shows the reservoir inflow to
18 Enders declining.

19 There are a couple of graphs like this.
20 We, I believe, picked this one because it's in the
21 Upper Republican District boundaries; but it's very
22 important, it shows how -- how, over time, that as
23 wells and groundwater became more prevalent, that
24 inflows into streams and reservoirs declined.

25 And I think that's, in my view, one of

1 the most important parts of this testimony, is that
2 graph.

3 Q At the end of the section that includes
4 that graph on the next page, I see that, in the last
5 sentence, you refer to, This uncertainty could
6 negatively affect the future working relationships of
7 all parties involved, including the Bureau of
8 Reclamation.

9 What were you referring to at that
10 point?

11 A It's my recollection at that time that
12 we had entered into -- excuse me -- the irrigation
13 districts had entered into some contracts with the
14 State of Nebraska, or the -- or Republican River
15 Coalition for the purchase of some water.

16 We had worked with the irrigation
17 district, in particular Frenchman-Cambridge, I
18 believe in '07. They were selling project water, and
19 that's where the Bureau of Reclamation got involved,
20 because it was project water.

21 We didn't get involved in some of the
22 natural flow water that was only tied to the
23 irrigation districts, but the negativity of that
24 working relationship was the payment was delayed, or
25 being delayed for that project, water to our

1 irrigation district. And Reclamation was concerned
2 if payments weren't made, that the irrigation
3 districts may not be interested in the future to sell
4 their water.

5 And I think that was -- in the context,
6 that was the concern that I had over future -- at
7 that time, future water sales in the -- in the basin.

8 Q And do the following sections of the
9 testimony describe the current situation that
10 pertains in the basin, as seen by the Bureau of
11 Reclamation?

12 A Yes, it does.

13 Q And does that include a significant
14 impact of groundwater pumping in Nebraska on project
15 inflows?

16 A Could you repeat the question?

17 Q Does that include the impact of Nebraska
18 groundwater pumping on Bureau of Reclamation project
19 inflows?

20 A Yes, it does.

21 Q Have there been significant impacts on
22 those inflows, in the view of the Bureau?

23 A From the view of the Bureau, yes, there
24 has been significant impact to our inflows in our
25 reservoirs and our project water deliveries to our

1 irrigation districts.

2 Q This is with respect to the Upper
3 Republican Natural Resources District area.

4 Are the inflows to the Bureau facilities
5 in the Upper RD described in this testimony?

6 A Yes, they are. They are described on
7 page 3.

8 Q And generally, what is shown there with
9 respect to those project inflows?

10 A Generally, we try to show our Definite
11 Plan Report average. Definite Plan Report is what
12 was -- what the Bureau compiled after the design of
13 the irrigation districts and what they expected to
14 have for inflows into the projects.

15 Then it goes on to, in 20-year
16 increments, show what the average was for those 20
17 years, 1956 to '75 and '86 to 2005. And then we did
18 add at the end the actual -- or excuse me, we added
19 just a five-year average from 2001 to 2005 and then
20 the actuals in 2006. So those are not an average,
21 but an actual, the last column.

22 Q And were these values compiled by
23 Mr. Swanda and others under your supervision?

24 A Those were compiled under his office,
25 yes, under my supervision.

1 Q And is there corresponding data with
2 respect to project deliveries?

3 A The next page, at the top of page 4, it
4 does show the deliveries to the different irrigation
5 canals in that region. And we did those, it looks
6 like, in ten-year increments.

7 Q And does that show a trend, as you go
8 down each of the columns, for each of the canals?

9 A The trend is the same for water
10 deliveries or surface inflows, the trend is down.

11 Q With respect to your responsibilities
12 with respect to the Bureau of Reclamation policies,
13 would you describe what is contained in the rest of
14 the testimony.

15 A Just generally what is contained is a
16 conversation about the statutes that require the
17 entities to create the IMPs, looks like maybe
18 highlighted, "The hydrologically connected
19 groundwater and surface water to be managed
20 differently from unconnected groundwater and surface
21 water in order to permit equity among water users and
22 to optimize the beneficial use."

23 That was excerpted, I believe, from
24 Nebraska Statute 46-703.

25 We go on to talk about, under "Reality,"

1 we talk about the Republican River Compact and the
2 overall allocations.

3 Q And under that section, do you express
4 concerns about what the deficits may become in the
5 future, if action is not taken?

6 A Yes. At the end of the paragraph --
7 first paragraph on page 5, we talk about the deficit
8 offset likely to be much -- to be as much as 60- to
9 75,000 acre-feet per year.

10 We generally talk about Compact
11 Administration, the expectations of the Bureau of
12 Reclamation, which I think I have talked about, but
13 in general, the Bureau of Reclamation continues --
14 wants to, and plans on, continuing to operate their
15 facilities and plans to have viable projects. That
16 was our plan when we designed the project and that is
17 still our current -- our current plan.

18 Then we went into some specific comments
19 on the IMPs themselves.

20 And then we talked about conclusions and
21 final statements. One of our -- we started off on
22 the bottom, last paragraph on page No. 6, one of our
23 concerns in the IMPs, it starts off, "Of grave
24 concern with goal number 5 as stated in the draft
25 IMP. Goal number 5 states 'Reserve any streamflow

1 available from regulation, incentive programs, and
2 purchased or leased water required to maintain
3 compact compliance from any use that would negate the
4 benefit of such regulations or programs.'" "

5 We go on to say, "That interpretation
6 that has to be assumed from Goal number 5 is there
7 will never be an improved, restored surface water
8 supply."

9 That was, I would classify as one of our
10 largest concerns and we didn't feel that was
11 consistent with Nebraska state statute 46-703, that
12 needs to be equity among water users.

13 Q And at the end of the statement on page
14 7, is there expressed there the view that Reclamation
15 expects the Federal projects to continue as operated
16 and planned -- to operate as planned and authorized?

17 A Yes, it does.

18 Q And does that, in the view of the Bureau
19 of Reclamation, include Compact compliance achieved
20 through restoring the inflows to Federal projects?

21 A Yes, it does.

22 Q The next two exhibits are, I think,
23 parallel to Exhibit 78.

24 Exhibit 79, is that indeed parallel
25 testimony, only this time relating to the proposed

1 IMP of the Middle Republican Natural Resources
2 District?

3 A Yes, it is. It's nearly identical, but
4 various differences throughout the document.

5 Q This testimony, for instance, would be
6 adapted to look at the particular projects within the
7 Middle Republican area, as opposed to the Upper
8 Republican area in the previous exhibit?

9 A Right. For example, it might look at
10 reservoirs that are a bit more downstream or canals
11 or irrigation canals that are a bit more downstream
12 from the Upper.

13 Q And were the major points that are made
14 in Exhibit 79 generally similar to those that we just
15 discussed with respect to Exhibit 78?

16 A Yes, I would say that the major points
17 are nearly the same.

18 Q And is the same also true of what has
19 been identified as Kansas Exhibit 80, this time with
20 respect to testimony provided on January 15, 2008 to
21 the Lower Republican Natural Resources District?

22 A Yes. Once again, this is testimony to
23 the Lower and it is -- it parallels the concerns of
24 main point on the Upper and Middle.

25 Q And to your knowledge, were significant

1 changes made by the NRDs as a result of the comments
2 they received to reduce the amount of allowed
3 groundwater pumping in the final views?

4 A To my knowledge, there was no
5 significant changes after my testimony was
6 introduced.

7 Q Would you turn your attention now to
8 Kansas Exhibit 81.

9 These are a couple of excerpts from a
10 document that we were provided in response to our
11 request. It doesn't have a title page, but do you --
12 are you able to provide us the name of the study of
13 which these excerpts are a part?

14 A Yes. This is -- this is the summary and
15 conclusion of the draft Frenchman Valley Appraisal
16 Study.

17 Q And from a policy point of view, given
18 that we will revisit this with Mr. Swanda, what is
19 the general purpose of this appraisal study that is
20 underway?

21 A The general purpose of this appraisal
22 study is to look at the irrigation districts and the
23 reservoir in the Frenchman Valley and to determine if
24 there is further Federal involvement needed, meaning
25 go to a feasibility study or a more in-depth study.

1 What this study generally is doing is
2 looking at options that the districts have in the
3 Frenchman Valley as far as what options they have in
4 the future as far as water supply, when they could
5 irrigate, how much they could irrigate, based on --
6 based on current inflows and . . . that's it.

7 Q All right, thank you.

8 I will revisit that with Mr. Swanda.

9 Let me ask you now to turn to Kansas
10 Exhibit 82, if you would, please.

11 Is this a letter that you wrote?

12 A Yes, it is.

13 Q And what was the purpose of this --
14 well, who was it written to, please?

15 A The letter is written to the Attorney
16 General's Office for the State of Nebraska. It was
17 addressed to Mr. Lavene.

18 Q And what was the purpose of the letter?

19 A The letter was -- it's a two-part
20 letter. The first one was in January, and it was to
21 address action items, or items we had from a meeting
22 with the State of Nebraska to discuss surface water
23 purchases. And it wasn't just -- it was -- the State
24 of Nebraska NRD, I believe, was there; ourselves.
25 And it was to just -- it was just to address in

1 general, overall how a long-term or -- instead of
2 doing a single one-year water purchase, how that
3 might happen if we went into a longer term, multiyear
4 water purchasing scenario.

5 And it just laid out some general, I
6 guess, policies that we wanted the State of Nebraska
7 to be aware of.

8 For example, 10,000 acre-feet, if you
9 are going to purchase more or less than 10,000
10 acre-feet, there is a parallel of how much authority
11 -- how much higher in the chain of command you needed
12 to go and what authority you needed to get to
13 purchase that amount of water.

14 It wasn't -- it was just trying to lay
15 out those general type -- type guidelines.

16 Q And whether it's less than 10,000 or
17 more than 10,000 acre-feet, there are specific
18 contracting environmental and approval processes that
19 must be successfully navigated; is that right?

20 A Correct.

21 Q And they are simply more complicated and
22 require higher levels of approval if you go over
23 10,000 acre-feet?

24 A As picking that example, yes.

25 Q So in this January 10, 2008 letter, you

1 were providing the Attorney General's Office with
2 notice of what you considered were some of the
3 requirements that needed to be satisfied in order to
4 obtain Bureau of Reclamation water?

5 A Correct.

6 Q And that would be water that would be
7 used for Compact compliance purposes; is that right?

8 A Yes. It would be, as water used in
9 previous purchases, for Compact compliance.

10 Q Now, you referred to a second part of
11 this letter. Was that your May 7, 2008 letter, which
12 we have marked as Kansas Exhibit 83?

13 A Correct.

14 Q What was the further purpose of this
15 letter?

16 A We had some -- we had some further
17 questions by the State -- or the Attorney General's
18 Office. It think we had some further conversations
19 at our RRCA meetings and just wanted to issue a, kind
20 of some further guidelines or sideboards in which I
21 thought would be helpful for the State to understand,
22 or at least to think about, before entering into any
23 short- or long-term water purchase or lease.

24 Q And have you had further consultations
25 or negotiations with the State of Nebraska based on

1 your May 7, 2008 letter?

2 A No, I haven't.

3 Q Is there any current effort that
4 involves you, as area manager, by the State of
5 Nebraska to set up either short-term or long-term
6 purchases from the Bureau of Reclamation projects?

7 A There are no current water leases or
8 purchases being contemplated or discussed with the
9 State or anyone else.

10 Q I would now like to draw your attention
11 to what has been marked as Kansas Exhibit 84. This
12 is a letter dated May 1, 2006 to your predecessor,
13 the acting area manager; is that right?

14 A Correct.

15 Q This is a letter that you provided to us
16 from your files and which you maintained as one of
17 your responsibilities as area manager?

18 A Yes, it is.

19 Q Now, this refers to the Final Settlement
20 Stipulation.

21 Are you familiar with the Final
22 Settlement Stipulation?

23 A Yes, I am.

24 Q And does the Bureau of Reclamation play
25 a role in the implementation of the Final Settlement

1 Stipulation?

2 A To my understanding, we have some roles
3 with the Final Settlement Stipulation.

4 Q Including assessments as to whether a
5 water-short year is expected or not?

6 A That is usually the first one I think
7 of, is our accounting of conservation water in Harlan
8 County Lake and whether it's above or below 119,000
9 acre-feet.

10 The other one I can think of is we are
11 part of a study to do -- study conservation
12 activities on the Republican River. And that's a, I
13 believe, a five-year study to be completed this year.

14 Q There is a requirement in the FSS with
15 regard to the water-short year administration, that
16 the State of Nebraska provide a letter specifying
17 what actions may be taken to deal with water-short
18 year conditions; is that right?

19 A That is my understanding, yes.

20 Q And this is -- this letter is in
21 satisfaction of that requirement; isn't that right?

22 A Yes, it is.

23 Q And in the first block-indented
24 paragraph there on the first page, I would draw your
25 attention to the last sentence of the block indent,

1 which indicates that some irrigators in the Superior
2 Canal surface water delivery area will be using
3 alternate supply from groundwater wells located below
4 Guide Rock diversion dam.

5 Do you see that?

6 A Yes, I do.

7 Q And is that consistent with your
8 knowledge with respect to the existence of wells to
9 provide water to the Superior Canal service area?

10 A I believe that's what we call commingled
11 acres, yeah, that's my -- my understanding, is that
12 this is referring to those surface water people that
13 might be within our surface water boundaries or
14 irrigation districts that are using wells.

15 Q I think I asked you earlier whether
16 there were any ongoing negotiations or consultations
17 between the Bureau of Reclamation and the State of
18 Nebraska regarding either short-term or long-term
19 leasing of project water. And your answer was no.

20 Are there any agreements that are now in
21 place that have been previously negotiated that
22 provide for the leasing or the transfer of project
23 water for Compact compliance purposes?

24 A No, not to my knowledge. All previous
25 leases or purchases are considered complete by the

1 Bureau of Reclamation.

2 Q Can the Bureau of Reclamation guarantee
3 that project water would be available to assist with
4 Compact compliance in any given year in the future?

5 A No, the Bureau cannot guarantee what
6 quantity of water may be available in the future.

7 MR. DRAPER: No further questions.

8 ARBITRATOR DREHER: All right. I have a
9 couple at this point.

10 Mr. Thompson, if I understood you
11 correctly, you began as the area manager in
12 October 2007. Where were you before that assignment?
13 Were you in Billings then, in the regional director's
14 office?

15 THE WITNESS: A year before that
16 assignment, I spent as the deputy area manager in the
17 Wyoming area office.

18 ARBITRATOR DREHER: So when were you in
19 the Great Plains office?

20 THE WITNESS: I was there for a very
21 short time between February of '06 and August of '06,
22 when I was a special assistant to the regional
23 director.

24 ARBITRATOR DREHER: Well, the reason I
25 was asking those questions is I noticed that the

1 comments -- or the written testimony that were
2 provided to the Upper Republican Natural Resource
3 District, those were dated November 1, 2009, which
4 means you would have been in your position for a
5 month.

6 THE WITNESS: Correct.

7 ARBITRATOR DREHER: And while you may
8 have been responsible for submitting this testimony,
9 I find it a little difficult to believe that you
10 could have grasped all of these issues in a month and
11 assembled this written testimony.

12 THE WITNESS: I didn't mean to imply
13 that those were all my direct words. Those are
14 definitely a group effort, not only from our regional
15 hydrologists and regional engineers and regional
16 contracting specialists, but also from our folks in
17 the field office and the local area office.

18 ARBITRATOR DREHER: Do you remember, or
19 do you know when the proposed Integrated Management
20 Plan was put out for comment? Do you know when that
21 was, by chance?

22 THE WITNESS: I do not remember when it
23 was -- when it was put out. It seems like we had
24 plenty of time to prepare.

25 ARBITRATOR DREHER: And I presume that

1 that preparation must have been underway before you
2 began your duties as the area manager?

3 THE WITNESS: I believe it was.

4 ARBITRATOR DREHER: I'm just trying to
5 get a sense for the context of how those were
6 prepared, noting that the testimony that was
7 submitted to both Upper Republican, Middle Republican
8 and the Lower Republican is very, very similar. I
9 mean there are certain differences.

10 Does this testimony in any way reflect
11 water reclamation policies regarding groundwater
12 effect on surface water supplies in any way?

13 THE WITNESS: I think that the testimony
14 encompasses the Bureau of Reclamation's view on
15 groundwater/surface water that is connected.

16 So, yes, it does embody the broad policy
17 of the Bureau of Reclamation.

18 ARBITRATOR DREHER: And I don't want you
19 to think like I'm giving you the third degree, I'm
20 not. I'm just trying to understand this document.

21 Before this was submitted to the Natural
22 Resources District, what kind of review would this
23 have gone through at Reclamation?

24 THE WITNESS: This would have been
25 through the review process all the way to our

1 regional director. Our regional director reports to
2 the Commissioners of the Bureau of Reclamation and we
3 have five regions. I'm part of the Great Plains
4 Region. Our regional director, Mike Ryan, or one of
5 his deputies or assistants, would have been reviewed
6 by them.

7 ARBITRATOR DREHER: To your knowledge,
8 would it have been submitted to the Commissioner's
9 office or the Secretary of Interior's office?

10 THE WITNESS: I can't remember if it was
11 submitted up there or not. I simply can't remember.

12 It wouldn't surprise me if it had been,
13 but from my memory, it definitely went to the
14 regional director.

15 ARBITRATOR DREHER: Turning now to
16 Exhibit 81, I understand this is an excerpt from a
17 draft appraisal study.

18 What would have been the date of that
19 appraisal study?

20 THE WITNESS: The last draft that I can
21 remember being put out was at the end of 2008. And
22 it -- I don't have a timeframe for you on when it
23 will be completed, but I would think within the next
24 couple of months.

25 As part of these appraisal studies, they

1 go out for review to all of the managing partners --
2 not managing partners, maybe I should call them study
3 partners, and that would be States, and different
4 entities within the State and our irrigation
5 district, so . . .

6 ARBITRATOR DREHER: The alternatives
7 that were identified, a flow-throw alternative, a
8 recreational alternative and groundwater recharge
9 alternative, I don't understand exactly the context
10 of those alternatives.

11 I mean, you have got an existing
12 irrigation district there, although their supplies
13 apparently are reduced. So are these alternatives to
14 the continuation of that irrigation operation, or
15 what are these alternatives?

16 THE WITNESS: The irrigation districts
17 we are talking about are more specifically to the
18 amount of deliveries and when they receive
19 deliveries, but we are looking at irrigation
20 districts that haven't seen deliveries in five, six,
21 seven years. So the group had to develop some
22 sideboards; they couldn't go too far in a general
23 study.

24 So, my opinion of these alternatives,
25 they tried to pick, well, what if they didn't become

1 irrigation districts? What if they just had
2 flow-through water? What if the reservoir was just
3 for recreation and didn't have an irrigation
4 component anymore because there is not enough water
5 to make the deliveries?

6 And then the third one is keep
7 deliveries to the projects, but make sure they are
8 just for groundwater recharge.

9 This study doesn't -- you know, this is
10 the first level of what I would call of a broad
11 study, and I think they wanted to keep the sideboards
12 pretty wide and just look at the different options so
13 if they investigate this in the future, there can be
14 an educated guess -- or an educated direction, I
15 guess, for purposes of Federal involvement.

16 These studies are not inexpensive. It
17 costs a lot of money to go, not only here, but down
18 the road to further investigate the options.

19 ARBITRATOR DREHER: Would Reclamation
20 receive any repayment under any of these
21 alternatives?

22 I mean it seems like the contracts are
23 structured around the irrigation district making
24 repayment. It's a little hard to understand how you
25 would get paid for flow-through alternative or

1 recreational alternative or groundwater recharge
2 alternative.

3 THE WITNESS: Right. You know, under
4 our current contracts we get paid; whether it's water
5 service or repayment, we get paid for water delivered
6 to farms or payment on O&M structures. And how would
7 that revise our contracts, I can't answer that.

8 But you are right, under our current
9 contracts, a couple of alternatives, there is not a
10 direct way for bringing revenue back to the Bureau of
11 Reclamation.

12 ARBITRATOR DREHER: Lastly, under the
13 recreation alternative, there is an entity identified
14 as the NGPC. It's in the last paragraph under the
15 "Recreation Opportunities" on page 52. I don't know
16 who that is.

17 THE WITNESS: I believe that is Nebraska
18 -- it sounded like you said Nebraska Game of Parks
19 Commission.

20 ARBITRATOR DREHER: Ah, okay.

21 THE WITNESS: NGPC.

22 ARBITRATOR DREHER: Yes. So the
23 Nebraska Game and Parks Commission?

24 THE WITNESS: Right. They -- obviously,
25 they have campground and boat-run ground and

1 different activities out there. They have wildlife
2 refuge areas, and they have an interest in the
3 alternatives and what happens to the projects in the
4 future.

5 ARBITRATOR DREHER: All right, thank
6 you.

7 Mr. Wilmoth.

8 MR. WILMOTH: Thank you very much.

9 CROSS-EXAMINATION

10 BY MR. WILMOTH:

11 Q Good morning, Mr. Thompson.

12 A Good morning.

13 Q Thank you again for appearing in this
14 proceeding, and I would like to thank Mr. Chaffin and
15 the Department of Interior for making you available.
16 This is very important to the States and we
17 appreciate your time.

18 Before we proceed, I want to make very
19 clear for the record the scope of your authorized
20 testimony.

21 It's my understanding, based on our
22 discussion in deposition, that you are not authorized
23 to testify to any future policies that might affect,
24 for example, the availability of surface water for
25 Compact compliance; is that accurate?

1 A Yes.

2 Q So I heard earlier that you are
3 authorized to testify solely to past and present
4 events, essentially?

5 A Correct.

6 Q So to be clear, the statements or the
7 positions taken in Kansas Exhibits 82 and 83, for
8 example, which are two letters authored by you to
9 Mr. Lavene, it is not your testimony today that
10 anything contained in those letters would apply from
11 this point forward? Is that correct?

12 A I believe those represent the current
13 policies that the Bureau of Reclamation would look at
14 for water purchases.

15 Q But you are not testifying that that
16 would be the policy that would be observed at any
17 point in the future?

18 A Correct. Without having a new
19 Commissioner on board, a new Assistant Secretary of
20 Water Science, how those policies may change I'm not
21 prepared or authorized to talk about.

22 Q Very good. Thank you.

23 Did you understand prior to the
24 deposition that occurred last Tuesday that you were
25 called by the State of Kansas in this project as a

1 witness on a component to this arbitration known as
2 future Compact compliance?

3 A Yes.

4 Q You did understand that?

5 A I did understand I was called as a
6 witness. I never read the title of future Compact
7 compliance or recall reading that title.

8 Q Okay. Now, you and I spent an awful lot
9 of time, I think with the third degree, on some of
10 the letters that Mr. Draper has introduced as
11 exhibits. And I don't intend to go over those in the
12 same level of detail, due to time constraints, but I
13 would like to talk a little bit about some of the
14 overriding things, if that's all right.

15 A Yes.

16 Q Do you recall what analysis the Bureau
17 conducted to determine, for example, the impact of
18 groundwater pumping on its projects?

19 A I do.

20 Q Would you explain that to us.

21 A We looked through -- we looked through
22 -- excuse me. "We" meaning hydrologists within my
23 office, in my regional office, engineers within my
24 office and regional office. We looked through
25 everything from USGS groundwater tables and whether

1 they are declining or decreasing. We looked at
2 reports that were done on groundwater levels and
3 streamflow. We cited, I believe, one of them from
4 HDR in our testimony. We also looked at information
5 we were given on the -- as part of the Frenchman
6 Valley Appraisal Study from DNR that showed graphs of
7 -- with the 20 percent cuts that the NRDs were
8 proposing and that shows reservoir -- or excuse me,
9 streamflows.

10 Q Can you be any more specific with regard
11 to those documents, precisely what you looked at?

12 A Precisely, without having the document
13 in front of me, I believe I indicated in our
14 deposition it was a November 2007 document we
15 received from Jim Schneider that showed -- that
16 showed three different lines on a graph. It's
17 actually contained in the appraisal report, which we
18 just have the excerpt from.

19 But it showed a dry condition, an
20 average condition and a wet condition. And it shows
21 graphs of streamflows above Enders Reservoir.

22 Q And you relied on that information to
23 formulate certain opinions; is that correct?

24 A Yes, I did.

25 Q And what opinions were those?

1 A The opinions that the IMPs need to take
2 further or, I guess we used the word "significant"
3 reductions to increase streamflows and to increase
4 streamflows and help out with Compact compliance.

5 Q So the best available data on which your
6 opinions were based was November 2007; is that
7 correct?

8 A That was one piece of it. It is also
9 the history of -- I forget to mention the history of
10 inflows to our reservoirs history of water
11 deliveries.

12 Q Historical documentation?

13 A USGS documents. I don't know the last
14 date on that. Also that HDR report, I honestly can't
15 remember the date on that report.

16 Q I believe that was 2006?

17 A Okay.

18 Q Does that sound right?

19 A It sounds right.

20 Q Again, as I recall from the deposition,
21 the Bureau conducted no independent modeling at any
22 time to determine the impact of groundwater pumping
23 on its facility, or the likely impact of the IMPs
24 when implemented; is that an accurate statement?

25 A Yes, we did no independent modeling.

1 Q You relied principally on conclusions of
2 Dr. Schneider?

3 A We relied on those documents, as well as
4 the ones I mentioned.

5 Q Okay. And at the time you considered
6 Dr. Schneider's analysis credible?

7 A Yes, I did.

8 Q Thank you.

9 Have you or your staff attended any
10 meetings with the Department of Natural Resources or
11 the NRDs in 2008 or early 2009, relating to the
12 Republican River I should say?

13 A Are you referring to RRCA meetings?

14 Q I'm referring to any meetings of any
15 kind.

16 A Yes, we -- yes, we have.

17 Q Was an effort made in those meetings to
18 understand the nuts and bolts, if you will, of the
19 Integrated Management Plans?

20 A In 2002 --

21 Q 2008 or early 2009.

22 A None that I remember.

23 Q Have you seen any recent projections as
24 to Compact accounting for 2008 and do you know
25 whether those projections show positive Compact

1 balance for Nebraska?

2 A I do. I remember attending a meeting at
3 Cambridge in which we received projections on the
4 last water year and what those meant.

5 Q How did that look?

6 A If I recall, under their five-year
7 average -- and there was a bunch of caveats put on
8 the bottom of the paper, meaning this was Compact
9 accounting based on this, or based on something else
10 -- but generally, putting their last five years,
11 nearly a zero average is the point I remember from
12 those -- those documents.

13 Q And what are the current levels of the
14 reservoirs that the Bureau currently operates?

15 A I --

16 Q If I may clarify, I don't necessarily
17 mean specific levels, elevations; but rather
18 generally, are they relatively full?

19 A Generally speaking, when you go east of
20 McCook, our reservoirs over the last couple of years
21 have seen some nice inflows and have increased.

22 As you go west of, generally, McCook,
23 you still see reservoirs that are relatively low and
24 unable to make deliveries to irrigation districts --
25 or what I would call substantial deliveries to

1 irrigation districts.

2 Q Now, throughout the documentation and in
3 and through your testimony, you indicated that the
4 Bureau is concerned about groundwater pumping and the
5 impact that that has on project facilities; is that
6 correct?

7 A Yes, it is.

8 Q And to what do you attribute -- excuse
9 me.

10 How much of the responsibility for those
11 declining inflows is groundwater responsible for?

12 A I don't know the Compact number in each
13 district. It seems, from my recollection from our
14 testimony and information we received from DNR, that
15 groundwater throughout the basin was responsible for
16 roughly 80 percent of the depletions to streamflow.

17 Q And you recall the precise source of
18 that information?

19 A It was a March 14, 2007 letter from Ann
20 Bleed to Cody Gittens, I'm not sure I pronounced her
21 last name correct.

22 Q Were there any studies provided to
23 support that figure?

24 A None that I can remember.

25 Q Are you aware of any studies that would

1 support that figure?

2 A None that I can recall.

3 Q And the Bureau has conducted no
4 independent analysis to determine the relative impact
5 of groundwater pumping versus some other source of
6 the declining wells?

7 A I would say we have conducted no
8 independent analysis, but we have had our experts
9 look at the data. We have had our experts look at
10 declining groundwater tables. We have had our
11 experts look at our declining inflows -- or declining
12 deliveries.

13 Q And you believe that 80 percent number
14 is a good number?

15 A From my recollection, I believe that's
16 -- yes, that is a good number.

17 Q Are there any other factors that affect
18 the level of inflow to the facilities?

19 A Well, yeah. I think there are a lot of
20 factors. There is, for example, that report that the
21 Bureau of Reclamation is working on, in conjunction
22 with educational institutes in Nebraska and Kansas as
23 part of this settlement, to work on conservation
24 practices -- or excuse me, to look at conservation
25 practices and how those things, like terracing and

1 repairing management, will -- will affect streamflow.

2 Q I would like to provide you with a
3 document. This will be Nebraska Exhibit 45.

4 Mr. Thompson, is this a short summary of
5 essentially the study you are talking about?

6 A It looks like the short proposal
7 summary, yes.

8 Q Okay. And in those first couple of
9 sentences prior to providing some preliminary
10 conclusions, could you read those?

11 A "In the Republican River Basin, there
12 are about 1.7 million acres of terraced fields and
13 several thousand water bodies. Estimates indicate
14 that these projects may be depleting the natural
15 water supply of the basin by as much as 175,000
16 acre-feet per year or nearly 50 percent of the
17 historic flow measured at Republican River near Hardy
18 Nebraska where the river flows from Nebraska into
19 Kansas."

20 Q Thank you.

21 Did you take that information into
22 account in formulating any of your conclusions?

23 A No, I didn't. This is a -- this is a
24 proposal, what I would call information that
25 justifies -- as part of the justification for doing

1 this study. And without having the conclusions from
2 that study, I didn't use any of that data.

3 Q What is the status of that study? How
4 far into the process is it?

5 A Nearly complete.

6 Q It's nearly complete.

7 And obviously, you had drawn some
8 conclusion earlier about the Frenchman Valley study;
9 is that correct?

10 A Correct.

11 Q And on a scale of 1 to 10, of 1 being
12 incomplete and 10 being complete, where does the
13 appraisal study fall?

14 A Well, the appraisal study, in my
15 opinion, is also nearly complete. It has gone out
16 for final review and final evaluation by the people
17 involved.

18 But if your question is, is an appraisal
19 study a broad study, it is.

20 Q And it precedes the feasibility study,
21 does it not?

22 A Yes, it does.

23 Q Which is a far more detailed and
24 extensive analysis, is it not?

25 A It is.

1 Q And both need to be complete before a
2 project is put in play, correct? In other words, no
3 project would be selected without a feasibility
4 study, would it?

5 A Well, Congress can do a lot of things
6 for us.

7 Q Fair enough.

8 A But to keep with your question,
9 generally speaking, if Congress doesn't authorize it
10 before we have a chance to do the studies, yes, we
11 like to go through the feasibility appraisal,
12 feasibility -- I believe I'm missing something, but I
13 think there is even more after that that can be
14 completed.

15 Q Did you take into account any other
16 factors -- for example, the level of evaporation off
17 the Federal reservoirs -- that might impact declining
18 inflows or that might result in declining inflows
19 from your project?

20 A I do know we talked about the amount of
21 evaporation that comes off our reservoirs as we were
22 working on these IMPs.

23 Q Do you recall what level of evaporation
24 that was?

25 A I do not.

1 Q Does groundwater pumping in either
2 Colorado or Kansas impact inflows to your facilities?

3 A I can -- I don't know to what degree,
4 but, yes, it does.

5 Q And so am I correct in understanding,
6 then, that you did not tease out the relative
7 contribution of Colorado pumping or the Kansas
8 pumping or the Nebraska pumping to this phenomenon
9 that you are seeing?

10 A From my memory, we didn't divide those
11 numbers.

12 Q I'm going to hand you a document here
13 which will be Nebraska 46.

14 I would like to direct your attention to
15 page 260 of this document. If you look in the top
16 portions of these pages, there are page numbers.

17 For the record, this is an article
18 appearing in Journal of Environmental Systems by
19 Joseph Szilagyi, dated 1999.

20 Do you see the discussion of "Results
21 and Discussion" on page 260?

22 A I do.

23 Q And do you see the third conclusion
24 there in the first paragraph on this page?

25 A I do.

1 Q And could you read that for me, please.

2 A "3) the decline in streamflow volumes
3 differs among geographic areas, defined by state
4 boundaries, with the most advanced streamflow
5 depletions occurring outside of Nebraska."

6 Q Thank you.

7 This will be Nebraska 47.

8 For the record, this is a US Geological
9 Survey that was published a week or so ago concerning
10 groundwater flows.

11 Direct your attention to page 4 of this
12 document and Table 2.

13 Do you see the area-weighted average
14 wear-level changes from predevelopment to 2007 as
15 articulated in Table 2 on page 46 of this document,
16 Mr. Thompson?

17 A I do.

18 Q What is Nebraska's change in water level
19 there?

20 A Negative 1. And it looks like it's in
21 units of feet, negative -- as you go across the
22 chart, that is predevelopment to the '07; '05 to '06,
23 negative .1; and '06 to '07 is negative .2.

24 Q Thank you.

25 How does that compare to the State of

1 Kansas and Colorado?

2 A Kansas, for predevelopment to '07 was
3 negative 22.7; Colorado was negative 12 --

4 Q Thank you very much.

5 A -- .8.

6 Q Now, if I understand your earlier
7 testimony in response to questions from Mr. Draper,
8 you indicated that your -- if I misquote you, feel
9 free, but I believe you said one of the most
10 important points was this number of wells that have
11 gone in in Nebraska?

12 A Uh-huh, yes.

13 Q And you inferred certain impacts to that
14 number of wells; is that right?

15 A Yes, I do.

16 Q And during your deposition you indicated
17 that you did not know whether groundwater pumping had
18 increased or decreased since 2000. Have you since
19 evaluated that?

20 A I haven't.

21 Q Do you recall that statement?

22 A I do.

23 Q You don't know whether groundwater
24 pumping levels have increased or decreased since that
25 time?

1 A No, I don't.

2 Q Thank you.

3 One of the main concerns I understand
4 the Bureau to have about its projects is that when
5 inflows to the project are depleted, there may be
6 less water available and, therefore, less revenue
7 taken in by the Bureau and less ability to repay the
8 Federal debt; is that right?

9 A Yes, it is.

10 Q And I believe in Kansas Exhibit 77,
11 which was your written testimony concerning three
12 questions --

13 A Yes.

14 Q -- did you identify \$5 million of costs
15 attributable to that issue?

16 A I did.

17 Q And when we talked in your deposition, I
18 believe you explained to me that that \$5 million
19 figure is not really money lost to the Federal
20 Government, but it has simply -- the payment
21 obligation has been reallocated; is that right?

22 A Yes. That the payment -- I guess what I
23 like to say is the amount of revenue that was
24 reimbursed to the Bureau of Reclamation by the
25 irrigation districts declined after our new contracts

1 were signed in July of 2000.

2 Q Who made that payment, then?

3 A If that -- that payment -- so when the
4 payments or the allocations change from 20 to
5 30 percent down to 2 to 5 percent, the taxpayer had
6 to pick up that difference.

7 Q I thought I understood you in the
8 deposition to explain that was shifted to hydropower
9 customers?

10 A Okay. I had to make a correction in my
11 -- in my deposition. And I used the word -- it was
12 on page 92, line 13 and 14, I used the word "power
13 district," and then the line below I used "power
14 customer." I should have said "taxpayer"; I made a
15 mistake because I was referring to O&M payments, not
16 capital payments.

17 Q Who is making the O&M payments?

18 A Irrigation districts are reimbursing us
19 for a portion of those O&M payments.

20 Q What about the capital payment?

21 A That was going back to talking about how
22 we first divided our number. If you recall the
23 233 million, then the 139 million was allocated of
24 construction cost to the irrigation component, of
25 which of that 139 million, 100 million was -- under

1 an-ability-to-pay study, was allocated to eight
2 irrigation power customers.

3 Q So that component has been shifted?

4 A That component remains relatively the
5 same.

6 It's my understanding that our regional
7 economists do an ability-to-pay study every
8 approximately five years and it is subject to an
9 adjustment; but to my understanding, it hasn't been
10 -- it was done pre -- during the contract
11 administrations. And, to my knowledge, there hasn't
12 been any large changes since then.

13 Q Let me ask it this way as straight
14 forward as I can.

15 Is that \$5 million, is that lost revenue
16 or is that revenue still coming in, just from a
17 different entity?

18 A I guess I would clarify it as this.

19 It is lost revenue to the Bureau of
20 Reclamation for which we supply to the Treasury.

21 Q So the Treasury is still compensated?

22 A I guess the best way for me to maybe
23 describe it is an example.

24 A hundred-dollar example, we spend a
25 hundred dollars on a project that the irrigation

1 districts used to be responsible for 30 percent of
2 that -- that payment. So we would pay for the
3 hundred-dollar O&M fix and they would reimburse
4 Reclamation 30 percent of that. That money would go
5 to Treasury. Now, they only reimburse 2 to 5 percent
6 of that and that is what goes to Treasury. That
7 difference is just absorbed through appropriations,
8 what I call taxpayer.

9 Q Very good, thank you.

10 One of the things that you have talked
11 about in your testimony is this notion of historical
12 project expectations.

13 Is that a fair characterization?

14 A Yes. We typically refer to, in those
15 context to the DPRs.

16 Q And you formulated some opinions about
17 what was expected back in 1940s?

18 A Correct, the Bureau did.

19 Q Give you what we will mark as Nebraska
20 Exhibit 48. And for the record, this is an official
21 publication of the Nebraska State Planning Board,
22 dated 1936, September.

23 And also for the record, for
24 authentication purposes, these documents were
25 obtained from the Nebraska Library. We have the

1 actual originals; however, these are excerpts for the
2 sake of argument, just to make things a little
3 easier. We do have the originals in our possession
4 and we would be happy to produce them if anyone would
5 like to review them in their entirety.

6 If you could look, please, at the first
7 page behind the cover page, 15 here. Could you
8 please take a look at the first paragraph of the --
9 I'm sorry, the first sentence of the second full
10 paragraph and read that first sentence for me,
11 please.

12 A "The recorded extreme variation of river
13 discharge at Hardy, ranged 0 second-feet August 19,
14 1934 inclusive, to 225,000 second-feet on June 2,
15 1935."

16 Q And was it your understanding that when
17 the Bureau constructed these facilities, it
18 understood that there were times when the Hardy gauge
19 was zero?

20 A I'm sure if -- when the Bureau of
21 Reclamation compiled their data, they were aware of
22 the streamflows at any gauge in the Republican River
23 Basin.

24 Q And, likely, aware of the fact that the
25 river ran dry at Hardy, on occasion?

1 A Yes, and specifically the floods in May
2 of 1935.

3 Q If you would turn a couple pages back to
4 page, it's excerpt 122. This section contains a
5 number of recommendations in this document.

6 Do you see Section II.A.,
7 "Conservation"?

8 A Yes, I do.

9 Q Would you read that for me, please.

10 A "Conservation," has indentation "1. The
11 development of conservational practices which will
12 assist in replenishing the ground water supply be
13 encouraged and aided by means of the circulation of
14 informational articles and by means of
15 demonstrational projects."

16 Q So would you interpret that as
17 encouraging the development of conservation
18 practices?

19 A Yes.

20 Q And if I understood you correctly
21 earlier, you indicated that you did not take into
22 account the impact of conservation practices when
23 looking at decreasing inflows to the project, as they
24 are occurring today; is that right?

25 A I didn't use -- to my knowledge, others

1 within the Bureau of Reclamation that may have been
2 helping me may have; but to my knowledge, we didn't
3 use any studies that showed the effects of
4 conservation on the inflows.

5 Q I would like to hand you what will be
6 Nebraska 48 -- 9 -- 9, excuse me.

7 Just for the record, this is a document
8 prepared by the University of Nebraska Conservation
9 Survey Division, but it has the participation of a
10 number of entities.

11 If you read the center of the cover
12 page, could you identify those entities for me on the
13 cover page.

14 A Yes. "Prepared by the Conservation and
15 Survey Division of the University of Nebraska, the
16 United States Geological Survey and the Bureau of
17 Irrigation, Water Power and Drainage of the Nebraska
18 Department of Roads and Irrigation."

19 Q And the precise date of this document is
20 not clear. Do you see a date-stamp on the cover?

21 A February 15, 1945.

22 Q Thank you.

23 And if you will turn to the page behind
24 the cover, you will see a paragraph about halfway
25 down begins, "The maps may be used in the following

1 manner," on the left-hand side.

2 A Yes, I see.

3 Q Would you read that for us, please.

4 A "The maps may be used in the following
5 manner: If the land in question is located in an
6 area shown on the map as underlain by . . . chances of
7 obtaining high-capacity wells are less than in areas
8 shown as underlain by a relatively thick water-filled
9 formation. Thus, locations on the farm may be
10 selected that are more favorable from a
11 water-production standpoint."

12 Q Thank you.

13 So assuming that this document was
14 generated sometime prior to February 15, 1945, would
15 it be fair to say that there was some expectation
16 that groundwater pumping might occur in the basin?

17 A Yes.

18 Q So the notion that groundwater pumping
19 might have an impact on project facilities is not
20 necessarily something new, is it?

21 A No.

22 Q And if I understood some of your
23 testimony, both written and in response to
24 Mr. Draper, you indicated that there were some
25 expectations about protecting the surface water

1 projects of the Bureau.

2 Did those expectations include, for
3 example, legal protection?

4 A Yes. I think when we obtained -- when
5 we designed the projects and obtained the legal water
6 rights, there was an expectation, not only that our
7 water be physically protected, but legally protected.

8 Q I provide you with what we will mark as
9 Nebraska 50.

10 By the way, I should say for the record
11 that all of these materials have previously been
12 provided to all parties, but we do have these extra
13 copies.

14 MR. DRAPER: For clarification, that was
15 just the excerpt. You have not provided --

16 MR. WILMOTH: Correct.

17 MR. DRAPER: -- even though we have
18 requested, the full copies of these documents.

19 MR. WILMOTH: And we do have the full
20 copies available.

21 ARBITRATOR DREHER: Do you intend to
22 make the full copies available?

23 MR. WILMOTH: We certainly can. I mean,
24 we have them here. The fact of the matter is, given
25 the time constraints, we didn't have the ability to

1 copy -- some of these treatises are very detailed and
2 have a lot of maps and other things in them. We will
3 certainly make them available. I have them on loan
4 from the library, but we can certainly make them
5 available.

6 ARBITRATOR DREHER: It just seems if
7 Mr. Draper has specifically asked for it, that you
8 should try to provide the full copy.

9 MR. WILMOTH: Certainly.

10 Q (BY MR. WILMOTH) Can you identify this
11 document, just briefly, Mr. Thompson?

12 A It looks like a United States Department
13 of Agricultural -- Bureau of Agricultural Economics
14 document.

15 It says, "Water Facilities Area Plan for
16 the Upper Republican Basin in Nebraska, Kansas and
17 Colorado."

18 Q Thank you.

19 What I have excerpted here for your
20 review, and I don't intend to have you read this in
21 its entirety, but there is a discussion beginning at
22 142 of this document entitled "Legal Factors Relating
23 to Water Use."

24 Do you see that?

25 A Yes.

1 Q My question to you is simply: Did you
2 review any material like this that might have talked
3 about legal issues related to water use in 1941 when
4 you formulated your opinions about the Bureau's
5 historic expectations?

6 A I don't -- I didn't personally review
7 any documents like this. I do know that our staff
8 reviewed documents that we have indicated in writing;
9 for example, Report No. 41 that was in this time
10 period.

11 Q Report No. 41, can you identify that?

12 A It's a 1940 Reconnaissance Report on the
13 Basin, Project Investigation Report No. 41.

14 Q Thank you.

15 A And it -- do you want me to --

16 Q Does it speak to legal issues?

17 A It said -- that's -- that's the part we
18 took the expert -- or excerpt from that that said to
19 avoid -- to avoid expensive litigation as a result of
20 possible conflicting uses of water in the various
21 states, further development for irrigation should be
22 preceded by three-state Compact.

23 Q But that document doesn't discuss
24 whether or not -- in 1941, whether or not Nebraska
25 water law could have protected surface water rights

1 from groundwater depletion?

2 A I don't know if it says that or not.

3 Q Do you know the answer to that question?

4 A In 1941?

5 Q Yes.

6 A I do not know the law -- the legal --

7 Q Thank you.

8 A -- effect of the law in 1941.

9 Q You understand today that the State of
10 Nebraska is attempting to restrict some groundwater
11 uses for the benefit of surface water uses, in
12 particular, those that help with Compact compliance?

13 A Could you repeat the question.

14 Q Do you understand that in the present
15 day, Nebraska is attempting to ensure that certain
16 surface water uses are protected from the groundwater
17 depletions to the extent necessary to assist in
18 Compact compliance?

19 A I guess it's my understanding that the
20 State of Nebraska is -- is -- looks at surface water
21 and surface water rights and protects those senior
22 surface water users from junior water diverters. But
23 it's my understanding that when it comes to
24 groundwater pumping, that's the responsibility of the
25 NRDs.

1 Q And is one of the ways that groundwater
2 impacts are being dealt with the Integrated
3 Management Plans?

4 A Yes, it is.

5 Q This is Nebraska Exhibit 51 which, for
6 the record, is a listing of water rights that the
7 Bureau provided us.

8 Could you just give us the highlights of
9 this document, Mr. Thompson. Who owns the water
10 rights in the Bureau projects?

11 A From my understanding, within the Bureau
12 projects it can vary from state to state within --
13 and actually can vary within a state.

14 Q Is that variance generally depicted in
15 here?

16 A Should be.

17 Q And some of the rights are held by the
18 individual districts; is that right?

19 A Correct.

20 Q Some of the storage rights are held by
21 the Bureau; is that correct?

22 A Correct.

23 Q And some natural flow rights are held by
24 individuals; is that correct?

25 A That's correct.

1 Q Regardless of all of that, all of these
2 rights are issued by the State of Nebraska; is that
3 right?

4 A That's my understanding.

5 Q And all of those rights are subject to
6 regulation by the State of Nebraska; is that correct?

7 A That's my understanding.

8 Q In any manner that the State chooses
9 placing?

10 A I hope they stick within the boundaries
11 of the state law.

12 Q As long as it's constitutional, right?

13 A Yeah.

14 Q Thank you.

15 One of the themes that you have
16 mentioned previously is this notion of equity between
17 surface water users and groundwater users; is that
18 right?

19 A That is correct.

20 Q And that's really an intrastate issue,
21 is it not?

22 A Usually, when I'm referring to that, I'm
23 referring to what is LB 962. And that is where I
24 picked that language up from, yes.

25 Q But the manner in which the State elects

1 to treat groundwater users or surface water users
2 really isn't necessarily a Compact issue, is it?

3 A I think it depends.

4 Q Let me ask it this way.

5 Isn't it possible that the State could
6 be in compliance where such projects would not be
7 enabled?

8 A Yes, there is a scenario where that
9 would work -- or that would happen.

10 Q But that would not be equitable, in your
11 opinion, correct?

12 A No. In my opinion, if a senior water
13 user is not receiving their water and a junior water
14 user is and they are hydrologically connected, that
15 is not equitable.

16 Q Do you recall our discussion about what
17 you believed was necessary to create an equitable
18 solution that would maintain Compact compliance?

19 Specifically, do you recall telling me
20 that you thought that historical inflows within
21 5 percent or so should be restored?

22 A I remember the conversation.

23 Another thing I would like to note for
24 the record, it happened to be missing a few sentences
25 around that conversation in the deposition notes that

1 I was given, but I remember -- I remember the
2 conversation as talking about, I believe it was the
3 word "significant."

4 Q That's correct, that's my recollection
5 also.

6 Perhaps you could elaborate on that.

7 A Well, I -- we were talking about
8 significance, and I got to thinking about that this
9 week and --

10 Q And before we go any further, can I
11 just, for the record, clarify with regard to
12 significance, we are talking about the issue of
13 significant impacts on Bureau projects, right?

14 A Yes, we were talking about significant
15 inflows, significant deliveries --

16 Q Thank you.

17 A -- and I think we even said significant
18 impacts. We seemed to use the word a lot.

19 But, you know, it -- it comes down to,
20 it's a -- it's a groundwater and a surface water
21 issue. It's -- you know, and the Supreme Court kind
22 of -- not kind of, told us it was both. So it's
23 groundwater, it's surface water, but it's -- they are
24 connected and they are both.

25 And when I was talking about significant

1 declines, I was talking about the significant
2 declines to deliveries that our surface water folks
3 have received through the significant increase in
4 groundwater pumping.

5 Q So you still believe that the real thing
6 that is needed here is to restore groundwater levels
7 to some level that will support an increased baseflow
8 in the river?

9 A I believe that is a very important step,
10 yes.

11 Q And I believe I asked you whether there
12 was any requirement in the Compact, in your
13 understanding, about maintaining certain groundwater
14 levels. Do you have an opinion about that?

15 A Same as last week. I still don't
16 remember the Compact indicating any groundwater
17 levels.

18 Q It just provides a certain flow or don't
19 use more than your allocation; isn't that the basis
20 of the Compact?

21 A It's -- yes, to divide the water among
22 the three States equitably.

23 Q And, obviously, your testimony is that
24 Nebraska's IMPs will not do that, right?

25 A Right.

1 Q But to bring this back full circle, you
2 conducted no modeling to determine that? You relied
3 on the representations of Dr. Schneider, is that
4 right -- and some historical documents?

5 A Correct. I'm not a groundwater expert;
6 but if you are asking if I'm confident that that
7 needs to take place to see increased streamflows, I'm
8 confident.

9 Q Based on your intuition?

10 A Yes.

11 Q And do you have any idea what reductions
12 would be sufficient to do that?

13 A I don't have a number in mind with what
14 reductions would be significant. But as I -- you
15 know, as I stand out on canal or dams that are half
16 full or below or canals that haven't received water,
17 and I see these 60-year-old structures in need of
18 repair and maintenance and I see 20-year-old
19 sprinklers going on the hillside and the valleys, I
20 remain very confident what needs to take place to
21 bring us into an equitable solution.

22 Q But you do agree that there is a
23 difference between Compact compliance and this
24 solution you are referring to?

25 A I believe there can be a difference,

1 yes.

2 Q Now, with regard to facilitating Compact
3 compliance, that's one of the things the Bureau tries
4 to do; is that right?

5 A Yes.

6 Q This will be marked Nebraska 52.

7 Mr. Thompson, I'm not concerned so much
8 about the number of emails as the underlying
9 document. Do you recall discussing this document in
10 your deposition?

11 A Yes, I do recall discussing it.

12 Q If you go to the last page here, there
13 are a series of statements under heading called
14 "Reclamation's Position/Role."

15 Do you see that?

16 A Yes, I do.

17 Q And do these positions or roles still
18 hold today? Recognizing that you can't opine as to
19 whether they will hold in the future, do they hold
20 today, as we sit here?

21 A Sure. And as well as we said in the
22 deposition, I'm not sure what No. 8 is referring to,
23 but No. 1 through 7, I believe, are still current
24 policies.

25 Q Very good.

1 So No. 3 would be to assist the States
2 in Compact compliance, right?

3 A Yes, it is.

4 Q Didn't we talk a little bit about the
5 role the Bureau plays with regard to transferring
6 natural flow rights for Compact compliance?

7 A Generally speaking, for natural flow
8 rights, the Bureau has not been involved with the
9 formal agreements, only to the respect with our
10 irrigation districts to assure that they are in
11 effect in Bureau projects.

12 Q So those are bilateral agreements
13 between the State or NRD --

14 A Or the Coalition.

15 Q -- or the District -- or the
16 Coalition -- thank you -- that would be the Nebraska
17 Groundwater Coalition; is that correct?

18 A Correct.

19 Q I'm sorry. The Republican River
20 Groundwater Coalition? Sorry.

21 A That's correct.

22 Q Now, the Bureau's role is a little bit
23 more extensive with regard to what you would call
24 project water; is that right?

25 A Yes, it is.

1 Q And project water just is -- how is that
2 different from natural flow?

3 A Project water is held, I think in the
4 cases, I believe for the cases it's held in the name
5 of the United States or the Republican -- or the
6 irrigation district within the Republican District --
7 the Republican Basin and that project water is
8 subject to our contracts that we have with these
9 irrigation districts.

10 Q And the State of Nebraska and the
11 Groundwater Coalition both have made purchases or
12 leases under these types of arrangements, have they
13 not?

14 A Yes, they have.

15 Q And the Bureau has approved those to the
16 extent it had an approval role and it has facilitated
17 those to the extent it was tangentially involved; is
18 that right?

19 A Sure. Generally speaking for '06 and
20 '07, no matter which district, it was either Kansas
21 Bostwick or Frenchman-Cambridge, we transferred the
22 project water to Kansas Bostwick Irrigation District
23 through an amendment to our contracts.

24 Q Could I turn your attention, please, to
25 Kansas Exhibit 83, please. Do you have a copy of

1 that handy?

2 A I do.

3 Q And this is a letter that you provided
4 to Mr. Lavene; is that right?

5 A Yes, it is.

6 Q And could you please take a look at page
7 2, paragraph No. 4, and read that paragraph, please.

8 A No. 4, page 2, "At this time, we believe
9 that the term of a long-term agreement should not
10 exceed five years. This would be consistent with a
11 number of water management concepts in the Republican
12 River Basin that are also based on a five-year term.
13 This is the term established for the Final Settlement
14 Stipulation water use accounting in the basin, and it
15 is also the term of current revisions of the
16 Integrated Management Plans recently adopted in the
17 basin."

18 Q And so is it generally correct to say
19 that the Bureau was -- or has been encouraging, up
20 until now at least, the entry of contracts or leases
21 that did not exceed that five-year period?

22 A We never entered into one that exceeded
23 one year, to my knowledge.

24 Q This will be Nebraska 53. For the
25 record, this was an electronic mail produced by the

1 Bureau to the parties.

2 Do you happen to recognize this
3 electronic mail?

4 A I don't recognize it, but I was copied
5 on it.

6 Q And could you read that statement under
7 the introduction, "Steve"?

8 A Starts with "Steve," is who it's
9 addressed to. The subject is, "Letter to Justin
10 Lavene, Nebraska Attorney General's Office."

11 It reads, I'm fine with the letter as is
12 - the issues and stands -- quote, stands, we are
13 taking in the letter are more internal decisions than
14 law and overall Reclamation policy driven
15 (exception -- excuse me. Starting with "exception,"
16 there is a bracket, (exception of if the 1920 Act is
17 the authority, Districts must consistent -- am I
18 missing? -- but consistent law driven) --

19 Q Fair enough. I take it you didn't write
20 this?

21 A I apologize for the reading of it.
22 Would you like me to continue.

23 Q No, that is fine. Who is the author?

24 A The author is Jim Beadnell.

25 Q Could you identify that individual,

1 please.

2 A He has since transferred. He is still
3 with the Bureau of Reclamation. He is in our, I
4 believe what would be called contracts office in the
5 regional office in Billings.

6 Q Thank you.

7 A He did transfer to Phoenix recently.

8 Q And there was not an attachment to this
9 particular electronic mail in our files that I can
10 recall, but is it safe to assume that, given the
11 proximity of this email to the letter that we just
12 looked at, they are referring to the same document?
13 Or did you send an intervening letter to Mr. Lavene
14 in that period?

15 A No. I would say, based on the title and
16 the timeframe before the May letter, there were
17 internal discussions about it, so . . .

18 Q Thank you.

19 MR. WILMOTH: I believe we have
20 completed our cross-examination, thank you.

21 I apologize for taking a bit longer, lot
22 of documents.

23 ARBITRATOR DREHER: Not a problem.

24 Mr. Ampe, do you intend to ask any
25 questions?

1 MR. AMPE: No.

2 ARBITRATOR DREHER: Well, why don't we
3 take our morning break. It's a little late, but
4 there are probably a few people that could use a few
5 minutes. We will reconvene at 5 after 11.

6 (Break taken from 10:50 to 11:10.)

7 ARBITRATOR DREHER: Mr. Draper, you
8 have some redirect?

9 MR. DRAPER: Yes, a little bit.

10 REDIRECT EXAMINATION

11 BY MR. DRAPER:

12 Q Mr. Thompson, I have a few questions
13 about some of the exhibits that were produced by
14 Nebraska in connection your cross-examination by Mr.
15 Wilmoth.

16 You have a copy of Nebraska's Exhibit
17 46, which is a paper by a person whose last name
18 starts with S-Z?

19 A Yes, I have it.

20 Q Have you ever seen this document before
21 it came to your attention in this proceeding?

22 A No, not that I remember.

23 Q Let me ask you to go to another exhibit
24 that is marked Nebraska Exhibit 48, I believe. It
25 has a picture of a river and it says, "Water

1 Resources Nebraska" at the top?

2 A Yes, I have it.

3 Q It has a date of 1936 at the bottom of
4 the front page.

5 Have you seen this document prior to
6 this proceeding?

7 A No, not prior to today.

8 Q Let's look at another exhibit.

9 No. 49, it was a two-page one, it didn't
10 have a date of its own but it had a library stamp
11 from 1945.

12 A I have it.

13 Q Have you ever seen that document before
14 this proceeding?

15 A Not before today.

16 Q If you would turn your attention to
17 Nebraska Exhibit 47. This is a USGS Report that has
18 been issued, I notice, since Ken Salazar became
19 Secretary of Interior.

20 Have you got a copy of that?

21 A Yes, I do.

22 Q Have you ever seen that document before
23 this proceeding?

24 A No, I haven't. I have attended meetings
25 where I have seen the USGS give presentations on High

1 Plains aquifers and their studies, but I have never
2 seen this document.

3 Q You were asked about your reliance on a
4 certain Nebraska Department of Natural Resources
5 study from November of 2007; is that right?

6 A Correct.

7 MR. DRAPER: I would note for the
8 record, and renew our request, that we have requested
9 -- this is within the scope of the request we made of
10 Nebraska; we have not received that report. We have
11 never seen it. And I would renew my request at this
12 time to be provided that as soon as possible.

13 MR. WILMOTH: I don't know whether that
14 has been provided or not and I don't, frankly, know
15 how you could conclude this quickly, John; but if it
16 has not been provided, it is, indeed, in our
17 possession and we will provide it.

18 Quite frankly, I don't know why the
19 Bureau didn't provide it in response to the Touhy
20 Request if it was so relevant, or for the request
21 that we made, for that matter.

22 MR. DRAPER: Mr. Arbitrator, just so you
23 understand, this is a series of requests that the
24 States made of each other and the Bureau. First was
25 by Kansas of Nebraska back in late last year, it was

1 either in November or December. And both States,
2 first Nebraska made a request of the Bureau and then
3 we did, as we have seen these documents.

4 And we realize that there are -- given
5 the expedited nature of the proceeding, there are
6 limitations on what is practical; but I wanted to
7 simply be sure that we were provided with this report
8 that Nebraska has raised, in particular. We don't
9 believe we have it at this point.

10 ARBITRATOR DREHER: Just to clarify, I
11 believe that this was a report either authored or
12 coauthored by Dr. Schneider dated November 2007. And
13 since the author --

14 MR. WILMOTH: I don't think that is
15 accurate. I think there is a lot of confusion about
16 what exactly this report was.

17 ARBITRATOR DREHER: Okay.

18 MR. WILMOTH: I think Dr. Schneider
19 provided some data, but I think the report is
20 actually perhaps a Bureau report.

21 I honestly don't know exactly what the
22 report is. Perhaps one of the reasons why we might
23 want some rebuttal or some responsive time is to
24 provide rebuttal to some of these various things and
25 lay some foundation for some of these conclusions.

1 But I leave that to your discretion, Mr.
2 Arbitrator.

3 MR. DRAPER: I would simply renew my
4 request. We have never been given access as far as
5 we know and, of course, that really limits our
6 ability to understand the data that was provided that
7 Nebraska is now raising.

8 But I simply wanted to note our request
9 for the record. I'm not wanting to make a big deal
10 of it; but we did, there are many things here and the
11 States have had limitations that are practical in
12 nature, and we understand that.

13 MR. WILMOTH: For the record, I would
14 simply state that it is possible that the information
15 was provided. And I don't accept at face value the
16 assertion that it was not.

17 ARBITRATOR DREHER: Let's back up a
18 second here.

19 If my recollection of your testimony,
20 Mr. Thompson, was accurate, I thought that you
21 indicated that you had relied on either a report or
22 data from Dr. Schneider that was -- the date of it,
23 what I noted was November 2007.

24 THE WITNESS: Correct, it was --

25 ARBITRATOR DREHER: Maybe you could

1 clarify, what is it you looked at?

2 THE WITNESS: It's an email from
3 Dr. Schneider, though I believe it's November 30 of
4 '07, from Dr. Schneider to one of my staff members
5 who was working on the Frenchman Valley Appraisal
6 Study. And the data that was contained within that
7 email had graphs that showed the different
8 conditions -- wet, dry and average -- for an area
9 above Enders Reservoir and what the projections were.

10 Those graphs were used and put in
11 Frenchman Valley Appraisal Study as part of
12 evaluating those three kind of sideboard
13 alternatives.

14 ARBITRATOR DREHER: Okay. So this
15 wouldn't be something that Nebraska would have been
16 obligated to provide anyway, because Nebraska
17 wouldn't have known that the Bureau -- how the Bureau
18 was going to use that information.

19 So it seems like -- I mean, do you have
20 a copy of that email that you could provide to
21 Mr. Draper?

22 THE WITNESS: I believe I have a copy of
23 it.

24 MR. WILMOTH: For the record, our Touhy
25 Request simply encompassed all communications, I

1 thought, on these issues. But was it not produced in
2 response either to the Touhy Request or FOIR Request?

3 THE WITNESS: In my understanding, this
4 particular document was not produced. The Frenchman
5 Valley Appraisal Study was produced.

6 In order to meet the needs of the
7 States, we produced everything that we thought was
8 appropriate for the questions asked, and we met with
9 each of the States to further clarify those.

10 But to my knowledge, that document, no,
11 it was not produced in either case; but I can't say
12 that it 100 percent wasn't, unless I go through the
13 thousands of documents that we did produce.

14 ARBITRATOR DREHER: But you do believe
15 you have a copy of the email still available, so if
16 you could provide the email with the attachments to
17 both the State of Nebraska and the State of Kansas, I
18 think it will resolve this particular issue.

19 MR. WILMOTH: Just to clarify, this
20 request Mr. Draper is making is to the Bureau to
21 provide it, not to us?

22 ARBITRATOR DREHER: That's why I asked
23 the clarifying question. I don't think Nebraska has
24 an obligation to provide it. I think the Bureau has
25 an obligation to provide it to both States.

1 MR. WILMOTH: Thank you.

2 MR. DRAPER: Just to the clarify what my
3 intent was, we did ask them for all of our
4 communications, the Bureau. So that would be among
5 those and we have not received any emails; but if we
6 can be provided it in a different way, that will take
7 care of it as a practical matter.

8 ARBITRATOR DREHER: Do you have anything
9 else, Mr. Draper?

10 MR. DRAPER: Yes. Thank you.

11 Q (BY MR. DRAPER) Mr. Thompson, this
12 email that we referred to, it's not the only thing
13 that you and the Bureau relied upon in reaching the
14 conclusions to which you have testified today, is
15 it?

16 A Correct, it's not the only thing we
17 relied upon.

18 Q You relied upon the other information
19 that you previously testified to?

20 A Yes. We relied upon experts within the
21 Bureau, other data from USGS, other studies that
22 showed groundwater and surface water flows. Our own
23 data that showed precipitation, surface water flows,
24 project delivered.

25 Q Would that also include presentations at

1 the RRCA meetings that you attend?

2 A Yes, that would. That would include
3 presentations by any of the States at the RRCA
4 meetings.

5 Q Are the concerns that you have testified
6 to that the Bureau of Reclamation has with respect to
7 groundwater pumping in Nebraska and the Republican
8 Basin, are those new concerns that have just been
9 developed in the course of providing responses here
10 or do they have a longer history?

11 A I believe they have a longer history
12 than just the last few years, or last year and a half
13 that I have been involved. I have looked at previous
14 documents. From my recollection, the late '70s were
15 -- the Bureau of Reclamation was talking about it
16 internally.

17 No, it was not a -- in fact, from my
18 understanding, in our initial studies and our initial
19 reports, it was mentioned in those 1940 studies; but
20 it definitely was mentioned to the effect of limited
21 or -- I don't think they knew the true -- the true
22 effect of how big it would become.

23 Q And if I understand your testimony, the
24 Bureau's position is that its projects are an
25 integral part of Compact compliance in this basin?

1 A I think we are. We are -- the Compact
2 has a set amount of water that is supposed to come
3 and go from each State and we are the -- we are the
4 large surface water users and have the reservoirs in
5 the basin. So I think we are an integral part of all
6 of the States, as far as Compact compliance.

7 Q And looking at your documents, isn't it
8 fair to say that the Bureau projects were intended by
9 the States and the United States Government to be an
10 integral part of the operation of the Compact?

11 A They were definitely -- they were
12 designed to fit within each State's allocation and
13 they were designed to be built and constructed and
14 used so that they didn't cause any one State to be
15 out of compliance.

16 MR. DRAPER: No further questions.

17 ARBITRATOR DREHER: All right.

18 Thank you, Mr. Thompson.

19 Looking at the time, do you have a sense
20 how long your direct will be for the second Bureau
21 witness?

22 MR. DRAPER: My sense is that it would
23 be considerably shorter for Mr. Swanda. We
24 established a lot of background that doesn't need to
25 be developed now.

1 ARBITRATOR DREHER: So if we went until
2 about 12:30, that would be all right with you folks?

3 MR. DRAPER: Sure, would be fine with
4 us.

5 ARBITRATOR DREHER: All right.

6 MR. WILMOTH: For your information, too,
7 Mr. Arbitrator, I would agree that our cross would be
8 substantially shorter, for planning purposes.

9 ARBITRATOR DREHER: And before you call
10 the next witness, you probably need to deal with
11 these exhibits, I suppose.

12 MR. DRAPER: Yes. I think I can shorten
13 the offer without identifying each one by name.

14 The Kansas exhibits that have been
15 testified to this morning by Mr. Thompson are Kansas
16 Exhibits 74 through 84. And on the basis of his
17 testimony, we would move their admission.

18 MR. WILMOTH: No objection.

19 ARBITRATOR DREHER: No objection.

20 Mr. Ampe?

21 MR. AMPE: No objection.

22 ARBITRATOR DREHER: All right.

23 (Whereupon, Kansas Exhibits 74, 75, 76,
24 77, 78, 79, 80, 81, 82, 83 and 84 were admitted into
25 evidence.)

1 MR. WILMOTH: Nebraska would offer
2 Nebraska Exhibits 45 through 53, which were also
3 testified about.

4 ARBITRATOR DREHER: Any objection, Mr.
5 Draper?

6 MR. DRAPER: I do have objections to a
7 few.

8 We would object to the exhibits that
9 Mr. Thompson conferred he had no previous familiarity
10 with. That was the Exhibit 46, this article with the
11 author whose name starts with SZ.

12 The Nebraska State Planning Board
13 excerpt from 1936, the undated excerpt from various
14 Nebraska agencies is Exhibit 49.

15 I guess I would limit my objections to
16 those.

17 ARBITRATOR DREHER: All right, Mr. Ampe?

18 MR. AMPE: No objections.

19 ARBITRATOR DREHER: Well, given that all
20 of those documents appear to me to be public
21 documents, I think we will go ahead and admit them,
22 noting though, that Mr. Thompson had not previously
23 seen those before today and certainly wasn't in a
24 position to offer any testimony about them. I think
25 all he did is read excerpts into the record and I

1 don't think he offered any testimony about them, but
2 they are public and I think it's appropriate to admit
3 them, but we will note that Mr. Thompson had not seen
4 them previously.

5 (Whereupon, Nebraska Exhibits 45, 46,
6 47, 48, 49, 50, 51, 52 and 53 were admitted into
7 evidence.)

8 ARBITRATOR DREHER: Okay. Please
9 proceed.

10 MR. DRAPER: Thank you, Your Honor.

11 As the next Bureau witness, we would
12 call Mr. Marv Swanda.

13 MARVIN R. SWANDA,
14 having been first duly sworn, was examined and
15 testified as follows:

16 DIRECT EXAMINATION

17 BY MR. DRAPER:

18 Q Good morning, Mr. Swanda.

19 A Good morning.

20 Q Please state your full name and
21 professional address for the record.

22 A Marvin R. Swanda. And my professional
23 address 1706 West Third Street, McCook, Nebraska.

24 Q What is your present position?

25 A Presently, I am the office manager of

1 the McCook field office with the Bureau of
2 Reclamation.

3 Q When did you start in that position?

4 A I have been in that position since, I
5 believe, 2001.

6 Q Have you held professional positions
7 with the Bureau of Reclamation?

8 A Yes, I have. I started with Reclamation
9 in Huron, South Dakota. I was in a planning --
10 planning group there. I provided hydrology support
11 to other planning groups within that office.

12 Q When was that?

13 A That was in 1980 I began with the
14 Reclamation until 1981. In 1981, I also -- I
15 received my -- became a registered professional
16 engineer in the state of South Dakota and remain so
17 until -- to this date.

18 In 1981, I transferred to McCook,
19 Nebraska, to the Bureau of Reclamation in the McCook
20 field office, which is situated under the
21 Nebraska/Kansas area office in Grand Island.

22 I transferred down there as a hydraulic
23 engineer. I was in the water operations branch, it
24 was at the time. We were responsible for the
25 operations of 16 reservoirs at that time throughout

1 Nebraska, Kansas and Colorado. I was one of three
2 engineers on staff that was responsible for the
3 operations of those projects.

4 In 1985, I was reassigned to the -- as
5 the chief of facilities maintenance there. The
6 office was responsible for the operations and
7 maintenance of -- directly of 11 of the projects and
8 oversight on another four.

9 In that position, I was responsible for
10 the maintenance of, the direct maintenance on 11 of
11 the dams in the projects. I supervised approximately
12 15 employees.

13 In 1995 I was reassigned as the chief of
14 water operations branch, the original branch that I
15 reported to down there. I remained in that as the
16 supervisor of that branch until 2001 when I was
17 appointed as the office manager.

18 Q What are your responsibilities in your
19 present position?

20 A Presently, we are -- our responsibility
21 in the office is for the operation and maintenance
22 functions of the Nebraska/Kansas area office and most
23 of those functions are carried out under the McCook
24 field office.

25 So I have oversight over all of the

1 operations that are related to those projects and
2 also the maintenance function related to those
3 projects. We are involved with operationally 12
4 irrigation districts, I believe three municipalities,
5 one water district and we have, I believe, two state
6 contracts, one with Kansas and one with Colorado.
7 So it's -- that's from the operation end.

8 Maintenancewise, we do the direct
9 maintenance on 11 of those facilities. Those
10 facilities, 11 of them are multipurpose facilities
11 that involve flood control, which involves
12 coordination with the Corps of Engineers on those
13 facilities.

14 And I might mention operationally, we
15 also worked with the Corps of Engineers in Harlan
16 County. It's an important facility. It's a Corps
17 facility but Reclamation has the irrigation
18 responsibility for the water -- irrigation water out
19 of that facility.

20 Q Now, you were here earlier today during
21 Mr. Thompson's testimony?

22 A Yes.

23 Q And so you heard that testimony as it
24 related to the scope of his testimony and yours?

25 A Yes.

1 Q And your testimony provided today, I
2 assume, is consistent with what he stated?

3 A Yes, it is.

4 Q I would like to turn, then, to Kansas
5 Exhibit 76. I believe we have provided you with a
6 set of the exhibits to which Mr. Thompson testified.

7 This is a map. Could you briefly
8 describe what the important features of this map are
9 for purposes of this proceeding.

10 A Yes, I can.

11 You know, kind of proceed from the west
12 to the east on the map.

13 It indicates the projects that exist in
14 the Republican Basin that we have responsibility for.
15 And starting out in northeastern Colorado, there is
16 Bonny Reservoir. And it -- they are all multipurpose
17 facilities.

18 Bonny originally had been envisioned to
19 have an irrigation district associated with it. That
20 did not come to be. In 1982, the State of Colorado
21 was interested in purchasing the conservation space
22 at Bonny for fish and recreation and wildlife
23 functions.

24 So in 1982, there was an agreement, a
25 contract put in place with the State as exists today.

1 So there was really no releases made from Bonny or
2 any demand other than bypass inflows and that kind of
3 thing.

4 Proceeding -- and that is located on the
5 South Fork, the Republican River upstream from
6 Swanson.

7 Proceeding down to Swanson, it's one of
8 three reservoirs that our reservoirs have provided
9 irrigation waters to Frenchman-Cambridge Irrigation
10 District.

11 Q Is Swanson marked here as Trenton Dam?

12 A Yes, Trenton Dam. The reservoir is
13 Swanson Lake.

14 And out of Trenton, we do -- as I
15 indicated, we provide -- there is a canal,
16 Meeker-Driftwood Canal that comes directly off the
17 dam. We supply water into the canal and we also
18 historically have made releases to the river that are
19 transmitted downstream and picked up either at the
20 Bartley Diversion Dam or the Cambridge Diversion Dam,
21 which are all features of the Frenchman-Cambridge
22 Irrigation Districts.

23 Moving to the Frenchman River-Enders
24 Dam, multipurpose facility again. It supplies water
25 to two irrigation districts out of their Frenchman

1 Valley Irrigation District and H&RW Irrigation
2 District. Enders has been discussed earlier, is
3 probably one of those that has been most impacted by
4 low flow conditions.

5 We release water from there on
6 downstream to Palisade, Nebraska, to where it's
7 diverted into the Culbertson Canal, ultimately to the
8 Culbertson Extension Canal.

9 Proceeding on down the basin, Red Willow
10 Dam and Butler Lake located north of McCook, that is
11 another of the facilities that supplies irrigation
12 water to Frenchman-Cambridge Irrigation District.

13 Immediately downstream of the dam, there
14 is the Red Willow Diversion Dam that we release water
15 to and then divert water into the Red Willow Canal.
16 We can also release water past that diversion point
17 to supply water down at the Bartley Diversion Dam
18 located on downstream.

19 The next facility located downstream
20 from there is Medicine Creek Dam, Harry Strunk Lake,
21 which is north of Cambridge. That is the third
22 reservoir that supplies water to the
23 Frenchman-Cambridge Irrigation District.

24 Releases are made from there and
25 diverted down on the Republican River at the

1 Cambridge Diversion Dam. That is the only canal --
2 the remaining canal in the Frenchman-Cambridge
3 District that we can supply out of the Harry Strunk
4 Lake.

5 Moving downstream and just into Kansas
6 is Norton Dam, Keith Sebelius Lake. There is a small
7 irrigation district associated with that dam,
8 approximately 5000 acres that we supply water to.
9 And there is also an M&I, municipal and industrial,
10 contract with the City in order to supply water to
11 those individuals.

12 Moving on downstream is Harlan County
13 Dam, Harlan County Lake, and that's the Corps of
14 Engineers facilities. We have, as I indicated, the
15 irrigation responsibility, Reclamation does, out of
16 that facility. We do a significant amount of
17 coordination with the Corps on the operation of that
18 facility.

19 We supply water to two irrigation
20 districts out of there. The Nebraska Bostwick
21 Irrigation District located in Nebraska and also to
22 the Kansas Bostwick Irrigation District located in
23 downstream in Kansas. There are two canals
24 immediately off the dam. Another canal located
25 approximately halfway downstream and then the

1 Superior-Courtland Diversion Dam where there are two
2 canals that can take water off that point.

3 The final dam, the reservoir is located
4 in Kansas, which is part of the Bostwick division
5 water supply. And that's Lovewell Dam located in
6 White Rock Creek. We operate that dam and reservoir
7 somewhat -- I don't know if we use the word "tandem."
8 It's certainly in conjunction with operations at
9 Harlan. It's kind of a combined water supply that we
10 supply water to both districts from, certainly from
11 both reservoirs; Lovewell Dam supplying only water to
12 Kansas below the reservoir there.

13 So it's a pretty integrated operation
14 from Harlan County for those two districts.

15 Q And is it within the Bostwick division
16 that we have the Guide Rock diversion point?

17 A Yes, that's correct.

18 Q And that's on the mainstem, not
19 particularly shown here, but it's just west of the
20 area indicated as Superior?

21 A Yes, that's correct.

22 Q I would like to turn our attention to
23 the next numbered exhibit, Kansas Exhibit 77, if I
24 may.

25 This is the exhibit, part of which

1 Mr. Thompson testified to, entitled, "Reclamation
2 Statement on Concerns with Project Viability in the
3 Republican River Basin," dated March 4, 2009.

4 Did you assist in the preparation of
5 this document?

6 A Yes, I did.

7 Q Unless you have particular comments with
8 respect to the first and last sections of it, which
9 were addressed to some degree by Mr. Thompson, I
10 would like to ask you to turn to the second section,
11 which starts on the second page entitled, "History of
12 Inflows and Water Deliveries at Federal Projects."

13 A Okay.

14 Q Could you describe the main points that
15 the narrative seeks to make in this section?

16 A Yes, I can.

17 I believe we have looked at all of the
18 -- at least we accumulate all of the data on our
19 projects that result in inflows to hydrologic data
20 released to the districts, that kind of thing. And
21 we have reviewed what was envisioned and inspected in
22 the DPRs that Mr. Thompson referred to earlier.

23 And in the late '60s, we noticed a
24 significant decline in inflows throughout the basin,
25 especially to the western part of the basin.

1 And we believe, in our opinion, in
2 reviewing the data and reviewing precipitation
3 trends, that kind of thing, we believe that
4 significant declines that we have observed and noted
5 in the inflows to our project are related to
6 groundwater development that is occurring throughout
7 the basin, especially above our reservoirs.

8 And I think we did a comparison. That
9 is probably on the following page, a table that
10 indicates what was envisioned when the DPRs were
11 worked on, when the projects were planned based on
12 those, and the -- we have noted the DPR average flows
13 that were expected at the time that those documents
14 were worked on.

15 And we have included a table in here
16 that shows by ten-year periods what we feel are
17 significant declines that are continuing to occur.

18 And at the point of the last column, I
19 believe indicates '96 through 2005. Almost all show
20 declines that only have 30 to 40 percent, at best,
21 remaining of what was envisioned the DPR averages.

22 I think what is significant to me is
23 when I look at the first ten-year period, it was
24 surprisingly close, the flows that were experienced
25 at that time. And then the following periods, the

1 declines significantly started occurring, which, I
2 believe in our opinion when we look at the
3 groundwater development, the time when that occurred
4 is -- is very related to the same time periods as
5 these declines began.

6 So that is what is captured in that
7 table. In a lot of cases, we probably will be down
8 to a third of what the flows were at one point in
9 time predevelopment.

10 Q Just to be sure we are clear, we are
11 looking at the Table, "Federal Reservoir Average
12 Annual Inflow - Acre-Feet"?

13 A Yes.

14 Q And DPR stands for what?

15 A Definite Plan Report.

16 Q And Definite Plan Reports, are those
17 prepared at the time that the project is --

18 A Yes.

19 Q -- initially built?

20 A Yes. They were -- they were -- after
21 the Compact, the allocations were set in place in the
22 '40s. Most of these -- there was a planning report
23 prepared for, I believe, each project throughout the
24 basin. And most of those would be in the late '40s,
25 early '50s, that kind of thing, that would have

1 planned out the project. It would have looked at the
2 water supply, any depletions that were expected. And
3 there were some expected from some groundwater
4 occurrence, some conservation activities. You will
5 see references to that and certainly not to the
6 extent that the groundwater development has occurred,
7 by any means, but there was some expected.

8 Those were planned into these projects.
9 These projects were, in my opinion and others that
10 have been very involved in this over the years, the
11 projects were planned such to not cause an allocation
12 violation or anything to any one State.

13 So I think they were, you know, were the
14 reports that the projects were planned on.

15 Q So to be sure I understand, the DPR
16 averages, those values in acre-feet already include
17 the anticipated effects of groundwater pumping and
18 any other depletions that were expected to occur?

19 A Yes, that's the way I read the reports.

20 They did envision some depletions and
21 they were accounted for in these planning reports.

22 Q Did you also present data analysis
23 regarding average water deliveries to the farm in
24 this narrative?

25 A Yes, yes. That's -- that's -- on the

1 following page, there is a table of our canals that
2 are throughout the basin.

3 Again, there was a -- in the planning
4 reports, it was envisioned, and the right column
5 would indicate what was envisioned in these projects
6 were going to be able to provide to the farm
7 18 inches of water. And that was a pretty standard
8 number.

9 So we did put a table together and
10 compared those -- compared those actual deliveries
11 that have occurred starting in the '60s by ten-year
12 periods.

13 As you move down there, there was these
14 supplies have -- these deliveries to the farms have
15 dropped significantly, which is related to the lower
16 water supplies we see in the reservoirs and
17 streamflows that we utilize.

18 Q And for this information, did you rely
19 in part on the HDR consultant's report of June 2006?

20 A Yes. That was reviewed just to get a
21 feel for the groundwater table, that kind of thing,
22 the effects to that that were occurring.

23 Q And as you move across the table you
24 have just been describing, do you see significant
25 declines in the deliveries to the farms?

1 A Yes. And I -- I guess I could pick out
2 a couple of examples, but probably the most extensive
3 deliveries are Culbertson Canal, Culbertson
4 Extension, which are related to the Enders Reservoir.

5 We were somewhere in the 17 inches,
6 14 inches in the '60s and we are down in the -- for
7 the '96 to 2005 is 4 inches and 2.7 inches,
8 respectively, and I believe in the last several years
9 there has been zero deliveries to the H&RW areas
10 used, which is certainly the Culbertson Extension.

11 The Meeker-Driftwood Canal, there has
12 been no releases made to that in the last several
13 years. So it's -- it's -- there has been a
14 tremendous amount of conservation efforts attempted
15 by the districts, knowing the water supplies were
16 declining, to try to make these supplies last.

17 In the last several -- several years,
18 there have been no -- no deliveries due to the short
19 water supply, to some of those.

20 Q And the delivery amounts -- the actual
21 delivery amounts that you show by ten-year periods
22 are compared to the delivery amounts that were
23 expected in the Definite Plan Reports of 18 inches;
24 is that right?

25 A That's correct.

1 Q I wanted to cover any aspect of this
2 narrative that Mr. Thompson hadn't covered.

3 In your opinion, any other conclusions
4 that you, particularly from your position as the --
5 as providing testimony in the hydrologic and
6 operation issues, you would like to make?

7 A I think -- I think just the bottom line,
8 I guess, is how I would put it, is that I think
9 significant depletions that have occurred; they have
10 been occurring for a number of years due to
11 groundwater development.

12 When I first arrived in '81, there was
13 discussions already at that point concerning concerns
14 that the Bureau had. And I know they were certainly
15 in the late '70s prior to my arrival there; but it's
16 not to say that there aren't some effects because of
17 conservation efforts, but -- activities that went on.

18 But in my opinion, the significant part
19 of the depletions to the streamflows, to our
20 projects, to our irrigation districts are related to
21 groundwater development. And, you know, we have
22 reviewed -- there has been discussion of DNR graphs,
23 that kind of thing. We certainly have had
24 opportunities to review those, and there was numerous
25 meetings with NRDs/DNR during the IMP's development,

1 certainly a lot of discussion regarding depletions,
2 that kind of thing, and what needed to be done.

3 And we have also reviewed the Compact
4 output policy model. We have not done our own
5 modeling, but we feel the Compact groundwater model
6 is a very important tool and we have reviewed output
7 data from that as it relates to groundwater
8 depletions, surface water, that kind of thing.

9 Q And did you participate in the
10 preparation of the last section of this narrative
11 regarding the IMPs?

12 A Yes, I did.

13 Q And as a result of that work, do you
14 have an opinion with respect to the sufficiency of
15 the IMPs to address the inflow and delivery problems
16 that you described?

17 A I think in our review, and not only
18 myself but others on my staff and with regional
19 office assistance, also, it's our belief in looking
20 at what the current groundwater pumping levels were
21 and what the proposed allocations were in the IMPs,
22 we felt they were -- they were way too high, the
23 allocations, due to the fact that the overage that we
24 were seeing in the 2003, 2004, 2005 Compact
25 accounting that indicated the overage in there and

1 the pumping levels related to that, and we felt the
2 allocations that were put in place at that time were
3 essentially where they had been pumping anyway.

4 So we -- we had a difficult time seeing
5 where this was going to reduce the depletions to
6 streamflows.

7 Q Let me turn our attention now, if I may,
8 to the following exhibit. This was also testified to
9 by Mr. Thompson.

10 This is the first of a series of three
11 exhibits that contain testimony provided to the
12 Upper, Middle and Lower Natural Resources Districts
13 in conjunction with their review of the proposed IMPs
14 that are now in place.

15 Did you participate in the preparation
16 of the documents which are Kansas Exhibits 78, 79 and
17 80?

18 A Yes, I believe I did.

19 Q I would simply ask that we look at the
20 first one, No. 78, relating to the Upper Republican.
21 And you were here for Mr. Thompson's testimony.

22 I would ask that you guide us through
23 this to any points that Mr. Thompson did not make or
24 that additional discussion is needed.

25 A I would just take a quick look, you

1 know, just to know we did indicate our expertise in
2 the operations of the projects throughout the basin.
3 So we feel, you know, we do have, not just myself,
4 but others that have worked on this, considerable
5 experience in the operations of our Federal projects,
6 and we felt we had a good handle on that -- that kind
7 of data.

8 I know the graph was talked about, and I
9 think it's -- it tells quite a story, actually. It
10 says -- Mr. Thompson indicated the X Graph we refer
11 to it as, it shows a significant decline in the
12 inflows above Enders and the increase in wells that
13 occurred above Enders. So we think there certainly
14 is a strong correlation there.

15 And in looking at the Compact precip
16 stations throughout the basin, we don't believe that
17 is a factor, not in the average precip that we see at
18 those. In fact, I think it's somewhere around
19 103 percent looking back over time, so we don't
20 believe that is a cause.

21 So significantly, we think it points to
22 groundwater use that is occurring above there.

23 Q I might direct your attention to page 3
24 of the document. I don't want to skip over anything
25 that you feel is important, but there is a table of

1 reservoir inflows and that is followed by canal
2 deliveries?

3 A Yes. What we did on -- we provided
4 testimony -- or statements, whatever, on all of the
5 IMPs that were put in place at the time. So we
6 tended -- in the upper areas, we have two reservoirs
7 listed, Swanson and Enders. And the reason for that
8 is the area above there was the Upper NRD areas, so
9 that's -- that's what we felt, the fact our surface
10 projects would be on these two particular reservoirs,
11 so that is why they are included in here.

12 And the other IMPs, they will be
13 different reservoirs listed as we felt they were
14 germane to the particular NRD.

15 Q These tables generally show the same
16 decline?

17 A Yes, yes. We showed what was DPR
18 average and then we compared that to this particular
19 table for Swanson and Enders. In this instance, we
20 have two columns by 20-year averages showing what the
21 inflow comparisons were to that.

22 And the five-year average, there is a
23 column of the five-year average, 2001 to 2005. That
24 average was 17,700 acre-feet, compared to the DPR
25 average of 115,300.

1 Enders, we envisioned 55,000 acre-feet
2 and there was 6800 acre-feet in that five-year
3 average from 2001 to 2005, so significant declines
4 for us to deal with and for the irrigation districts
5 to deal with, which translates to small deliveries to
6 the farms or no deliveries, in most cases.

7 Q And you also show the percentages by
8 which the totals have been depleted?

9 A Yes. The five-year average is
10 14 percent remaining out of the -- compared to the
11 original DPR average.

12 Q You provided similar information in the
13 columns on the next page with respect to deliveries?

14 A Yes. Those are the canal systems that
15 are related those two reservoirs. And we did compare
16 the -- indicate the deliveries that we see there by
17 ten-year periods again. And in the '60s to the '70s,
18 we were pretty much where I think the DPRs expected
19 us to be. As we move through time, they become less
20 and less until there is zeros in some of those where
21 there was no water to deliver.

22 Some water was -- natural flows on
23 Culbertson Canal were purchased and allowed to go;
24 but storage water, no storage water is available.

25 Q Were there any other parts of this

1 testimony that deserved special comment from you?

2 A I would just -- there was some -- and I
3 think Mr. Thompson indicated, you know, we did -- we
4 did note some, what we thought were important things
5 in the Nebraska Statute 46-703.

6 And what seemed important to us is that
7 there -- it indicates there should be clear goals and
8 objectives of sustaining the balance between water
9 needs and water supplies.

10 And I don't think -- I think we had a
11 difficult time finding -- finding that in the
12 proposed IMPs. And that was so addressed in here, I
13 believe.

14 And I think there is a reference in
15 here, I don't know if it was indicated earlier, based
16 on model runs. And I think it's somewhat, the model
17 runs we are talking about, that streamflows would
18 continue to decline even with the 20 percent
19 reduction in pumping, average hydrologic conditions.

20 Q If that, combined with the remarks
21 earlier of Mr. Thompson is sufficient, we have the
22 next two exhibits relating to the Middle and Lower
23 Republican Natural Resources Districts. Are there
24 any significant ways in which the testimony would
25 differ from the testimony that was provided about the

1 Upper NRD?

2 A I think, for the most part, they are
3 very similar.

4 We did -- again, as I indicated earlier,
5 we did note different reservoirs that were probably
6 more germane to the particular NRD that we were
7 supplying testimony to.

8 In the Middle, it would have been
9 Swanson, Harry Strunk and Harlan County. Those all
10 affected, to some extent, the downstream of that
11 particular NRD.

12 Q You are referring to Exhibit 79 on page
13 3?

14 A Yes. And again, we went through some of
15 the same drill of comparing the DPR averages and the
16 declines that we see by, in this case, 20-year
17 periods and then, again, a five-year average and
18 where we are. And the five-year average is 20-some
19 percent of what was originally envisioned.

20 Q And similar declines in project
21 deliveries?

22 A Yes. And so -- yes, directly relates to
23 deliveries to the canal systems.

24 Q And, in general, the concerns,
25 expectations and conclusions are generally parallel

1 with the ones that we looked at with Mr. Thompson in
2 the Upper NRD?

3 A Yes, I believe, so.

4 And there is one -- one item I might
5 note that we had quite a bit of concern and we did
6 point it out in our testimony, and I think it's on
7 page 6 of this particular one, was Goal No. 4.

8 And it spoke to "Reserve any streamflows
9 available from regulation or supplemental programs,
10 enacted to maintain compact compliance from use that
11 would negate benefit of such regulations or the
12 programs."

13 What that was saying to us was
14 groundwater use, as it's connected, could take the
15 water away from the streamflow; but if some action
16 was done to put some back, then we, as the
17 water-right holders in our districts -- they were
18 saying that would not be available to us, once it was
19 put back into the streamflow.

20 And that -- that was -- that is pretty
21 tough for us to understand that -- that theory or
22 philosophy, I guess.

23 And so we commented, as such, that if
24 that was taken out -- or if that was, in fact,
25 encouraged and put into place, then we are not sure

1 that we would ever see any of our streamflow come
2 back to us.

3 That was saying to us it would be
4 protected on the way to Kansas. And it was -- it's
5 not an acceptable thing to Reclamation, I don't
6 believe.

7 Q If you would please turn to Kansas 81.
8 This is the draft of the Frenchman Valley Appraisal
9 Study excerpts.

10 From an engineering operational
11 hydrologic point of view, could you describe briefly
12 the purpose of this report and the conclusions that
13 are summarized in the excerpt.

14 A Okay. I think the purpose --
15 originally, I believe the thought in working with
16 Nebraska Department of Natural Resources was we knew
17 we had a very short water supply, what shall we do
18 going into the future with what we have left of the
19 water supply?

20 And so the idea was to do an appraisal
21 study and try to determine some of those things, put
22 some alternatives out there, analyze them and kind of
23 do some looking at that and see if there is
24 justification to move on to a feasibility study, that
25 kind of thing.

1 Q I'm going to ask you to turn to the
2 third page, which has a page number 51 in the lower
3 right. You have a section there entitled, "Future
4 Surface Water Supply."

5 What is the gist of that part of the
6 conclusions?

7 A I believe from what -- the preliminary
8 model runs that were provided in looking at the
9 declining inflows, the model runs we received, with
10 the assistance of Nebraska DNR, and looking at our
11 declines in inflows in Enders Reservoir and to some
12 extent declines below the reservoir down to where the
13 diversion point is in these irrigation districts, it
14 looked like there was significant declines, at best.

15 Probably H&RW Irrigation Districts would
16 not receive any water. They have junior flow rights,
17 so they are behind the Frenchman Valley right. So
18 the significant depletion, it's -- it's very limited.
19 Probably could be reduced at the recharge unit, that
20 kind of thing.

21 Q Could you read for us the first sentence
22 in the last paragraph on page 51, the one that
23 starts, "Without drastic reductions" --

24 A "Without drastic reduction in
25 groundwater pumping in the Frenchman Basin, there

1 will not be enough streamflows to provide any
2 sizeable deliveries to the H&RW Irrigation Districts.
3 The H&RW's current contract with Reclamation allows
4 them to continue to 'wait and see' in case drastic
5 measures cause future streamflows to increase. Also,
6 the H&RW can retain the water for a period of 30
7 years due to shortages" -- and there is a "(possibly
8 extended by petition-see Appendix A.)"

9 I might mention in regards to H&RW,
10 their contract, initially, I believe was a repayment
11 contract in the early '80s that was redone to a water
12 supply contract. And there is references in the
13 water supply contract, due to decreasing streamflows
14 and expectations, that they will completely go away.

15 The contract was redone based on --
16 strictly on if there was water supply available to
17 them of up to 6 inches, to the irrigation districts,
18 and they would then pay an O&M fee in that given
19 year. Anything less than that, then there is no
20 payment required. And that's the wait-and-see part.

21 Q Do you agree with this statement that
22 drastic reductions in groundwater pumping would be
23 necessary to make sizeable deliveries available in
24 that irrigation district?

25 A Yes, I do.

1 Q And if those supplies were made
2 available, would they be used, not only eventually
3 downstream by Kansas users, perhaps, but in the first
4 instance, by water users in Nebraska itself?

5 A Yes, I believe that's correct. And
6 that's -- that certainly plays back into the planning
7 of the Federal projects.

8 That was one of the key references you
9 will see in looking at those documents, is that there
10 was a strong expectation that when these projects
11 would operate, there would be return flows from these
12 projects and those would become return flows to the
13 stream and be of use to downstream users, downstream
14 projects.

15 And there is strong indication that that
16 was what they envisioned, and it did happen
17 originally.

18 Q Based on your experience and the
19 documents that we have just reviewed and the present
20 IMPs, can Reclamation be expected to have the surface
21 water physically available to assist Nebraska with
22 Compact compliance on a regular basis in the future?

23 A I think it would be very difficult to
24 say that we would or could. I think it would depend
25 on if there were some large runoff events that

1 occurred that we were able to store water; but on a
2 consistent, I believe is the word you used, I don't
3 believe it could be -- you could expect that to be
4 available consistently.

5 MR. DRAPER: Thank you. No further
6 questions.

7 ARBITRATOR DREHER: A couple here.

8 Mr. Swanda, let me take you back to
9 Kansas Exhibit No. 75 and the table on the third page
10 of that exhibit, which for various reservoirs shows
11 the Definite Plan Report average and then compares
12 that with the average during subsequent ten-year
13 intervals.

14 THE WITNESS: Is that 77?

15 MR. DRAPER: Which exhibit number? What
16 did you say?

17 ARBITRATOR DREHER: Oh, I'm sorry, I
18 said 75. It's 77.

19 THE WITNESS: Which page?

20 ARBITRATOR DREHER: Third page in.

21 THE WITNESS: Third page, okay.

22 ARBITRATOR DREHER: And you know, I
23 certainly understand how -- how these percentages
24 were calculated.

25 What I'm having trouble understanding is

1 why, during the first ten-year period, the Definite
2 Plan Report average was exceeded, I guess the
3 exception would be the Morton -- or the Norton -- not
4 Morton -- Norton facility, where only 77 percent of
5 the Definite Plan Report annual inflow occurred.

6 But with that exception, all of the
7 others either met or actually exceeded the Definite
8 Plan Report average.

9 And what I'm struggling with is when I
10 look at the next table, which is on the following
11 page -- oh, I see what I did. I didn't correctly
12 match up the years. You don't report the 1956 to
13 1965 average water deliveries, I guess, because the
14 facilities probably weren't completely in place?

15 THE WITNESS: That is probably correct,
16 yes. Norton is, I believe, the early '60s; and Hugh
17 Butler would have also been early '60s, I believe.

18 ARBITRATOR DREHER: Well, I have
19 answered my own question.

20 Initially, I was looking at the average
21 water deliveries in 1966 to '75, and I didn't
22 realize, or I misread the date. I thought that was
23 during the first ten years and it's not.

24 In terms of the -- I think you testified
25 that -- or made the statement that probably the most

1 impacted division is this Frenchman-Cambridge
2 division.

3 And I guess what I'm wondering about, is
4 the Bureau -- well, two questions.

5 Is the Bureau's conclusion that this is
6 from groundwater use -- this diminishment is from
7 groundwater use in Nebraska or is it Colorado or is
8 it both?

9 THE WITNESS: No. No, it's both.

10 We have, I don't know, Bonny Reservoir,
11 which is in Colorado, there are significant
12 depletions occurring above that, too, due to
13 groundwater use. So it's a combination of both, I
14 believe.

15 ARBITRATOR DREHER: Lastly, do you have
16 a sense or basis for estimating what portion of the
17 irrigators in the Frenchman-Cambridge division are
18 now using groundwater because the surface water
19 supplies are not adequate?

20 THE WITNESS: I can give you a rough
21 percentage, I guess.

22 We have quizzed the District in the past
23 on that very same topic. And I think, depending on
24 which canal, it probably ranges 60 to 80 percent also
25 at groundwater wells, probably depending on which

1 canal you are talking about.

2 And so most of those, in our view, put
3 in the groundwater well because they knew their
4 surface water supply was going away. So there is a
5 significant amount of wells within the districts.

6 They do vary, of course, but it's -- as
7 far as I would think, it's greater than 50 percent on
8 any particular canal.

9 ARBITRATOR DREHER: And so those
10 irrigators that are now using groundwater are, at
11 least in part, if not in large part, responsible for
12 the diminishment in the -- the ongoing diminishment
13 in the surface water supplies?

14 THE WITNESS: Yes. And I think it
15 became a necessity then, especially in the -- for
16 example, in the Frenchman drainage area, their
17 surface supply went away. So consequently, if they
18 wanted to continue, put a well in.

19 ARBITRATOR DREHER: And there were no
20 restrictions in the Bureau's repayment contract that
21 would have prevented them from doing that, I presume?

22 THE WITNESS: No, I don't believe so.
23 Strictly dealt with the surface supply. These would
24 have been individuals doing that. We deal with an
25 irrigation district as a district.

1 ARBITRATOR DREHER: All right.

2 Mr. Wilmoth.

3 MR. WILMOTH: Thanks.

4 We can proceed, Mr. Arbitrator. It's
5 about 12:30. We probably have, oh, 20 or 25 minutes
6 of questioning. We can either continue or we can
7 break. It's your pleasure.

8 ARBITRATOR DREHER: Well, I would rather
9 not break in the middle of your cross, so I say let's
10 go ahead and break for lunch now and resume, can we
11 do it at 1:30?

12 MR. WILMOTH: Certainly. Thank you.

13 (Lunch break taken from 12:30 to 1:37.)

14 ARBITRATOR DREHER: All right.

15 Before you start, Mr. Wilmoth, you and I
16 did briefly discuss these reports that Kansas has
17 requested full copies of. And they have them here,
18 and what I suggested they do is they go ahead and
19 take them back with them, but then get them over to
20 Kinko's, or whatever copy service or scanning
21 services, and then get them back out to Colorado and
22 Kansas, a week certainly should be long enough, I
23 would think.

24 MR. WILMOTH: We can get them scanned,
25 and, in addition, I think probably a number of these,

1 if not all of them, were submitted in the prior round
2 of this and may be able to locate that submission and
3 point the parties to where they might already have
4 copies, but we will take care of it.

5 ARBITRATOR DREHER: A week timeframe is
6 sufficient?

7 MR. WILMOTH: It's fine with me, if
8 Kinko's will do that. Yes, assuming they can.

9 ARBITRATOR DREHER: All right.

10 MR. DRAPER: That's sounds good.

11 ARBITRATOR DREHER: All right.

12 Mr. Wilmoth, you may proceed.

13 CROSS-EXAMINATION

14 BY MR. WILMOTH:

15 Q Good afternoon, Mr. Swanda.

16 A Good afternoon.

17 Q Thank you for appearing today. Again, I
18 would like to thank you and the Bureau and
19 Mr. Chaffin and the associate Office of the Interior
20 for making you available to us.

21 Mr. Swanda, I heard a lot in your prior
22 testimony today about impacts to Reclamation
23 projects. And if I understand what you did, you
24 basically took the DPR reports and looked at expected
25 inflows and then looked at expected deliveries and

1 concluded that those expectations had not been met;
2 is that a fair summary?

3 A I think that is pretty much correct.

4 Q And I'm trying to tie that to Compact
5 compliance.

6 I'm having a hard time understanding
7 what the relationship is between the amount of water
8 the Bureau projects receive and Nebraska's compliance
9 at, say, Hardy.

10 A I would go back and speak to the DPRs
11 that designed the projects to fit within Compact
12 compliance. And there was an expectation that our
13 water rights that we applied for, the water supplies
14 that we were expecting would be insured. That was
15 the whole idea of the Compact, I think, in building
16 Federal projects. So I think there is an expectation
17 that you see in the DPRs when you read those.

18 Q Do I understand you to say that the
19 Compact was designed to protect water rights?

20 A I'm saying that the projects were
21 designed to fit within the Compact allocations and
22 not cause overallocations, but the expectation is
23 that we would have reliable water supplies or why
24 else build the projects.

25 Q Those are the expectations with regard

1 to the projects, though, not with regard to Compact
2 compliance?

3 A That is probably correct.

4 Q Thank you.

5 And the Compact obviously was signed in
6 '42, correct?

7 A Yes.

8 Q And that predated the construction of
9 the projects, generally, right?

10 A Yes.

11 Q And certainly predated completion?

12 A Yes.

13 Q And Nebraska was obligated to inquire,
14 under the Compact, whether those projects existed or
15 not at that time; correct?

16 A Yes.

17 Q And whether or not those projects
18 continue to exist in the future or not, Nebraska will
19 have a compact obligation, correct?

20 A Yes, I would assume so.

21 Q There is a distinction between the
22 Compact compliance and the status of the Federal
23 projects?

24 A Yes. And the connection -- I guess I
25 would make the connection that it appears to us when

1 Nebraska is out of compliance, our projects are
2 definitely depleted. Having depleted inflows, flows
3 to deal with, it's kind of a synonymous thing it
4 would appear to us as.

5 Q So this is an observational -- this is
6 something the Bureau has observed based on the
7 historical --

8 A Yes --

9 Q -- date?

10 A -- in reviewing the groundwater
11 accounting and the accounting that goes with the
12 Compact, just looking at those -- at those outputs.

13 Q Did I understand you to say earlier when
14 you were looking at that and drawing certain
15 conclusions, you were looking at the '03, '04, '05
16 accounting averages?

17 A That clearly would have been three of
18 the years that we were looking at.

19 Q Did I understand -- I'm sorry, I didn't
20 mean to speak over you.

21 A Yeah. There's -- and I don't remember
22 exactly, but I know there's -- which years. There is
23 a year or two, like '05 or '06, that there is more
24 than one version, depending on which State and how
25 they see it. So we would have reviewed whatever was

1 available at the time providing input.

2 Q Did I understand you to say that you
3 thought that the allocations essentially within the
4 NRDs were essentially the same as the '03-'05 period?

5 A What I was saying is, I believe there is
6 a baseline assumed of '98 to 2002, I believe -- I'm
7 not exactly sure of the years there -- for the
8 Compact -- or excuse me, for the IMPs, the basis for
9 that. And that supposedly was -- involved a
10 20 percent reduction in groundwater use, I believe.

11 And in our review, we believed the NRDs
12 were already at that 20 percent reduction and were
13 still overuse occurring.

14 Q So you did not account for any further
15 reduction in groundwater pumping from the '03-'05
16 levels; is that accurate?

17 A I think we reviewed -- we reviewed the
18 Compact accounting numbers. And those would have
19 been for those -- whatever years were available,
20 depending on which testimony thing we were preparing.

21 Q Do you recall those years?

22 A I think if we had the data available or
23 the information available, it certainly could have
24 been up to 2005, 2006 because we did present
25 testimony as late as 2008, I believe.

1 Q If I understand you correctly, you
2 conducted no independent forward-looking analysis?

3 A No, I don't believe so.

4 Q Thank you.

5 I would like to talk to you a little bit
6 about the individual projects.

7 A Yes.

8 Q Do you recall during our discussion in
9 your deposition a line of questioning I had about
10 whether these projects were operated as a unit or did
11 the individual reservoirs serve individual
12 components?

13 A Yes.

14 Q And what was your response to that?

15 A What I recall is that typically the
16 individual reservoir is -- is not necessarily tied
17 to, but typically supports the irrigation districts
18 that is aligned with that particular project.

19 And there is -- typically, we do not
20 move water from one -- one reservoir to another,
21 other than the instance where Harlan County and
22 Lovewell come into play. And that is because they
23 share that water supply -- the two irrigation
24 districts down there.

25 So there are occasions where we would

1 move water from Harlan County to Courtland Canal
2 through Lovewell to support the acreage below, if it
3 needed it or required it.

4 Q And not all Bureau projects have been
5 impacted the same way, necessarily, have they? Are
6 there higher impacts the farther west you go, for
7 example?

8 A Yes, I believe that is true. I believe
9 the -- out of all of the reservoirs that we have, the
10 least amount of impact we have seen is to Harry
11 Strunk Lake.

12 And as I indicated in my deposition, I
13 believe there is 10- or 11,000 acre-feet of imported
14 water that comes through there. If it were not for
15 that, we would probably be seeing the same impacts
16 there.

17 Q And that's related to the groundwater
18 mound?

19 A Yes.

20 Q What is commonly referred to as the
21 groundwater mound?

22 A Yes.

23 Q With regard to Bonny Reservoir, you
24 indicated earlier that there was no current
25 irrigation at that facility; is that correct?

1 A That's correct.

2 Q What has impacted Bonny Reservoir?

3 A I think significantly the impact of the
4 groundwater flows out there have been groundwater
5 development occurring above that reservoir also.

6 Q Would that be groundwater pumping in
7 Colorado?

8 A Yes.

9 Q What about Norton Reservoir; what has
10 impacted Norton Reservoir?

11 A There are some groundwater impacts to
12 Norton. I know there was a moratorium put on new
13 wells, I believe it was in the '80s.

14 The issue with Norton they have in that
15 reservoir is that it's a very narrow drainage basin
16 that supports that and that any runoff-related flows
17 that we may see in there are very -- very defined.
18 They have to happen just right over that basin. It's
19 very narrow.

20 Q And have you provided any testimony or
21 similar comments to the States of Colorado or Kansas
22 about the impacts of their pumping on your facility?

23 A I think we have -- we have had several
24 meetings with the State of Colorado concerning the
25 operation of Bonny Reservoir out there and the

1 impacts that we see to that. There have been
2 releases we have been required to make by the state
3 engineer for Compact compliance.

4 So it has resulted in several meetings
5 with them and discussions of the impacts of the
6 groundwater development above there and the impacts
7 on our supply in that reservoir, also.

8 Q Have you provided any public testimony?

9 A No, I don't believe so. I -- I would --
10 I believe there was one instance that we may have
11 provided some written comments, back probably two or
12 three years ago when they were having discussions
13 about what was referred to as the Compact rules, I
14 believe, out there. And I think they had a hearing
15 or something like that. And we may have provided
16 some written testimony to that, I believe would be
17 the only -- only occasion I can think of.

18 Q And I believe I understood you to
19 testify that groundwater pumping in both Colorado and
20 Nebraska perhaps has impacted Swanson Reservoir
21 inflows; is that right?

22 A I believe that's correct.

23 Q And in regard to the testimony that is
24 reflected in Kansas Exhibits 75 -- I'm sorry, Kansas
25 Exhibit 77 --

1 A Okay.

2 Q Do you have a copy of that?

3 A Yes.

4 Q In regard to that testimony, did you
5 make any effort or did the Bureau make any effort to
6 distinguish the state responsible for the impact?

7 A Could you ask that again, please.

8 Q In Exhibit 77, Kansas Exhibit 77, in the
9 tables that reflect inflow, did the Bureau make any
10 attempt to distinguish between impacts attributable
11 to one state or the other?

12 A No, we did not, other than Bonny, of
13 course, is located in Colorado. So it would be
14 implied that would be the impact to that reservoir.
15 But, no, otherwise those are just inflows that we are
16 calculating -- inflows by us on the reservoir.

17 Q And when we talk about impacts, one of
18 the things that I understand to be at issue is
19 monetary compensation or debt payment associated with
20 these facilities; is that right?

21 A That's correct.

22 Q And Mr. Dreher asked you whether or not
23 individual customers within these projects often
24 commingled water. Do you know what I mean by that
25 term --

1 A Yes.

2 Q -- use groundwater, perhaps, when there
3 is not surface water available?

4 A Yes.

5 Q Did I understand you to respond that
6 about 60 to 80 percent of those customers in any one
7 project might have wells that they would rely on?

8 A That would be my best guess.

9 Q Is it fair to say that it's not only the
10 customers that are necessarily suffering from this
11 reduced inflow, so much as the Bureau's revenue
12 source? In other words, you are not going to pay for
13 groundwater pumping, are you?

14 A No, we are not.

15 Q The real issue, it seems -- is it fair
16 to say that the real issue is a reduction in the
17 revenue coming in to pay off these?

18 A That would be the impact to us.

19 The other thing I would relate is that
20 there are serious impacts to the district, in itself,
21 in its O&M funds that it needs to operate its
22 district. And I would think that is significant in
23 some of those because they still have to stay in
24 business or go out of business, one or the other.

25 Q But to be clear, there is no issue of

1 reduced crop deals or anything like that,
2 necessarily?

3 A That, I can't speak to.

4 Q I would like to turn just briefly to
5 your understanding of the hydrologic system --

6 A Okay.

7 Q -- in the Republican River. And we had
8 a discussion in the deposition about the source of
9 water.

10 Can you generally reflect on your
11 statements to me regarding the source of water in the
12 Republican River.

13 A I think, historically -- and I'm talking
14 predevelopment -- baseflows in most of all the
15 streams was a significant portion of those
16 streamflows. And, of course, there was runoff that
17 occurred that contributed, in part.

18 And I believe, as you move forward to
19 this time period that we are in now, baseflows have
20 been significantly reduced and the runoff from storm
21 events, that kind of thing, is a bigger -- a much
22 bigger part of the flows that are still there.

23 Q Would it be accurate, then, to say that
24 the system is generally dominated by surface water
25 wells?

1 A I would think in some cases, that is
2 probably a true statement.

3 Q Would you agree that conservation
4 measures can affect the volume of surface water
5 runoff reaching the stream?

6 A There certainly -- I would not disagree
7 that there are some impacts because of the
8 conservation measures that are in place.

9 Q But the analysis that went in to support
10 the testimony in Kansas Exhibit 77 did not discuss
11 that issue; is that right?

12 A No. We may have -- I don't know if we
13 alluded to it or not, but it certainly could have
14 been alluded to as another cause. And I can't
15 remember if we had -- we have prepared numerous
16 testimonies and we have alluded to the fact that
17 there are impacts from conservation measures, but I
18 think the conclusion we come to is that the
19 groundwater development is the largest impact.

20 Q Historically?

21 A Well, historically; currently.

22 Q So conservation measures, in your view,
23 are less significant on the current source of supply
24 for the river?

25 A I believe that's true --

1 Q Okay.

2 A -- because they both occurred, a lot of
3 them, the major increases in both of those activities
4 occurred around the same time, I believe, the
5 groundwater -- the wells continued to increase and so
6 on. I believe they are the bigger part of that.

7 Q Let's talk about that for a moment.

8 When you say the wells continued to
9 increase, are you talking about the number of wells
10 or the groundwater withdrawals associated with those
11 wells?

12 A I think it's probably yes, to both of
13 those.

14 Q Yes to both.

15 Is it your understanding that
16 groundwater withdrawals have increased or decreased
17 since 2000 in the Republican River Basin?

18 A I couldn't speak to that, unless I
19 looked at the data.

20 Q So as you sit here today, can you draw,
21 based on any documentation, a correlation directly
22 between the number of wells and groundwater impacts?

23 Do you have any data to support that?

24 A I think I would turn to the groundwater
25 model output to look for that data.

1 Q This is the RRCA model?

2 A Yes.

3 Q What was the date of that model output
4 you might be referring to?

5 A It's back to the 2003 to 2005 or '6.

6 Q Okay. I wanted to speak with you
7 briefly about surface water purchases or leasing.

8 A Okay.

9 Q I have a series of exhibits, you have
10 seen these before in your deposition. I would like
11 to just walk you through them very quickly for the
12 record.

13 A Okay.

14 Q This first will be Nebraska Exhibit 54.
15 Could you just identify this document for the record,
16 please.

17 A It's a letter from then-director Anne
18 Bleed, dated July 21, 2007 to Steve Ronshaugen, who
19 was acting manager for the Bureau of Reclamation in
20 the Nebraska-Kansas area office, and Daniel Smith,
21 Middle -- well, Republican River Basin Coalition.

22 Q Does this generally articulate a
23 particular purchase of surface water for Compact
24 compliance?

25 A Yes, I think it does. What I recall of

1 it, it indicated the accounting by DNR that would
2 occur on all of the purchases or releases that
3 occurred in 2007.

4 Q And then I would give you Nebraska
5 Exhibit 55. Would you identify this document for us,
6 please.

7 A It was a -- it's an email from Brad
8 Edgerton, who was with DNR at the time, to myself,
9 Steve Ronshaugen and Ann Bleed. It contained the
10 Storage Regulating Notice on Harlan County Reservoir
11 at the time.

12 Q What did that Storage Regulating Notice
13 mean to you?

14 A I think it -- in fact, it was, it was
15 indicated to us that the protected water from
16 Frenchman Valley and Riverside of the flows
17 calculated to be 68 cfs and we were directed to
18 bypass that through Harlan County.

19 Q And you did so?

20 A Yes.

21 Q This is Exhibit 56, Nebraska 56.

22 Would you please identify this document
23 and just summarize its contents?

24 A Okay. It's from -- it's an email from
25 William Peck, who works under me as the chief of

1 water operations. It was to me on August 10, 2007
2 entitled "Harlan County Estimated Purchased Water."

3 And what this email was doing was to
4 indicate to me estimates of purchased water to Harlan
5 County for that 2007 season through August -- it is
6 through August 29, even though the email is
7 August 10. It indicates 1) the purchased water from
8 Frenchman Valley and Riverside agreements (passed
9 through Harlan County Lake) was equal to 2500
10 acre-feet.

11 Secondly, the purchased water from
12 Frenchman-Cambridge (consumptive use portion of the
13 Harry Strunk release) was equivalent to 14,000
14 acre-feet.

15 And three, the purchased water from the
16 Bostwick in Nebraska was 12,500.

17 And so I think -- let's see here, that
18 is, I believe, where we thought we were starting
19 with, and then he went on to indicate how these
20 releases transpired, I believe.

21 Q Thank you.

22 And at least with regard to Nebraska, I
23 believe it's 53, the Ann Bleed letter --

24 A Yes.

25 Q -- we talked a little bit about that in

1 your deposition. In fact, we talked about all of
2 these documents in your deposition?

3 A Yes.

4 Q And I asked you, and you are welcome to
5 review this if you would like.

6 But I asked you, were there any problems
7 with that particular transaction that you wanted to
8 articulate for us today?

9 And your response was: I don't think
10 there was. We worked closely with DNR at the time
11 with helping, you know, because we were part of
12 making the accounting happen and providing that kind
13 of data to DNR.

14 Do you stand by that testimony,
15 generally?

16 A Yes. We would have been providing
17 release information and that kind of thing from our
18 reservoirs, particularly Harry Strunk and Harlan
19 County.

20 Q And you experienced no problems you care
21 to articulate regarding those deliveries?

22 A No, I don't believe so.

23 Q So I would like to talk with you very
24 briefly about your concerns regarding the IMPs.

25 A Okay.

1 Q One of the things that I understand the
2 Bureau to be concerned about is that the reductions
3 are not sufficient enough, reductions in groundwater
4 pumping are not sufficient enough to ensure
5 compliance; is that right?

6 A That's correct.

7 Q I have two questions relating to that.
8 My first is: In your mind, what does
9 compliance mean?

10 A Could you ask the first part of it
11 again, please.

12 Q The question is, when you testified that
13 the IMPs are not capable of achieving Compact
14 compliance, what do you understand compliance to
15 mean?

16 A I believe that to be where Nebraska is
17 not overusing their allocation in the five-year
18 average or in the case of water-short year, it would
19 be the two-year average.

20 Q And that has nothing to do with inflows
21 into Bureau projects?

22 A I believe the allocations that were set,
23 and in looking at the output from the accounting and
24 that type of information, I believe we were concerned
25 that with the allocations that were in place, that

1 was in the same areas of the use that was occurring
2 prior to that, and they were still at basically the
3 same allocations in the IMPs. So we were having a
4 lot of problem trying to decide how that could help,
5 knowing Nebraska was out of compliance with those
6 years, how was that going to --

7 Q In the years prior?

8 A 2003-2004.

9 Q And so Compact compliance doesn't have
10 anything to do with, necessarily, restoring
11 groundwater elevations to ensure historical inflows,
12 or does it?

13 A I think indirectly it does because it's
14 going to look at the groundwater tables and it's
15 going to look at if there is a disconnect between
16 those and the streambeds, which would, if they are
17 connected, result in streamflow, which will help
18 compliance and, obviously, help our projects.

19 Q And during your discussion in the
20 deposition, you acknowledge that the Compact was a
21 surface water compact; in other words, it doesn't say
22 anything about groundwater levels, does it?

23 A Yes. I mistakenly answered that way.

24 Q Okay.

25 A Upon further review, I should have said

1 it is the waters of the basin.

2 Q Is it your testimony, then, that the
3 Compact does regulate groundwater?

4 A It regulates waters of the basin.

5 Q But no specific groundwater elevations?

6 A I don't believe there is any reference
7 to groundwater that I'm familiar with.

8 Q So provided Nebraska does not exceed her
9 allocation, whether the groundwater baseflows are
10 restored or not is not necessarily relevant, is it?

11 A It's not in Compact compliance, but I
12 think it certainly is in IMP process of 962 process,
13 and that's the equity.

14 Q And with regard to your analysis on the
15 IMPs, I understand that principal reliance has been
16 placed on some information that the Department of
17 Natural Resources of Nebraska provided.

18 For the record, I have been handed a
19 copy of this famous or infamous November 2007
20 electronic communication.

21 I'm sorry, I don't have multiple copies
22 of it, but I can give it to Mr. Swanda.

23 ARBITRATOR DREHER: Sure.

24 MR. WILMOTH: Do you all have a copy of
25 this?

1 MR. DRAPER: Yes, we do.

2 Q (BY MR. WILMOTH) Mr. Swanda, is that
3 generally what you all -- you and Mr. Thompson have
4 previously discussed as being information shared by
5 the Department of Natural Resources?

6 A Yes, I believe that is correct.

7 Q And this information relates to certain
8 modeling scenarios in Frenchman Valley; is that
9 correct?

10 A Yes, appraisal study.

11 Q And on what basis did you extrapolate
12 basinwide Compact compliance from this particular
13 information?

14 A Well, what I would -- in the first graph
15 that I'm looking at is -- is Imperial, and it
16 indicates dry, average and wet years.

17 And the first thing that stands out for
18 me is, we are starting at 6000 acre-feet per year,
19 when, during development time, we were talking 50-,
20 60,000 acre-feet. So we are -- that's the first
21 thing that strikes me, is we have lost 50,000
22 acre-feet. This is the starting point at 2007,
23 whenever this graph starts.

24 Q But if I understand you correctly, this
25 is the foundation on which you conclude that the IMPs

1 wanted basinwide compliance, right?

2 A No, I think that isn't correct.

3 Q How does that fit into that analysis?

4 A This is one piece of that.

5 Q What is the rest of that?

6 A The rest of that is our review of all of
7 our project histories, the inflows, the whole thing
8 that we were responsible to put together and take
9 care of on our projects.

10 Q The historical documents?

11 A Yes. It also involves, not just by
12 myself but others in Reclamation, of reviewing the
13 output documents, that kind of thing, with the
14 accounting from the Compact, looking at -- to the
15 extent that we are able to, at the part that is
16 related to groundwater in that accounting.

17 It's based on being in numerous meetings
18 with all three States, listening to the discussion by
19 their experts, their state engineers on their
20 opinions that they have expressed in regard to
21 groundwater development throughout the basin on
22 streamflows.

23 Q And all of which you, I believe, deem to
24 be credible?

25 A Yes, very much so.

1 Q Have you had any occasion to review the
2 Nebraska future compliance plan that has been offered
3 in this proceeding?

4 A No, I don't believe I have.

5 Q And you have no opinion about that?

6 A No, I have not reviewed it.

7 MR. WILMOTH: Thank you, I have nothing
8 further.

9 I believe Mr. Ampe may have a question.

10 MR. AMPE: It's all right if I ask a
11 couple of questions from here?

12 ARBITRATOR DREHER: Certainly.

13 CROSS-EXAMINATION

14 BY MR. AMPE:

15 Q Mr. Swanda, earlier in your discussion
16 you mentioned that there is no irrigation district
17 ever associated with Bonny Reservoir; is that
18 correct?

19 A That's correct, as far as I know.

20 Q But there is irrigation in the area?

21 A Yes, there is.

22 Q And that irrigation takes place through
23 pumping groundwater, correct?

24 A For the most part, yes. There are -- I
25 think there are a few surface water irrigators that

1 we have been required to pass natural flows through
2 the reservoir for.

3 Q But those are not part of the project?

4 A No.

5 Q So essentially, those folks in Colorado
6 may have simply chosen to pump groundwater, rather
7 than contracting with the Bureau of Reclamation for
8 surface water; is that a possibility?

9 A Unless those folks live below the dam, I
10 don't believe it will be the same physically located.
11 I think it was a small district that was envisioned,
12 I don't remember for sure, but I think it was in the
13 neighborhood of 5000 acres possibly, and I think
14 there is significantly more acres currently irrigated
15 by groundwater.

16 Q Oh, true. I was not suggesting those
17 would be the only acres, but perhaps those who would
18 have been able to benefit from an irrigation district
19 chose instead to pump groundwater?

20 A That's possible, yes.

21 Q From your understanding of simply having
22 or possessing a water right, does that guarantee your
23 right to water?

24 A It should as it fits into the state laws
25 and regulations.

1 Q So it would have to be physically and
2 legally available?

3 A That's probably a true statement.

4 Q Looking at Kansas Exhibit 77, which is a
5 narrative response to Questions 1, 8 and 10.

6 A Okay.

7 Q First of all, you mentioned impacts of
8 Colorado and Nebraska pumping affect streamflows.
9 Does Kansas pumping also affect streamflows?

10 A Yes, to the extent it depletes
11 streamflows, as all of the States.

12 Q Now you pointed out, I believe, in
13 response to a question about a Frenchman-Cambridge
14 division; you pointed out Bonny had probably the
15 worst reductions in streamflow inflow; is that
16 correct?

17 A I think I mentioned Enders as being
18 probably the worst.

19 Q Enders, you are right.

20 Enders. And Bonny is -- just to be
21 clear, Bonny is not part of Frenchman-Cambridge?

22 A That's correct.

23 Q Now, if I look at my math on this, we
24 have -- Bonny has about 33 percent of the DPR
25 projected or average inflow, correct?

1 A That's correct.

2 Q I'm going to look at the entire
3 Frenchman-Cambridge division. And if I counted
4 correctly on all my fingers and toes, the total DPR
5 average was estimated to be about 246,500 acre-feet,
6 that would be all four divisions together.

7 Does that look approximately right?

8 A You are talking Enders, Swanson, Hugh
9 Butler and Pearson?

10 Q Correct.

11 A Yes, I would.

12 Q And for 1996 to 2005 level, if we add
13 those same four up, we are about the 92,900 acre-feet
14 average for the five years?

15 A Okay.

16 Q You trust my math?

17 A Yes.

18 Q I'm not sure if I do, but . . .

19 And so, at 92,900, it's approximately
20 37 percent of the 246,500. Does that look about
21 right?

22 A That sounds right.

23 Q And then we look at Norton and that has
24 about 37 percent of the inflows?

25 A That's correct.

1 Q And Harlan County is also about
2 37 percent?

3 A Correct.

4 Q So on a division-wide, they are really
5 similar, aren't they?

6 A They -- yes. They were close if you
7 look at them like you are looking at them.

8 Q Turn to the next page.

9 You mentioned the DPR full supply for
10 every division in every canal was projected to be
11 18-inch per acre?

12 A That's correct.

13 Q That's right?

14 A Yes.

15 Q And would you agree with me as a general
16 proposition, that as you move from west to east in
17 the basin, precipitation decreases -- sorry,
18 increases?

19 A Yes, I would agree with that.

20 Q Had my rights and lefts wrong.

21 So you understand why they would simply
22 assume that for the entire basin, despite
23 precipitation, they would assume an 18-inch supply?

24 A I can't speak to why they would assume
25 that. It may have been in their planning process as

1 simple -- without having enough additive to support a
2 different number -- just assume, generally speaking,
3 18 inches is where it would be. I don't know.

4 Q And you are not sure that 18 inches is
5 actually necessary in any particular year for
6 beneficial use in any particular area, 50 or more;
7 could be less?

8 A Right. I would suspect with the
9 technology today, it's less.

10 Q You pointed out some of the drop-offs in
11 inches per acre, such as the Culbertson Extension,
12 which dropped 14.6 inches per acre to 2.7?

13 A Yes.

14 Q And then let's look at the Courtland
15 Canal. The Courtland Canal went from 10.5 to 10.5,
16 which is greater from 1996 to 2005; is that correct?
17 Courtland Canal in Kansas.

18 A I see that. Which time period?

19 Q 1966 to 1975, you have 10.5 inches per
20 acre; 1996 to 2005, you have 10.5 inches per acre?

21 A That's correct.

22 MR. AMPE: Nothing further.

23 ARBITRATOR DREHER: All right.

24 Mr. Draper, redirect?

25 MR. DRAPER: Just a second.

1 No questions.

2 ARBITRATOR DREHER: What is your
3 pleasure on exhibits?

4 Let me ask a question about this email
5 correspondence dated November 2007. Does one of the
6 States intend to introduce that as an exhibit?

7 MR. DRAPER: My understanding was that
8 Nebraska was doing that.

9 ARBITRATOR DREHER: All right. Okay.
10 We don't have any additional exhibits
11 from Kansas, then?

12 MR. DRAPER: I think we had identified
13 those all during Mr. Thompson's testimony.

14 ARBITRATOR DREHER: Okay.

15 MR. DRAPER: I am unsure what the
16 Nebraska exhibit number would be on this.

17 ARBITRATOR DREHER: I think it would be
18 57 if they introduce it.

19 MR. WILMOTH: You looking at me?

20 Nebraska would offer Exhibit 54, 55 and
21 56. Whether or not we offer 57 depends on whether or
22 not we would have an opportunity to recall
23 Dr. Schneider.

24 And on that point, Mr. Arbitrator,
25 frankly, the reason for our doing so was limited to

1 trying to conceptualize some of this information that
2 you heard about was relied on. If you don't find
3 that useful, then that is acceptable to us. If that
4 is the case, then we frankly don't need to offer
5 Exhibit 57.

6 ARBITRATOR DREHER: Well, in thinking
7 about whether or not that would be appropriate, I
8 looked at all of the exhibits that Kansas had
9 introduced, looking for what they may have relied on
10 that had been provided from the Department of Natural
11 Resources in Nebraska. And this was the only thing.
12 There is nothing else.

13 So I guess I'm a little troubled. If
14 this is not introduced, I don't know how we draw on
15 that in considering the testimony of Mr. Thompson
16 this morning, where he said he relied upon this.

17 MR. DRAPER: Your Honor, they said they
18 were introducing it as an exhibit. We took them at
19 their word.

20 I think it is important, we have had
21 Mr. Swanda's testimony on it as well, and I don't
22 think it should be hostage to how you decide their
23 question of putting Dr. Schneider on.

24 If they don't want to offer it, we would
25 be glad to offer it. There was ample testimony to

1 justify.

2 MR. WILMOTH: We don't have a problem
3 with it being offered. If it is offered, we would
4 request a response opportunity.

5 ARBITRATOR DREHER: Well, I want to see
6 it offered and I certainly don't want to preclude
7 information.

8 So you know, I will accept, if you want
9 to characterize it as responsive testimony from Dr.
10 Schneider, on this one exhibit only.

11 MR. WILMOTH: Very well.

12 ARBITRATOR DREHER: But other exhibits
13 that were introduced this morning, I don't think it's
14 appropriate to have any responsive testimony
15 regarding those.

16 MR. WILMOTH: Very well. Then, if it's
17 your pleasure, we offer Exhibits 54 through 57 with
18 that document inclusive --

19 ARBITRATOR DREHER: All right.

20 MR. WILMOTH: -- and seek to call Dr.
21 Schneider for that limited purpose.

22 ARBITRATOR DREHER: Any objection?

23 MR. DRAPER: Just a clarification, the
24 Schneider memo is Nebraska Exhibit 57?

25 MR. WILMOTH: 57.

1 MR. DRAPER: We have no objection to any
2 of those exhibits.

3 ARBITRATOR DREHER: All right.

4 MR. AMPE: No objection.

5 ARBITRATOR DREHER: They are admitted,
6 and you may call Dr. Schneider.

7 (Nebraska Exhibits 54, 55, 56 and 57
8 were admitted into evidence.)

9 MR. WILMOTH: May we have a five-minute
10 recess. Dr. Schneider just got a copy of this about
11 20 minutes ago, if he could just take a quick look at
12 it.

13 ARBITRATOR DREHER: Sure, that will be
14 fine.

15 (Break was taken from 2:15 to 2:30.)

16 ARBITRATOR DREHER: Mr. Wilmoth, you may
17 call Dr. Schneider.

18 Dr. Schneider, even though it has been a
19 few weeks, you are still under oath.

20 JAMES SCHNEIDER,
21 having been previously duly sworn, was examined and
22 testified as follows:

23 DIRECT EXAMINATION

24 BY MR. WILMOTH:

25 Q Good afternoon, Dr. Schneider.

1 A Good morning.

2 Q Seems like you never left, doesn't it?

3 A Yes.

4 Q Would you please take a look at what has
5 been marked as Nebraska Exhibit 57. Are you familiar
6 with this communication?

7 A Well, it certainly has been a while, but
8 I do remember this.

9 Q Can you explain generally what that
10 communication represents?

11 A Certainly. And I think I will, you know
12 start a step by going back ways to provide some
13 context in terms of the study that we were involved
14 in.

15 And I think the Frenchman Valley
16 Appraisal Study actually was begun when Roger
17 Patterson was still a director of DNR so it was
18 something that was ongoing when I started at the
19 department. And we, the department, had committed
20 some resources to that study. And once I started,
21 and we had some other new staff that were involved in
22 the study as well, and we essentially fulfilled those
23 commitments through, in kind, help related to
24 modeling scenarios that we develop in conjunction
25 with the study partners and carried out at DNR and

1 also assisted with interpretation at DNR.

2 So that was going on kind of throughout
3 2007, I would say, completely distinct from the
4 process we were going through related to the
5 Integrated Management Plans. In other words, we had
6 Frenchman Valley study over here and the Integrated
7 Management Plans were being discussed over here and
8 there was no -- no relationship between the two.

9 Q What does the material in this exhibit
10 represent, then?

11 A Well, and you will see there is this
12 kind of a back and forth between Jack Wergin and
13 myself. And they had been attempting -- and I do
14 remember this -- early in November of 2000, they had
15 been attempting to --

16 Q Excuse me, early in November of what
17 year?

18 A 2000? Yes, 2007, sorry.

19 In early November 2007, they had been
20 attempting to use some of those initial modeling runs
21 they had done for the Frenchman Valley Appraisal
22 Study to form some opinions related to the IMPs.

23 And I remember having conversations with
24 him and I don't remember exactly what those were, but
25 what I recall the gist of what I told him was it's

1 very difficult to draw firm conclusions from the
2 Frenchman Valley runs we have done based on the
3 current IMPs.

4 And you can see that then precipitated
5 additional work that we did. Apparently after the
6 Bureau had submitted their testimony on the Upper
7 Republican IMP, we did some additional modeling runs
8 that did, in fact, incorporate the 20 percent
9 reduction from baseline pumping and, essentially, the
10 Bureau has this future without condition that they
11 have to incorporate into these appraisal studies.

12 And as I understand it, it just means
13 here is what we expect in the future without any
14 additional regulation. So once the IMPs have been
15 put into place, that was what we had in going
16 forward. So we did that, these scenarios that are
17 described in my email.

18 Q And that related to the Frenchman
19 subbasin?

20 A Right. I mean, of course, we are
21 running the whole RRCA groundwater model, but the
22 study was only looking at baseflows and streamflows
23 in the Frenchman Creek subbasin.

24 Q So would it be appropriate, in your
25 view, to extrapolate anything regarding basin-wide

1 Compact compliance from this material?

2 A No. And I think the real important
3 point here is, this is Frenchman Creek in which
4 Nebraska is allocated most of the water. And what is
5 not allocated is unallocated and split between Kansas
6 and Nebraska.

7 So Nebraska has the right to use most of
8 the water supplied in Frenchman Creek and the Compact
9 doesn't say whether or not that needs to occur
10 through surface water use or groundwater use.

11 So, you know, to try to extrapolate
12 these entire results to the basin isn't appropriate.

13 Q With regard to that latter effort, your
14 January 2009 report is the best available material on
15 that from the DNR?

16 A Absolutely.

17 MR. WILMOTH: Thank you.

18 I have nothing further.

19 ARBITRATOR DREHER: Let me ask a
20 clarifying questioning.

21 These model runs that are contained in
22 Exhibit 57, they do or do not assimilate adoption of
23 the IRPs?

24 THE WITNESS: IMPs.

25 ARBITRATOR DREHER: IMP?

1 THE WITNESS: Yes. They do, in fact,
2 contain the pumping volumes that are mandated by the
3 IMPs, the 80 percent reduction. They are not the
4 same as the modeling scenarios that we developed in
5 the IMP process. They are at this average, dry and
6 wet. We took a different approach and so that the
7 specific climate that is simulated isn't the same but
8 the pumping volumes were the same.

9 ARBITRATOR DREHER: So what is the dry
10 climate that is simulated here?

11 THE WITNESS: If I remember right, the
12 approach we took here was essentially to, I think we
13 used the 25th, 50th and 75th percentile precipitation
14 as dry, average and wet. And then we picked a year,
15 or a series of years that represented that percentile
16 precipitation.

17 They are a little bit different because
18 the average we selected from a scenario we already
19 developed in the past. So it repeats, I think, 1988
20 to 1991 conditions over and over, going into the
21 future. That, at least -- and again, another
22 difference is we were only focused on this study
23 area.

24 '88 to '91 was actually a moderate
25 drought for the whole basin; but when we look at the

1 area of Frenchman Creek and the precipitation
2 stations in Frenchman Creek, it was fairly average.
3 So we felt it was representative of average
4 conditions for Frenchman Creek. It isn't
5 representative of average for the whole basin.

6 And then similarly, we didn't have a
7 scenario for the dry and the wet. And we, I think,
8 just chose a single year in the past to repeat. And
9 that is why those curves are more -- are smoother,
10 because there isn't a series of years that are going
11 through. I don't recall what years those were, but
12 they were equal to the 25th or 75th percentile precip
13 for that study area.

14 ARBITRATOR DREHER: But for the dry
15 sequence, it was -- every year was a dry year?

16 THE WITNESS: Every year, 25th
17 percentile year and after for 40 years.

18 ARBITRATOR DREHER: All right.

19 Mr. Draper.

20 MR. DRAPER: Can I have just a second?

21 ARBITRATOR DREHER: Sure.

22 MR. DRAPER: I have just a simple
23 question. Of course, it's difficult to decide what
24 makes sense to approach on cross-examination, given
25 about 60 seconds for an opportunity, but let me do

1 what I can.

2 CROSS-EXAMINATION

3 BY MR. DRAPER:

4 Q Dr. Schneider, you used the pumping
5 volumes that were contemplated by the current IMPs
6 for the analysis that is shown in Nebraska Exhibit
7 57; is that right?

8 A That's right.

9 Q Did you include the possibility of
10 carryovers?

11 A Are you referring to the carryforward
12 that is allowed under the these rules, regs?

13 Q Right. Did you account for the
14 carryforward?

15 A Obviously not, because the 80 percent of
16 baseline is a hard volume cap and the carryforward
17 wouldn't come into play. They can't exceed
18 80 percent of their baseline pumping, on average,
19 regardless of what their carryover is.

20 Q There is no exception in the carryover
21 language for that, is there?

22 A Those carryforwards are for the
23 individual pumpers. I think you are getting that
24 confused.

25 There are rules that apply to individual

1 groundwater pumpers and there is an IMP for the NRD
2 and DNR. And the NRD must ensure, through whatever
3 rules and implementations they implement, that
4 groundwater pumping shall not exceed 80 percent of
5 the baseline.

6 Q But in a given year, they obviously can
7 exceed 80 percent; isn't that right?

8 A It is a long-term average, yes.

9 Q And so you also wouldn't have taken into
10 account variances that are allowed to individuals,
11 for the same reason?

12 A It doesn't matter. 80 percent of
13 baseline pumping is the cap. I mean, I would also
14 note that the wet conditions assumed that 80 percent
15 of baseline pumping as well, which may be
16 unrealistic.

17 MR. DRAPER: Nothing further.

18 ARBITRATOR DREHER: That triggered one
19 more question from me.

20 You say the 80 percent is a hard number
21 and so it doesn't matter about the carryforward, but
22 -- and I don't have the boundaries of the NRDs in
23 front of me, so I can't remember exactly how they
24 were situated.

25 But I mean, if you have got an

1 individual that has a carryforward and is exercising
2 his right to a carryforward and his well is adjacent
3 to the hydraulically connected surface water source
4 and the NRD is making up for that by reducing pumping
5 further away, doesn't that potentially have an
6 effect?

7 THE WITNESS: I mean, that would -- that
8 would certainly come into play. Of course, that is
9 where the other side of their compliance standard
10 would come into effect, the fact that, in the case of
11 the Upper Republican NRD, they can't exceed
12 44 percent of the allowable groundwater depletions.

13 So, you know, the two work together to
14 ensure that, you know, that the pumping levels are
15 stable and that there is compliance.

16 ARBITRATOR DREHER: All right.

17 Any redirect?

18 MR. WILMOTH: No.

19 ARBITRATOR DREHER: Thank you, Dr.
20 Schneider.

21 During our last recess I had a brief
22 discussion with Mr. Draper inquiring about what the
23 States had -- or whether the States had decided how
24 to proceed with closing statements, and he indicated
25 that the States have generally talked about a half

1 hour each.

2 Is that accurate, Mr. Wilmoth?

3 MR. WILMOTH: We did discuss that. I
4 will tell you that it's more likely than not that we
5 will waive our closing argument in favor of
6 posthearing briefing. So we don't intend to take a
7 half an hour.

8 ARBITRATOR DREHER: All right.

9 Mr. Ampe.

10 MR. AMPE: Yes, I certainly don't intend
11 on taking a half hour, depending, of course, on the
12 questions you have for counsel during our closing
13 argument.

14 ARBITRATOR DREHER: It's going to be
15 hard to ask questions if there isn't any closing
16 argument.

17 MR. AMPE: We thought that.

18 MR. DRAPER: Your Honor.

19 ARBITRATOR DREHER: Yes.

20 MR. DRAPER: Before we get too far down
21 the road towards closing argument, I would ask for a
22 short break to determine whether we will need to put
23 on any rebuttal testimony to the responsive case that
24 we have just heard.

25 ARBITRATOR DREHER: Okay. That is as

1 long as it's limited to that one exhibit, that's
2 certainly fair.

3 And we will take a brief break, but let
4 me tell you kind of where I'm at at this point.

5 I have been trying to ask questions as
6 we go, so, you know -- I mean, I may have some
7 questions about parts of this case that are long
8 past, but I don't have any other questions about what
9 we heard today at this point.

10 So, you know, how you want to use the
11 rest of the afternoon, if you want to use it, is up
12 to the States.

13 In terms of the closing or posthearing
14 briefs, my understanding is that those are due to be
15 sent by Federal Express on April 24 for delivery on
16 April 27.

17 MR. DRAPER: Yes, that's correct.

18 ARBITRATOR DREHER: And at this
19 juncture, you know, I'm not planning to seek any
20 additional time to issue some, whatever it is that
21 I'm going to call it in this matter.

22 And, you know, to make sure that all of
23 the States know what I'm doing, because I did mention
24 to a couple of the States that I have begun writing
25 kind of a draft decision because time is limited.

1 And just, you know, in terms of what it is I could be
2 working on in advance of receiving the posthearing
3 brief, what I have done is I have started with the
4 accounting issues. And I'm not done with those, but
5 that is where I started trying to least rough out a
6 decision.

7 And, in part, the reason that I did that
8 is because, you know, I'm anticipating that most of
9 the argument that is made in the posthearing briefs
10 is going to pertain to damages and Compact
11 compliance. I may be wrong. And if there is
12 significant material in posthearing briefs that
13 pertain to the accounting procedures, please know
14 that just because I have started roughing out a
15 decision, I will fully take into consideration any
16 material or information that is offered in that
17 posthearing brief, whether it's accounting issues or
18 anything else.

19 But I had to pick a place to start. It
20 seemed like that may be the safest place to start and
21 I guess that is in the eye of the beholder, I
22 suppose, but that is what I have done.

23 I just wanted all three States to know
24 what it is I'm doing. As to how that may or may not
25 affect what you submit in your posthearing briefing,

1 obviously, what you think is important for me to
2 consider, please include, but I have started to rough
3 out a decision.

4 So with that, we will take maybe a
5 ten-minute break and reconvene at 3:00. And if you
6 need to have a rebuttal limited to Exhibit 57, that
7 will be fine.

8 MR. DRAPER: Very good, thank you.

9 (Break taken from 2:50 to 3:06.)

10 ARBITRATOR DREHER: Mr. Draper.

11 MR. DRAPER: Thank you, Your Honor.

12 We do wish to proceed with a rebuttal
13 case, a full-blown rebuttal case, within the limits
14 that you specified.

15 ARBITRATOR DREHER: It's hard for me to
16 see how it can be full blown, but you can proceed.

17 MR. DRAPER: It's going to be a tight
18 squeeze.

19 With your permission, then, we would
20 recall to the stand Mr. Mark Swanda.

21 ARBITRATOR DREHER: All right.

22 Mr. Swanda, you are still under oath.

23 MARV SWANDA,
24 having been previously sworn, was examined and
25 testified as follows:

1 DIRECT EXAMINATION

2 BY MR. DRAPER:

3 Q Nice to see you once more on the witness
4 stand, Mr. Swanda.

5 A There is one of us that thinks that way.

6 Q I was about to say I thought sure that
7 was a shared sentiment.

8 I would like to ask you about what has
9 been marked as Nebraska Exhibit 57.

10 This is the email that involved a
11 transmittal description from Dr. Schneider and some
12 accompanying graphs and tables.

13 Dr. Schneider just testified; you were
14 here for that testimony, correct?

15 A Yes.

16 Q Dr. Schneider suggested that you and the
17 Bureau of Reclamation had inappropriately
18 extrapolated the information in this exhibit.

19 Now, what part of the Republican Basin
20 do the graphs in this exhibit cover?

21 A I think they cover all of the Frenchman
22 River from Imperial down to Culbertson, Nebraska.

23 Q And what NRD or NRDs does that
24 encompass?

25 A I believe it would encompass the Upper

1 NRD, as well as the Middle.

2 Q And did you rely, in part, on this
3 information about one of the results in drawing your
4 conclusions with respect to the Upper NRD IMP, as
5 proposed, and the middle NRD IMP, as proposed?

6 A Yes, I believe we used it as one piece
7 of the information that we used to develop the
8 statements that we presented to them.

9 It would have been one of the things, as
10 I mentioned earlier. Important to us is looking at
11 all of our project data that we have historically
12 since the dams have been there and the reservoirs,
13 the deliveries.

14 It also involved looking at Compact
15 accounting numbers from the RRCA, also involves
16 information that we have picked up and been involved
17 with the meetings with the various States concerning
18 all of these particular activities with -- I guess
19 the thing I would point out is, I believe we would
20 have -- and definitely, I believe, we would have come
21 to the same conclusions with or without this piece of
22 information.

23 Q Was this information largely consistent
24 with all of the other information on which you based
25 your opinion?

1 A I believe so.

2 Q And did you extrapolate it, per se,
3 outside of the area for which it was offered?

4 A Not to my knowledge. I believe it
5 indicated to us a trend and we believe that probably
6 would be the same trend we would see other places;
7 but actually taking it further than that, I don't
8 believe we did that.

9 MR. DRAPER: Thank you, no further
10 questions. Our full-blown case has blown.

11 ARBITRATOR DREHER: All right. Thank
12 you, Mr. Swanda.

13 Closing statements, if any.

14 MR. AMPE: Well, actually, I have a
15 housekeeping matter first.

16 ARBITRATOR DREHER: All right.

17 MR. AMPE: I spoke with the other States
18 just briefly during the break.

19 One thing that occurred to me is, in
20 addition to these two weeks of trial, these issues,
21 we have those as preliminary issues of law that you
22 already issued rulings on, some of which I believe
23 finally settled issues as a matter of law and no
24 facts were presented.

25 I was just curious on how we all wanted

1 to approach that and make sure that all of the States
2 give their yes or no to all of the issues that have
3 been resolved, and perhaps would act differently, for
4 instance, reject a preliminary issue, as a matter of
5 law, that you didn't need preliminary rulings but
6 accept a final ruling.

7 And my thought would be to attach that
8 previous ruling as an appendix to the final ruling
9 that you make upon these factual issues.

10 I don't know if the other States have
11 opinions on that and that way we would all know
12 exactly what it is that we have to go through, accept
13 or reject.

14 ARBITRATOR DREHER: That is consistent
15 with how I have started drafting the decision.

16 MR. WILMOTH: Good idea, Pete.

17 ARBITRATOR DREHER: I plan to fully
18 incorporate it by reference and actually attach as an
19 attachment or appendix, whatever, to this remaining
20 decision.

21 MR. DRAPER: So the question is, closing
22 statement?

23 ARBITRATOR DREHER: Correct. And I
24 guess I heard Nebraska say they may not offer closing
25 statement at the point.

1 MR. WILMOTH: We don't intend to offer a
2 closing statement. We prefer to rest on our
3 posthearing brief.

4 That is not to say that I'm not willing
5 to answer questions that you might have. Certainly
6 don't mean to dodge those. We don't intend to take
7 up any more time.

8 ARBITRATOR DREHER: Colorado.

9 MR. AMPE: Simply reserve mine for
10 written closing, as well, unless you have any
11 questions for us, I would be more than happy to
12 answer.

13 ARBITRATOR DREHER: Mr. Draper.

14 MR. DRAPER: Well, I guess it's up to me
15 as whether we are going to break this. My thought
16 was that I would try to say a few things with respect
17 to closing. And given the reluctance of other States
18 to spend much time on this, I will keep it pretty
19 short, but I thought I would say a few things to
20 address what we believe has been presented.

21 ARBITRATOR DREHER: All right. And
22 then, of course, Nebraska and Colorado, if you hear
23 something, then, that you want to respond to, you are
24 free to respond.

25 MR. WILMOTH: Okay.

1 MR. DRAPER: We had three segments to
2 this trial, which has been done on an expedited
3 basis.

4 Discovery leading up to the trial has
5 been, shall we say, abbreviated, not complete. I
6 don't think any of the States were satisfied,
7 certainly we were not, with our ability to do it
8 within the timeframe. We were also hampered by the
9 lack of any subpoena power and we were not able to
10 obtain some of the background that we considered
11 essential; but I think that is all consistent with
12 how this has been set up in the Decree. And those
13 are limitations that we have to live with.

14 We have seen a lot of cooperation of
15 counsel, which I personally want to express my
16 appreciation for. And it's a difficult matter to get
17 through, but it has been a lot easier, given the
18 constructive attitude of counsel in many regards.

19 So based on the, I guess what will
20 amount to something close to nine days, nine days of
21 trial time, we have addressed it in three categories.

22 There was the first segment on the
23 amount of the violation in 2005-2006 and the damages
24 that might be appropriate for that.

25 The second segment was related to future

1 compliance and it's in that segment that the
2 supplemental testimony we heard today was presented.

3 And thirdly, there was the segment on
4 Nebraska's proposed changes to the accounting
5 procedures of the Final Settlement Stipulation.

6 In that framework, I would just offer a
7 few comments describing how we see the evidence and
8 take them in that order and maybe abbreviate or
9 eliminate the third one, given your recent comments.

10 But in the first segment with respect to
11 the 2005 and 2006, the amount of the violation, first
12 and, secondly, the amount of losses to Kansas, there
13 was no dispute, as far as I could tell, that Nebraska
14 had violated the Decree based on the 2005-2006
15 accounting.

16 There was some difference as to the
17 exact amount of the violation based on the
18 differences over the Harlan County evaporation. The
19 bigger differences amounted, or appeared in routing
20 the water from Harlan County Reservoir to the Kansas
21 Bostwick Irrigation District and on downstream in
22 terms of return flows below the district. And there
23 were major differences between the way Nebraska and
24 Kansas handled the assumptions under which that water
25 was delivered.

1 Generally speaking, Kansas assumed more
2 normal conditions. We have seen the amount of losses
3 varies quite a bit, depending on whether you are in a
4 normal year or a dry year. We generally assume
5 normal conditions, normal project operations.

6 Nebraska assumed that we were not under
7 normal conditions and that none of the other parts of
8 the project that normally operate with regard to the
9 Nebraska part of it were operating.

10 We did not -- our experts testified that
11 they did not feel that it was appropriate to make
12 those harsh assumptions and that normal operation was
13 the appropriate approach to that; and that what they
14 considered the monthly distribution of deliveries
15 from Harlan County, even at times when it couldn't be
16 used, was inappropriate.

17 In terms of the valuation, once the
18 amount of water available to the fields is
19 determined, there were wide differences between the
20 States.

21 The technique used by the Kansas experts
22 closely followed the approach that was taken in the
23 Arkansas River case to determine losses to farmers
24 and the consequent economic effects of that.

25 Nebraska, on the other hand, used a

1 difference-in-rents approach, which, to the thinking
2 of Kansas experts, was inappropriate. It was
3 something that the Nebraska experts had not used in
4 similar situations. When we saw what they had used
5 in similar situations, it was much more like our
6 approach.

7 Further, if you were going to use such
8 an approach, there were factors that had to be taken
9 into consideration, such as whether the rental values
10 included irrigation equipment or not or other fixed
11 costs, and these were not considered.

12 So we had quite a differences in the way
13 the two States approached the valuation of the water
14 that was calculated -- that would have reached the
15 fields, if there had been compliance.

16 With respect to the second segment,
17 future compliance, which is perhaps the most
18 far-reaching part of this case, certainly the most
19 important from our point of view, since it determines
20 whether there will be compliance in an ongoing
21 fashion in the future, we presented expert evidence
22 supporting the need for a -- to use the words of the
23 Bureau from its Enders study draft, a drastic
24 reduction in groundwater pumping in order to restore
25 surface flows to the system.

1 As the system operates now, restored
2 surface flows are essentially to Compact compliance.
3 You couldn't get there any other way. There has been
4 suggestion that there might be some other ways, but
5 there are no other such ways currently proposed by
6 Nebraska.

7 So at this point, we are looking at what
8 the proper remedy would be for future compliance and
9 a way that will have a relatively high degree of
10 certainty that it will achieve Nebraska compliance.

11 That means, in particular, that the
12 Bureau of Reclamation projects need to be healthy in
13 the sense that they need to have robust inflows.

14 We have seen some purchases of Bureau of
15 Reclamation water, they are in the record; but we
16 also know that those were -- those were ultimately
17 insufficient to eliminate the noncompliance in that
18 year. This is the kind of situation that is going to
19 be unavoidable if the inflows to the Bureau projects
20 is not restored.

21 And as we have seen from the experts,
22 it's largely due to the effects, and particularly the
23 legacy effect, of groundwater pumping that the
24 inflows to the reclamation project have declined to
25 the point where as we heard today, the Bureau is not

1 sure, as a physical matter, that it would be in a
2 position to provide water.

3 We have also seen in that regard that
4 the hoops that one has to jump through
5 administratively and legally, in addition to
6 physically having the water available, are
7 considerable and that there is no such effort
8 presently being made by the State of Nebraska.

9 So in general, the core of our proposal
10 to achieve Compact compliance now, some 20 or more
11 years after this problem was first complained of, is
12 to cut back significantly on groundwater pumping in
13 Nebraska, much of which has gone into place since
14 those complaints started and even since the Decree
15 was entered in this case, there has been some
16 increase.

17 So that is essential. It's not
18 improbable that eventually Nebraska could come up
19 with a viable alternative. If it did not include the
20 protection of the inflows to the Bureau of
21 Reclamation projects that form the backbone of the
22 whole system, it would be inconsistent with the
23 intent of the States and the United States when they
24 entered into the Compact, approved the Compact, and
25 then implemented the projects on the basis of the

1 Compact.

2 We have other elements in the -- just
3 painting with a broad brush, there are other elements
4 in the proposal for future compliance. Even the
5 Kansas proposal for cutting back pumping in Nebraska
6 is not expected to, by itself, achieve compliance in
7 every year. It will, however, lay the groundwork, we
8 believe, so that ad hoc single-year purchases or
9 leases of water could -- could provide Compact
10 compliance in dry years.

11 We have also proposed a river master.
12 We have seen a significant disconnect in the internal
13 administration of Nebraska between the surface water
14 regulators at the Department of Natural Resources and
15 the Natural Resource Districts, which are local
16 political entities in Nebraska that are controlled by
17 the groundwater pumpers. And while the boards of the
18 groundwater pumpers on the Natural Resource Districts
19 have made some effort to help the State meet its
20 obligation of compliance with the Compact, it has
21 clearly not been possible to persuade them to make
22 the kinds of cutbacks that obviously are, at least to
23 Kansas and I think also to the Bureau of Reclamation,
24 necessary to get the system back in balance for
25 continual compliance with the Compact, not just in

1 average years or wet years.

2 I don't want to overuse my vocals here,
3 so I wouldn't pursue this any further at this time.
4 As the other States have indicated, the most -- one
5 of the most efficient ways to address these issues
6 will be in our briefs and we will get those to you on
7 the schedule that you proposed.

8 In the interest of time I will leave any
9 comments that we have on the third segment, which go
10 to the Nebraska proposals for changing the accounting
11 procedures to our brief.

12 And with that, I thank you and the other
13 States very much.

14 ARBITRATOR DREHER: Mr. Draper, a couple
15 of questions.

16 You stated that the methodology used by
17 the -- or proposed by the Kansas experts, used by the
18 Kansas experts to assess monetary damages was similar
19 to what was used in Kansas v. Colorado involving the
20 Arkansas.

21 Did I hear that correctly?

22 MR. DRAPER: Yes.

23 ARBITRATOR DREHER: But I'm not -- I
24 don't believe I have a complete copy of the Special
25 Master's report on that subject. I think I have

1 excerpts, but I don't believe I have the complete
2 report.

3 Is that available on the Internet?

4 MR. DRAPER: It is available on the
5 Internet. The Supreme Court Clerk has been doing
6 some salutary work in getting the Special Master
7 reports on the Supreme Court website and the third
8 report is there.

9 As we have done with some other reports,
10 I could check and see if we might have enough copies
11 of that in the hard copy form, if that would be your
12 preference, but it is available electronically
13 through the Supreme Court website.

14 And I think, in some -- in some
15 submittal, I think we have listed that website link,
16 but I will make a note to include that in our brief,
17 for sure.

18 ARBITRATOR DREHER: If you do happen to
19 have an extra hard copy that you could provide to me,
20 I would appreciate that. I can get it on the
21 Internet, but it's -- depending upon the situation,
22 it sometimes is more convenient and easier to read
23 the hard copy.

24 MR. DRAPER: Very good. I will look
25 into that.

1 ARBITRATOR DREHER: The second question
2 I have is -- pertains to this idea of a river master.

3 And I assume that your thinking, Kansas
4 is thinking of something along the lines of what was
5 done on the Pecos River with Texas and New Mexico; is
6 that correct?

7 MR. DRAPER: Yes.

8 ARBITRATOR DREHER: And that river
9 master is appointed by the Supreme Court; is that
10 correct?

11 MR. DRAPER: Yes.

12 ARBITRATOR DREHER: So hypothetically,
13 if the States were to -- and I recognize this is
14 probably unlikely, but if they were to accept
15 whatever decision that I finally render here, this
16 wouldn't go back to the Supreme Court, for now -- I
17 mean, I recognize this is remote. I mean, given the
18 depth of the controversy, I understand, but I'm just
19 wondering if the States could agree to a river
20 master-like function without going to the Supreme
21 Court.

22 MR. DRAPER: Well, one of the aspects of
23 our proposal is that a further order be entered by
24 the Supreme Court.

25 And so one scenario, perhaps it's

1 wishful thinking to think along these lines exactly,
2 but for example purposes, if the States were to agree
3 on the substance of, say, your decision, or it may
4 lead to a closely related arrangement, even if it's
5 not exactly as you have ruled, one can imagine that.

6 And part of our proposal which we are
7 asking their acceptance of is that such an order be
8 entered if the States were agreeable to it, and it
9 might even be helpful to Nebraska, at least for an
10 interim period -- it's perhaps wishful thinking on my
11 part again to think along these lines, but given the
12 traditional disjuncture and the unfinished work in
13 bringing that two-part system together that, at least
14 for sometime, an independent third-party appointed
15 under an order of the Supreme Court is something that
16 can be conceived.

17 It has been done that way, for instance,
18 on the Delaware River. There is a river master on
19 that river that was appointed at the joint suggestion
20 of the States.

21 ARBITRATOR DREHER: Okay.

22 Nebraska, do you care to respond?

23 MR. WILMOTH: No specific closing.

24 If I may, I suppose I should or will
25 respond to your suggestion of a river master, if I

1 may.

2 ARBITRATOR DREHER: Sure.

3 MR. WILMOTH: I think there are a couple
4 of things to think about in this regard.

5 First of all, the propriety of
6 appointing a river master who would essentially
7 administer the river, I believe in Nebraska's view,
8 it would require an extraordinary showing of bad
9 faith or virtual impossibility of compliance.

10 And we will explain this more in our
11 posthearing brief, but we don't think the State of
12 Kansas has met its burden to show that there will be
13 noncompliance in the future. So we would submit that
14 the appointment of a river master would be extremely
15 premature.

16 That said, we would also submit that
17 Nebraska's division and respect for local control of
18 groundwater resources has a long history. This is
19 not an arbitrary division empowered, and it is a
20 relatively new thing for DNR and the NRDs to
21 collaborate to ensure the proper administration of
22 hydrologically connected waters.

23 And to suggest that because there has
24 been some noncompliance in some extraordinary dry
25 times in the last couple years since the FSS was

1 signed, to suggest that that is somehow indicative of
2 the inherent failure or problem in the process, I
3 think is erroneous.

4 With regard to that effort, I believe
5 Nebraska has shown, and will continue to show -- and
6 I believe you heard Director Dunnigan testify -- that
7 noncompliance is not an option for the State of
8 Nebraska as a policy matter.

9 And finally, with regard to whether the
10 States could agree to appoint a river master, I
11 suppose the States could agree collectively to do
12 something like that.

13 However, I'm not sure whether that would
14 require the consent of Congress, if that would
15 constitute an amendment to the Compact or not; but
16 it's our sincere hope, quite frankly, that the
17 parties can accept any order that you issue, and we
18 very much would like to avoid taking this any
19 further.

20 So I hope you don't discount your
21 significant efforts that we very much appreciate.

22 ARBITRATOR DREHER: Thank you.

23 Mr. Ampe.

24 MR. AMPE: I will answer your question a
25 little more directly.

1 At least to the extent that a river
2 master would have control over Colorado water
3 resources, no, we cannot agree to that. Our statutes
4 are very specific in listing these specific state
5 officials who have authority over surface water
6 rights, authority over Compact and authority over
7 groundwater within a designated basin and we, of
8 course, can't violate those statutes simply because
9 we wish to.

10 Whether that applies to Kansas or
11 Nebraska, I have no idea, but that brings up a
12 broader point and I will end with simply that the
13 Compact controls the interstate allocation, not the
14 intrastate. To the extent a State has its own unique
15 system of laws for interstate administration so long
16 as it applies to the Compact, the Compact can't
17 change that intrastate allocation system.

18 Thank you.

19 ARBITRATOR DREHER: Are we done?

20 MR. DRAPER: I think we are.

21 ARBITRATOR DREHER: Well, I certainly
22 want to express my thanks to you for the help that
23 you are trying to offer and you all have been very
24 responsive in terms of providing materials and I
25 appreciate that.

1 And you know, whether you decide to
2 accept what I come up with or not is, I mean, I'm
3 going to do the best I can, and whether you accept it
4 or not, hopefully, it will add value at some point
5 down the road.

6 So with that, again I appreciate it and
7 we need to stay in touch, I guess, over the next
8 couple of months here in terms of -- well, I will get
9 your posthearing briefs on the 24th, but I will
10 probably by email keep you apprised of where I am at
11 and how I'm progressing.

12 So, with that, safe travels.

13 MR. WILMOTH: Thank you very much.

14 MR. BLANKENAU: Appreciate it.

15 MR. AMPE: Thank you.

16 (Hearing concluded at 3:40 p.m.)

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CERTIFICATE

I, Carol Patterson, Registered Merit Reporter, do hereby certify that the above-named proceedings were reported by me in stenotype; that the within transcript is true and correct, to the best of my knowledge and belief.

Patterson Reporting & Video
Carol Patterson
Registered Professional Reporter