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BEFORE THE
ARIZONA NAVIGABLE STREAM ADJUDICATION COMMISSION

IN THE MATTER OF THE NAVIGABILITY)
OF THE VERDE RIVER FROM ITS) NO. 04-009-NAV
HEADWATERS AT SULLIVAN LAKE TO)
THE CONFLUENCE WITH THE SALT) ADMINISTRATIVE
RIVER, YAVAPAI, GILA AND MARICOPA) HEARING
COUNTIES, ARIZONA.)
_____)

At: Phoenix, Arizona
Date: February 25, 2015
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1 CROSS-EXAMINATION

2 BY MS. HERNBRODE:

3 Q. Good afternoon, Dr. August.

4 A. Good afternoon.

5 Q. We haven't met formally.

6 A. No.

7 Q. But I'm Joy Hernbrode.

8 A. Joy, okay.

9 Q. You can call me Joy.

10 A. Joy, thank you.

11 Q. Ms. Hernbrode is just --

12 A. Jack.

13 (An off-the-record discussion ensued.)

14 BY MS. HERNBRODE:

15 Q. I think we've established that you're going
16 to call me Joy and I'm going to call you Jack.

17 A. Correct.

18 Q. All right. I'm going to start with your CV a
19 little bit. Is it fair to say that much of your
20 writings focus on the political history of Arizona post
21 about the 1920s and the history of various water
22 conflicts?

23 A. Yes.

24 Q. Is that because that's where your main
25 interest lies?

1 A. I'm interested in all of it, but I like some
2 of the topics that -- in the 20th century, yes.

3 Q. Are there any good books out there you could
4 recommend on territorial political history of Arizona?

5 A. Sure. I would start with Volume 2 of Jay J.
6 Wagoner's Arizona history; I think Thomas Farish of
7 1918; McClintock's, about the same time; Thomas
8 Sheridan, his most recent revision of the Arizona
9 history. While I like Marshall Trimble, I wouldn't
10 recommend Marsh for kind of any serious kind of
11 scholarly work. And then there's a host of kind of
12 articles in the Arizona History and other scholarly
13 works that cover the naming of Arizona, to all types of
14 political and political developments in Arizona.

15 Q. Would you call your current report here
16 comprehensive, or did you have sort of a limited focus?

17 A. I had a very limited focus.

18 Q. And I think you said that your limited focus
19 was the Verde in its ordinary and natural condition,
20 which I think you said was about 1866, correct?

21 A. 1866, 1870, you know, yes, beginning of
22 development.

23 Q. There's no firm --

24 A. No firm --

25 Q. -- date there?

1 A. No firm date.

2 Q. Right.

3 Would it be common for a historian to include
4 a list of works cited in their report?

5 A. Yes, but I used the just footnotes to cite.
6 And the idea of comprehensive bibliographies in terms
7 of academic and scholarly publications in history is --
8 it's so erratic, it's kind of receding into history,
9 that many editors -- and I think it may have to do with
10 costs. Those extensive bibliographies that kind of
11 characterize my book on Hayden and others in my recent
12 works, they don't have bibliographies, and they just
13 rely on your end notes for sources cited. But that may
14 be a stylistic thing.

15 Q. Okay. Are all the documents you relied on
16 listed in your report?

17 A. No, not necessarily, but they were some of
18 the most obvious, since it was so brief and I became
19 part of this family rather recently, so...

20 Q. Did you review the Land Department's report?

21 A. I've reviewed it in part. I haven't had
22 time, but I will after this. I'll have some time.

23 Q. Mr. Fuller's latest PowerPoint?

24 A. I've reviewed it. I have a copy of it and
25 was able to take a look at it. But to review it

1 comprehensively like I would like to do, I have not had
2 the time.

3 Q. Were you here when Mr. Fuller was testifying?

4 A. No, not at this one. I didn't catch him. I
5 may have caught a half a day, but not very much. But
6 I've seen him testify in the past on another
7 watercourse.

8 Q. And were you provided with transcripts of
9 Mr. Fuller's testimony?

10 A. Not yet.

11 Q. Did you rely on any other reports from
12 experts in this case?

13 A. Not for this report, no, not -- and, again,
14 I'm catching up and trying to review things as I go
15 along here.

16 Q. Okay. So you didn't rely on Dr. Littlefield?

17 A. No, no. But I'm familiar with
18 Dr. Littlefield's work and his area of expertise with
19 surveying and the history of surveying and that; but I
20 have not seen his work in this regard, and I think the
21 point was that I provide some other material besides
22 that, just to add to the record for the Commission.

23 Q. And you must have looked at at least portions
24 of Mr. Burtell's report to get the segments at least?

25 A. Yeah. Yeah, the segments. I think it was I

1 read 20 pages and then just very quickly reviewed the
2 end note material, including the Joseph Pratt Allyn
3 book that he used. And so I guess I was most
4 interested not in the technical work that other people
5 are providing, but I was interested in some of his
6 historical references and just to see how he would use
7 those.

8 Q. So given those answers, I guess I'm a little
9 confused when you say you reviewed the complete
10 historic record. The complete historic record of what,
11 I guess is the question?

12 A. The historical record of what I was charged
13 with reviewing for this Segments 4 and 5. If I had,
14 and I will have, some more months, then it will really
15 truly be comprehensive, and I can even venture to do
16 some work in Segments 1, 2, and 3.

17 Q. Did you look at any evidence that's in the
18 record from the 1870 and prior period?

19 A. No evidence in this record, no.

20 Q. So I think what you're saying is that you
21 relied a lot on your expertise in this area, stuff that
22 you've looked at over the course of your career?

23 A. Oh, that's correct. Yeah. I was familiar
24 with the secondary sources, where the primary sources
25 are located, and I looked for any accounts of boating

1 or trade up and down the river, but particularly with
2 Segments 4 and 5.

3 Q. And it looks to be like you primarily relied
4 upon books, though a few newspaper accounts were also
5 included?

6 A. That's right. That explains the brevity and
7 the kind of contracted time frame. But, believe me, I
8 do the long form usually. I mean the books are long.

9 Q. And I take it then that you believe that
10 those sources are reliable?

11 A. They are, they're reliable.

12 Q. Even though they were, in some cases,
13 secondary sources?

14 A. Secondary sources in that field, in the
15 borderlands field, are really quite, in my opinion,
16 reliable.

17 Q. And newspaper reports, reliable?

18 A. You have to read those very carefully,
19 critically, and analytically, particularly from around
20 the turn of the century. And even in my work on
21 Senator Hayden, for example, in 1912, when he
22 arrested -- it's a little bit after the time frame, but
23 when he arrested two train robbers in 1910, the
24 verbiage was over the top on how exciting it was and
25 all that. It was much more mundane.

1 Q. They tend to make things sound a little more
2 exciting than they actually were?

3 A. Yeah. That's a function of the time.

4 Q. So when you opine that none of the five
5 segments of the Verde River were navigable, would it be
6 perhaps more correct to state that you found, from the
7 historical records you looked at, that the Verde River
8 was not navigated?

9 A. It was not navigated.

10 Q. Okay. Would you agree that there are lots of
11 reasons that someone might not use a river to travel
12 on?

13 A. There might be a lot of reasons, sure.

14 Q. I believe some that Mr. Randall, who
15 testified here previously, mentioned, you didn't have
16 the technology to build a boat?

17 A. I remember that testimony.

18 Q. Would you agree with that?

19 A. That his people, for example, are you saying,
20 the Apache people?

21 Q. Yes.

22 A. If Mr. Randall said it, I would consider the
23 source and I would, at first blush, I would agree with
24 him.

25 Q. The river doesn't go where you want it to go?

1 A. It doesn't go where I -- I don't --

2 Q. I believe Mr. Randall testified his people
3 traded with the Hopi. The Verde doesn't go to Hopi,
4 does it?

5 A. No. No, it does not.

6 Q. So that would be a good reason not to use the
7 river?

8 A. That would be a reason not to use it, why it
9 would be excluded, yes.

10 Q. The river doesn't take a direct route?

11 A. It does not.

12 Q. And that would be a reason not to use the
13 river?

14 A. I don't think about that. I don't see, if it
15 were navigable, if it were in kind of a slight
16 reverse C, like it is, I don't think that would
17 preclude someone moving from Point A to Point B on that
18 river.

19 Q. So you would disagree with Mr. Randall on
20 that particular point?

21 A. On that particular point, yeah, I would
22 respectfully disagree.

23 Q. Some other reasons, you've got a horse and
24 the horse doesn't want to get on a boat?

25 A. That might be a reason.

1 Q. You're tracking people who don't use boats?

2 A. In my report and --

3 Q. Well --

4 A. Yeah.

5 Q. -- would that be a reason not to use a boat?

6 A. Oh.

7 Q. If your purpose there were to be to track
8 some people who were not using a boat, would that be a
9 good reason not to use a boat?

10 A. You would not use a boat, no.

11 Q. Would it be a good reason not to use a boat
12 if the boat would mean you arrive at a predictable
13 place at a predictable time and you're being tracked by
14 some people who were trying to kill you?

15 A. I agree with that statement.

16 Q. Would it be a reason not to use a boat if you
17 need to go upstream?

18 A. Yes, that would be a reason not to use it.

19 Q. It's a little more difficult to go upstream
20 than down?

21 A. Correct.

22 Q. Would it be a reason not to use a boat if the
23 country is fairly open and easy to navigate on foot or
24 on horseback?

25 A. Correct.

1 Q. And would it be a good reason not to use a
2 boat if you're exploring and need to look at multiple
3 watersheds?

4 A. Correct.

5 Q. Okay. I'm going to draw a little bit on,
6 hopefully, your expertise as a western historian.

7 A. Okay.

8 Q. What kind of boats were used for trade and
9 travel purposes around the time of Arizona statehood?
10 I'll give you some examples, if you don't
11 want to come up with one.

12 A. Well, maybe Lingenfelter, you know, I would
13 cite that source, and there were paddle wheels, there
14 were steamers on the Colorado, and that's
15 well-documented and celebrated. I think there were
16 canoes.

17 Q. Kayaks?

18 A. Kayaks, I would suspect. I don't know.

19 Q. Flatboats of various types?

20 A. Flatboats would be something that's part of
21 the American travel lexicon, yes.

22 Q. Home-built boats?

23 A. Home-built boats, I would agree that there
24 might be some home-built boats.

25 Q. Mail-order boats?

1 A. Mail-order boats from Sears.

2 Q. Canvas canoes?

3 A. I'm assuming canvas canoes would be possible,
4 would be in the landscape.

5 Q. Dugout canoes?

6 A. Dugout canoes.

7 Q. Rubber boats?

8 A. I don't know about rubber boats. I'm not a
9 boat expert, but if they were here and they were
10 invented and useful in 1912, I suspect there would be
11 some in Arizona.

12 Q. I believe it was Ives' expedition crossing
13 the Colorado had a rubber boat.

14 A. Did he have rubber boats? I did not know
15 that.

16 Q. I could be wrong about the expedition. It
17 was one of the early --

18 A. Early 1850s?

19 Q. Yeah.

20 A. Okay.

21 Q. Would any of those small boats be
22 particularly useful for hauling a horse?

23 A. No, they would not.

24 Q. Do you know the navigability requirements of
25 any of those boats?

1 A. I do not.

2 Q. So you would defer to Mr. Fuller for that
3 information?

4 A. Yes, I would.

5 Q. Have you seen the video testimony of Mr. Brad
6 Dimock?

7 A. I have not. I'm sure I will.

8 Q. What's your definition of commerce?

9 A. Commerce. The selling and purchasing of
10 goods, just very briefly.

11 Q. I think on the Gila you said something along
12 the lines of in commerce, if you can float a log down
13 and somehow conduct commerce, float down it, that would
14 be navigable. Does that sound about, right?

15 A. I think I said something like that back then,
16 yeah.

17 Q. Do you disagree with that statement now?

18 A. No, not necessarily.

19 Q. So, again, you were looking for actual use of
20 the river?

21 A. I was.

22 Q. You didn't really look at whether it could be
23 used, whether the river was deep enough, wide enough,
24 and obstacles-free enough to support commerce?

25 A. No, I did not look at any of that kind of

1 material. I think other experts have addressed that,
2 those.

3 Q. I notice your report doesn't include any
4 specific descriptions of the Verde by the historical
5 figures you discuss. They mention the Verde, but they
6 don't really describe it; is that true?

7 A. That's correct. They saw it, they knew it
8 was there, and I would venture from Camp Verde to where
9 it meets the Salt, and that was fairly well-known by
10 1780.

11 Q. But you don't -- none of the figures you
12 cited specifically described the Verde; they didn't say
13 we met the Verde and it was --

14 A. Yes.

15 Q. -- 50 feet wide and 4 feet deep or whatever?

16 A. That's right, and I was looking for that
17 specifically.

18 Q. So how did you determine whether the river
19 was susceptible for transportation or commerce?

20 A. I'm not an attorney, and susceptible, I think
21 in this instant, is a legal term that will be
22 determined by the attorneys and the Commission. So I
23 don't think I should or can talk about the legal
24 definition of susceptibility.

25 Q. Well, I believe that you state, at least on

1 Page 7 of your report, that Kino didn't think the Verde
2 was susceptible to transportation or commerce?

3 A. Yeah, but he wouldn't even go there, he
4 didn't even go to the Verde; and I think from their --
5 from the rest of that report, it was too far away and
6 was not viewed to or susceptible to navigation not in
7 the legal term, just that why are we going to go there.
8 We know it's there, we know there's water there, and
9 that was it. But to use it as some kind of a
10 commercial transportation route, that wasn't even in
11 question.

12 Q. I believe in your direct this afternoon, you
13 talked about the fact that Kino didn't even actually
14 get very close to the river; he kind of looked at it
15 from pretty high up?

16 A. He looked at it from pretty high up.

17 Q. And it was on the wrong side of the Gila for
18 them to be really interested in?

19 A. Yes. Yeah, the Gila seems to be an important
20 barrier, consciously or not, for the Spaniards. They
21 had hopes of establishing some kind of colony/mission
22 north of the Gila, but it just never worked out. And
23 the only way they reached the Hopis, more often than
24 not, was from the Santa Fe base and not from Sonora.

25 Q. And I think you said you don't have an

1 opinion on the segmentation?

2 A. Yeah, I don't.

3 Q. You cited to Mr. Burtell's segmentation. I
4 assume you don't know how, if at all, it varies from
5 the segmentation that the Land Department did?

6 A. No. I'm assuming that -- I assumed that
7 Mr. Burtell was using the State Land Department's,
8 without having -- and, again, I can't wait to read all
9 of them.

10 Q. What's your boating experience?

11 A. Zero.

12 Q. Really?

13 A. None.

14 Q. Okay.

15 CHAIRMAN NOBLE: We really appreciate
16 that, Jack.

17 MS. HERNBRODE: I was hoping for --

18 CHAIRMAN NOBLE: You have no idea.

19 THE WITNESS: You know, my buddies would
20 go up to Apache Lake or something, but I never -- you
21 know, I didn't have time or something like that, so...

22 BY MS. HERNBRODE:

23 Q. You are aware that thousands of people boat
24 the Verde every year, though?

25 A. I'm aware, from the testimony I heard here,

1 up around Clarkdale, close to where I live, that that's
2 an activity that takes place, yes.

3 Q. I notice there are no photographs in your
4 report as well. Did you look for photographs or other
5 early evidence of what the Verde might have looked
6 like?

7 A. I honestly did not have time, but I will, as
8 this proceeds. I do like imagery and illustrations to
9 clarify and assist in the narrative, yes; but I have
10 not used any up to this point.

11 Q. And, likely, any photographs would have
12 fallen after that 1870s date?

13 A. Well, let's see, photography is invented in
14 1837. I think there's some de Guerra types in the
15 Arizona Territory. So I would be very interested. I'm
16 very interested in that field, and so I look forward to
17 uncovering anything that I might find.

18 Q. If I tell you that lining your boat involves
19 walking your boat with a rope tied on to it around an
20 obstacle, not pulling it upstream, that's a different
21 term --

22 A. Oh, okay.

23 Q. -- do you have any reason to disagree with
24 that?

25 A. I have no reason to disagree with what you

1 said.

2 Q. You talked for almost three pages about
3 Phoenix's use of water from the Verde. It's
4 interesting history.

5 A. Right.

6 Q. But how does that apply to navigability?

7 A. Well, I think it has to do with how they --
8 Phoenix's interest in those segments of the river.
9 Phoenix has an abiding interest in Segments 4 and 5,
10 and so that was one of the reasons to take a look at
11 this.

12 Q. You were trying to explain why your client
13 was here at this hearing, but not necessarily to convey
14 anything about the navigability of the river?

15 A. I think that was it; and, also, to look to
16 see if there was any history of navigation that I could
17 uncover over the course of my career in looking at this
18 reach, and pretty critically and analytically, as well
19 as any material I could find.

20 Q. And I think Phoenix's interest started in
21 about 1907; is that correct?

22 A. Phoenix?

23 Q. Phoenix's interest in the Verde?

24 A. Yes, right around there.

25 Q. But its predecessors or the people who lived

1 in the Phoenix area were taking water before that?

2 A. That is correct. They were concerned.

3 Q. I think we tend to assume that the Phoenix
4 Metro area has always been sort of the dominant
5 metropolis we have today, but that wasn't true for a
6 lot of Arizona's territorial and preterritorial period,
7 was it?

8 A. It was not. In fact, Phoenix, I think the
9 census of 1920, if I'm not mistaken, is the first
10 census in which Phoenix has a larger population than
11 Tucson. And, also, Yuma and the Bisbee area, they
12 were -- politicians, for example, if that's a
13 barometer, they had better go and talk to the editor of
14 the Bisbee News or something in order to get their
15 endorsement.

16 So they don't play the role that they did
17 100 years ago, but, yes, Phoenix was slower to overtake
18 Tucson. And the rivalry continues to exist, whether
19 it's over population or lifestyle or whether Phoenix
20 was being settled by Anglo-Americans from the East and
21 Tucson's history goes south to north, you know, the
22 different places.

23 Q. Or who is going to get their roads repaired?

24 A. That's true. I agree.

25 Q. For a lot of the time Prescott was actually

1 more important than Phoenix?

2 A. Oh, it was a Territorial Capitol, and we
3 still think we're -- no, it's -- yeah, we're -- no, it
4 was very important and has found its niche, I think, in
5 the pantheon of 21st century micropolis in Arizona.

6 Q. I noticed that when you talked about the
7 prehistoric people here, particularly in the Phoenix
8 area, you called them the Hohokam.

9 A. Yes.

10 Q. Other people have called them the Hohokam.

11 A. Hohokam.

12 Q. Or the Huhukam.

13 A. Uh-huh, sure.

14 Q. All the same people, right?

15 A. All the same people, that's correct.

16 Q. Sort of depends on what your cultural
17 background is, how you use that phrase?

18 A. Boy, I never -- I have never thought of that.
19 I've always heard the term Hohokam, even from
20 archaeologists I know and zooarchaeologists as well. I
21 have some friends at ASU. And so they've used the term
22 Hohokam. But the third one I haven't heard, so thank
23 you.

24 Q. That would be the tribal.

25 A. The tribal reference?

1 Q. Yes, yes.

2 A. Yeah. Not the Aztecs, but the Meshika.
3 Okay, I got it.

4 Q. Is it fair to say that the question of
5 whether the Hohokam became what we used to call the
6 Pima is a matter for scholarly debate, but not one
7 which the O'odham people themselves debate?

8 A. I think that's a -- the last I've discerned
9 and heard of that issue, that's correct.

10 Q. They feel pretty strongly they were descended
11 from those people?

12 A. Yes.

13 Q. And the Hopi as well?

14 A. I have not heard that about the Hopi. They
15 speak the Uto-Aztecan language. That kind of links
16 them down with people on the southern part of the
17 Colorado River straits.

18 Q. And you haven't seen anything in the
19 literature you've reviewed about Hohokam use of boats,
20 but that doesn't mean there is evidence you haven't
21 seen?

22 A. I haven't seen anything, and I relied on the
23 classic works of Emil Haury, Doyle, and, you know,
24 those people that are the recognized experts.

25 Q. In prehistoric times the culture along the

1 lower Verde was the Hohokam, and in the Verde Valley it
2 was the Sinagua?

3 A. I think that's correct.

4 Q. Where was the dividing point between the two
5 cultures; do you know?

6 A. I do not.

7 Q. Both cultures practiced irrigation?

8 A. Yes.

9 Q. Were the Hohokam canals more extensive than
10 the Sinagua canals?

11 A. That seems to be what the research indicates,
12 that they were really quite extensive.

13 Q. The Sinagua were more into terrace farming?

14 A. Terrace farming, that's correct.

15 Q. And were the Hohokam canals on the Verde
16 system less extensive than those on the Salt or the
17 Gila?

18 A. From the lower Verde report, which, again, is
19 exhaustive, and I don't know how many previous nights
20 I've been reading through that, but they were less. I
21 think there were 26 sites and less extensive, but still
22 a vital civilization during the height.

23 Q. When you say the lower Verde report, what are
24 you referring to?

25 A. It's called the Lower -- it's called

1 Vanishing Verde, The Lower Verde Report. It's got a
2 very long title, but it's cited here, and you can see
3 it online, and it's like I don't know how many volumes.

4 Q. Would that be Vanishing River?

5 A. Vanishing River, yeah, it's the Vanishing
6 River.

7 And the interdisciplinary and
8 multidisciplinary nature of the report is impressive.
9 I don't see -- it was funded by the Bureau of
10 Reclamation. That's how it got done.

11 Q. Do you know if that report is in evidence as
12 Exhibit X017-120?

13 A. I found out about that today.

14 Q. Okay. When Mr. Randall testified about the
15 earliest people in the Verde Valley, he was likely
16 talking about the Sinagua, then, and not the Hohokam?

17 A. I would think so, yes, from his discussion.

18 Q. And I believe you said scholars don't agree
19 about why the Sinagua and the Hohokam cultures
20 declined?

21 A. I think that's a fair statement, yes.

22 Q. If the Hohokam had built boats, what do you
23 think they would have been made of?

24 A. I can't speculate about that. I really don't
25 know.

1 Q. Reeds?

2 A. Perhaps.

3 Q. Logs?

4 A. Perhaps.

5 Q. Do you know if the Hohokam used bundles of
6 reeds for their diversion dams?

7 A. Yes, I think that's in evidence.

8 Q. So do you think you could tell, if you dug up
9 a bundle of reeds, whether it had been part of a dam or
10 part of a boat?

11 A. I couldn't tell that. I would leave that to
12 archaeologists.

13 Q. Have you read the draft report on the
14 archeological testing for the Sky Harbor Sky Train
15 that's been partially funded by your client?

16 A. No, I have not.

17 Q. Okay. You testified previously on the Gila?

18 A. Uh-huh. A long time ago, yes. I forget.

19 Q. 2005, I believe.

20 Are you aware of the prehistoric canoe that
21 was reported in a canal in that report and I believe in
22 the Salt report?

23 A. I am not aware of that canoe.

24 Q. Did I hear you say you thought Mr. Randall
25 testified about the Yavapai?

1 A. He testified a little bit about the
2 relationship and the difference in language, languages.
3 So he testified a bit about that, yes.

4 Q. But his primary testimony, his focus was his
5 culture --

6 A. His culture.

7 Q. -- which would be Apache?

8 A. Yes.

9 Q. You relied on Mr. Bolton's work for
10 information about Father Kino?

11 A. And others, but, yeah, that's kind of the
12 classic cite; but there are other people that have
13 written about Father Kino, of course.

14 Q. Did you rely on him for any other parts of
15 your report?

16 A. Certainly. He's kind of this constant
17 eminence in the field of borderlands history, and I
18 think I've read almost everything he's ever written.
19 I've even read the bio -- I think a historian has a
20 biography written on him, but he has a biography
21 written by John Francis Bannon. So a major figure in
22 the field, yes, and I've read most of his, if not all
23 of his work.

24 Q. The only place I saw it cited was in the
25 reference to Kino.

1 A. Yes.

2 Q. Are there other places that you --

3 A. Oh, he wrote Coronado: Knight of Pueblo and
4 Plains. He wrote the big Coronado book. He's written
5 shorter pieces on Kino, kind of a synthesis, rather
6 than the Rim of Christendom, to make it more
7 accessible. And he's written on a variety of other
8 topics from presidios to even on some of the
9 individuals that were mentioned, like Espejo and
10 Farfan. He's covered -- he covered the territory,
11 really invented the field, in a way.

12 Q. I notice you seem to speak Spanish fairly
13 fluently. Do you read it?

14 A. Yes.

15 Q. During the period of time that the Spanish
16 were exploring, were horses commonly available
17 throughout Arizona?

18 A. Yes. The Spanish introduced or reintroduced
19 the horse to this continent in around, it looks as
20 though, the earliest, 1570. Then some of them get
21 away, you know, and then bred. So we have a few, but
22 not many, wild horses in Arizona and then through the
23 plains. And they were quickly acquired by the Comanche
24 people, for example, and used as a dimension of their
25 war tactics. Other groups didn't; used them as food.

1 Q. Because I thought you said, when we were
2 talking about the trappers, that sometimes they lost
3 their horses or had to eat their horses.

4 A. Yes.

5 Q. And it didn't seem like they had a ready
6 source for replacing their horses.

7 A. Their horses, for the most part, up in what
8 we're talking about, from Taos and Santa Fe, they had
9 ready supplies of horses and ranches and where their
10 embarkation point or disembarkation point was at.

11 Q. But if they ate their horse in Arizona --

12 A. They would be in big trouble.

13 Q. -- or misplaced their horse because the
14 Apache ran off with it --

15 A. That's correct, and that happened, and then
16 you were a pedestrian.

17 Q. And so if the Spanish had gotten to a river
18 that they could put a canoe on and they've got their
19 horse there or they've got the canoe, would they just
20 turn that horse loose and go on down the river, or does
21 it make sense to keep ahold of the beast of burden you
22 have right here?

23 A. I think 99 to 100 percent of the time, I
24 think they would keep the horse. It was a valuable
25 asset.

1 Q. And, generally, Arizona's located up or
2 downstream from Mexico?

3 A. Generally, it's located upstream; but we do
4 have some watercourses that flow from Mexico to the
5 United States. I think the Santa Cruz starts in the
6 U.S., goes underneath, and then circles back, yeah.

7 Q. And if you're exploring an area you know is
8 arid and you want to explore across multiple
9 watersheds, would it be easier to ride a horse or use a
10 boat?

11 A. Ride a horse.

12 Q. How many Spanish explorers do you discuss in
13 your report? Because I had counted five, and then I
14 heard Ms. Campbell mention ten, and it's entirely
15 possible that I can't count that much.

16 A. And there are several others I could have
17 mentioned; Father Segesser, Father Pfefferkorn. I
18 think I mentioned Sedelmayr only because I think I had
19 to be selective and brief, and I wanted to use the most
20 representative of those who may have had contact or
21 went beyond the Gila River at some point. But there
22 were others, many others; many of them with German
23 names, and some of the military people, like Alejandro
24 O'Reilly and Hugo O'Connor. It's kind of a
25 multinational frontier that are in the service of

1 Spain. But I didn't mention them.

2 Q. Okay. And we're getting into dangerous
3 ground here. I should tell you now that I had to take
4 American Sign Language in college as my second language
5 because my pronunciation of all languages is so bad.

6 A. Okay.

7 Q. So with that in mind, please bear with me.

8 A. Okay.

9 Q. The first Spaniard you talked about came with
10 Farfan as his biographer or his diarist, I guess?

11 A. Oh, there was a diarist with Farfan. Is that
12 what you're saying?

13 Q. Yeah, yeah. He was the diarist for --

14 A. Diego de Luján?

15 Q. Es --

16 A. Or Espejo?

17 Q. Yes.

18 A. Espejo.

19 Q. Espejo?

20 A. Yeah.

21 Q. Does that sound right?

22 A. Yeah. Mirror.

23 Q. Okay. And what was Espejo doing in Arizona?

24 A. He was -- technically, he was illegal,
25 illegal in Arizona. He was the person who agreed to

1 save two Franciscan priests who were left behind by a
2 previous expedition. Everyone left them, and they left
3 them up there, and so the Franciscan Bishop, the head
4 Franciscan in Durango, was outraged and wanted them
5 returned.

6 And so he was on a rescue expedition in 1583,
7 and he took advantage of his situation and went
8 exploring, because of the persistent rumors of myth of
9 gold, Seven Cities of Cibola, Estrecho de Anián, what's
10 called Gran Quivira. That was another myth. There's a
11 variety of them. Some of them are passageways to the
12 Orient and some of them are, in fact, supposedly
13 treasures.

14 So he went looking for them, and through
15 contact with the Hopis and others as he headed west, he
16 learned of what might be precious minerals and, thus,
17 he ends up traversing in 1583.

18 Q. Where did he end up finding the guys he was
19 looking for?

20 A. He ended up around Jerome and traded for rugs
21 and a few things and then went back and subsequently
22 became obscure, and then unfortunately for him,
23 Oñate -- he wanted to go back and colonize, but Oñate a
24 few years later got the contract to colonize and become
25 Captain General of New Mexico. But that was his

1 overall ambition, so...

2 Q. So he didn't find the two gentlemen he was
3 sent to look for?

4 A. They were dead.

5 Q. Okay.

6 A. There was three altogether, actually.

7 Q. And where did he start from?

8 A. He started from Santa Bárbara, which is, I
9 guess, today in Chihuahua, and it became a big silver
10 mining frontier, kind of a wild west, like the
11 Tombstone of the central corridor of the Spanish
12 advance from south to north. And so he started there.
13 That was where they took off, and you race up the
14 Rio Grande Valley, and then he turned left.

15 Q. And did he use any rivers on his journey?

16 A. He did not. He did not use any rivers. And
17 it was pretty well-documented by the diarist, and he
18 subsequently, again, got in trouble and was rebuked.

19 Q. How many people did he have with him?

20 A. I think eight or nine.

21 Q. So a relatively small --

22 A. Small, small.

23 Q. -- Spanish expedition?

24 A. Yes, a small expedition.

25 Q. Any cattle?

1 A. No cattle on this one, no.

2 Q. And how long did he spend on the Verde?

3 A. I think he crossed the Verde and may have
4 spent a matter of weeks, you know, and then came -- a
5 matter of weeks.

6 Q. And you didn't find any specific description
7 of the river from him?

8 A. No, there's no description of the river,
9 other than there were rivers that they crossed, and
10 so...

11 But that was it.

12 Q. Did you read his primary account?

13 A. Yes, I've read it in the past, yeah.

14 Q. A while ago?

15 A. Yeah. But I also take a look at the English
16 translation recently, because it was the most -- the
17 handiest.

18 Q. And I think the next explorer you talked
19 about was Oñate?

20 A. Juan de Oñate after -- yeah, Juan de Oñate is
21 the founder of what is now New Mexico, and he was the
22 first -- he got the contract in 1598 to colonize and
23 govern and advance the frontier. And he was given a
24 good contract, but, again, you know, he wasn't paid.
25 He financed it.

1 Q. So he was looking for settlement sites?

2 A. Yes, he went up to settle. So it's a much
3 larger force. There are civilians, which is different
4 than the previous expeditions up there.

5 And so the site they went to is actually
6 north of Santa Fe, north, oh, about 30 miles toward
7 Taos, if you go on the road today, and it's called the
8 San Juan Pueblo, and they called it Gaypa, G-A-Y-P-A.
9 And then it was relocated in 1690 because he didn't
10 fulfill his contract, according to the King, and the
11 King put his own guy there and it became a royal
12 province.

13 Q. And so how many people, approximately, did he
14 have with him?

15 A. Probably -- he had about 100 mixed; more
16 military men, 50 to 100 military; and cattle.

17 Q. How long did he stay on the Verde?

18 A. He didn't stay on the Verde at all. He went
19 in 1604. He crossed it looking for the Sea of -- the
20 South Sea, which is really a reference to the Pacific
21 Ocean, because of communication from the natives to the
22 west.

23 And so after Farfan came back, his first --
24 the first guy he wanted to take a look at and was
25 unsuccessful, by 1604 he's getting kind of desperate,

1 because there was no gold or silver, mineral, and New
2 Mexico was -- I think today is the 44th state that was
3 poor in natural resources. And so he went to try to
4 save his charge, and was unsuccessful, but he did try
5 to get to the South Sea, as they called it, and he got
6 to the Colorado River and saw it.

7 Q. Do you know where, approximately, he crossed
8 the Verde?

9 A. Often the passageway was along the Gila.
10 They went south and used the Gila, because there's
11 water, so they --

12 Q. Where did he cross the Verde, though?

13 A. Oh, he crossed the Verde close to where
14 Clarkdale would be, between Camp Verde and where
15 Clarkdale is.

16 Q. And did he leave any records about what he
17 saw when he crossed the Verde?

18 A. No. It was just an obstacle to travel, so he
19 crossed.

20 Q. And then we have Kino, who only saw the river
21 sort of from far away?

22 A. Yeah. Yeah, I think that's --

23 Q. And then Nentvig?

24 A. Nentvig, yes. Yeah, one of the later
25 Jesuits.

1 Q. And what was his purpose in Arizona?

2 A. He was there to consolidate all the
3 information. He was a missionary, but many of these
4 missionaries wore several hats, like Kino, and he
5 produced a pretty scholarly volume.

6 And I'll look up Rudo Ensayo and it is a real
7 solid laundry list of the natural resources, the
8 mountain ranges, the people, the vegetation, the
9 animals, and what was there. It's what Americans did
10 in the 19th century, and if you read William
11 Geotzmann's Exploration and Empire, which won the
12 Pulitzer Prize in '67 -- and he didn't even get tenure
13 at Yale; geez. -- but that's a great account of
14 America's scientific dimension to study.

15 So he was an early-day kind of scientist, in
16 a way, and evaluated what was there.

17 Q. Sort of an early version of the great surveys
18 of the American West?

19 A. There you go. Yeah. Agreed.

20 Q. So how long did he spend on the Verde?

21 A. No time on the Verde.

22 Q. Okay. So we don't have a description from
23 him of the Verde yet?

24 A. No. That it was there, and he relied on
25 previous descriptions of it.

1 Q. Which basically said there's this river?

2 A. There's this river.

3 Q. All right. And then -- oh, boy -- Sedelmayr?

4 A. Sedelmayr, yeah.

5 Q. Okay.

6 A. The Father of the Papago, according to John
7 Francis Bannon, but now that term is not used. Papago
8 actually is kind of, I think, bean-eaters, Papábotas.
9 But, you know, their name has changed. But he did a
10 lot of work among those people and was a very astute,
11 religious Jesuit.

12 Q. So his focus was really down around Tucson?

13 A. Yes, and that's about as far as -- I think I
14 said before, that's about as far as, I think, they got
15 advancing the frontier.

16 Q. Okay. So that's five.

17 The other five folks that I failed to count,
18 did any of them spend time on the Verde?

19 A. No, none of them did.

20 Q. And even those who did, they're sort of
21 pictures of a river at a particular point in time; they
22 didn't settle on the Verde; they didn't spend a lot of
23 time there?

24 A. That's correct.

25 Q. Did the early Spanish bring ships up the

1 Colorado?

2 A. There was seafaring expeditions, yes.

3 Q. What years?

4 A. The 1580s was when they realized that that
5 was a significant watercourse. But in terms of
6 establishing a settlement there, it wasn't until 1781.
7 Father Garcés, after he had led the expedition in 1776,
8 colonizing what is Monterey and San Francisco, they
9 lent people from Tucson, and they went overland and all
10 that, and then they came back and tried to make a
11 settlement, but the Yumans, they massacred them in
12 1781. So there was an attempt later on in the Spanish
13 period.

14 Q. And they actually sailed oceangoing vessels
15 up the Colorado?

16 A. They tried, yes, with some success but not
17 very much.

18 Q. Is it possible that a navigable river existed
19 in the area explored by the Spanish and they chose, for
20 some reason, not to boat it?

21 A. I can't answer that one. I'm trying to
22 think. Is it possible?

23 Q. Well, I think you said that if you've got a
24 horse --

25 A. Yeah.

1 Q. -- you're not going to turn him loose.

2 A. Yeah.

3 Q. You're not going to put him in a canoe or a
4 flatboat.

5 A. Yeah, it just doesn't seem that they did.

6 Q. Okay. You quote Manje on Page 7 of your
7 report.

8 A. Manje, yeah, his name is Manje.

9 Q. Manje, thank you.

10 In that quote, the small stream that he's
11 referring to is the White and Black Rivers, not the
12 Verde, correct?

13 Can you turn to Page 7 of your report?

14 A. Well, okay, yeah. Yeah, I'm thinking.

15 Q. Can you turn to Page 7? It's not
16 horrifically clear, but I think he's talking about the
17 headwaters of the Salt.

18 A. "This Salado River runs from east to west and
19 to the south of the Verde River and they merge, as I
20 have said. To the very end and to the most easterly
21 point of this Pimería there are also two rivers called,
22 more properly, arroyos or small streams."

23 That's what the sentence says in Spanish and
24 in the translation, so I can't speculate if it was the
25 White and the Red River. I don't think you could see

1 it from the top of the White and the Black River; I
2 don't think you could see it from Estrella Mountain.

3 Q. So do you think the small stream he's talking
4 about is the Verde?

5 A. No, I think -- no.

6 "Of the Verde River and they merge, as I have
7 said."

8 No, not talking -- those two small streams
9 are not the Verde.

10 Q. Okay. Did any of the Spanish observers cited
11 in your report make any statements about the
12 navigability of the Verde?

13 I understand that you've taken from their
14 lack of statements --

15 A. Yeah.

16 Q. -- an implication, but did they say anything?

17 A. No, they did not assertively say anything.

18 CHAIRMAN NOBLE: Joy, can we take a
19 break here?

20 MS. HERNBRODE: I would love to.

21 CHAIRMAN NOBLE: Thank you.

22 Fifteen.

23 (A recess was taken from 3:30 p.m. to
24 3:45 p.m.)

25 CHAIRMAN NOBLE: Let's have it.

1 BY MS. HERNBRODE:

2 Q. All right. You talk a lot about the lack of
3 accurate maps of the Verde in your report.

4 A. Yes.

5 Q. Was the technology available at that time,
6 did that make it a little bit difficult to have an
7 accurate map?

8 A. Sure. Cartographers of the 17th and
9 18th Century also had to have, maybe, an artistic flare
10 or another ability to get perspective and meaning. So
11 there's a lack of technology, it's an accurate
12 statement. There was a lack of technology, correct.

13 Q. You didn't have the aerial overflights, so if
14 you didn't see it yourself, you were pretty much
15 guessing?

16 A. That's correct.

17 Q. Was there any other reason other than the
18 lack of accurate maps that you conclude the Spanish
19 felt the Verde was nonnavigable?

20 A. Were there other reasons?

21 Q. Yes.

22 A. I think so. I think that's just one point
23 that I found striking to the map, the map section. You
24 know, and I'm, frankly, pretty puzzled by it. I was
25 very surprised that some of the maps, even in the late

1 19th Century, after 1850, let's say, that they were off
2 until they -- they finally got it right, but that took
3 time.

4 Q. And you have actually looked at the maps
5 created by the various Spanish explorers?

6 A. Yes, and they're available in a variety of
7 texts and others, other sources. And today, I think,
8 you know, with digitizing, they're becoming more
9 available to the general public.

10 Q. Have you looked at them recently?

11 A. Not recently; but after this proceeding I'm
12 going to look at every one of them carefully, other
13 than these that I looked at from the Rumsey collection.

14 Q. You should probably quit angling to come back
15 to this hearing.

16 A. Oh, not this one. No, I just know this is
17 going to go on, so...

18 Q. Do you recall if those maps showed a single
19 or multiple channels of the Verde?

20 A. No, I don't. I don't recall.

21 Q. Do you recall if they showed any marshes?

22 A. No.

23 Q. And you didn't include copies of those maps
24 in your report?

25 A. No, no visuals for this.

1 Q. Would it be fair to say that none of the
2 accounts you're aware of of the Spanish talked about
3 the Verde in any detail or described using boats on the
4 river?

5 A. That's correct.

6 Q. All right. Let's move on to mountain men.

7 A. Yeah, Taos Trappers, yeah.

8 Q. You referenced David Weber's Taos Trappers,
9 correct?

10 A. Yes.

11 Q. Did you look at anything else from Mr. Weber?

12 A. Yes. I looked at his works, The Spanish in
13 North America and The Mexican Frontier in the
14 Southwest. He has two big volumes that are large
15 syntheses of the period. I think that grew out of his
16 doctoral dissertation at the University of New Mexico.

17 Q. And The Taos Trapper doesn't talk a lot about
18 trappers who were in Arizona, does it?

19 A. Not too much.

20 Q. It's primarily focused on, really, the
21 aspects of trade that were happening in New Mexico?

22 A. That's correct.

23 Q. What accounts of trappers did you look at
24 from folks who were operating in Arizona? It sounds
25 like you looked at the Pattie account.

1 A. Pattie, Ewing Young. Tom Sheridan has done a
2 nice job of synthesizing that, that period, and so I
3 relied on Dr. Sheridan's Arizona: A History, which is,
4 I think, recognized generally as the authoritative
5 source; and he relies on that and other accounts as
6 well.

7 Q. Did you look at, I believe, Kit Carson left
8 some records?

9 A. Yeah, I've looked at Kit Carson's work, and
10 there's been some biographies on Kit Carson, and I've
11 seen that before, and I'm actually looking at it in
12 another proceeding.

13 Q. Kit didn't actually write stuff himself, did
14 he?

15 A. No.

16 Q. He had ghostwrites?

17 A. Many people had ghostwrites, yes, including
18 Pattie.

19 Q. And did he keep notes?

20 A. He was not known as a notorious notetaker,
21 because he moved constantly. He appears in the Navajo
22 frontier in 1868 burning peach trees. I mean he is
23 kind of a utility person in furthering the westward
24 expansion.

25 Q. And for Ewing Young, he left some

1 correspondence, but not really a diary either, correct?

2 A. No, no diary, no.

3 Q. But Mr. Dye, who traveled with him, kept a
4 diary?

5 A. Evidently, yes. I've heard about that, yes,
6 but I have not looked at it. I've not looked at that
7 source.

8 Q. Okay. The beaver trappers operating in
9 Arizona generally came from Taos or Santa Fe, correct?

10 A. Yeah, immediately, yes.

11 Q. And that's over the Continental Divide from
12 the Verde?

13 A. Correct.

14 Q. So there's no river that runs between the
15 two?

16 A. No, there's not.

17 Q. And even if there were, it would have been a
18 little harder to disguise where they were going if they
19 were taking a water route, correct?

20 A. Yes, and oftentimes that was necessary to
21 disguise where they were going. They sometimes took
22 off north or northeast to disguise where they were
23 going.

24 Q. Were trappers and mountain men operating in
25 the American West generally literate?

1 A. No, that would be the exception to the rule.

2 Q. We don't have a lot of accounts from trappers
3 operating anywhere in the west?

4 A. That's correct. There's a paucity of
5 material.

6 Q. There's a fair amount of material for
7 trappers who were part of the big operations operating
8 out of St. Louis and places like that?

9 A. Yes, and even Astoria in Oregon, there's some
10 good work on that, but that didn't seem relevant here.

11 Q. Taos didn't have that kind of one big company
12 that controlled everybody and really kept track of
13 things?

14 A. No. In many ways, Taos kind of reflects the
15 essence of American expansion, which was individual
16 freedom and initiative.

17 Q. I think you said in the 1820s through 1848 or
18 so, it wasn't legal for Arizonans to trap in Arizona?

19 A. Americans, you mean?

20 Q. Yes.

21 A. Yes, with some exceptions, like saving the
22 Governor's wife and her daughter and things of that
23 nature, but -- and more often than not, you know, they
24 were skirting the law. They were viewed with
25 suspicion, yes.

1 Q. You could sometimes get a license if you took
2 a Spanish or Mexican citizen with you?

3 A. That's correct, yes.

4 Q. But most of them didn't bother to do that?

5 A. Of course not. No, they did not.

6 Q. Were trappers generally protective of their
7 methods and trapping locations?

8 A. Yes, they were, like miners.

9 Q. Particularly if they could be prosecuted by
10 Spanish or Mexican authorities for being there?

11 A. Correct.

12 Q. Have you reviewed the Spanish or Mexican
13 records to see if they list any other trapping
14 expeditions on the Verde?

15 A. For this proceeding, no, but that would be
16 something I would certainly do in the future.

17 Q. You think it would be a good idea to look at
18 those records?

19 A. Oh, yeah. I kind of can't wait.

20 Q. So the first trapper who left us at least a
21 widely distributed account is James Ohio Pattie?

22 A. Yes.

23 Q. And he does record a couple of times where he
24 uses a canoe on the Gila and on the Colorado?

25 A. I believe that's in there. I wonder --

1 again, it's a source that I questioned, given the
2 exaggeration, so I would question that.

3 Q. You question that he used a canoe to trap?

4 A. Yes, and a variety of other things that he
5 asserts in that book.

6 Q. Okay. Well, did other trappers in the West
7 commonly use a canoe?

8 A. Depending on where they were, but I think in
9 the West, in this region, no.

10 Q. Do you have any expertise in trapping?

11 A. No, I don't. Oh, God.

12 Q. Is Pattie's account a day-by-day account of
13 what happened every day?

14 A. Pretty much not. It's impressionistic, and,
15 again, the audience was the East Coast urban areas and
16 to generate money; and Timothy Flint, who wrote it, was
17 a skillful writer.

18 Q. And the other sources you mentioned, they
19 don't record the sort of day-by-day events --

20 A. No.

21 Q. -- of a trapping expedition?

22 A. But it would be great to have that material.

23 Q. Do you recall Pattie saying on the Colorado
24 they made boats, they made dugout canoes?

25 A. I don't recall that, but I would have to

1 review the material again.

2 Q. Okay. Would it help you if I told you they
3 made dugout canoes after their horses were stolen?
4 Does that help you place that in the story?

5 A. That would help me place it, that would help
6 me place it in the story, yes.

7 Q. Would you agree that, likely, there were
8 hundreds of trappers operating in Arizona?

9 A. Hundreds, I wouldn't agree with that.

10 Q. How many?

11 A. 20 to 30, my guest guesstimate.

12 Q. Would you agree that trapping was dangerous?

13 A. I would agree that trapping was dangerous.

14 Q. You could end up being killed by other
15 trappers?

16 A. Other trappers, indigenous groups that were
17 resentful.

18 Q. The wildlife?

19 A. The wildlife could. Well, perhaps, yes, the
20 wildlife. I know the Piipaash people. Yeah, there
21 were some tribes that didn't want the Anglos here, and
22 wildlife could do it as well, yes.

23 Q. Bears?

24 A. Bears.

25 Q. Mountain lions?

1 A. Mountain lions. Yikes.

2 Q. Oh, my.

3 Your take on it is because Pattie didn't
4 specifically say he used a canoe on the Verde, that no
5 one in his party did?

6 A. I'm not saying that. There's just no
7 evidence that I've seen that anyone else used a canoe,
8 and I was looking for it.

9 Q. He doesn't say he did?

10 A. He doesn't say, yeah.

11 Q. But you don't believe Pattie's memoir is
12 particularly accurate?

13 A. Not particularly accurate is a good way to
14 put it. I think it's impressionistic.

15 Q. Okay. And how about the accounts left by
16 Carson and Young and Dye?

17 A. I think they're in the same category; that
18 there's some truth or factual information that
19 generated a good story and a fanciful retelling of
20 events.

21 Q. Would it be more likely for them to
22 exaggerate things like Indian encounters? I guess
23 today we might call them -- we might say that they sort
24 of exaggerate their adrenaline junky activities.

25 A. I agree with that.

1 Q. Okay. So they're less likely to exaggerate
2 day-to-day activities?

3 A. I can't say that, but that's something I
4 would have to do some research, further research on, to
5 make a statement like that.

6 Q. Okay.

7 A. Yeah.

8 Q. But certainly the encounters with a bear or
9 with a hostile tribe or something like that, those may
10 be certainly blown up?

11 A. I think that's a good assumption. I think
12 it's an accurate assumption.

13 Q. Or if you rescued the Governor's daughter --

14 A. Yeah.

15 Q. -- rather than some poor --

16 A. Yeah.

17 Q. -- lass?

18 A. Yeah.

19 Q. I would like to talk a little bit about some
20 later trappers on the Verde, and you talked about them
21 in your direct a little bit. We'll start with the Day
22 brothers in 1891 and 1892.

23 A. Okay.

24 Q. And, Debi, if you could pull up No. 3, which
25 is X001-18.

1 This is the easiest-to-read version of this
2 event. The newspaper is a little difficult.

3 Does it indicate they trapped the entire
4 Verde in a boat that they built?

5 A. Does it indicate they trapped the entire
6 Verde.

7 Q. Well, from Camp Verde down to the confluence
8 with the Salt.

9 A. That was my reading of it, yes.

10 Q. In a boat that they had built themselves?

11 A. Yes.

12 Q. And then how did they get back upriver when
13 they were finished?

14 A. I believe they took a train. Am I not
15 mistaken?

16 Q. Yeah, right down there at the bottom.

17 A. Yeah, yeah.

18 Q. And they didn't record any difficulty on any
19 of the rivers they talked about?

20 A. Yes. It's a rather brief description.

21 Q. Okay. And you weren't here when Mr. Fuller
22 testified about the Verde, so you didn't hear him say
23 that he thought the 800-mile figure seemed fairly high,
24 correct?

25 A. No, I was not here for that, no.

1 Q. The Day brothers didn't have a GPS?

2 A. They did not.

3 Q. Do you know if J.K. had family in Phoenix?

4 A. I do not.

5 Q. Does trapping take a little time?

6 A. Trapping might take some time, yes, it does.

7 Q. Do you know that Mr. Day actually became one
8 of our first wildlife officers in Arizona?

9 A. I did not know that.

10 Q. Do you think any part of this account is made
11 up?

12 A. This is the first time this morning I read
13 it, and I would like to really review it and come to a
14 conclusion that would be accurate, for me.

15 Q. Well, right. I understand that the distance
16 traveled is off.

17 A. That's -- yes.

18 Q. Is it possible that they traveled up some
19 tributaries and back down trapping, and so added that
20 into their distance?

21 A. Well, it doesn't say that there, so I can't
22 speak to that.

23 Q. Is it possible, though?

24 A. Yes. Yeah, it is.

25 Q. Is it possible that without a GPS, they had a

1 little hard time accurately estimating how far they
2 traveled?

3 A. That's a fair assumption, yes.

4 Q. And is it possible that the boosterism of the
5 newspaper in Yuma thought 800 miles sounded like a
6 better figure than whatever the Day brothers reported?

7 A. If it's 800 miles to Yuma, I don't know if
8 that's very inviting. But I was just thinking about
9 it.

10 Q. I guess it depends on your perspective.

11 A. Yeah, because I think I may have to take a
12 long trip.

13 Q. Careful, I was born there.

14 A. No, my brother lives there.

15 Q. Does any of this article strike you as the
16 kind of community boosterism that you would expect a
17 newspaper to exaggerate?

18 A. Yes, it does. You know, I think it's a
19 colorful. Is it feel-good? Maybe feel-good. I would
20 still have to really take a look at it line by line,
21 but I think boosterism is one aspect of it.

22 Q. Some of the other newspaper articles that we
23 looked at in other cases sort of emphasize the rapids
24 and the excitingness of the trip and things like that.
25 This doesn't do that?

1 A. No. It talks about the color, the beaver,
2 patience, remuneration. I mean that's --

3 Q. Five trips?

4 A. Five trips, it talks about that. I can't
5 speak to that. I haven't seen any evidence of five
6 trips, but that's what that says.

7 Q. And you think that might be boosterism?

8 A. It certainly could be. It could be
9 boosterism, yes.

10 Q. Okay. Let's then talk about a gentleman
11 named Fogal and his friend, who did a trapping trip in
12 1931.

13 Debi, could you bring up 4?

14 A. Okay.

15 Q. And they traveled from Clarkdale to Fort
16 McDowell using a flat-bottom boat. Have you seen this?

17 A. I have not seen it. This is the first time.

18 Q. Actually, it sort of falls off the bottom of
19 the screen a little bit there. I'll give you a moment
20 to read it.

21 A. Okay.

22 I guess my only question of what I read there
23 is it's 1931, and I haven't -- I didn't consider that.

24 Q. I understand you haven't looked at it, but I
25 mean these are a pair of guys who were doing the same

1 kind of activities that we're talking about --

2 A. Correct.

3 Q. -- on the same river.

4 A. Okay. Agreed.

5 Q. A river that might be a little more difficult
6 to navigate, in fact, by 1931?

7 A. That's a good assumption.

8 Q. So in 1931, were newspapers prone to the same
9 kind of boosterism?

10 A. I think there is dialing back by 1931,
11 especially, during The Depression, I'm sure. This is a
12 feel-good story and an interesting story.

13 Q. So if the Day brothers could trap on the
14 Verde using a boat and Fogal and his friend could trap
15 on the Verde using a boat and lots of people use a boat
16 on the Verde today, why couldn't other trappers do it?

17 A. Well, as I said earlier, I have not seen any
18 evidence during the period under discussion of that.

19 Q. You haven't seen anybody say "I used a boat
20 on the Verde"?

21 A. I have not seen that, either in Spanish or in
22 English.

23 Q. You also didn't hear anybody say "I couldn't
24 use a boat on the Verde"?

25 A. I have not heard that either.

1 Q. The Verde's been known by a bunch of
2 different names?

3 A. Yes.

4 CHAIRMAN NOBLE: Green.

5 BY MS. HERNBRODE:

6 Q. What names?

7 A. Oh, boy. I would have to go back, but it's
8 here in this report.

9 Q. You named a couple. The San Francisco,
10 the --

11 A. San Francisco. The --

12 Q. Rio Azul?

13 A. Rio Azul, Blau Fluss. A couple, yes.

14 Q. So if you were looking for historic
15 information about the Verde, you should probably look
16 for all of those names?

17 A. One would do that, yes.

18 Q. Does the Verde flow through relatively rugged
19 terrain?

20 A. In Segments 4 and 5, I would say moderate
21 compared to some of the other, you know, segments of
22 the river.

23 Q. Above that, much more rugged?

24 A. Yes, I would say that.

25 Q. And is the area around the Verde, even today,

1 relatively unpopulated?

2 A. Comparatively to other areas in Arizona.

3 Q. There weren't a lot of settlers and explorers
4 in the area?

5 A. Not too many.

6 Q. Are you aware of U.S. Supreme Court cases
7 that say that just because a river is unexplored or
8 unused, that it's not necessarily nonnavigable?

9 A. I have heard that referenced in this
10 proceeding.

11 Q. Do you know what the Euro-American population
12 along the Verde was between the 1840s and 1880s?

13 A. The Euro-American, 1840, 1880s. I would
14 suspect -- let me think about it.

15 No more than 1,000, I think, individuals.

16 Q. And did the Apache aggressively resist
17 incursions into the Verde watershed up to the 1800s, up
18 through the 1800s?

19 A. Yeah, up to the middle part of the
20 19th Century, and before that, much more -- well, quite
21 vigorously, depending on what you read.

22 Q. Are you familiar with what's been called the
23 Oatman Massacre on the Gila River?

24 A. Yes. Olive Oatman, yes, I'm familiar with
25 it. Haven't scrutinized it lately.

1 Q. Do you know what year that was?

2 A. 1857? I mean I picked that out. When was
3 it?

4 Q. I think 1851.

5 A. '51. Close, yeah.

6 Q. That sound okay?

7 A. Yeah, that sounds about right, yeah.

8 Q. Can you tell us a little bit about what
9 happened there?

10 A. From my recollection, the group the Mojaves,
11 I believe it was the Mojave Tribe, murdered the family,
12 and they kept Olive, and there's a famous picture of
13 her with tattoos from her mouth to her jaw. But I did
14 not do any research into that for this proceeding.

15 Q. Killed off the family?

16 A. Yeah.

17 Q. Took the two sisters --

18 A. Yeah.

19 Q. -- captive?

20 A. Correct.

21 Q. And they were traded around a little bit?

22 A. They were traded around a little bit, yes.

23 Q. And I believe, was the Mojave a Pai Tribe?

24 A. Pai Tribe, yes.

25 Q. Okay. So related to the Yavapai?

1 A. Yavapai, yeah.

2 Q. So it wasn't just the Apache people and it
3 wasn't just in the 1860s that the native people in
4 Arizona were resisting settlement of their territories?

5 A. No. No, there was active resistance, yes.

6 Q. Do you know when the railroads appeared in
7 the Verde Valley?

8 A. Are you talking about the Prescott Stage from
9 Prescott to Ash Fork?

10 Q. I believe that was the first one.

11 A. Yeah, that was the first one. It's in the
12 1880s.

13 Q. Were mapmakers, either the military or the
14 Spanish mapmakers or the military mapmakers, trained in
15 assessing navigability?

16 A. No.

17 Q. They didn't apply The Daniel Ball test?

18 A. They did not know about it, no.

19 Q. Okay. And you didn't look at the work of
20 federal surveyors for your report?

21 A. Not this time, for this, yeah.

22 Q. Okay.

23 A. But I think, was that covered by
24 Dr. Littlefield?

25 Q. Dr. Littlefield.

1 A. Yes. Yes, so I didn't want to be redundant.

2 Q. Why were the Fort McDowell and Fort Verde
3 posts established?

4 A. For protection, military protection, of the
5 increasing civilian population in this territory.

6 Q. The native peoples were fairly successfully
7 resisting our incursion into the territory?

8 A. That's correct, up until 1865, certainly, and
9 thus the establishment of several -- that had been
10 discussed throughout the territory, particularly
11 Central Arizona.

12 Q. Now, Ms. Summerhayes came to Arizona in 1874;
13 is that correct?

14 A. That's correct.

15 Q. Okay. So she was -- her husband was
16 stationed at Fort McDowell in 1877, does that sound
17 about right?

18 A. Right around there. She spent some time at
19 Fort Apache and then they came down.

20 Q. Were they ever stationed at Fort Verde, or
21 did they just pass through?

22 A. They were stationed there for a time, about a
23 year, from my recollection in reading the book.

24 Q. And how long were they stationed at Fort
25 McDowell?

1 A. Oh, Fort McDowell? I think about one year,
2 if I'm not mistaken. I would have to go back and take
3 a look at the account.

4 Q. They moved around a lot?

5 A. They moved around, yeah. They moved to Fort
6 Yuma and around.

7 Q. Okay. So I thought you said you weren't
8 going to testify about stuff after 1866, and I know I
9 went to law school to avoid math, but 1877 is well
10 after that.

11 A. Oh, I understand. Sure. It was
12 transportation, rugged transportation, so that jumped
13 out, yes.

14 Q. So she wasn't there for the 1883 trip by
15 Willcox and Andrews in a canvas skiff from Fort
16 McDowell to Barnum's Pier on the Salt River Canal?

17 A. She was not there.

18 Q. She was not there when Major Spaulding and
19 Captain Hatfield departed for Phoenix in 1888?

20 A. No, she was not. Didn't know about it.

21 Q. Didn't get to wave at the Day brothers going
22 by in 1891?

23 A. No, she didn't.

24 Q. Didn't see the lumber intended to float on
25 the Verde in 1894?

1 A. She did not.

2 Q. And she certainly missed the 1931 trip of
3 Fogal and his friend?

4 A. Doubtlessly.

5 Q. Okay. When were the roads built by the
6 military? You talked about military roads this
7 morning, or this afternoon, I guess.

8 A. 1865 to 1870. Stoneman Road, 1870, and then
9 the Stoneman Grade also began in 1870.

10 Q. And that road went? Refresh me.

11 A. The first one, the Stoneman Road, went from
12 Fort Whipple to Fort McDowell; and Stoneman Grade went
13 from, roughly, Fort McDowell to what's now called, I
14 think, Picketpost at the base of Picketpost Mountain in
15 Superior; and then from there, from Picketpost, it went
16 up that grade. It was called Stoneman Grade. It was
17 very difficult. You still see remnants of it.

18 Q. Did Ms. Summerhayes travel by boat on the
19 Colorado?

20 A. I think she did, yes.

21 Q. Did she describe that as a pleasant
22 experience?

23 A. She described it as not a very pleasant
24 experience.

25 Q. Pretty horrifying?

1 A. Pretty horrifying in the summer, yes.

2 Q. And she noted a lot of details about how she
3 got to Fort McDowell. Did she record details of how
4 other military people traveled in the area?

5 A. That was an autobiographical account.

6 Q. Did she say anywhere affirmatively that the
7 Verde was not used for navigation?

8 A. She did not say affirmatively that the Verde
9 wasn't used for navigation.

10 Q. So when you say on Page 14 of your report
11 that military commanders never used the Verde, you mean
12 they didn't use the Verde while transporting
13 Ms. Summerhayes at least?

14 A. Not specifically that. I think that's -- the
15 records that I've seen, they have not navigated -- they
16 were not navigating the Verde, from what I've seen.
17 And Ms. Summerhayes, again, that was just an example of
18 the difficulty of traveling through Arizona, whether it
19 was 1860 or whatever her account was, 1874.

20 Q. She's the only one that you talk about in
21 your military section, her and Smith?

22 A. Smith, yes.

23 Q. Old Y.T.

24 A. Old Y.T.

25 Q. Did she mention, in her passages about Fort

1 Verde, the boat that was located there?

2 A. Did she mention? Did I mention or did she
3 mention?

4 Q. Did she mention?

5 A. She did not mention it.

6 Q. Does Ms. Summerhayes talk about swimming in
7 the Verde?

8 A. In that account, I don't believe she talks
9 about swimming. I'm not really sure, though.

10 Q. In her book, at all?

11 A. In her book. In her book, yeah.

12 Q. Let's pull up 6, which is X017-99, which is
13 Page 207 of Vanished Arizona.

14 A. So does she talk about swimming there? If
15 she does, I had forgotten.

16 Q. Last paragraph, about halfway down.
17 She talks about teaching somebody else to
18 swim there.

19 A. Okay, yeah. I had forgotten that anecdote.

20 Q. So, clearly, there were places on the Verde
21 that were deep enough that you had to swim in the area
22 of Fort McDowell?

23 A. One could infer that.

24 Q. And then you talk about John Y.T. Smith, and
25 Mr. Smith established a hay camp along the Salt to

1 supply hay to Fort McDowell?

2 A. Yes.

3 Q. And Fort McDowell is upstream from the Salt
4 River, where he established his hay camp?

5 A. Yes.

6 Q. Hay is a pretty bulky kind of thing to
7 transport?

8 A. Yes.

9 Q. It doesn't do well if it gets wet?

10 A. It does not.

11 Q. In your opinion, is the Colorado River
12 navigable?

13 A. I believe it's been found navigable by the
14 courts, and so --

15 Q. And you wouldn't disagree with the courts?

16 A. I'm not going to disagree with the courts,
17 no.

18 Q. How about the Mississippi?

19 A. I think I would agree.

20 Q. Do roads run along either one of these
21 rivers?

22 A. Yes.

23 Q. On Page 13 of your report, you state that
24 "Fort McDowell could not raise sufficient crops to
25 sustain the men, their families, and their livestock so

1 innovative entrepreneurs began to branch out."

2 And there's no citation for that; but then
3 when you testified, you talked about the fact that the
4 military was sort of pressured into seeking civilian
5 contractors rather than raising the food for
6 themselves.

7 A. Yeah.

8 Q. Is that what you were talking about in that
9 sentence?

10 A. Yeah, that there was protests from the local
11 population that the military should be fighting the
12 Indians, and so there was an adjustment about
13 the canal. Well, the canal was dug by order of General
14 McDowell and then -- basically, to try to sustain the
15 military operation there, and then there were protests,
16 and it was parcelled out to private sector individuals.

17 Q. So it wasn't really they couldn't raise
18 sufficient crops; it's just it was politically
19 expedient not to raise sufficient crops?

20 A. Yeah, they had other issues that they wanted
21 to address, and so that was the path of least
22 resistance for that outpost.

23 Q. Do you know who Dr. Edgar Mearns is?

24 A. I think he was associated with the Fort
25 McDowell.

1 Q. He was actually stationed at Fort Verde.

2 A. Fort Verde? Okay.

3 Q. Between 1884 and 1888?

4 A. I remember reading something about him, yes.

5 Q. Was he the post surgeon and a naturalist?

6 A. I think, yes.

7 Q. Is that a common overlap at that time?

8 A. Yes. Yeah, there were individuals posted
9 that were like that. I can think of one in Southern
10 Arizona at Fort Lowell, but I can't think of his name
11 right now. And, again, I didn't look at that post as
12 opposed to Fort McDowell.

13 Q. And, in fact, many of the great naturalists
14 of the 1800s were doctors?

15 A. Correct.

16 Q. Vandever Hayden, for instance, who ran --

17 A. Yes.

18 Q. -- one of the Great Surveys?

19 A. Yes.

20 Q. Was there a similar doctor or naturalist at
21 Fort McDowell?

22 A. I'm not aware. I don't know.

23 Q. Did you look at the records for the Fort?

24 A. I did not look at the records for the Fort
25 specifically for this proceeding.

1 Q. I would like to talk a little bit about the
2 infamous two guys in a boat photo --

3 A. Okay.

4 Q. -- that I think you still have up there.

5 A. Yeah, sure.

6 Q. X035-167, Page 110.

7 Do you have any reason to disagree with other
8 experts' opinions of the location of this photo?

9 A. I don't have any reason to disagree with the
10 location.

11 Q. Do you have any doubts about the date on this
12 photo, at least the approximate date of this photo.

13 A. I think the approximate date. It looks like
14 the late 19th Century.

15 Q. I see from your CV, you have some exposure to
16 the Colorado River through Grand Canyon?

17 A. Some.

18 Q. Are you familiar with the boating history of
19 Grand Canyon?

20 A. I am not familiar with that dimension of its
21 history.

22 Q. You know who John Wesley Powell was?

23 A. I do.

24 Q. Do you know what kind of boats he used in
25 Grand Canyon?

1 A. I saw images of them in this proceeding, yes.

2 Q. But you don't know their cargo capacity or
3 draft?

4 A. I don't know those things.

5 Q. You would say those would be a boat that
6 would be available for commercial purposes at the time
7 of Arizona's statehood, as well --

8 A. Yes.

9 Q. -- as the ones we talked about earlier --

10 A. Yes.

11 Q. -- the canoes and flatboats and things like
12 that?

13 A. Yes. I would think so, yes.

14 Q. I'm trying to keep from us overlapping,
15 because I'm getting dirty looks over here.

16 A. Okay. I'm sorry.

17 Q. Would you characterize Mr. Powell's use of
18 the river as a commercial use?

19 A. No, I would characterize it as a scientific
20 survey.

21 Q. He was being paid a salary to boat down the
22 river, was he not?

23 A. Is that commerce along the river? That's for
24 you -- I think for the attorneys to decide. I mean I
25 really can't --

1 Q. You don't have an opinion?

2 A. I don't have an opinion on that, no.

3 Q. Okay.

4 Do you know who the Kolb brothers were?

5 A. Yes, photographers in the canyon, yes.

6 Q. Are you familiar with the boats they used in
7 Grand Canyon?

8 A. I'm not familiar with the boats they used.

9 Q. Okay. Do you have a standard for
10 navigability?

11 A. I do not.

12 Q. I would like to talk a little bit about the
13 historical records of boating we have for the Verde,
14 and I know you didn't include them because they
15 occurred after the dates you were focused on.

16 A. Yes.

17 Q. And I think we've already talked about the
18 Day brothers in Segments 2 through 5 and Fogal and his
19 friend in those same segments.

20 Let's look at the record we have for Willcox
21 and Andrews in Segment 5, which is No. 8, and it is
22 X017-122.

23 A. Okay, I've read it.

24 Q. Okay. These guys didn't seem to have --
25 didn't report any difficulties in their journey?

1 A. It appears not.

2 Q. Okay. And then I'm not going to bring back
3 up the infamous photo of the guys in the boat, but they
4 apparently used a boat on the Verde?

5 A. Apparently. They're there.

6 Q. And then we have Major Spaulding and Captain
7 Hatfield in a canoe in 1888, also in Segment 5.

8 This is X017-123, and it's 10, please, Debi.

9 I'll give you a minute to read this.

10 A. I'm going to have to get up.

11 Q. And there's a copy, actually, in the
12 notebooks there next to you.

13 A. Oh, good. Yeah.

14 Q. I'll find the page --

15 A. What page, yeah?

16 Q. -- or the tab --

17 A. Tab.

18 Q. -- for you will be 6.

19 A. 6? Okay. One, two, three?

20 Q. Yes.

21 A. Okay. "Major Spaulding's Death"?

22 Q. Yes.

23 A. Oh, the death.

24 I have heard about this account before, but
25 this is the first time I've read it here.

1 Q. And he was the Commandant at Fort McDowell?

2 A. Yes.

3 Q. What does that mean?

4 A. He was the --

5 Q. Guy in charge?

6 A. Top officer, yes.

7 Q. Okay. And he was apparently using a boat.

8 Do we know whether this was a pleasure or a business
9 trip?

10 A. Let me take another quick look.

11 It looked as though they were shooting as
12 they came, so it looks as though they were -- it was a
13 pleasure trip.

14 Q. Have you never done anything fun on a
15 business trip?

16 A. Yes, I've done something fun on a business
17 trip.

18 Q. So it's possible they could have been
19 traveling for military purposes and incidentally
20 shooting along the way, or it's possible they could
21 have been on a frolic?

22 A. Either/or.

23 Q. Okay. And he died because his gun misfired
24 going over an irrigation diversion?

25 A. That's correct.

1 Q. Not because he drowned on the Verde or
2 because the --

3 A. No.

4 Q. -- rapids were too big or anything like that?

5 A. It was a tragic event, yes.

6 Q. Okay. Do you know who Dr. Ralph Palmer was?

7 A. No, I don't.

8 Q. He was the author of a book called Doctor on
9 Horseback. Have you read that?

10 A. No, I haven't.

11 Q. We have an account from Dr. Palmer, and
12 that's is X017-97, page 29.

13 It's No. 12, Debi.

14 A. Okay.

15 Q. So starting with the first full paragraph
16 there.

17 A. "Sunday morning"? Okay. Oops, I'm sorry.
18 Okay. Thank you.

19 Q. Let me see if I can make it a little bigger.

20 A. Yeah, geez.

21 Q. Does that help?

22 A. Yeah, that helps a lot. Thank you.

23 Okay.

24 Q. He doesn't talk about, at least in this
25 paragraph of this, like the boat was -- having a boat

1 was an unusual event, does he?

2 A. No, there's no reference to it being unique.

3 Q. Although, it does seem a little unique that
4 you have a horse that takes the boat trailer back?

5 A. Yes.

6 Q. All right. I would also like to look at
7 X017-121, which is 13, Debi.

8 Can you just blow up the text there so it's
9 on the screen?

10 A. Okay, I've read it.

11 Q. So this is outside of your area. This is --

12 A. Yeah.

13 Q. -- up on the top part of the Verde.

14 A. It's fun learning.

15 Q. And it's 1917.

16 A. Yes.

17 Q. But it actually shows a picture of the boat
18 that was used on the Verde.

19 A. Okay.

20 Q. There it is.

21 Do you have any reason to doubt this account?

22 A. I don't doubt that account, no.

23 Q. Okay. And then looks look at X017-126.

24 So 14, Debi.

25 You may have remembered this account from my

1 discussion of it with Dr. Littlefield.

2 A. Yes, I think I do.

3 Q. So these guys also used the Verde for
4 boating?

5 A. Apparently, yes.

6 Q. Okay. Don't these accounts contradict your
7 conclusion that the Verde wasn't boatable?

8 A. I don't necessarily think so. I think these
9 accounts, they're comparatively small in number, and I
10 think it's up to the Commission and the attorneys to
11 place these accounts in context and discuss what
12 susceptible means and natural, and I forgot the other
13 one. I feel like Governor Perry.

14 Q. It's been a long day.

15 A. I forgot the third one.

16 Q. Governor Perry is not the third part of your
17 test.

18 A. I know.

19 The other term that's -- the legal term
20 that's your charge and the Commission's charge to deal
21 with, yes.

22 Q. Okay. Is it your opinion that since the
23 Verde was used for irrigation, it could not have been
24 used for irrigation or --

25 Let me try that again.

1 A. I know, I'm with you. Sorry.

2 Q. It's been a long day or a long week.

3 Is it your opinion that since the Verde was
4 used for irrigation, it could not have been used for
5 navigation?

6 A. No.

7 Q. Those are not mutually exclusive?

8 A. They are not mutually exclusive.

9 Q. Okay.

10 MS. HERNBRODE: Luckily for you, that
11 concludes my cross-examination. Thank you so much.

12 THE WITNESS: Thank you.

13 MS. HERNBRODE: I believe you have
14 another tormenter.

15 THE WITNESS: Okay, tormenter.

16 MR. HELM: That is cruel.

17 CHAIRMAN NOBLE: Mr. Helm, are you ready
18 to proceed?

19 MR. HELM: I am.

20 CHAIRMAN NOBLE: Jody? Jack?

21 Go ahead, John.

22

23 CROSS-EXAMINATION

24 BY MR. HELM:

25 Q. Hello, Dr. August. I think we've done this