UIdaho Law
Digital Commons @ UIdaho Law

Bighorn | Hedden-Nicely

1-27-1981

Trial Transcrip, Vol. IV, Afternoon Session

Frontier Reporting Service

Follow this and additional works at: https://digitalcommons.law.uidaho.edu/bighorn

Recommended Citation
Frontier Reporting Service, "Trial Transcrip, Vol. IV, Afternoon Session" (1981). *Bighorn*. 164.
https://digitalcommons.law.uidaho.edu/bighorn/164

This Transcript is brought to you for free and open access by the Hedden-Nicely at Digital Commons @ UIdaho Law. It has been accepted for inclusion in Bighorn by an authorized administrator of Digital Commons @ UIdaho Law. For more information, please contact annablaine@uidaho.edu.

File 111
4362
Box 10

Case # 4993

File # 111

4362

IN THE DISTRICT COURT FOR THE FIFTH JUDICIAL DISTRICT

WASHAKIE COUNTY, STATE OF WYOMING

IN RE:	)
THE GENERAL ADJUDICATION OF RIGHTS TO USE WATER IN THE BIG HORN RIVER SYSTEM AND ALL OTHER SOURCES, STATE OF WYOMING,	) Civil No. 4993

FILED
2/6 1981
Margaret L. Hampton CLERK
DEPUTY

VOLUME IV

Tuesday, January 27, 1981

Afternoon Session

ORIGINAL

INDEX TO EXAMINATION

			PAGE
WITNESS:			
James Merchant			
Direct Examination	By Ms. Sleater		267
Voir Dire Examination	By Mr. Merrill		274
Voir Dire Examination	By Mr. Merrill		287
Direct Examination	By Ms. Sleater		290
Voir Dire Examination	By Mr. Fillerup		324
Voir Dire Examination	By Ms. Yonkee		326
Voir Dire Examination	By Mr. Webster		327
Voir Dire Examination	By Mr. Webster		348
Voir Dire Examination	By Mr. Merrill		352
Direct Examination	By Ms. Sleater		371
Examination	By The Special Master		375
Voir Dire Examination	By Mr. Webster		377
Voir Dire Examination	By Mr. Merrill		386
Redirect Examination	By Ms. Sleater		397
Examination	By The Special Master		401
Direct Examination	By Ms. Sleater		402
Voir Dire Examination	By Mr. Webster		406
Voir Dire Examination	By Ms. Yonkee		00410
Voir Dire Examination	By Mr. Merrill		00412
Direct Examination Cont.	By Ms. Sleater		437
Voir Dire Examination	By Mr. Webster		441
Voir Dire Examination	By Mr. Sachse		445
Voir Dire Examination	By Mr. Radosevich		449
Voir Dire Examination	By Mr. Merrill		450
Voir Dire Examination	By Ms. Yonkee		455
Direct Examination Cont.	By Ms. Sleater		458

INDEX TO EXHIBITS

	IDENTIFIED	RECEIVED
U.S. Exhibit WRIR C-14	272	278
U.S. Exhibit WRIR C-14-A	286	290
U.S. Exhibit WRIR C-15	297	345
U.S. Exhibit WRIR C-15-A	319	
U.S. Exhibit WRIR C-16	345	
U.S. Exhibit WRIR C-19	431	429
U.S. Exhibit WRIR C-20	438	

(The following Proceedings was continued at 1:30 p.m.)

THE SPECIAL MASTER: We will convene.

MR. MERRILL: Your Honor, before we begin, I would like to mention two things: Number one, during the recess Mr. Echohawk asked me if we intended to recall Mr. Harbour as part of these proceedings for further cross-examination. I don't think that will be the case, and I would ask the Court to excuse Mr. Harbour subject to his being recalled by the State of Wyoming as an adverse witness when we put him on in our Case in Chief.

THE SPECIAL MASTER: Is that understandable, Mr. Harbour.

MR. HARBOUR: I'm not sure I heard it all.

THE SPECIAL MASTER: Would you please repeat that, Mr. Merrill?

MR. MERRILL: Yes, Your Honor.

We have no objection to your being excused, Mr. Harbour, on the understanding that you are still subject to the jurisdiction of this Court and can be recalled as an adverse witness to testify as part of Wyoming's Case in Chief.

MR. HARBOUR: Understood.

MR. MERRILL: Is that agreeable to you?

MR. HARBOUR: Yes, that is.

THE SPECIAL MASTER: Is that agreeable to you, Regina?

MS. SLEATER: With one qualification. I'm not sure about the reservation of the existence of an adverse witness under the current Rules of Procedure. But in terms of the Court's jurisdiction over Mr. Harbour, Mr. Harbour is a resident of Lander, and I think that goes without question that he is within the jurisdiction of the Court.

THE SPECIAL MASTER: Whether he comes as adverse or otherwise, I will suspect he will be happy to come to help us solve our problems.

MR. MERRILL: The second matter, Your Honor, concerns the order of witnesses for the remainder of the week, and I discussed this with Mr. Echohawk and Ms. Sleater over the break, and I would like to have them state on the record who their next witness will be. Very simply, our problem is upon invocation of the rule on Monday, Wyoming's witnesses have scattered to the four winds, and depending on who will be the next witness to come in, we have folks in California as well as several private parties who have advised me they would like to be present during the testimony of certain witnesses of the United States.

So if we could get a listing from Ms. Sleater who she will call for the rest of the week -- not the rest of the case.

THE SPECIAL MASTER: The next two or three?

MR. MERRILL: That would help.

THE SPECIAL MASTER: Can you do that, Regina?

MS. SLEATER: Your Honor, this morning I advised Mr. White and Counsel for the State of Wyoming that in all probability our next witness would be Oliver Page. The reason I said in all probability, although Mr. Page is here, unforeseen circumstances such as an auto accident or something like that might cause a change, but other than that I anticipate him.

THE SPECIAL MASTER: All right. After him?

MS. SLEATER: Basically I can't go further than that. In view of what has gone on today, we may not have much time for another witness other than Mr. Page, and until I have more of a feeling for what time is left, I am not going to put someone on the stand to get one-tenth of their testimony out or something like that, so we will have to make adjustments depending on the time available, which we will have a better feeling for after Mr. Page.

THE SPECIAL MASTER: Will Mr. Page be the

third witness?

MS. SLEATER: Probably.

THE SPECIAL MASTER: How many does that leave on the list? Can you summarize maybe the next one or two?

MR. MERRILL: I don't know who Ms. Sleater plans on, but even a narrowing of the field would be a great help.

THE SPECIAL MASTER: Well, you have listed already from the letter she sent you about how many names, eight, seven or eight that are to be called?

MR. MERRILL: At least that, Your Honor. I'm not sure of the exact number. But if she could tell the witnesses whom she is considering calling after Mr. Page, that would be of some help to us since we have so many people to shift around.

MS. SLEATER: Your Honor, the State of Wyoming has already been advised of three people we will not be calling. We have already called or have indicated that we will call with Mr. Page three people, and that doesn't leave that many people left out of the original list to begin with, and I am just -- I am not in a position right now to tell the Court who my next witness is, and I'm not going to make a representation I cannot live up to. I'm sorry.

I appreciate Mr. Merrill's problem, and at a time when we have more of a feeling for how -- and the State of Wyoming controls a lot of this -- how the cross-examination is going to be going, I will advise them who our next witness is as soon as we can determine who he will be.

MR. MERRILL: That's fine, Your Honor.

THE SPECIAL MASTER: All right. Thank you.

* * * * *

MR. WEBSTER: Your Honor?

THE SPECIAL MASTER: Yes, Mr. Webster.

MR. WEBSTER: Not to belabor this point any further than it already is, but it continues with the request I made last evening as we were about to adjourn for the evening.

I don't think that we need to cast any stone as to any set order of witnesses, and I certainly wouldn't want to do anything that would not be fair as far as Ms. Sleater redoing her order of witnesses, but it would help the private counsel a tremendous amount if we had some kind of a tentative list more than a couple-three days in advance, and if someone gets in a car accident or Ms. Sleater just gets the feeling she doesn't want to call that witness right then, that would be okay, but as I look at their list of witnesses that they provided me with last evening -- and I certainly appreciated that -- there's 15 or 16 witnesses on this list, and if we could get some idea, tentative though it may be, of the order of the witnesses, it would certainly help the private parties who might be able to select the ones they want to be here to hear and have the opportunity to cross-examine.

I don't think there are any private parties who feel that they can afford to be here all the time, and it's going to kind of be a hit-and-miss procedure.

THE SPECIAL MASTER: I appreciate that. Regina, is the list that you handed to Mr. Webster the same list that you are now preparing to be mailed on the general mailing that we ordered yesterday morning?

MS. SLEATER: What I am just doing is making copies of letters that we sent to the State of Wyoming listing witnesses and exhibits.

I might state at this time, which I forgot about last night, is some of the names on there were people who we are not intending to call, but if at all, it was an overcaution regarding a possible rebuttal case. There was no intent, and those are people like Dr. Lamb from the Instream Flow Group, and Mr. Keating from BLM, and who do appear on that list, and until he mentioned that, I was not aware of that.

We are not trying to add additional expense to anyone's trial preparation or transportation costs or anything like that.

We were taken quite off guard by having to

rearrange our case to adjust to the schedule that was set up, and the main problem is these first two isolated weeks that are far removed from the other case.

As I explained yesterday when I was putting Mr. Merchant on, we're trying to get the blocks of the case that just are sort of blocks in and have them up front and out of the way as much as possible so that then we can devote full-time to the things that require multiple witnesses.

However, these blocks, in and of themselves, are of varying lengths. Until I can see what time is available, I certainly don't want to put myself in a position of having the State of Wyoming having a month to prepare cross-examination, and I just feel it would be a great disservice to my client to say anything further.

As soon as I can truthfully represent who my next witness is, I will certainly make it available, and it's possible that when we get to the larger block of the case, that then we will be in a position to just say, "And here is the list for the rest of the case as we see it."

That's what I anticipate.

THE SPECIAL MASTER: What is it that's being

prepared by your secretary now that Mr. Salazar is waiting for now that is being mailed in regard to yesterday's order?

MS. SLEATER: She's not preparing anything. What we are doing is arranging for the printing of the letters which we sent to the State and which listed the exhibits and listed the witnesses. She is preparing the printing. She is not preparing a new document because --

THE SPECIAL MASTER: And that will contain the names of those parties and those witnesses you intend to call up?

MS. SLEATER: And the subject matter of their testimony.

THE SPECIAL MASTER: And the subject matter?

MS. SLEATER: Yes, Your Honor.

THE SPECIAL MASTER: And you are presenting matters ahead of acreage now because you like to keep those unified and into a long term trial once it begins in a few weeks?

MS. SLEATER: That's correct, Your Honor. As you may have gleaned from my opening statement -- I don't know how clear it was -- we have a number of witnesses who were involved in the practicably irrigable acreage part of the case and, truthfully,

if they don't go together, it loses a lot of its sense. It's a straight progression, and if you just hear them laid out in a straight progression, I think it would be easier for everyone.

THE SPECIAL MASTER: All right, Mr. Webster. I really believe, and I hope that the preparation of the letters that Regina alluded to will be of some help to other counsel for other defendants, and I don't know of a better way to do this, and I can appreciate that these factors,the aesthetics, conversion, land use, may be incidential to the main concept of finding the practicably irrigable acreage and that will come on after these first few days of hearing, but let's proceed and conclude with Mr. Merchant and then go on with the remainder of the case.

If you find need to terminate these proceedings before Friday, there's no law that says you can't do that Thursday afternoon or so and then move to the next date once you feel you are completed with this phase of what you are offering.

MS. SLEATER: Thank you, Your Honor.

* * * * *

MS. SLEATER: Thank you, Your Honor.

THE SPECIAL MASTER: But if you do that, we will presume that you are not coming back to these subject matters, we'll go on to irrigable acreages.

MS. SLEATER: Or some other subject.

Your Honor, I want you to understand that the United States is making a claim based on live-stock consumption, that also includes future expansion. I don't want you to think that this is all --

THE SPECIAL MASTER: Let's talk about this for a minute. I realize, of course, that the United States is making a claim for livestock and livestock consumption, so did the Indians in your claim and so did you in your Statement of Claims, but I also recognize that when there's 1,400 feet of evaporation from watering troughs and from watering pens, that that may be supplied by groundwater as well as surface water, and it is my opinion that it may affect to some degree whether groundwater is included in our decree or not, but it is one of those things that is met in that way.

I am primarily interested in what require-ments you will be maintaining should be made in that litigation from the groundwaters -- from the surface waters, rather, not from the groundwater, as will be

needed for these various phases of the arts of civilization that you are pursuing.

MS. SLEATER: Yes, sir. Thank you.

DIRECT EXAMINATION (CONTINUED)

BY MS. SLEATER:

Q Mr. Merchant, do you have a professional opinion regarding the economic feasibility of expanding the livestock operation on the Wind River Indian Reservation of 50 percent?

A Yes.

MR. MERRILL: Objection, Your Honor, foundation.

THE SPECIAL MASTER: What was the last word or two of that question, I still don't hear, Regina, but that's nothing new.

MS. SLEATER: Fifty percent.

THE SPECIAL MASTER: Can I have the whole question read back.

(Thereupon the following question was read back as follows: "Q Mr. Merchant, do you have a professional opinion regarding the economic feasibility of expanding the livestock operation on the Wind River Indian Reservation of 50 percent?")

THE SPECIAL MASTER: Extending the operation

109 WEST 24TH STREET
CHEYENNE, WY 82001
(307) 635-4283

FRONTIER REPORTING SERVICE

201 NORTH E. ST.
CASPER, WY 82601
(307) 237-2752

of 50 percent is your clause. Now, that doesn't make sense to me. Can we ask for it to be rephrased? Does he have an opinion regarding the livestock operation, extension of it on the Reservation.

MS. SLEATER: Okay, that's fine.

Q (By Ms. Sleater) Do you have a professional opinion regarding the economic feasibility of expanding the livestock operation on the Wind River Indian Reservation?

A Yes.

MR. MERRILL: I'm going to object, Your Honor, to his rendering any opinion until foundation is laid for that opinion.

MS. SLEATER: Your Honor, I would like to know what foundation is necessary when the rules expressly state that without any evidence being admitted at all on this subject the witness was entitled to give his opinion. I could have asked him that as soon as he was qualified as an expert, and I will cite the Court to --

THE SPECIAL MASTER: Regina, I'll save you the trouble; I'll overrule the objection.

409 WEST 24TH STREET
CHEYENNE WY 82001
(307) 635-8260

FRONTIER REPORTING SERVICE

201 MIDWEST BUILDING
CASPER WY 82601
(307) 237-1493

MS. SLEATER: Thank you.

Q (By Ms. Sleater) What is your opinion, Mr. Merchant?

A My opinion is that it's economically feasible to expand the livestock industry by 50 percent on the Wind River Indian Reservation.

Q Did you perform an analysis of livestock operation on the Wind River Reservation?

A No, I did not.

Q Why didn't you?

A I felt that a financial analysis would include elements that weren't appropriate. The Indians on the Reservation receive subsidies that not everyone can obtain, and I would feel that a financial analysis would, is a less objective type of analysis for this purpose.

This is a type of -- the economic analysis is the kind of analysis used by the World Bank and the U.S. AID, and the Water Resources Council. It's a recognized type of analysis for expanding or for evaluating a new project of this type. If I had performed a financial analysis, I think it probably would have shown greater profits, but I haven't done that analysis.

MR. MERRILL: Your Honor, I object to that statement and ask that it be stricken, since he admits that he performed no financial analysis whatsoever, he's in no position to say what it probably would have shown, and I would ask the last sentence be stricken.

THE SPECIAL MASTER: I will sustain it for the last sentence only.

MS. SLEATER: Thank you, Your Honor.

Q (By Ms. Sleater) Mr. Merchant, I hand you a copy of U.S. Exhibit WRIR C-16, and ask you if you can identify that, please?

A Yes, this exhibit shows -- the bottom line shows the number of cattle presently on the Reservation, and those we conclude potentially could be on the Reservation in the first two columns.

The second two columns show the associated water requirement for those numbers of cattle.

The four rows above the total row show how those numbers are allocated by watershed within the Reservation.

Q And are those figures based upon the operation you previously described?

A Yes, they are.

merchant-direct-sleater

MS. SLEATER: At this time, Your Honor, I would like to move U.S. Exhibit WRIR 17 into evidence.

THE SPECIAL MASTER: I have a few questions myself that I'd like to ask.

EXAMINATION

BY THE SPECIAL MASTER:

Q Does this exhibit purport to describe the water requirement set down, a water requirement of any particular water, of groundwater as it pertains to surface water?

A No, Your Honor, I did not distinguish the two.

Q And in your studies of the cattle industry and the grazing areas, what did you find is the predominate source of water for the feeding of cattle?

A There are both sources on the Reservation, it's very difficult to say one is predominate, but the evaporation --

Q My question wasn't on the Reservation.

A Oh, I'm sorry.

Q The question was on the grazing area.

A On the grazing area.

Q What did you find is a dominate source of water?

409 WEST 24TH STREET
CHEYENNE WY 82001
(307) 635 8280

FRONTIER REPORTING SERVICE

201 W DAVIS BUILDING
CASPER, WY 82601
(307) 237 1453

A I didn't find that one was over the other.

Q You did not find that water wells and feeding troughs and drinking troughs were predominate over streams that cows can drink out of?

A There are stock ponds as well.

Q And stock ponds?

A Yes.

Q Did you find any of them predominate -- well, strike that question, please.

In your survey, does your expertise extend to that segment of the livestock industry regarding water sources and grazing cattle on the grazing areas of the Reservation? If it doesn't, just say so.

A It doesn't, but let me clarify one thing. The evaporation aspect of these water requirements are based on stock ponds only and not feeding troughs, water troughs, windmills.

Q But were the stock pond's source of water well, all water wells with windmills?

A No.

Q But were some made from direct flow?

A Some were made from direct flow.

THE SPECIAL MASTER: That's what I wanted merchant-examination-the special master

to know.

Any other objections to this exhibit?

MR. WEBSTER: May I voir dire the witness?

THE SPECIAL MASTER: Yes, you may, providing it's all right with Mr. Merrill.

MR. MERRILL: Absolutely, Your Honor. They're a party as much as we are.

MR. WEBSTER: I don't know what order we're supposed to go in.

THE SPECIAL MASTER: Generally the way we're going, I try to offer the majors first, but you go right ahead.

VOIR DIRE EXAMINATION

BY MR. WEBSTER:

Q Your exhibit, and that's 17; is that correct, Exhibit Number 17?

A Yes, sir.

THE SPECIAL MASTER: C-17.

Q (By Mr. Webster) C-17 indicates that the number of cattle on the Reservation would be increased by 50 percent, that's how you come up with the figures in the second column; is that correct?

A Yes, it is.

FRONTIER REPORTING SERVICE

Q And how did you determine the potential to come up with those figures?

A I think I described that earlier. It's based on -- let me step back just a minute. What we tried to do in this, in our analysis was to evaluate the potential of a resource on the Reservation, a particular resource, and that's the carrying capacity of the Reservation. What we first tried to do was -- well, let me also say that the only reason we're doing this is to establish these water requirements. The first step in that was to look at the carrying capacity in different seasons on the Reservation. We found that in the summer, summer carrying capacity could be expanded by 50 percent and that with the advent of irrigated, new irrigated agricultural development, the fall and winter feeding periods would also be no problem.

It's the spring period then we encounter difficulties with, and we found that we could expand the carrying capacity by 50 percent in the spring as well as by including a range improvement in our operation, and that range improvement is an element of the budget, the total

309 WEST 24TH STREET
CHEYENNE WY 82001
(307) 635-8280

FRONTIER REPORTING SERVICE

201 MIDWEST B-1-AG
CASPER WY 82601
(307) 237-1433

budget. So it's costed in there, so that's our basis for the 50 percent expansion. Then we did the budget to confirm --

Q Hold on just a second, if you wouldn't mind. Where did you get the information for that 50 percent figure?

A That's from the range operation's officer on the Reservation.

Q And you relied solely on his information?

A For the carrying capacity of the summer range land, yes.

Q And that's one individual; is that right? That's the only source you used?

A I confirmed that with the land operation's officer.

Q Both in the same office basically?

A Yes.

Q On the Reservation?

A That's right.

Q Anybody else?

A No, they have the best information there is.

Q Well, I think that's up to the Master to decide. But did you decide with anybody else?

A No, not on that 50 percent capability of expansion

40 WEST 24th STREET CHEYENNE, WY 82001 (307) 632-0587

FRONTIER REPORTING SERVICE

201 M STREET BLDG CASPER, WY 82601 (307) 237-1433

in the summer range lands.

Q I cut you off and I apologize for that.

If there is something further that you'd like to say, go ahead.

A Just to finish up, our last step then was to determine that this expansion was not only technically feasible but economically feasible, so that was the purpose of the budgets that you've seen for --

Q And technically feasible, you mean you went on the ground and said, yes, there is in fact this potential for increase?

A For that I relied on other experts on the Reservation. That's the 50 percent ability to expand in the summer, that's what I mean by technical feasibility, that there is an under-grazing now on the Reservation.

Q And that information again came from whom?

A From the range operation's officer and confirmed by the land operation's officer.

* * * * *

Q. (By Mr. Webster) Were you able to see any of the date or information by which this information was developed?

A. They did show me some of the information on carrying capacities of different range units, but I can't say I viewed that extensively enough to form my own opinion based on that data. My opinions are based primarily on the conversations with range operations officers and --

Q. What was the nature of that data?

A. The data that I reviewed?

Q. (Mr. Webster is nodding his head affirmatively.)

A. It's the number of cattle on different range units.

Q. Do you know how that data was developed?

A. I believe it's -- it's the number of animals permitted on different range units, and then I believe they also count the actual number of -- but they have some indication of the actual numbers that use the representative range units.

Q. So other than the existing use, did you analyze any other data or see any other data by which the 50 percent figure was developed?

A. No. For that I relied on the judgment of those experts.

Q. It is my recollection, my notes so reflect, that during your examination by Ms. Sleater that you indicated that the daily consumption of cattle was 15 gallons per day. Is that correct?

A. Yes.

Q. And is that how you developed the figures in column number 3 and 4?

A. That's just one aspect of the development of those columns. The other is the evaporation.

Q. Were all the cattle treated the same? I mean, was a calf allocated 15 gallons a day, the same as a bull, for instance?

A. They -- I should have explained.

Q. Maybe you can answer my question, then if you want to explain you can go on ahead.

A. Yes, they were. My explanation is that the number of animal units in the summer closely coincides with the number of animals when these animals are counted. The 25,000, in other words, is a very close approximation of the number of animal units that exist on the range land in the summer. In fact, it might even be a slight underestimation. So if we were to do this animal by animal, in terms of animal units

we might come up with a slightly higher figure, but it's very close.

Q. I'm not sure I understood what you said. Are you saying that this determination in column 3 and 4 was done by animal units, AUMs?

A. No, I'm not. I'm saying that it's based on an average of 25,000 animals at 15 gallons per day per animal, but --

Q. And that's the number of animals that are currently on the Reservation at the fall inventory time, or over the winter feeding period.

A. There are more animals in the summer, however.

Some of the animals are heavier because they have been gaining weight all winter, so the number of animal units in the spring and summer is greater than the number of animal units in the winter.

Q. And is that because the calves are sold off in the fall?

A. Yes, that's one of the reasons. There are new calves born in the spring, and the calves that become yearlings are gaining weight.

Q. It's my recollection that either you testified or Mr. Harbour testified that the counts were

actually done in the spring and there was very little change until the count was done in the fall. Was that you who testified to that?

A. No, it wasn't.

Q. Do you know if that is correct or not?

A. I don't -- as to whether there is very little change over the summer?

Q. Yes, over the summer until the count is completed in the fall?

A. Well, except for the new calves, I imagine that's pretty accurate, yes. But if you count before calving, there are going to be a lot of new animals.

Q. No, I didn't mean that. After the calving in the spring.

A. I believe the count is done before calving, but I should -- Mr. Harbour would know that better than me.

Q. Thank you. Did you analyze the grazing area to any extent that these animals would be put on, this new potential?

A. The location?

Q. Yes.

A. Only in a general sense do I know approximately

where the summer grazing areas are.

Q. Do you know the water availability in those areas from streams?

A. No. I didn't -- I didn't look at water availability.

Q. How about the groundwater availability?

A. Well, I think I will defer to Mr. Page on that.

Q. You can answer the question for me, and then I will ask Mr. Page maybe.

A. No, I don't know the answer to that.

Q. And if I understood your answers to the Master correctly, you don't know how much of this full potential of water requirement would be supplied by the groundwater and surface water, is that correct?

A. That's correct.

MR. WEBSTER: I have no further questions.

THE SPECIAL MASTER: Thank you, Mr. Webster.

Let me ask one question while the next attorney is getting ready.

Mr. Merchant, is the figure you quoted in C-17 from an optimum expansion with range improvements?

THE WITNESS: Yes.

THE SPECIAL MASTER: All right. Without the range improvements to which you earlier alluded,

FRONTIER REPORTING SERVICE

what would that increased percentage be?

THE WITNESS: I suspect it would be in the neighborhood of fifteen percent, but I didn't explicitly study that. The reason I say that is that the spring grazing is about 15 percent underutilized now, and without any range improvement that would become a constraint on expansion of the livestock industry.

THE SPECIAL MASTER: Any further questions of this witness?

MR. MERRILL: Yes, Your Honor.

THE SPECIAL MASTER: Mr. Merrill? On this exhibit, that is, of course.

MR. MERRILL: I have lots more for this witness.

THE SPECIAL MASTER: I imagine so.

VOIR DIRE EXAMINATION

BY MR. MERRILL:

Q. Jim, I note that Exhibit C-17 reflects four different watersheds from which water is to be taken I presume, to satisfy these livestock needs, is that correct?

A. Yes.

Q. Would you explain to the Court what facts and

FRONTIER REPORTING SERVICE

data you relied on to determine that the current use of water or the water requirement in the Wind River watershed is 580 acre-feet per year?

A. Yes. That's an allocation of the total figure by watershed, and that allocation was based on information from the range operations officer.

Q. Now, what you are telling me is the division of cattle between the four basins, is that right?

A. Yes.

Q. My question is how did you determine through calculations or whatever that 580 acre-feet of water is now required annually for cattle in the Wind River watershed? Can you explain how you determined that to the Court?

A. Well, that's how I determined it, by allocating the total of 1,820 to the various watersheds..

Q. In other words, you determined the total requirement and then broke that up?

A. Yes, that's right.

Q. Why don't you describe the the Court how you determined the total requirement.

A. That's based on 15 gallons per day per animal times the number of animals plus a factor for evaporation. The evaporation is based on a count

of 280 stock ponds times an average of two acre-feet per pond -- two acres, I'm sorry -- times an average of two and a half acre-feet per acre of evaporation.

(Off-the-record discussion.)

MR. MERRILL: I believe about 360,000, Your Honor.

THE SPECIAL MASTER: How many gallons in an acre-feet is what I was asking my assistant, and what is your answer?

THE WITNESS: 360 gallons, Your Honor.

THE SPECIAL MASTER: All right.

Q. (By Mr. Merrill) So as I understand it, you multiplied the actual 15 gallons per consumption times the total herd count, 25,000 and then put 280 stock ponds which you assumed the average area of two acres per pond, and then you also assumed two and a half acre-feet per acre evaporation rate; is that right?

A. We didn't assume those. We found those or we learned that information from people on the Reservation.

Q. Who did you learn it from?

A. From the range operations officer.

Q. Anybody else?

A. Well, the evaporation rate was also learned from information provided by HKM.

Q. Are these stock ponds scattered through the length and breadth of the grazing areas on the Reservation?

A. Yes, I believe they are.

Q. Altitude varies considerably between those areas, doesn't it?

A. Yes.

Q. So, in fact, the rate of evaporation could vary and be, in fact, quite different down in the

FRONTIER REPORTING SERVICE

low part of the Reservation than it would be in the high part?

A. I would expect it to be quite different.

Q. Do you have the same amount of stock ponds in each of the various water sheds on the Reservation? Are they equally divided between the four?

A. Our allocation here is based on the fact that they are fairly equally divided across the Reservation, and as far as the evaporation rates are concerned, we had a map showing lines of equal evaporation around the Reservation and matched that with the location of stock ponds that Mr. Robertson told us about so that the 30 inches represents an average value and based on that comparison of location with the evaporation data.

Q. So some of the stock ponds are going to have much higher rates of evaporation and some will be lower; is that right?

A. Yes.

Q. How did you determine the current distribution of cattle by number of cattle in the four water sheds?

A. I believe I told you already. That was based

on information from the range operations officer.

Q. Isn't it true that these cattle move around during the seasons of the year from low lands to high lands?

A. Yes, it is.

Q. Isn't it also true that these basins, the various water sheds, doesn't each contain the same proportion of low lands and high lands?

A. Not exactly the same, no.

Q. So, in fact, the burden of the cattle on the various areas might vary depending on the season of the year; isn't that correct?

A. That's right.

Q. So how did you determine for just one figure what the cattle population in each of these four basins would be? Is this an average of winter, spring, summer and fall, or is this one time of year?

A. This is a year-around average.

Q. How did you make that average?

A. We talked to Mr. Robertson about it.

Q. Did you base your average on anything else than the information Mr. Robertson gave you?

A. No. He's the person on the Reservation who's

in charge of the range operations, and I think he's in the best position to know that.

MR. MERRILL: Your Honor, I would ask that the last comment of the witness be stricken as not responsive to the question.

THE SPECIAL MASTER: I didn't hear it. Would the reporter be kind enough to read the answer?

(The last answer was read
(back by the reporter as
(follows: "Q. No. He's
(the person on the
(Reservation who's in charge
(of the range operations,
(and I think he's in the
(best position to know that.")

THE SPECIAL MASTER: Oh, that's all right.

Q. (By Mr. Merrill) Did I hear you say in response to Mr. Webster's cross-examination that the spring range land could only sustain a fifteen percent increase in grazing load right now?

A. No, I stated that in response to the Master's inquiry.

Q. Is that true -- I have got the inquirer wrong, I guess. Is it true then that the spring grazing lands can only sustain a fifteen-percent increase in capacity?

A. Without improvement, that's true.

Q. And how about the fall grazing lands?

A. Well, as they are now, that's equally true for the fall grazing lands, but with the new irrigation development there will be much more turning capacity available in the fall so --

Q. Let's forget the future irrigation for a moment and just talk about the fall grazing lands as they are now.

A. As they are now?

Q. Do you know how much increase in grazing load those lands can sustain?

A. Well, the fall grazing lands are generally the same as the spring, so that's equally true.

Q. Fifteen percent?

A. Fifteen percent.

Q. Did you make any determination whether a reseeding program such as the one you contemplate in your hypothetical model could actually sustain a fifteen-percent increase if a reseeding program is implemented on the Reservation?

A. I checked with reliable sources about the carrying capacity increase one might expect from reseeding. I talked to people on the Reservation who had

participated in reseeding programs and ascertained that that was reasonable to expect on the Reservation.

I should point out that our model is an attempt that has been based on conditions on the Reservation that might be expected in the future and it's not a purely hypothetical model.

Q. Mr. Merchant, did you actually verify that the current water consumption for livestock on the Reservation is 1820 acre-feet per year as shown at the bottom of the third column on Exhibit C-15?

A. Did I measure evaporation on each stock pond? Is that the implication of your question?

Q. No, the question is did you verify that 1820 acre-feet per year are currently being used to support the livestock operations?

A. No.

MR. MERRILL: Your Honor, I have no further questions and ask that this exhibit not be admitted.

Again, it bears no relation to what's actually going on on the ground out on the

Reservation nor has it been shown that there is any feasibility outside of the hypothetical assumptions that the witness has made to expand the operations to the degree that he has testified.

I think it has no probative value since it doesn't bear on the expansion of the operation. It does not show what is going on on the ground to date.

THE SPECIAL MASTER: Are there any other attorneys who wish to voir dire this exhibit or this witness regarding this exhibit?

(Pause.

THE SPECIAL MASTER: If not, I will rule on the objection. The objection has a valid base in that it limits what this exhibit can be used for, and the exhibit is not based upon experience of raising livestock, but it is based upon a continuance of the studies and modes that this witness has made in an attempt to show the need for more water, and for that purpose only, it shall be admitted. So C-15 is in evidence.

THE SPECIAL MASTER: I have a couple more

FRONTIER REPORTING SERVICE

questions on it.

You did state that all of the information contained in this exhibit you obtained from Mr. Robertson; is that substantially correct?

THE WITNESS: Sir, the total numbers of cattle are based upon our analysis of the ability to expand the livestock industry. The allocation of the totals across water sheds is based on information from Mr. Robertson.

THE SPECIAL MASTER: Right, but at no time did you see any studies made that distinguishes between high loam soil and its characteristics as distinguished from other soils in this vast area? You make one generalization as to grazing capacity for the entire grazing area?

THE WITNESS: We distinguished by summer and spring, fall --

THE SPECIAL MASTER: By seasons, but not by qualities or capacities of the land to sustain livestock or to regenerate its feed?

THE WITNESS: We used the average values for the different seasonal grazing areas.

THE SPECIAL MASTER: Okay. Thank you, Mr. Merchant.

merchant -

REDIRECT EXAMINATION

BY MS. SLEATER:

Q. Is there anything else you did with respect to the livestock enterprise?

THE SPECIAL MASTER: Can you repeat the question, please, Regina?

Q. Was there anything else that you did with respect to the livestock enterprise?

A. I don't believe so.

Q. Let's move on to the next category you mentioned you were hired to examine, which is municipal, domestic and commercial uses.

MS. SLEATER: And, Your Honor, if we could have a few minutes' indulgence while my co-counsel moves around a couple of exhibits.

THE SPECIAL MASTER: Yes. Municipal, domestic and what?

MS. SLEATER: Commercial.

THE SPECIAL MASTER: Yes, thank you. You may take a minute for that. Do you want a ten-minute break?

MS. SLEATER: That would be fine, Your Honor.

THE SPECIAL MASTER: We shall have a ten-minute recess.

(Brief recess.

THE SPECIAL MASTER: All right. We'll come to order, please.

Regina.

MR. MERRILL: Excuse me for interrupting, Your Honor. Before we resume, since we know who the next witness is going to be, I want to make sure we have all the exhibits so we don't have to have a repeat of my objection that was made this morning, and I'd just like the record to reflect that the United States has thus far served us, and maybe Ms. Sleater can look at these with me and see if I've got them all.

(Brief pause.)

MR. MERRILL: We have four isopach maps, which is i-s-o-p-a-c-h maps for four different different types of rocks on the Wind River Indian Reservation. And we have a summary of the hydrogeologic characteristics of rocks and deposits present on the Wind River Indian Reservation.

We have something called Table four, source and locations under the Wind River Indian Reservation. And the last exhibit is Table 2, estimated potential well yields from quarternary,

q-u-a-r-t-e-r-n-a-r-y, deposits. And I'm wondering if there are any other exhibits in addition to those, that we ought to know about them now and we can foreclose having to make these objections when Mr. Page's testimony comes on.

MS. SLEATER: Your Honor, as Mr. Merrill is aware, there are other exhibits which are -- have been -- the State of Wyoming's experts have been over there examining within the last week. There are large scale exhibits with various geological formations and other information relating to groundwater that has been fully available to the State of Wyoming and other parties since the sixteenth of January.

THE SPECIAL MASTER: Very well.

MS. SLEATER: At this time I do not have with me the letter which we sent to Wyoming notifying them, and I don't even know if that's all the tables we sent them because I don't have the letter --

THE SPECIAL MASTER: Very well.

MS. SLEATER: -- with me on that.

THE SPECIAL MASTER: Very well. If there are

other exhibits besides those mentioned we'll know you're saying they've been in the hands of the State experts or technicians for at least ten days.

MS. SLEATER: They are. In fact, they are here available now as are all of the exhibits that the United States thus far accumulated up in the U. S. Attorney's Office. If any counsel would like to go an view them before the trial, they are more than welcome to go up.

THE SPECIAL MASTER: That's kind of you, but it might not meet the requirements of the pre-trial order, but nevertheless it is an offer that counsel should take note of in case they want to brouse through the exhibits that are there.

MR. MERRILL: Thank you, Your Honor.

MS. SLEATER: As to Mr. Merrill's concern about there possibly being others or not, if he would like to wait until we adjourn this evening and we can pull out the letter to see what we supplied them, I'd be most happy to meet with them.

THE SPECIAL MASTER: Before we go on with

new subject matter, municipal, domestic and commercial, I'd like to ask a question or two of Mr. Merchant.

EXAMINATION

BY THE SPECIAL MASTER:

Q. I notice that during the United States' statement of claims, that a claim is made for total irrigation for the livestock industry, and that additional figure that was added on livestock industry in the four drainage basins came to 2,773 acre-feet. Did you see this before you ever completed your work?

A. Yes, I believe I did.

Q. I just wondered because you missed it by three acre-feet a year, and I wondered what coincidence that could have been. Apparently you had the benefit of this pleading and your own work also.

A. What was the date of that pleading, Your Honor?

Q. The date of this pleading was -- that's a good question.

MR. MERRILL: I believe it's in early March of 1980, Your Honor, if I'm not mistaken.

THE WITNESS: We had done some additional work on this, and I think that was the basis for

the pleading, so apparently that's the figure.

THE SPECIAL MASTER: You don't have that handy, do you, the date of filing of the United States' statement of claims?

MS. SLEATER: It was March 6th, 1980.

Q. (By the Special Master) March of 1980 was the date set on that. So you had access to it.

A. I believe that's based on our preliminary work because we've been working on the case prior to that.

THE SPECIAL MASTER: Okay. Thank you, Mr. Merchant.

DIRECT EXAMINATION (CONTINUED)

BY MS. SLEATER:

Q. Have you performed an investigation of the future water requirements of the Indian population on the Wind River Indian Reservation?

A. Yes, I have.

Q. Could you define Indian population for us as it related to your work, please?

A. Yes. For this purpose we used the term Indian population to mean enrolled members of Shoshone and Arapahoe tribes and their immediate families.

Q. Thank you. Could you briefly give us an overview of what your work entailed in this area.

A. Yes. The first step was to locate those communities that had common water systems, public water systems, and determine what the water requirement per capita per day for those systems was.

The next step was to forecast population for the Reservation as a whole, and for each of these communities. And in doing our research into the community water systems, we also determined the source of water for each of those systems.

Our conclusions follow from those two steps with the exception of the people who live on the Reservation who don't have access to a public water system. These people live away from communities and generally have their own wells. We did estimate their population and also projected water requirement for them.

Q. Thank you. I show you a copy of U. S. Exhibit WRIR C-18 that's marked for identification.

THE SPECIAL MASTER: What's the caption on it, Regina?

THE WITNESS: Population --

THE SPECIAL MASTER: I have one, thank you.

Q. (By Ms. Sleater) I ask you if you can identify that exhibit, please?

A. Yes. This is a table showing the Indian population by community, those away from communities, from public water systems, and the Reservation total for the Indians in 1980, 2000 and 2020. There is also a column, showing just for information, the total population of several of these communities on public water systems.

Q. Could you please go through the different communities and explain where the information came from that's reflected on this table.

A. Yes. The populations from Fort Washakie, Boulder Flat, Ethete and Arapahoe were provided by, through conversations with Jim Sorenson of the Indian Health Service who provided us with the number of Indian households connected to the public water system.

Through discussions with him we ascertained that there were approximately 5.2 people per household, so we derived an Indian population for those communities based on those two factors.

The Riverton and Pavillion populations are

based on 1970 census data which breaks out Indian population, and then that data was shown as the rate of the tribal enrollment has grown between 1970 and 1980.

The Reservation total population is based upon a computer printout of enrolled members of the Shoshone and Arapahoe tribes and their immediate families. And we sifted through this printout to locate those people who lived on the Reservation and this total was a total of that count.

The other total community population is the residual, in other words, it's subtracting all the community totals from the Reservation total.

Q. Why have you identified six communities?

A. These are the communities within the Reservation that have community water systems.

Q. I direct your attention to the column heading 2000, Indian Population.

A. Yes.

Q. Could you explain where those figures came from?

A. Well, both that column and the next column are based upon growth rates of the numbers in the merchant - direct - sleater

first column, and the growth rate we used was the growth rate that has occurred over the past thirty years among enrolled tribal memebers. We had a figure for 1950 and 1980, tribal enrollment, and we calculated the compounded annual average growth rate, and then applied that to future projection.

Q. What is a compounded annual average?

A. That's like if you put money in the bank it accumulates at a compounded interest rate instead of simple interest rate. They pay you interest on the interest, in other words.

MS. SLEATER: At this time, Your Honor, I'd like to move U. S. Exhibit WRIR C-18 into evidence.

THE SPECIAL MASTER: If there are no objections, it will be admitted. If there are objections, please stand and I'll take them in order. Mr. Webster.

VOIR DIRE EXAMINATION

BY MR. WEBSTER:

Q. What is the growth rate of the tribal members over the last 30 years?

A. It's about 1.92 percent per year.

Q. And where did that information come from?

A. It's based upon enrollment figures for the period. That information was from -- provided by the Bureau of Indian Affairs office in Fort Washakie by Joseph Smith.

Q. And do you have those, the basis for that determination, do you have some kind of a documentation of that?

A. Those were obtained over the telephone, but I can tell you the 1950 enrollment was 3,151, and the 1980 enrollment was 5,169.

Q. And that came from whom?

A. Joseph Smith, Fort Washakie.

Q. And what is his capacity?

A. Well, he's a BIA officer,I don't know his title. The BIA keeps records as to enrollment. So he was the one who provided those records to us.

Q. You don't know his capacity at all?

A. No, I don't.

Q. How about Jim Sorenson, he's with the public health service there?

A. Yes, the Indian Health Service.

Q. Indian Health Service. And in what capacity does he

serve?

A. He's an Indian Health Engineer in Fort Washakie.

Q. And what information did you get from him by which you developed or made a decision that the average number of Indians per household was 5.2?

A. He provided us with that estimate.

* * * * *

Q (By Mr. Webster) Oh, I thought you said on direct examination you made that determination based upon figures or the information he sent you?

A No, he provided us with that figure.

Q And you don't know the basis by which he came up with those figures at all?

A No, I'm not familiar with that.

Q You don't know if there was a survey or something of that nature?

A I don't know if it's based on a survey.

MR. WEBSTER: I believe that's all the questions I have.

THE SPECIAL MASTER: Mr. Merchant, what were the 1980 census figures on the Wind River Reservation? Everybody else in America is unhappy with those figures; maybe you are, too.

THE WITNESS: Well, the problem with the 1980 census is it doesn't break out Tribal enrollment or Tribal members.

Q From non-Tribal and non-Indians?

A That's right, not yet. There will be a special Indian census aspect of the 1980 census, but that won't be published for another year or

two.

THE SPECIAL MASTER: Did the Department of Commerce publish a figure on the population of the Wind River Indian Reservation in 1980?

THE WITNESS: Not yet that we have. We have several divisions within Fremont County, but there is no census population for the Reservation.

THE SPECIAL MASTER: Thank you. Mr. Merrill? All right, very fine. Ruth Yonkee.

VOIR DIRE EXAMINATION

BY MS. YONKEE:

Q I was wondering, this is stated Indian population, and do you know the basis for what is called enrolled members?

A I believe the Tribes' criteria is an enrolled member must be one-quarter Indian blood.

Q And in making your projections, did you consider any intermarriage so that, perhaps, this Indian blood as the Indians might intermarry would be decreased instead of increased?

A No. No, we looked at statistics of Tribal enrollment over the past 30 years and projected the future population based on that relationship.

Q I see. And no consideration was given to a possible decrease?

A Well, if the decrease has occurred over the past 30 years, then that would be reflected in our projections.

MS. YONKEE: I see. Thank you.

MR. MERRILL: Your Honor, before I begin my voir dire of this exhibit, I must once again raise the ten-day objection. There have been modifications between the exhibit which was served on us by the United States and what has been marked as Exhibit C-18. I don't know exactly where the differences are, but the Reservation total for 1980, for the year 2000, for the year 2020 are all different. So once again we are presented with the same problem.

THE SPECIAL MASTER: Well, can you read the differences? What is the first one, the 1980, is it forty-five fifty-five, or what is it?

MR. MERRILL: On the copy served upon us it was 4,405.

THE SPECIAL MASTER: Would you forget that rather small porportion?

MR. MERRILL: I imagine Your Honor will.

THE SPECIAL MASTER: Your other figures, 6,660, what is it on the one you were served?

MR. MERRILL: 6,440, Your Honor. And the last one is ninety-four twenty rather than ninety-seven

THE SPECIAL MASTER: I hope you understand I don't think those are significant departures.

MR. MERRILL: That's fine. I just wanted the record to reflect our objection.

THE SPECIAL MASTER: Thank you.

VOIR DIRE EXAMINATION

BY MR. MERRILL:

Q Mr. Merchant, I believe you stated on direct examination that you determined the growth rate for enrolled members of the Tribes from the years 1950 to 1980, is that correct?

A Yes.

Q Did you make any determination of whether the standards for who can be an enrolled member of the Tribe changed during that period of time?

A I'm not aware of any change.

Q Did you investigate whether any changes have actually taken place in the standards or requirements for enrolled members?

A I have talked to people about the standards. I'm not sure I asked that specific question, but I'm not aware of any changes that occurred.

Q So you didn't necessarily make a determination that there have not been any changes in the requirements to be an enrolled member of the Tribe?

A No, I haven't.

Q So, in fact, if there have been changes in the standards, some of the growth or decrease, for that matter, in the number of the enrolled members of the Tribe would not be significant to the change, isn't that correct?

A If there had been such a change, yes.

Q As I understand it, you based your 1980 Indian population total on a printout of the enrollment lists, is that right?

A Yes.

Q Do you recall in the deposition in which we discussed this matter a couple weeks ago, I asked you to produce a copy of the enrollment list which you used?

A Yes.

Q To your knowledge, has such a copy been produced?

A We have requested the Billings office of the BIA to provide you with such a copy.

MR. MERRILL: Your Honor, the record should reflect that no such copy of the underlying data which Mr. Merchant relied upon has yet been provided to the State of Wyoming.

MS. SLEATER: Your Honor --

THE SPECIAL MASTER: It is not necessary. Go ahead.

MS. SLEATER: Okay.

* * * * *

Q (By Mr. Merrill) Mr. Merchant, is tribal enrollment over a historic period of a time a commonly accepted technique for projecting future population changes?

A. For projecting Indian population changes, I would think it would be.

Q. You would think that it would be?

A. Yes.

Q. To the best of your knowledge, is it a commonly accepted technique?

A. Yes.

Q. On what do you base that statement?

A. Review of many population projections over the course of my work as an economist.

Q. Now, we're talking about Indian tribe populations; is that correct?

A. Well, I think basing Indian population changes on tribal enrollment would only be valid for Indian populations. I guess I don't understand your question.

Q. My reason is with respect to only projecting future Indian populations, is historic data concerning tribal enrollment a commonly accepted method of projecting future populations?

A. Yes.

Q. In reviewing the data for the past thirty years, did you make any determination as to whether the growth rate has been the same for the past ten years, say, as opposed to the past thirty?

A. No.

Q. So you took the average rate for the past thirty years and assumed that that would apply for the next forty years and in the future; is that correct?

A. Yes, we're looking for a long-term, again a stable relationship.

Q. Did you consider the actual statistics concerning births of members of the Indian tribes or births of children to enrollment members of the Tribes?

A. No, we --

Q. Did you consider any statistics concerning deaths of members of the Tribes?

A. We could find no such statistics.

Q. Did you use any statistics concerning net migration either into or out of the area by persons who are enrolled members of the Tribes?

A. We considered that issue.

Q. Did you rely on any specific data regarding

migration?

A. Only discussions with people on the reservation.

Q. Did you factor it into the actual projections that you made or the rate of growth which you assumed?

A. We determined that this technique was reasonable because we felt that there had been no large migration one way or the other over the period.

Q. On what did you base that feeling?

A. Discussions with people on the reservation. There was no statistics on migration.

Q. With whom did you discuss this?

A. I can't recall right now.

Q. So you are unable to tell me the people who gave you the information on which you relied?

A. No, I can't remember right now who I discussed that with.

Q. Would it be possible for you to refresh your recollection by consulting your notes?

A. I don't think I have it in notes with me now.

Q. But you said you did consider what migration information was available in projecting future populations; is that right?

A. Well, these population projections are based upon

an assumption of no net migration one way or the other, so that it's based upon that fact. And the information I received helped us confirm our assumption.

Q. So you did rely on it, at least to the extent that you were reinforced in your assumption that there was no net migration either way?

A. Yes, it does enforce our assumption.

Q. Did you use any other technique of population forecasting, such as the Cohort-Survival Method?

A. No, we didn't have the data to do that.

Q. Did you rely on any other lists of names or information which might likely show the number of Indians in the various areas for which you were projecting populations?

A. The printout I spoke of did have addresses for each of these towns. However, we felt it wasn't valid to use those addresses as a basis for determining the population of these communities because many people have an address in a certain town and don't actually live in the town. Some of the addresses were in terms of bank boxes and such things.

Q. I can sympathize with your problem.

Did you check the growth rate that you

projected, this 1.92 percent per year, by comparing it with census data from any previous time with, say, 1970?

A. We did look at census data, but felt that this was a better indication of Indian growth rates.

Q. Did you actually verify the results that you obtained through your projections for the growth rate projection by going back and computing historical growth, say, from the 1950 to 1970 census?

A. Census data, no, because we felt that census data wasn't as good an indication of tribal population as this data was.

MR. MERRILL: Your Honor, I object to the introduction or the admission of U.S. Exhibit WRIR C-18 on a variety of grounds --

(Off-the-record discussion.

THE SPECIAL MASTER: Is there an alarm button? I thank you. Now, everything is okay. All right, I'm glad to know that in case somebody gets real mean with me. I beg your pardon and I'm sorry about that question.

MR. MERRILL: I'll repeat it, Your Honor. I just wish I had an alarm button, too.

Let me start over again, Your Honor. Wyoming

merchant - cross - merchant

objects to the receipt of U.S. Exhibit WRIR C-18 into evidence for a variety of reasons, and I presume that this exhibit is being offered for the truth of its contents since no qualifying language was made to the offer.

The first ground is that the witness has testified that he's unable to disclose now in open court all of the facts and data on which he relied and, more specifically, the sources on which he relied concerning his migration assumptions.

Number two, some of the facts and data on which this exhibit is based were agreed to be supplied to the State two weeks ago. And, as of this date, it's not been supplied.

Number three, the witness has made no determination that the base information on which he relied, that being the standards for tribel enrollment from 1950 to 1980, in fact, did not change during that time.

For example, were the Tribes to relax their standards of degree or percentage of blood from 1/4 to 1/8 being full-blooded Indians, it would be fair to assume that a number of additional Indians who otherwise would not qualify for

tribal enrollment would join the rolls.

This does not increase the number of people; it just increases the numbers that are Indian that are enrolled, and it's clearly not --

THE SPECIAL MASTER: Do you assert that there was a change in criteria in blood quantums from 1950 to 1980?

MR. MERRILL: I can't give evidence from the podium, but I'm saying the witness did not determine that there was a standard population on which he based his future projections. And I think based on that, his projections are defective, or at least suspect, and, therefore, should not be accepted for the truth of their contents.

For those reasons, I don't think that Exhibit C-18 ought to be admitted, and I think that the witness' testimony concerning it should be stricken.

THE SPECIAL MASTER: Let me ask a question or two about it.

Did the printout on which this is based contain the names of enrolled members who, in fact, by the address shown, lived in other cities, areas, towns, and states?

THE WITNESS: Yes, it did.

THE SPECIAL MASTER: Was any adjustment made

to compensate for that and reduce these figures accordingly?

THE WITNESS: Yes, we subtracted any person on that list whose address was off the reservation.

THE SPECIAL MASTER: How many of those subtractions were made?

THE WITNESS: Oh, we did it the other way around. We added up all the people we felt were on the reservation, but I think the difference is about 1,000 or 1500 people.

THE SPECIAL MASTER: Yes, do you have more objections?

MR. MERRILL: No, I have stated all the objections I have, Your Honor.

THE SPECIAL MASTER: All right, Mr. Webster?

MR. WEBSTER: Your Honor, on behalf of my client, I would like to make an objection to the introduction to this particular exhibit. I think the witness is entitled to rely on other experts for his information, but it's clear from the testimony that he has presented that he had no valid foundation on which to rely on some of the information he has used to present this exhibit. And I refer the Court exclusively to the growth rate, which is the very basis of that exhibit.

His only information that he could give on cross-examination, as well as direct examination, is that it came from some BIA official. And we, of course, have no idea or basis for that BIA official's expertise. And we would object on the basis of foundation that it contains the rankest form of hearsay, and we will object.

THE SPECIAL MASTER: Yes. Regina? I am troubled with this and I am going to have to ask you some -- Yes, Regina?

MS. SLEATER: I would like to state that, in the first place, the rules clearly provide that an expert may testify based on hearsay evidence. And, in the second place, an expert may testify based on facts and data which are inadmissible in evidence, which I think disposes of most of the objections being raised.

Secondly, I would like to state that insofar as allegations have been made regarding changes of standards in Indian blood necessary for tribal enrollment, or things of that nature, that is more appropriately for cross-examination if there is evidence to support it.

Mr. Merchant is an expert, has been qualified in this matter, and he has done population

statistics and growth statistics. He has stated that in his professional opinion this is the way to do it, and these are the results of his analysés.

I think that's clearly admissible in this matter, and I don't think any of the objections raised go to that, and what we are supposed to be addressing is the exhibit itself.

* * * * *

THE SPECIAL MASTER: Mr. Sachse.

MR. SACHSE: I'd like to speak to the admissibility of this. As someone who's worked with Indian populations for some time, I'm aware of the difficulties sometimes in saying who is an Indian and who isn't an Indian, and thus predicting population because of those difficulties, it seems to me what Mr. Merchant has done is the most reliable of any sort of prediction. And he's being criticized now really for being conservative and careful in what he's done. He's taken a list of enrolled members in the tribe 30 years ago who lived on the Reservation, compared that to a list of the enrolled members of the tribe now who live on the Reservation. Both lists are official governments lists, they're lists used for other purposes, not just for this purpose. They're basically used for payment of per capita.

THE SPECIAL MASTER: Per capita distribution.

MR. SACHSE: So from those two lists he has done a mathematical computation as to the growth and enrolled membership.

Now, the water rights that are at issue here merchant -

have not to do with whether someone calls themself an Indian or not when the census taker comes around, it has to do with whether he is an enrolled member of these tribes, so this seems to me to be the most accurate method that he could have used to predict the increase that has already occurred in enrolled members who live on the Reservation, and to project into the future who's likely to be there. And the criticism about migration in or out is just a red herring because these figures from which he's made a projection conclude that, they're just the figures of the people who stayed. So you don't have to ask someone how many people left, how many people came back, they're there mathematically within those figures.

So, I support the proposition that this is a reasonably accurate estimate of population growth. Nobody can tell you the individual. We've argued with Mr. Merchant at one time or another, how you would project it, but it seems to me this is clearly admissible evidence, and that all of us can argue about whether it's accurate five people, a hundred people or a thousand people.

MR. MERRILL: Your Honor, Wyoming's objection

not only go to the accuracy of the survey, but also the admissibility of the results based on the Wyoming rules of evidence.

One of the rules concerning expert testimony says that while under direct examination a witness need not rely or state all of the facts and data upon which he relied. He may, in any event, on cross-examination, be required to disclose the information on which he relied. And we now have three different pieces of information on which Mr. Merchant relied, which he is unable to tell us today what they are. The first one being the qualifications and information he got from the BIA official concerning the enrollment, and therefore, computed the growth rates.

The second one would be a copy of the enrollment list which was promised to be furnished to the State and has not yet been received.

And the third one is the -- that he can't disclose the facts and data on which he relied in making his assumption, that there hadn't been any migration. Now, it may be that migration is not an issue, but if he can't tell me the facts and data upon which he relied, his opinion as

an expert is not admissible into evidence.

MS. SLEATER: I'd like to try to clarify a couple of issues. First of all, this is not cross-examination, and the rule states that the -- they should be disclosed on cross-examination.

Mr. Merchant has disclosed facts and opinions and data upon which he relied. He's not been able to conjur up from his memory a list of people. I think he's been doing remarkably well with names that he's been able to remember with all the people he's talked to in the course of his investigation. There's nothing in the rule that says an expert must remember everything he has ever heard or done.

Secondly, the depositions of Mr. Merchant, which I might add we received copies of yesterday, so Mr. Merchant has not even had a chance to review, are probably -- any mention of them is prejudicing this proceedings since, under the rules a witness has 15 days to review his deposition before it can be used in any proceedings, and that's 15 days from date of receipt; he has that time to review it to determine its

accuracy.

THE SPECIAL MASTER: Is the printout on its way to the State?

MS. SLEATER: We requested the printout within, I think it was the next day after it was requested by the State; we requested that printout be run giving the exact information. I received a printout from Billings, I reviewed it with Mr. Merchant and it turned out they sent the wrong information, it was just not the information that was requested that be sent to him.

We have called back and asked for it as an expedited matter, and was fully expecting to have it before now to deliver to the State. However, at the time Mr. Merrill requested it, he was advised that this came out of the Billings office, and we had no way of guaranteeing the time of delivery at all on it.

THE SPECIAL MASTER: What document did you use that was the basis for changing the figures in the three columns to which we referred to earlier today?

MS. SLEATER: Your Honor, I think you should address that question to Mr. Merchant.

THE SPECIAL MASTER: Mr. Merchant --

MS. SLEATER: I'm not ducking out.

THE SPECIAL MASTER: Did you get the question all right?

THE WITNESS: Would you repeat it, please?

THE SPECIAL MASTER: What documents did you rely upon for changing the totals slightly in the three columns that I referred to earlier today in finally admitting that, and not excluding it under the ten-day rule?

THE WITNESS: I relied upon that printout that is under discussion.

THE SPECIAL MASTER: And the printout that was found to be erroneous?

THE WITNESS: No, the printout we used earlier.

THE SPECIAL MASTER: Earlier?

THE WITNESS: Yes, sir.

THE SPECIAL MASTER: Well, it's easy for me to sustain the objections to this, but what does that leave us with? It leaves us with the fact that we're not to admit that the population center of 3500 or 4000 or 4500 people may grow to 8500 or 9000, 9500 in the next 40 years, and

if the Wind River flowing near as it does today, and all of the tributaries can't provide some domestic water for 9000 people 40 years from now, then I better get off this lawsuit in a hurry. And I think that's what the purpose of this is, to show the need of some water for some population growth, whether it's up 500 or down 500 I don't think it's all that important.

* * * * *

Now, if the State knows of a better way to give us a more accurate figure, it will be welcome, but if those being the circumstances, I don't think I have the right to exclude this from coming into the evidence for whatever it may be worth, and it may not be worth very much by the way you gentlemen attacked it.

You see my point, we know there is a population there, we can take judicial notice of that. I don't know whether it's 4,550 people; that's been referred to before, I think in this case. And I don't know what it's going to be 20 years from now. About all this shows is that you made a projection over the past 30 years of 1.92 growth per year in the enrolled members, and by projecting that you come up with these figures.

THE WITNESS: Yes, sir.

THE SPECIAL MASTER: And for that reason, that purpose I think I will permit it and overrule the objections.

I welcome an opportunity to hear something otherwise on the rebuttal case, if it's thoroughly wrong, but again, if that's the only water that's going to be in issue in this case we have no case, we might as well start drawing up a judgment.

MS. SLEATER: I think we have a little more.

THE SPECIAL MASTER: I'm afraid you do. Go ahead.

DIRECT EXAMINATION (CONTINUED)

BY MS. SLEATER:

Q Mr. Merchant, I direct your attention to what has been marked for identification purposes as U.S. Exhibit WRIR C-9, and it's entitled Population on Community Water Systems, 1980. I wonder if, at this time, you could identify that exhibit, please.

A Yes. That exhibit graphically shows the information portrayed in Exhibit C-18. The red interior circles around each community are drawn to scale to show the relative sizes of Indian populations among the communities.

Q If I could interrupt at this point, would it be, Mr. Merchant --

THE SPECIAL MASTER: What are you calling that exhibit now before us with the red dots on it?

MS. SLEATER: I thought I was calling it 19.

THE SPECIAL MASTER: I thought you said 9.

MR. MERRILL: It's marked C-9. should I put a one in front of it?

MS. SLEATER: I appreciate that, Jim.

THE SPECIAL MASTER: That becomes C-19 not C-9, correct?

MS. SLEATER: Yes, sir, it's C-19. C-9 was admitted as one of the feed rations earlier.

THE WITNESS: This simply shows the -- each of the communities with water systems; Riverton, Arapahoe, Pavillion, Ethete, Fort Washakie and Boulder Flat. And as I said, the interior red circles show the size of the Indian population in these communities, and the outer dark rings show the total population. See, Riverton is this, the largest.

Q (By Ms. Sleater) Were you responsible for the preparation of this exhibit?

A Yes.

Q Have you personally reviewed that exhibit?

A Yes.

Q Does it accurately portray the information depicted thereon?

A Yes, it does.

Q At this time, Your Honor, I would like to move merchant-direct-sleater

U.S. Exhibit WRIR C-19 into evidence.

THE SPECIAL MASTER: I would presume the objections will prevail -- I mean objections will be raised with this exhibit for the same reason they were on the past one, that is based upon the information he learned in supplying C-18, and put in a different graphic form --

THE WITNESS: Yes, sir..

THE SPECIAL MASTER: -- on C-19. And if those are the only objections to be raised to C-19, they are and will be -- also they will not prevail, because I think the C-19 does a little more than put into graphic terms what C-18 says.

MR. WEBSTER: That relates to my objection, Your Honor, and I question the relevance or at least the purpose of this exhibit.

THE SPECIAL MASTER: It may not have very much relevancy. If you were to compare the total water we are talking about with what overall figures are going to be for irrigation and other uses, but I think we might as well let it in for whatever it's worth. I wonder about what is to be said for the Indians who live

further up on the area. I know some of the Indians live up in Crowheart, in the areas in the northwest portion. Why are they not represented on this exhibit?

THE WITNESS: Because they're not tied into a public water system. These represent only the community water systems.

THE SPECIAL MASTER: I see.

MR. MERRILL: Your Honor, the State of Wyoming has no objection to the introduction of Exhibit C-19 as long as the tender is for illustrative purposes only. I would not -- some of the information contained on Exhibit C-19 does not match that shown on C-18, specifically the Indian and total population for the town of Pavillion. Based on that discrepancy, the Court shouldn't be faced with having to resolve conflicts between the two exhibits offered by the same party. And I would ask that you admit them only for illustrative purposes.

THE SPECIAL MASTER: So ordered: It will be admitted for illustrative purposes only.

(The instrument received herein-before U.S. Exhibit WRIR C-19 was admitted into evidence.)

* * * * *

(CONTINUED) DIRECT EXAMINATION

BY MS. SLEATER:

Q I believe you said the second part of your analysis that dealt with the municipal, domestic and commercial requirements involved determining per capita water consumption?

A Yes.

Q Would you please tell us how you did that?

A Yes. We interviewed people familiar with these area community water systems to determine an average per capita daily rate of water use. We could obtain data for Riverton and Fort Washakie, but that information was not available for other communities. So to derive figures for the other communities, we conducted a survey of communities throughout central Wyoming to ascertain and average rate for water consumption. That rate so ascertained was thought reasonable by us, so we adopted that for the other communities.

Q Approximately how many communities did you survey?

A We talked to about a dozen, and perhaps about two thirds of those provided us with credible

information.

Q When you say you talked to the community, did you talk to the city engineer?

A City engineer in general.

Q At this time I will hand you a copy of what has been marked as U.S. Exhibit WRIR C-20 and ask you if you can identify that?

A Yes. This is a table --

Q Why don't you wait until everyone gets a copy before you go over it.

(Brief pause.)

Q (By Ms. Sleater) Mr. Merchant, could you please explain this exhibit?

A Yes. This is a table showing the daily per capita water uses for various communities. As I said, the first two were obtained directly from those communities. The other -- the next four are rates resulting from our survey, and the last for Other Rural is a rate, an estimate taken from some regional publications.

Q I notice that the figures for Fort Washakie seems much higher than the other figures for per capita consumption. Is that a natural figure received from the water system?

A The Indian health engineer provided us with the data on water consumption for various periods of the year, and this constitutes an annual average figure.

MS. SLEATER: At this point, Your Honor, I would move that U.S. Exhibit WRIR C-20 be admitted into evidence.

THE SPECIAL MASTER: I would have to raise a serious objection to letting this go into the record, and that's on the 325 from Fort Washakie, unless I know what it is based on. I can't believe a citizen, Indian or non-Indian, living in Riverton or Ethete can use 165 or 185 gallons of water per day for requirement and the same citizen, Indian or non-Indian, at Fort Washakie uses 325. Some of that water must be used for more than such things as gardening or other requirements of homes or the swimming pool at Fort Washakie. There has to be some explanation for that figure, and I think before you crank into any total here, that ought to be addressed. Can the witness address my observation?

MS. SLEATER: Your Honor, you may inquire of the witness certainly.

merchant-direct-sleater

THE WITNESS: Well, I believe there is more outdoor use than is typical in the outdoor area and, of course, it's the outdoor use that is the high water consumer.

THE SPECIAL MASTER: Can you tell how projections for the need for irrigation water in the immediate Fort Washakie area will contain figures that could easily include some of the 325 that is here and figures that would be difficult to remove because of the virtually impossibility of -- because of the overlapping of these statistics?

THE WITNESS: I don't think the 325 would include any water that we would claim for irrigation.

THE SPECIAL MASTER: What would it include?

THE WITNESS: This includes water delivered to Indian homes hooked up to the community water system, and any incidential outdoor uses that they would have, but not irrigation of large scaled plots.

MS. SLEATER: Your Honor, I would renew my motion at this point.

THE SPECIAL MASTER: Any objections?

MR. WEBSTER: I would like to ask some questions.

THE SPECIAL MASTER: Mr. Webster? All right.

VOIR DIRE EXAMINATION

BY MR. WEBSTER:

Q I would like to have you define for the record what you meant in response to the question by the Master that the figures in Fort Washington -- Washakie -- sorry -- could possibly have included outdoor use?

A These figures I'm sure include outdoor use incidential to the homes hooked up to the community water system.

Q What kind of outdoor use?

A Apart from lawns, I'm sure it includes some incidental irrigation of family gardens, things such as this.

Q And you are saying it would not include those things in Pavillion and Riverton?

A No, I'm not saying that. I'm simply trying to explain why the Fort Washakie figure might be so much higher. This may be a more common practice there.

Q How about stock watering, would it include stock

FRONTIER REPORTING SERVICE

watering?

A I'm sure it includes some incidental stock watering.

Q With regard to incidental irrigation and garden use, how big irrigation plots would you contemplate it would include?

A I can't tell you the size of the plots. Those associated with homes is what I'm referring to.

Q Would you anticipate those being any different size than they are in Pavillionor Riverton?

A Probably in Riverton they -- with land -- with the density of population higher, you will see smaller garden plots.

Q Okay. How about Pavillionand the other small communities?

A No. I don't see any reason to expect plots to be smaller in Pavillion than in Fort Washakie, but we simply didn't have water use data for Pavillion, Ethete and the other communities on the town.

Because the Fort Washakie figure was higher than, say, the average water use nationwide, we questioned whether that was a good figure to apply for other communities without actually knowing

that they used that much water. So that is what prompted our survey. But because the 325 represents actual use in Fort Washakie, we felt justified in using that figure.

Q Isn't it true that they have had a lot of problems with the water system in Fort Washakie and there have been a lot of leaks and those kinds of engineering problems?

A I'm sure there are leaks associated with this system.

Q Are there any independent wells or groundwater sources that are included in the systems at Fort Washakie, Boulder, Ethete, and so forth?

A Independent wells apart from the community water systems?

Q Yes.

A Not that I'm aware of.

Q Do you know what the --

MR. WEBSTER: I think that is an improper question. We better put that on cross-examination.

I have no further questions, except, Your Honor, I would at this time enter an objection to that 325 figure as it is represented in the system, and it does not accurately reflect water

FRONTIER REPORTING SERVICE

consumption on the basis of the witness' own testimony, but rather probably includes some leaks and problems like that. Therefore, it has no probative value and is an objectionable exhibit.

* * * * *

MR. ECHOHAWK: Your Honor, at this time I assume that the private counsel is prepared to put on evidence backing up his insinuation that it does contain leaks. I don't think that's what Mr. Merchant testified.

MR. WEBSTER: I think the record will show, Your Honor, that when I asked him if it wasn't true that there were some leaks and problems with that system, he said, "I am sure there are," and I think that's what the record will show. And, and on the basis of that, that is why I entered the objection.

THE SPECIAL MASTER: To that one item, to the one item.

MR. SACHSE: I would like to voir dire the witness on this exhibit.

VOIR DIRE EXAMINATION

BY MR. SACHSE:

Q Mr. Merchant, have you been to Fort Washakie?

A Yes, I have.

Q Is the headquarters of the Shoshone and Arapahoe Tribe located there?

A Yes, it is.

Q What kind of building is that in?

A. It's a large -- I recall it's a brick building.

Q. Is there a lawn around that building?

A. Yes, there is.

Q. Are the BIA headquarters located in Fort Washakie?

MR. MERRILL: I object to this line of questioning. This is examination being conducted by counsel who is closely in line with his own side of the case.

THE SPECIAL MASTER: I think it's proper. Overruled. Is the BIA headquarters at Fort Washakie? If I can't listen to an answer to that, why --

A. Yes, it is.

Q. (By Mr. Sachse) Is there an independent health service clinic at Fort Washakie?

A. Yes, I believe there is.

Q. Can you describe those buildings?

A. There are varied buildings over there. There are numerous buildings with lawn areas in front.

Q. Is it possible that the larger water use in Fort Washakie has something to do with the ratio between public buildings there and the smaller number of private homes that you would find in other communities?

merchant - voir dire - sachse

MR. MERRILL: Objection, Your Honor. Anything is possible.

THE SPECIAL MASTER: That might be --

MR. WEBSTER: It calls for a speculative answer.

THE SPECIAL MASTER: I agree with him. Maybe Mr. Sachse can reword it.

Q (By Mr. Sachse) Do you attribute any relevance between the location of the Indian government and the BIA government in Fort Washakie and the larger water use there?

A Yes, I do. Most of the BIA personnel, non-Indian personnel, commute from outside of Fort Washakie, and so they are not reflected in the population figures, but would contribute to water use during the day.

MR. SACHSE: Thank you.

MR. ROGERS: May I just state one remark? Is this Mr. Webster?

THE SPECIAL MASTER: Yes. Mr. Webster,

MR. ROGERS: I missed the cast of characters earlier.

His objection, I believe, as I understood him was that he was objecting to the exhibit on

the basis of the 325 figure.

THE SPECIAL MASTER: No, he was objecting only to the 325 figure for Fort Washakie.

MR. ROGERS: Well, that's right, and that's what I understood him to say. The witness has stated that that is the fact; It's not a matter of dispute of whether the exhibit is admitted or not.

The gentleman has offered no proof that it's not true. He may not like the figure, but the witness has stated that is, in fact, what the fact of life is at Fort Washakie.

THE SPECIAL MASTER: No, the witness stated that that's what he was told the fact of life is at Fort Washakie. There's a little bit of difference.

MR. ROGERS: I understand, Your Honor. But Mr. Webster has set forth no factual basis to disagree.

THE SPECIAL MASTER: That is true. He will have his turn.

MR. ROGERS: And that's not a basis for rejecting the exhibit.

THE SPECIAL MASTER: Well, I don't want to reject the exhibit, but I want to call attention

to the fact that item required the discussion I think that it deserved.

Mr. Radosevich?

MR. RADOSEVICH: May I ask a few questions of the witness?

THE SPECIAL MASTER: Certainly.

VOIR DIRE EXAMINATION

BY MR. RADOSEVICH:

Q. What's the national average per capita water consumption?

A. I believe it's around 180-190 gallons per day per capita.

Q. Do you know if the water diversion device in Fort Washakie is an accurate measuring device?

A. No, I don't know that.

Q. The figures that you were provided you, are they provided as a result of in-house metering devices?

A. The system is metered. That's the way those figures were described to me, but I don't know that each house is metered or the system in entirety.

Q. Do you know if any of the other -- well, Riverton, in particular, is a metered system?

A. I believe it is.

Q. Okay. You stated that, to the best of your

FRONTIER REPORTING SERVICE

knowledge, you don't know if there are independent wells serving for non in-house uses in the Fort Washakie area in particular?

A. I don't know that to be true.

Q. As far as any of the other towns, Ethete or Arapahoe or Pavillion, do you know if there are any wells?

A. Apart from the community water systems?

Q. Yes.

A. No, I do not.

MR. RADOSEVICH: Thank you, Your Honor.

THE SPECIAL MASTER: Do you know, Mr. Merchant, how many taps there are at Fort Washakie?

THE WITNESS: No, sir.

THE SPECIAL MASTER: Well, I'm ready to rule on the exhibit unless someone else wishes to be heard.

MR. MERRILL: I have these a little bit of voir dire, Your Honor?

THE SPECIAL MASTER: All right.

VOIR DIRE EXAMINATION

BY MR. MERRILL:

Q. Mr. Merchant, does the average per capita consumption reflected on Exhibit C-20 include any

FRONTIER REPORTING SERVICE

industrial uses whatsoever?

A. No, I don't think they do.

Q. What steps did you take to ensure that those figures did not include industrial uses?

A. Well, there are no industrial uses in any town but Riverton, and in any of these towns the Riverton water system is independent of the major industrial uses in Riverton.

Q. Who did you speak to in Riverton to get your figures?

A. The City Engineer.

Q. Who is that?

A. Oh, I don't remember his name. He is the City Engineer though.

Q. Was that a telephone call interview?

A. Yes.

Q. Who did you speak to in Fort Washakie?

A. That was Jim Sorenson.

Q. In your conversation with the Riverton City Engineer did you make any inquiry as to whether they would be interested in having a reserve water rights serve their municipal water supply system?

MS. SLEATER: I'm going to object to that

question. It has nothing to do with the exhibit that's before the court for motion. I think Mr. Merrill can ask that question at some other time.

MR. MERRILL: I'll save it for cross-examination, Your Honor.

THE SPECIAL MASTER: I would imagine if it's objectionable now, it would be later, and we can get to the substance of that if it were relevant. I have suspicions it's not relevant.

MR. MERRILL: I will move on.

MS. SLEATER: It's probably not that either, Your Honor.

Q (By Mr. Merrill) Mr. Merchant, in the interviews that were conducted with the folks in these various cities that you contacted, did you ask them to give you an average per capita consumption over a specific period of time?

A. Yes, an average daily per capita rate over a year. In other words, averaged over the year.

Q. For what year?

A. We asked for their most recent year.

Q. And what year did you receive?

A. I think they told us a figure based upon our inquiry. I don't believe they gave us a year

FRONTIER REPORTING SERVICE

Q. So these figures will represent an annual average consumption in each of the cities that are listed?

A. If an average daily consumption --

Q. I'm sorry. An average daily consumption averaged over the year?

A. Yes.

Q. Isn't it true that during your survey of the water uses in municipalities in Wyoming, you contacted a number of city personnel who gave you figure ranges from about 90 gallons per day to 23,000 gallons per day per capita?

A. Yes.

Q. And isn't it true that you went through the information that you gleaned from those telephone interviews and struck certain portions of it as not being credible?

A. Yes, we did.

Q. How did you determine whether an amount of water was credible or not?

A. Based upon our knowledge of the water consumption in various towns and the average national water consumption per capita, daily water consumption, there were some figures that we thought were either incredible or that could represent some

403 WEST 24TH STREET
CHEYENNE, WYOMING
(307) 635-4283

FRONTIER REPORTING SERVICE

201 MIDWEST BUILDING
CASPER, WYOMING
(307) 237-1433

other use that we thought might bias our average figures. The 23,000 gallons per day we thought there must have been some mistake in the person's calculation or he misunderstood our question or some problem, so we rejected that figure and did not include it in our average.

Q. What steps did you take to confirm any of the consumption figures that were given to you by personnel in these cities?

A. We relied on their knowledge as City Engineers.

Q. For each city then you spoke only to the City Engineer?

A. Well, or a person referred to us by him.

Q. What steps did you take to ascertain that that person knew what they were talking about.

A. If they are referred by someone knowledgeable, we have to rely on that person's ability to refer us to a person who knows.

Q. Even though one of those people who knew told you 23,000 gallons per day; isn't that right?

A. Well, the other -- Yes, that's right.

MR. MERRILL: No further questions, Your Honor. We would endorse Mr. Webster's objections to the introduction of Exhibit 20.

FRONTIER REPORTING SERVICE

THE SPECIAL MASTER: Ms. Yonkee?

VOIR DIRE EXAMINATION

BY MS. YONKEE:

Q. Did you obtain the information about Fort Washakie by phone?

A. Yes, that was a telephone conversation.

Q. Is there any chance you could have misunderstood this number over the telephone?

A. I don't believe so.

Q. Did you verify it later or at any time?

A. I don't think we talked to him about the same figure, no.

Q. In any of your telephone interviews, did you verify them in writing later or at any time?

A. For these water consumption figures?

Q. Yes.

A. No.

Q. You say you have been to Fort Washakie?

A. Yes,

Q. Have you seen various homes there?

A. Yes.

Q. Do they have extra large yards?

A. Some have yards.

Q. Do they have --

FRONTIER REPORTING SERVICE

A. I wouldn't call them extra large.

Q. Do they have grass, most of them?

A. Some do.

Q. Some do and some don't?

A. Yes.

Q. And they are not extra large yards?

A. I wouldn't call them extra large.

Q. Compared to those in Riverton or Ethete -- or have you been to those places?

A. Yes, I have. I wouldn't say the yards were larger than Riverton or Ethete. Many of the houses around Fort Washakie have larger parcels of land particularly than those in Riverton, but they are not all lawns.

MS. YONKEE: That's all.

* * * * *

THE SPECIAL MASTER: The objection to the Fort Washakie figure is going to be recognized and left in limbo, frankly. The balance of this exhibit will be admitted, and I suspect we can adjust the Fort Washakie figure at a later date.

I recognize that the Fort Washakie population figure constitutes almost twenty-five per cent of the population of the Indian community, and it makes this very, very important.

Next item.

MS. SLEATER: Excuse me, I'm making a note of your --

THE SPECIAL MASTER: Anyone want to take a break?

(No response.

THE SPECIAL MASTER: If not, we'll go right on through.

MS. SLEATER: Your Honor, I think we're about finished with this, with just maybe another half hour or more on the direct on this section, and perhaps we could break for the day, if it's okay with you.

THE SPECIAL MASTER: Very well. Take all the time you need.

DIRECT EXAMINATION CONTINUED

BY MS. SLEATER:

Q Mr. Merchant, I'm going to hand you what has been marked as WRIR C-21 and ask if you can identify that, please, after everyone gets their copy.

(Brief pause.

THE SPECIAL MASTER: Did you want a break?

THE WITNESS: We can go on a little longer.

MR. MERRILL: If we are going to go straight through with the remainder of the municipal and domestic uses, I would ask that we take a break; I have a telephone call that we need to make.

THE SPECIAL MASTER: I appreciate that. Let's take a ten minute recess.

(Thereupon a 15 minute recess (was taken.

THE SPECIAL MASTER: Court will come to order, please.

Q (By Ms. Sleater) Mr. Merchant, I believe before the break you were handed a copy of an exhibit that's been marked for identification as U.S. WRIR C-21.

A Yes.

Q Is that correct.

A Yes, I was.

Q I believe copies were distributed.

(Brief pause.

Q Could you explain what that exhibit is?

A Yes. This exhibit is a table showing the annual water requirements of the communities on the Wind River Reservation, and also a total amount for other rural water use on the reservation.

Then, the bottom line shows the reservation total for all communities plus other rural.

Q I note this has headed Municipal, Domestic and Commercial Water Needs. Could you please tell us what that means.

A Municipal water needs are those required by the municipality for such things as fire control, street washing, park maintenance, city, building maintenance, things such as that.

Domestic is household use, both inside and outside. And commercial is the incidental uses associated with commercial establishments such as retail stores, motels, whatever.

Q I note the information is broken down under certain headings such as surface water, infiltration

merchant-direct-sleater

galleries and other wells. Could you please explain those headings.

A Yes. Those breakdowns differentiate the water needs according to the source of water.

Q Could you explain where you got that information?

A Most of that is from Jim Sorenson of the Indian Health Service. The Riverton information is from the City Engineer, and the other rural is our assumption that rural households will gain their water from household wells.

Q What is an infiltration gallery?

A That is a shallow well field in the alluvium of a river.

Q And is it your professional opinion that the total municipal, domestic and commercial water needs today are 1,041?

A Yes.

Q What is your professional opinion regarding the municipal, domestic and commercial water needs for the year 2000?

A That 1,524 acre-feet will be needed.

Q And for the year 2020?

A 2,226 acre-feet per year.

Q Are these conclusions and opinions based upon

the study and information that you have previously described here today?

A Yes.

MS. SLEATER: At this time, Your Honor, I would ask that U.S. Exhibit WRIR C-21 be admitted into evidence.

THE SPECIAL MASTER: Voir dire anyone?

MR. MERRILL: Your Honor, I probably have worn out my welcome on the ten day objection, but this time I think I've got a real zinger, and with consent of the United States, I would like to show the Court the exhibit that was served on us in advance of the trial in order that the Court may compare it in both its format and substantive contents with the exhibit that is being presented to you today, so you can make a ruling.

THE SPECIAL MASTER: I'm handed a table 3 that has a total in the first column, 1980 of 1,032 with changes in each tabulation, with subtotals even differently. And it's not unlike the prior tables in that about the only thing that's the same is the headings.

MS. SLEATER: Your Honor, if I could

suggest that the witness be asked to explain the differences so that Your Honor will have a better grounds for ruling.

THE SPECIAL MASTER: Why was there a total groundwater column, either in the one now offered and, why is it not in the one you offered, Regina?

MS. SLEATER: Your Honor, I think the witness can best explain this, and I don't have a copy of the exhibit that Mr. Merrill just gave you.

THE SPECIAL MASTER: Well, Mr. Merrill, are you raising an objection on the basis that it's a violation of the ten day rule under the pre-trial order?

MR. MERRILL: Yes, Your Honor. Not only a technical violation, but as you can see for yourself, the columns and breakouts are different. This new exhibit includes numbers for Pavillion, it splits up surface water and infiltration galleries, which the other one does not. It simply prejudices Wyoming's preparation for voir dire and cross examination of the experts to come in at the day of trial

merchant-direct-sleater

and force us to redo our work.

THE SPECIAL MASTER: I'm going to agree with Mr. Merrill. I think the fact that you can withhold from an adversary party a document and then hit him at a trial with the word infiltration galleries, something he's supposed to have knowledge at the same time of trial is really taking a little bit of advantage of him, an unfair advantage, frankly, so I will ask that if you two can't agree on what to introduce between these two documents by tomorrow morning, that you proceed to prove the contents of C-21 in some other fashion with this witness, and we can get it into the record, so that what you want to say, that these totals can be read, and be part of my deliberations without my having to let you come into infiltration galleries two minutes before the State had a chance to know what it's all about, and also changing the sub, subheads. It does make it a different document; the objection's sustained.

MR. MERRILL: Thank you, Your Honor.

MS. SLEATER: Your Honor, I'd like the record to reflect though that the United States

provided the State of Wyoming with a copy yesterday as soon as the new exhibit was prepared.

THE SPECIAL MASTER: I appreciate that. And if Mr. Merrill was to say that in light of the purpose served by these exhibits, and in the best interest of moving along expeditiously he might object -- he might be kind enough to remove his objection now that it's sustained, I would be grateful to him.

MR. MERRILL: Your Honor, at this point without having --

THE SPECIAL MASTER: You didn't hear a word I said.

MR. MERRILL: Yes, I did. I was trying to compare the two exhibits plus listen to you at the same time.

If you would give me overnight, let us check these out and perhaps we can remove our objection by the morning. But I think it's prejudicial to any party to have exhibits put on which a party's expected to voir dire and cross examine, then come in with a different exhibit the day of trial and rely on the witness to explain the differences between the two, and thereby subvert the purposes

of the ten day rule.

THE SPECIAL MASTER: You have been sustained in your objection. Now, during the break we had a discussion with counsel on these exhibits in a generic nonex parte way, and we find there's bigger picture of what they portend, what they signify. And if we can keep that bigger picture in mind and keep the pictures towards the general finding that can be made, that they can give us some substance, we don't need to be crossing each of these t's and dotting each of these i's so meticulously as to the ten day rule and other niceties of combat, legal combat.

All right, next, Regina.

MS. SLEATER: Well, Your Honor, I certainly didn't mean to subvert the State of Wyoming's preparations.

MS. SLEATER: Mr. Merrill (sic), have you formed a professional opinion relating to -- I'm sorry.

I bet Mr. Merrill has a professional opinion or two.

MR. MERRILL: Your Honor, I may not be very smart, but I'm not getting on the witness stand.

THE SPECIAL MASTER: You don't want to hear his professional opinion? Well, in view of the difficulty today, if you want to call off this -- do you want to prepare materials for tomorrow and adjourn for the day, or do you want to go ahead with other matters?

MS. SLEATER: Well, Your Honor, I was going to have the witness testify as to just his professional opinion relating to the water need, which I don't think the exhibit is necessary for, and perhaps we will remove the problem that way.

THE SPECIAL MASTER: The witness has been crucial and necessary in the introduction of some ten exhibits today, I believe, and I think he certainly could have opinions that could be listened to going to these general purposes of these exhibits, if that's what you have in mind.

MS. SLEATER: Well, Your Honor, I was going to ask him his opinion relating to the water that was required for the future municipal, domestic and commercial needs out of the Wind River to satisfy the needs of the Indian population. However, if you feel at this time it is more appropriate to take a break at this time until tomorrow for the parties to resolve this issue, I'm certainly in favor of attempting to resolve anything we can.

THE SPECIAL MASTER: Well, if the State and the United States can use the next 30 minutes to -- we are going to quit at 4:30 anyway -- can use the next 30 minutes to come to a resolution of this last item regarding total acre-feet per year for the three subject matters, that will be time well spent and might help us in the morning.

MS. SLEATER: We can certainly try, Your Honor.

THE SPECIAL MASTER: Why don't you do that and let us reconvene at 9:15 in the morning. I know it keeps the witness over one more day, but hopefully we can make more progress that way tomorrow than doing otherwise. And then the

witness after this one will be the name you give.

MS. SLEATER: Oliver Page, Your Honor.

THE SPECIAL MASTER: You have one name, Oliver Page. Do you want to give an additional name at this time?

MS. SLEATER: Your Honor, the way this trial is going, I assume Oliver Page will be on the stand until the end of the week.

THE SPECIAL MASTER: All right. We will stand in recess until tomorrow morning at 9:15.

(Whereupon, the Proceedings were recessed for the evening.)

* * * * *

REPORTER'S CERTIFICATE

State of Wyoming)
: SS
County of Laramie)

We, Merissa Racine, Mary Nelson and Viola J. Lundberg, Registered Professional Reporters and Notary Publics, hereby certify that the facts as stated in the caption hereof are true; that we did at the time, date and place, as set forth, report the proceedings had before the Honorable Teno Roncalio, Special Master, in stenotype; that the foregoing pages, numbered 258- inclusive, constitute a true, correct and complete transcript of our stenographic notes as reduced to typewritten form under our direction.

We further certify that we are not agents, attorneys or counsel for any of the parties hereto, nor are we interested in the outcome thereof.

Dated this 27th day of January, 1981

MERISSA RACINE
Registered Professional
Reporter

MARY NELSON
Registered Professional
Reporter

VIOLA J. LUNDBERG
Registered Professional
Reporter

COUNTY OF LARAMIE STATE OF WYOMING
My Commission Expires Mar. 10, 1984

MARY B. NELSON - NOTARY PUBLIC
COUNTY OF LARAMIE STATE OF WYOMING
My Commission Expires March 13, 1983