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## Trial Transcript, Vol. 62, Morning Session

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File 169  
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case # 4993

File # 169

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IN THE DISTRICT COURT FOR THE FIFTH JUDICIAL DISTRICT  
WASHAKIE COUNTY, STATE OF WYOMING

IN RE: )  
)  
THE GENERAL ADJUDICATION OF )  
ALL RIGHTS TO USE WATER IN )  
THE BIG HORN RIVER SYSTEM, )  
AND ALL OTHER SOURCES, STATE )  
OF WYOMING. )

Civil No. 4993

FILED .....  
5/20 1981  
*Margaret V. Hampton* CLERK  
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VOLUME 62  
Morning Session  
Thursday, May 14, 1981

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CLERK TO THE  
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1 THE SPECIAL MASTER: Please come to order. Mr. White?

2 CROSS-EXAMINATION (CONTINUED)

3 BY MR. WHITE:

4 Q Mr. Stetson, would you please get out before you HS-3,  
5 HS-4, and HS-5?

6 A Yes, I have them.

7 Q I hand you a blank copy of certain pages from the United States'  
8 Statement of Claim, being pages 1, 2, 3, 15 and 16.

9 A Excuse me, Did you say these were blank pages?

10 Q Unannotated pages.

11 A Oh, I'm sorry.

12 Q Mr. Stetson, are you able to indicate to the Court where  
13 the acreage values as well as the values for annual  
14 diversions requirements shown on HS-3 for adjudicated trust  
15 land, HS-5 for Type VII irrigable land, and HS-5, unadjudi-  
16 cated trust lands appear or fit into the claims made for  
17 irrigation purposes on those portions of the Statement  
18 of Claim which I have handed you?

19 THE SPECIAL MASTER: I'm beginning to believe that  
20 question is not proper, Mr. White. I don't think I should  
21 allow it because I think what's in the Statement of Claims  
22 is totally irrelevant and outside the scope of direct  
23 examination.

24 MR. WHITE: Well, I think, Your Honor, that we are

25 white-cross-stetson





1 entitled to inquire as to whether or not the evidence  
2 given by the witness is within the scope of the pleadings.

3 THE SPECIAL MASTER: I take respectful exception to  
4 that. If you find something in the pleadings which you  
5 question, you have a right to show that it's in error or  
6 wrong and you may cross-examine this witness on anything  
7 he raised in that regard, but I don't believe you can go to  
8 him and pinpoint each item of the Statement of Claims with  
9 regard to his exhibits or his work papers, and I think  
10 that's a fair ruling.

11 Q (By Mr. White) Mr. Stetson, I believe the totals for  
12 Crow Creek among the three exhibits, HS-3, 4 and 5 come  
13 out in the neighborhood of 3100 acres for roughly 16,500  
14 acre-feet; is that correct?

15 THE SPECIAL MASTER: Which page are those totals,  
16 Mr. White? The third?

17 MR. WHITE: They are not totaled, Your Honor. They  
18 appear on each one, as I believe 1-G on the second page.

19 THE SPECIAL MASTER: And can I hear the question  
20 again, please?

21 (Thereupon the question was read  
22 (back as follows: "Q Mr. Stetson,  
23 (I believe the totals for Crow  
24 (Creek among the three exhibits,  
25 (HS-3, 4 and 5 come out in the  
(neighborhood of 3100 acres for  
(roughly 16,500 acre-feet; is  
(that correct?"

white-cross-stetson



1 MR WHITE: I would like to ammend the question to  
2 3100--

3 THE SPECIAL MASTER: Do you want to strike the question  
4 and try again?

5 Q (By Mr. White) Isn't it true, Mr. Stetson, that the totals  
6 of the values shown under acreage in the annual diversion  
7 requirement for Crow Creek on the second page of exhibits  
8 3, 4 and 5 come out to be approximately 3100 acres--Did  
9 I say 3100--for roughly 16,500 acre-feet?

10 A I didn't add up the acre-feet, but the acreage comes out  
11 to 3122.

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- 1 Q All right.
- 2 A You don't want me to verify the acre-feet?
- 3 Q Please. When I punched it out, I got 16,577.
- 4 A Just eyeballing it, it's about 16,500.
- 5 Q On Page 2 of the Statement of Claims five-eighths of
- 6 the way down the page, do you find a claim set forth
- 7 for Crow Creek?
- 8 A I see Crow Creek, yes sir.
- 9 Q For 1200 acres?
- 10 A For 1200 acres, yes sir.
- 11 Q For 4800 acre-feet?
- 12 A For 4800 acre-feet, with a Footnote 5, which says, on
- 13 Page 3, "Historical water requirements consume direct
- 14 high flow hydrologic potential of these creeks. Therefore
- 15 the claim is made for the noted water requirement or all
- 16 of the direct flow of the creek, whichever controls."
- 17 Q Isn't it true that the 3122 acres and the 16,500 acre-feet
- 18 are between two and three times the amount of the stream,
- 19 ignoring the footnote, as the amount claimed on Page 2?
- 20 THE SPECIAL MASTER: Mr. White, I made the ruling
- 21 and you are in contempt of that ruling. You think you
- 22 can just go on and go around it. And I admire your
- 23 gall, but I don't think it ought to be done.
- 24 MR. WHITE: Well, I --
- 25 stetson - cross - white



1 THE SPECIAL MASTER: I don't think you ought  
2 to do it. I think you can take your exception, or  
3 you have an automatic exception already granted as  
4 a matter of course. Make your offer of proof and build  
5 up that record and just tear me apart on appeal.

6 MR. WHITE: I apologize, Your Honor. I did  
7 not intend to be contemptuous. I thought the ruling  
8 was I could not make the inquiry generally and you  
9 were asking me to do it with specificity.

10 THE SPECIAL MASTER: I allowed the difference.  
11 You did a difference in those totals and got it in  
12 the record. I think you ought to not belabor the  
13 point now.

14 MR. WHITE: Okay. Your Honor, we have no offer  
15 of proof to make in this matter, simply because, as  
16 a practical matter, it is impossible to try to determine  
17 how the evidence fits in or doesn't fit in the Statement  
18 of the Claims.

19 I guess I could make a short offer of proof on  
20 certain obvious and glaring discrepancies.

21 THE SPECIAL MASTER: That, plus the fact, I think,  
22 Mr. White, counsel for the Tribes or for the U. S. has  
23 said on several occasions that the Statement of Claims  
24 was a ballpark going-into-the-lawsuit document, and it's  
25 going to have a lot of changes before you come home



1 with your case. And I suppose we will be stipulating  
2 to a lot of changes.

3 So, I think again my ruling is not burdensome or  
4 unreasonable.

5 MR. WHITE: Very well, Your Honor. The State of  
6 Wyoming would make the following offer of proof as  
7 being illustrative of the variations between the  
8 Statement of Claims and the evidence submitted solely  
9 through Mr. Stetson.

10 It would be pointed out that this evidence through  
11 Mr. Stetson does not include evidence that has been  
12 given through other witnesses, such as Dr. Mesghinna,  
13 but solely through evidence presented by Mr. Stetson.

14 We point out values from Mud Creek are up twice  
15 as large, and the evidence ought to be submitted as  
16 roughly twice as large as the extent of the claim.

17 The same thing would be true for, I believe, Bull  
18 Creek.

19 THE SPECIAL MASTER: First you are dealing with  
20 the Crow, and then the same thing would be true for  
21 what?

22 MR. WHITE: I asked about the Crow already, Your  
23 Honor, and then the offer of proof goes to Mud Creek  
24 and Bull Creek --

25 THE SPECIAL MASTER: I can't hear this morning.



1 MR. WHITE: To Bull Lake Creek.

2 THE SPECIAL MASTER: Bull Lake Creek. Thank you.

3 And others?

4 MR. WHITE: Dry Creek would be roughly three times  
5 as large; Five-Mile Creek, 50 percent greater; Muddy  
6 Creek, 50 percent greater; Sage Creek, 20 percent  
7 greater.

8 If allowed to pursue, the State would show that  
9 evidence has been submitted for creeks for which no  
10 names have been made, such as Spring Creek and Big  
11 Horn Creek.

12 Evidence has been submitted through this witness  
13 which is not related to the claims, insofar as it simply  
14 relates to the Ray Unit, Coolidge Unit, Sub-Agency Unit,  
15 and other such generic units.

16 Also, I would add Sand Creek to the list of those  
17 creeks for which no name was made but evidence was sub-  
18 mitted.

19 I would point out -- and that concludes the offer  
20 of proof -- and I would point out this is an area in  
21 which virtually no discovery has been made, because the  
22 work was done shortly before trial. And that's all.

23 THE SPECIAL MASTER: Sustained because it is all  
24 time consuming to the rest of your case. I think we  
25 should include that. There is so much we can do. All right.



1 MR. WHITE: And as a part of the offer of proof,  
2 I ought to say, Your Honor, that had the State been  
3 allowed to bring out those discrepancies with respect  
4 to Crow Creek, as well as the other creeks that were  
5 included in the offer of proof, I would move to strike  
6 the evidence on those matters as being outside the scope  
7 of the pleadings.

8 Q (By Mr. White) Mr. Stetson, with respect to the annual  
9 diversion shown on HS-3, the adjudicated lands, did you  
10 make any determination of the points on diversion, or  
11 diversion in conveyance of facilities which would carry  
12 those annual diversions, or divert those annual diversions?

13 MR. CLEAR: What annual --

14 MR. WHITE: Carry or divert.

15 A. With respect to project or non-project or all?

16 Q With respect to all, first, and then if one answer can't  
17 deal with all of them, we will go into the specifics of  
18 the various individuals.

19 A. Well, in connection with the preparation of these  
20 figures, we didn't actually go back and check which  
21 canal they would come out of, but in our over-all studies,  
22 we've checked and looked at the canals in all of the  
23 project units, and in our tour of the reservation, we  
24 have looked at most of the canals that would serve

25 stetson - cross - white





1 the non-project lands.

2 Q. Would you please describe those diversion facilities  
3 and ditches which would divert and carry the water  
4 diverted for the 259 acres on the East Fork of the  
5 Wind River, having a total annual diversion requirement  
6 of 1310 acre-feet?

7 THE SPECIAL MASTER: Total?

8 MR. WHITE: An annual diversion requirement  
9 of 1310 acre-feet. That should be up at the top of  
10 the second page, at the top of HS-3, Your Honor.

11 THE SPECIAL MASTER: Got it.

12 A. I would need the set of maps that shows -- Do we have  
13 those maps over there, Joe?

14 Well, our set of maps on the historic lands does not  
15 include the sheet that I need, because it is in the  
16 photo 6 series. I presume it is in evidence somewhere.

17 Q. Why don't we pick out one. How about Dinwoody Creek,  
18 with an annual diversion requirement of 95 acre-feet.  
19 Would that be in your stack of maps?

20 THE SPECIAL MASTER: Be in your what?

21 MR. WHITE: The stack of maps or volume of maps  
22 in front of him.

23 A. It would, if I can find the aerial photo numbers.

24 \* \* \* \* \*

25 stetson - cross - white





1 Q (By Mr. White) Mr. Stetson, I'm looking at HS-1 on  
2 Page 13, and it looks like it would be Page 185.

3 A. Yes. On 8-185 most of the parcels are unadjudicated  
4 trust land, but there is a parcel which is simply  
5 labeled "A" which is adjudicated lands off the  
6 Phillips Ditch. There are several others.

7 I think Parcel B, which are large parcels,  
8 have adjudicated -- I can't tell from this exactly  
9 which parcel is the 17 acres, because in determining -- it  
10 may be this small parcel -- there are two parcels  
11 labeled "A". There is one off of the Leary Miller  
12 Ditch which is a very small parcel. There's one off  
13 the Phillips Ditch which looks to be maybe 25 or 30  
14 acres, so I can't tell which exact parcel it is.

15 In connection with the adjudicated lands, we  
16 did not go out and check the specific canals serving  
17 the specific parcel as we did on the Type VII lands  
18 because we were asked to come up with the water  
19 requirements for the lands, not the water service to  
20 the lands.

21 Q Mr. Stetson, wouldn't the annual diversion requirement,  
22 however, require you to determine for non-project lands  
23 the conveyance efficiency through the ditch which serves  
24 that land?

25 stetson - cross - white



1 A But we didn't do it that way. We derived what we  
2 called an achievable overall efficiency of 35 percent.  
3 We have not presented the historic efficiency which  
4 would have been much lower in most cases.

5 Q With respect to the adjudicated lands, did you  
6 determine the costs of achieving that efficiency in  
7 a manner similar to the way in which you developed  
8 costs for the Type VII lands?

9 MR. CLEAR: I think we went over this yesterday  
10 with --

11 MR. WHITE: Absolutely not, Your Honor. It was  
12 about the Type VII lands yesterday.

13 MR. CLEAR: No, he testified that he did go into  
14 the Type VII, but I believe there was a line of  
15 questions on the other types of lands.

16 THE SPECIAL MASTER: I think he touched on them  
17 yesterday, but he can go ahead.

18 MR. WHITE: Would you read the question, Vi?

19 (The above question was  
20 (read back by the reporter:  
21 ("Q With respect to the  
22 (adjudicated lands, did you  
23 (determine the costs of  
24 (achieving that efficiency  
25 (in a manner similar to the  
(way in which you developed  
(costs for the Type VII lands?"

24 A First of all, the costs we developed for the Type VII  
25 stetson - cross - white



1 lands was not necessarily to achieve the efficiency. It  
2 was simply to restore service to lands that once had ser-  
3 vice and that service had been interrupted.

4 We are saying that overall we think we can in the  
5 future achieve an efficiency of 35 percent. We also feel  
6 that with time in the adjudicated lands or the unadjudicated  
7 now in-use lands, we can achieve an efficiency of 35 percent.

8 Sometimes achieving the better efficiency doesn't  
9 really involve a large investment in cost. Sometimes it's  
10 simply management.

11 Q (By Mr. White) Mr. Stetson, specifically, however, did  
12 you develop any cost figures either similar to those for  
13 Type VII lands or not which would be required to achieve  
14 the efficiencies which would -- let's start again.

15 THE SPECIAL MASTER: I was going to say that question  
16 you just asked, even though you pulled it back, has been  
17 asked and answered.

18 MR. WHITE: I don't believe so, Your Honor. Let me  
19 try again.

20 Q (By Mr. White) Did you develop any costs whatsoever for  
21 the unadjudicated trust lands that would be necessary to  
22 be incurred before the annual average diversion listed on  
23 HS-3 could be achieved?

24 A Let me see if I can help clarify this. The question you

25 stetson - cross - white



1 first started was on adjudicated lands. In your second  
2 question you said unadjudicated lands on HS-3, and I pre-  
3 sume you are still talking about the --

4 Q I'm talking about adjudicated.

5 A Adjudicated trust lands?

6 Q Right.

7 A We did not develop any costs.

8 Q Thank you. Now, let's go to unadjudicated lands on HS-5.

9 A On HS-5, yes, sir.

10 Q Did you develop any costs at all which would be required  
11 to be incurred in order to make the annual diversion re-  
12 quirement available to the lands indicated on HS-5?

13 A Well, first of all, with respect to the project lands,  
14 those efficiencies and unit diversions have been achieved.  
15 Those are the historic.

16 With respect to the nonproject -- and the specific  
17 answer to your question is, no, we did not do any cost  
18 estimates on those.

19 Q Let's flip back to the project for just a minute. Do you  
20 know whether or not the facilities are in place to serve the  
21 unadjudicated project lands on Page 1 of HS-5, which would  
22 require the expenditure of no further costs in achieving  
23 the irrigation of those lands through the withdrawal of  
24 the annual diversion requirement from the streams involved?

25 stetson - cross - white





1 A. Well, these unadjudicated trust lands are the lands that  
2 have been under irrigation. I believe Mr. Billstein said  
3 they were under irrigation as recently as 1980 on some of  
4 them, but overall he was talking about the last two or  
5 three years, so I have to assume that those facilities are  
6 there and are serving those lands.

7 Q. And the costs involved for the Type VII lands are the costs  
8 you went over with Mr. Merrill yesterday afternoon; is that  
9 correct?

10 A. Yes, sir.

11 THE SPECIAL MASTER: You got a sheaf --

12 MR. WHITE: I have got to get those back, and I had  
13 forgotten to bring those.

14 THE SPECIAL MASTER: You had 149,000 pages or some-  
15 thing like that.

16 MR. WHITE: When we take our break, I will get those  
17 back.

18 I believe we got the originals back to you?

19 THE WITNESS: Yes.

20 THE SPECIAL MASTER: He also won a one dollar bet.

21 MR. WHITE: It was a safe bet, Your Honor.

22 Q. (By Mr. White) Turning to the unadjudicated lands on  
23 HS-5 --

24 A. Yes, sir.

25 stetson - cross - white



1 Q -- did you make a determination or identify the point of  
2 diversion and the ditch through which the diversion would  
3 be carried of the average annual diversions listed on  
4 Pages 2 and 3 of HS-5?

5 A Only to the extent that those lands appear on the historic  
6 land claims maps, and I don't know whether this is an  
7 exhibit or not. It's our worksheet.

8 Historic lands claim is --

9 MR. WHITE: Could we have a small break, Your Honor?

10 THE SPECIAL MASTER: All right.

11 MR. WHITE: We might be able to save some time.

12 THE SPECIAL MASTER: All right, let's recess and take  
13 the time you need to try to proceed, but let's stay in  
14 session.

15 (Off-the-record discussion.)

16 THE SPECIAL MASTER: Back on the record, please.

17 MR. WHITE: We still have another volume of maps to  
18 check, Your Honor.

19 (Off-the-record discussion.)

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THE SPECIAL MASTER: We will make this into a ten-break.

(Proceedings were recessed from 9:45 a.m. until 9:55 a.m.)

THE SPECIAL MASTER: We are back in order.

Q (By Mr. White) Mr. Stetson, I will hand you what has been marked for identification HS-13 and ask you whether or not that is a copy of workmaps to which you have been referring during the last few minutes we were in session?

A I believe these were checked during the recess. Rather than go through them page by page, can I ask the two engineers who checked them, are they identical?

MR. DIMAGGIO: Yes.

THE SPECIAL MASTER: Let the record show Mr. DiMaggio answered the question in the affirmative.

A Yes, they are.

Q (By Mr. White) Mr. Stetson, isn't it true that on the maps which are contained in the bundle marked as HS-13, you can tell the point of diversion and the ditch which serves the various parcels shown on there?

A Usually that is the case. Occasionally there will be a scattered parcel where it will be not as clear, but usually it shows the ditch system through or along the side of the parcels.

MR. WHITE: Your Honor, we would like permission to

white-cross-stetson



1 withdraw what has been marked as HS-13 and try to get a  
2 reduced versdon of these, so that it would be easier to  
3 keep it in the record, so that we are not going to have  
4 such a bulky record in this case. And since this is our  
5 only copy, we can continue to work with it.

6 THE SPECIAL MASTER: All right. Permitted.

7 Q (By Mr. White) Mr. Stetson, I've handed you a copy of  
8 what is marked HS-12 and ask you if, with the exception  
9 of the face and the numbers which appear in circles on  
10 pages on HS-10 and HS-12, if that is a photostatic copy  
11 of the cost estimates for Type VII lands in and out of  
12 the Federal Irrigation Projects, which you shared with  
13 Mr. Merrill at the end of yesterday's proceedings?

14 A Yes, I believe it is. All the pages on the copy you handed  
15 me do have a page number on them, and some of them are--

16 Q Did we miss some?

17 A Some are slightly out of order. I'm just looking. I was  
18 checking to make sure you had included those little  
19 sketches, which you did. And those are usually marked  
20 with a page number and an "A," in other words, matching  
21 the page number to which it was attached.

22 But after page 118 there is a page "South Fork Owl  
23 Creek;" that doesn't have a page number on it, followed  
24 by a page 119A, which is a map, which is then followed by

25 white-cross-stetson



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the Owl Creek drainage, which is page 119. I was just checking to see what the--where that blank page should go.

The blank page should go--I don't mean blank page, but the page without the circled number, should be 120, and then page 119 and 119A should be reversed.

\* \* \* \* \*



1 Q (By Mr. White) Would you kindly put 120 on the page without  
2 a number?

3 A With a circle?

4 Q Yes, sir.

5 (Witness marked on document.)

6 A It's done.

7 MR. ROGERS: Excuse me, Your Honor. Did the witness  
8 say that the blank page is numbered 120?

9 MR. WHITE: Yes.

10 MR. ROGERS: Okay.

11 THE SPECIAL MASTER: Are you ready to move these into  
12 evidence, Mr. White?

13 MR. WHITE: I will at the end of cross, Your Honor.

14 THE SPECIAL MASTER: Okay. Are we about there, Mr.  
15 White?

16 MR. WHITE: Not for a while. We saved a remarkable  
17 amount of time with that last exhibit that we got in, the  
18 last set of maps.

19 THE SPECIAL MASTER: Very fine.

20 MR. WHITE: I hope we can do the same with respect to  
21 the Type VII lands.

22 THE SPECIAL MASTER: All right.

23 Q (By Mr. White) Mr. Stetson, on HS-4, the Type VII lands --

24 A Yes.

25 stetson - cross - white



1 Q Did you determine the points of diversion for the annual  
2 diversion requirements shown on HS-4 for the corresponding  
3 acreages shown on HS-4?

4 A Yes.

5 Q And did you identify the ditches to connect the points of  
6 diversion with the acres as shown?

7 A Yes. We may not have identified them by name, but we  
8 checked back through the maps to see and in the field to  
9 look at the ditches.

10 Q Now, I hand you a copy of what's been marked as HS-14 and  
11 ask you if that is a copy -- and you may want to consult  
12 with Mr. DiMaggio on that -- of the blue lines which you  
13 used in identifying the various tracts included within your  
14 Type VII lands?

(Off-the-record discussion.)

15 A Yes, they appear to be.

16 Q (By Mr. White) Isn't it true that from the maps which are  
17 contained in the package that's been identified as HS-14,  
18 unlike HS-13, you cannot tell the points of diversion and  
19 the ditches which serve those tracts?  
20

21 A No, you cannot tell on that set of blue lines.

22 MR. WHITE: Your Honor, I would similarly ask to --

23 THE SPECIAL MASTER: Make smaller ones of these?

24 MR. WHITE: We would offer these at this time -- well,

25 stetson - cross - white





1 not at this time, but when we finally get around to offering  
2 them, but at that time I would like to be able to withdraw  
3 them.

4 THE SPECIAL MASTER: And the document in your hand?

5 MR. WHITE: This is HS-14, and the other one I would  
6 like to withdraw is HS-13, Your Honor.

7 THE SPECIAL MASTER: You will want to offer those this  
8 morning with the previous twelve but then pull them back to  
9 make the small copies?

10 MR. WHITE: We may not be able to, Your Honor. We may  
11 have to give you these, Your Honor.

12 THE SPECIAL MASTER: Whatever.

13 Q (By Mr. White) Mr. Stetson, if the points of diversion of the  
14 ditches are not identified on HS-14 for the Type VII lands,  
15 are they then identified in HS-12?

16 A Well, on HS-12, depending on which parcel it is, there may  
17 be references to ditches, but there aren't on all sheets,  
18 and -- there's references to where ditches are needed, but  
19 we will have a cost estimate in there for either adding a  
20 ditch or extending a ditch. They are on our work maps.

21 Q Look at Page 1 of HS-12, which I believe relates to Field  
22 No. 10-1-X?

23 A Yes.

24 Q And I ask you whether or not you are able to determine the  
25 stetson - cross - white





1 point of diversion for the ditch which serves Field 10-1  
2 from Page 1 or any other source within HS-12?

3 A. Well, on Page 1 of HS-12, it indicates that we have included  
4 a cost estimate for headworks and a ditch, a main ditch.  
5 That is because there was not one available or in a state  
6 of good repair, and on our work maps we would have made a  
7 note of that, needs ditch. These are the same maps you  
8 identified as whatever -- No. HS-14, I believe.

9 Q. Yes, sir.

10 A. But on these, these are the maps that we have used in the  
11 field and in the office that have our notations on them  
12 (indicating).

13 Q. Okay. Well, let's take Tract 10-1-X and you have indicated  
14 a cost of \$15,000 for head works?

15 A. Yes.

16 Q. 3400 feet for ditch length; is that correct?

17 A. Yes, sir. I guess that's 34 -- let me look at my own copy  
18 that's more legible.

19 THE SPECIAL MASTER: Is that 15,000 instead of 1500?

20 MR. WHITE: I'm sorry, Your Honor.

21 THE WITNESS: \$15,000 for the headworks; 3700  
22 lineal feet of ditch.

23 Q. (By Mr. White) In determining that ditch length, where was  
24 the point of diversion?

25 stetson - cross - white



1 A It was on the East Fork of the Wind River, just upstream of  
2 the parcel.

3 Q And do your maps show that point of diversion, the annotated  
4 diversions of your maps?

5 A Yes, it shows an X there.

6 Q Would that also be true for the other parcels identified on  
7 Pages 2, et seq., in HS-12, I believe it is?

8 A Yes, it would be. If the headworks were required and a  
9 ditch were required, it would be indicated on these, yes.

10 Q Can I look at your copy for just a minute?

11 A Yes, sir.

12 MR. WHITE: Off the record.

13 (Off-the-record discussion.)

14 THE SPECIAL MASTER: White Mr. White is looking, Mr.  
15 Stetson, what is a turn dot?

16 THE WITNESS: That's a turnout.

17 THE SPECIAL MASTER: Oh, I beg your pardon.

18 THE WITNESS: It's a turnout on the canal.

19 Q (By Mr. White) Mr. Stetson, I notice that in some cases  
20 you have blue lines and in some cases you have red lines.  
21 Any significance to the different colors, or do they just  
22 mean the same?

23 A Generally, they mean the same. Some of those were put on  
24 these maps before we went out in the field, the last

25 stetson - cross - white



1 field trip. They were put on from other maps in the  
2 office, such as USGS quadrangle sheets. Others were  
3 added in the field, but in general -- but don't pin me  
4 down to it -- but in general the red means an existing  
5 ditch and the blue not, but that's not always true.

6 Q Okay.

7 A Because they are just worksheets.

8 Q Mr. Stetson, I notice that some of your parcels are plain  
9 gray on the blue line and others are highlighted with an  
10 orangish color. Is there any significance to that?

11 A Yes.

12 Q What is that significance?

13 A That means those are Type VIII lands.

14 Q Okay.

15 THE SPECIAL MASTER: The organge is Type VIII lands?

16 THE WITNESS: Yes, sir.

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MR. WHITE: Your Honor, I would like to have an off-record discussion with U.S. counsel.

THE SPECIAL MASTER: Let's go off the record.

(Discussion was held off-the-record.)

MR. WHITE: We are ready, Your Honor.

THE SPECIAL MASTER: All right. Please come to order. Back on the record.

Q (By Mr. White) Mr. Stetson, I will hand you what has been informally marked as 14-A and ask you if that is the set of maps or bluelines for Type VII lands, which have the annotations on them in addition to the blueline material on HS-14?

A Yes, it is.

MR. WHITE: Your Honor, during the last short break the State and the United States and the Tribes reached an agreement, on which I would like to provide for the record and obtain the Court's approval and the other parties' concurrence.

The agreement is-- And I would invite other counsel, if I misstate it along the way, to jump right in--

THE SPECIAL MASTER: I'm sure they will.

MR. WHITE: It is still early in the day, Your Honor; we are being pretty quiet.

white-cross-stetson



1 The agreement is at the conclusion of Mr. Stetson's testi-  
2 mony, the State may remove HS-14-A and make copies of the  
3 exhibit as annotated.

4 In the event that the annotations are in color, such  
5 as different colors for the ditches, the State will  
6 annotate the colors on the copy as well.

7 The copy of 14-A made by the State, as well as the  
8 original of 14-A, which we will mark today, will then be  
9 given to the United States.

10 Counsel for the United States will then--

11 THE SPECIAL MASTER: It will be given to counsel  
12 for the United States?

13 MR. WHITE: Yes. Counsel for the United States will  
14 then determine, I assume with Mr. Stetson's and Mr.  
15 DiMaggio's assistance, whether the annotations have  
16 accurately been transferred from the original 14-A to  
17 the State's copy of 14-A.

18 Once they make that determination, then the copy of  
19 14-A will be substituted for the original of 14-A in the  
20 Court's File. The original of 14-A will be returned to  
21 Mr. Stetson and the copy of 14-A will go into the record  
22 and replace not only the original of 14-A, but also HS-14,  
23 which is the same material without the annotation.

24 Then, if any issue arises because of the annotations  
25 contained on HS-14-A, the United States as part of their





1 case in chief may recall Mr. Stetson to testify as to  
2 those issues, in spite of the fact the same general sub-  
3 ject matter of his testimony has been touched upon during  
4 his direct and cross-examination during the last several  
5 days.

6 THE SPECIAL MASTER: Did Mr. White accurately state  
7 the stipulation, Mr. Rogers?

8 MR. ROGERS: I believe he did, Your Honor.

9 THE SPECIAL MASTER: Did he state the stipulation  
10 according to your recollection, Mr. Membrino?

11 MR. MEMBRINO: One moment, Your Honor.

12 THE SPECIAL MASTER: Did he state it according to  
13 your understanding?

14 MR. MEMBRINO: It is all right, Your Honor.

15 THE SPECIAL MASTER: Then, Mr. Echohawk?

16 MR. ECHOHAWK: Yes.

17 THE SPECIAL MASTER: And Mr. Clear?

18 MR. CLEAR: Yes, Your Honor.

19 THE SPECIAL MASTER: Okay.

20 MR. WHITE: It is all right with Your Honor?

21 THE SPECIAL MASTER: Yes, it is indeed.

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- 1 THE WITNESS: Could I ask one question?
- 2 MR. WHITE: Yes, sir, I'm at your disposal.
- 3 THE SPECIAL MASTER: Where does that leave you?
- 4 THE WITNESS: I assume that means when we get that  
5 back, that we will not be working with it and erasing  
6 or adding lines because if we do that in connection with  
7 any other work we are doing, it would be difficult to go  
8 back and check it against your copy. Will check it against  
9 your copy first.
- 10 MR. WHITE: I'll tell you what we will do: We will  
11 give you an uncolored copy so that you have got all of the  
12 annotations, just different colors, and you'll have your  
13 own copy so you will know the colors of the original  
14 annotation and that way you will know whether or not you  
15 added annotations. Is that all right?
- 16 THE WITNESS: That's all right. I just want to make  
17 sure that someone from our office doesn't make some  
18 additions or deletions and then we get a call to come back  
19 and verify something and we would maybe be making a  
20 big mistake.
- 21 MR. WHITE: I understand. We don't want to put you  
22 in a bind, and if that's okay with the United States--
- 23 MR. CLEAR: Yes.
- 24 MR. ECHOHAWK: Yes.
- 25 THE SPECIAL MASTER: Is HS-14 the one that has the



1 Type VIII lands in orange?

2 MR. WHITE: Yes, sir.

3 THE WITNESS: Yes, sir.

4 THE SPECIAL MASTER: At this point could I ask-- I  
5 won't either. Strike that.

6 MR. WHITE: Go ahead and ask, Your Honor.

7 THE SPECIAL MASTER: No, no.

8 MR. WHITE: I'm trying to find some orange ones for  
9 you.

10 THE SPECIAL MASTER: We saw them.

11 MR. WHITE: If it's all right with the Court, I will  
12 just leave this with Mr. Stetson.

13 THE SPECIAL MASTER: Very fine.

14 Q (By Mr. White) Mr. Stetson, with respect to HS-4, did you  
15 use the values of average overall efficiency contained in  
16 the right-hand column to arrive at the annual diversion  
17 requirement listed in the third column?

18 THE SPECIAL MASTER: Period?

19 THE WITNESS: Question mark?

20 MR. WHITE: Question mark.

21 A For non-project lands we did. The overall efficiency was  
22 used in backing out the unit diversion requirement which  
23 gave us the annual acre-feet diverted in the third column.

24 Q (By Mr. White) Was that also true for the annual diversion  
25

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1 requirement listed for unadjudicated trust lands on HS-5?

2 A Yes, it is.

3 THE SPECIAL MASTER: On project and non-project? Both?

4 THE WITNESS: On non-project only.

5 THE SPECIAL MASTER: On non-project only.

6 MR. WHITE: His answer was with respect to non-  
7 project.

8 THE SPECIAL MASTER: I beg your pardon.

9 Q (By Mr. White) And would that be similarly true with  
10 respect to the non-project lands on HS-3, the adjudicated  
11 lands?

12 A Yes, it would.

13 Q And I believe you previously indicated that the-- Strike  
14 that. I'm not sure you did.

15 Did you assume that the Type VII lands would be  
16 irrigated by hand move sprinklers or not?

17 A On Type VII?

18 Q On Type VII.

19 A There were a few parcels that if they met the minimum  
20 size requirement, right shape and perhaps a pumping  
21 diversion, where we estimated the cost on the basis of hand  
22 move sprinklers, but they were in the minority.

23 Q Would you take a look at page 2 of HS-12 where you do have  
24 pump costs and tell me if this would be an example of

25 white-cross-stetson



1 where you would be using hand move sprinklers?

2 A No, it is not. As a matter of fact, you are looking at  
3 Field 10-2X?

4 Q Yes.

5 A That field, although it had a pump and pipeline to serve  
6 it, did not have sprinklers. Where the sprinklers could  
7 be identified is where on the on-farm systems we would  
8 show a unit cost per acre of \$130.

9 Q So we just flip the pages on Exhibit HS-12, look at the  
10 on-farm system column and where there's \$130, there that's  
11 hand move sprinkler?

12 A That should be a sprinkler--a field that was analyzed on  
13 the basis of sprinklers.

14 Q Everything else is surface irrigation of some type?

15 A Surface irrigation, yes, sir.

16 Q Did you make any assumptions as to the type of surface  
17 irrigation involved?

18 A We did to the extent that we would put the head ditch in  
19 and that would be part of our on-farm cost, but as far as  
20 the detail of whether that was to be flood irrigated,  
21 panel-type irrigation, furrow-type irrigation, we did not.

22 Q So the costs here are project costs rather than on-farm  
23 costs?

24 A Yes, except where we have the on-farm sprinklers.

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white-cross-stetson





- 1 Q With the exception of \$130 project cost?
- 2 A Yes.
- 3 Q Now, such as on page 2-A where you have a copy of the
- 4 topo map, the USGS quad sheet--
- 5 A Yes.
- 6 Q --is this just a refined version of the information which
- 7 would appear on HS-14A.
- 8 A Yes. In this instance we ~~xerboxed~~ out a portion of a
- 9 US Geological Survey quadrangle which had the topo-
- 10 graphy on it because we are making the diversion several
- 11 miles upstream, and then we have to parallel the stream,
- 12 and we cross some side drainages with siphons, and that's
- 13 why we did it for that particular parcel.
- 14 Q Who did the design work for these diversion facilities?
- 15 Did you do it or what--
- 16 A Mainly Mr. DiMaggio under my direction and incidentally, that
- 17 particular parcel was found not to be feasible.
- 18 Q Is it true that the worksheets in HS-12 include both
- 19 feasible and unfeasible projects, or parcels, rather?
- 20 A Yes, yes, they do.
- 21 Q Is it true that on HS-14-A those pages that have projects
- 22 X'ed out with the word "Out" on them are those fields that
- 23 you determined to be unfeasible?
- 24 A That is generally true, but I don't trust that answer a
- 25 white-cross-stetson





1 hundred-percent. For a hundred percent answer I would  
2 go to Exhibit HS-11.

3 Q All right. At the top of the first page and many of the  
4 following pages on HS-12 there's a place in the form that  
5 says, "Water short, yes or no"?

6 A Yes, sir.

7 Q What does "water short" mean?

8 A These would be areas in which HKM has preliminarily  
9 advised us of where an area is water short. In that event  
10 we would circle the yes.

11 Q Does water short mean that there is not physically enough  
12 water available at the anticipated point of diversion to  
13 fulfill the diversion requirement for this particular  
14 field or tract?

15 A It may in some instances, and in other instances it may  
16 be because of other uses of the water upstream.

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1 Q Okay. What kind of uses, if you know, would --

2 A Other water right holders upstream that may be using the  
3 water.

4 THE SPECIAL MASTER: But you don't actually define  
5 'water short'? There are some in this State that could  
6 put the circle around the entire reservation and call it  
7 that.

8 THE WITNESS: I imagine some could put it around the  
9 entire state.

10 THE SPECIAL MASTER: The State of Wyoming.

11 THE WITNESS: Including California.

12 THE SPECIAL MASTER: Sure, maybe we had better put a  
13 definition on it, if we can. But I think you have.

14 Q My understanding of why you didn't do any of the evaluation  
15 on the 'water short,' this is just a reproduction for your  
16 own purposes of the information which HKM gave?

17 A Yes.

18 Q And if you want to know what "water short" means, we can  
19 ask HKM when they show up; is that right?

20 A Yes, sir.

21 Q Where you determined that a tract was water short or  
22 circled "yes," such as on page 9, was that tract or were  
23 those tracts where you circled "yes" included or excluded  
24 from the values on HS-4?

25 stetson - cross - white



- 1 A Some of them were and some of them weren't.
- 2 Q What was the criteria which you used to determine which
- 3 ones were and which ones weren't?
- 4 A Those criteria really came from the economists.
- 5 Q I'm sorry, go ahead.
- 6 A What we did was we developed the costs to serve each parcel.
- 7 Q Assuming the water was available?
- 8 A Assuming water was available. When the economist -- we
- 9 would circle the "yes" so the economist knows that this
- 10 area preliminarily is indicated to be "water short".
- 11 The economist then takes that into consideration,
- 12 is my understanding, the return or the yield from that
- 13 land.
- 14 Q Is it true, then, whether "water short," in the form of
- 15 a circled "yes" or "no," made no difference whether you
- 16 included these different tracts in the claim or in the
- 17 Exhibit HS-4?
- 18 A Not "water short" per se, but if because it was "water
- 19 short the returns were not sufficient to justify the
- 20 cost, and we declared that one unfeasible, then, that
- 21 would not be included in the acreage.
- 22 THE SPECIAL MASTER: In HS-4?
- 23 A In HS-4.
- 24 Q And questions concerning how that water chart information
- 25 stetson - cross - white



1 was used or properly addressed to Mr. Dornbusch; is that  
2 correct?

3 A That's correct.

4 Q On page 10 -- I believe on other pages of the annotations  
5 with respect to bedrock, this one on page 10 says "Bedrock  
6 at four feet. Low WHC," or water holding capacity, I  
7 assume. That would be in the second row.

8 A Yes, sir.

9 Q Where you found values for bedrock which were less than  
10 six feet, were those parcels included in the acreage dis-  
11 played on HS-4?

12 A Only if we could supply proper drainage, including the cost  
13 of that, and it would still qualify from an economic stand-  
14 point. This particular one on page 10 did not qualify.

15 Q Whereas on page 2 you talk in the alternative. I believe  
16 you told me page 2 was one that was not included, but  
17 where you did, as on page 2, develop an alternate set of  
18 costs. Which was used to determine feasibility, if you  
19 know; the original or the alternate?

20 A Both would be. That was the reason for the alternate.  
21 On that particular analysis we had a pump diversion, but  
22 when we got down to computing energy requirements, we  
23 ended up with a very high cost of energy.

24 So, then we did a gravity to see what that would  
25 stetson - cross - white





1 show, and it showed a lesser capital cost and lesser total  
2 annual cost.

3 But when those were handled by the economist and con-  
4 verted to present-value costs and present-value returns,  
5 it didn't qualify.

6 THE SPECIAL MASTER: Neither one qualified?

7 THE WITNESS: Neither one qualified. We put those  
8 alternates in there to give the economist another way to  
9 look at it.

10 Q (By Mr. White) In developing the costs that are set out  
11 across the pages in Exhibit HS-12, did you have any stand-  
12 ard costs or standard unit costs which were utilized in  
13 doing that?

14 MR. CLEAR: Your Honor, you may recall yesterday  
15 afternoon Mr. Merrill, when he examined Mr. Stetson about  
16 costs, he said at four o'clock he was done with that  
17 problem.

18 MR. WHITE: He hasn't even had a chance to look at  
19 that.

20 THE SPECIAL MASTER: He said he was through with the  
21 cross-examination, but the fact he took back a set of docu-  
22 ments that is now HS-12, I think was done so there would  
23 be some questions asked on it today. So, I think we can  
24 go ahead.

25 stetson - cross - white





1 MR. WHITE: As you are aware, Your Honor, I am trying  
2 to get some unit values so we don't have to go through  
3 each one.

4 THE SPECIAL MASTER: You may answer that.

5 A Yes. We developed the unit values on a number of features.

6 Q Could you give me those?

7 A For head works --

8 Q Do you have some figures there in some tabular form so  
9 we don't have to go through them?

10 A Someday I'll learn not to reach for my papers. I'm just  
11 kidding.

12 Q Do you have them in tabular form?

13 A Yes, sir.

14 Q May I see them, please?

15 A Yes, sir.

16 THE SPECIAL MASTER: These are headgate costs?

17 THE WITNESS: Well, it is a number of features.

18 MR. WHITE: There are a number of costs, Your Honor.  
19 We may have saved ourselves about an hour here.

20 THE SPECIAL MASTER: All right. I assume there will  
21 be no objection to him copying what you just handed to  
22 Mr. White?

23 THE WITNESS: I didn't know I could object.

24 THE SPECIAL MASTER: I will look to your attorneys  
25 stetson - cross - white



1 for that. Counsel for the United States, do you have any  
2 objection to having this copied?

3 MR. CLEAR: I would like to see what they are.

4 MR. WHITE: I will state for the Court we can probably  
5 copy them and save about three hours here of cross-examina-  
6 tion.

7 THE SPECIAL MASTER: We have heard that before.

8 MR. WHITE: I thought I was going pretty good for a  
9 witness we hadn't deposed.

10 THE SPECIAL MASTER: You did say you would be through  
11 by noon.

12 MR. WHITE: I didn't say that.

13 THE SPECIAL MASTER: Off the record for a moment.

14 (Discussion was held off the record.)

15 THE SPECIAL MASTER: Back on the record, please. Mr.  
16 Clear?

17 MR. CLEAR: We have no objection, Your Honor.

18 THE SPECIAL MASTER: Thank you. Will you have them  
19 returned this afternoon?

20 MR. WHITE: We can do better than that. When we  
21 take a break during the morning, I will get them copied  
22 then.

23 THE SPECIAL MASTER: All right.

24 MR. CLEAR: Perhaps now would be a good time to break.

25 MR. WHITE: That would be all right with me.



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THE SPECIAL MASTER: You want a five minute break?

MR. WHITE: Yes, Your Honor.

THE SPECIAL MASTER: All right. We will break for  
five or ten minutes.

(Proceedings were recessed at  
10:50 a.m. for ten minutes.

\* \* \* \* \*



9-1-V-vlb

1 THE SPECIAL MASTER: Let's come to order.

2 Q. (By Mr. White) Mr. Stetson, in order to go ahead -- and  
3 you don't have your original of HS-15 with you, and we'll  
4 get that added in a few minutes -- but let's go ahead,  
5 if it's okay with Court and counsel, and talk about HS-15  
6 until we get that done.

7 HS-15 contains generally what type of information,  
8 Mr. Stetson?

9 A. It contains costs for headworks, cost estimates for head-  
10 works, turnouts, main ditches, head ditches, pumps and  
11 pumping plants, both deisel and electric, land clearing  
12 costs, land leveling costs and also indications of annual  
13 costs for maintenance and repairs on headworks and turnouts,  
14 main ditches, fuel for diesels, costs, electricity and  
15 demand charges -- energy and demand charges, general data  
16 that were used in preparing the estimated costs of these  
17 facilities.

18 Q. Did you develop costs in each of the same categories that  
19 Dr. Mesghinna developed costs for future lands, or do you  
20 know?

21 A. Well, for similar facilities, we have, sure. His were  
22 on a much larger scale, of course.

23 Q. On page 1 of HS-12 --

24 A. HS-12?

25 stetson - cross - white



9-2-C-vlb

- 1 Q. Yes, sir.
- 2 MR. ROGERS: On what page?
- 3 MR. WHITE: One.
- 4 Q. (By Mr. White) -- show an investment cost of \$15.00 for  
5 turnouts.
- 6 A. \$15 per acre, yes, sir.
- 7 Q. And that's per acre cost, and you would derive that by  
8 what mathematical computation based on the information  
9 on HS-15?
- 10 A. All right. From H-S 15?
- 11 Q. Yes.
- 12 A. We would, first of all, look at the bottom of page 1  
13 in the left-hand column. It indicates we put in a  
14 turnout, approximately one each quarter of a mile, and  
15 we have 3700 feet of ditch, so we divide that out and  
16 find we need 2.8 turnouts, so we call that 3 turnouts.
- 17 Q. Okay.
- 18 A. Those types of turnouts we estimate the cost -- these are  
19 outside of the FIP areas. We estimate the cost, if it's  
20 for a turnout of less than 3 cubic feet per second, they  
21 would be \$200 each, so we multiply 3 times 200, divided  
22 by the 41.2 acres, and get \$15.00 per acre for the turnout  
23 cost.
- 24 Q. Thank you. Your headworks at the top of HS-15 show a value  
25 stetson - cross - white





9-3-

1 of \$15,000 for headworks in the Wind and Little Wind, and  
2 it would appear from the computations at the bottom of  
3 page 1 on HS-12 -- excuse me -- \$15,000, that you used  
4 \$15,000 for parcel 10X?

5 A. Yes, we did.  
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1 Q. And that is based, what value you used, according to  
2 (1) toward the middle of HS-15, depends on the peak flows  
3 of the creek; is that correct?

4 A. Yes, in general that is a guideline we set up.

5 Q. How did you determine flows of the creek for the various  
6 parcels?

7 A. We probably looked at the U.S. Geological Survey daily  
8 peak flow records and just estimating what they would  
9 be during irrigation. And it's not all that precise. We  
10 are really trying to find out whether we needed a large  
11 size, medium size or small size headworks.

12 Q. And for those tributaries where you had no gauges, you  
13 looked at the general size of the water shed?

14 A. The water shed. We just estimated it, yes sir.

15 Q. In determining the capacity of the ditch, referring to the  
16 bottom of the first page in HS-15, you depended upon the  
17 parcel size; is that correct? Seventy acres being the  
18 break point?

19 A. Yes.

20 Q. Mr. Stetson, are these 1979 costs the same as Dr.  
21 Mesghinna's?

22 A. Yes. Excuse me --

23 Q. I'm sorry.

24 A. When you said the same as Dr. Mesghinna's, the unit costs  
25 stetson - cross - white



1 wouldn't be. They are both geared to 1979, but our unit  
2 costs for a like size facility may not be the same.

3 Q. I understand the year in which these costs are appropriate  
4 is 1979.

5 A. Yes.

6 Q. I asked a poor question, I guess.

7 A. That's right.

8 Q. I think, Mr. Stetson, we cut off some of the information  
9 when we did our copying on the bottom of your graph.  
10 If I could have the original back, I will try to make  
11 those changes and annotations.

12 MR. WHITE: Could I write on this table?

13 THE SPECIAL MASTER: Certainly, sure.

14 MR. WHITE: Thank you.

15 THE SPECIAL MASTER: Dr. Stetson, if we find a  
16 discrepancy between the figures you gave in your direct  
17 testimony regarding the water and water requirements and  
18 those contained in the HSS as we have amended them through  
19 your cross-examination, which of those generally would  
20 you say ought to govern?

21 THE WITNESS: Like in the HS-3, 4 and 5 exhibits?

22 THE SPECIAL MASTER: Right.

23 THE WITNESS: I believe HS-3, 4 and 5 exhibits, which  
24 are up here before me and marked for the Court, have the  
25 stetson - cross - white



1 proper --

2 THE SPECIAL MASTER: The latest and proper information?

3 THE WITNESS: -- the latest and proper corrections on  
4 them. I apologize for the fact we have done so many  
5 corrections.

6 THE SPECIAL MASTER: No problem.

7 Q. (By Mr. White) Mr. Stetson, now I will hand you what has  
8 been marked for identification as HS-15, as well as your  
9 notes, out of your notebook, and ask you whether or not  
10 HS-15 is an accurate copy of the materials contained in the  
11 notes with the attached costs?

12 A. Yes, it appears to be.

13 Q. Why don't you go ahead and stick your notes back in your  
14 notebook. On the first page of HS-15 you indicate you  
15 assumed a net irrigation requirement peak flow of  
16 five gallons per minute per acre; is that correct?

17 A. Yes.

18 Q. What is the basis for that assumption?

19 A. That was the estimated requirement for irrigation of the  
20 types of crops for the net use on the fields, five gallons  
21 per minute. That is the consumptive use. That was our  
22 estimate of the consumptive use peak net. We used that  
23 to go ahead and derive what we ought to divert for them.

24 Q. On the next line you show calculations for the gross  
25 stetson - cross - white





1 irrigation peak flow, and then in the denominator you have  
2 .26. Where did that come from?

3 A. That was an assumed efficiency at the time these criteria  
4 were set up, assuming an overall efficiency of .26.

5 We subsequently considered, or I did, that we would  
6 achieve an efficiency of 35 percent, which we have used  
7 in our water requirements.

8 To that extent we have overstated the design criteria  
9 for the facilities. In other words, if we have used  
10 the 35 percent we would be using 20 gallons per minute  
11 per acre as a diversion requirement. And using the 26  
12 percent, we derived 20 gallons per minute. If we used  
13 35 percent, we would have derived 15 gallons per minute.

14 I considered that after all this work was done, and  
15 said, well, so we have --

16 Q. We have done the work?

17 A. -- we have done the work. It is a little too big. And to  
18 that extent, perhaps some of our costs are over estimated.  
19 But on the basis of this type of cost estimate, I think it  
20 is a reasonable cost and, if anything, it may be a little  
21 on the high side. So, we didn't bother to go back and  
22 change it and recopy it.

23 Q. Where you have given these persons' names, next to the sources  
24 in this information, are those the people within that  
25 stetson - cross - white





- 1 particular office that gave you the information?
- 2 A. Yes, sir.
- 3 Q. Do you know who gave you the information on turnouts
- 4 from SCS? Did you rely on --
- 5 A. That would have been George Morris, all the information
- 6 we got from the SCS on costs. We may have talked to more
- 7 than one person up there, but it was George Norris from
- 8 whom we basically got the information on their experience
- 9 in the area.
- 10 Q. Why did you use the different pumping assumption from
- 11 inside and outside it?
- 12 THE SPECIAL MASTER: Inside what?
- 13 MR. WHITE: The FIPs, Your Honor, the second page
- 14 of HS-15.
- 15 A. Because that's out of the FIPs, many of the areas we
- 16 were concerned as to whether or not electric power would
- 17 be available. So, in many other areas we used diesel
- 18 pumps, or diesel drive.
- 19 Q. From the entires on pages contained in HS-12, how would
- 20 one determine the pipeline sizes described at the bottom
- 21 of the page, the second page, in HS-15, which were used
- 22 for the particular units we were examining in HS-12?
- 23 A. Let me look at my own copy; it's easier to read. For
- 24 example, on Exhibit 2 it talks about 4,000 linear feet
- 25 stetson - cross - white



10-6

1 of pipe. It used ten-inch pipe, ten-inch diameter pipe.

2 Q. Where are you? I'm sorry.

3 A. I'm on page 2.

4 Q. Of Exhibit HS-12?

5 A. Of Exhibit HS-12.

6 Q. Okay.

7 A. And it says, "Use ten-inch pipe length, 4,000 feet."

8 So, on HS-15, page 2, we have ten-inch pipe listed  
9 at \$10 a foot. You multiply the 4,000 times \$10 and  
10 divide by 62.1 acres, and you get the cost of the pipe.

11 Q. And that same approach would be used for all the parcels  
12 where you have pipe costs included with your pumps?

13 A. Yes, sir.

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stetson - cross - white



1 Q (By Mr. White) With respect to your land clearing costs,  
2 which I believe are on the 6th page of HS-15 --

3 A Yes.

4 Q -- how did you determine which value per acre to use?  
5 I understand where you got the values from, but how did  
6 you decide which values --

7 A By our observations in the field and comments that have  
8 been made on some -- on maps from HKM, if they made  
9 comments to that effect, but basically on our field ob-  
10 servations.

11 Q Did you personally made the field observations or was it  
12 someone working under you?

13 A Mr. DiMaggio and myself were both out there for three  
14 days flying around in a helicopter, with a pilot, and a  
15 man from HKM.

16 Q And your land leveling costs which are based on land  
17 class --

18 A Yes.

19 Q -- also page 6 towards the middle?

20 A Yes, sir.

21 Q Which class did you use, sprinkler or gravity, or did it  
22 depend on the type or the method of water application?

23 A Well, we looked -- on the soil classification data sent  
24 to us by HKM, there were indications if it was a Class 1  
25 stetsoni- cross - white



1 soil, that would be a soil in a field where the leveling  
2 would be from zero to 200 cubic yards per acre, so we  
3 took the average for Class 1, the same thing on Class 2,  
4 3, and 4.

5 Part of their criteria for that classification is  
6 how much leveling would be required -- how many cubic  
7 yards of leveling would be required, so it's based on  
8 that.

9 The soil classes are shown on HS-12, so if it was  
10 shown as a Class 2 soil and there was indication it  
11 needed leveling, we would use the 300 cubic yards per  
12 acre.

13 If it was a Class 3 or 4, we would use the 550.

14 Q Would you look at page 1 of HS-12, please?

15 A Page 1?

16 Q Yes, where it has a soil class of 4 slash 6?

17 A Yes, sir.

18 Q Does that mean 4 gravity, 16" sprinkler?

19 A Yes, sir.

20 Q Now, is it true that you used in your land leveling costs  
21 the class for sprinkler if you intended to use a sprinkler  
22 on this tract and the class for gravity if you intended  
23 to use gravity irrigation on the tract?

24 A We used nearly always gravity. Usually for sprinkler we  
25 stetson - cross - white





1 didn't do any leveling. I would have to go back and check  
2 this, you know, page by page, but generally if we were  
3 using sprinkler, there may not have been any leveling  
4 involved.

5 Q Were your costs per acre on land leveling provided by  
6 SCS in Lander or from the Barnett Company in California?

7 A Well, we had costs from several different sources, SCS  
8 in Lander, U. S. Bureau of Land Management in Billings; and  
9 the land leveling costs in California, which were a very  
10 much higher stage of leveling. This is laser beam leveling,  
11 which they use in the San Joaquin Valley to make the fields  
12 look like pool tables, and from that we used the 60 cents per  
13 cubic yard whereas the California price was --

14 Q You meant \$60 --

15 A I beg your pardon?

16 Q You used \$60 or 60 cents?

17 A No, 60 cents per cubic yard applied to the number of  
18 yards per acre which gives you \$60 per acre if you have  
19 a hundred cubic yards.

20 Q Your only costs which begin on the 7th page of HS-16, how  
21 did you determine or arrive at the value of two percent  
22 of investments, repairs and maintenance?

23 A That was pretty much based on our judgment, that if you  
24 allowed that much and conducted that -- spent that much  
25 stetson - cross - white





1 on maintenance, that your headworks and turnouts would  
2 function through a reasonably long useful life.

3 Q Is the same thing true for your annual cost for your main  
4 ditches?

5 A Some of this we discussed with Dan Crook at the BIA --  
6 at Fort Washakie, and made some assumptions that ditches,  
7 for example, be replaced each three years, so you take  
8 your 25 cents per foot-cost of a ditch and call it 8 cents  
9 per foot per year for repair and maintenance or replace-  
10 ment, and then for the larger ditches we applied the same  
11 thing to the cost per cubic yard that we used in estimating  
12 the cost of those ditches. Divide the 50 cents by 3 and  
13 we came up with 17 cents per foot.

14 Q Where did the annual cost for your head ditches come from?

15 A We made that cost estimate in-house based upon discussions  
16 with people like George Norris and Don Crook.

17 Q From what source did you obtain your repair and mainten-  
18 ance values for the pumps that are shown on the 7th page  
19 of HS-15?

20 A We obtained those from reference material in our office.

21 Q Do you recall what material that is?

22 A No, I don't, and probably some of it from -- some of our  
23 discussions with people either in or outside of the office  
24 who have been involved in maintenance of pumps.

25 stetson - cross - white



1 We think it's a reasonable estimate.

2 Q How did you arrive at the pumping hours shown at the top  
3 of the 8th page?

4 A That was generally by taking the growing season, water  
5 requirements, number of hours that would be required to  
6 meet the application of water on those crop patterns, and  
7 then going back and multiplying that by the cost per hour  
8 of pumping for the energy cost per hour for pumping.

9 Q Did you provide any costs to Dornbusch aside from the  
10 project costs that are shown in Exhibit HS-12 for on-  
11 farm costs, except for the pumping, the pipe networks  
12 you discussed?

13 A I can't say for sure. It's possible that -- there were  
14 several people in Dornbusch's office that are in contact  
15 with people in my office on an almost daily basis, and  
16 somebody from Dornbusch's office may call down and say,  
17 "Would you verify this cost for me and would you tell  
18 me what kind of a cost we should use here?" And then  
19 we would -- my people would probably give them some in-  
20 formation, but as far as supplying them any lists of  
21 costs as you mentioned, we have supplied them with HS-12  
22 and we have probably -- we may have even supplied them  
23 with HS-15, if they had requested it. I just don't know,  
24 but other than that, as far as, you know, soil amendment  
25 stetson - cross - white



1 costs and things for like that, I am sure we did not.

2 Q On page 5 of HS-12 is the additional 2.1 acres of land  
3 in-use land that's included within your unadjudicated  
4 totals on HS-5?

5 THE SPECIAL MASTER: First, Mr. White, lead me to  
6 where you found the 2.1 acres of land on page 5, would you,  
7 to HS-12?

8 (Whereupon Mr. White indicated  
9 (on document.

10 THE SPECIAL MASTER: There's 2.1 acres in land can  
11 share the costs, and now you want to ask what about that?

12 MR. WHITE: I wanted to ask whether this was included  
13 within his unadjudicated totals on HS-5, Your Honor.

14 THE SPECIAL MASTER: In other words, is the 2.1 acres  
15 a part of the 179 acres -- or rather a part of the --

16 MR. WHITE: The easiest thing to do is ask him what  
17 it is, Your Honor. I was anticipating that it was part  
18 of the unadjudicated lands, but -- so maybe I can just  
19 ask him what it is.

20 A I believe it is part of the unadjudicated lands. It's  
21 adjacent to one of these pieces (indicating), to one  
22 of these 14, 4-X, 5-X, and 6-X.

23 Q So part of the cost -- I'm sorry. I didn't mean to inter-  
24 rupt you.

25 stetson - cross - white



1 A I have to check that against one of the maps.

2 All right. It's adjacent to 14-5-X because we are  
3 improving that whole system through there to serve the  
4 three parcels of Type VII, and the other is adjacent to  
5 it. It's getting benefit from the system, so we used it as  
6 additional acreage to share the cost.

7 Q Was that a common practice in developing costs for the  
8 Type VII lands, to allocate some portion of their crops  
9 to unadjudicated lands that were nearby?

10 A It was done in some instances, in not very many, but it  
11 was done in some instances.

12 Q Didn't you tell me this morning that you had already  
13 assumed that the unadjudicated lands were receiving irri-  
14 gation water and, therefore, you made no determination  
15 of the ditches required and the points of diversion re-  
16 quired to serve those lands?

17 A That's right.

18 Q On the bottom of page 11 --

19 THE SPECIAL MASTER: On HS-12?

20 MR. WHITE: Yes, sir. I'm still on 12.

21 Q (By Mr. White) Do you find page 11?

22 A I found it in your exhibit. I'm trying to find it in  
23 mine.

24 Q My copy --

25 stetson - cross - white





1 A -- I'll have it here in a minute.

2 Yeah, I have it.

3 My eyes just aren't as good as they used to be, and  
4 I like to look at mine because I can read it a little  
5 better.

6 Q At the bottom of page 11 does it indicate the cost of these fields  
7 are shared with 600 acres of adjudicated lands?

8 A Yes, insofar as repair and maintenance cost is concerned.

9 Q Are these sharing of costs with adjacent lands, either  
10 adjudicated or unadjudicated, the only instance where you  
11 developed any costs associated with the adjudicated and  
12 unadjudicated type lands that you have been discussing?

13 A That's right, and we haven't told them about it either.

14 But they are all trust lands.

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- 1 Q. Is there a parcel like 14-7X on page 20 of HS-12?
- 2 A. Page 20?
- 3 Q. Page 20, yes.
- 4 A. Yes, I'm on that page.
- 5 Q. Why would you determine if there were zero costs for
- 6 headworks, turnouts, and things like that?
- 7 A. Because there is already an existing facility that can be
- 8 used and we would simply extend the head that is off that
- 9 facility.
- 10 Q. How did you make a determination in general whether or not
- 11 drains would be required?
- 12 A. Drainage?
- 13 Q. Whether drainage would be required on any given field?
- 14 A. We had some indications from Mr. Waples on the arable
- 15 land classifications on twelve thousand and some odd acres.
- 16 We found that generally those were inside the existing
- 17 FIPs, where this was generally surrounded by other
- 18 irrigation activity, and that is where drainage would be
- 19 required. So, that is where we provide drainage.
- 20 Q. What was the tip off in the information Mr. Waples gave
- 21 you? Did he give you a sheet saying this particular
- 22 tract needed drainage?
- 23 THE SPECIAL MASTER: I will not permit that, Mr. White.
- 24 I don't want any more sheets in your cross-examination. I
- 25 stetson - cross - white



1 believe your questions over the last hour have been far  
2 beyond what the law permits and allows in asking questions  
3 regarding the sufficiency of his competence or the  
4 accuracy of the work missed or anything else which you  
5 have a right to inquire into. I will not require this  
6 witness to produce another document in your cross-  
7 examination, Mr. White. And that is an order.

8 Furthermore, it is within fifteen minutes of the time  
9 to end cross-examination anyway.

10 MR. WHITE: Is Your Honor saying I have to finish  
11 cross-examination by noon?

12 THE SPECIAL MASTER: No, but I was trying to hold  
13 you to your -- not your assurance, your hope of yesterday  
14 or the day before you might get it done by then. That is  
15 why.

16 MR. WHITE: I think I am within an hour of finishing.

17 THE SPECIAL MASTER: You need an hour after lunch  
18 to wind it up, fine, but it's just I think you are on --  
19 in other words, I sense it from your questions -- the  
20 tail end.

21 MR. WHITE: I am within an hour or two of being done,  
22 Your Honor, yes.

23 THE SPECIAL MASTER: Do you want to take a break,  
24 since we have interrupted the testimony now, for lunch?

25 stetson - cross - white



1 It is fifteen to twelve. I will do that and I will ask  
2 you to use from 1:30 until 3:00 to wind up your cross-  
3 examination and gauge your own questions accordingly.

4 MR. WHITE: Can I finish this drainage question area  
5 while I've got my mind on it?

6 THE SPECIAL MASTER: I will let you. I marvel at  
7 the way you seem to get my cooperation on almost everything  
8 and I am unable to do that with you.

9 MR. WHITE: I am willing to stop, if you want.

10 THE SPECIAL MASTER: Go right ahead and finish the  
11 drainage matter.

12 -Q. (By Mr. White) What was the information that you received  
13 from Mr. Waples which would indicate that there was a  
14 drainage problem on a particular parcel?

15 A. It would be indications that some parcels had a high water  
16 table. He gave us depth to barrier and conductivity,  
17 hydrologic conductivity, on certain parcels, and there  
18 would be indications in some, for instance, of sodic  
19 soils due to a high water table, things like that.

20 We would look at those and then determine that, okay,  
21 these parcels should be provided with proper drainage. And  
22 then our people designed the adequate drainage to take care  
23 of that and put the costs in these calculations.

24 Q. Was that type of information contained on the aerial  
25 stetson - cross - white





1 photographs provided you by Mr. Waples, or was it in some  
2 other form?

3 A. It was contained on some blue line prints of maps.

4 Q. The same ones we were talking about this morning, what  
5 is HS-14, or was it some other?

6 A. No.

7 Q. Are they in evidence, do you know?

8 A. I don't know.

9 Q. Do you have them with you?

10 A. They are in this room.

11 Q. May I look at them, please?

12 THE SPECIAL MASTER: I would -- I will deny that.  
13 request.

14 MR. WHITE: Under the rules, Your Honor, I am entitled  
15 to look at things.

16 THE SPECIAL MASTER: You sure have and you have taken  
17 two days until now to look at them. Two full days of  
18 cross-examination with a microscopic examination of  
19 every facet of the evidence we have had, I think, is  
20 sufficient, Mr. White.

21 And I will -- otherwise we could go on ad nauseum,  
22 ad nauseum, with cross-examination and adding to the  
23 repetitious and burdensome facet of these proceedings.

24 MR. WHITE: I want to be clear. All I asking is  
25 stetson - cross - white



1 right now is to look at the information.

2 THE SPECIAL MASTER: And all I am ordering right now  
3 is you don't get a chance to look at those Waples documents  
4 to which this witness has referred. He has told you how  
5 he got this information and material and if you have a  
6 question about his professional opinion on drainage, you  
7 can prove it on your case.

8 Q. (By Mr. White) Mr. Stetson, did you rely on the  
9 information contained in those materials, those maps,  
10 furnished by Mr. Waples in arriving at the professional  
11 opinions and conclusions to which you have testified  
12 during your direct examination?

13 THE SPECIAL MASTER: I will object to that. Whether  
14 he relied on them is irrelevant because I have made my  
15 ruling and you are not about to get it.

16 MR. WHITE: Your Honor, I think I am entitled  
17 to make a record.

18 THE SPECIAL MASTER: You may be, and if you are,  
19 then I have erred, but I have ruled.

20 MR. WHITE: Okay. This is a good time to take a  
21 break.

22 THE SPECIAL MASTER: I'm glad you think it is.  
23 We will be in recess until 1:30.

24 (The trial was recessed from  
25 (11:50 a.m. until 1:30 p.m.)

stetson - cross - white

