

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF
THE STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

In Re: SRBA,)
) Subcase No. 63-3618
Case No. 39576.) (Lucky Peak Reservoir)
)
_____)

DEPOSITION OF MARY MELLEMA

Volume I

(Pages 1 through 126)

Law Offices of
Moffatt, Thomas, Barrett, Rock & Fields, Chartered
101 South Capitol Boulevard, 10th Floor
Boise, Idaho 83702

Wednesday, January 23, 2008
Beginning at 9:08 o'clock a.m.

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A P P E A R A N C E S

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A P P E A R A N C E S
(continued)

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I N D E X O F E X A M I N A T I O N

Deponent's Name Page Number

MARY MELLEMA

Examination by Ms. Martens 7

* * *

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I N D E X O F E X H I B I T S

(*PER STIPULATION OF ALL COUNSEL, EXHIBIT NOS. 1 THROUGH 16, INCLUSIVE, WERE RETAINED BY COUNSEL AT MOFFATT, THOMAS, BARRETT, ROCK & FIELDS, CHARTERED)

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* * *

Deposition of Mary Mellema (Volume I)

1 THIS DEPOSITION, VOLUME I, was taken on behalf
2 of Pioneer Irrigation District and Settlers Irrigation
3 District on Wednesday, the 23rd day of January 2008, at
4 the offices of Moffatt, Thomas, Barrett, Rock & Fields,
5 Chartered, 101 South Capitol Boulevard, 10th Floor,
6 Boise, Idaho 83702, before Lori A. Pulsifer, Court
7 Reporter and Notary Public within and for the State of
8 Idaho, to be used in an action pending in the District
9 Court of the Fifth Judicial District of the State of
10 Idaho, in and for the County of Twin Falls, said cause
11 being Subcase No. 63-3618 (Lucky Peak Reservoir) in said
12 court.

13 The following testimony was adduced, to wit:

14 * * *

15 (Exhibit Nos. 1 through 11, inclusive, were
16 marked for identification by the court reporter.)

17 * * *

18 MARY MELLEMA,

19 having been first duly sworn, testified as follows:

20 MS. MARTENS: Counsel, can we stipulate that
21 this deposition is being taken pursuant to Notice and
22 pursuant to the Idaho Rules of Civil Procedure?

23 MR. GEHLERT: Sure.

24 MR. ARRINGTON: Yes.

25 MS. MALMEN: Yes.

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1 MR. FARRIS: Yes.

2 MS. JORGENSEN: Yes.

3 MS. MARTENS: Thank you.

4

5 EXAMINATION

6 BY MS. MARTENS:

7 Q. Mary, can you state your full name, spelling
8 your last name for the record, please?

9 A. It's Mary Mellema, M-e-l-l-e-m-a.

10 Q. What is your business address?

11 A. 1150 North Curtis Avenue, Boise, 83706.

12 Q. Before we began today, your counsel indicated
13 to me that you intended to change a portion of your
14 affidavit that was submitted to the court in this
15 matter; is that correct?

16 A. Yes.

17 Q. I am going to hand to you what has been
18 premarked as Deposition Exhibit No. 2 and ask you if
19 that is the affidavit you are referring to.

20 A. Yes, it is.

21 Q. And what portion of this affidavit do you
22 intend to change?

23 A. I needed to add an additional year that I
24 missed in the initial calculations. 1974 needs to be
25 added.

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1 Q. And I assume you mean the chart that is
2 included as part of Paragraph No. 7?

3 A. It's Section 5.

4 Q. I apologize. The chart that follows Paragraph
5 No. 5?

6 A. Yes.

7 Q. And so I assume, between 1972 and 1975, you
8 intend to add 1974. Is there a corresponding amount of
9 space not filled in Anderson and Arrowrock?

10 A. Yes.

11 Q. And what is that amount?

12 A. 30,367 acre feet.

13 Q. And is there a corresponding percentage for the
14 amount of space in the accounting that filled for
15 Anderson and Arrowrock?

16 A. 100 percent.

17 Q. How was it that you came across this error?

18 A. I was double-checking numbers yesterday, and I
19 realized that I missed 1974.

20 Q. What were you referring to, with respect to
21 double-checking your numbers?

22 A. I went back and I checked the database, as far
23 as releases for flood control for the historical record
24 of the years on the Boise River; and I realized that
25 1974 had flood control releases and that the projects

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1 did not completely fill -- or the system did not
2 completely fill.

3 Q. Was that also the case in 1977?

4 A. No.

5 Q. And how about 1992?

6 A. No.

7 Q. And the documents that you refer to having
8 reviewed in noting this error -- did you bring those
9 documents with you today?

10 A. Yes.

11 Q. Thank you. I will hand you what has been
12 premarked as Deposition Exhibit No. 1 and ask you if you
13 have seen that document.

14 Just as a matter of housekeeping, you might
15 want to keep our official exhibits separate from your
16 files so that you do not leave today with one of them.
17 Thank you.

18 Have you seen that document before?

19 A. No.

20 Q. You did not receive or review a copy of your
21 Notice for today's deposition?

22 A. I may have. I don't remember.

23 Q. Have you ever had your deposition taken
24 before?

25 A. No.

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1 Q. Just so that the record that is being taken
2 down by our court reporter today is clear, all of your
3 responses need to be verbal, "yes" or "no," if
4 appropriate. The record cannot reflect nods of the
5 head, and "yea" and "nay" and so forth do not record
6 very well.

7 In addition, if you answer any of my questions,
8 I will assume that you understood those questions. So
9 if you do not understand any of my questions, please
10 feel free to stop me and ask me to rephrase so that you
11 do.

12 And then, finally, if you would like to take a
13 break, just please let me know. At any time, we can
14 take a break. We have already discussed that we will be
15 breaking from at least noon until 1:00 today, as well.

16 Do you have any questions about the process
17 before I move on?

18 A. No.

19 Q. I understand that you may not have seen the
20 Deposition Notice that we sent out in this matter. It
21 was sent out quite sometime ago; I believe, it was on
22 December 19th. It is a Duces Tecum Notice, meaning that
23 you were required to bring certain documents with you
24 today.

25 So I would like to go through the documents
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1 that were requested and make sure that you have brought
2 those documents with you today.

3 And if you follow along, it is noted on page 2
4 of the exhibit. You were to bring with you any and all
5 documents or records concerning the subject matter of
6 this litigation and/or the Lucky Peak project. Did you
7 bring those documents with you today?

8 MR. GEHLERT: I do note for the record an
9 objection to that request as overly broad. Any
10 documents relating to the Lucky Peak project would be a
11 warehouseful of Bureau of Reclamation documents. She
12 brought all of the documents she relied upon in coming
13 up with her opinion.

14 BY MS. MARTENS:

15 Q. So you did not bring with you any documents
16 other than what you relied upon for purposes of your
17 affidavit?

18 A. No.

19 Q. And there are documents that exist responsive
20 to this request that you did not bring with you today?

21 A. Yes. That I did not bring? I'm sorry.

22 Q. Correct.

23 A. Okay.

24 Q. And the extent of those documents -- where are
25 they maintained?

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1 A. In our offices. All of the documents for Lucky
2 Peak? Is that what you're saying?

3 Q. Yes.

4 A. I'm not sure.

5 Q. What about documents within your possession
6 that you did not bring with you today that relate to the
7 Lucky Peak project? Where are those maintained?

8 A. They are maintained in our office.

9 Q. Again, your office is located --

10 A. In the Regional Office of the Bureau of
11 Reclamation at 1150 North Curtis.

12 Q. Thank you. And then my understanding from your
13 counsel is that you did bring with you all documents or
14 records that you reviewed in conjunction with the
15 preparation of your affidavit?

16 A. Yes.

17 Q. Did you bring with you in hard copy format all
18 electronic documents and records?

19 A. No, because I don't believe that's really
20 possible.

21 MR. GEHLERT: You can mention that there is a
22 website.

23 THE WITNESS: I did put the website where this
24 data can be found that I referred to, to look at the
25 historic database for information that's included on

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1 this affidavit.

2 BY MS. MARTENS:

3 Q. And the website address is?

4 A. Do you want me to read it to you?

5 Q. Yes, please, and slowly so the court reporter
6 can accurately reflect it.

7 A. It's www.usbr.gov/pn/hydromet/index.html.

8 Q. If you look to page 3, the first full
9 paragraph, it references that a full response to this
10 document request should include, but not be limited to,
11 a search for documents recorded or available on computer
12 or electronic media of any type, as well as documents
13 available in hard copy, disk, electronic, and other
14 media.

15 Is there any other responsive document in
16 electronic or other media that you did not bring with
17 you today?

18 A. No.

19 Q. So going through the documents you did bring
20 with you today, if you could, hand them to me and
21 identify to me what you did bring with you today,
22 please.

23 A. I brought the Boise River Water Control Manual.

24 MR. GEHLERT: Mary, are we going to need to
25 have that copied?

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1 THE WITNESS: This whole thing?

2 MR. GEHLERT: I mean, that looks like a copy
3 you are going to need to take back with you.

4 THE WITNESS: Yes. I assumed this was
5 submitted already.

6 MS. MARTENS: We can go off the record for a
7 moment here.

8 (An off-the-record discussion was held.)

9 MS. MARTENS: Let's go back on the record. The
10 deponent is out of the room right now.

11 Counsel, can we stipulate that this deposition
12 can be continued beyond today's date, given the
13 discovery responses that we just received prior to close
14 of business yesterday, in addition to the failure of the
15 deponent to bring with her the records that we could
16 review for purposes of the deposition and that she
17 relied upon in her affidavit, which was directly
18 requested by the Notice itself?

19 MR. GEHLERT: She did bring all of the material
20 that she relied upon. I will just object, for the
21 record, that we will provide copies of the pages of the
22 book that she did not rely upon and you can review them.
23 If, after your review, you have questions to ask of her,
24 we can schedule something.

25 MS. MARTENS: Will you please hand me
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1 Deposition Exhibit No. 1 that she has over there,
2 please? Thank you.

3 The Duces Tecum specifically requests that she
4 bring with her all documents or records reviewed in
5 conjunction with the preparation of her affidavit. I
6 think what she has testified to is that she did not.

7 I think, in all fairness, given the incomplete
8 production, the option of a continuation of this
9 deposition is warranted. That is what I am requesting
10 be stipulated, that we be given the option to continue
11 the deposition.

12 MR. GEHLERT: I will give you that option. As
13 I said, you are welcome to review the material. I think
14 you will find that it will be irrelevant and not worthy
15 of follow-up questions. If you do have follow-up
16 questions, we will make her available.

17 MS. MARTENS: Thank you.

18 We can go back off the record.

19 (An off-the-record discussion was held.)

20 MR. CAMPBELL: Of course, under the Rules of
21 Civil Procedure, relevancy is not the determining factor
22 in whether or not material can be discovered.

23 MR. GEHLERT: Certainly. I understand that,
24 Scott. I use "relevance" in a loose sense, not a
25 strictly legal sense, in the sense that I believe that,

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1 after you review the material, you will decide it is not
2 worth asking questions about because it won't further
3 your case. But that's your decision to make.

4 Off the record for a second.

5 (An off-the-record discussion was held.)

6 MR. CAMPBELL: Back on the record. She made
7 reference to this website as being a source of
8 information that she relied upon?

9 MR. GEHLERT: Yes.

10 MR. CAMPBELL: That examination of the website
11 materials would also extend to that extension, from my
12 standpoint.

13 MR. GEHLERT: Fair enough. Again, with the
14 website -- she brought copies of web pages that she
15 relied on. If you examine the entire site and decide
16 that there is material you would like to ask questions
17 about, that is a fair request.

18 MR. CAMPBELL: Is that on the record?

19 THE COURT REPORTER: Yes, sir.

20 BY MS. MARTENS:

21 Q. So I believe, before that exchange, we were
22 going through the records that you did bring with you
23 today. The first record identified was the Water
24 Control Manual, and that has left the room for copying
25 right now. What else did you bring with you today

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1 responsive to the request?

2 A. I brought copies of the years that I looked at
3 from the water distribution of the Boise River District,
4 three books, the years that I looked at and the pages
5 that I looked at.

6 Q. Okay.

7 A. I brought three copies of that.

8 Q. Could you please hand those to me? Are these
9 copies that you intended to be distributed today?

10 A. Two of them, yes.

11 Q. I will be marking one of these as an exhibit,
12 and I am going to be looking at one of them.

13 A. Okay.

14 Q. Does that leave another copy that can be
15 distributed to the group for their review, or do you
16 want that for your counsel or for your own file?

17 A. I'm not quite sure what you are asking. I
18 would like to refer to it if you ask me questions about
19 it.

20 Q. The one that I am going to mark as an exhibit
21 will be available for you to review at all times.

22 A. Then you can use this to distribute, yes.

23 MS. MARTENS: You have handed to me a document
24 entitled "Report on Canal Deliveries from Boise River
25 and Different Features Affecting These Deliveries for

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1 the Irrigation Season of 1972."

2 I will ask that the reporter please mark this
3 as Deposition Exhibit 12.

4 (Exhibit No. 12 was marked for identification.)

5 THE WITNESS: That's just the top one. There
6 are multiple years in there.

7 BY MS. MARTENS:

8 Q. What other years?

9 A. 1972, 1974, 1975, 1976, 1978, 1989, 1993, and
10 1999.

11 Q. Is the information that is contained in the
12 exhibit that has been marked Deposition Exhibit No. 12
13 the same information that was attached to your affidavit
14 which is marked as Deposition Exhibit No. 2?

15 A. With the exception that I added 1974 to Exhibit
16 No. 12. That wasn't included in the additional -- the
17 original affidavit.

18 Q. Was it your intent and understanding that the
19 Water Control Manual was going to be attached to your
20 affidavit?

21 A. No.

22 Q. What else did you bring with you today?

23 A. I brought notes that I made while I was doing
24 the analysis, and these refer back to the web page and
25 the historic data on the Boise River.

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1 MS. MARTENS: I would ask that the court
2 reporter please mark this as the next deposition
3 exhibit, which I understand to be 13.

4 (Exhibit No. 13 was marked for identification.)

5 BY MS. MARTENS:

6 Q. What was the source of the printed information
7 on this document?

8 A. The source was our historic database -- at the
9 Bureau of Reclamation -- of discharges and storage on
10 the Lucky Peak -- on the Boise system.

11 MR. CAMPBELL: Excuse me. Do we have extra
12 copies of this document? We should probably make an
13 extra copy.

14 Let's go off the record.

15 (An off-the-record discussion was held.)

16 (Exhibit Nos. 14 and 15 were marked for
17 identification.)

18 BY MS. MARTENS:

19 Q. I am going to hand back to you the documents
20 that you provided to me from your files that have now
21 been marked as Deposition Exhibits 13, 14, and 15.
22 Referring, first, to Deposition Exhibit No. 13, can you
23 please identify this document for me?

24 MR. FARRIS: May I ask a question? Which one
25 is 14 and which one is 15?

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1 MS. MARTENS: Exhibit No. 13 does not contain
2 1974.

3 MR. GEHLERT: 14 does not.

4 MS. MARTENS: 14 does not contain 1974.

5 MR. GEHLERT: Just for the record, we will
6 submit a corrected affidavit to the court which will
7 include 1974.

8 MR. CAMPBELL: When will that occur, for the
9 record?

10 MR. GEHLERT: As soon as we can get it done.
11 By Friday. I mean, it won't come as a surprise to you.
12 She has already given you the content of the correction.
13 We will simply add 1974 to the table.

14 MR. CAMPBELL: As long as that is clear.

15 BY MS. MARTENS:

16 Q. So referring, now, to Deposition Exhibit No.
17 13, can you please identify for me what this document
18 is?

19 A. This is historic data from our historic
20 database. The "BIGI" at the top refers to "Boise River
21 at Glenwood Bridge Gauge." What it is is a ranking of
22 the maximum flow that occurred in those years at
23 Glenwood Bridge on the Boise River.

24 Q. The data that is printed on this document -- I
25 mean, not handwritten but the computer-generated

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1 printing, I suppose -- is that information that you have
2 produced for us today or is that information that is
3 available on the website or, potentially, neither?

4 A. It is available on the website.

5 Q. And that is the website that you provided to us
6 on the record earlier?

7 A. Yes.

8 Q. And it is written at the very bottom of the
9 document?

10 A. Yes.

11 Q. And if I were to search that website, where
12 would I find the first page of Deposition Exhibit No.
13 13?

14 A. It wouldn't look exactly like this, but you
15 would go to the Boise River and you would look at the
16 Glenwood Gauge. You would go to 1983, and you would
17 look for the maximum flow at Glenwood on the Boise River
18 for 1983. Then you would go to 1998 and do each year
19 individually.

20 Q. So how did you prepare this document to appear
21 the way that it does appear?

22 A. This document came from our internal database
23 computer system which has different displays than can
24 be -- the same data can be found both on the website and
25 in our database, but we have tools on our database that

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1 allow me to get a printout like this.

2 (A delivery of books was made to the witness.)

3 MR. CAMPBELL: Let's go off the record.

4 BY MS. MARTENS:

5 Q. Back on the record. Still referring to
6 Deposition Exhibit No. 13, you were describing for me,
7 before we went off the record, how you generated
8 Deposition Exhibit No. 13. Did you complete your
9 answer?

10 MR. GEHLERT: You can ask her to read it back.

11 THE WITNESS: Can you read it back?

12 (The previous question and answer were read
13 back by the court reporter.)

14 BY MS. MARTENS:

15 Q. What tool did you utilize to create the first
16 page of Deposition Exhibit No. 13?

17 A. It's a program called Check.

18 Q. Is Check software?

19 A. Yes.

20 Q. What is the purpose of utilization of the Check
21 software?

22 A. The Check software allows us to get a quick
23 summarization of data from the database.

24 Q. And what type of summarization did you utilize
25 the software for with respect to page 1 of Deposition

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1 Exhibit 13?

2 A. I asked the Check program to give me the
3 maximum flow for all of the years that the Glenwood
4 Gauge was there and the minimums and asked it to rank
5 it, meaning the greatest flow was at the top and the
6 least flow was at the bottom of the page.

7 Q. And why did you request such a summary?

8 A. This summary allows me to determine how high
9 the Boise River was each year, what the maximum flow
10 was, the daily maximum flow each year that the river
11 gauge was there.

12 Q. And why did you deem that to be important
13 information in this case?

14 A. This is important because we are trying to
15 determine which years flood control releases were made
16 on the Boise River. The way to find that out is to look
17 at what kind of flows were historically on the Boise
18 River.

19 Q. So if I look at the listing that is below the
20 computer-generated area, it states, "Years to look at."
21 There is a list of years. Is that your handwriting?

22 A. Yes, it is.

23 Q. And why did you list those particular years?

24 A. Those years were listed because I determined,
25 from the first two sheets, that those were years where

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1 flood control releases were made on the Boise River.

2 On the third sheet, it shows what the maximum
3 storage was on the whole system. The years to look at
4 were the years that I determined that there were flood
5 control releases made and the Boise River system storage
6 was not filled completely.

7 Q. Why did you circle the years that -- let me ask
8 you: Did you then circle the years 1972, 1975, 1993,
9 1976, 1989, and 1978?

10 A. Yes.

11 Q. And why did you circle those years?

12 A. I don't remember.

13 Q. If I refer back to your affidavit which is
14 Deposition Exhibit No. 2, is it a coincidence that the
15 years that are circled are the years that are included
16 within the exhibits to your affidavit?

17 A. Can you repeat that? Can you clarify that,
18 please?

19 Q. Yes. My understanding from your testimony is
20 that, while you did circle the years 1972, 1975, 1993,
21 1976, 1989, and 1978, you do not recall why you circled
22 those; is that correct?

23 A. Yes.

24 Q. Does it refresh your memory that those are also
25 the years reflected within the exhibits to your

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1 affidavit?

2 A. Except '99 is on the affidavit and that's not
3 circled here.

4 Q. But does it refresh your recollection in any
5 way?

6 A. No.

7 Q. Is it your handwriting next to '99 that says,
8 "Okay, filled"?

9 A. Yes.

10 Q. What is that meant to depict?

11 A. I can't remember.

12 Q. Should we read it to mean that you determined
13 that, in 1999, the reservoir filled?

14 A. I don't remember why I wrote that there.

15 Q. Referring back up, also, on page 1 of
16 Deposition Exhibit No. 13, is it your handwriting in the
17 column between the date and the maximum?

18 A. Yes.

19 Q. Do you recall what your handwriting is meant to
20 depict in that column, meaning the column that contains
21 your handwriting?

22 A. Yes.

23 Q. What is meant to be depicted in the handwritten
24 column?

25 A. Where the handwritten column says, "Filled," it
Deposition of Mary Mellema (Volume I)

1 means that the system, the Boise River system, filled
2 that year. Its maximum storage was above the full
3 storage.

4 Q. And what is full storage?

5 A. Full storage is -- since the year 2000, it's
6 949,000 acre feet, give or take a little bit. It's real
7 close to 949,000.

8 Q. And your testimony is that has been the case
9 since 2000?

10 A. 2000.

11 Q. What was full storage prior to 2000?

12 A. 974,000 acre feet, close to that.

13 Q. For what years was that deemed to be full?

14 A. From when the reservoirs were put in to 1999.

15 Q. And what year were the reservoirs, as I think
16 you testified, quote, "put in"?

17 A. Lucky Peak -- I'm not sure. 1954, I believe.

18 Q. So from 1954 to 1999, full storage was deemed
19 to be approximately 974,000 acre feet?

20 A. Yes.

21 Q. What precipitated the change between 1999 and
22 2000 as to what was deemed full storage?

23 A. Sediment surveys were taken on Anderson and
24 Arrowrock Reservoirs, and their storage had decreased
25 due to sedimentation.

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1 Q. And who performed those studies?

2 A. I believe they were performed by the Bureau of
3 Reclamation.

4 Q. Because we have not yet gone through your
5 education and employment history, which I promise we
6 will in the near future, just so I am clear, you were
7 not an employee of the Bureau of Reclamation in 2000; is
8 that correct?

9 A. That's correct.

10 Q. Back to the handwritten column on page 1 of
11 Deposition Exhibit No. 13 where it is indicated
12 "Filled," I believe it was your testimony that the Boise
13 River system was deemed full in those particular years;
14 correct?

15 A. Yes.

16 Q. What is meant by your handwriting which appears
17 next to June 8, 1986, which states, I believe -- you can
18 correct me if I am wrong -- 970.4?

19 A. 970.4 is referring to the third page. For
20 1986, the maximum storage for the system was 970,388
21 acre feet.

22 Q. Can you point on the third page where you are
23 referring?

24 A. (Witness complies.)

25 Q. So while in 1986 970.4 might not be deemed

Deposition of Mary Mellema (Volume I)

1 filled, it would have been deemed filled since 2000?

2 A. Yes.

3 Q. Is that true, also, of your depiction next to
4 March 25, 1999?

5 A. Yes.

6 Q. And what does your handwriting state next to
7 March 25, 1999, just to be clear?

8 A. It says 966.8.

9 Q. Referring down a couple of lines to May 23,
10 1993, what does your handwriting show?

11 A. 966.3.

12 Q. And I assume there is a corresponding figure
13 on page 3 of Deposition Exhibit No. 13?

14 A. Yes.

15 Q. And then, finally, April 23, 1989, 849.0;
16 correct?

17 A. Yes.

18 Q. And that also has a corresponding figure on
19 page 3?

20 A. Yes.

21 Q. And under either set of circumstances, whether
22 it be the amount deemed full from 1954 to 1999 or the
23 amount deemed full since 2000, on April 23, 1989, that
24 would not have been deemed full under either of the
25 benchmarks?

Deposition of Mary Mellema (Volume I)

1 A. Yes.

2 Q. Below your list of dates on Deposition Exhibit
3 No. 13, there is an indication -- or there is some
4 handwriting. Can you read that to me, please? Let me
5 ask you, first, if it is your handwriting?

6 A. Yes.

7 Q. And can you read that for me, please?

8 A. It says: Flow, 6,030; 5/1, 1976, took out of
9 LUC, which is Lucky Peak, to fill ARK, which is
10 Arrowrock. Amount between Arrowrock peak to fill,
11 281,880; 4,700 acre feet.

12 Q. What does that mean?

13 A. I can't remember.

14 Q. Do you remember where the data for your
15 statement can be found?

16 A. The data can be found on our database or on the
17 web page.

18 Q. Would that be data on your internal software,
19 or would it be data that is available on the web page?

20 A. Both.

21 Q. Would a user of the web page be able to utilize
22 your software to perform this same analysis?

23 A. The Check software is not available on the
24 Internet, on the website.

25 Q. So a user of the Internet would not be able to
Deposition of Mary Mellema (Volume I)

1 perform the same analysis that you did in order to
2 generate this particular document?

3 A. Could you clarify? Are you referring to --

4 Q. Yes. That is a good point. First, let me ask
5 the question, actually, as to both issues. Let's just,
6 at this point, refer to page 1 of Deposition Exhibit No.
7 13.

8 If we ignore your handwriting -- and I
9 understand that all of the writing on this document is
10 your handwriting; correct?

11 A. Yes.

12 Q. If we ignore all of your handwriting on page 1,
13 is the analysis that is depicted on this page an
14 analysis that can only be completed using internal
15 software?

16 A. Can you clarify this display? Can you clarify
17 that, please?

18 Q. The computer-generated, printed information on
19 Deposition Exhibit No. 13 is the result of a requested
20 analysis of your internal software; correct?

21 A. Yes.

22 Q. And that could not be completed by a user of
23 your web page, to your knowledge; correct?

24 A. No.

25 Q. Now, referring to the information that is in
Deposition of Mary Mellema (Volume I)

1 your handwriting and, most specifically, the line of
2 information just below the listed dates or the listed
3 years, that is also an analysis that could not be
4 completed by a user of your website without the
5 assistance of your internal software; is that correct?

6 A. No.

7 Q. So explain to me how you generated the
8 information that is contained in your handwriting on the
9 very first line below the list of years.

10 A. You would go to historical year number -- year
11 1976. You would call up Arrowrock's maximum storage,
12 and you would get that 281,880 acre feet.

13 Q. How would I get the information contained in
14 your narrative?

15 A. That information came from the Water Master
16 Book.

17 Q. And the Water Master Books are the hardbound
18 books that are currently being copied; is that
19 correct?

20 A. Correct. Yes.

21 Q. Where did you go in the Water Master Books to
22 complete your narrative on that line?

23 A. This Chart No. 10 in the Water Master Book for
24 1976.

25 Q. Perhaps we will return to this area of inquiry.

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1 How is that? Do you recall why you looked to that Water
2 Master Manual Chart No. 10?

3 A. I was examining the difference between what
4 full storage at Arrowrock would be and how full it got
5 in 1976 for maximum storage.

6 Q. Why were you looking specifically to Arrowrock
7 in 1976?

8 A. I don't remember.

9 Q. Do you remember it being a unique year for some
10 reason?

11 A. No.

12 Q. Moving on to the next line, "1978" is what I
13 believe it reads?

14 A. Yes.

15 Q. Is that 83,100 acre feet?

16 A. Yes.

17 Q. And what is that narrative or notation meant to
18 depict?

19 A. I don't remember.

20 Q. Do you know where the data was located?

21 A. No.

22 Q. Moving on to page 2 of Deposition Exhibit No.
23 13, ignoring for a moment the handwriting and the
24 underlining, what is this document?

25 A. This is the Boise River at Boise. This was the
Deposition of Mary Mellema (Volume I)

1 gauge that existed before the gauge at Glenwood Bridge
2 was put in, and it's the maximum discharges at that
3 gauge.

4 Q. Can you provide me, again, the definition of
5 "BIGI"?

6 A. That's the Boise River at Glenwood Bridge.

7 Q. And what year did you say that became
8 effective, for purposes of measurement?

9 A. I don't know exactly.

10 Q. You do not know what year?

11 A. I don't know what year that was put in.

12 Q. At the time that that method of measurement was
13 put in place, was the method of measurement depicted on
14 page 2 taken out of service?

15 A. Yes.

16 Q. Is there any reason to believe that it would
17 have been in service through 1983?

18 A. No.

19 Q. So what does the "begin year" and "end year"
20 mean on page 2 of Deposition Exhibit No. 13?

21 A. Those were the years I requested from the
22 database.

23 Q. Why did you request the years 1953 to 1983?

24 A. I knew that the gauge at BIGI had been there in
25 the early '80s and previous to that, and I was trying to

Deposition of Mary Mellema (Volume I)

1 cover the whole period to find out when that gauge was
2 there.

3 Q. Is there any period of time between pages 1 and
4 2 that there is no measurement?

5 A. It appears not.

6 Q. Did you specifically consider that issue?

7 A. Yes.

8 Q. And how did you confirm that there would be no
9 time period lacking?

10 A. Page 2 goes through 1982 and page 1 starts in
11 '83.

12 Q. So why do you think that the Boise River at
13 Glenwood Bridge Gauge was not put into place in 1983?

14 A. It was put in place.

15 Q. Then I apologize. I thought that you had
16 testified that you did not believe that to be the case.

17 A. I don't know.

18 Q. My error. I apologize.

19 A. Okay.

20 Q. Moving on, looking at page 2 again, it
21 indicates the process date of October 31, 2007. Did you
22 perform all of this analysis on that date?

23 A. I don't remember.

24 Q. Do you remember if you were performing this
25 analysis on that date?

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1 A. I don't remember.

2 Q. When were you first asked to become involved in
3 this case?

4 A. I don't remember the date.

5 Q. Do you remember the year?

6 A. 2007.

7 Q. Do you remember the month of the year?

8 A. No.

9 Q. Do you remember the quarter of the year?

10 A. The last quarter.

11 Q. Thanks. Looking again at page 2, there are
12 certain years underlined. Do you know why those years
13 are underlined?

14 A. No.

15 Q. But it is your writing?

16 A. Yes.

17 Q. Between the columns of "maximum" and "year,"
18 there is a handwritten column. Is that your
19 handwriting?

20 A. Yes.

21 Q. And what is meant by your entries within the
22 handwritten column?

23 A. "Filled" means a system filled; question marks
24 meant that I wasn't sure that Lucky Peak -- what the
25 full amount was in those years, I guess, for the system.

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1 The numeric entries are the maximum storage for those
2 years for the system.

3 Q. Again, during this entire time period, "filled"
4 meant 974,000 acre feet?

5 A. Yes.

6 Q. Again, is this data that would have only been
7 summarized in this fashion with the utilization of your
8 internal software package?

9 A. Yes.

10 Q. Turning to page 3 of Deposition Exhibit No. 13,
11 what is this document?

12 A. This is a listing of the historic maximum
13 storage for the Boise system -- Anderson, Arrowrock, and
14 Lucky Peak.

15 Q. And is the handwriting on the page your
16 handwriting?

17 A. Yes.

18 Q. Can you tell me why the entire first set of
19 columns in the year 2000 is underlined?

20 A. Everything below the year 2000 was less than
21 974,000 acre feet.

22 Q. Is it your handwriting next to July 8, 1997?

23 A. Yes.

24 Q. And what does "accounts full" mean?

25 A. That means that I went to the Water Master Book
Deposition of Mary Mellema (Volume I)

1 for 1997 to check whether accounts had been filled.

2 Q. And how did you determine whether or not
3 accounts had been filled?

4 A. I went to the charts and the Water Master Book
5 and looked at what the water accounts for "full" were
6 and checked in 1997 if those numbers matched.

7 Q. And did they?

8 A. Yes.

9 Q. And that was true, also, of 2006?

10 A. I don't know.

11 Q. Do you know what the term "full" next to "2006"
12 was meant to depict?

13 A. That meant that, in 2006, the reservoirs were
14 full at 949,000 acre feet.

15 Q. Is this also a summary that was created
16 utilizing your internal software package that is not
17 available on the website?

18 A. Yes.

19 MR. CAMPBELL: Let's go off the record for just
20 a moment.

21 (An off-the-record discussion was held.)

22 (Recess.)

23 BY MS. MARTENS:

24 Q. Back on the record. Ms. Mellema -- is that the
25 correct pronunciation?

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1 A. No.

2 Q. Can you correct me, please?

3 A. Mel-uh-muh (pronouncing).

4 Q. Mel-uh-muh (pronouncing). Thank you.

5 We have been going through some specifics on
6 some of the documents that you brought with you today;
7 but I am going to back up and cover with you some more
8 general areas, if we could.

9 First of all, can you describe for me your
10 education, beginning with graduation from high school?

11 A. I have a Bachelor's Degree from the University
12 of Minnesota in soil science, a Master's Degree from the
13 University of Minnesota in soil/water.

14 Q. And what year did you receive your Bachelor's
15 Degree?

16 A. '82, 1982.

17 Q. In what year did you receive your Advanced
18 Degree?

19 A. 1987.

20 Q. Were you employed full time between your
21 Bachelor's Degree and your Advanced Degree?

22 A. Yes.

23 Q. In what capacity?

24 A. I worked in a -- as a graduate -- let me
25 correct that. I worked as a lab assistant in a soil

Deposition of Mary Mellema (Volume I)

1 science lab.

2 Q. Any other employment during that time period?

3 A. No.

4 Q. Upon graduation in 1987, did you become
5 employed?

6 A. Yes.

7 Q. Where?

8 A. The National Weather Service River Forecast
9 Center in Minneapolis, Minnesota.

10 Q. And how long were you in that position?

11 A. About two years.

12 Q. What did that job entail?

13 A. That was a river forecasting job for the Upper
14 Mississippi Basin.

15 Q. And you left that position in what year?

16 A. 1991.

17 Q. And did your scope of duties with that position
18 change any while you were employed?

19 A. Excuse me. I left that job in 1989.

20 Q. During the term of that employment, did your
21 duties change in any significant way?

22 A. No.

23 Q. And in 1989, did you become employed again?

24 A. Yes.

25 Q. And where did you become employed?

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1 A. I worked for the National Weather Service in
2 Portland, Oregon, at the Northwest River Forecast
3 Center.

4 Q. And how long were you employed in that
5 position?

6 A. It was about two and a half years.

7 Q. So through '91 or '92?

8 A. Yes.

9 Q. And what were your duties in that job?

10 A. I was forecasting rivers for the Columbia River
11 Basin, including Idaho, Montana, Oregon, and Washington.

12 Q. Do you recall when you left that position?

13 A. I believe it was in 1991.

14 Q. Did your job duties change in any significant
15 way during that employ?

16 A. No.

17 Q. And in 1991, did you become employed --

18 A. Yes.

19 Q. -- in another capacity? With whom and where?

20 A. National Weather Service in Boise, Idaho. I
21 was a forecast hydrologist at the Weather Service here
22 in Boise.

23 Q. And that commenced in 1991?

24 A. Yes.

25 Q. Forgive me for my ignorance here, but it sounds

 Deposition of Mary Mellema (Volume I)

1 as if your title changed with that position change.

2 Were your duties significantly different in Boise than
3 they were in Portland?

4 A. Yes.

5 Q. And tell me about the differences.

6 A. In Portland, I ran the river forecast model and
7 issued forecasts for the whole Columbia Basin, basins
8 around the Columbia.

9 In Boise, I was the hydrologist for the Boise
10 Weather Office, which meant I issued flood warnings to
11 the public for the State of Idaho.

12 Q. Did it require any additional training to take
13 that position?

14 A. No.

15 Q. So it was all within your scope of knowledge in
16 1991?

17 A. Yes.

18 Q. And what brought you to Boise?

19 A. The job.

20 Q. Was it a promotion for you or was it --

21 A. It was a lateral.

22 Q. -- a lateral? So if I have reviewed your
23 affidavit correctly, you were in that position with the
24 National Weather Service in Boise from 1991 until 2001;
25 is that correct?

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1 A. Yes.

2 Q. Did your duties as a hydrologist with the
3 National Weather Service change in any significant way
4 between 1991 and 2001?

5 A. No.

6 Q. So in 2001, if I am reading your affidavit
7 correctly, you became a hydrologist with the River and
8 Reservoir Operations Group of the Pacific Northwest
9 Regional Office of the Bureau of Reclamation?

10 A. Yes.

11 Q. And why did you make that job change?

12 A. I decided it was time to try something else.

13 Q. Was this position created for you?

14 A. No.

15 Q. Was somebody vacating the position?

16 A. The position was not created for me.

17 Q. Who was the person who performed your job
18 duties prior to 2001 when you took the position?

19 A. I'm not sure.

20 Q. You also indicate that you are the Regional
21 Boise River Operations Contact. What does that mean?

22 A. In the regional office, we have a group of
23 three people who operate the reservoirs or are in
24 operation of the reservoirs of the whole Pacific
25 Northwest. We split up the basins, and one of the

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1 basins that I'm assigned to is the Boise River Basin.

2 Q. What other basins are you assigned to?

3 A. I have the Owyhee Basin, the Tualatin Basin in
4 Oregon. I assist with Hungry Horse Basin in Montana;
5 and the Upper Snake Basin I assist with, as well.

6 Q. And all of those basins are operated through
7 the Boise office?

8 A. The regional office only operates a couple of
9 them. We have field offices or regional offices -- not
10 regional. We have field offices that may operate some
11 of the reservoirs, as well. We don't directly operate
12 all of the reservoirs.

13 Q. Is there any personnel involved in the Bureau
14 of Reclamation's operation of the Boise River Basin
15 outside of your office?

16 A. Yes.

17 Q. And who are they?

18 A. For the Bureau of Reclamation, Brian Sauer is
19 in the -- it's not the field office -- the area
20 office -- excuse me -- the Boise area office.

21 Q. And where is that located?

22 A. It's in Boise, close to -- it's by Fort Boise
23 Rec Center.

24 Q. Understood. Any other personnel involved in
25 operations of the Boise River Basin that are not in the

Deposition of Mary Mellema (Volume I)

1 regional office with you?

2 A. No.

3 Q. What are your employment duties and
4 responsibilities today? First, I guess, what is your
5 title today?

6 A. My title is "hydrologist."

7 Q. Has that changed at all since 2001?

8 A. No.

9 Q. Go ahead and, if you would, please, describe
10 your job duties.

11 A. I monitor in-flows into the reservoirs; I make
12 decisions regarding what kind of releases need to be
13 made for flood control; I monitor the snow pack in the
14 basins and assist with volume forecasting for the
15 basins; and I perform study projects that need to be
16 done regarding hydrology.

17 Q. Who is your supervisor?

18 A. Pat McGrane.

19 Q. How do you spell the last name?

20 A. M-c-G-r-a-n-e.

21 Q. And what is Pat McGrane's job title?

22 A. I'm not sure.

23 Q. Can you describe for me the various studies of
24 reservoir operations that you conduct?

25 A. There are studies relating to how to best

Deposition of Mary Mellema (Volume I)

1 operate the reservoirs. We look at historic conditions
2 and snow packs and run models and look at ways to best
3 operate the reservoirs.

4 Q. Are there any particular guidelines that you
5 utilize for purposes of conducting those studies?

6 A. Could you clarify that?

7 Q. Are there manuals? Regulations? What do you
8 refer to as the basis for conducting the studies that
9 you conduct and the determinations that you make?

10 A. We use the Water Control Manual to determine
11 how to operate the reservoirs.

12 Q. Anything else?

13 A. No.

14 Q. You were not involved, were you, with the
15 adoption or enactment of any provision within the Water
16 Control Manual, were you?

17 A. No.

18 Q. You also indicate that you make realtime
19 decisions of reservoir operations of the federal
20 reservoirs in the Pacific Northwest Region. Can you
21 please describe that job duty?

22 A. It involves looking at, in realtime, today's
23 conditions on a reservoir and deciding how much water to
24 release.

25 Q. And do you have the authority to order such

Deposition of Mary Mellema (Volume I)

1 releases?

2 A. It depends on which reservoir.

3 Q. Do you have the authority to order such
4 releases from the Boise River Reservoirs?

5 A. No.

6 Q. Who has the authority with respect to those
7 reservoirs?

8 A. The Corps of Engineers for Lucky Peak and Brian
9 Sauer for the Reclamation Reservoirs of Arrowrock and
10 Anderson.

11 Q. Do you know the name of the person with such
12 authority with the Corps of Engineers?

13 A. Ed Kim.

14 Q. K-i-m?

15 A. Yes.

16 Q. Do you know where Mr. Kim's office is or his
17 business address?

18 A. It's in Walla Walla, Washington.

19 Q. You also indicate in your affidavit that you
20 are knowledgeable about reservoir operations of
21 Arrowrock, Anderson Ranch, and Lucky Peak. What is the
22 basis of that knowledge?

23 A. The basis is my experience at the Weather
24 Service and dealing with the Boise Basin and, also, my
25 experience at Reclamation.

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1 Q. Let's first refer back to your experience at
2 the National Weather Service. Can you describe for me
3 what knowledge you acquired in your experience at the
4 National Weather Service related to the reservoir
5 operations of Arrowrock, Anderson Ranch, and Lucky
6 Peak?

7 A. At the Weather Service, I monitored those
8 reservoir elevations. I monitored the snow pack and
9 run-off for the Boise Basin. I talked to Reclamation
10 folks when I worked at the Weather Service. I was
11 involved with the Weather Service volume forecast for
12 the Boise Basin. So that was some of my experience.

13 Q. With respect to the historic water supply
14 conditions that you have analyzed, how long have you
15 analyzed historic water supply conditions?

16 A. Could you clarify that?

17 Q. Sure. If you would, look at your affidavit,
18 Deposition Exhibit No. 2. I am referring specifically
19 to Paragraph 2.

20 We are talking about your knowledge about the
21 reservoir operations which you indicate is based upon
22 your experience which you have described as being both
23 with the Bureau and with the National Weather Service
24 and, you have been the operations contact since 2004.

25 Then you talk about your capacity. In that
Deposition of Mary Mellema (Volume I)

1 capacity, you have analyzed historic water supply
2 conditions in the Boise Basin. I am just curious how
3 long you have been analyzing historic water supply
4 conditions.

5 A. In both the position I have now and in my
6 previous position.

7 Q. So since 1991?

8 A. Yes.

9 Q. And what are the historic water supply
10 conditions that you have been analyzing?

11 A. We go back and look at the volume run-off that
12 occurred in the Boise Basin, look at snow pack
13 conditions, precipitation conditions, dryness of ground
14 conditions, soil conditions, and go back and re-analyze
15 how the water ran off with differing conditions in the
16 past.

17 Q. And where is that data maintained?

18 A. Some of it is at the Bureau of Reclamation, on
19 our computer system. Some of it comes from the Natural
20 Resources Conservation Service. Some of it comes from
21 the National Weather Service. Some comes from USGS.

22 Q. Is it internal data or publicly-available
23 data?

24 A. Publicly available.

25 Q. Is the data you are referring to regarding the
Deposition of Mary Mellema (Volume I)

1 Bureau of Reclamation also available at the website you
2 provided?

3 A. Yes.

4 Q. How far back do you go when you are referring
5 to historic water supply conditions?

6 A. We go back as far as we have data.

7 Q. How far back do you have data?

8 A. It depends on the data. Snow data -- some of
9 the automated data only goes back to the early '70s.
10 Precipitation data may go back to the 1920s.

11 Q. What about volume and flow?

12 A. I don't know exactly.

13 Q. You also speak to your development of
14 operational tools to plan realtime operations at each of
15 the reservoirs. What operational tools did you develop?

16 A. We have an operational spreadsheet in Excel
17 that calls in historic data. It calls in realtime data.
18 We can input the forecast into that spreadsheet and make
19 plans for what we need to release.

20 Q. And where are the forecasts developed?

21 A. The official forecasts are developed at the
22 National Weather Service.

23 Q. And do you know the individual who supplies
24 those forecasts to the Bureau?

25 A. No.

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1 Q. Do you know the individuals who generate and/or
2 approve those official forecasts?

3 A. An individual?

4 Q. Yes.

5 A. No.

6 Q. Just the National Weather Service?

7 A. Yes.

8 Q. Is it specific to the area or is it nationally
9 generated?

10 A. Area.

11 Q. Can you please describe for me -- I think I
12 interrupted you -- the operational tool that you
13 developed? I believe you started to say it was an Excel
14 spreadsheet where you enter in the forecast data that is
15 supplied to you. What else is included within this
16 operational tool?

17 A. Rule curves are included.

18 Q. Where are the rule curves generated?

19 A. They come from the Water Control Manual.

20 MS. MARTENS: We do not have the Water Control
21 Manual yet, do we?

22 MR. CAMPBELL: No.

23 BY MS. MARTENS:

24 Q. Any other data that goes within this
25 operational tool that you create?

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1 A. No.

2 Q. So it is forecast data and rule curves?

3 A. And historic data and realtime data.

4 Q. And how far back -- within this operational
5 tool, how historic, I guess, is the data that is within
6 the operational tool?

7 A. You can call data in for as far back as you
8 want, as far back as there's data available. There's no
9 limitation.

10 Q. So when you are performing this analysis,
11 though, what data do you utilize?

12 A. I utilize maybe the last five days' worth of
13 data, look at the trend, pull in the current forecast
14 from the National Weather Service, look at the volume
15 forecast, pull in the snow data for the last five days,
16 and perform the analysis.

17 Q. What criteria do you utilize for planning the
18 realtime operations of each of the reservoirs?

19 A. We use the Water Control Manual rule curves.

20 Q. Any other criteria?

21 A. Current conditions, what's happening in the
22 Basin.

23 Q. Any other criteria?

24 A. What the data is telling us, what the current
25 data is, what time of year it is.

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1 Q. How is the time of year utilized as a criteria?

2 A. The rule curves change based on the time of
3 year. In January, you have a certain amount of space
4 that's required in the system, versus May; and those are
5 different.

6 Q. So what is the end result of the analysis
7 utilizing the operational tools?

8 A. It's to help plan what kind of releases need to
9 be made from the reservoirs.

10 Q. And how far in advance is the analysis
11 performed?

12 A. It depends on conditions.

13 Q. Who makes the ultimate decision?

14 A. Could you clarify that?

15 Q. I understand that the operational tools to plan
16 realtime operations of each of the reservoirs are
17 conducted in order to plan releases; correct?

18 A. Correct.

19 Q. And I assume that somebody utilizes these plans
20 that are generated through your operational tools to
21 ultimately order releases; is that correct?

22 A. Yes.

23 Q. Who utilizes that data to make those
24 decisions?

25 A. During the flood control season, which is the
Deposition of Mary Mellema (Volume I)

1 spring season, it would be the Corps of Engineers,
2 myself, and the area office.

3 Q. So if I have my names correct here, it would be
4 a joint decision of Brian Sauer, Ed Kim, and yourself?

5 A. Yes.

6 Q. And that is during the spring season?

7 A. During flood control season.

8 Q. So flood control season is defined as what?

9 A. January through July, approximately. It could
10 vary from year to year.

11 Q. And what causes it to vary?

12 A. The conditions of the Basin, how much snow.

13 Q. So if we assume excess snow pack or very high
14 snow pack, the flood control season is lengthier?

15 A. Yes.

16 Q. And who makes the determination as to when the
17 flood control season is over in a particular year?

18 A. Could you clarify that?

19 Q. I have asked you to define the flood control
20 season; and you have indicated that it is from January
21 to July, approximately, depending on conditions. I
22 think I asked you what conditions, and you told me snow
23 pack.

24 So my next question is: Who makes the
25 determination as to the date that the flood control

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1 season is over?

2 A. The three of us -- the Corps of Engineers,
3 myself, and the area office of Reclamation.

4 Q. Is there any kind of official notice provided
5 that the flood control season is now over or the date
6 you anticipate the flood control season will be over?

7 A. No.

8 Q. Let me ask you this: Prior to 2001, were you
9 ever involved in determining the flood control season?

10 A. No.

11 Q. So since 2001, what is the latest date that the
12 flood control season extended to?

13 A. Probably mid June to early July.

14 Q. And what is the earliest date within those
15 seventeen years that the flood control season ended?

16 A. Sometimes we don't even have flood control --
17 flood control issues.

18 Q. What is the last year that you had flood
19 control issues?

20 A. 2006 we were releasing water for flood control.
21 We examine it every year, but that was the last year we
22 had flood control releases.

23 Q. The reason we started down this path on the
24 definition of "flood control season" was your testimony
25 that, during the flood control season, releases are

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1 ordered or determined by you, Mr. Kim of the Corps of
2 Engineers, and Brian Sauer.

3 If it is not flood control season, who makes
4 the determination with respect to ordering releases?

5 A. Releases from Lucky Peak are determined by the
6 Water Master.

7 Q. Who is?

8 A. It was Lee Cisco, but I understand he retired.

9 Q. And you do not know who the replacement is?

10 A. No.

11 Q. Prior to his retirement, did Lee Cisco review
12 and analyze your operational tools which determine --
13 well, let me phrase it so that it is accurate with your
14 affidavit.

15 Prior to his retirement, did Lee Cisco analyze
16 the operational tool data utilized to plan realtime
17 operations of the reservoirs in order to make his
18 determinations regarding releases from Lucky Peak?

19 A. No.

20 Q. Is there any other person who had authority
21 with respect to releases that did review that
22 information or that does review that information outside
23 of the flood control season?

24 A. I don't know.

25 Q. So are there some entire years that the data

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1 that is generated through the operational tools are not
2 utilized for purposes of releases?

3 A. No.

4 Q. So I suppose I am missing something here.
5 During flood control season, you, Ed Kim, and Brian
6 Sauer analyze the data generated from the operational
7 tools to make determinations regarding releases from
8 Lucky Peak; correct?

9 A. Yes.

10 Q. And sometimes there is no flood control season
11 within a year; correct?

12 A. Yes.

13 Q. In 2007 there was no flood control season;
14 correct?

15 A. Yes.

16 Q. Utilizing 2007 as an example, who utilized the
17 operational tools for purposes of releases from Lucky
18 Peak?

19 A. Myself, Ed Kim, and Brian Sauer.

20 Q. And during what time period?

21 A. During the spring, the January-through-July
22 period.

23 Q. But you didn't utilize the data to order any
24 releases?

25 A. No. You said, "didn't"?

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1 Q. Correct.

2 A. We did use it.

3 Q. Maybe it is easier if I just ask you again.

4 A. I got a double-negative.

5 Q. My question was poor. Let me ask you to
6 explain how the operational tools are used in years when
7 there is no flood control season.

8 A. We use the spreadsheet, the operational tool,
9 to determine what the proper releases would be, to
10 determine whether we need to make flood control releases
11 or not.

12 Q. And what are the parameters of that decision?

13 A. The Water Control Manual determines that.

14 Q. And what does the Water Control Manual -- we
15 don't have it here. Can you tell me what the Water
16 Control Manual requires you to decide?

17 A. If there is a lot of snow in the volume
18 forecast and the expected run-off of the Basin is at a
19 certain level for the springtime, it requires a certain
20 amount of space required in the reservoirs.

21 If the volume of water is very low and it's a
22 dry year, we already may have that space in the
23 reservoirs; and additional releases are not required to
24 make space.

25 Q. Have you made that determination for 2008?

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1 A. We have looked at our January forecast and have
2 looked at whether flood control releases would be
3 required. Yes, we have looked at that.

4 Q. Have you made a determination?

5 A. Yes.

6 Q. And what determination have you made?

7 A. That we don't need to start releasing water in
8 January.

9 Q. Are you in a flood control season?

10 A. It's too soon to say.

11 Q. In the year 2007, were there any releases
12 ordered by any other party other than Lee Cisco?

13 A. I don't know.

14 Q. Did the Bureau of Reclamation order any
15 releases in 2007?

16 A. From Lucky Peak or the other reservoirs?

17 Q. We are still on Lucky Peak. I apologize.

18 A. Could you repeat your question, please?

19 Q. Yes. During the calendar year of 2007, were
20 there any releases from Lucky Peak ordered by any party
21 other than Lee Cisco?

22 A. I don't know.

23 Q. Were there any releases from Lucky Peak ordered
24 by you or any other person from the Bureau of
25 Reclamation and/or the Army Corps of Engineers?

 Deposition of Mary Mellema (Volume I)

1 A. I don't know.

2 Q. Would that be something that you would be
3 required to know for purposes of the analysis that you
4 have discussed?

5 A. No.

6 Q. Can you explain that to me?

7 A. They could request releases. Ed Kim could
8 request releases for a Corps maintenance job or Lucky
9 Peak's valves. Someone at Lucky Peak Dam could request
10 a special release for a drowning downstream, perhaps. I
11 wouldn't know about those things.

12 Q. So it would not be required data within your
13 operational tools?

14 A. Those would be one-time requests. No.

15 Q. All right. So if my understanding is correct,
16 the only parties that order releases from Lucky Peak
17 Reservoir at any time are you, Ed Kim, and Brian Sauer
18 during a flood control season, if one is ever
19 declared -- or Lee Cisco?

20 MR. GEHLERT: I am going to object to the form
21 of that question. I don't think there has been
22 testimony about declaration of flood control seasons.

23 MS. MARTENS: Okay. I thought I had -- excuse
24 my language here -- beat that horse to death. Let's go
25 back to that.

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1 MR. GEHLERT: Can we have just a second?

2 MS. MARTENS: Sure. Go ahead.

3 (Recess.)

4 THE WITNESS: Can I clarify something?

5 MS. MARTENS: Let's go back on the record.

6 THE WITNESS: I think you are confused with
7 flood control season versus flood control releases.
8 Every year has a flood control season, January through
9 July.

10 BY MS. MARTENS:

11 Q. Let's just stop there because I do think that I
12 was confused. Did you not testify that there are
13 certain years where there is no flood control season?

14 A. Yes.

15 Q. Did you testify there are years where there is
16 no flood control season?

17 A. Yes. I think I used the term incorrectly.

18 Q. All right. So explain to me what is meant by
19 your use of the phrase "flood control season."

20 A. When I used the term "flood control season," I
21 was referring to years where we actually had to make
22 flood control releases.

23 But every year actually has a flood control
24 season. We determine, during that flood control season,
25 whether flood control releases need to be made or not,

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1 based upon the Basin conditions and the condition of the
2 storage in the reservoirs.

3 Q. Let's define the flood control season. When is
4 the flood control season?

5 A. It's approximately January through July.

6 Q. And who determines the length of the flood
7 control season?

8 A. Basin conditions determine the length of it.

9 Q. And the criteria within the Basin conditions
10 that are utilized to determine the flood control season
11 are what?

12 A. Amount of snow pack, condition in the Basin.

13 Q. Any other criteria other than snow pack?

14 A. Storage in the reservoirs, precipitation,
15 forecasted precipitation, dryness of ground, how much
16 run-off we expect.

17 Q. Who makes the determination as to what date the
18 flood control season ceases?

19 A. I don't think there's ever a time when we just
20 say, "Flood control season is over." The condition of
21 the Basin and the amount of run-off determine when a
22 flood control season is over. That is a decision that
23 is made, looking at conditions, by Ed Kim, myself, and
24 Brian Sauer.

25 Q. And who do you notify once you have made that

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1 decision?

2 A. I don't know if we notify anybody.

3 Q. How does Lee Cisco know that he is now in
4 charge of releases?

5 A. Ed Kim gives him a call and says, "We are no
6 longer releasing water for flood control."

7 Q. So nobody else receives any notification of
8 that change?

9 A. I don't know.

10 Q. Not that you are aware of?

11 A. Correct.

12 Q. Now, other than Lee Cisco, at all times other
13 other than the flood control season, and you, Ed Kim,
14 and Brian Sauer during flood control season, is there
15 any other person who can order releases from Lucky Peak
16 Reservoir?

17 A. Yes.

18 Q. And who is that?

19 A. Corps of Engineers employees that are higher up
20 than Ed Kim.

21 Q. And during what time period are those releases
22 ordered?

23 A. That could be any time.

24 Q. And who are the individuals above Ed Kim that
25 make those orders?

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1 A. These would only be special situations. It
2 would be John Heitsuman.

3 Q. Can you spell his last name?

4 A. I'm not sure I can.

5 Q. Can you give me maybe a phonetic spelling of
6 it?

7 A. H-e-i-t-s-t-u-m-a-n, something like that.

8 Q. And who else, if anyone?

9 A. There would be others.

10 Q. Do they notify you of their orders for
11 releases?

12 A. It depends on the situation.

13 Q. In what situation would you receive notice?

14 A. If they knew that we were in the middle of a
15 flood control release and something happened where a
16 valve was malfunctioning or something like that, they
17 would definitely let us know -- something that would
18 limit our ability to change releases or something like
19 that.

20 Q. Is it fair to say that you would be notified
21 during the flood control season?

22 A. Yes.

23 Q. And that you would not be notified outside of
24 flood control season?

25 A. Probably not.

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1 Q. Again, we talked about this earlier; but these
2 special releases for maintenance and other
3 considerations are not data required to be included in
4 your operational tools to plan realtime operations?

5 A. Yes.

6 Q. It is not important information for that
7 tool -- or not required data for that tool?

8 A. In a non-flood control season, it would not be.

9 Q. Do you take any action to monitor the
10 operations of the reservoir system outside of the flood
11 control season?

12 A. Yes.

13 Q. What do you do outside of the flood control
14 season?

15 A. We monitor releases. We --

16 Q. I don't mean to interrupt you, but I think it
17 is probably important that I stop you there. Maybe you
18 can help me with my confusion here.

19 On the one hand, you have testified that the
20 Corps of Engineers does not notify you of releases
21 outside of the flood control season; but it sounds like
22 one of your duties outside of the flood control season
23 is to monitor releases?

24 A. Yes.

25 Q. Do you know why that doesn't make sense to me?

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1 Can you explain?

2 A. They are not required to call us about a change
3 that wouldn't affect -- that would be a minor thing. We
4 monitor it because we need to know what's going on.

5 Q. So how are you able to monitor it if you are
6 not provided with notice of the release?

7 A. We monitor realtime data. When the release
8 happens, we see it.

9 Q. Do you ever inquire as to what the release is
10 for or who ordered the release?

11 A. Yes.

12 Q. Is that part of your monitoring?

13 A. Yes.

14 Q. And tell me how you accomplish that.

15 A. I would call the Dam, Lucky Peak, and ask
16 them.

17 Q. Who do you call for that information?

18 A. It's the person at the Dam that works for the
19 Corps of Engineers. I don't know the name because the
20 guy just retired.

21 Q. So back to Lucky Peak and utilization of your
22 operational tools to plan realtime operations of Lucky
23 Peak, my understanding is that tool is only utilized by
24 you, Ed Kim, and Brian Sauer during the flood control
25 season for purposes of releases from Lucky Peak; is that

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1 correct?

2 A. No.

3 Q. Explain to me when the operational tools
4 utilized to plan realtime operations of Lucky Peak is
5 utilized outside of the flood control season.

6 A. We use it to plan releases from Anderson and
7 Arrowrock, as well.

8 Q. I am sorry. I am limiting it to Lucky Peak
9 because that is where we started. I will go back
10 through this process for the other two reservoirs,
11 hopefully much more quickly.

12 With respect to Lucky Peak, is that the extent
13 of the use of the operational tool to plan realtime
14 operations of Lucky Peak?

15 A. Could you repeat the original question?

16 Q. I am looking at Paragraph 2 of your affidavit.
17 You indicate that you have developed operational tools
18 to plan realtime operations of Lucky Peak; correct? You
19 say, in your affidavit, "each of the reservoirs;" but we
20 are referring specifically to Lucky Peak now.

21 A. Yes.

22 Q. This whole line of inquiry has been about the
23 extent and scope of the use of that tool to plan
24 realtime operations.

25 My understanding from your testimony is that

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1 that operational tool was utilized only during flood
2 control season; and it is only utilized by you, Ed Kim,
3 and Brian Sauer during that time period. Is that
4 correct?

5 A. No.

6 Q. Explain to me who uses the operational tools
7 and the data generated by the operational tools and
8 when.

9 A. The operational tools may be used by my peers
10 in the office if I'm sick or gone. We use them
11 year-around, not just during flood control season. We
12 use them year-around to just monitor what is going on in
13 the Boise Basin.

14 Q. But monitoring is not the same as planning
15 realtime operations, is it?

16 A. No.

17 Q. So as far as using the tools to plan realtime
18 operations, that is only during flood control season?

19 A. No.

20 Q. Maybe I can just ask you to narratively explain
21 to me why -- I am sure it is obvious why I'm confused.
22 Maybe you can narrataively explain to me what I am
23 missing.

24 A. We may use it to plan, if we are required to
25 release water for other uses than flood control, to keep

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1 track of the water.

2 Q. So are you required to release from Lucky Peak
3 at times other than during the flood control season?

4 A. Yes.

5 Q. And for what purpose?

6 A. We may need to release water for flow
7 augmentation for salmon downstream.

8 Q. What are the criteria for release of water for
9 flow augmentation for salmon?

10 A. We are required to release a certain amount, a
11 certain volume of water, from the Boise system during --
12 usually, during the months of July and August.

13 Q. Who requires the release? I can rephrase that.

14 A. I can't address that.

15 Q. Who or what requires the release?

16 A. I can't address that. I don't know.

17 Q. So you are required to release water from Lucky
18 Peak in July and August for flow augmentation for
19 salmon, but you don't know on what basis?

20 A. It's required, from the Boise system, for the
21 Columbia Basin. It's part of the volume of water that's
22 required from Idaho. I don't know the details of that.

23 Q. Who orders the release?

24 A. Directly?

25 Q. Yes.

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1 A. Reclamation tells them how much water to
2 release -- tells Lee Cisco how much water to release for
3 flow augmentation.

4 Q. Who at Reclamation tells Lee Cisco what to
5 release?

6 A. We plan it, and Brian Sauer would make the
7 call.

8 Q. And what authority do you utilize for planning
9 the release?

10 A. I don't know the details of that.

11 Q. Who knows the details of that?

12 A. Pat McGrane, my supervisor, would know the
13 details.

14 Q. So you are not involved in that planning
15 process?

16 A. In the decision process.

17 Q. What do you utilize for purposes of planning?

18 A. As operators -- as an operator on the Boise
19 River, I am given -- I am given a volume of water that
20 needs to come out of the Boise River for flow
21 augmentation, and I plan how that water should come out.

22 Q. What criteria do you utilize for that planning
23 process?

24 A. The amount of water that is required.

25 Q. Which is?

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1 A. It depends on the year. Usually, it's around
2 41,000 acre feet.

3 Q. And what makes that volume differ from year to
4 year? What is the basis of the difference from year to
5 year?

6 A. It could be water supply conditions.

7 Q. What do you mean by "water supply conditions"?

8 A. How much water is in the snow pack, how much
9 volume we are expecting to come into the reservoirs.

10 Q. So back to your planning process --

11 MR. GEHLERT: Tara, if you have finished up
12 your questions on that line, can we stop for a second?
13 That beeping noise was my calendar reminding me that I
14 have got a status conference with a Special Master.

15 MR. CAMPBELL: Let's go off the record.

16 MS. MARTENS: We will go off the record.

17 (Recess.)

18 MS. MARTENS: Back on the record. Can you read
19 back the last question, please?

20 (The previous question and answer were read
21 back by the court reporter.)

22 BY MS. MARTENS:

23 Q. And my recollection is we were talking about
24 the planning process that you utilized for purposes of
25 flow augmentation for salmon in the months of July and

 Deposition of Mary Mellema (Volume I)

1 August. Explain to me the data that you utilized for
2 that planning process.

3 A. We look at the current in-flows into the
4 reservoir. We look at the storage of the reservoir. We
5 look at the downstream flow, the gauge at Glenwood
6 Bridge and the gauge down at Middleton.

7 We look at how much volume is required to come
8 out of the Boise system and plan out how that water
9 needs to come out of the reservoirs -- needs to be
10 released from the reservoirs to fulfill that volume
11 requirement.

12 Q. What is the volume requirement?

13 A. It's approximately 41,000 acre feet, usually;
14 but it depends upon the water supply conditions.

15 Q. What is the potential variance?

16 A. I don't know.

17 Q. You don't know the potential variance?

18 A. I'm not sure. Could you clarify that?

19 Q. Sure. You said it is usually 41,000, but it
20 depends -- that being the required volume. My question
21 is: What is the potential variance in the required
22 volume?

23 A. I don't know.

24 Q. So do you always plan to 41,000 acre feet?

25 A. Yes.

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1 Q. On what occasions has the acre feet that you
2 have planned to differed from 41,000?

3 A. When conditions are such in the Basin, in the
4 upper Snake Basin, where they were not able to fulfill
5 their volume requirements, there may be some shifting of
6 volumes to the Boise and change the amount of volume
7 that needs to come out of the Boise system for full
8 augmentation.

9 Q. So it would increase above the 41,000?

10 A. In that case, yes.

11 Q. Where does that come from? Where does that
12 water come from?

13 A. I don't know.

14 Q. Do you have an understanding of the priorities
15 of the water within Lucky Peak Reservoir?

16 A. No.

17 Q. Is a portion of the amount exceeding 41,000
18 potentially water under contract?

19 A. I don't know.

20 Q. It could be?

21 A. I don't know.

22 Q. How are you notified if the flow augmentation
23 exceeds 41,000 acre feet?

24 A. I am told by my supervisor what kind of volume
25 needs to come out of the Boise system.

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1 Q. Has your supervisor ever told you who required
2 the amount above 41,000?

3 A. Yes.

4 Q. And who is that?

5 A. It's not a person. It's conditions that
6 require that.

7 Q. So you perform the analysis to determine that
8 more than 41,000 acre feet is required?

9 A. No.

10 Q. So your supervisor performs the analysis to
11 determine that more than 41,000 acre feet is required?

12 A. No.

13 Q. Who supplies to you the data that more than
14 41,000 is required?

15 A. I don't know who makes that decision.

16 Q. Has your supervisor ever informed you of the
17 person responsible for making that determination?

18 A. No.

19 Q. When is that information provided to you?

20 A. Usually, by mid June.

21 Q. When are the releases commenced for the flow
22 augmentation?

23 A. It depends on the year. Sometimes it has to
24 occur in mid June, start in mid June, to get the water
25 out.

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1 Q. Have you ever performed any analysis regarding
2 the deficiencies in other basins necessitating the
3 increase above the 41,000 acre feet?

4 A. Yes.

5 Q. What data do you utilize for that analysis?

6 A. Storage -- storage -- how much reservoir
7 storage there is, expected in-flows, discharges, snow
8 pack data -- all of the usual hydrologic data.

9 Q. In what basins?

10 A. The Payette and the Upper Snake.

11 Q. And none of that data is present in any of the
12 information that we have collected today?

13 A. No.

14 Q. So the reason that we were discussing the flow
15 augmentation for Salmon, those necessary releases, was
16 based upon my question to you as to what times your
17 operational tools are utilized to plan realtime
18 operations for release of water from Lucky Peak at times
19 other than during the flood control season; correct?

20 A. Yes.

21 Q. Is there any other time, outside of the flood
22 control season, that your operational tools are utilized
23 to plan realtime operations of Lucky Peak Reservoir?

24 A. Our operational tool is used all of the time.
25 If there is anything unusual that comes up, we will use

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1 the operational tool. So it could be any time. I can't
2 say specifically.

3 Q. But who ultimately makes the determination
4 regarding the release?

5 A. We use it to monitor.

6 Q. All right. So for the release for flow
7 augmentation for salmon, that is done, it sounds like,
8 between mid June through August; correct? Is that the
9 relevant time frame?

10 A. Yes.

11 Q. Who orders that release?

12 A. I believe Brian Sauer lets Lee Cisco know.

13 Q. But you are not sure?

14 A. I'm not positive.

15 Q. Who performs the planning with respect to those
16 releases, other than you? And I mean the flow
17 augmentation releases.

18 A. Brian Sauer and, if I'm not available, the
19 other members of my group.

20 Q. The Water Master is not involved in any
21 capacity in the planning?

22 A. No.

23 Q. The Corps of Engineers is not involved in any
24 respect with the planning?

25 A. He may give an opinion but -- no.

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1 Q. What type of opinion would he give?

2 A. He would say, "Well, so you've got 40,000? It
3 sounds like about 300 a day?"

4 And we'll say, "Yeah."

5 That's his opinion. He'll say stuff off the
6 cuff, but he's not involved in the actual decision.

7 Q. Now, you testified that you have no
8 understanding of the priorities of the water in Lucky
9 Peak Reservoir. Do you know who does at the Bureau?

10 A. People in our contracting group.

11 Q. And who are those people?

12 A. Ryan Patterson is the head of it.

13 Q. And where is Ryan Patterson's office?

14 A. It's in the regional office.

15 Q. Where is the regional office?

16 A. 1150 North Curtis.

17 Q. North Curtis. Thank you. With respect to
18 utilization of your operational tools to plan realtime
19 operations of the other reservoirs that are at issue in
20 this case, meaning Arrowrock and Anderson, how are your
21 tools utilized in any different ways with respect to
22 those reservoirs?

23 A. We use the operational tool to help us decide
24 where the water needs to be to provide -- where it needs
25 to be to provide the flow downstream. So we use it to

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1 help determine what we need to release Arrowrock and
2 Anderson.

3 Q. What criteria do you use for that planning
4 process?

5 A. Well, if Anderson is going to fill, we will
6 move water out of it to make sure we've got space. So
7 we will look at water supply conditions upstream of
8 Anderson.

9 We will look at water supply conditions for
10 upstream of Arrowrock, as well, and determine if they
11 are going to -- if it's going to fill too early. We use
12 that to determine when to release and how much to
13 release from those reservoirs, down to the lower
14 system.

15 Q. Is there any specific criteria you utilize?

16 A. We follow the flood control rule curves and
17 Water Control Manual and the flooding in a high water
18 year.

19 Q. Any other regulations, manuals, other
20 information that you utilize to determine those
21 operations?

22 A. We are just dealing with the water. So we use
23 the Water Control Manual to make sure we have a balance
24 in the reservoirs to hold the expected run-off. So, no,
25 I guess.

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1 Q. So your only concern is with respect to flood
2 control operations?

3 A. No.

4 Q. Explain to me, then, the criteria other than
5 the flood control operations.

6 A. We try to fill the reservoirs as full as
7 possible with the water supply conditions that exist
8 that year.

9 Q. Are you aware of any promises or
10 representations, even contractual obligations, made to
11 any irrigation entities?

12 A. No.

13 Q. No?

14 A. No.

15 Q. Have you ever considered any criteria within
16 contractual obligations or other promises or guarantees
17 made to irrigation districts with respect to your
18 planning or operational tools?

19 A. No.

20 MR. FARRIS: It's 11:55.

21 MS. MARTENS: We will go ahead and break for
22 lunch.

23 (Lunch recess.)

24 MS. MARTENS: Back on the record. I think that
25 we, at least, have the Water Control Manual now copied.

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1 So I would like to mark one of the copies of the Water
2 Control Manual as Deposition Exhibit No. 16, please.

3 (Exhibit No. 16 was marked for identification.)

4 BY MS. MARTENS:

5 Q. Before we broke for the lunch break, you were
6 discussing with me an Excel spreadsheet. Do you recall
7 that discussion?

8 A. Yes.

9 Q. And the Excel spreadsheet relates to the
10 reference in your affidavit to the operational tools
11 that you utilized for realtime planning of operations of
12 the reservoir; correct?

13 A. Yes.

14 Q. Have you produced that Excel spreadsheet?

15 A. I'm not sure what you mean by "produced."

16 Q. Did you bring a copy, either electronic or in
17 hard copy form, of that spreadsheet?

18 A. No.

19 Q. And do you maintain that spreadsheet at your
20 office here in Boise?

21 A. Yes.

22 Q. I think that probably the best thing to do at
23 this point would be to request that you do bring that
24 spreadsheet, either in electronic or hard copy format,
25 on the 30th when we reconvene because I think it clearly

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1 is contemplated by the Notice of Deposition Duces Tecum.

2 A. Okay.

3 MR. GEHLERT: I am not going to commit to
4 bringing it, but we will commit to either bringing it or
5 having an appropriate response.

6 BY MS. MARTENS:

7 Q. Explain to me the contents of the Excel
8 spreadsheet.

9 A. The Excel spreadsheet has, in columns, all of
10 the information on the Boise River. So it has columns
11 to pull in data, all of the data for the Boise.

12 So it will have a column for Anderson,
13 elevation and storage; Anderson, discharge; Arrowrock,
14 storage; Lucky Peak, storage and discharge; Boise River
15 at Glenwood Bridge, discharge; precipitation gauges;
16 snow-tail gauges.

17 It has all of those in columns. Then we hit a
18 button, and all of that date is updated from our
19 database into this spreadsheet.

20 Q. Do you maintain an annual or other record of
21 the Excel spreadsheet?

22 A. No.

23 Q. So the Excel spreadsheet is not saved with
24 respect to any one season in any location?

25 A. No.

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1 Q. Did you develop the Excel spreadsheet?

2 A. Yes.

3 Q. Did anybody else participate in the development
4 of the Excel spreadsheet?

5 A. Other members of my group had suggestions and
6 may have done little parts, but I developed it.

7 Q. When you say "my group," who are the
8 individuals within your group?

9 A. I'm part of the operations group which includes
10 Pat McGrane, my boss; Ted Day; and John Roache.

11 Q. Is there anybody else who would have
12 participated in the creation of the Excel spreadsheet?

13 A. No.

14 Q. Did anybody approve the Excel spreadsheet as an
15 operation tool consistent with the procedures of the
16 Bureau of Reclamation?

17 A. I don't remember.

18 Q. Did somebody request, as a task on your part,
19 to create this Excel spreadsheet?

20 A. No.

21 Q. You did that at your own, I guess,
22 initiation?

23 A. Yes.

24 Q. And why did you work to develop that tool?

25 A. I developed it because we needed a quick and

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1 easy way to look at all of the data in one place rather
2 than writing it all down in columns and keeping track of
3 it that way.

4 Q. When did you develop the Excel spreadsheet?

5 A. Initially, in 2001. There has been updates
6 since then.

7 Q. On what occasions did you update the
8 spreadsheet?

9 A. When I recognized or my fellow workers
10 recognized deficiencies, we would add things to it.

11 Q. What deficiencies were noted?

12 A. Oh, we forgot a snow-tail site. That's about
13 it.

14 Q. On how many occasions has that been modified?

15 A. I can't really say.

16 Q. More than once?

17 A. Yes.

18 Q. Has it been modified within the last year?

19 A. I'm not sure.

20 Q. Has it been reviewed in the last year by any
21 supervisor or other individual to determine whether or
22 not it is in compliance with Bureau of Reclamation
23 regulations, rules, Water Control Manual, or any other
24 document or regulation?

25 A. No.

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1 Q. Have you ever reviewed the tool to determine
2 whether it is in compliance with the Water Control
3 Manual?

4 A. Yes.

5 Q. And how did you approach that review?

6 A. Mostly, I was checking the flood control rule
7 curves to make sure that it was properly calculating
8 within the spreadsheet, based on what was in the Water
9 Control Manual.

10 Q. Did you refer to any other document or
11 regulation with respect to your review?

12 A. No.

13 Q. Did you determine whether or not your tool
14 adequately or in any way addresses the contractual
15 obligations of the Bureau of Reclamation?

16 A. Could you repeat that, please?

17 Q. Yes. Did you review your Excel spreadsheet to
18 determine whether or not it complies with any
19 contractual obligations of the Bureau of Reclamation?

20 A. No.

21 Q. So as far as you know, no individual has
22 reviewed the tool to determine whether or not it
23 complies with the Bureau of Reclamation contractual
24 obligations?

25 A. No.

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1 Q. Thank you. Paragraph No. 2 in your affidavit
2 that we were discussing before the break references
3 operational tools which you utilize in planning realtime
4 operations of each of the reservoirs. Is this Excel
5 spreadsheet the only tool, or are there operational
6 tools that you have developed?

7 A. In regards to the Boise, this is the only one.

8 Q. So in a sense, it would be more correct if the
9 affidavit were to read that you have developed "an
10 operational tool" to plan realtime operations of each of
11 the reservoirs; is that correct?

12 A. Yes.

13 Q. Now, you have discussed that you had developed
14 this tool in 2001. And that is the same year that you
15 commenced this particular job; is that correct?

16 A. Yes.

17 Q. So did you develop this tool immediately upon
18 taking your position?

19 A. Probably within six months.

20 Q. So prior to the utilization of this tool, did
21 you undertake any other types of planning for realtime
22 operations of the reservoirs?

23 A. I don't -- I can't remember.

24 Q. Moving on, then, in the affidavit, the next
25 sentence states that you have operated the Boise

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1 reservoirs during a variety of water supply conditions.

2 I wanted to address that sentence, as well. What do you
3 mean by having operated the Boise reservoirs?

4 A. Planning operations.

5 Q. So during what times of the year do you plan
6 operations for the Boise reservoirs?

7 A. Certainly, during the January through July
8 period and other times, as needed.

9 Q. But you are not suggesting that you are in the
10 authority position for operation of the Boise
11 reservoirs, are you?

12 A. Could you clarify what you are asking?

13 Q. When I asked you about explaining to me the
14 sentence in your affidavit within Paragraph 2 that
15 begins, "I have operated the Boise reservoirs," you
16 explained to me, I think -- I am not trying to put words
17 in your mouth, so you can correct me. Really, what you
18 mean there is you participated in planning operations of
19 the Boise reservoir; is that correct?

20 A. Yes.

21 Q. So you are not suggesting that you are in the
22 authority position of operating the Boise reservoirs?

23 A. I don't open the gates.

24 Q. And you don't issue the orders to do so?

25 A. No.

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1 Q. And the timing with which you participate in
2 the planning is during the flood control season;
3 correct?

4 A. No.

5 Q. Can you explain to me the times of the year
6 that you participate in planning operations for the
7 Boise reservoirs?

8 A. I also participate in planning during the flow
9 augmentation season which would be June and July and
10 perhaps other times, too, for special needs.

11 Q. And you state there that it is during a variety
12 of water supply conditions. What do you mean by "a
13 variety of water supply conditions"?

14 A. Below-normal water years, average water years,
15 and above-average water years.

16 Q. You also indicate that you have examined the
17 run-off patterns of the Basin. When do you examine the
18 run-off patterns of the Basin?

19 A. We look at -- historically, we look at how the
20 run-off occurred on the Basin in relation to the
21 weather, precipitation patterns, and how that governed
22 the shape of the run-off from the Basin.

23 Q. And how do you accomplish that examination?

24 A. We will pull historic data, look at what the
25 in-flows to the reservoirs were and historic climactic

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1 data, and we will look at how the reservoirs -- how the
2 storage in the reservoirs reacted and probably use some
3 kind of Excel spreadsheet to analyze it.

4 Q. And did you develop the Excel spreadsheets that
5 are utilized for examining those run-off patterns?

6 A. Well, normally, you just put it in an Excel
7 spreadsheet. I did not develop anything for that.

8 Q. Do you have an Excel spreadsheet at present in
9 your possession that you utilize for examining run-off
10 patterns?

11 A. No.

12 Q. What --

13 A. Not that I know of.

14 Q. What happened to those spreadsheets?

15 A. They may be in our files somewhere. I don't
16 know.

17 Q. What type of historical data do you analyze for
18 those purposes?

19 A. Run-off data, precipitation data, snow pack
20 data, storage data.

21 Q. From what date, moving forward?

22 A. It depends on what we're looking at. It could
23 be from the fall into -- through the summer. It just
24 depends.

25 Q. How do you define a low water year?

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1 A. There's really not a good definition for that.
2 Some people would say below average. I don't have a
3 good definition for a low water year. We usually try to
4 say much below average, but I don't know a specific
5 volume that that would be.

6 Q. What do you use for your working definition of
7 a low water year?

8 A. I would go and pull in all of the water years
9 that we have available and separate the water years and
10 look at the lowest one and maybe take the lowest ten
11 percent.

12 Q. Have you --

13 A. Perhaps -- that's just an example.

14 Q. Have you done that?

15 A. I don't remember recently doing that.

16 Q. Do you recall whether you ever have done that
17 since 2001?

18 A. On the Boise? I'm not sure.

19 Q. So back to the analysis of the historic water
20 supply conditions, as well as your statement that you
21 operated the Boise reservoirs during a variety of water
22 supply conditions, I think that we have discussed that
23 it is not your testimony that you operate the Boise
24 reservoirs but that you participate in planning related
25 to operations during a variety of water supply

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1 conditions.

2 But I thought that, when I asked you to explain
3 to me what you meant by "a variety of water supply
4 conditions," you meant low, average, and high water
5 years; is that correct?

6 A. That was a really long question. I'm not
7 really sure what you're asking.

8 Q. Then explain to me again what you mean by "a
9 variety of water supply conditions."

10 A. The range of water supply conditions that occur
11 on the Boise Basin, looking at low, average, and
12 above-average conditions.

13 Q. So that is when I had asked you to define for
14 me, then, "low water conditions." What is your
15 definition of "low water conditions"?

16 MR. GEHLERT: It's asked and answered. I'm
17 sorry. I will speak up. It's asked and answered.

18 MS. MARTENS: I don't mean to be difficult
19 here, but I think she answered that she doesn't know.
20 So I'm curious as to -- if there is a statement in the
21 affidavit -- if she doesn't know what it means for a low
22 water year --

23 MR. GEHLERT: I will allow her to answer. I
24 will note the objection.

25 THE WITNESS: What was the question?

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1 BY MS. MARTENS:

2 Q. I would like to know what your definition of
3 "low water condition" is.

4 A. I don't have a definite definition. It would
5 be in the lowest percentage of the water supply volumes
6 that have occurred on the Boise. In regards to these
7 studies, it would depend on what I was looking at.

8 Q. Do you have a numeric value?

9 A. No.

10 Q. You also indicated that the variety of water
11 supply conditions would also include an average water
12 condition. Do you have a definition for "average water
13 condition"?

14 A. "Average water condition" would be near the
15 average volume run-off, which would be a thirty-year
16 average volume run-off on the Boise.

17 Q. Have you calculated that numeric value?

18 A. Yes.

19 Q. And what is that numeric value?

20 A. I don't know it, offhand. I could look it up.

21 Q. And what data would you consider in order to
22 determine that value?

23 A. I would look at all of the historic run-off
24 values that we have for the Boise system and calculate
25 it from that.

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1 Q. And did you do so in this case?

2 A. In which case?

3 Q. In conjunction with the statements that you
4 make in Paragraph 2 of your affidavit?

5 A. At one time, yes.

6 Q. And do you recall when you performed that
7 calculation?

8 A. No.

9 Q. And you don't recall the result of the
10 calculation?

11 A. Not exactly.

12 Q. Given that you qualified your answer there, I
13 assume that maybe you do have --

14 A. I don't know.

15 Q. -- an estimate?

16 A. No.

17 Q. Do you know approximately what "average water
18 year" would be defined as?

19 A. No.

20 Q. And I assume that your answer is the same with
21 respect to "above-average water year" -- or
22 "above-average water condition"?

23 A. Yes.

24 Q. I apologize. Following up on that sentence,
25 you indicate that you have examined the run-off patterns

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1 of the Basin and how the reservoirs react. When did you
2 examine the run-off patterns of the Basin?

3 A. No specific time. Just from year to year, when
4 we need to do that.

5 Q. And what is the purpose for examining those
6 patterns?

7 A. We look at the run-off patterns to get an idea
8 of what we may be able to expect in the coming year.

9 Q. Expectations as to volume?

10 A. No.

11 Q. So what expectations are you attempting to
12 calculate when you examine run-off patterns?

13 A. The future run-off pattern.

14 Q. Then you indicate that you examine those
15 run-off patterns to determine how the reservoirs react.
16 What reservoir reaction are you referring to in that
17 paragraph?

18 A. The rate of fill.

19 Q. Anything else?

20 A. That's -- no.

21 Q. Just rate of fill?

22 MR. CAMPBELL: Was there an answer? I didn't
23 hear that.

24 THE WITNESS: I said, "No."

25 MR. CAMPBELL: So rate of fill is all?

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1 THE WITNESS: Yes.

2 MR. GEHLERT: Do you want to take a break?

3 THE WITNESS: Yes.

4 Can I take a break?

5 MS. MARTENS: Sure.

6 (Recess.)

7 BY MS. MARTENS:

8 Q. We are back on the record.

9 A. Can I clarify the shape of the run-off
10 patterns?

11 Q. Okay.

12 A. The rate of fill is all I can think of right
13 now.

14 Q. Is there something else that you have analyzed
15 with respect to how the reservoirs react related to
16 run-off patterns?

17 A. Not that I can think of right now.

18 Q. Specifically, with respect to your review of
19 this case, have you looked at any other reservoir
20 reaction?

21 A. No.

22 Q. I suppose I should ask you -- you seem sort of
23 confused as I am going through the statements that are
24 contained within your affidavit. Did you review this
25 affidavit before you signed it?

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1 A. Yes.

2 Q. I, of course, do not want to invade any
3 attorney-client privilege. I assume that you didn't
4 draft the affidavit?

5 A. Yes.

6 Q. "Yes," you did not draft it?

7 A. Yes.

8 Q. Moving on to Paragraph 3, you state that one of
9 your primary responsibilities is to provide analysis
10 regarding flood control operations for the
11 three-reservoir system. What are your other primary
12 responsibilities, other than providing such analysis?

13 A. I provide analysis on many other reservoirs, as
14 well.

15 Q. Any other responsibilities that you have that
16 you consider primary?

17 A. They are all primary. No.

18 Q. The analysis, you indicate, includes
19 forecasting and routing of run-off in the Boise Basin.
20 How do you define the forecasting included within that
21 analysis?

22 A. Forecasting is looking at the conditions -- the
23 snow pack conditions, the water conditions -- in the
24 Basin and forecasting the expected amount of volume of
25 run-off that will occur from those conditions.

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1 Q. And do you do that annually or weekly or
2 monthly? How often do you perform the forecasting?

3 A. I assist with the forecasting January through
4 June.

5 Q. And who do you assist?

6 A. Another member of my group.

7 Q. Who?

8 A. Ted Day.

9 Q. So Ted Day actually performs the forecasting
10 responsibilities, but you assist with that process?

11 A. He runs the model, and we look at results
12 together.

13 Q. And what model does he run?

14 A. I don't know what you would call it. It's a
15 run-off forecasting model.

16 Q. Is it a computer program?

17 A. Yes.

18 Q. And who developed the model?

19 A. I don't know.

20 Q. And I apologize; I forgot his name. Ted, was
21 it?

22 A. Uh-huh.

23 Q. Once Ted runs the forecasting model and you
24 assist with review of the data that is generated, what
25 data are you able to review? Let me rephrase the

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1 question. That was poorly phrased.

2 What does the model generate with respect to
3 data?

4 A. The model generates a volume of expected
5 run-off.

6 Q. Anything else?

7 A. Not that I know of.

8 Q. And how often do you participate with review of
9 that data?

10 A. At least once a month in the January through
11 June time frame.

12 Q. When did you first start utilizing this model?

13 A. I don't know.

14 Q. Has it been in place since you started working
15 in 2001?

16 A. Yes.

17 Q. How would you define the routing of run-off in
18 the Boise Basin?

19 A. Routing of run-off is the response of the
20 run-off getting to the rivers or the reservoir. So it's
21 how long it takes the water to be routed to the
22 reservoir or the river gauge.

23 Q. Is the routing a natural occurrence or
24 something that you intervene?

25 A. That's a natural occurrence.

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1 Q. So it's not "forecasting and routing"? It's
2 "forecasting of routing"?

3 A. In order to forecast the flow, you also have to
4 route within your model to mimic what happens in a
5 natural system.

6 Q. So the model, in a sense, is forecasting the
7 routing or, at least, estimating the routing to assist
8 you with the forecast of the run-off?

9 A. Yes.

10 Q. But you don't do anything in the natural
11 occurrence to change the routing?

12 A. No.

13 Q. It is just the portion of the model; is that
14 correct?

15 A. Yes.

16 Q. You indicate that the analysis that you provide
17 with respect to flood control operations includes the
18 forecasting and the routing and planning of reservoir
19 releases. Does the analysis include anything else?

20 A. Not that I can think of.

21 Q. So referring to planning of the reservoir
22 releases, have we already covered all of that this
23 morning, as far as what your duties and responsibilities
24 are with respect to planning reservoir releases?

25 MR. GEHLERT: If you don't recall, you can ask

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1 the reporter to read back any portion of the transcript.

2 THE WITNESS: That's a lot.

3 MR. GEHLERT: Can we go off the record for
4 second?

5 MS. MARTENS: Sure.

6 (An off-the-record discussion was held.)

7 THE WITNESS: Can you re-ask the question?

8 BY MS. MARTENS:

9 Q. Yes, I can. We have spent some considerable
10 time this morning discussing your roles and
11 responsibilities with respect to planning reservoir
12 releases. I am just interested in whether or not we
13 have discussed all of your duties and responsibilities
14 related to planning reservoir releases.

15 Frankly, I am not trying to trick you. I just
16 need to know what your roles and responsibilities are
17 with respect to this analysis of planning reservoir
18 releases, without having to go back through all of the
19 prior testimony.

20 If there's something that you do with respect
21 to that analysis that we have not talked about, I need
22 to know that.

23 A. Not that I can think of.

24 Q. Moving on in Paragraph 3, you indicate that
25 flood control operations are necessary in many years to

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1 avoid potentially damaging floods from impacting the
2 City of Boise and other downstream communities. What
3 flood control operations are you referring to?

4 A. I'm referring to releasing water from the
5 reservoirs to maintain space so that the reservoirs can
6 store the large amount of run-off that is expected into
7 the reservoirs, to avoid having to release that water
8 later and causing flooding.

9 Q. And how do you determine when those operations
10 are necessary?

11 A. We look at what the storage of the reservoir is
12 currently. We look at the forecasted volume run-off
13 that is expected in the Boise Basin.

14 We turn to the rule curves in the Water Control
15 Manual and determine whether we need to either make
16 space or if we have plenty of space to control the
17 run-off or to contain the run-off.

18 Q. Do you utilize any resource other than the
19 Water Control Manual for those purposes?

20 A. No.

21 Q. You indicate that those operations are
22 necessary in many years to avoid potentially damaging
23 floods. Can you tell me, since 2001, which years those
24 necessary flood control operations were put in place?

25 A. I would have to refer to the exhibits.

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1 Q. That would be fine.

2 A. 2006.

3 Q. Is that the only year?

4 A. And, possibly, the year 2000.

5 Q. But you were not employed in the year 2000;
6 correct?

7 A. That's correct.

8 Q. So since 2001, since you have been in your
9 current position, there have not been many years that
10 those flood control operations were necessary? It was
11 only one year?

12 A. That's correct.

13 Q. How about 2005? Were there any flood control
14 operations necessary in 2005?

15 A. No.

16 Q. And where are you referring to within the
17 exhibits to answer that question?

18 A. I am looking at Exhibit 13, and I am looking at
19 the year 2005. I am looking at the peak discharge at
20 Glenwood Bridge. The peak discharge occurred August
21 10th, and it was 1,258 CFS.

22 Q. I now understand the data, but bear with me and
23 my lack of clear understanding. How do those three
24 factors lead you to know that there were no necessary
25 flood control operations in the year 2005?

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1 A. First of all, the timing of it. Flood control
2 releases are not made in August. Also, the amount of
3 discharge is 1,258, which is a pretty nondescript, low
4 flow at Glenwood.

5 Q. And, again, the data that is contained within
6 page 1 of Deposition Exhibit 13 is the maximum flow date
7 in the entire year?

8 A. Correct.

9 Q. Now, if we do look at 2006, which I understand
10 is your testimony of the only year that flood control
11 operations were necessary since you have been employed
12 in this position, what factors do you take into
13 consideration to know that, in 2006, there were flood
14 control operations put in place? If your memory is one
15 of those pieces of information, please let me know.

16 A. First of all, my memory.

17 Q. Okay.

18 A. Second of all, the date April 22nd is during a
19 flood control season; and the amount of flow down at
20 Glenwood which was 7,127 CFS.

21 Q. And, again, please forgive me for my ignorance
22 here. If I am looking at this data and I am considering
23 the same factors that you have and I look at 1997 where
24 there is a higher maximum rate at an earlier date, can I
25 assume, in 1997, there were also flood control

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1 operations put in place?

2 A. Yes.

3 Q. And, again, because of those three elements of
4 criteria?

5 A. Yes.

6 Q. So in order for you to look at data and
7 determine whether or not flood control operations were
8 instituted in a particular season, you really only need
9 those three pieces of information? Actually, I guess,
10 there are just two pieces of information -- the date and
11 the maximum?

12 A. I would also look at the storage of the
13 reservoirs for those years, as well.

14 Q. And where do I find the data on the storage of
15 the reservoirs?

16 A. It's on page 3 of this exhibit.

17 Q. Explain to me that element. How do you
18 determine, by looking at the storage within the
19 reservoirs, how that plays into your determination as to
20 whether or not flood control operations were instituted
21 in a particular year?

22 A. The storage would not be the deciding factor,
23 but it would be one of the factors that I would also
24 look at.

25 I would look at the first page first to look at
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1 what the flows were, the date and the flows that
2 occurred; but I would also want to look at the storage
3 to just make sure that I knew what was going on in that
4 year, as far as the storage versus the flood control
5 releases that were occurring that year.

6 Q. So let's take, for example, because I had
7 raised it earlier, the 1997 year where you have
8 determined, by looking at the date and the maximum, that
9 flood control operations were instituted in 1997. Would
10 you, also, though, before you made that determination,
11 confirm the storage in the reservoirs?

12 A. I would look at the storage in the reservoirs;
13 but I do remember 1997 from my memory, as well.

14 Q. And what do you remember from 1997?

15 A. 1997 was a very large water year and the
16 reservoirs were evacuated to -- if not to their maximum,
17 to about their maximum extent for 1997. It was a very
18 large water year.

19 Q. And what do you remember about 2006?

20 A. 2006 was also a really large water year, and we
21 were evacuating space out of the reservoirs through the
22 spring to make room for all of the run-off that was
23 expected.

24 Q. Any other year that you have a specific
25 recollection regarding reservoir operations for flood

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1 control?

2 A. No.

3 Q. So do you actually have any personal knowledge
4 of flood control operations being necessary in many
5 years?

6 A. Could you repeat your question, please?

7 Q. Yes. Do you have any personal knowledge of
8 reservoir operations being necessary in many years? I
9 am sorry. Do you have actual -- I will rephrase the
10 question so we are clear.

11 Do you have personal knowledge of flood control
12 operations being necessary in many years?

13 A. No.

14 Q. And the extent of your review in that regard is
15 the data that is contained in Deposition Exhibit No.
16 13?

17 A. Yes.

18 Q. Did you review any other data to support that
19 statement?

20 A. Which statement are we referring to?

21 Q. The statement in your affidavit that flood
22 control operations are necessary in many years to avoid
23 potentially damaging floods from impacting the City of
24 Boise and other downstream communities.

25 A. And the question was --

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1 Q. Well, we have discussed the fact that you do
2 not have any personal knowledge of that. So I have
3 asked you, then, what data you reviewed in order to make
4 that statement?

5 A. I reviewed the data in Exhibit 13 and talked to
6 coworkers who were here at Reclamation during some of
7 those years.

8 Q. Who did you talk to?

9 A. My coworkers, Ted Day and John Roache.

10 Q. How do you spell John's last name?

11 A. R-o-a-c-h-e.

12 Q. What did Ted Day tell you about flood control
13 operations being necessary in many years?

14 A. I don't recall.

15 Q. What did John Roache tell you about flood
16 control operations being necessary in many years?

17 A. I don't recall.

18 Q. When did you have that conversation with them?

19 A. I don't recall.

20 Q. Did you review any other document, electronic
21 or hard copy, to support that statement?

22 A. No.

23 Q. Do you agree with that statement?

24 A. Yes.

25 Q. In what years -- I will make sure I use the
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1 right language here. If you will, bear with me for just
2 a second.

3 THE WITNESS: Can I take a break for a minute?

4 MR. GEHLERT: Do you need to make a phone call?

5 THE WITNESS: Yes.

6 MR. GEHLERT: Go ahead.

7 (Recess.)

8 BY MS. MARTENS:

9 Q. Back on the record. Did you examine Lucky Peak
10 water accounting records in order to render your opinion
11 that flood control operations were necessary in many
12 years to avoid potentially damaging floods?

13 A. No.

14 Q. Do you know of anybody who examined Lucky Peak
15 water accounting records for that purpose?

16 A. No.

17 Q. And you also, then, did not determine, based
18 upon any review of accounting records, that the
19 irrigators contracting for water from Anderson Ranch and
20 Arrowrock Reservoirs had received their full entitlement
21 of storage water?

22 MR. GEHLERT: Can you repeat the question?

23 BY MS. MARTENS:

24 Q. I am just going to read a statement, and I am
25 going to ask you if you performed this analysis. It

Deposition of Mary Mellema (Volume I)

1 states, "The United States has examined the Lucky Peak
2 water accounting records since coordinated operations
3 for flood control began in 1955." You didn't do that;
4 correct? That wasn't something you did?

5 MR. GEHLERT: Let's take a second.

6 (Recess.)

7 MS. MARTENS: Back on the record.

8 MR. CAMPBELL: We are on the record again.

9 BY MS. MARTENS:

10 Q. Did you want to change your response to my
11 previous question?

12 A. Can you repeat your question, please?

13 Q. Yes. You testified that you did not review
14 Lucky Peak water accounting records since coordinated
15 operations for flood control began in 1955.

16 MR. GEHLERT: Can I object? I don't think she
17 ever actually answered the question.

18 MR. CAMPBELL: That's fine. Why don't you read
19 it back, the original question?

20 (Whereupon, the previous question and answer
21 were read back by the court reporter.)

22 MR. GEHLERT: Can we go off the record?

23 (An off-the-record discussion was held.)

24 (Whereupon, a series of previous questions and
25 answers were read back by the court reporter.)

Deposition of Mary Mellema (Volume I)

1 BY MS. MARTENS:

2 Q. Did you want to change your answer to that
3 question?

4 A. No.

5 Q. So you did not examine the accounting records
6 and you do not know of anybody who did?

7 A. Which accounting records? Can you repeat the
8 whole thing, please?

9 Q. Sure. Did you examine Lucky Peak water
10 accounting records since coordinated operations for
11 flood control began in 1955?

12 A. No.

13 Q. Do you know of anybody who did?

14 A. No.

15 Q. Thank you. Do you know whether or not
16 irrigators who contracted for water from Anderson Ranch
17 and Arrowrock Reservoirs received their full entitlement
18 of storage water for the years commencing in 1955?

19 A. I think this addresses how I did my analysis,
20 and I did not look at all of the years. I narrowed --
21 to make the process go faster, I narrowed down the
22 years, looking at the flow records.

23 Q. So you looked at flow records, but you did not
24 determine whether or not irrigators contracting for
25 water from Anderson Ranch and Arrowrock received their

Deposition of Mary Mellema (Volume I)

1 full entitlement for storage water in each year since
2 1955, did you?

3 A. Not in every year.

4 Q. So before I was reading from the brief, we were
5 talking about your statement in your affidavit that
6 flood control operations were necessary in many years.
7 I believe you testified that you formed that opinion
8 based upon your review of the documents in Deposition
9 Exhibit No. 13 and your communications with Ted Day and
10 John Roache; correct?

11 A. And personal experience.

12 Q. And personal experience. Okay. I think that
13 we covered your personal experience being that you are
14 aware of 1997 and 2006; correct?

15 A. Yes.

16 Q. Anything else about your personal experience
17 that supports that opinion?

18 A. I had experience at the Weather Service. I
19 knew which years were high flood control years, from my
20 previous experience with the Weather Service.

21 Q. And which years were those?

22 A. A lot of the high years stick in your memory.

23 Q. What years were those?

24 A. '93, '98.

25 Q. And where did you live in 1993?

Deposition of Mary Mellema (Volume I)

1 A. I was in Portland, Oregon -- no. Excuse me. I
2 was here in Boise in '93.

3 Q. And you were also in Boise in 1998?

4 A. Yes.

5 Q. What did Ted Day tell you with respect to that
6 opinion?

7 A. I believe I answered this already.

8 Q. That you can't recall?

9 A. Right.

10 Q. And that is the same for John Roache?

11 A. Yes.

12 Q. Do you recall what years you discussed with
13 them?

14 A. I also answered that. No.

15 Q. So what are, in your opinion, the many years
16 that flood control operations were necessary to avoid
17 potentially damaging floods?

18 A. I believe the "many years" are the historic
19 record which show that there were high flows released on
20 the Boise River.

21 Q. Which years were those that it is your opinion
22 that flood control operations were necessary?

23 A. Looking at the first page, Exhibit 13, all of
24 the years -- probably, all of the years above the year
25 2000, including the year 2000.

Deposition of Mary Mellema (Volume I)

1 Q. So you would opine that the "many years" you
2 are referring to in Paragraph 3 include 1983, 1998,
3 1996, 1982, 1997, 2006, 1984, 1999, 1996, 1993, 1989,
4 1995, and 2000; correct?

5 A. You forgot 1986.

6 Q. And that was the third one down from the top?

7 A. Yes.

8 Q. I apologize for that. And 1986. Any other
9 years?

10 A. On the second page, it would be the years --
11 all of the years above 1964, including '64.

12 Q. So 1956, '53, '74, '82, '65, '57, '71, '81,
13 '72, '75, '58, '54, '76, '63, '60, '80, '78, '69, '70,
14 and '64; correct?

15 A. Yes.

16 Q. And of the years that we read -- oh, excuse me.
17 Any other years?

18 A. Not that I know of.

19 Q. So with respect to all of the years that we
20 read into the record from Deposition Exhibit 13, pages 1
21 and 2, the only year that you were actually engaged in
22 analyses regarding planning reservoir releases was the
23 year 2006?

24 A. Yes.

25 Q. And the remainder of the support for that
Deposition of Mary Mellema (Volume I)

1 statement comes from your review of the data in
2 Deposition Exhibit 13 and your discussions with your
3 coworkers which you cannot recall; is that correct?

4 A. Yes.

5 Q. Further, you indicate, in Paragraph 3, that
6 flood control operations are carried out jointly by
7 Reclamation and the Army Corps of Engineers pursuant to
8 criteria set forth in the 1985 Water Control Manual.

9 Is that the only document that contains
10 criteria relevant to flood control operations?

11 A. That I know of.

12 Q. And how did you gain that understanding?

13 A. When you are a reservoir operator, reservoirs
14 generally have a Water Control Manual that is put out by
15 the Army Corps of Engineers if it is one of their
16 projects and has flood control requirements. That's
17 just a known thing.

18 Q. The next sentence says, "Pursuant to the Water
19 Control Manual, space in all three reservoirs is
20 allocated for flood control." How do you define
21 "allocated"?

22 A. In this context, it's "can be used for flood
23 control."

24 Q. And what provision in the Water Control Manual
25 allows for the space in all three reservoirs to be used

Deposition of Mary Mellema (Volume I)

1 for flood control?

2 A. Their rule curves that are in the Water Control
3 Manual that govern how much space is required from each
4 reservoir for flood control.

5 Q. Anything other than the rule curves?

6 A. There may be some text in there relating to it.
7 I'm not really sure.

8 Q. Have you reviewed that text?

9 A. I'm sure I have.

10 Q. But it is not something that you could locate
11 for us to discuss?

12 A. Not quickly, no.

13 Q. Did you review those provisions before you
14 signed your affidavit?

15 A. I looked over the Flood Control Manual, yes.

16 Q. Not to be picky but do you mean "Water Control
17 Manual"?

18 A. We call it the "Flood Control Manual," as well.

19 Q. Thanks. If you could, please, turn to
20 Deposition Exhibit No. 11, which I will hand to you.
21 Have you ever seen that document before?

22 A. No.

23 Q. I will represent to you that this is the Water
24 Right License at issue in this particular case. Have
25 you had any discussions with anybody other than your

Deposition of Mary Mellema (Volume I)

1 attorney regarding this Water Right License?

2 A. No.

3 Q. Did you participate in any way in the process
4 respecting this Water Right License with the Department
5 of Water Resources?

6 A. No.

7 Q. Were you ever aware that it had been issued?

8 A. No.

9 Q. I will represent to you that it was issued in
10 September of 2002. You can see that on the second page.
11 If you review this Water Right License, can you tell me
12 what the capacity of Lucky Peak Reservoir is represented
13 to be?

14 A. The reservoir -- I'm reading from the document.
15 The reservoir storage capacity is 293,020 acre feet.

16 Q. And where are you reading from?

17 A. Page 2, Point No. 3.

18 Q. I would now like to refer to Deposition Exhibit
19 No. 2, which is your affidavit. The very last sentence
20 of Paragraph No. 3 states that the space allocations for
21 flood control are as follows, and you speak of Arrowrock
22 and you speak of Anderson Ranch, and then you state,
23 "and Lucky Peak at 264,000 acre feet."

24 Can you explain to me the difference between
25 that allocation for flood control and the capacity

Deposition of Mary Mellema (Volume I)

1 indication within the Water Right License?

2 A. No.

3 Q. Moving on to Paragraph No. 4, you indicate that
4 you are familiar with the water right accounting system
5 of the flow for the Boise project. Are you familiar
6 with the water right accounting system?

7 A. In this context, I was talking about the
8 program.

9 Q. And what program is that?

10 A. That's the water right accounting program that
11 the Department of Water Resources runs.

12 Q. Do you utilize the Boise water right accounting
13 computer program?

14 A. No.

15 Q. Did you participate in development of the
16 program?

17 A. No.

18 Q. What is your familiarity with that program?

19 A. I am aware that it exists. I get periodic
20 updates from IDWR during the flow augmentation season;
21 they tell me how close we are to fulfilling our flow
22 augmentation requirement; and I know that they run it
23 through the year.

24 Q. Anything else that you have been made aware of
25 with respect to the Boise water right accounting

Deposition of Mary Mellema (Volume I)

1 computer program, other than with respect to the flow
2 augmentation portion?

3 A. No.

4 Q. Are you involved at all in the allocation of
5 storage to various contractors and the purposes for that
6 allocation?

7 A. No.

8 Q. Are you familiar with that process?

9 A. I know that they run the computer program.

10 Q. Any other familiarity with that process or that
11 allocation?

12 A. No.

13 Q. Have you ever participated in that
14 allocation?

15 A. No.

16 Q. And you are not familiar with making up for
17 shortages due to flood control operations in the Boise
18 project?

19 A. Well, for this case, I reviewed that but -- no.

20 Q. So you are not familiar with the program being
21 utilized for that purpose?

22 A. No.

23 Q. Have you ever been involved in that analysis?

24 A. No.

25 Q. Have you ever been involved in making any

Deposition of Mary Mellema (Volume I)

1 determinations regarding making up storage utilized for
2 flood control operations?

3 A. No.

4 Q. And have you ever been involved or do you have
5 any familiarity specifically with respect to storage
6 allocation for each Reclamation contractor being input
7 into the accounting model?

8 A. No.

9 Q. Or being used to account for water for the rest
10 of the water year? I am referring, if it helps you any,
11 to the last sentence of that paragraph.

12 A. No.

13 Q. And you would not know where the additional
14 water comes from, would you?

15 A. Which additional water?

16 Q. The shortages due to flood control operations
17 being made up.

18 A. No.

19 Q. I would assume you did not draft this paragraph
20 of your affidavit?

21 A. No.

22 Q. Would I also be correct in assuming that it is
23 really not accurate that you are familiar with those
24 processes or participate in any way with those
25 processes?

Deposition of Mary Mellema (Volume I)

1 A. I am familiar with the processes. I did not
2 participate in them.

3 Q. So, then, are you familiar with the process of
4 how the make-up water is determined?

5 A. IDWR does all of that.

6 Q. So you are stating here that you are familiar
7 with it and giving your opinions in this regard. So I
8 am just curious as to what your familiarity with it is.
9 If it's that you know IDWR does it, that's fine. If you
10 have additional knowledge, I need to know what that is.

11 A. The only knowledge that I have is going back
12 and looking in the accounting books and seeing the final
13 tally for the accounting.

14 Q. So you do not have any knowledge about what
15 happens once flood control operations have occurred and
16 the reservoir is filled to the maximum reservoir level
17 and making up water that was utilized for flood control
18 operations?

19 A. Not in -- excuse me. Not in realtime.

20 Q. And what knowledge do you have that it is not
21 in realtime?

22 A. I will go back in the books and look, later, to
23 see how IDWR fulfilled the -- how they contracted it out
24 in IDWR's Water Master Books.

25 Q. Have you already done that, or do you intend to
 Deposition of Mary Mellema (Volume I)

1 do that?

2 A. For the case, I did that.

3 Q. What documentation did you review?

4 A. I reviewed the Report on Canal Deliveries from
5 the Boise River, what we call the Water Master Books,
6 the black books. I reviewed those for the years that we
7 determined -- that I determined there were flood control
8 releases and there was -- and the system did not fill.

9 Q. So in those years, did you determine where the
10 additional water came from?

11 A. I made some calculations to determine where the
12 water came in to fill Arrowrock and Anderson. Yes.

13 Q. And have you produced those calculations?

14 A. Yes.

15 Q. Can you show me where those calculations are?

16 A. They are on Exhibit 14 and 15.

17 Q. And you did not perform any analysis, again, on
18 any of the years that you didn't -- let me rephrase that
19 question.

20 The only years you performed that analysis on
21 were the years 1972, '75, '76, '78, '89, '93, and '99,
22 at least for purposes of your affidavit; is that
23 correct?

24 A. Yes.

25 Q. And since that time, you have performed the
Deposition of Mary Mellema (Volume I)

1 analysis for 1974?

2 A. Yes.

3 Q. Is there any other data you reviewed relevant
4 to flood control releases?

5 A. Not that I can remember.

6 Q. How did you determine the years in which
7 Arrowrock and Anderson Reservoirs did not physically
8 fill due to flood control releases?

9 A. I looked at the historic record. I looked at
10 the system storage, the max system storage. And if
11 there was a shortage there, if it was not completely
12 filled, those were the years that I determined that
13 there was a shortage.

14 Q. So am I correct in understanding, from what you
15 have told me, that Arrowrock is 272,000 acre feet and
16 Anderson Ranch is 413,000 acre feet? Are those the
17 numerics that you utilized?

18 A. It's a little different than that. It's
19 272,200 acre feet. It's close to this, yes.

20 Q. And how about Anderson Ranch?

21 A. It's four-thirteen -- it's approximately
22 413,000. There's a little more.

23 Q. So if I am following your analysis -- I am
24 referring to -- which document do I refer to to
25 determine whether or not Arrowrock and/or Anderson Ranch

Deposition of Mary Mellema (Volume I)

1 did not physically fill due to flood control releases?

2 A. The first document you would look at would be
3 page 3 of Exhibit 13 which gives the total system
4 storage.

5 Q. I assume, when you say "total system storage,"
6 you are adding together Arrowrock, Anderson, and Lucky
7 Peak?

8 A. Yes.

9 Q. Is there any place that we can look to see
10 whether Arrowrock and/or Anderson Ranch were full?

11 A. Looking at the storage at Anderson and
12 Arrowrock and Lucky Peak separately is hard to do
13 because they fill at different times.

14 So Lucky Peak -- Arrowrock may fill early.

15 Lucky Peak -- we would fill that for recreation.

16 Anderson typically fills later in the year, because of
17 the nature of the run-off.

18 So looking at each of those individually can be
19 misleading because water could be shifted between the
20 reservoirs at different times.

21 So, no, I don't have a printout here of the max
22 storage for Anderson and Arrowrock -- especially for
23 Arrowrock. Many times, it will be full, physically
24 full; but that may be because of differing times of the
25 year. So the one that's really relevant is the system

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1 storage.

2 Q. Even though it might have been somewhat
3 misleading, did you look to see years in which Arrowrock
4 and Anderson Ranch, those two particular reservoirs, did
5 not physically fill?

6 A. Yes, I did.

7 Q. And how did you accomplish that?

8 A. Once again, I looked at the historic database
9 and looked at the max storage for each of those
10 projects.

11 Q. And where do I find that in the analysis?

12 A. I do not have that written down.

13 MS. MARTENS: Can we get a production of the
14 Anderson Ranch and Arrowrock data, please?

15 MR. GEHLERT: Let's talk about that. I don't
16 even know if it's possible.

17 THE WITNESS: Okay.

18 (Recess.)

19 MS. MARTENS: Back on the record. So can we
20 get production of the Arrowrock and Anderson Ranch
21 records that were reviewed?

22 MR. GEHLERT: It turns out it is part of that
23 hydromet database that we gave you the website for.

24 MR. CAMPBELL: Well, she said that she --

25 BY MS. MARTENS:

Deposition of Mary Mellema (Volume I)

1 Q. I would be most interested in what pieces you
2 reviewed, as opposed to doing my own research on the
3 website. Can you, between now the 30th, produce for me
4 what it is that you reviewed for purposes of Paragraph
5 No. 5?

6 A. Okay. For Paragraph No. 5, I actually reviewed
7 the Boise Water Master records, those black books.

8 Q. Okay.

9 A. And I looked to see if their paper accounts
10 were full. So that's what I looked at for determining
11 whether Anderson or Arrowrock were full, for page -- for
12 Paragraph No. 5.

13 Q. Okay.

14 A. Then I went back and looked at our historic
15 database and looked at whether Anderson and Arrowrock
16 actually, physically filled. You know, all you have to
17 do is go to our web page, type in "Arrowrock" and the
18 year you want and look in "maximum storage," and it's
19 there.

20 Like I said, sometimes, with operating
21 reservoirs, you won't have physical fill to the very top
22 of the reservoir. It may be a number of acre feet
23 short. That's just because of physical constraints.

24 So when I used -- when I looked at -- when we
25 compiled Paragraph No. 5, I was using, actually, numbers

Deposition of Mary Mellema (Volume I)

1 from the Boise River Water Master accounting book for
2 that.

3 Q. Those are the books that you have produced?

4 A. Yes.

5 MS. MARTENS: I understand that we are
6 approaching the 3:00 o'clock hour, and I want to cover a
7 couple of things off the record.

8 Before I do, I would like for you to produce
9 the records that you did review for any purpose prior to
10 our deposition today that relate to your analysis that
11 you have performed and that you did not produce today.

12 I understand that some things might be
13 misleading and so forth, but I think that we have
14 requested that in our Notice and we are entitled to
15 that.

16 If you want to object, we can talk about that.
17 But that would just be my official, on-the-record
18 request for purposes of the 30th.

19 With that being said, we can go off the record.

20 MR. GEHLERT: Let me just note my objection and
21 say that we might produce them, notwithstanding the
22 objection. I don't know what is involved in producing
23 material from the website.

24 MS. MARTENS: We can go off the record now.

25 * * *

Deposition of Mary Mellema (Volume I)

1 (The deposition stood in recess at 2:53 p.m.,
2 to be continued on Wednesday, January 30, 2008, at 8:30
3 a.m.)

4 (Signature requested.)

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C E R T I F I C A T E

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I, LORI A. PULSIFER, Certified Shorthand Reporter, do hereby certify that:

The foregoing proceedings were taken before me, at which time the witness was placed under oath;

The testimony and all objections made were recorded stenographically by me and were thereafter transcribed by me;

The foregoing is a true and correct record to the best of my skill and ability; and

Pursuant to request, notification was provided that the deposition is available for review and signature; and

I am not a relative or an employee of any attorney, nor am I financially interested in the action.

I have hereunto set my hand and seal this 28th day of January 2008.

LORI A. PULSIFER, CSR, RMR, CRR
Certified Shorthand Reporter
Idaho Certificate 354

Deposition of Mary Mellema (Volume I)