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 ROBERT J. SUTTER

Volume I

(Pages 1 through 143)

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

Friday, March 28, 2008
Beginning at 9:00 o'clock a.m.

QnA COURT REPORTING
Lori A. Pulsifer, CSR, RDR, CRR
Idaho Certificate No. 354
PMB 219, 111 Broadway, Suite 133
Boise, Idaho 83702-7200
E-mail: realtimeqna@msn.com
Telephone: (208) 484-6309

(ELECTRONIC COPY)

A P P E A R A N C E S

FOR PIONEER IRRIGATION DISTRICT AND
SETTLERS IRRIGATION DISTRICT:
Mr. Scott L. Campbell
Ms. Tara Martens
Attorneys at Law
MOFFATT, THOMAS, BARRETT, ROCK &
FIELDS, CHARTERED
101 South Capitol Boulevard
10th Floor
Boise, Idaho 83701
Phone: (208) 345-2000
Fax: (208) 385-5384
E-mail: slc@moffatt.com
tlm@moffatt.com

FOR THE BUREAU OF RECLAMATION:
Mr. David Gehlert
Assistant United States Attorney
UNITED STATES DEPARTMENT OF JUSTICE
1961 Stout Street, 8th Floor
Denver, Colorado 80294
E-mail: david.gehlert@usdoj.gov

FOR NAMPA AND MERIDIAN IRRIGATION DISTRICTS:
Mr. S. Bryce Farris
Attorney at Law
RINGERT CLARK, CHARTERED
455 South Third Street
Boise, Idaho 83701
Phone: (208) 342-4591
Fax: (208) 385-4657
E-mail: bryce@ringertclark.com

FOR ADA COUNTY:
Ms. Lorna K. Jorgensen
Deputy Prosecuting Attorney
ADA COUNTY PROSECUTING ATTORNEY'S OFFICE
200 West Front Street
Suite 3191
Boise, Idaho 83702
Phone: (208) 287-7700
Fax: (208) 287-7719
E-mail: ljorgensen@adaweb.net

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

FOR BOISE PROJECT BOARD OF CONTROL:
Mr. Paul L. Arrington
Attorney at Law
BARKER ROSHOLT & SIMPSON, LLP
113 Main Avenue West
Suite 303
Twin Falls, Idaho 83301-6167
Phone: (208) 733-0700
Fax: (208) 735-2444
E-mail: pla@idahowaters.com

A N D

Mr. John K. Simpson
Attorney at Law
BARKER ROSHOLT & SIMPSON, LLP
Post Office Box 2139
Boise, Idaho 83701
Phone: (208) 336-0700
Fax: (208) 344-6034
E-mail: jks@idahowaters.com

* * *

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

Deponent's Name Page Number

ROBERT J. SUTTER

Examination by Mr. Campbell 7

* * *

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

Exhibit No.		Page Marked
*(Exhibit Nos. 1 through 26, inclusive, having been previously marked for identification, are incorporated herein by reference.)		
Exhibit No. 27	Affidavit of Robert J. Sutter dated February 12, 2008	16
Exhibit No. 28	"Boistofor.txt" document, re: Irrigation season reservoir storage by canal or use for Anderson Ranch, Arrowrock, and Lucky Peak Reservoirs (Notepad)	23
Exhibit No. 29	"Boistofor.txt" document, re: Irrigation season reservoir storage by canal or use for Anderson Ranch, Arrowrock, and Yucky Peak Reservoirs	23
Exhibit No. 30	Output for Storage Allocations Program for 1999	42
Exhibit No. 31	Output from Water Right Accounting Program, July 1, 1999, through July 5, 1999	43
Exhibit No. 32	USGS Surface Water Monthly Statistics for the Nation, USGS 13206000 Boise River at Glenwood Bridge NR Boise	98
Exhibit No. 33	Handwritten Notes, 02/07/08	102
Exhibit No. 34	"Boistofor.txt" document, re: Irrigation season reservoir storage by canal or use for Anderson Ranch, Arrowrock, and Lucky Peak Reservoirs (Visual Fortran)	105
Exhibit No. 35	Pages 7-15 and 7-16 from the Water Control Manual	123

* * *

THIS DEPOSITION OF ROBERT J. SUTTER, VOLUME I, was taken on behalf of Pioneer Irrigation District and Settlers Irrigation District on Friday, the 28th day of March 2008, at the offices of Moffatt, Thomas, Barrett, Rock & Fields, Chartered, 101 South Capitol Boulevard, 10th Floor, Boise, Idaho 83702, before Lori A. Pulsifer, Court Reporter and Notary Public within and for theState of Idaho, to be used in an action pending in theDistrict Court of the Fifth Judicial District of the State of Idaho, in and for the County of Twin Falls, said cause being Subcase No. 63-3618 (Lucky Peak Reservoir) in said court.

The following testimony was adduced, to wit:

* * *

(Exhibit Nos. 1 through 26, inclusive, having been previously marked for identification by the court reporter, are incorporated herein by reference.)

* * *

ROBERT J. SUTTER,

having been first duly sworn, testified as follows:

MR. CAMPBELL: First, before I inquire of you, Mr. Sutter, I would like to clarify a couple of items with Mr. Gehlert on the record.

David, at the Deposition of Jerry Gregg, which was conducted on January 30th and 31st, I requested a

number of documents.

MR. GEHLERT: They are being copied.

MR. CAMPBELL: Are they?

MR. GEHLERT: Yes. I was working on that yesterday with my clients. They are in the Bureau's in-house copy shop, which I understand is not the speediest copy place. You should have them next week.

MR. CAMPBELL: Great. Thank you. I appreciate that.

EXAMINATION

BY MR. CAMPBELL:

Q. First, Mr. Sutter, would you please state your full name and spell your last name?

A. My name is Robert J. Sutter. My last name is spelled S-u-t-t-e-r.

Q. And, Mr. Sutter, I feel uncomfortable calling you "Mr. Sutter." For purposes of the record, we know each other.

A. Right.

Q. We have known each other for sometime. Just so it has the formality that, perhaps, the court would prefer, I am going to refer to you as "Mr. Sutter."

Have you ever had your deposition taken before?

A. No, sir, I haven't.

Q. Let me explain the procedures. First of all, did Mr. Gehlert explain the procedures of a deposition to you?

A. Yes, he did.

Q. And what did he explain to you?

A. He said that I would be explaining the content of my affidavit that I submitted and that I would be asked questions about the statements in my affidavit.

He said that there were two purposes for a deposition: The first one would be for the opposing attorney to explore in depth those statements and then, also, to provide a record if this ever went to trial.

Q. Well, let me sort of add some things, just so we understand each other, as far as the procedure is concerned.

We have a court reporter that is taking down all of the statements made by everyone who is participating here so there will be a formal record of those statements and comments.

The process is relatively simple. First, I get to ask the questions. You get to respond to the questions, hopefully.

Mr. Gehlert gets to object to questions that I ask; but unless he, for some reason, tells you not to answer the question, you still have to answer the

question that I asked you. Okay?

A. Yes, sir.

Q. The other important aspect in a deposition is that, when I ask a question, you have to respond with an audible answer. By that, I mean, "yes" or "no," or, "This is the explanation for this particular issue," or a more protracted answer. "Uh-huh" and "huh-uh" do not come across very well.

A. Yes, sir.

Q. All right. The other thing is, as you are aware, you are under oath; and, consequently, everything you respond is supposed to be truthful. Do you understand that?

A. Yes, sir.

Q. If I ask a question that is unclear to you, I want you to tell me to rephrase it because you do not understand the question. All right?

A. Yes, sir.

Q. If I ask a question and you answer the question, I will assume that you understood the question. Do you understand that?

A. Yes, sir.

Q. "Sir" is not necessary.

A. Okay.

Q. I will be asking you some questions about

documents, and you will get to see the documents. We will have sort of a dialogue that is somewhat formalized because we have to put it down in a transcript and that sort of thing.

There are certain rules that have to be followed. We will do our best to follow the rules, and Mr. Gehlert will be there to slap my hands if I do not follow the rules. That is, basically, the process.

If there is any time when you want to take a break, if you need to use the facilities, if you are just tired of this process and you want to have a little break from it so your mind can get into a more normal functioning position, that is fine. Just say you would like to take a break for a while, and we will then reconvene.

We will break for lunch. You will get to eat lunch. We will break before lunch at some point, I would assume, because people usually, after an hour and a half of this process, get sort of fed up with it.

Do you have any questions at this point in time?

A. No.

Q. First of all, I would like to go into your background and educational experiences, Mr. Sutter. Can you tell me where you graduated high school and what

your educational experiences were after high school?

A. I graduated from high school in Fairbury, Illinois; and then I attended the University of Illinois.

Q. When was that?

A. 19 --

Q. High school graduation?

A. 1963 I graduated from high school. The Fall of '63, I entered the University of Illinois and graduated with a Degree in Agricultural Engineering in 1968.

I immediately went to the University of Idaho where I went to school from '68 through '69 and got a Master's Degree in Agricultural Engineering.

Q. And then from that point, upon graduation from the University of Idaho, what did you do?

A. I took the EIT Exam and passed that.

Q. What is the EIT Exam?

A. That's the Engineer-In-Training Exam. I then began work with the -- at that time, it was the Idaho Water Resource Board, in October of 1969, as a Water Resource Planner.

And when the Water Resource Board was combined with -- the Department of Water Administration became the Department of Water Resources. I was reclassified as a Water Resource Engineer.

I think, then, I passed the Professional Engineer's Exam; I am going to say it was approximately 1973 or '74. I was a Water Resource Engineer in the Hydrology Section of the Department of Water Resources.

In 1995, I became the Manager of the Hydrology Section in the Department of Water Resources. I retired in June of 2002.

Q. Very good. I am impressed by your recollection.

A. It's hard.

Q. I understand. Can you tell me, Mr. Sutter, how you became involved in this particular litigation?

A. I think there were questions posed about the accounting and the natural flow and storage water on the Boise that were directed toward Liz Cresto who currently works for the Department of Water Resources and currently runs the water right accounting.

She directed, I think it was, Jerry Gregg from the Bureau of Reclamation down to me. So I got a call from Jerry Gregg saying, "We need to have a little bit more background on how the storage water and natural flow is accounted on the Boise for this issue."

Q. Do you recall when that telephone call occurred?

A. It was sometime in January, but I don't recall

the exact day. I'm pretty sure it was in January of this year.

Q. And what exactly did Mr. Gregg say to you?

A. He said that he was involved in a lawsuit concerning storage water in Lucky Peak Reservoir. Could I come in and talk to them? So I did. I went into their office.

Q. Who is "them"?

A. I met with Jerry Gregg, Gail -- I forget her last name.

Q. McGarry?

A. McGarry. I think it was just those two. They were asking questions about the water right accounting. I, basically, told them the process.

Q. Was that the only meeting that you had with Bureau of Reclamation officials concerning this matter?

A. They gave my name to Mr. Gehlert. My recollection is, at that time, there were e-mails and phone calls between Mr. Gehlert and myself. I don't think I met with the Bureau of Reclamation until, probably, yesterday. Let's see. What is today? Friday. Correct. Yesterday? This week, yes.

Q. This week or yesterday?

A. When you're my age, you know, it's hard to remember exactly when.

Q. I understand. That's fine. That's fine. In your conversations with Mr. Gehlert, were you asked to participate as an expert in this matter?

A. Yes, I was.

Q. And did --

A. And by Mr. Gregg.

Q. Did you agree to do that?

A. Yes, I did.

Q. And are you being compensated for that service?

A. Yes, I am -- I think.

Q. What do you mean, "I think"? What do you mean by that?

A. Yes, I am.

Q. Have you received any compensation?

A. I have not, no.

Q. Well, I would get the money up front, Bob; I would. We are talking about the federal government here.

A. They move slowly; let's put it that way.

Q. Do you have a contract, a written contract, with them?

A. No.

Q. What is the basis of the compensation arrangement?

A. It is my expectation that such a contract is being prepared.

Q. So you are doing it on the good word of the federal officials at this point?

A. Yes, I am.

Q. Oh, Bob. Bob. Bob.

A. I know.

MR. GEHLERT: He has got the full faith and credit of the United States Government backing him.

BY MR. CAMPBELL:

Q. Well, that would be a very valuable assurance, as far as I am concerned.

A. I have the same concerns you have; let me put it that way.

Q. Well, enough about that. In terms of your agreement to serve as an expert witness for the Bureau of Reclamation in this matter, do you recall when you consented to do that, approximately? I do not need the exact date.

A. It was in January.

Q. In January?

A. Yes, in January.

Q. Was your agreement to do that prior to your execution of the affidavit that was submitted?

A. Yes.

Q. All right. Mr. Sutter, can you explain to me what your definition of "entitlement" is as it relates to your affidavit?

MR. GEHLERT: Bob, if you want to review your affidavit for where you have used that terminology, feel free.

THE WITNESS: The way I used the word "entitlement" was in reference to the storage water in the reservoirs. I would imagine -- yes -- it would be in Lucky Peak Reservoir.

MR. CAMPBELL: We have a copy of your affidavit.

(Exhibit No. 27 was marked for identification.)

BY MR. CAMPBELL:

Q. Mr. Sutter, I have had the court reporter hand you what has been marked as Exhibit 27. I would like you to review that document, please, and tell me if you can identify it.

A. Yes. I prepared this document.

Q. How did you go about preparing the document?

A. When I met with the Bureau of Reclamation, I described the process of water right accounting on the Boise River as it applies to the stream resource maintenance flow in Lucky Peak Reservoir, and I also read the Affidavit of Mary Mellema.

They asked me to put into this affidavit, in writing, the procedure that was developed by myself to account for the storage water in a typical year or various types of water years and how that accounting affected the stream resource maintenance fill in Lucky Peak Reservoir. That's what I have attempted to do here.

Q. By "stream resource maintenance" -- I am confused by the term "resource." Is that the same term that is used by the -- well, let me look at the document, itself, because I do not think that is the term you use.

On page 5 of Exhibit 27, at the bottom, the very last line, you say, "streamflow maintenance entitlement."

A. Right. That would be the same as "stream resource maintenance flow."

Q. All right. So we are clear on that. In terms of your development of the affidavit, Exhibit 27, can you tell me the time frame that this was prepared? Was it over several weeks? Was it over just a couple of days? What was the process?

A. After I was asked to prepare this, I think the original -- my recollection is the original draft -- I did it in, probably, a day. I submitted it to

Mr. Gehlert; and he asked me to clarify a few things in the affidavit that he felt weren't clear, that I didn't explain well enough.

And I think, probably, two weeks -- not continuously but back and forth, probably, in about two weeks we had it finished.

Q. And how many drafts of the affidavit did you prepare?

A. I don't know exactly. Perhaps, if you count little, one- or two-word changes, maybe seven or eight.

Q. How did you prepare the document? What kind of word-recording process did you use?

A. I used Microsoft Word.

Q. So you used a computer?

A. Yes.

Q. Did you provide any written -- that is, printed -- versions of the various drafts? Did you actually hard copy any of the drafts before you finalized the document?

A. Probably -- probably not.

Q. Okay.

A. Maybe once or twice but they were just left on the computer and then --

Q. All right. Do you still have the file for the preparation of the document in your computer?

A. The only place that they might exist would be -- when I e-mailed those to Mr. Gehlert, I kept a copy of all of the e-mails I sent. So I think I do have those.

I think I could find those -- or most of them. Normally, I would just replace a word and then it would be destroyed. If I did e-mail -- when I got to where I felt that it was the way I wanted it, then I would e-mail it to Mr. Gehlert.

Q. We would request copies of those documents.

A. I may not have them all, but I may have some.

Q. In the process of preparing Exhibit 27, Mr. Sutter, did you review any legal briefing that had been prepared by the Bureau of Reclamation or the Department of Justice?

A. I reviewed the Affidavit of Mary Mellema.

Q. Anything else, in terms of legal documents?

A. No.

Q. All right. After you signed the affidavit, Exhibit 27, did you review any of the legal briefing that was prepared by the Bureau of Reclamation?

A. The only other legal document that I reviewed was Mr. Gehlert's -- I'm not sure what it's called. He prepared a document using my affidavit, and he had me review that to see if it accurately reflected what I had

written.

Q. And did you reach a determination with respect to that issue?

A. Yes. There were, I would say, two or three minor changes that I suggested.

Q. All right. Do you recall when that review of Mr. Gehlert's document happened?

A. No. Somewhere between -- I would say that it was in probably -- what is this? This is March. It was sometime in the last six weeks.

Q. All right. During the course of the preparation of Exhibit No. 27, did you have any conversations with any individuals concerning the content of the affidavit -- except for Mr. Gehlert?

A. Yes. I talked with Mary Mellema about her affidavit.

Q. What did you discuss with her?

A. I asked her specifically how she determined the values that she had in a table in her affidavit.

Q. What did she say?

A. She said that she had looked at the Boise River watermaster reports and had gotten those numbers from tables in the watermaster reports.

Q. Did you have any comments to her about her procedures?

A. My comment was that that's what I had suspected. I was just trying to make sure that's how she had gotten the numbers, that she didn't use any other source other than those tables that she attached at the end of her affidavit.

Q. We will look at her affidavit in a few minutes. First, I would like to ask you whether or not you had any other conversations with Mary Mellema besides the one you just described.

A. Just the one phone call.

Q. Did she ask you any questions?

A. No.

Q. Did you have any conversations with anyone else besides Ms. Mellema and Mr. Gehlert concerning preparation of your affidavit or in the context of preparation of your affidavit?

A. Yes. I spoke with Liz Cresto at the Department. My question to her was -- she currently runs the Boise water right accounting. My question to her was: Since I've retired, have there been material changes in the storage allocations program?

She provided me a listing of the current program and said that she had not made -- she, herself, had not made any appreciable changes.

Q. Now, you used two different words. You used

the term "material" when you asked her, and you used the term "appreciable" when she answered. So was she answering the question that you asked with a different term that was a substantial deviation -- or not?

A. I meant the same thing, major changes.

Q. Did she say "major"? Did she say "material"?

A. I don't recall.

Q. So you asked her if there were any material changes in the program; correct?

A. Yes.

Q. And she responded that there were not any material changes, more or less?

A. Yes.

Q. All right. Did she indicate what changes in the program had been made?

A. No.

Q. So were you able to determine whether or not there were any changes at all in the program?

A. Yes.

Q. How did you reach that determination?

A. Liz Cresto provided me with a listing of the current program that was used last year and that she's using now. So I compared that program with the program that was in existence when I left the Department. I laid them side by side and compared them.

Q. Did you find any deviations from the 2002 program?

A. Yes.

Q. What were they? If it would help you, I have copies of those documents. Would that be helpful to you?

A. Yes.

MR. GEHLERT: We have copies. Why don't we have your copies marked as exhibits?

MR. CAMPBELL: All right.

(Exhibit No. 28 was marked for identification.)

THE WITNESS: This is the text file.

BY MR. CAMPBELL:

Q. Is that the same document you are talking about?

A. Yes, it is. It's just a different method of printing them out.

MR. CAMPBELL: Before we go on, let me take a look at this.

(Exhibit No. 29 was marked for identification.)

BY MR. CAMPBELL:

Q. Mr. Sutter, I have had marked and had handed to you two exhibits, Exhibit 28 and Exhibit 29.

A. Yes.

Q. Are those documents that you recognize?

A. Yes.

Q. Are those copies of the documents you brought with you in a different format? Are we dealing with the same documents?

A. We are dealing with the same documents, yes.

Q. All right. So can you tell me, comparing Exhibit 28 to Exhibit 29 -- first of all, identifying Exhibit 28, what does that represent?

A. Exhibit 28 is the program that is currently being used by the Department of Water Resources and the watermaster to allocate storage in the Boise River.

Q. And Exhibit 29? What is that?

A. That is the allocations program as it existed when I left the Department in 2002.

Q. Now, you indicated, in your comparison of the two documents, Exhibit 28 and Exhibit 29, that you identified certain deviations, one from the other; is that correct?

A. Yes.

Q. Can you describe those deviations, making reference to Exhibit 28 versus Exhibit 29?

A. I didn't go line by line. I found some minor changes. The major change between -- you will notice that the new one is a lot thicker.

Q. Which new one?

A. Exhibit 28, the one that is currently being used.

Q. All right.

A. The main change here is that the last to fill for flow augmentation water out of basin has been added.

Q. And where is that described on Exhibit 28?

A. It is not described. It's not described.

Q. So how did you identify that that particular feature had been added to Exhibit 28, compared to what Exhibit 29 had?

A. By looking at the statements in the program.

Q. For example, it says, on the third page of Exhibit 28, about half-way down, "The old statement is the following." And then it says, "DO 3 K=1,3." Is that the statement that you are talking about -- or those types of statements?

A. Yes. It says, "The old statement..." Above that will be similar statements. I can see where two additional categories of storage accounting were added, where it says "the old dimension..." or "the old statement..."

This will occur repeatedly throughout the new program. It was increased from three storage, I guess you would say, priorities to five.

Q. And what were the two additional priorities

that were added?

A. The two additional priorities were last to fill in Anderson Ranch and Lucky Peak for out-of-basin use flow augmentation water.

Q. That is one.

A. Oh, okay. Two. One for Anderson Ranch and one for Lucky Peak.

Q. And was there any addition for Arrowrock in this last-to-fill configuration?

A. No.

Q. Do you know, in talking to -- Ms. Cresto, is it?

A. Yes, Liz Cresto.

Q. Did she tell you when these changes were made in Exhibit 28 to add these two additional categories?

A. Throughout this listing, you will see the name "Weimin Li." The dates appear to be July of 2002. It is my understanding that he is the one who programmed in these changes because those are his initials. From this, I determined it was in July of 2002.

Q. Do you base that upon anything other than the references in Exhibit 28?

A. No.

Q. Did you have any conversation concerning these changes with Mr. Li?

A. No.

Q. Why is that?

A. I didn't think it was relevant.

Q. Why not?

A. I didn't think it applied to anything that I was describing in my affidavit.

Q. Do you know if Mr. Li is still employed -- first of all, is Mr. Li an employee of the Department of Water Resources?

A. Yes, he is.

Q. Do you know him?

A. Yes.

Q. Was he an employee of the Department when you worked there?

A. Yes.

Q. What division or department does he work in?

A. He was in the Hydrology Section -- or he is.

Q. He is?

A. Yes.

Q. Do you know what his role or job function is at the Department, in the Hydrology Section?

A. Currently? Are you talking about today or at this time?

Q. When you left, what was his position?

A. He was a recent -- I'm not sure when we -- I

hired him. We were trying to get him familiar with various aspects of what the Hydrology Section was doing, so we would assign him various tasks.

This was done -- at this time, I think he was assisting Pamela Pace who, at that time, was in charge of the water right accounting.

Q. What do you mean by "at that time"?

A. I would say, 2002. She was doing the water right accounting; and you will see her name, also, in here, "P. Pace," in some comments. So I think she probably asked him to do this so that he would become familiar with water right accounting.

Q. When did you hire Mr. Li?

A. It would have been sometime -- let's see -- in 1997, eight, nine, somewhere in there.

Q. He was working in the Hydrology Section the whole time?

A. Yes.

Q. Were you at the Department -- I think you said you left in July of 2002?

A. June.

Q. June?

A. Yeah, June.

Q. You were not present when these changes were made that are referenced under his name on Exhibit 28?

A. I was not Manager of the Hydrology Section at this time.

Q. By "this time," do you mean July?

A. July.

Q. In July of 2002 you were not Manager of the Hydrology Section?

A. No, sir.

Q. You were still with the Department of Water Resources?

A. I worked under contract for Water District One for a term after I retired. So I was present at the Department but was not head of the Hydrology Section.

Q. Were you involved in the changes that Mr. Li made which are reflected on Exhibit 28?

A. No.

Q. Did you have any supervisory function or role with regard to Mr. Li and his activities which are reflected in the changes on Exhibit 28?

A. No.

Q. You said your assumption is that Pam Pace told Mr. Li to make these changes to get him familiar with the program; is that correct?

A. Yes.

Q. Do you know for a fact that that is what occurred?

A. No.

Q. Is Pam Pace still with the Department?

A. No.

Q. When did she leave? Do you know?

A. One to two years ago.

Q. Do you know where she is now?

A. Yes, I do.

Q. Where is she?

A. She works for Idaho Power Company.

Q. Do you know what her role or job function was in 2002 when Mr. Li made these changes?

A. Yes.

Q. What was that?

A. She was my Resource Engineer.

Q. Was she in charge of the Hydrology Section?

A. No. I was in charge of the Hydrology Section. I hired her as -- actually, she was doing my function prior to 1995. She took over my duties. There was another person in between that, also.

Q. Explain to me the sequence.

A. I retired -- I mean, I became Manager of the Hydrology Section in 1995. I hired Sheryl Howe to replace me. She ran this program and did the water right accounting until she left three or four years later.

Q. I do not need the exact date.

A. Right. She left, and I hired Pam Pace. She was doing the water right accounting at the time I retired; that would have been in 2002. Then she went to work for Idaho Power Company, and Liz Cresto took over for her.

Q. Can you recall what Pam Pace's educational training and degrees were at the time she worked for the Department?

A. She was an engineer. I think she graduated from the University of Michigan. I can't recall specifically.

Q. Apart from the two items that you mentioned, are there any other changes between Exhibit 28 and Exhibit 29?

A. I'm sure there are, if we went through line by line; but there would be only minor changes.

Q. By "minor," what are you talking about? Give me an example, if you could.

A. Maybe, possibly, we added a user in storage entitlement, possibly. Just small, minor things.

MR. GEHLERT: Bob, do you want to take some time to compare the two?

THE WITNESS: Yes. Let me just find --

MR. GEHLERT: Can we go off the record for five

minutes?

MR. CAMPBELL: Yes. That is fine.

(Recess.)

BY MR. CAMPBELL:

Q. We are back on the record. You are still under oath, Mr. Sutter. Can you answer my question as to the minor changes between Exhibit 28 and 29?

A. Yes.

Q. What are they?

A. On Exhibit 29, the program as of 2002 -- if you will, look on the third page.

Q. Of Exhibit 29?

A. Exhibit 29. There is a statement, 998. Right above it, it says, if J is greater than 2000 --

Q. It says, "If (J.GT.2000)"?

A. Right, "(J.GT.2000)."

Q. Okay.

A. Now, if you will, look on Exhibit 28, the same spot. It's probably on page 4, about in the middle. You will see that it now says, right above Statement 998, "If (J.GT.2500)." That's been changed to 2500. It's a minor change.

MR. GEHLERT: Actually, it is on page 5, Scott.

MR. CAMPBELL: Page 5? Good. Because I didn't see anything on page 4.

THE WITNESS: I have a different printer.

MR. GEHLERT: They are printed out slightly different.

THE WITNESS: This is using Wordpad or Notepad.

BY MR. CAMPBELL:

Q. What does that minor difference that you describe between Exhibit 28 and 29 mean?

A. That's an error statement. In allocating storage, that was put in so that if this little routine here --

Q. You have to describe the exhibit.

A. Okay. Well --

Q. The little routine on Exhibit 28 or the little routine on Exhibit 29?

A. Both. It's the same routine.

Q. That is under format -- or just above format statement 998?

A. 998. It's the same routine. This routine computes the new fill to each reservoir. If there's somehow an error, this is a looping procedure.

If it goes through this loop -- on Exhibit 29, if it goes through 2000 times without coming to some resolution, it will stop and print out the error message "Runaway Loop."

Q. Okay.

A. That has been changed to allow it to go 2500 times before it prints out this "Runaway Loop" error statement. That would be a minor change that somebody at some point made between Exhibit 29 and 28. That would be a minor change.

Q. Is there anything on Exhibit 28 to reflect when that change was made?

A. No.

Q. Is there anything on Exhibit 28 to reflect who made the change?

A. No.

Q. All right. I would like to have you turn your attention to Exhibit 29, if you would, please, on the first page. Do you have that document?

A. Yes.

Q. Mr. Sutter, if you would, use the documents that are actually marked. That would be more helpful to us, I think.

A. All right.

Q. Thank you. So you have Exhibit 29; is that correct?

A. Yes.

Q. Does this document reflect the program that was in place when you retired in 2002?

A. Yes.

Q. Does it reflect the program that was in place when you developed the program in 1986?

A. What do you mean by "reflect"?

Q. Well, is it the same program you developed in 1986? That is the question. Does that make sense to you?

A. If we were to compare the statements in this program --

Q. That is, Exhibit 29?

A. Exhibit 29, yes -- with the program by the same name that was used in -- what year did you say?

Q. 1986.

A. 1986. There would be some statements that would be different.

Q. All right. So the document, Exhibit 29, does not reflect the same program that you developed in 1986; is that correct -- exactly the same program?

A. It's not exactly the same program.

Q. Thank you. With regard to the first page on Exhibit 29, what is the reference in the -- I guess it is sort of a three-quarters box at the top.

It has got asterisks on the top and then asterisks on the bottom, and it has got "CCCCCC" on the left-hand side. Do you see what I am talking about there at the top?

A. Yes.

Q. It has a designation. I do not know why it says "Yucky Peak Reservoir." Perhaps there is a different reservoir that I am not aware of?

A. No, sir.

Q. No? There is no Yucky Peak Reservoir?

A. You have to understand that sometimes this gets boring, doing this programming. It's nice to keep a sense of humor to make life a little bit more enjoyable.

Q. Was that change from an "L" to a "Y" made by you?

A. I wrote that. Yes, sir.

Q. Was that part of the original program?

A. I'm not sure.

Q. I am not criticizing you in any shape or fashion, Mr. Sutter. I just found it to be rather entertaining.

A. You may find humor throughout a lot of my programs.

Q. Good. I am glad for that. There is a reference to "RJS" in that same line and then the date June 1997. Can you tell me what those items mean?

A. "RJS" are my initials. I don't recall why I chose to put June of 1997. I can speculate. Many times, when I was doing programming changes, I would --

if I made a change in the program, whether it be minor or whatever, I would sometimes put the date up on top. I'm not sure why I chose to put this date. I don't recall.

Q. In comparing Exhibit 28 with that portion of Exhibit 29, someone changed it back to "Lucky Peak," as opposed to "Yucky Peak;" is that correct?

A. Correct.

Q. Did you make that change back?

A. I don't recall.

Q. And then there is a reference, again, "RJS-June 1997." Do you see that?

A. Yes.

Q. And below that it says, "Modified, CAK-October 1998." Do you see that?

A. Yes.

Q. Do you know what that means?

A. "CAK" stands for Cheryl -- I'm not sure what her middle name was -- Kramer. She was a part-time employee at that time. This would indicate that she made some change in the program in October of '98.

Q. Just so I understand -- well, before I ask that question, let me go to your affidavit, if I could, Exhibit 27. I think it has been marked. Do you have that document?

A. Yes.

Q. On page 2 of Exhibit 27, paragraph 2, it indicates, in the first line -- and I will read this into the record -- "In 1986, I developed the Boise River Water Right Accounting computer program (hereafter called the 'Accounting Program') and the Boise River Storage Allocations computer program (hereafter called the 'Allocations Program') for the Boise River."

Did I read that correctly?

A. Yes.

Q. From that statement, I understand that to mean that, in 1986, you developed the first computer programs which are reflected, in part, by Exhibits 28 and 29? Is that a correct conclusion for me to reach?

A. No.

Q. Why not?

A. Exhibits 28 and 29 are only the Boise River storage allocations program and not the water right accounting program.

Q. All right. So 28 and 29 reflect the allocations program?

A. Yes.

Q. So does my statement hold true with respect to Exhibit 29, relative to the allocations program? Does 29 represent the Boise River storage allocations

computer program which you developed in 1986?

A. What do you mean by "represent"?

Q. Well, this is a print-out?

A. Yes.

Q. So the actual program is in the computer?

A. Yes.

Q. The program you developed is in the computer; correct?

A. Yes.

Q. This document, Exhibit 29, is a representation of what is in the computer; correct?

A. Yes.

Q. That is why I say "representation."

A. It is the same as a -- it is a program of the same name. It is not exactly the same because the computer program is a dynamic tool for which modifications are made several times in order to accomplish the correct storage allocations on the Boise. So the statements won't be exactly the same, but it is the same function and the same named program.

Q. I understand. I think I understand. So what you are saying is that Exhibit 29 reflects the representation as it existed at a particular point in time; is that correct?

A. Yes.

Q. Exhibit 29 represents the representation of the program for allocations in approximately 2002, in June, when you retired; is that correct?

A. Yes.

Q. All right. And Exhibit 28 represents the allocations program currently; is that correct?

A. Yes.

Q. All right. So I would like to ask you, Mr. Sutter, if there are any representations available with the Department of Water Resources, as far as you know, that represent the allocations program that you developed in 1986?

A. I don't think that the exact program exists that was used in 1986.

Q. Are there any documents that represent the program that was prepared by you in 1986?

A. The output from the program showing the storage allocations that exist.

Q. And what do you mean by "the output"?

A. The table which shows the reservoir fill, the space allocations that were in existence at that time, the carry-over from the previous year, and the disposition -- the fill of -- the new fill of that space, the water that was used by the various entitlements, and the carry-over for the next year.

Q. And that output is in what format?

A. In hard copy.

Q. Paper?

A. Paper, yes.

Q. And where would that be available?

A. At the Department of Water Resources.

Q. And how would I ask for that if I wanted that document?

A. You would contact Liz Cresto.

Q. What would I ask for?

A. You would ask for the output from the storage allocations program for 1986.

Q. And they would have a hard copy of that?

A. Yes.

Q. You do not have that in your personal information?

A. I do not, no.

Q. I am going to ask the following set of questions concerning both the allocations program and the accounting program. I assume that we have documents that represent the accounting program, as well. I just have not dug through them yet. Did you provide copies of those programs, also?

A. I did not.

Q. Oh, you did not?

A. No.

Q. Why is that?

A. I did not use the accounting program, per se, in my affidavit.

Q. What do you mean by "per se"?

A. The results from the accounting program were input to reflect it in the allocations output.

Q. Now, you say, "allocations output." That is a different document than Exhibit 28 or 29?

A. Yes.

Q. And is the allocations output a document that you provided to us previously?

A. I did, for 1999. I believe that is the year I included.

(Exhibit No. 30 was marked for identification.)

BY MR. CAMPBELL:

Q. Mr. Sutter, I have had marked and handed to you Exhibit No. 30. If you could, identify that, please.

A. Yes. Exhibit 30 is the output from the storage allocations program for 1999.

Q. Is this the document that you were referring to previously?

A. Yes.

MR. CAMPBELL: You have just pulled up another document, I see.

(Exhibit No. 31 was marked for identification.)

BY MR. CAMPBELL:

Q. Mr. Sutter, we have two new documents. You have identified one of them, 30; and then we have Exhibit 31. Can you identify Exhibit 31, please?

A. Yes. 31 is the output from the water right accounting program for the period July 1st through July 5th of 1999 and also includes two sheets which I call the storage reconciliation sheets.

Q. Why don't you explain what those two different sets of sheets mean?

A. The July 1st through July 5th of 1999 dated sheets are the actual accounting output which shows the flows in the Boise River, the reservoir contents, all of the hydrologic data.

It reflects how the natural flow was allocated for those days. It also reflects the amount of water that is credited -- or the amount of natural flow that is credited to those reservoirs. It shows their reservoir rights. Then there's a listing of all of the canals and water entitlement uses below.

Q. "Entitlement uses"? Where are you identifying that, that particular reference? I do not see that word on there.

A. It's not there. If you look, there are 62

storage -- or water entitlement entities. Most of these are canals but there are a few -- like, if you look at number 2 and 3, these are not canals. They're flow uses. So they're not strictly canals. That's why I say "entitlements."

Q. So your reference to "entitlement" is connected with a use of water?

A. Yes, sir.

Q. So how is it connected with a use of water?

A. For example, number 2 is the Fish and Game flow. Whenever water is released in the wintertime to maintain a -- I believe it's called resource maintenance flow in the Boise River. That use is reflected under that entitlement.

Q. So the references on the first page of Exhibit 31 that are at the bottom portion of the document numbered 1 through 62 with various names represent to you a right to use water from the storage accounts in the three reservoirs on the Boise River; is that correct?

A. It reflects either a right to use water from natural flow and/or storage account.

Q. I see. So "entitlement," basically, is a synonym for "water right" or "storage account" or something along those lines; is that correct?

A. Yes.

Q. All right. Just so we understand each other.

A. Yes.

Q. And in terms of the documentation at the end of Exhibit No. 31, can you explain to me what that two-page document is?

A. Yes. The water right accounting program is run on a daily basis beginning November 1. During the non-irrigation season --

Q. Which is what period?

A. November 1 through March 31 is, typically, the non-irrigation season on the Boise.

Q. So during the non-irrigation season, what happens?

A. The natural flow of the Boise River is allocated to storage rights, and reservoirs capture that water. On April 1, the irrigation season typically begins.

In many years, the diversions are -- the irrigation diversions are small enough early in the year and the natural flow is great enough such that reservoirs continue to accrue natural flow.

On the date in which the reservoirs stop accruing water, that is typically called the date of maximum fill. Then this storage reconciliation sheet is

prepared.

Q. By that, are you referring to the last two sheets on Exhibit 31?

A. I have them --

Q. Are they in the middle?

A. -- as sheets 4 and 5. I am referring right now to sheet 4.

Q. Okay.

A. At this point, storage accrual and uses from the water right accounting is used to reconcile the accounted-for storage -- the term we use is "paper fill" -- of water with the actual reservoir contents.

Q. Is that reflected someplace on page 4 of Exhibit 31?

A. Yes.

Q. How is it reflected?

A. At the bottom, you will see the term "net storage," and you also see the term "actual storage."

Q. Okay.

A. The net storage is the amount of water that we have accounted for, or the so-called paper fill. The actual storage is the amount of water that has been measured in the reservoirs by just reading the gages.

Q. Which gages are you referring to?

A. Okay. There's a stage gage at Anderson Ranch,

Arrowrock, and Lucky Peak -- those three reservoirs. They take that stage information. They look at a curve and determine the actual acre-feet content of each --

Q. You say --

A. -- of those reservoirs.

Q. Excuse me. I didn't mean to cut you off.

A. No. I'm fine.

Q. You say, "stage gage"?

A. Right.

Q. And they take those measurements and look at a curve. Who is "they"?

A. It's either the Bureau of Reclamation or the U.S. Geological Survey. I think the U.S. -- it used to be the U.S. Geological Survey. I think the Bureau of Reclamation currently does it.

Q. You say it used to be the U.S. --

A. U.S. Geological Survey.

Q. -- Geological Survey. When was that?

A. I would say, sometime in the '90s, maybe, the Bureau of Reclamation took over a lot of their gages, their reservoir gages. It's either the Bureau of Reclamation or the USGS.

Q. Currently?

A. Currently, I don't know.

Q. You do not know exactly?

A. I don't know exactly.

Q. How do you know this information is accurate?

A. I just assume that they're doing a good job. I mean, I --

Q. You just are relying upon their professionalism and their --

A. Yes.

Q. -- expertise and training; is that correct?

A. Yes.

Q. And the information that is derived from these stage gages that you are talking about and the process of looking at curves and then generating data -- what happens to that data as it relates to the function that you performed when you were with the Hydrology Section of the Department of Water Resources?

A. We receive the reservoir data, the river flow data, the diversion data, whatever; and that data is entered into the accounting program.

Q. Now, you identified three different types of information?

A. Correct.

Q. Tell me which one is the stage gage information.

A. That would be the reservoirs for Anderson Ranch, Arrowrock, and Lucky Peak.

Q. Is that the reservoir data that you referenced?

A. The elevation of the reservoir is used to determine the acre-feet content.

Q. And is that the stage gage?

A. They read the stage gage. "Stage" is just elevation, and that is used to determine the reservoir content.

Q. And the other two types of information -- the diversion data is what information?

A. The Boise River Watermaster is in charge of measuring the canals on the Boise River to determine their diversion. So he enters that data.

The third type are the river flow; that is the U.S. Geological Survey. They have various gages throughout the Boise River; and that data is input into the program, also.

Q. And how is that information from those three sources transmitted to the Department of Water Resources Hydrology Section for utilization in the two different programs that you have been describing?

A. The river discharge data comes in --

Q. You said, "river flow"?

A. River flow, river discharge data, is transmitted via satellite to the Bureau of Reclamation; and they enter it into their Hydromet system. That's

downloaded into the program electronically from there.

The diversion data is entered manually by the watermaster. I'm not certain about the reservoir stage data. My recollection is that was also a satellite transmitted to the Bureau of Reclamation and then downloaded.

Q. But you are not sure?

A. I can't be 100-percent positive on that.

Q. You said the diversion data is entered manually by the watermaster?

A. Yes.

Q. Is that entered manually at the Department offices, in the hydrology section?

A. When I was there, prior to 2002, the watermaster was entering it on his computer at his office.

Q. And then it was transmitted via telephone line?

A. No. Well, yes. There was an electronic hookup somehow.

Q. An Internet connection?

A. Yes. Somehow. It may have been just -- it may have -- I'm not sure. I don't think it was the Internet. Somehow he was able to transmit it.

Q. All right. That information that came from at least three different sources was utilized by the

Hydrology Section to run the two different accounting programs -- or, I should say, the accounting program and the allocations program?

A. It was used to run the accounting program. Yes.

Q. But wasn't it information also utilized to run the allocations program?

A. The output from the accounting program was then taken and input into the storage allocations program.

Q. But you could not run the allocations program without the data that went into the accounting program; correct?

A. Yes. Correct.

Q. So the inputs to the accounting program were the core data that produced all of the outputs both for the accounting program and the allocations program; is that right?

A. Yes.

Q. And was that the process that you utilized in 1986?

A. Yes.

Q. Has that process changed in any fashion, other than what you have described regarding the Bureau taking over the USGS -- at any point in time since 1986?

A. There have been many changes and updates. For

instance, originally, we were using an IBM computer in the auditor's office, and then we were using a DEC computer. Now they are using, you know, PCs.

So the mechanism for doing the runs changed; but the process is, for all practical purposes, the same.

Q. Do you know if the information-gathering agencies -- the USGS, the Bureau of Reclamation, the watermaster -- to your knowledge, have any of those entities changed their information-collection processes since 1986?

A. The only possibility -- I think the Bureau of Reclamation took over their reservoirs. The USGS was measuring them. It's my recollection that they now do it themselves to save money.

Q. Do you know if any of the three agencies, the three entities, have upgraded or modified their technological systems since 1986?

A. The watermaster hasn't. He still measures the water the same. USGS has continually upgraded their data processing techniques. I think it's all on the Internet now.

Q. And what about the Bureau of Reclamation?

A. I'm not -- I don't recall. I don't know.

Q. Do you know if the Department of Water

Resources, during your tenure, did anything to verify the procedures utilized by the USGS or the Bureau of Reclamation, in terms of data gathering?

A. No.

Q. Do you know if the Department of Water Resources did anything to verify the information-transmission procedures utilized by the USGS or the Bureau of Reclamation with respect to the process you described?

A. No.

Q. Do you know if the Department of Water Resources did anything to verify the validity of the procedures utilized by the watermaster in his data-collection process that has been used by the Department in the allocations and the accounting program?

A. Initially, when there's a new watermaster, the Department trains them in water measurement. So that, I am sure, was done initially with the Boise River Watermaster. After that initial training, I'm not aware of anything they have done.

Q. When you were with the Hydrology Section, do you recall any discussions or any procedures pertaining to verification of the hard data which was relied upon by the Department for the accounting program from these

three entities?

A. Yes.

Q. Can you describe those for me?

A. The flow at Middleton is a key point in the river because the two diversions down at Middleton, essentially, use all of the natural flow -- every diversion above there. So it's a real critical measurement at Middleton.

We continually had trouble getting accurate measurements there. So we worked with the watermaster and the USGS diligently, trying to find the best location down there to take those measurements. That's the only one I can recall that we were involved in.

Q. And how long were you the -- I am sorry. I have forgotten the title you had. How long were you in charge of the Hydrology Section of the Department?

A. From 1995 until my retirement in 2002.

Q. How long did you work in the Hydrology Section? You told me earlier, but I have forgotten.

A. From October of '69 until June of 2002.

Q. So you were in the Hydrology Section the whole time you were with the Department?

A. Yes.

Q. Wow. Very impressive.

A. So you have to make jokes once in a while in

your programs.

Q. Do you want to take a break, Bob?

A. No. I'm fine -- unless you do.

Q. No. I'm asking you.

A. No.

Q. I get to suffer. So in terms of paragraph 2 on page 2 of Exhibit 27 -- that is your affidavit.

A. Right.

Q. Are you at paragraph 2?

A. Yes.

Q. You said that in 1986 you developed these two different programs. Okay?

A. Yes.

Q. Can you describe for me why this came about? I mean, was it just sort of a brainstorm that you had? You know, "I need to do this"? How did it arise that you developed these two programs?

A. In 1997 -- or in 1977, for the first time in many, many years, we had an extreme drought in Southern Idaho. The water users in the Upper Snake were requesting a better water accounting of their natural flow because of perceived inequities.

That's when the original water right accounting program was developed by myself in response to that request.

As a result of that, the Department realized that, with the advent of computers, we were able to do a much better job of accounting for natural flow and storage water with the use of computers.

It was the Director of the Department at that time who decided to utilize the computer to do the water right accounting in as many of the basins in Idaho as possible because we realized that the hand calculations that the watermasters were using -- although they were trying to do a good job, they could do a much better job using computers and could do it more accurately.

As a result of that, we instituted the accounting program and the storage allocations program in the Upper Snake in 1977. Then the Department started to look at other basins where this could be used.

Their goal was to make water right accounting and natural flow distribution, for as many water districts in Idaho as possible, consistent. They realized that various basins were doing things differently.

So in 1986, when there was a change of watermasters and the new watermaster had some familiarity with computers, he asked us to look at the Boise.

When he became watermaster, he realized that

the old methods that were in place were not exactly correct and requested we go in to do a similar -- he was aware of what we had done in the Upper Snake, and he wanted similar procedures in the Boise.

So at that point, I took the accounting program from the Upper Snake and adapted it to the Boise and the storage allocations program for the Upper Snake and adapted it to the Boise.

Q. Are you finished?

A. Yes.

Q. I did not want to cut you off.

A. No.

Q. You were giving me a great answer.

A. I'm trying to -- yes. I think that's it. Yes.

Q. And that watermaster was Lee Sisco; right?

A. Correct.

Q. "Sisco" is spelled S-i-s-c-o?

A. S-i-s-c-o.

Q. I would like to explore a little bit more deeply the interaction that you had with Lee Sisco and how it came to pass that you were tasked with developing the programs in 1986. Okay?

A. Yes.

Q. You indicated that the watermaster came to the Department or came to you?

A. Called -- contacted me, yes.

Q. Because Lee had worked at the Department; correct?

A. Yes.

Q. He knew you?

A. Yes.

Q. And he knew what you did?

A. Yes.

Q. So did he just call you up one day and say, "Gee, you know, I'm the new watermaster here. You know that because I left the Department. The old way of doing things just doesn't work. So will you develop a set of programs for the Boise?"

A. Yes.

Q. Basically, that was it?

A. Yes.

Q. And you said, "Okay, I'll do it"?

A. Yes.

Q. In 1986, were you the Hydrology Section Chief?

A. No.

Q. Who was?

A. Alan Robertson.

Q. Did you talk about this project with Alan?

A. Yes.

Q. I assume he gave a green light to do it?

A. Yes, he did.

Q. Do you recall how long it took you to develop the two programs for the Boise River, approximately? I do not need the exact number of days.

A. Right. I would say, three months.

Q. And after you got it up and running, you tinkered with it following that three-month period, I assume?

A. Yes.

Q. And was the process of making adjustments to the program after you got it up and running after the three months?

A. Yes.

Q. And how long did that process of adjusting the program take place?

A. If you go back and look at 1986, you will notice that we didn't even do the whole year. I think we started on the day of maximum reservoir fill.

It's my recollection that, for the first two years, we made major -- not major. We made several adjustments in the program to get it to where we were satisfied with it.

But the process of adjustments -- I'm sure we made adjustments to the program every year after that. The water right accounting program and the storage are

just a tool and can easily be modified -- and they were modified -- to make it easier to read the results, interpret the results.

Q. Make the results more accurate?

A. Not more accurate. I would say, just more user-friendly.

Q. So the changes that you are talking about after this -- and I will use a term that you did not use -- this shake-down process took two or three years; correct?

A. Two years.

Q. Two years?

A. About.

Q. So the middle of 1986 through the end of 1986 and then the following year, 1987, and then 1988?

A. I would think, by 1988, there were only minor adjustments.

Q. Well, I understand.

A. You can tell by looking at the watermaster reports. The initial watermaster report looks much like the previous watermaster report. So we did make it more accurate.

Lee would say, "Oh, gee, it would be nice to have these tables showing this and this." We would change the program so it would print out more

information. "The water users are asking for this," or, "They want to know this," so we would respond.

Q. And in terms of the decision to develop these two programs in 1986, do you know if this decision was discussed with anyone besides Alan Robertson before you proceeded?

A. Certainly, the watermaster was involved. Certainly, the Bureau of Reclamation was involved.

Q. Okay.

A. Yes.

Q. Do you know how the Bureau of Reclamation was involved? Do you recall that?

A. The primary information we received from the Bureau of Reclamation, as far as input to the program, would have been the hydrologic data from their Hydromet system.

So I'm sure we coordinated with them to get the Boise data; but then, also, input into the storage allocations program were the space entitlements in the three reservoirs.

Q. And do you recall how that information was provided to the Department?

A. As I recall, it was a hard-copy list of the acre-foot storage allocated to each entitlement for Anderson Ranch, Arrowrock, and Lucky Peak.

Q. And that was provided by the Bureau of Reclamation?

A. Correct.

Q. Do you know who with the Bureau of Reclamation provided that?

A. I've been trying to think. I cannot remember who it was. I just don't know.

Q. Do you recall having any discussions with anyone at the Bureau of Reclamation concerning this information when it was first provided to you?

A. Other than I requested from them the storage amounts that were reflected in their contracts and their commitments and received a table for each reservoir of those acre-foot values. Anything else -- that would be it.

Q. Did you do anything to verify the accuracy of the information provided by the Bureau of Reclamation with respect to the storage entitlements?

A. No.

Q. Do you know the process that the Bureau of Reclamation utilized to develop the information concerning storage entitlements that was provided to you in 1986?

A. I have seen examples of their contracts in the reservoirs but I think the contracts -- I'm aware that

the contracts for each reservoir are different because they were done at different times. So I did not try to verify those.

Q. The question was: Do you know if the Bureau conducted any kind of verification process of the information that they provided to you for the development of the programs in 1986?

A. Yes. They were involved in the results of the storage allocations program. They looked over our shoulder after we did our runs for the storage allocations. That would have been the area office.

Q. Area office of the Bureau?

A. Yes.

Q. I appreciate that, but my question goes to a different issue. Do you know if the Bureau did anything to validate or verify the information that was provided to you with respect to the storage entitlements that you used to develop the 1986 programs?

A. Before the fact?

Q. Yes.

A. I do not know that.

Q. Thank you. Mr. Sutter, you indicated that you reviewed some of the contracts for storage allocations or entitlements in the reservoirs on the Boise River; is that correct?

A. Very briefly.

Q. And do you recall when this occurred?

A. This would have been in the mid 1980s, sometime around 1986.

Q. Do you recall which contracts you reviewed?

A. No, I don't.

Q. Do you recall which reservoirs?

A. No, I don't.

Q. Do you recall the number of contracts you reviewed?

A. I think there was one. I wanted to see one. I had a copy, just so I could read it. I don't recall which canal company it was. I know the contracts are very lengthy. I was just looking at the storage numbers.

Q. All right. In terms of the decision to proceed with the programs that you developed in 1986, was anyone else involved in the decision-making process besides you, the watermaster, Alan Robertson, and I think you mentioned the Bureau of Reclamation?

A. The Director of the Department of Water Resources definitely was.

Q. I am glad you remembered him because I was going to ask you directly.

A. Yes.

Q. So the Director made the final decision; is that right?

A. Yes.

Q. And the Director at that point in time was -- was it Keith Higginson?

A. Or Steve Allred? Steve Allred was the initial Director with the Upper Snake who really made the decision that we needed to standardize accounting processes throughout the water districts.

Q. I understand.

A. I don't recall in 1986 which Director --

Q. That's fine. That's fine. It doesn't matter.

A. Ken Dunn, maybe?

Q. With respect to that decision by the Director, do you know if any notice was provided to any of the water users on the Boise River with water rights as to this procedure that was going to be developed -- that is, the 1986 programs that you prepared?

A. I do not know.

Q. Okay.

A. No, I don't know.

Q. Do you know if there were any public meetings with the water users or anyone apart from Department staff that involved this decision in 1986 to develop these two accounting programs?

A. I do not know that.

Q. Would the records of the Department reflect if there were such public meetings?

A. No, sir. No.

Q. Why not?

A. We relied on Lee Sisco, the watermaster, to be the liaison between the Department and the water users.

Q. Do you know if Mr. Sisco conducted any meetings with the water users concerning this set of programs that you developed in 1986?

A. I don't recall for certain. No.

Q. Do you know if the Department of Water Resources promulgated or adopted a formal rule or regulation under the Administrative Procedures Act with respect to the development of these programs?

A. No.

Q. You do not know if they did or did not?

A. I'm not aware of anything they did.

Q. With respect to your actual work on development of the programs in 1986, after you finished the three-month period of work that you described, what did you do to actually verify that what you had done was accurate?

A. With all of the programs I wrote, I would do hand calculations for various parts to make sure that

the computer was doing exactly what I told it to do.

Q. So you did a manual verification that the computer was acting properly?

A. Yes.

Q. And was anyone else with the Department involved in that verification process that you conducted?

A. Alan Robertson.

Q. Is Mr. Robertson still around? Do you know?

A. He is retired. He is living in Sandpoint. He's up in Sandpoint.

Q. Did anyone else besides Mr. Robertson do that verification?

A. No.

Q. Did the Department take this program, or these programs, out to an independent entity to verify the procedures?

A. No.

Q. Let me sort of turn the clock back a little bit more. Before 1986, what was the procedure for making the determinations that have been made by the Department of Water Resources since 1986 that you have described in your affidavit as to the water accounting and the allocations?

A. Could you rephrase that?

Q. Sure. It was a really long question; I apologize.

A. I missed it.

Q. In your affidavit, Exhibit 27, you described that you developed two programs in 1986; correct?

A. Yes.

Q. And you have described in the affidavit, as well, that, since that point in time, this program, with a few minor adjustments, has been utilized by the Department of Water Resources to account for and allocate water in the Boise River system; correct?

A. Yes.

Q. My question is: What was the procedure that the Department of Water Resources utilized for that same determination, or those determinations, before you developed the programs in 1986?

A. For the Boise River?

Q. Yes.

A. What procedures were used?

Q. Yes.

A. I can't describe it exactly. I know that the previous watermaster to -- or the previous several watermasters prior to Lee Sisco had a very simple hand procedure where they would allocate the natural flow.

I remember seeing it. It was little flip cards

where they had the rights that you could flip down somehow and look at it. I don't recall exactly the procedure, but I know it was a very simplified procedure. Other than that, I can't tell you exactly how they did it.

Q. And what did the Department of Water Resources do in the Hydrology Section to verify the accuracy of those procedures?

A. I'm not aware of anything that they had done prior to that.

Q. Prior to 1986?

A. Yes.

Q. And you were in the Hydrology Section from 1969 until 2002?

A. Yes.

Q. So from your understanding, the procedure before 1986 was the procedure you just described from the beginning of time until 1986?

A. Way back.

Q. So from 1955 to 1986; is that correct?

A. I --

Q. As far as you know?

A. As far as I know.

Q. Certainly, since 1969?

A. Certainly, yes.

Q. All right. Do you know if the Bureau of Reclamation was involved with any of the data generation of the watermaster before 1986 that you have described as flip cards?

A. To my knowledge, they were not.

Q. How about the USGS?

A. Yes.

Q. How were they involved, as far as you know?

A. I'm sure all of the reservoir measurements and the river discharge measurements came from the U.S. Geological Survey gages. I'm not certain of the procedures that the watermaster used to get those.

Q. Why are you certain that the information from the USGS gages was utilized by the watermaster?

A. Because the data that existed at that time is published by the USGS, and they were the only entity at that time that was reading the reservoir gages or the river discharge stations.

Q. Do you know, based upon your employment with the Department of Water Resources from 1969 to 2002, what supervisory duty the Department of Water Resources had with respect to watermasters on the Boise River?

A. I do not.

MR. GEHLERT: Scott, if we are at a good point, can I take a minute?

MR. CAMPBELL: Sure. We will go off the record.

(Recess.)

(All counsel displayed on the appearance page of this transcript were present after the break, with the exception of Mr. John K. Simpson.)

BY MR. CAMPBELL:

Q. Mr. Sutter, we are back on the record after a break. You are still under oath. Do you understand that?

A. Yes.

Q. Look at Exhibit 27, which is your affidavit, page 2, paragraph 4. Do you have that document?

A. I do.

Q. Page 2, paragraph 4. Okay? Why don't you just read that paragraph to yourself so you are familiar with it. I will ask you some questions about that paragraph, if you don't mind.

A. Okay.

Q. I do apologize, Mr. Sutter. This is not intentional. It is just that my brain does not always pull up everything I need to ask the questions at the time I do.

I am not going to ask you questions right now about paragraph 4. I am going to ask you a couple of

other questions that relate to our discussion that was just before the break.

A. Okay.

Q. I asked you whether or not the Department of Water Resources had published any notice about the adoption of the 1986 programs that you developed. Do you recall that?

A. Yes.

Q. And your answer was, no, as far as you know, there was no notice?

A. As far as I know, there was no public notice.

Q. Do you know, from your experience from 1986 to 2002, when you retired, if there was any notice given to the water users on the Boise River system about any of the changes that were made between 1986 and 2002 to the programs that you developed?

A. Yes. I believe, in the first watermaster report that the watermaster did, he had some discussion in that report about those changes.

Q. So in 1986 there was some reference?

A. I believe it was 1986, possibly 1987. I know of no public meetings or hearings or anything.

Q. Do you know if that watermaster report reflected any subsequent changes after the adoption of the programs in 1986, '87?

A. Once more?

Q. Let me rephrase that for you. After 1986 or '87 where you said you recall that the watermaster's annual report mentioned something about the accounting program and the allocations program -- that is what you have testified about?

A. Yes -- or at least the accounting program. I'm not sure about the allocations.

Q. So after that reference in the watermaster's annual report that described this new process, do you know if the watermaster's annual report mentioned any changes to the accounting program or allocations program after it was first implemented?

A. Not that I'm aware of.

Q. Do you know if the Department of Water Resources published any notice concerning these changes that occurred from 1986 until 2002?

A. I'm not aware of any.

Q. Do you know if the Department of Water Resources adopted any formal rules or regulations, pursuant to the Administrative Procedures Act, implementing these changes that occurred between 1986 and 2002 -- to the programs?

A. There may have been some rules on last to fill for downstream augmentation, but I can't speak to that

directly.

Q. So as far as you know, there were no formal rules or regulations adopted by the Department of Water Resources with respect to the Boise River water right accounting program or the Boise River storage allocations program; is that correct?

A. That's correct.

Q. And are you aware of any rules or regulations adopted by the Department of Water Resources concerning these two programs after 2002?

A. I am not, no.

Q. Now, turning to paragraph 4 -- I apologize for that interlude.

A. That's fine.

Q. In paragraph 4, you are talking about when the accounting program is typically first run. You talk, in the second sentence, about each day after November 1st, the Accounting Program -- and I will quote this. I am sorry.

"For each day after November 1st, the Accounting Program calculates the amount of water that is credited to each of the Boise River Reservoirs, Arrowrock, Anderson Ranch, and Lucky Peak, according to their respective storage rights."

What do you mean exactly by your reference to,

"...the Accounting Program calculates the amount of water that is credited to ...the Boise River Reservoirs... according to their respective storage rights"?

A. For each day, the program calculates the natural flow of the Boise River at several key locations. It uses those calculations to allocate the natural flow to water rights.

During the non-irrigation season, the only valid water rights would be the rights to store natural flow in the reservoirs.

So in order of priority, the program satisfies those rights until it uses up 100 percent of the natural flow. In this manner, natural flow, or water, is credited to the appropriate reservoir storage right.

Q. In terms of that crediting process, tell me how the program determines what quantities of water are credited to which reservoir. Because the various reservoirs have different priority water rights, I need to understand how that is done.

A. The program takes the oldest right first and looks at it and says, "How big is this right?" For a reservoir, the right is the total capacity of the reservoir.

So then it looks at where in the system that

reservoir is located and looks at the natural flow at that location and credits that reservoir with that natural flow. It takes that natural flow that is credited to the reservoir and removes it from the system. It's gone; it's stored.

Then it takes the next reservoir right and goes and looks at the natural flow that is remaining after this other natural flow has been removed and credited at that reservoir. If there's any left, it will credit it to that one and so forth.

You go to the next reservoir. Of course, on the Boise, there's three reservoirs. So it would look at those three reservoirs, see if there is any natural flow remaining or left that hasn't gone -- been allocated. If there is some there, it credits it to them and keeps a running account for that each day.

Q. I appreciate that explanation. Let me get into it a little bit more deeply.

A. Okay.

Q. The reservoirs on the Boise River are at different locations, obviously?

A. Yes.

Q. Arrowrock Reservoir, with the earliest priority date that is on the river, is on the main stem and, I think, the north fork; is that correct?

A. Pardon? It's on the main stem.

Q. The main stem?

A. Yes.

Q. But there is a north fork of the Boise River, also?

A. Yes. It comes in above.

Q. So it takes the main stem of the Boise River and stores the water there; correct?

A. Yes.

Q. And, also, some water from the south fork of the Boise River comes into Arrowrock; correct?

A. Yes.

Q. So once Arrowrock -- in your accounting program -- I am talking about how your accounting program works.

A. Yes.

Q. Once Arrowrock is full from those sources, then the accounting program looks to which reservoir?

A. Let's just say that, yesterday, Arrowrock filled.

Q. Yes.

A. So now, today, it would do the same thing. We would compute the natural flow at several locations on the Boise River. It goes to the oldest right, which is Arrowrock, and it says, "Oh, it's full, can't use it."

So it goes to the next right, which would be Anderson Ranch; and it looks at the natural flow that's available at Anderson Ranch. The gage there, I think, is called Featherville.

It would take the entire natural flow that has been computed at that gage and credits it to Anderson Ranch. Then it would remove that natural flow from the system, all the way down to the mouth of the Boise. It's gone; it's diverted -- on paper.

So then it goes to the next right, which would be Lucky Peak; and that's located below Arrowrock. It looks at the natural flow at that point. There would be some natural flow available there because there's inflow between the Featherville Gage -- or the Anderson Ranch location and Lucky Peak.

It would take that natural flow and credit it to Lucky Peak Reservoir, and then it would remove it from the system. Then it would look for any other valid reservoir rights or anybody else that had a right. And there wouldn't be because it's in the wintertime.

Q. And what about Lake Lowell?

A. Okay. Lake Lowell is fed by the New York Canal. Let's say that we're -- in the wintertime, Lake Lowell can divert water. It is a valid right to Lake Lowell.

So if the New York Canal is diverting -- I think that may be even an older right. I think that's probably even prior to Arrowrock.

Any time -- let's take the situation -- sometimes they begin to divert water as early as February to bring Lake Lowell up. So it would go to that point. It would look at the natural flow at the New York Canal that's been calculated.

It would look at the actual diversion of the New York Canal; and it would say, "That right is good." It would take that water, give it to the New York Canal as natural flow to fill Lake Lowell, and then it would remove that from the system. Nobody can take that.

And usually, I think, maybe only -- 1,000 cfs during the winter is about all they would divert. There's always, usually, some remaining. Then it would go back to Arrowrock.

You know, is there a capacity to store water there? It would look at that. Then it would look at Anderson Ranch and then down to Lucky Peak. That's how it works.

Q. How does the accounting program factor in releases from the reservoirs before they physically fill?

A. At each location on the river where we compute

the natural flow, the program looks at the actual flow. It compares the calculated natural flow, which is the flow that would be there if we didn't have any reservoirs, with actually what's there.

If the flow is less than the natural flow, it computes a stored water flow, which is negative, which means somebody is storing water.

Now, if a reservoir releases water and you look at the natural flow of the river at that point and the flow is greater than what the natural flow would be, then that's a stored water release. It keeps track of that storage water release at each location along the river.

Now, the only time that really becomes important in the Boise is if there's a stored water release at Lucky Peak. The reason for that is that those reservoirs are operated as a system.

Q. Okay.

A. Is that --

Q. So let me give you a more concrete example that I would like you to explain to me because it is something that I do not quite understand. The gaging station at Featherville measures natural flow into Anderson Ranch Reservoir; correct?

A. Yes. There's probably also some local flow

there but, basically, that's -- yeah.

Q. You do not measure that local flow into the reservoir?

A. We don't measure it. There's a gage below the reservoir.

Q. Below the reservoir? So you pick it up there?

A. We pick it up there, yes. It's a computed number.

Q. So the flows that come into Anderson Ranch Reservoir that you measure at Featherville -- if you are in a storage accrual -- I am using the wrong term but a storage -- I am going to use "accrual status" --

A. That's fine.

Q. -- where the accounting program is accruing that natural flow at Featherville into Anderson -- and this assumes that Arrowrock is already full.

A. And New York Canal is not diverting.

Q. Correct. So Anderson Ranch is accruing storage, yet the Bureau of Reclamation is releasing water from Anderson for power generation or to maintain a fishery -- any of those purposes.

A. Whatever.

Q. How does the accounting program track those releases from Anderson during the non-irrigation season to make certain that that water is still credited to

Anderson Ranch Reservoir?

A. The program credits the entire natural flow that's computed at the reservoir to Anderson Ranch, regardless of what the discharge is below the river, below the dam, whether it's for fish or power or whatever. The entire natural flow is credited to the reservoir.

Q. So if I understand you correctly, the accounting program keeps track of the amount released from Anderson Ranch Reservoir during the wintertime and somehow tracks it, even though it is in Arrowrock or Lucky Peak; is that correct? It keeps track of that water that was let out of Anderson Ranch?

A. The program doesn't calculate the amount of storage -- it calculates the amount of storage that is released on a daily basis; but it doesn't summarize it anyplace because it's really not important to the accounting procedure because it credits the entire natural flow to the reservoir, regardless of whether the discharge -- whatever the discharge is, it doesn't care.

It credits the entire natural flow that's computed at that reservoir to that reservoir storage right. As long as that storage release doesn't go past Lucky Peak and it's able to be captured at Arrowrock or

Lucky Peak, the program doesn't care or doesn't keep track of it.

Q. Based upon the affidavit, paragraph 4, that accounting determination is termed "paper fill"?

A. Yes.

Q. And physical fill -- according to your statement, "The physical fill in a reservoir seldom equals the paper fill because..." and then you have a number of statements.

Can you explain to me why the water stored in the three reservoirs on the Boise River is not reconciled until the end of the irrigation year?

A. It would be possible, on a daily basis, to sit down with the Bureau of Reclamation and look at who used water and calculate this out; but this would just be a tremendous amount of work.

The only really important time to reconcile all of this is at the end of the irrigation year so that we can compute what the accounts -- how much carry-over there is for the next irrigation year.

So even though we could do this -- we could somehow sit down and figure out exactly where the Anderson Ranch water is. Who used water out of Anderson Ranch? Did they use it out of Arrowrock or Lucky Peak? You could do it, but it would just be a tremendous

amount of work and wouldn't be of any use.

Q. It would not be of any use to whom?

A. Really, it wouldn't be of any use to anybody. An irrigation user on the Boise River -- let's take the New York --

Q. Let's take Pioneer Irrigation District.

A. Pioneer Irrigation District. They are using stored water. They may have water stored in Anderson Ranch and Arrowrock and Lucky Peak. I'm not sure; they may have water in all three reservoirs.

Q. They do.

A. So on any particular day, they are using stored water. It's not really important to them to know, on that day, whether or not it's Lucky Peak water or Anderson Ranch water or Arrowrock water.

It is very important to them at the end of the year to know what their carry-over is and where exactly their water is for the next year. So that calculation is only done once a year, at the end of the year. That is done to maximize their capability to refill for the next year in their water supply.

Q. You made the statement that the calculation before the end of the year would not help anyone. We talked about Pioneer. Let me ask you a couple of questions in that regard.

Let's say Pioneer does not want to use all of its Anderson Ranch water in any particular irrigation season. Let's say it wants to use its Arrowrock water and it wants to use its Lucky Peak water; but it does not want to use any Anderson Ranch water because of the likelihood of refill, for example, or the carry-over provisions of the contracts, for example.

A. Right.

Q. You are saying that does not matter to them?

A. Oh, no. They could do that without any feedback from the accounting program.

Q. How could they do that?

A. Well, let's say that they have 10,000 acre-feet in -- which reservoir do you want to keep?

Q. Anderson.

A. Anderson. They could say, "We are going to use all of our water except 10,000 acre-feet," and that would then remain in Anderson.

Q. Okay.

A. At the end of the year, we remove the stored water according to their instructions.

Q. Well, I am a little bit --

A. You wouldn't have to do that every day. It would just be a lot of work.

Q. I understand you don't want to do a lot of work

every day on this. That would be understandable.

A. We can accomplish the same thing.

Q. I am trying to grasp this. I apologize for being so dense.

A. It's okay.

Q. This is your life, basically, for the last thirty years. I am just trying to understand it, sort of jumping into it.

A. Right.

Q. I will be real dense with my questions. Okay? Just have patience with me. If, for example, the Pioneer Irrigation District said, "We want to divert water into our system, even though the storage accrual on Anderson, Arrowrock, and Lucky Peak is not a full accrual."

They say, "We want to divert this." Based upon the watermaster's regulation of the system, he checks the diversions once a week. Okay?

A. Okay.

Q. Under typical circumstances, that is what he does; he checks the diversions on the main canals once a week. Okay?

So if, in fact, you make your accounting program runs -- or you have done it in the past. You are not doing it now. If those runs are made at the end

of the irrigation season -- let me finish --

A. Okay.

Q. -- then how will Pioneer know that it has run out of water during the irrigation season if it does not have a full allotment?

A. The accounting program does tell you your remaining water here. It just doesn't tell you which reservoir it's in.

Q. You are pointing to Exhibit 31 now?

A. Yes.

Q. And I need you to say why that document is tied to the accounting program because that is not the accounting program.

A. Yes. After the storage allocations program is run --

Q. Which occurs?

A. Which occurs on the last day of reservoir accrual.

Q. Which is?

A. Anywhere from -- in a drought year, it could be anywhere from April 1st -- it might be on April 1st. It could also go clear into mid July, somewhere in that period.

The reservoirs stop accruing storage. The storage allocations program is run and each entity --

each entity's storage water supply is calculated. It's the sum of their storage water in Anderson Ranch, Arrowrock, and Lucky Peak.

That number is then put back into the accounting program so that, on a daily basis, when a canal or entity uses any storage water, it's subtracted from that account so that each user knows, on a daily basis, how much storage water they have remaining.

Q. Is that done by the Department, or is that done by the watermaster?

A. Currently, that's done by the -- the accounting runs are done by the Department at the request of the watermaster.

Q. And how often do they occur? Daily?

A. It varies. In a really good water year, where there's abundant water supply and users are not worried about how much water they have, it might be once a week during the irrigation season.

If there's a drought situation, the watermaster might make a run two or three times a week, if it's critical. He can do this. You know, it doesn't -- he's not locked into just once a week or whatever. He can request these runs.

Q. So he has the discretion to ask you to run it whenever he feels it is necessary?

A. Yes.

Q. And this run is separate and apart from the accounting program?

A. No, no. This is the accounting program.

Q. All right.

A. This is the accounting program.

Q. So the reconciliation that you are describing in paragraph 4 -- what is that process, then, that occurs at the end of the irrigation year?

A. That is when all of the storage fill and all of the uses -- it says here, "storage fill and use." The totals -- all of the storage uses and fill is not known until the end of the year.

So those are all used to make the final storage allocations run where the physical and the paper fill are reconciled.

Q. Why is this done at the end of the irrigation year, as opposed to the end of the calendar year?

A. Because, normally, the canals divert from April through October. Traditionally, the water year is from October 1 until September 30. I think that's because it's traditional. I think -- I'm not sure where that came from.

We shifted it one month, to November 1, because it makes it so much easier for accounting because many

canals divert into October. October 15, usually, is the last day anywhere in the state. So we shifted one month, for ease.

Q. What about the other uses from the reservoirs besides irrigation? How are those calculated in if you make this reconciliation at the end of the irrigation year?

A. Which use would you -- can I -- like, the stream maintenance water? Would that be --

Q. Streamflow maintenance, the flow augmentation water that the Bureau sends downstream, the diversionary flows that Boise water has for certain municipal uses, you know, any leases of water that are made through the water bank to the Idaho Power Company, maybe, outside of the irrigation year.

A. If the uses are such that they use water that has been stored in the previous fill season, then those are deducted off during the non-irrigation season, or after November 1, and those are subtracted from the last year's water.

Q. So you do an additional reconciliation of the non-irrigation uses at some point after November 1?

A. I would say it's a reconciliation. Those numbers are just simply subtracted -- let's use the example of the Fish and Game water.

Q. Sure.

A. They start using water after the irrigation season, so there's really no reconciliation. It's just that they have so much water, and that stream maintenance water is kept track of and subtracted from their account --

Q. So --

A. -- during the non-irrigation season. Excuse me.

Q. All right. So your reconciliation is at least two months behind the calendar year for those non-irrigation uses because those are picked up the following year; is that correct?

A. Well, they are computed as they occur and are subtracted from, right here in their account. In the accounting program, they are subtracted -- their use is subtracted from the amount of storage they have in the reservoir. So that would be done on a daily basis.

Q. After November 1st?

A. Yes.

Q. So in your statement, again, on page 3, in the continuation of paragraph 4, under subparagraph (a), you say, "the system..." and then you talk about the three reservoirs?

A. Correct.

Q. "...storage fill and use is not reconciled until the end of the irrigation year..."

A. The system --

Q. That does not apply to non-irrigation uses; is that correct?

A. That does not apply to non-irrigation uses? By "system," I mean that all of the uses that occurred between November 1 and the following October 31st are all summarized and reconciled at that point.

Q. As of October 31st?

A. As of October 31st. Now, in the following November 1 through October 31st, lots of things are happening, including use of water during the non-irrigation season for non-irrigation uses, flood control releases, whatever.

All of those are all bundled up and summarized once a year. So I guess it does apply. Maybe it's a little bit different because it's during the winter.

Q. I understand what you are saying.

A. Yeah.

Q. The last sentence in paragraph 4 -- and I quote -- "The Accounting Program does not calculate the amount of storage water that accrues to individual space entitlements." Did I read that correctly?

A. Correct.

Q. Again, would you explain to me what you mean by "space entitlements"?

A. The accounting program computes the amount of water that is accrued to each reservoir. Within the reservoir, each reservoir, there are individual space entitlements to various users. These individual space entitlements by user are not addressed in the accounting program.

MR. CAMPBELL: All right. I think this is a good time to stop.

(A lunch recess was taken from 11:54 a.m. until 1:15 p.m.)

BY MR. CAMPBELL:

Q. We are back on the record. Mr. Sutter, you are still under oath. Do you realize that?

A. Yes.

Q. Good. We are moving forward or onward or proceeding from where we were before. If you would, turn to your affidavit, Exhibit 27, page 3, please. Okay?

A. Yes.

Q. Look at paragraph 6, if you would, please, and tell me when you have had a chance to read both (a) and (b) of 6.

A. Yes.

Q. Does what you have described in paragraph 6, subsections (a) and (b), represent the procedures, as you recall them, with respect to calculations performed by the allocations program?

A. Yes.

Q. Did you discuss with Liz Cresto the procedures currently utilized by the Department of Water Resources with respect to the items you describe in paragraph 6?

A. Briefly, yes.

Q. How briefly? What did you discuss with her?

A. As I stated earlier, I asked her whether or not the same program was being used. I was able to get a copy of that and determined that there were no -- that it was being done the same way.

Q. In terms of the descriptions you have set forth in paragraph 6, did you describe your statements to Liz Cresto?

A. No.

Q. Did you write the statements in paragraph 6 before or after you talked to Liz Cresto?

A. After.

Q. In terms of subsection (a) of paragraph 6, you say, "In a year of low to moderate run-off, the paper fill in one or more of the Boise River reservoirs may not fill to 100 percent of its storage right (or total

allocated space)." Did I read that accurately?

A. Yes.

Q. Now, what do you mean in that statement by the term "a year of low run-off"?

A. That has to be a generalization because what I was trying to describe here was the two situations where you would not have a flood control release and when you would have a flood control release.

Q. So do you have any generalization, in terms of equating a year of low run-off to a set quantity of water that would be generated from the Boise River system?

A. No.

Q. And what about with respect to a year of moderate run-off, the other prong of your phrase there?

A. No.

Q. No?

A. Huh-uh.

Q. So these are not based upon any numeric figures of volume of acre-feet of run-off from the Boise River system in any particular year?

A. No.

Q. The second sentence under paragraph 6 (a) talks about, "In this type of year..." I will stop there.

You are referring to a low to moderate run-off year?

A. Yes.

Q. But that is just a generalization? There is no quantifiable determination of the actual acre-feet; is that correct?

A. Correct.

Q. In subsection (b) on page 4, you talk about, "In a year of above-average run-off, storage water may be physically released from the Boise River reservoirs early in the irrigation year to make space to store anticipated high natural flows to prevent flooding in the lower Boise River below Lucky Peak Reservoir." Did I read that sentence correctly?

A. Yes.

Q. Can you tell me what the term "a year of above-average run-off" means?

A. That's also a generalization, meaning that it would be a year in which natural flows would normally occur that may cause flooding.

Q. Again, with respect to the phrase "a year of above-average run-off," do you have any quantifiable, numeric figure of acre-feet in mind?

A. No.

Q. Do you have any broad parameters in mind as to an above-average run-off year versus a low to moderate

run-off year? I am just trying to get a general sense of what these two different scenarios are, in terms of actual numeric acre-feet quantities.

A. That's not possible to do because it depends upon the carry-over from the previous year.

Q. In preparing your affidavit, did you review any historic records of volume of water produced in the Boise River system that would suggest to you whether or not it was an above-average run-off year or a low to moderate run-off year?

A. No. Those are just generalizations.

Q. So you did not look at any total flow records before you prepared your affidavit -- for the Boise River system?

A. What do you mean by "total flow"?

Q. Well, I am talking about measured data from the mouth of Lucky Peak Reservoir, based upon all of the inputs of water from snow, rain, hail, whatever, up river from Lucky Peak and the quantities that were released from Lucky Peak in any particular water year.

A. I looked at the quantities released from Lucky Peak.

Q. And for which years did you review that information?

A. The years 1986 through 2007.

Q. Is that in a particular document that you reviewed?

A. Yes. I used the USGS surface water monthly statistics for the gaging station at Glenwood Bridge.

Q. Is that a document that you brought with you today?

A. Yes. You should have it.

MR. CAMPBELL: Do we have it?

MS. MARTENS: Yes.

(Exhibit No. 32 was marked for identification.)

BY MR. CAMPBELL:

Q. Mr. Sutter, you have had handed to you Exhibit No. 32. Can you identify that?

A. Yes.

Q. Tell me what it is.

A. Exhibit 32 are records from the USGS website showing the historic measured flows in cfs at the gaging station on the Boise River at Glenwood Bridge.

Q. And for the years 1986 --

A. For the years 1986, partially, through 2007.

Q. Do you know why all of 2007 is not reflected there?

A. Let's see. This is calendar year. So they have included the water year 2007 which ends in October. Yes.

Q. Is there a date on this document that indicates when it was printed?

A. Yes. March 10th of 2008.

Q. Where is that reflected?

A. It's at the end.

Q. The bottom?

A. At the end, the very bottom.

Q. Explain to me why they do not have all of the figures through 2007.

A. The USGS compiles their records by water year, which is October 1st through September 30th. They wait until the end of the water year to review the entire record for the year and to make changes according to gaging parameters.

They usually publish those, I think, usually, in January or early in the next year. So the water year 2008 records won't be published until probably January of calendar year 2009.

Q. And with regard to this document, for what purpose was it used by you?

A. I used this document to determine when there was a flood control operation, a system flood control operation on the Boise River.

Q. And how did you make that determination?

A. I observed the flows from January through July.

When, in my opinion, they were -- or in my experience, when they were larger than what the normal discharge would be for purposes other than flood control, I viewed that as a flood control year.

Q. So you just checked the monthly mean in cfs for January, February, March, April, May, June, and July maybe?

A. Possibly, yes. I think there was a July. Yes. Correct.

Q. Then you reached a professional judgment that that was a flood release year?

A. Yes.

Q. Did you verify your determinations with any data from the Corps of Engineers or the Bureau of Reclamation?

A. I did not.

Q. And the small arrows on the left-hand side of the first column? Are those your markings?

A. Yes, they are.

Q. And what do those represent?

A. Those are the years that I determined that there was a flood operation. Yes.

Q. And these are the only years that you made these determinations, as reflected on Exhibit No. 32; is that correct?

A. Yes.

Q. Why did you restrict your review of the information to the years 1986 to 2007?

A. Those are the years for which the water right accounting and storage allocations program was run, using the automated data procedures that I prepared in 1986.

Q. Are you aware if the Boise River discharges at Lucky Peak prior to 1986 reflected any flood control operations?

A. I haven't examined those years.

Q. Are you aware of any flood control operations prior to 1986 by the Bureau of Reclamation and the Corps of Engineers on the Boise River?

A. Yes. There were several -- many years prior to 1986 in which there were flood control operations.

Q. And were any of those years while you were an employee of the Department of Water Resources?

A. Yes.

Q. Do you recall any calculations that were done by the Department of Water Resources or the Boise River Watermaster reconciling any differential and storage allocations to reservoir space in Anderson Ranch or Arrowrock Reservoir, based upon flood control operations and the accrual of water to those storage allocations

prior to 1986? That is a really long question. I will break it up.

A. Yeah.

Q. Do you know if the Boise River Watermaster, prior to 1986, conducted any kind of reconciliation of the storage accounts, based upon the flood control operations of the Bureau of Reclamation and the Corps of Engineers, before 1986?

A. I am not aware of any. I am not familiar with what he did, no.

Q. Do you recall any conversations you had with Bureau of Reclamation officials concerning any similar reconciliation before 1986?

A. No.

Q. Are you familiar with any conversations that may have taken place or any meetings internally with the Department of Water Resources concerning reconciliation of storage accounts based upon flood control operations before 1986?

A. No.

(Exhibit No. 33 was marked for identification.)

BY MR. CAMPBELL:

Q. Mr. Sutter, please review the document that has been marked Exhibit 33. Can you identify that document?

A. Yes. Those are the notes that I used when I

looked at the years for which I determined there was a flood operation and, also, notes. I reviewed the watermaster reports which had the results of the storage allocations program to determine whether or not there was a failure to fill due to flood control.

Q. So the reference to Exhibit 32 is what you reflected on Exhibit 33, to some degree; is that correct? You had little check marks next to one column.

A. Yes. That's correct.

Q. In terms of the letters on Exhibit 33 -- you have, "FTF" and "FC" and "No FTF FC." You have, "Notes RJS." Can you explain what those letter references are? You also have "F" on that side.

A. Right. "RJS" are my initials. I made these notes on February 7th of this year, 2008. The left column are the years 1986 through, actually, 2008 where I examined the flow records to determine if there was a flood control operation.

If there was, I put an "F" to the left of the year. Then I examined whether or not the right for all three reservoirs had filled on paper. If it had, I wrote the word "Filled."

And in the column with "FTF," I examined whether or not there was a failure to fill physically from flood control. "FTF FC" means that there was a

failure to fill the entire system physically for flood control.

Q. Because of flood control?

A. Yes.

Q. Okay.

A. "No FTF FC" meant that the system did refill completely.

Q. So based upon Exhibit 33, then, with these calculations that you conducted between the years of 1986 and 2008, there were four years where the system, the reservoir system, failed to fill because of flood control; is that correct?

A. Correct.

Q. Did you evaluate any years before 1986?

A. I did not.

Q. Why not?

A. Again, I didn't because I wasn't familiar with the procedures that the watermaster used. I was only concerned with the fill procedures using the current accounting program and storage allocations program.

Q. Were you asked to review the water years before 1986?

A. No, I was not.

Q. Did you suggest to anyone that you should review the water years before 1986?

A. No.

Q. Could I see Exhibit 28, please, Mr. Sutter?

A. 28.

MR. CAMPBELL: Thank you. Keep that document out, if you would.

(Exhibit No. 34 was marked for identification.)

BY MR. CAMPBELL:

Q. Mr. Sutter, I have had Exhibit 34 handed to you. Can you identify that document?

A. Yes.

Q. What is it, sir?

A. That's a listing of the allocations program to the Boise River that's currently being used by the Department of Water Resources.

Q. And tell me how it differs from Exhibit 28.

A. Exhibit 28 is a listing made by copying the statements from the program and putting it into a Notepad file, whereas Exhibit 34 was made by printing it out with Visual Fortran software.

Q. Are they the same document?

A. Same document. Exact, same document.

Q. I just want to clarify something. I am sure you can explain it to me. It does not make sense to me. Looking at Exhibit No. 34, the first page, and Exhibit 28, the first page, and looking at the bottom of 34 and

the bottom of 28, they do not seem to match up.

A. Right. Mr. Gehlert had asked me for a copy of this program. Since he doesn't have Visual Fortran, I couldn't give him a copy of it that he could read. So I just copied and pasted it into Notepad and e-mailed it to him.

Q. Which one?

A. This one, the bigger print.

Q. Exhibit 28?

A. That one is the one that I printed out from my Visual Fortran software, which the font is smaller and, therefore --

Q. So which one is which?

A. 34, with the smaller font, is the one I printed out from my Visual Fortran. You get more statements on one page.

Q. It is the same document with the same information?

A. Yes. It's just a different, larger font.

Q. That's fine. That is all I need. I just wanted to have that clarified.

A. Sorry.

Q. There is no reason to be sorry. You answered the question. You clarified it.

A. Okay. I shouldn't have had so many --

Q. Turn back to Exhibit 27, if you would, Mr. Sutter, please. That is your affidavit.

A. Okay.

Q. If you would, read paragraph 7 to yourself so I can ask you some questions about it.

A. Okay.

Q. Would you read outloud the second sentence in paragraph 7 on page 4 of Exhibit 27, please?

A. "I have examined accounting results for all years since the inception of the use of the accounting program in 1986."

Q. What do you mean by "the accounting results"?

A. I reviewed the watermaster reports from 1986 through, I am going to say, 2006. I looked at the storage allocations program which shows the reservoir fill numbers from the accounting program.

Q. Where is that documentation?

A. That's at the Department of Water Resources.

Q. So you physically went there and looked at this information?

A. Yes, I did. Yes.

Q. Did you bring copies with you today?

A. I did not.

Q. We will need copies of those documents.

A. Well, the tables that I looked at are -- they

would have been in Mary Mellema's Affidavit. They are attachments.

Q. We can get to that in a minute. Let's look at that right now so we can verify what you are talking about.

A. It would be quite a job to copy all of the watermaster reports.

MR. GEHLERT: For the record, I believe you already have copied all of the watermaster reports in conjunction with Mary's affidavit.

MR. CAMPBELL: We have copied a lot of the watermaster reports; however, that is not all of the information Mr. Sutter identified.

Q. So looking at the Affidavit of Mary Mellema, which is Exhibit No. 2, sir, would you please point out the information you are talking about?

A. It would be table -- it's called Chart 9 for the years 1989, 1993, and 1999.

Q. And those are attached to the Mary Mellema Affidavit; is that correct?

A. Yes.

Q. And could you describe for me, again, what those are called? I think you said "allocation results"?

A. These are the results from the allocations --

the Boise River allocations program for that year.

Q. For the year you identified?

A. Yes.

Q. Now, what I am asking is: As to your statement, "I have examined accounting results for all years since inception of the use of the accounting program in 1986" --

A. Correct.

Q. Now, you are saying you examined the allocation results for four or five years found in the Affidavit of Mary Mellema; is that correct? I am just trying to understand.

A. Yes.

Q. So apart from those documents, what other documents at the Department of Water Resources did you review as part of your statement that you examined the accounting results for all years since 1986?

A. It would be Chart 9, from all of those reports.

Q. All right. You can go ahead and put that away, but leave it there. I will have some more questions for you. Can you give me the page numbers of the Chart 9 references that you relied upon on the exhibit?

A. Page 44.

Q. Excuse me. There is no page 44.

MR. GEHLERT: Use these page numbers, Bob.

He is looking at the page number from the original --

THE WITNESS: I'm sorry.

BY MR. CAMPBELL:

Q. You will have page 44 for every one of them.

A. I thought it was strange I had two page 44s.

Q. What was the first one?

A. Page 26, page 30, and page 33.

Q. 26, 30, and 33?

A. Yes.

Q. I guess I am missing something, Mr. Sutter. I only see three years there.

A. Right. Those are the three years in which there was a failure to fill for flood control.

Q. So, again, I am trying to understand your statement on page 4 of your affidavit, Exhibit 27. I thought I understood what you were saying when you described the information on Mary Mellema's Affidavit that we have just been talking about.

Apparently, I did not understand it. I am going to ask some more questions so I do understand it. Apart from examining the watermaster records for those years and the documents that you described on the Mary Mellema Affidavit, what other information did you review to lead you to the statement that you made at the second

sentence of paragraph 7 of your affidavit?

A. I also reviewed the other flood control years, that same chart.

Q. What do you mean by "that same chart"?

A. Chart 9 in the watermaster reports which told me that the system filled.

Q. So you reviewed each year of the watermaster's reports from 1986 to 2006 or 2007; is that correct?

A. Correct, looking at the chart.

Q. That is what you mean by the term "examined accounting results"?

A. Yes.

Q. All right. That makes it clear. I am sorry that it was hard for me to get to that point.

A. No. I'm sorry.

Q. The next statement you make in paragraph 7 -- and I am cutting into the middle of it -- says, "...the paper fill of all storage rights in Arrowrock, Anderson Ranch, and Lucky Peak reservoirs have never failed to initially fill to 100 percent." Do you see that phrase?

A. Yes.

Q. I would like to ask you what you mean by "...never failed to initially fill to 100 percent."

A. For all of these years that I have marked with

an "F," the right for all three reservoirs -- the three rights -- the four rights for all three reservoirs always filled to 100 percent.

Q. Which document are you looking at, sir?

A. I was looking at --

Q. What exhibit?

A. I was looking at my notes, Exhibit 33.

Q. Would you repeat your answer? Now that I have the document in front of me, I think I can follow it better.

A. I examined the paper fill for the four rights for the three Boise River reservoirs -- Anderson Ranch, Arrowrock and Lucky Peak -- for these years that are marked as having a flood control operation and determined in every instance that those rights filled to 100 percent.

Q. On paper?

A. On paper.

Q. Now, by the term "initially filled," what do you mean?

A. That would have been before the storage allocations program was run, prior to the last day of reservoir physical fill.

Q. So we are talking about the paper fill and then the unaccounted-for storage? I think you used that

term.

A. Yes.

Q. Is that the term you used?

A. Yes.

Q. That is the water that is dumped out of the system that is not going to be stored because of flood control; correct?

A. Correct.

Q. Turn to paragraph 8 of Exhibit 27, your affidavit, if you would.

A. Okay.

Q. Go ahead and read that full paragraph so I can ask you some questions. Tell me when you have finished reading it.

A. Okay.

Q. As to the first sentence of paragraph 8, can you tell me what you mean by the phrase "typically progresses" or "flood control operation typically progresses"?

A. The typical flood control operation includes a release of stored water before the natural flow increases to where it would create flooding. And when that natural flow materializes, the reservoirs capture that water.

At some point, the flood control releases are

cut back and maybe even stopped. The reservoirs refill using the high, natural run-off -- refill the space that was evacuated earlier for flood control.

Q. Who makes the determinations as to the quantities of water that are released from the reservoirs during the flood control period?

A. It's a joint decision between the Bureau of Reclamation and the Corps of Engineers.

Q. Does the Department of Water Resources play any role in that process?

A. No.

Q. How are you familiar with that decision-making process?

A. Because of my job duties at the Department of Water Resources, I was very much involved with the Corps and the Bureau in evaluating flood control operations from a planning standpoint.

Q. And did you have any conversations with individuals employed by the Corps of Engineers or the Bureau of Reclamation concerning flood control operations?

A. Yes.

Q. And how many conversations, over the course of your thirty years, more or less, with the Department? Hundreds?

A. Yes.

Q. With various individuals with both entities?

A. Yes.

Q. All right. So that is how you became aware of their procedures?

A. Yes.

Q. But you or no one else in the Department really had any defined role to play with respect to those procedures; is that correct?

A. Yes, we did.

Q. Oh, you did have a role?

A. Yes.

Q. Explain to me what the role was. Then I would like you to explain to me what the role is currently. So, first, what do you know, from your personal experience?

A. The Department of Water Resources was a very interested party when the Water Control Manual was revised in the early '80s.

Q. Okay.

A. So we had many meetings. At the direction of the Governor, we had many meetings with the Bureau of Reclamation and the Corps of Engineers in that manual revision.

Q. And did you participate in those meetings?

A. Yes, I did.

Q. Was there anyone else with the Department of Water Resources who participated in those meetings?

A. Yes.

Q. Do you know who?

A. Alan Robertson and maybe others in the Hydrology Section.

Q. How about David Tuthill?

A. No.

Q. How about Hal Anderson?

A. No.

Q. Who else was in the Hydrology Section?

A. Bill Ondrechen, I think, was involved. John Lindgren, maybe.

Q. Do you recall the individuals with the Bureau of Reclamation who were involved in that process?

A. David Reese, I think, is one of the main ones. David Reese. Probably Vic Armacost. Three or four other people; I don't remember their names.

Q. Can you describe for me how this process commenced, as far as your recollection and involvement was concerned? In other words, give me the context of how it started.

A. Right. I think it was the result of the year 1974 when they about lost control of the reservoir and

Governor Andrus directed the Department to review the flood control procedures, from a safety standpoint. So that fell to the Hydrology Section.

Q. And what was done after the Governor said, "Look at this"?

A. We wrote a report -- it was called "Review of the Boise River Flood Control" -- and that suggested that the Water Control Manual be revised and updated to assure the system be more safe.

Q. Do you know when that report was issued? Was it 1977?

A. It was somewhere --

Q. Somewhere around there?

A. Somewhere around there.

Q. You said that your report recommended that the Water Control Manual be revised?

A. Yes.

Q. Can you tell me what form the Water Control Manual took before its revision?

A. In what way? What it looked like or --

Q. What did it look like? Was it a manual like Exhibit 16 which is a copy of the current manual?

A. No. The one that I recall didn't have, really, a formal cover. It was just paper, and it was stapled together. It may be three-quarters of an inch or

one-half inch thick. It had space reservation diagrams in it and various other things.

Q. Mr. Sutter, I am handing you what has been previously marked as Exhibit 3. I would like you to examine that and tell me if you can identify it.

A. Yes. I recognize this.

Q. What is it, sir?

A. I recognize this as a Memorandum of Agreement between the Bureau of Reclamation, the Corps of Engineers and, I believe, the water users to operate the Boise River system as a combined, coordinated irrigation, flood control.

There was a manual on top of this. This was attached to -- I think this was an attachment to the Water Control Manual that existed at that time. That's my recollection.

Q. Thank you. Based upon your recollection of Exhibit 3, did you ever utilize Exhibit 3 in any of the calculations that you performed using the two computer programs?

A. No.

Q. Did you have any discussions with anyone at the Bureau of Reclamation concerning the content of Exhibit 3?

A. No.

Q. Did you have any discussions with anyone concerning the content of Exhibit 3 prior to this deposition?

A. No.

Q. Did you examine Exhibit 3 in preparation for your deposition?

A. No.

Q. So getting back to this period where the Department had generated this report in 1974 to 1977 --

A. Somewhere in there.

Q. -- did you work on the report?

A. Yes, sir. Yes.

Q. You can call me "sir." I mean, it doesn't bother me. I am not sure I deserve the "sir" part. In terms of your involvement with the report, can you tell me what role you played?

A. I pretty much wrote the report.

Q. With input from various people -- or not?

A. No.

Q. So you wrote the report?

A. Yes.

Q. All right. So do you recall what it said?

A. In general.

Q. Tell me in general what it said.

A. I did some technical studies where I suggested

that the Water Control Manual be revised using more current data since the old manual, in '53, used a limited record of data and that we had forty more years of data and that we could do much better studies for the flood reservation diagrams. I did some risk calculations in there that I recommended be considered in the new manual.

Q. In terms of those recommendations, do you recall any specific aspects of the recommendations, like changing the flood control rule curves or the timing of the flood control operations, or anything along those lines?

A. Not specifically.

Q. Do you recall, after this report was completed, what was done with it?

A. The report was given to the Corps of Engineers with the -- I think there were -- as I recall, there were recommendations at the end of the report; and those were passed by the Governor to the Corps of Engineers in the form of a report.

Q. Did you have any input from the Corps of Engineers while you were preparing the report? Any conversations? Any data that you relied upon from their prior operations of the reservoirs?

A. No.

Q. And after the report was sent to the Corps of Engineers by the Governor, what occurred?

A. The Corps of Engineers then began a revision of the manual with the cooperation of the Bureau of Reclamation, and the manual was revised.

Q. Did you participate in that process?

A. Let's see. Yes, yes.

Q. How did you participate?

A. There were many, many meetings while the manual was being revised. We would sit in on the meetings to be kept informed about the progress that was being made.

Q. And by "we," that would be --

A. The Department of Water Resources.

Q. Alan Robertson, you, and Bill Ondrechen maybe?

A. And possibly others.

Q. Over what period of time was this?

A. Sometime in 19 -- in the mid '80s.

Q. All right.

A. Mid '80s, mid to late '80s.

Q. Do you know, based upon your attendance at these meetings, whether or not there was any discussion about notice to the impacted water users?

A. I don't recall.

Q. Do you recall if there were any representatives present at any of the meetings of the impacted water

users?

A. Other than the Bureau of Reclamation, I think there were not. I guess if you call the Bureau of Reclamation --

Q. I don't.

A. You don't? Okay. No.

Q. What do you understand by my use of the term "impacted water users"?

A. Canal company managers, probably.

Q. All right. Do you know -- well, let's start it this way. The Water Control Manual was revised and adopted as a manual that is sometimes called the 1985 Water Control Manual; is that correct?

A. That sounds right, yes.

Q. Did you, in your function with the Department from 1985 on, utilize any portion of the Water Control Manual of 1985 for your role in the accounting program or the allocations program?

A. Yes.

Q. What portions of the Manual did you utilize? Do you recall? You provided us with copies of certain documents.

A. Yes.

Q. Maybe that is more helpful to you?

A. I included the page from the Water Control

Manual that I reviewed, to refresh my memory.

Q. I am trying to find it here on my list here. I think I have it. Is it this document?

A. Yes.

(Exhibit No. 35 was marked for identification.)

BY MR. CAMPBELL:

Q. Mr. Sutter, if you would, examine Exhibit No. 35, please.

A. Okay.

Q. Can you identify Exhibit 35?

A. Exhibit 35 are two pages from the Water Control Manual, page 7-15 and 7-16.

Q. And are those the documents that you relied upon for your affidavit, in part?

A. Yes.

Q. On page 7-15, what portions of that page did you rely upon?

A. Starting with the final three sentences on page 7-15 and probably clear down to paragraph (d) is what I re-read.

Q. All right. In terms of your affidavit, what significance did that information have contained on those two pages?

A. The 60,000 acre-feet that's referred to in those two paragraphs. That 60,000 acre-feet is space in

Lucky Peak Reservoir that is given a secondary priority under a flood control refill situation, such that it has a last priority of fill in the reservoir. Yes.

Q. Anything else? Take your time.

A. No. That's it.

Q. That is it?

A. Yes.

Q. Turn your attention to Exhibit 16, if you would, sir. Would you look at that and tell me if you can identify it? I would warn you that if you take anything from that document with you today you will be shot, or something like that -- something like that -- by the Bureau of Reclamation.

A. I don't recognize this cover, but I recognize the Water Control Manual. No date?

Q. Mr. Sutter, I will represent to you, sir, that that document is an exact copy of a document brought to the deposition by Mary Mellema as a copy of the 1985 Water Control Manual that she utilizes.

A. Yes. But this does not look like the Water Control Manual that I used.

Q. All right.

A. Mine doesn't look like this -- or the one that I used when I was an employee of the Department of Water Resources.

Q. That's fine. That's fine. In terms of the one that you used, what did it look like?

A. It had a blue cover. It did not have all of the handwritten pages, nor did it have all of the little stickies.

Q. Do you still have that one that you used when you were at the Department?

A. No. No, sir. I know it is at the Department. Yeah.

Q. Oh, it is at the Department?

A. Yes. It's at the Department.

Q. Who has possession of that?

A. It's in a bookcase, in a general-use area, the Hydrology Section.

Q. In the State office?

A. Yes.

Q. Turn to your affidavit, again, Mr. Sutter, if you would, paragraph 8. Are you there, sir?

A. Yes.

Q. Your statement is, "The Accounting Program tracks the amount of natural flow stored during the refill phase of a flood control operation as 'unaccounted for' storage."

Tell me what you mean by the term "unaccounted for storage."

A. That term was first coined when we did the Upper Snake accounting. After the reservoirs fill on paper, that storage water is subsequently released for flood control.

When that natural flow that normally would cause flooding is stored in that evacuated space, the program recognizes that that natural flow wasn't released downstream; but it has no way to categorize it and no right to credit it to because the rights are full on paper.

So we created this category of unaccounted-for storage, recognizing that storage, yes, in fact, has taken place but without a water right, since the water right has already been filled.

So this is a little category that accumulates, on a daily basis, this storage that is taking place without a water right; and that is called "unaccounted for," for lack of a better term.

Q. So let me try to paraphrase what you said. I am not criticizing it. I just want to see if I understand it.

A. That's fine.

Q. So for the Boise River Reservoir System, when they are in flood control, this accounting program tracks and calculates when 100 percent of the storage

space accrues, based upon inflow to the system, the reservoir system; is that correct?

A. Yes.

Q. When that happens, then anything else that comes in above that 100 percent is deemed unaccounted-for storage; correct?

A. Anything that comes in and is captured.

Q. Okay.

A. If it comes in and goes on out, it's fine. But if it's captured --

Q. So there are two categories. The amount in excess of 100 percent of fill that is passed through is one category; correct?

A. Could be. It's natural flow that is passed through -- could be.

Q. That is the category of water. This flood control period where the accounting program tracks that --

A. Yes.

Q. What is that called?

A. Natural flow that just passes downstream. It goes in the Snake River.

Q. Is that described in your affidavit someplace?

A. No.

Q. Has it ever happened in the years 1986 to 2002

where that natural flow water passes through?

A. Yes.

Q. How many times has that happened that you know of? Every flood control operation?

A. Yes.

Q. So your little sheet that is identified by the F's on the left-hand side of the column -- every one of those F's represents a year when the natural flow water passed on through after the system filled to 100 percent?

A. I would have to check that to make sure.

Q. Go ahead and check it.

A. Oh, I can't. I would have to look at the accounting runs.

Q. Well, we won't have you do that today.

A. Yeah.

Q. Let's pursue the question I have, then. So that category of water that is not the unaccounted-for storage -- okay -- the natural flow pass-through water, how is that reflected in the accounting process that you have described in your affidavit?

A. It would be natural flow down at Parma that went into the Snake River.

Q. I meant in your affidavit. Where is it described in your affidavit?

A. It is not described.

Q. Why not?

A. I didn't think it was relevant.

Q. Well, isn't it part of your accounting program?

A. Yes.

Q. So why wasn't it relevant?

A. I think, if I would have described everything in the accounting program, it would have been this thick (indicating). So I narrowed it to the portions that I thought were relevant to this case.

Q. Did you discuss with Mr. Gehlert what portions were relevant to this case?

A. After my discussions with Jerry Gregg, I sat down and wrote this and then sent it to Mr. Gehlert for review. I guess, on that matter, he reviewed it and maybe asked me to elaborate in different areas.

Q. So based upon your conversation with Jerry Gregg, you drafted this initial draft of the affidavit and, based upon your discussions with Jerry and Gail McGarry -- correct?

A. Yes.

Q. You did not think it was relevant to explain in your affidavit how the accounting program calculates or deals with natural flow water releases in flood control

operations, apart from the unaccounted-for storage or apart from the 100-percent fill; is that correct?

A. Apart from the unaccounted-for storage or --

Q. Let me separate the question out so it is a little bit easier. I apologize. You said that you did not think it was relevant, in terms of your affidavit, to describe this natural flow water that passes through the reservoir system in flood control operations --

A. Yes.

Q. -- in describing the accounting program functions. That is what I understood you to say.

A. Right. I thought --

Q. Is that correct?

A. Yes, yes, yes.

Q. All right. And what I understood -- I am not trying to put words in your mouth. So correct me, please. Okay.

What I understood you to say was that, based upon your conversations with Jerry Gregg in January, when Gail McGarry was present, your understanding of the circumstances of this case led you to draft this affidavit; is that correct?

A. Yes.

Q. And then you provided certain drafts to Mr. Gehlert; correct?

A. Yes.

Q. My question to you is: Does the accounting program track or account for the natural flow of water that is passed through Lucky Peak Reservoir?

A. Yes.

Q. Thank you. Mr. Sutter, if you would, look at the last sentence on page 4. It starts with, "At the end of a flood operation..." Do you see that?

A. Yes.

Q. Going over to the next page, just read that so you know what I am going to ask you about.

A. Yes.

Q. You make the reference that, at the end of the flood operation -- excuse me. I misspoke.

"At the end of a flood operation, ideally the amount of 'unaccounted for' storage will be equal to the amount of storage released for flood control so that the amount of water stored physically in the reservoirs will be equal to the paper fill, which is 100 percent of the storage right (or allocated storage)." Did I read that sentence correctly?

A. Yes.

Q. What do you mean by "ideally"? That implies to me that it does not happen this way.

A. That term means that the flood control

operators, the Bureau of Reclamation and the Corps of Engineers -- it's their goal to physically refill all of the storage space that was made available for flood control by the end of the flood control season. That's their goal.

Q. So that is what you are saying? "Ideally"?

A. Yes. That's the goal.

Q. Do you know if that ever happens?

A. Yes. It does happen.

Q. And do you know how often this happened?

A. Looking back at 1986 through 2007, I think I had ten flood control years. Actually, they did pretty good. One, two, three, four, five -- six times they filled the system back up completely.

Q. So sixty percent of the time they were right?

A. Yes. Sixty percent of the time they were lucky.

Q. Even better.

A. They are always right.

Q. Is that your professional opinion?

A. They use the flood control curves.

Q. I am asking you a question. Is that your professional opinion?

A. That was a joke, sir.

Q. So that is not your opinion?

A. No.

Q. So you were describing the Flood Control Manual?

A. Yes. They use the curves in the Flood Control Manual. You know, it is quite professionally done. If a mistake it made, it's because of statistical forecasting procedures. It's not because somebody actually was wrong. That was my point, sir.

Q. I understand, I think. The next sentence in paragraph 8 reads, "If the 'unaccounted for' storage is less than the storage released for flood control, this shortfall is termed the 'failure to refill due to flood control.'"

Is that phrase, "failure to fill due to flood control," a term that is reflected in your programs?

A. No.

Q. So where does it come from?

A. Again, that's a term that we coined in the Upper Snake when similar things happened there. When the unaccounted-for storage was less than the storage released for flood control -- those exact words are not used in the program, but it was a term that we used between professionals that operated the reservoirs to describe this difference in -- yeah, the difference.

Q. Is that term used in the Boise River

Watermaster's Annual Report?

A. No.

Q. Is it used or documented someplace internally within the Department of Water Resources with regard to these accounting program or allocations program runs for each year?

A. It could only be found in worksheets.

Q. So it is not an official term?

A. It is not official.

Q. Is this calculation -- excuse me -- not "calculation." Is this term a term that was utilized when you were at the Department to calculate a specific number?

A. Yes.

Q. And what number was calculated relating to this phrase?

A. It would be different for each year in which there was a failure to fill. It would depend upon that particular year.

Q. And as part of your preparation for today's deposition or as part of your preparation of the affidavit, did you conduct any evaluation of the years where the failure to refill due to flood control amount was calculated and a figure was derived?

A. Yes.

Q. For which years did you do that?

A. I came up with the years 1986, 1989, 1993, and 1999.

Q. And do you have amounts that are related to those years?

A. These amounts are reported in Mary Mellema's Affidavit, and I checked those. I don't have those. I just --

Q. Well, let's look at her affidavit. I think that is Exhibit 2, if I am not mistaken.

MR. GEHLERT: At one point you asked Bob to hold on to it.

THE WITNESS: I probably didn't give it back to you. Is this it? I've got something on the back there that's not supposed to be there.

BY MR. CAMPBELL:

Q. No. I think it is part of it. Identify, if you would, please, the portion of that affidavit that you are identifying.

A. Okay. It would be page 4, the table at the top.

Q. Which figures?

A. The 1989, '93, and '99 values.

Q. '93 -- I am sorry.

A. In 1989, it was 126,473; in 1993, it was

15,372; and in 1999, it was 6,968.

Q. Just so I am following you, you are saying, then, that you calculated out the failure to fill due to flood control amount in 1989 as being 126,473 acre-feet?

A. Correct.

Q. And the same with regard to 1993; it was 15,372 acre-feet?

A. Correct.

Q. And in 1999, the amount was 6,968 acre-feet?

A. Correct.

Q. Did you do anything to verify the amounts in years '72, '75, '76, or '78?

A. I did not.

Q. And, Mr. Sutter, what about 1986?

A. That was a year -- I looked at the 1986 report.

Q. Which report?

A. The Watermaster Report for 1986. I was fairly certain it was a flood control year, and I think there was a slight amount that was not refilled. It's an additional year that Mary Mellema did not have.

Q. Do you recall the amount of the failure to fill?

A. I don't. It was small.

Q. By "small," do you mean a couple thousand acre-feet?

A. I don't recall.

Q. All right. Let's go back to Exhibit 27, Mr. Sutter. Are you doing okay? Do you want a break?

A. I'm fine.

Q. That is your affidavit. Look at paragraph 9. If you would, please, just go ahead and read paragraph 9 to yourself and tell me when you have finished.

A. Okay.

Q. All right?

A. Yes.

Q. In terms of paragraph 9, the last two sentences are the portions which I would like to talk to you about. I will just read outloud the two sentences together.

"I have examined these years and in all cases, Arrowrock and Anderson Ranch entitlements received 100 percent allocation. The same conclusion was reached by Mary Mellema in her affidavit dated November 13, 2007."

Did I read those two sentences correctly?

A. Yes.

Q. Now, perhaps you have already described your process; but I would like to have you indulge me just a little bit and tell me what you examined for the years you identify -- it is the preceding sentence -- from 1986 through 2007. You say you examined these years.

What did you examine?

A. I looked at the watermaster reports, the portion that showed the results of the allocations program. I looked at the Arrowrock and Anderson Ranch fill numbers. They were all 100 percent.

Q. And you state that the same conclusion was reached by Mary Mellema in her affidavit dated November 13, 2007; is that correct?

A. Yes.

Q. Turn back to her affidavit, if you would. Tell me what portion of her affidavit you are describing in that sentence.

A. That would be on page 4. It would be the second column -- or the third column.

Q. In the chart?

A. In the chart at the top of the page where she shows 100 percent.

Q. So you are agreeing with the chart?

A. I am agreeing with her conclusion that, in 1989, '93, and '99, Anderson and Arrowrock filled to 100 percent.

Q. So your agreement with her conclusions does not extend to 1978, 1976, 1975, or 1972; is that correct?

A. Correct.

Q. Is there any other portion of Mary Mellema's

Affidavit of November 13, 2007, with which you agree with her conclusion?

A. Once more.

Q. Let me read your statement.

A. Okay.

Q. "The same conclusion was reached by Mary Mellema in her affidavit dated November 13, 2007."

A. I was referring to this table here of the 100-percent fill.

Q. That is the only portion of your affidavit that I see you reference Mary Mellema's Affidavit. Now, is there another portion of your affidavit where you agree with the conclusions of Mary Mellema's Affidavit?

A. Let me check. No.

MR. CAMPBELL: Let's take a quick break.

(Recess.)

MR. CAMPBELL: Given travel arrangements and the fact we are not going to complete the deposition today and the fact that I want some of the documents that, evidently, exist but I do not have, we are going to continue the deposition to another date.

Do you have a sense of when you are going to be back here again, David?

MR. GEHLERT: Yes. I will be here April 16th. I talked with Bob over lunch. He is available on the

17th.

THE WITNESS: That is a Thursday?

MR. GEHLERT: Yes. My understanding is that's a Thursday. I don't have my calendar with me.

MR. CAMPBELL: It is.

MS. MARTENS: I am in a different depo on the 17th.

MR. GEHLERT: If you think we can do it in an afternoon, we can be available on the 16th.

MR. CAMPBELL: I think we might be able to.

Are you available on the 16th?

MS. MARTENS: I should be. My depo is in Meridian on the 17th. I will be here on the 16th, anyway.

MR. GEHLERT: Bob just indicated that the 16th is better for him. I think our argument is at 9:00 a.m. We should be done by lunch or, I would think, even earlier than that.

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

MR. GEHLERT: Should we just say 1:00 o'clock?

MR. CAMPBELL: Does that work for you, Bob?

THE WITNESS: I'm pretty sure. I have to check my hard-copy calendar, since I don't have one of these.

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

MR. GEHLERT: Why don't we do it this way? We

will assume we are going to go forward at 1:00 o'clock on the 16th unless I send you an e-mail or give you a call in the next two days.

MS. MARTENS: We will just reschedule it as a group e-mail again.

MR. CAMPBELL: That would be great.

Thank you very much, Bob. You have been very patient.

MR. GEHLERT: We should clarify the documents. You asked for copies of drafts of the affidavit. Bob had indicated he would look to see if he had any.

MR. CAMPBELL: And e-mails, yes.

MR. GEHLERT: And related e-mails. That's it?

MR. CAMPBELL: That is what I recall.

THE WITNESS: E-mails. You have got the watermaster reports. Some of those I didn't -- you got those?

MR. CAMPBELL: Yes. I have got those.

MS. MARTENS: The report that you authored in the '70s.

THE WITNESS: Is that --

MR. CAMPBELL: We have asked for that before.

MR. GEHLERT: Actually, I think -- and don't hold me to this. I think that is one of the things that is being copied. I vaguely remember it.

MR. CAMPBELL: We will see when we get the documents.

(The deposition stood in recess at 3:10 p.m., to be continued on Wednesday, April 16, 2008, at 1:00 o'clock p.m., or sometime mutually agreed upon by counsel and the witness.)

(Signature requested.)

* * *

C E R T I F I C A T E

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 1st day of April 2008.

_____

LORI A. PULSIFER, CSR, RDR, CRR
Certified Shorthand Reporter
Idaho Certificate 354

A

ability 143:11
able 22:17 50:23 56:2 82:25 94:12 140:10
above-average 96:8 96:16,21,25 97:9
abundant 88:16
accomplish 39:18 86:2
account 17:3 44:22 44:24 68:10 76:16 88:7 91:6,15 131:3
accounted 12:22 46:21
accounted-for 46:11
accounting 5:14 12:14,17 13:13 16:22 17:4 21:19 25:19 28:6,9,12 30:24 31:3 38:5,6 38:19 41:20,21 42:3 42:6 43:7,13 45:7 46:10 48:18 51:1,2 51:4,8,11,14,16 53:15,25 55:21,23 56:3,7,13,16 57:5 59:25 65:8,25 67:23 73:4,7,12 74:5,16 74:18,21 75:1 77:13 77:14,18 79:22 81:14,23 82:9,18 83:4 85:11 86:23 87:6,12,13 88:5,11 89:3,4,6,25 91:16 92:22 93:3,7 101:5 104:20 107:9,10,12 107:16 109:5,6,17 111:11 122:17 125:20 126:2,24 127:17 128:14,20 129:4,9,24 130:10 131:2 134:5
accounts 44:18 83:19 102:6,18
accrual 46:9 81:11 81:12 86:13,15 87:18 101:25
accrue 45:22
accrued 93:4
accrues 92:23 127:1
accruing 45:24 81:14 81:18 87:24
accumulates 126:15
accuracy 62:16 69:7
accurate 48:2 54:9 60:4,5,22 66:23
accurately 19:25 56:11 95:1
acre-feet 47:3 49:3 85:13,17 95:21 96:4 96:22 97:3 123:24 123:25 136:4,7,9,25
acre-foot 61:24 62:14
Act 66:14 73:21
acting 67:3
action 6:8 143:16
activities 29:17
actual 39:5 43:13 46:12,18,22 47:3 66:19 79:9 80:1 96:4 97:3
ADA 2:18,20
adapted 57:6,8
add 8:13 26:15
added 25:5,9,19 26:1 31:20
addition 26:8
additional 25:19,25 26:2,15 90:21 136:20
addressed 93:7
adduced 6:13
adjusting 59:14
adjustments 59:10 59:21,23,24 60:17 68:9
Administration 11:23
Administrative 66:14 73:21
adopted 66:13 73:20 74:3,9 122:12
adoption 72:6,24
advent 56:2
affidavit 5:5 8:7,8 15:24 16:3,5,12,25 17:1,19 18:2,7 19:16,19,24 20:14 20:16,19 21:5,6,15 21:16 27:6 37:23 42:4 55:7 67:23 68:4,7 71:12 83:3 93:19 97:6,13 107:2 108:1,10,14,20 109:10 110:16,18 110:24 111:1 113:10 123:14,21 125:17 127:23 128:21,24,25 129:19,24 130:6,22 134:22 135:7,9,18 137:5,18 138:7,10 138:11 139:1,7,10 139:11,12,13 141:10
afternoon 140:9
age 13:24
agencies 52:8,16
ago 30:5
agree 14:7 139:1,12
agreed 142:5
agreeing 138:18,19
agreement 15:16,23 118:8 138:22
Agricultural 11:10 11:13
ahead 109:19 113:12 128:12 137:6
Alan 58:22,23 61:5 64:19 67:8 116:6 121:14
allocate 24:11 68:11 68:24 75:7
allocated 43:16 45:16 61:24 76:15 95:1 131:20
allocating 33:8
allocation 108:23 109:9 137:17
allocations 5:12 21:21 24:13 38:7,8 38:18,21,24,25 39:18 40:2,6,11,18 40:21 41:12,19 42:7 42:8,11,20 51:3,7,9 51:10,16 53:15 56:13 57:7 61:19 63:9,11,23 67:24 73:5,8,12 74:6 87:14,25 89:15 94:4 101:5,23,25 103:4 104:20 105:12 107:15 108:25 109:1 112:22 122:18 134:5 138:3
allotment 87:5
allow 34:1
Allred 65:6,6
amount 43:17,18 46:20,22 74:21 75:1 82:9,14,15 83:16 84:1 91:17 92:23 93:3 125:21 127:11 131:16,17,18 134:23 136:4,9,19 136:21
amounts 62:12 135:4 135:6 136:11
Anderson 5:7,10,20 26:3,6 46:25 48:24 61:25 74:23 78:2,3 78:6,14 79:20 80:24 81:9,15,18,20,24 82:1,3,10,13 83:23 83:23 84:8,15 85:2 85:5,15,16,18 86:14 88:2 101:23 111:18 112:12 116:10 137:16 138:4,20
Andrus 117:1
and/or 44:22
annual 73:4,10,11 134:1
answer 8:25,25 9:5,7 9:19 32:6 57:13 72:9 112:8
answered 22:2 106:23
answering 22:3
anticipated 96:11
anybody 78:19 84:3
anyplace 82:17
anyway 140:14
apart 31:13 65:23 89:2 109:14 110:22 130:1,2,3
apologize 68:2 71:20 74:12 86:3 130:5
Apparently 110:20
appear 26:17

appearance 71:4
applied 27:5
applies 16:23
apply 92:4,6,17
appreciable 21:24 22:2
appreciate 7:8 63:14 76:17
appropriate 75:15
approximately 12:2 15:18 40:2 59:3
April 45:17 87:21,21 89:19 100:6 139:24 142:4 143:18
area 63:11,12 125:13
areas 129:17
argument 140:16
Armacost 116:18
arrangement 14:25
arrangements 139:17
Arrington 3:3
Arrowrock 5:8,11,21 26:8 47:1 48:25 61:25 74:23 76:23 77:11,13,17,19,25 78:11 79:3,17 81:16 82:11,25 83:24 84:9 84:15 85:3 86:14 88:3 101:24 111:18 112:13 137:16 138:4,20
arrows 100:17
asked 8:8 9:1 14:2 17:1,23 18:1 20:18 22:1,3,8 28:11 56:23 72:4 94:11 104:21 106:2 129:17 135:11 141:10,22
asking 9:25 13:13 55:4 61:1 109:4 132:22
aspect 9:3
aspects 28:2 120:9
assign 28:3
Assistant 2:10
assisting 28:5
assume 9:20 10:18 41:20 48:3 58:25 59:8 141:1
assumes 81:16
assumption 29:20
assurance 15:11
assure 117:9
asterisks 35:22,23
attached 21:4 108:19 118:14
attachment 118:14
attachments 108:2
attempted 17:6
attendance 121:20
attended 11:3
attention 34:13 124:8
attorney 2:10,14,19 3:4,10 8:11 143:16
Attorneys 2:4
ATTORNEY'S 2:20
audible 9:5
auditor's 52:2
augmentation 25:5 26:4 73:25 90:10
authored 141:19
automated 101:6
available 40:9 41:5 78:3,13 132:3 139:25 140:9,11 143:13
Avenue 3:5
aware 9:11 36:4 53:20 57:3 62:25 66:18 69:9 73:14,18 74:8 101:8,12 102:9 115:4
a.m 1:16 93:11 140:16

B

b 5:1 93:24 94:2 96:7
back 18:5 32:5 37:6,9 59:16 67:19 69:19 71:8 79:17 88:4 93:14 107:1 114:1 119:8 132:11,14 135:13,14 137:2 138:10 139:23
background 10:24 12:21
backing 15:9
bank 90:14
BARKER 3:4,10
Barrett 1:14 2:4 6:4
base 26:21
based 70:19 83:3 86:16 95:20 97:17 101:24 102:6,18 104:8 118:17 121:20 127:1 129:18,20 130:18
basically 10:8 13:14 44:23 58:15 81:1 86:6
basin 25:5
basins 56:7,15,19
basis 14:24 45:8 82:16 83:13 88:5,8 91:18 126:16
began 11:19 121:3
beginning 1:16 45:8 69:18
begins 45:18
behalf 6:2
believe 42:13 44:12 72:17,21 108:8 118:10
best 10:6 54:11 143:11
better 55:21 56:3,10 112:10 120:4 126:18 132:18 140:16
big 75:22
bigger 106:8
Bill 116:13 121:14
bit 12:20 36:9 57:19 67:19 76:18 85:22 92:18 130:5 137:23
blue 125:3
Board 3:3 11:20,22
Bob 14:17 15:6,6,6 16:4 31:22 55:2 109:25 135:11 139:25 140:15,21 141:7,10
Boise 1:15,21 2:6,16 2:21 3:3,11 5:17,17 6:6 12:15,22 16:23 20:21 21:19 24:11 38:4,6,8,17,25 39:18 43:14 44:13 44:19 45:12,15 49:10,11,15 53:19 56:24 57:4,6,8 58:13 59:3 61:18 63:24 65:16 68:11 68:17 70:22 72:14 74:4,5,22 75:2,6 76:12,20 77:4,7,11 77:24 78:8 80:15 83:11 84:4 90:12 94:24 95:11,21 96:9 96:12 97:8,13 98:18 99:23 101:8,14,21 102:4 105:13 109:1 112:12 117:7 118:11 126:23 133:25
Boistofor.txt 5:6,9,19
bookcase 125:13
boring 36:8
bother 119:14
bottom 17:13 35:23 44:16 46:17 99:6,7 105:25 106:1
Boulevard 1:14 2:5 6:5
box 3:11 35:21
brain 71:21
brainstorm 55:15
break 10:10,12,14,16 10:17 55:2 71:5,9 72:2 102:2 137:3 139:15
Bridge 5:17 98:4,18
briefing 19:13,20
briefly 64:1 94:9,10
bring 79:6 107:22
broad 96:24
Broadway 1:20
brought 24:2 98:5 124:17
Bryce 2:14
bryce@ringertclar... 2:17
bundled 92:16
Bureau 2:9 12:19 13:16,20 15:16 16:21 19:14,21 47:12,14,20,21 49:24 50:5 51:23

52:8,12,23 53:2,8 61:8,11,14 62:1,4,9 62:17,20 63:4,12,15 64:20 70:1 81:19 83:14 90:11 100:14 101:13 102:7,12 114:7,16,20 115:22 116:15 118:9,23 121:4 122:2,3 124:13 132:1
Bureau's 7:5

C

C 2:1 3:1 143:1,1
CAK 37:18
CAK-October 37:14
calculate 82:14 83:15 92:22 134:12
calculated 79:8 80:2 88:1 90:5 134:15,24 136:3
calculates 74:21 75:1 75:5 82:15 126:25 129:24
calculation 84:18,22 134:10,11
calculations 56:8 66:25 75:7 94:3 101:20 104:9 118:19 120:6
calendar 89:18 91:11 98:23 99:18 140:4 140:23
call 12:19,23 21:10 43:8 58:9 119:13 122:3 141:3
called 19:23 38:6,7 44:12 45:24 58:1 78:4 108:17,23 117:6 122:12 126:17 127:20
calling 7:17
calls 13:19
Campbell 2:3 4:4 6:21 7:3,8,12 15:10 16:11,14 23:10,13 23:18,21 32:2,4,24 33:5 42:16,24 43:2 71:1,7 93:9,13 98:8 98:11 102:22 105:4 105:7 108:11 110:4 123:6 135:16 139:15,17 140:5,10 140:21 141:6,12,14 141:18,22 142:1
canal 5:7,10,20 64:13 78:23 79:1,8,10,11 81:17 88:6 122:9
canals 43:21 44:2,3,4 49:11 86:21 89:19 90:1
capability 84:20
capacity 75:23 79:18
Capitol 1:14 2:5 6:5
capture 45:16 113:23
captured 82:25 127:7 127:10
cards 68:25 70:4
care 82:21 83:1
carry-over 40:22,25 83:19 84:17 85:6 97:5
case 1:5 129:11,13 130:21
cases 137:15
categories 25:19 26:15 127:11
categorize 126:8
category 126:11,15 127:13,16 128:18
cause 6:10 96:19 126:6
CCCCCC 35:23
certain 10:5 24:17 50:3 66:11 70:11,13 81:25 90:12 122:21 130:24 136:18
Certainly 61:7,8 69:24,25
Certificate 1:20 143:22
Certified 143:3,21
certify 143:4
cfs 79:14 98:17 100:5
chance 93:23
change 24:23 25:4 32:22 34:3,5,7,10 36:10 37:1,9,21 56:21 60:25
changed 32:21 34:1 37:6 51:22 52:4,10
changes 18:10 20:5 21:21,24 22:5,9,12 22:14,18 24:23 26:14,19,25 28:24 29:13,18,21 30:11 31:14,17 32:7 36:25 51:25 60:7 72:15,19 72:24 73:12,16,22 99:13
changing 120:10
charge 28:5 30:15,16 49:10 54:16
chart 108:17 109:18 109:21 111:3,4,5,9 138:15,16,18
Chartered 1:14 2:5 2:15 6:5
check 103:8 128:11 128:12 139:14 140:22
checked 100:5 135:7
checks 86:17,21
Cheryl 37:18
Chief 58:19
chose 36:24 37:3
circumstances 86:20 130:21
clarified 106:21,24
clarify 6:22 18:1 105:22 141:9
CLARK 2:15
clear 17:18 18:2 87:22 111:13 123:19
clients 7:5
clock 67:19
coined 126:1 133:18
Colorado 2:12
column 100:18 103:8 103:16,23 128:7 138:14,14
combined 11:22 118:11
come 9:8 13:6 81:9 133:17
comes 49:21 77:6,11 127:5,7,9
coming 33:22
commenced 116:21
comment 21:1
comments 8:19 20:24 28:10
commitments 62:13
company 30:9 31:5 64:13 90:14 122:9
compare 31:23 35:7
compared 22:23,25 25:9
compares 80:2
comparing 24:6 37:5
comparison 24:15
compensated 14:9
compensation 14:15 14:24
compiles 99:10
complete 139:18
completed 120:14
completely 104:7 132:14
compute 77:23 79:25 83:19
computed 78:6 81:7 82:3,23 91:14
computer 18:14,23 18:25 38:5,7,12 39:1,5,7,11,16 50:15 52:1,3 56:6 67:1,3 118:19
computers 56:2,4,11 56:23
computes 33:19 80:6 93:3
concerned 8:15 15:12 104:19 116:22
concerning 13:5,16 20:13 21:14 26:24 41:19 62:9,22 66:9 73:16 74:9 102:12 102:17 114:20 118:23 119:2
concerns 15:13
conclusion 38:14 137:17 138:6,19 139:2,6
conclusions 138:22 139:13
concrete 80:20
conduct 134:22
conducted 6:25 63:5

66:8 67:7 102:5 104:9
configuration 26:9
confused 17:9
conjunction 108:10
connected 44:6,9
connection 50:20
consented 15:18
consequently 9:11
considered 120:6
consistent 56:18
contact 41:9
contacted 58:1
contained 123:22
content 8:6 20:14 47:3 49:3,7 118:23 119:2
contents 43:14 46:12
context 21:15 116:22
continually 52:20 54:9
continuation 91:22
continue 45:22 139:21
continued 3:1 142:4
continuously 18:5
contract 14:21,21 15:1 29:10
contracts 62:12,24 62:25 63:1,23 64:5 64:9,13 85:7
control 3:3 5:23 92:15 95:7,8 99:22 99:22 100:3,4 101:9 101:12,16,24 102:6 102:18 103:5,18,25 104:2,3,12 110:14 111:2 112:14 113:7 113:18,20,25 114:3 114:6,16,20 115:18 116:25 117:2,7,8,16 117:18 118:12,15 120:1,10,11 122:11 122:13,16,25 123:11 124:2,15,19 124:21 125:22 126:4,24 127:17 128:4 129:25 130:8 131:17,25 132:4,4 132:12,21 133:2,4 133:11,13,15,21 134:23 136:4,18
conversation 26:24 129:18
conversations 14:2 20:13 21:8,13 102:11,15 114:18 114:23 120:23 130:19
cooperation 121:4
coordinated 61:17 118:11
copied 7:2 106:5 108:9,11 141:25
copies 19:10 23:5,8,9 24:2 41:22 107:22 107:24 122:21 141:10
copy 1:22 7:6,7 16:11 18:18 19:3 41:2,13 64:12 94:13 106:2,4 108:6 117:22 124:17,18
copying 105:16
core 51:15
Corps 100:14 101:13 102:7 114:8,15,19 115:23 118:9 120:16,19,21 121:1 121:3 132:1
correct 13:22 22:9 24:18 29:22 34:21 35:17 37:7,8 38:14 39:8,11,18,24 40:3 40:6 44:20,25 48:8 48:21 51:12,13 57:2 57:16 58:3 60:10 62:3 63:25 68:5,11 69:20 74:6,7 76:25 77:8,11 80:24 81:18 82:12 91:13,25 92:5 92:25 96:5,6 100:9 100:25 103:8,9 104:12,13 108:20 109:8,11 111:8,9 113:7,8 115:9 122:13 127:2,6,13 129:21 130:2,13,16 130:22,25 136:5,8 136:10 138:8,23,24 143:10
correctly 38:9 82:8 92:24 96:13 131:21 137:19
counsel 71:4 142:6
count 18:9
County 1:2 2:18,20 6:10
couple 6:22 17:21 71:25 84:24 136:24
course 20:11 76:11 114:23
court 1:1,19 6:7,9,12 6:16 7:22 8:16 16:15
cover 117:24 124:14 125:3
create 113:22
created 126:11
credit 15:9 76:9 78:16 126:9
credited 43:18,19 74:22 75:2,15,18 76:4,8 81:25 82:6
crediting 75:16
credits 76:2,15 78:6 82:2,18,22
Cresto 12:15 21:17 22:21 26:11,13 31:5 41:9 94:6,17,20
critical 54:7 88:21
criticizing 36:15 126:20
CRR 1:19 143:21
CSR 1:19 143:21
current 21:22 22:22 104:19 117:22 120:2
currently 12:15,17 21:18 24:9 25:1 27:22 40:6 47:15,23 47:24 88:11 94:7 105:13 115:14
curve 47:2,11
curves 48:12 120:10 132:21 133:4
cut 47:6 57:11 114:1
cutting 111:17

D

d 3:8 4:1 5:1 123:19
daily 45:8 82:16 83:13 88:5,7,14 91:18 126:16
dam 82:5
data 43:15 48:12,13 48:16,17,17,17 49:1 49:9,12,15,21,23 50:2,4,9 51:11,15 52:21 53:3,24 61:15 61:18 70:2,15 97:16 100:14 101:6 120:2 120:3,4,23
data-collection 53:14
date 15:19 31:1 36:21 37:2,3 45:23,24 76:24 99:1 124:15 139:21
dated 5:5 43:12 137:18 138:7 139:7
dates 26:17
David 2:10 6:24 116:8,17,18 139:23
david.gehlert@usd... 2:12
day 6:3 13:1 17:25 58:9 59:18 74:17,20 75:5 76:16 84:12,14 85:23 86:1 87:17 90:2 112:22 143:18
days 17:22 43:17 59:4 141:3
dealing 24:3,5
deals 129:25
DEC 52:2
decided 56:6
decision 61:3,4 64:16 65:1,8,14,24 114:7
decision-making 64:18 114:12
deducted 90:18
deemed 127:5
deeply 57:20 76:18
defined 115:8
definitely 64:22
definition 16:2
degree 11:10,13 103:7
degrees 31:8
dense 86:4,10

Denver 2:12
department 2:11 11:23,24 12:4,6,16 19:14 21:18 22:24 24:10,14 27:8,13,16 27:21 28:19 29:8,12 30:2 31:9 40:10 41:6 48:15 49:18 50:12 52:25 53:5,11 53:15,18,25 54:16 54:22 56:1,5,14 57:25 58:2,11 61:22 64:21 65:23 66:2,7 66:12 67:5,15,21 68:10,14 69:6 70:20 70:21 72:4 73:15,19 74:3,9 88:9,12 94:7 101:18,21 102:17 105:14 107:18 109:15 114:9,14,24 115:7,17 116:2 117:1 119:9 121:13 122:15 124:24 125:7,8,10,11 134:4 134:12
depend 134:18
depends 97:4
depo 140:6,12
Deponent's 4:2
deposition 1:10,25 2:25 3:24 4:24 5:25 6:1,24,28 7:24,28 8:2,10,28 9:3,28 10:28 11:28 12:28 13:28 14:28 15:28 16:28 17:28 18:28 19:28 20:28 21:28 22:28 23:28 24:28 25:28 26:28 27:28 28:28 29:28 30:28 31:28 32:28 33:28 34:28 35:28 36:28 37:28 38:28 39:28 40:28 41:28 42:28 43:28 44:28 45:28 46:28 47:28 48:28 49:28 50:28 51:28 52:28 53:28 54:28 55:28 56:28 57:28 58:28 59:28 60:28 61:28 62:28 63:28 64:28 65:28 66:28 67:28 68:28 69:28 70:28 71:28 72:28 73:28 74:28 75:28 76:28 77:28 78:28 79:28 80:28 81:28 82:28 83:28 84:28 85:28 86:28 87:28 88:28 89:28 90:28 91:28 92:28 93:28 94:28 95:28 96:28 97:28 98:28 99:28 100:28 101:28 102:28 103:28 104:28 105:28 106:28 107:28 108:28 109:28 110:28 111:28 112:28 113:28 114:28 115:28 116:28 117:28 118:28 119:3,6,28 120:28 121:28 122:28 123:28 124:18,28 125:28 126:28 127:28 128:28 129:28 130:28 131:28 132:28 133:28 134:21,28 135:28 136:28 137:28 138:28 139:18,21 139:28 140:28 141:28 142:3,24 143:13,25
depth 8:11
Deputy 2:19
derived 48:10 134:24
describe 24:20 33:7 33:11 54:3 55:14 68:21 94:8,16 95:6 108:22 116:20 130:7 133:24
described 16:22 21:9 25:6,7,7 51:23 53:9 66:21 67:22 68:4,7 69:17 70:3 73:10 94:1 110:18,23 127:23 128:21,25 129:1,8 137:21
describing 27:6 49:20 89:7 130:10 133:2 138:11
descriptions 94:15
deserve 119:14
designation 36:2
destroyed 19:7
determination 20:2 22:20 68:15 83:4 96:4 99:24
determinations 67:21 68:15 100:13 100:24 114:4
determine 22:17 47:3 49:3,6,11 99:21 103:4,17
determined 20:18 26:20 94:13 100:21 103:1 112:15
determines 75:17
develop 58:12 59:2 61:3 62:21 63:18 65:24
developed 17:2 35:2 35:4,16 38:4,12 39:1,7 40:12 55:11 55:17,24 64:17 65:17 66:10 68:5,16 72:6,16
developing 57:21
development 17:19 63:7 66:15,19
deviation 22:4
deviations 23:1 24:17 24:20
diagrams 118:1 120:5
dialogue 10:2
difference 33:6 133:24,24
different 21:25 22:3 23:16 24:3 33:1,3 35:14 36:4 42:9 43:10 48:19 49:19 50:25 51:1 55:12 63:1,2,15 75:19 76:21 92:18 97:2 106:19 129:17 134:17 140:6
differential 101:22
differently 56:20
differs 105:15
diligently 54:11
dimension 25:20
directed 12:15,18 117:1
direction 115:21
directly 64:24 74:1
Director 56:5 64:21 65:1,4,7,11,14
discharge 49:21,23 70:10,18 82:4,20,20 100:2
discharges 101:8
discretion 88:24
discuss 20:17 94:6,10 129:12
discussed 61:5
discussion 72:1,18 121:21 140:19,24
discussions 53:23 62:8 118:22 119:1 129:14,20
displayed 71:4
disposition 40:23
distribution 56:17
District 1:1,1 2:2,2 6:2,3,9 29:10 84:6,7 86:12
districts 2:13 56:18 65:9
diversion 48:17 49:9 49:12 50:2,9 54:7 79:9
diversionary 90:11
diversions 45:19,20 54:5 86:18,21
divert 78:24 79:5,15 86:12,16 89:19 90:1
diverted 78:9
diverting 79:1 81:17
division 27:16
document 5:6,9,19 16:17,19,20 17:11 18:11,19,25 19:22 19:24 20:7 23:14 34:14,23 35:15 37:25 39:10 41:8 42:9,11,21,25 44:16

45:6 71:13 87:11 98:1,5 99:1,19,21 102:23,24 105:4,9 105:20,21,21 106:17 112:4,9 123:3 124:11,17,17
documentation 45:4 107:17
documented 134:3
documents 7:1 10:1,1 19:10,17 23:5,25 24:2,4,5,16 34:16 40:15 41:20 43:3 107:24 109:14,15 110:23 122:22 123:13 139:19 141:9 142:2
doing 15:3 28:2,8 30:17 31:3 36:8,25 48:3 52:4 56:19 58:12 67:1 86:25 137:3
downloaded 50:1,6
downstream 73:25 90:11 126:8 127:21
draft 17:24 129:19 130:21
drafted 129:19
drafts 18:7,17,18 130:24 141:10
drought 55:19 87:20 88:19
due 103:5 133:12,14 134:23 136:3
dug 41:22
duly 6:20
dumped 113:5
Dunn 65:13
duties 30:18 114:14
duty 70:21
dynamic 39:16

E

E 2:1,1 3:1,1 4:1,1 5:1,1 143:1,1
earlier 54:19 94:11 114:3 140:18
earliest 76:23
early 45:20 79:5 96:10 99:16 115:19
ease 90:3
easier 60:2 89:25 130:5
easily 60:1
eat 10:16
educational 10:24 11:1 31:7
eight 18:10 28:15
EIT 11:16,17
either 44:21 47:12,21
elaborate 129:17
electronic 1:22 50:18
electronically 50:1
elevation 49:2,6
employed 27:7 114:19
employee 27:8,13 37:20 101:18 124:24 143:15
employment 70:19
ends 98:24
engineer 11:25 12:3 30:14 31:10
Engineering 11:10 11:13
Engineers 100:14 101:14 102:8 114:8 114:19 115:23 118:10 120:16,19 120:22 121:2,3 132:2
Engineer's 12:2
Engineer-In-Train... 11:18
enjoyable 36:9
enter 49:25
entered 11:9 48:18 50:2,9,12
entering 50:15
enters 49:12
entertaining 36:17
entire 78:5 82:2,6,18 82:22 99:12 104:1
entities 44:1 52:10,17 54:1 115:2
entitlement 16:2,8 17:15 31:21 43:21 43:22 44:1,6,14,23 61:24
entitlements 40:25 44:5 61:19 62:18,22 63:17,24 92:24 93:2 93:6,7 137:16
entity 67:16 70:16 87:25 88:6
entity's 88:1
equal 131:16,19
equals 83:8
equating 95:10
error 33:8,20,23 34:2
essentially 54:6
evacuated 114:3 126:6
evaluate 104:14
evaluating 114:16
evaluation 134:22
evidently 139:20
exact 13:1 15:19 31:1 40:13 59:4 105:21 124:17 133:21
exactly 13:3,25 18:9 35:17,18 39:15,19 47:25 48:1 57:1 67:1 68:21 69:2,4 74:25 83:22 84:17
Exam 11:16,17,18 12:2
Examination 4:4 7:11
examine 118:5 119:5 123:7 138:1
examined 101:11 103:17,20,23 107:9 109:5,9,16 111:10 112:11 137:15,23 137:25
examining 110:22
example 25:12 31:19 44:10 80:20 85:6,7 86:11 90:25
examples 62:24
exception 71:6
excess 127:12
excuse 47:6 91:8 109:24 131:14 134:10
execution 15:24
exhibit 5:2,3,5,6,9,12 5:14,16,18,19,22 6:15 16:13,16 17:13 17:19 19:12,20 20:12 23:11,20,23 23:23 24:7,7,8,9,12 24:16,16,21,21 25:1 25:6,9,10,13 26:15 26:22 28:25 29:14 29:18 31:14,15 32:7 32:10,12,13,18 33:7 33:11,13,14,21 34:4 34:6,9,13,20 35:9 35:10,15,20 37:5,6 37:24 38:2,24 39:10 39:22 40:1,5 42:9 42:15,18,19 43:1,5 43:5 44:15 45:5 46:3,14 55:7 68:4 71:12 87:9 93:19 98:10,12,16 100:24 102:21,24 103:6,7 103:10 104:8 105:2 105:6,8,15,16,18,24 105:24 106:9 107:1 107:8 108:15 109:22 110:16 112:6,7 113:9 117:22 118:4,18,18 118:23 119:2,5 123:5,7,10,11 124:8 135:10 137:2
exhibits 23:9,23 38:13,17
exist 19:1 40:18 139:20
existed 24:13 39:23 70:15 118:15
existence 22:24 40:21
exists 40:13
expectation 15:1
experience 72:12 100:1 115:16
experiences 10:24 11:1
expert 14:3 15:16
expertise 48:8
explain 8:1,2,5 16:1 18:3 30:20 43:10 45:5 80:21 83:10 93:1 99:8 103:12 105:23 115:13,14 129:23

explaining 8:6
explanation 9:6 76:17
explore 8:11 57:19
extend 138:23
extreme 55:19
e-mail 1:21 2:8,12,17 2:23 3:7,13 19:7,9 141:2,5
e-mailed 19:2 106:5
e-mails 13:18 19:3 141:12,13,15

F

F 4:1 5:1 103:13,19 112:1 143:1
facilities 10:10
fact 29:24 63:19 86:23 126:12 139:18,19
factor 79:22
failed 104:11 111:19 111:24
failure 103:5,24 104:1 110:14 133:12,14 134:18 134:23 136:3,21
Fairbury 11:2
fairly 136:17
faith 15:8
Fall 11:8
Falls 1:2 3:6 6:10
familiar 28:1,12 29:21 71:16 102:9 102:15 104:17 114:12
familiarity 56:23
far 8:14 15:12 40:10 61:14 69:22,23 70:8 72:9,11 74:2 116:21
Farris 2:14
fashion 36:16 51:22
Fax 2:7,17,22 3:7,12
FC 103:11,11,25 104:6
Featherville 78:4,14 80:23 81:10,15
feature 25:9
February 5:5 79:6 100:6 103:15
fed 10:19 78:22
federal 14:18 15:4
feedback 85:11
feel 7:17 16:5
feels 88:25
fell 117:3
felt 18:2 19:8
Fields 1:14 2:5 6:5
Fifth 1:1 6:9
figure 83:22 96:22 134:24
figures 95:20 99:9 135:22
file 18:24 23:12 105:18
fill 17:5 25:4 26:2 33:19 40:20,23,23 45:25 46:12,21 59:18 73:24 79:12 79:24 83:4,6,7,8 89:10,11,12,15 90:17 92:1 94:24,25 103:5,24 104:1,11 104:19 107:16 110:14 111:18,20 111:24 112:11,23 112:24 124:3 126:2 127:12 130:2 131:19 133:14 134:18 136:3,22 138:5 139:9
filled 77:20 103:21 103:22 111:6 112:3 112:15,19 126:14 128:9 132:14 138:20
final 65:1 89:14 123:18
finalized 18:19
financially 143:16
find 19:5 23:1 31:24 36:18 54:11 123:2
fine 10:13 14:1,1 32:2 47:7 55:3 65:12,12 74:14 81:13 106:20 125:1,1 126:22 127:9 137:4
finish 87:1
finished 18:6 57:9 66:20 113:13 137:7
first 6:20,21 7:13 8:1 8:10,20 10:23 21:7 24:7 27:8 34:14 35:19 38:3,12 44:15 55:18 59:19 62:10 72:17 73:13 74:16 75:21 100:18 105:24,25 110:7 113:16 115:15 126:1
fish 44:10 82:5 90:25
fishery 81:21
five 25:24 31:25 109:10 132:13
flip 68:25 69:1 70:4
flood 92:14 95:7,8 99:22,22 100:3,4,11 100:22 101:9,12,16 101:24 102:6,18 103:2,5,18,25 104:1 104:3,11 110:14 111:2 112:14 113:6 113:18,20,25 114:3 114:6,16,20 117:2,7 118:12 120:5,10,11 124:2 125:22 126:4 126:24 127:16 128:4 129:25 130:8 131:8,14,15,17,25 132:3,4,12,21 133:2 133:4,11,12,14,21 134:23 136:4,18
flooding 96:11,19 113:22 126:6
Floor 1:14 2:6,11 6:6
flow 12:14,22 16:24 17:17 25:5 26:4 43:16,18 44:3,11,13 44:22 45:15,21,22 48:16 49:13,22,23 54:4,6 55:22 56:3 56:17 68:24 75:6,8 75:11,14,14 76:1,3 76:3,7,8,14 77:23 78:2,5,7,12,13,16 79:7,12 80:1,1,2,3,5 80:5,6,9,10,10,23 80:25 81:2,15 82:2 82:6,19,22 90:10 97:12,15 103:17 113:21,23 125:21 126:5,7 127:14,21 128:1,8,19,22 129:25 130:7 131:3
flows 43:14 81:9 90:12 96:11,18 98:17 99:25
follow 10:6,8 112:9
followed 10:6
following 6:13 25:14 41:18 59:7 60:15 91:13 92:8,11 136:2
follows 6:20
font 106:11,14,19
forecasting 133:7
foregoing 143:5,10
forget 13:9
forgotten 54:15,19
fork 76:25 77:4,10
form 117:18 120:20
formal 8:18 66:13 73:20 74:2 117:24
formality 7:22
formalized 10:2
format 24:3 33:16,16 41:1
forth 18:5 76:10 94:15
Fortran 5:21 105:19 106:3,11,15
forty 120:3
forward 93:17 141:1
found 24:22 36:16 109:10 134:7
four 30:24 104:10 109:10 112:2,11 116:18 132:13
frame 17:20
free 16:6
Friday 1:16 6:3 13:22
front 2:20 14:17 112:9
FTF 103:11,11,23,25 104:6
full 7:14 15:8 77:17 77:25 81:16 86:14 87:5 113:12 126:9
function 27:20 29:16 30:10,17 39:20

48:13 122:15
functioning 10:13
functions 130:11
F's 128:7,8

G

gage 46:25 47:8 48:22 49:4,5 78:3,6 78:14 81:4
gages 46:23,24 47:20 47:21 48:11 49:14 70:11,14,17
gaging 80:22 98:4,17 99:14
Gail 13:9 129:20 130:20
Game 44:10 90:25
gathering 53:3
gee 58:10 60:23
Gehlert 2:10 6:23 7:2 7:4 8:2,23 10:7 13:17,19 14:2 15:8 16:4 18:1 19:2,9 20:14 21:14 23:8 31:22,25 32:23 33:2 70:24 106:2 108:8 109:25 129:12,15 130:25 135:11 139:24 140:3,8,15 140:20,25 141:9,13 141:23
Gehlert's 19:23 20:7
general 97:1 119:23 119:24
generalization 95:5,9 96:3,17
generalizations 97:11
general-use 125:13
generated 95:11 119:9
generating 48:12
generation 70:2 81:20
Geological 47:13,14 47:17,18 49:14 70:11
getting 54:9 119:8
give 31:18 79:11 80:20 106:4 109:21 116:22 135:13 141:2
given 72:13 120:16 124:1 139:17
giving 57:13
glad 36:20 64:23
Glenwood 5:17 98:4 98:18
go 10:23 16:20 23:18 24:22 31:25 34:1 37:23 57:2 59:16 71:1 76:11 79:6,17 82:24 87:22 109:19 113:12 128:12 137:2,6 141:1
goal 56:16 132:2,5,7
goes 33:21,22 63:14 76:6 77:24 78:1,10 127:9,22
going 7:23 12:2 41:18 64:24 65:17 71:24 71:25 81:12 85:16 107:14 110:21 113:6 131:10,11 139:18,20,22 141:1
good 12:8 15:3 32:24 36:20 48:3 56:10 70:24 79:10 88:15 93:10,17 132:13
gotten 20:22 21:3
government 14:18 15:9
Governor 115:22 117:1,4 120:19 121:2
graduated 10:25 11:2 11:8,9 31:10
graduation 11:7,14
grasp 86:3
great 7:8 45:21 57:13 141:6
greater 32:14 80:10
green 58:25
Gregg 6:24 12:18,20 13:3,9 14:6 129:14 129:19 130:19
group 141:5
guess 25:23 35:20 92:17 110:11 122:3 129:16

H

H 5:1
hail 97:18
Hal 116:10
half 10:19
half-way 25:13
hand 16:15 56:8 66:25 68:23 143:17
handed 23:22 42:17 98:12 105:8
handing 118:3
hands 10:7
handwritten 5:18 125:4
happen 131:24 132:9
happened 20:7 127:25 128:3 132:10 133:19
happening 92:13
happens 45:14 48:13 127:4 132:8
hard 12:10 13:24 18:18 41:2,13 53:24 111:14
hard-copy 61:23 140:23
head 29:12
hearings 72:22
held 140:19,24
help 23:4 84:23
helpful 23:5 34:17 122:24
hereunto 143:17
Higginson 65:5
high 10:25 11:1,2,7,8 96:11 114:2
hire 28:13
hired 28:1 30:17,22 31:2
historic 97:7 98:17
hold 38:23 135:12 141:24
hookup 50:18
hopefully 8:22
hour 10:18
Howe 30:22
huh-uh 9:7 95:19
humor 36:9,18
Hundreds 114:25
hydrologic 43:15 61:15
hydrology 12:4,5 27:17,21 28:2,16 29:1,6,12 30:15,16 30:22 48:14 49:19 50:13 51:1 53:22 54:16,18,21 58:19 69:7,13 116:7,12 117:3 125:14
Hydromet 49:25 61:15

I

IBM 52:1
Idaho 1:2,15,20,21 2:6,16,21 3:6,11 6:6 6:8,10 11:11,15,19 30:9 31:5 55:20 56:7,18 90:14 143:22
ideally 131:15,23 132:6
identification 5:3 6:16 16:13 23:11,20 42:15 43:1 98:10 102:21 105:6 123:5
identified 24:17 43:4 48:19 108:13 109:2 128:6
identify 16:18 25:8 42:18 43:5 98:13 102:24 105:9 118:5 123:10 124:10 135:17 137:24
identifying 24:7 43:22 135:19
Illinois 11:3,4,9
imagine 16:9
immediately 11:11
impacted 121:22,25 122:8
implemented 73:13
implementing 73:22
implies 131:23
important 9:3 80:15 82:17 83:17 84:13 84:16
impressed 12:8
impressive 54:24
inception 107:10

109:6
inch 117:25 118:1
included 42:14 98:24 122:25
includes 43:8 113:20
including 92:13
inclusive 5:3 6:15
incorporated 5:3 6:17
increased 25:23
increases 113:22
independent 67:16
indicate 22:14 37:20
indicated 24:15 57:24 63:22 140:15 141:11
indicates 38:3 99:1
indicating 129:10
individual 92:23 93:5 93:6
individuals 20:13 114:19 115:2 116:15
indulge 137:22
inequities 55:22
inflow 78:13 127:1
information 41:16 47:2 48:2,10,20,23 49:8,9,17 50:24 51:6 61:1,13,21 62:10,17,21 63:6,16 70:13 97:24 101:3 106:18 107:20 108:13,16 110:18 110:24 123:22
information-collec... 52:10
information-gathe... 52:7
information-trans... 53:7
informed 121:11
initial 53:20 60:20 65:6 129:19
initially 53:17,19 111:20,24 112:19
initials 26:19 36:23 103:14
input 42:7 49:15 51:9 61:14,18 119:18 120:21
inputs 51:14 97:18
inquire 6:21
instance 52:1 112:15
instituted 56:12
instructions 85:21
intentional 71:21
interaction 57:20
interested 115:18 143:16
interlude 74:13
internally 102:16 134:3
Internet 50:20,23 52:22
interpret 60:3
involved 12:12 13:4 29:13 54:13 61:7,8 61:12 63:8 64:18 65:24 67:6 70:2,8 114:15 116:13,16
involvement 116:21 119:15
in-house 7:6
irrigation 2:2,2,13 5:7,10,20 6:2,3 45:17,20 83:12,18 83:20 84:4,6,7 85:2 86:12 87:1,4 88:18 89:9,17 90:5,6,15 91:2 92:2 96:10 118:12
issue 9:6 12:22 20:3 63:15
issued 117:10
items 6:22 31:13 36:22 94:8

J

J 1:10,25 2:25 3:24 4:3,24 5:5,25 6:1,19 6:28 7:15,28 8:28 9:28 10:28 11:28 12:28 13:28 14:28 15:28 16:28 17:28 18:28 19:28 20:28 21:28 22:28 23:28 24:28 25:28 26:28 27:28 28:28 29:28 30:28 31:28 32:14 32:28 33:28 34:28 35:28 36:28 37:28 38:28 39:28 40:28 41:28 42:28 43:28 44:28 45:28 46:28 47:28 48:28 49:28 50:28 51:28 52:28 53:28 54:28 55:28 56:28 57:28 58:28 59:28 60:28 61:28 62:28 63:28 64:28 65:28 66:28 67:28 68:28 69:28 70:28 71:28 72:28 73:28 74:28 75:28 76:28 77:28 78:28 79:28 80:28 81:28 82:28 83:28 84:28 85:28 86:28 87:28 88:28 89:28 90:28 91:28 92:28 93:28 94:28 95:28 96:28 97:28 98:28 99:28 100:28 101:28 102:28 103:28 104:28 105:28 106:28 107:28 108:28 109:28 110:28 111:28 112:28 113:28 114:28 115:28 116:28 117:28 118:28 119:28 120:28 121:28 122:28 123:28 124:28 125:28 126:28 127:28 128:28 129:28 130:28 131:28 132:28 133:28 134:28 135:28 136:28 137:28 138:28 139:28 140:28 141:28 142:24 143:25
January 6:25 12:25 13:1 15:20,21,22 99:16,17,25 100:6 130:19
Jerry 6:24 12:18,20 13:9 129:14,18,20 130:19
jks@idahowaters.c... 3:13
job 27:20 30:10 48:3 56:3,10,10 108:6 114:14
John 3:9 71:6 116:13
joint 114:7
joke 132:24
jokes 54:25
Jorgensen 2:19
judgment 100:10
Judicial 1:1 6:9
July 5:14,15 26:17,20 28:20 29:3,4,5 43:7 43:7,12,12 87:22 99:25 100:6,8
jumping 86:8
June 12:7 28:21,22 28:23 36:22,24 40:2 54:20 100:6
Justice 2:11 19:15
J.GT.2000 32:15,16
J.GT.2500 32:21

K

K 2:19 3:9 71:6
keep 36:8 83:1 85:14 105:4
keeps 76:16 80:11 82:9,12
Keith 65:5
Ken 65:13
kept 19:2 91:5 121:11
key 54:4 75:6
kind 18:11 63:5 102:5
knew 58:5,7
know 7:18 13:24 15:7 18:9 26:11 27:7,11 27:20 29:24 30:4,6 30:10 36:2 37:17 40:10 47:24,25 48:1 48:2 52:3,7,16,24 52:25 53:5,11 55:16 58:10,10 61:2,4,11 62:4,7,20 63:4,15 63:21 64:13 65:15

65:19,21,22 66:1,8 66:12,17 67:9 68:21 69:3,22,23 70:1,8 70:19 72:9,11,12,21 72:23 73:11,15,19 74:2 79:18 84:13,17 87:3 88:21 90:13 98:21 102:4 115:15 116:5 117:10 121:20 122:10 125:8 128:3 131:11 132:8,10 133:5
knowledge 52:9 70:5
known 7:21 89:12
knows 88:7
Kramer 37:19
K=1,3 25:14

L

L 2:3 3:3 36:10
lack 126:18
laid 22:25
Lake 78:21,22,23,24 79:6,12
larger 100:2 106:19
last-to-fill 26:9
late 121:19
Law 1:13 2:4,14 3:4 3:10
lawsuit 13:4
lead 110:25
leases 90:13
leave 30:4 109:20
led 130:21
Lee 57:15,20 58:2 60:23 66:6 68:23
left 18:22 22:24 24:14 27:24 28:20 30:24 31:2 58:11 76:9,14 103:15,19
left-hand 35:24 100:17 128:7
legal 19:13,17,20,22
lengthy 64:14
letter 103:12
letters 103:10
let's 13:21 14:20 28:14 77:19 78:23 79:4 84:4,6 85:1,3 85:13 90:24 98:23 108:3 121:7 122:10 128:17 135:9 137:2 139:15
Li 26:17,25 27:7,8 28:13 29:13,17,21 30:11
liaison 66:7
life 36:9 86:6
light 58:25
likelihood 85:6
limited 120:3
Lindgren 116:14
line 17:14 24:22,22 31:16,17 36:21 38:3 50:17
lines 44:25 120:12
list 61:23 123:2
listing 21:22 22:21 26:16 43:20 105:12 105:16
litigation 12:12
little 10:11 12:20 18:10 33:9,13,13 36:9 57:19 67:19 68:25 76:18 85:22 92:18 103:8 125:4 126:15 128:6 130:5 137:23
living 67:10
Liz 12:15 21:17 22:21 26:13 31:5 41:9 94:6,16,20
ljorgensen@adawe... 2:23
LLP 3:4,10
local 80:25 81:2
located 76:1 78:11
location 54:12 76:2 78:15 79:25 80:12
locations 75:7 76:21 77:23
locked 88:22
long 54:14,15,18 59:2 59:14 68:1 82:24 102:1
look 17:10 21:6 23:19 32:11,18 43:25 44:2 47:2,10 56:15,23 59:16 69:2 71:12 76:12 78:18 79:7,9 79:19,19 80:8 83:14 93:22 97:12 108:3 117:5,21 124:9,20 124:23 125:2 128:13 131:6 135:9 137:5 141:11
looked 20:21 63:9 97:21 103:1 107:14 107:19,25 117:20 136:15 138:2,4
looking 25:11 48:12 60:19 64:14 105:24 105:25 108:14 110:1 111:9 112:4,5 112:7 132:11
looks 60:20 75:22,25 76:1,7 77:18 78:2 78:12 80:1
loop 33:21,24 34:2
looping 33:20
Lori 1:19 6:6 143:3 143:21
Lorna 2:19
lost 116:25
lot 24:24 36:18 47:20 85:24,25 108:11
lots 92:12
low 94:23 95:4,10 96:1,25 97:9
Lowell 78:21,22,24 78:25 79:6,12
lower 96:12
lucky 1:5 5:8,21 6:11 13:5 16:10,24 17:5 26:3,7 37:6 47:1 48:25 61:25 74:23 78:11,15,17 79:20 80:16 82:12,25 83:1 83:24 84:9,14 85:4 86:14 88:3 96:12 97:17,19,20,21 101:9 111:19 112:13 124:1 131:4 132:17
lunch 10:16,17,17 93:11 139:25 140:17

M

M 4:1
main 3:5 25:4 76:24 77:1,2,7 86:21 116:17
maintain 44:12 81:20
maintenance 16:24 17:5,8,14,17 44:12 90:9,10 91:5
major 22:5,6 24:23 59:20,20
making 24:20 59:10 67:20
Manager 12:5 29:1,5 30:21
managers 122:9
manner 75:14
manual 5:23 67:2 115:18,23 117:8,16 117:19,21,22 118:13,15 120:1,2,7 121:4,5,9 122:11,12 122:13,17,20 123:1 123:12 124:15,19 124:21 133:3,5
manually 50:2,9,12
March 1:16 6:4 20:9 45:11 99:3 100:6
marked 5:2,3 6:16 16:13,16 23:9,11,20 23:22 34:17 37:24 42:15,17 43:1 98:10 102:21,24 105:6 111:25 112:14 118:4 123:5
markings 100:18
marks 103:8
Martens 2:3 98:9 140:6,12 141:4,19
Mary 16:25 19:16 20:15 21:8 108:1,14 108:19 109:11 110:18,23 124:18 135:6 136:20 137:18 138:7,25 139:6,11,13
Mary's 108:10
Master's 11:13
match 106:1
material 21:20 22:1,6 22:8,12
materializes 113:23

matter 13:16 14:3 15:17 65:12 85:9 129:16
maximize 84:20
maximum 45:25 59:18
McGarry 13:11,12 129:21 130:20
mean 9:5 14:12,12 28:7 29:3 30:21 33:7 35:3 36:22 38:11 39:2 40:19 42:5 43:11 47:6 48:4 55:15 74:25 92:7 93:1 95:3 97:15 100:5 107:12 111:4,10,23 112:20 113:17 119:13 125:24 131:23 136:24
meaning 96:17
means 37:17 80:7 96:16 103:25 131:25
meant 22:5 104:6 128:24
measure 81:2,4,10
measured 46:23 97:16 98:17
measurement 53:18 54:8
measurements 47:10 54:10,12 70:9,10
measures 52:19 80:23
measuring 49:11 52:14
mechanism 52:4
meeting 13:15
meetings 65:22 66:3 66:8 72:22 102:16 115:21,22,25 116:3 121:9,10,21,25
Mellema 16:25 19:16 20:15 21:8,14 108:14,19 109:11 110:24 124:18 136:20 137:18 138:7 139:7
Mellema's 108:1 110:18 135:6 138:25 139:11,13
Memorandum 118:8
memory 123:1
mentioned 31:13 64:20 73:4,11
Meridian 2:13 140:13
message 33:23
met 13:9,20 16:21
method 23:16
methods 57:1
Michigan 31:11
Microsoft 18:13
mid 64:3 87:22 121:17,19,19
middle 32:19 37:19 46:5 60:14 111:17
Middleton 54:4,5,8
mind 10:12 71:18 96:22,24
Mine 124:23
minor 20:5 24:22 31:17,18,21 32:7,22 33:6 34:3,5 37:1 60:16 68:9
minute 70:25 108:3
minutes 21:6 32:1
missed 68:3
missing 110:11
misspoke 131:14
mistake 133:6
mistaken 135:10
moderate 94:23 95:15 96:1,25 97:10
modifications 39:17
modified 37:14 52:17 60:1,2
Moffatt 1:14 2:4 6:4
money 14:17 52:15
month 89:24 90:3
monthly 5:16 98:3 100:5
months 59:5,12 91:11
mouth 78:8 97:17 130:16
move 14:20
moving 93:17
municipal 90:12
mutually 142:5

N

N 2:1 3:1,8 4:1,1,1 5:1
name 4:2 7:14,14,15 7:15 13:10,17 26:16 28:9,25 35:11 37:19 39:15
named 39:20
names 44:17 116:19
NAMPA 2:13
narrowed 129:10
Nation 5:16
natural 12:14,21 43:16,18 44:22 45:15,21,22 54:6 55:21 56:3,17 68:24 75:6,8,10,13,14 76:1,3,3,7,8,13 77:23 78:2,5,7,12 78:13,16 79:7,12 80:1,2,5,9,10,23 81:15 82:2,6,19,22 96:11,18 113:21,23 114:2 125:21 126:5 126:7 127:14,21 128:1,8,19,22 129:25 130:7 131:3
necessary 9:23 88:25
need 10:10 12:20 15:18 31:1 55:16 59:4 71:22 75:19 87:11 106:20 107:24
needed 65:8
negative 80:6
net 46:17,20
never 111:19,24
new 24:24,25 25:22 33:19 40:23 43:3 53:17 56:22 58:10 73:10 78:22 79:1,8 79:10,11 81:17 84:5 120:7
nice 36:8 60:23
nine 28:15
non-irrigation 45:9 45:12,13 75:9 81:24 90:18,22 91:8,12 92:4,6,14,14
normal 10:12 100:2
normally 19:6 89:19 96:18 126:5
north 76:25 77:4
Nos 5:3 6:15
Notary 6:7
Notepad 5:8 33:4 105:18 106:5
notes 5:18 102:25 103:2,11,15 112:7
notice 24:23 59:17 65:15 72:5,10,11,13 73:16 121:22
notification 143:12
November 45:8,11 74:17,20 89:24 90:19,22 91:19 92:8 92:12 137:18 138:7 139:1,7
NR 5:17
number 4:2 7:1 44:3 44:10 59:4 64:9 81:8 83:9 88:4 110:1 134:13,15
numbered 44:17
numbers 20:22 21:3 64:15 90:24 107:16 109:21,25 138:5
numeric 95:20 96:22 97:3

O

O 4:1,1 5:1
oath 9:11 32:6 71:9 93:15 143:6
object 8:23
objections 143:7
observed 99:25
obviously 76:21
occur 25:22 88:14 91:14 96:19
occurred 12:24 29:25 64:2 73:17,22 92:7 121:2
occurs 87:16,17 89:9
October 11:20 37:21 54:20 89:20,21 90:1 90:1 92:8,10,11,12 98:24 99:11

office 2:20 3:11 13:7 50:16 52:2 63:11,12 125:15
offices 1:13 6:4 50:13
official 134:8,9
officials 13:16 15:4 102:12
off-the-record 140:19,24
Oh 15:6 26:6 41:25 60:23 77:25 85:10 115:11 125:10 128:13
okay 9:1,24 18:21 26:6 32:17 33:12,25 46:8,19,25 55:12 57:22 58:17 61:9 65:20 71:15,19 72:3 76:19 78:22 80:18 85:19 86:5,10,18,19 86:22 87:2 93:20 104:5 106:25 107:3 107:6 113:11,15 115:20 122:6 123:9 127:8 128:19 130:17 135:20 137:3,8 139:5
old 25:13,17,20,20 57:1 58:11 120:2
older 79:2
oldest 75:21 77:24
once 18:22 54:25 73:1 77:13,17 84:19 86:18,21 88:17,22 92:17 139:3
Ondrechen 116:13 121:14
ones 116:17
one-half 118:1
onward 93:17
operate 118:10
operated 80:17 133:23
operation 99:22,23 100:22 103:2,18 112:14 113:18,20 125:22 128:4 131:8 131:14,15
operations 101:10,12 101:16,24 102:7,18 114:16,21 120:11 120:24 130:1,8
operators 132:1
opinion 100:1 132:20 132:23,25
opposed 37:7 89:18
opposing 8:10
order 39:17 75:12
original 17:24,24 36:13 55:23 110:2
originally 52:1
outloud 107:7 137:13
output 5:12,14 40:17 40:19 41:1,11 42:7 42:8,11,19 43:6,13 51:8
outputs 51:15
outside 90:14
out-of-basin 26:3
o'clock 1:16 140:20 141:1 142:5

P

P 2:1,1 3:1,1 28:10
Pace 28:5,10 29:20 30:2 31:2
Pace's 31:7
page 4:2 5:2 17:13 25:12 32:11,19,23 32:24,25 34:14 35:19 38:2 44:15 46:13 55:7 71:4,13 71:15 91:21 93:19 96:7 105:24,25 106:16 107:8 109:21,23,24,25 110:1,5,6,8,8,8,16 122:25 123:12,16 123:16,18 131:7,10 135:20 138:13,16
pages 1:12 5:22 123:11,23 125:4
Pam 29:20 30:2 31:2 31:7
Pamela 28:5
paper 41:3,4 46:11 46:21 78:9 83:4,8 89:15 94:23 103:21 111:18 112:11,17 112:18,24 117:24 126:3,10 131:19
paragraph 38:2 55:6 55:9 71:13,15,16,17 71:25 74:12,15 83:3 89:8 91:22 92:21 93:22 94:1,8,16,19 94:22 95:24 107:4,8 111:1,16 113:9,12 113:16 123:19 125:18 133:10 137:5,6,11
paragraphs 123:25
parameters 96:24 99:14
paraphrase 126:19
Pardon 77:1
Parma 128:22
part 36:13 38:13 109:16 119:14 123:14 129:4 134:20,21 135:17
partially 98:20
participate 14:3 115:25 121:6,8
participated 116:3
participating 8:18
particular 9:6 12:12 25:8 39:23 43:23 84:12 85:2 95:22 97:20 98:1 134:19
parts 66:25
party 115:18
part-time 37:19
pass 57:21
passed 11:16 12:1 120:19 127:12,14 128:9 131:4
passes 127:21 128:1 130:7
pass-through 128:19
pasted 106:5
patience 86:11
patient 141:8
Paul 3:3
PCs 52:3
Peak 1:5 5:8,11,21 6:11 13:5 16:10,24 17:6 26:3,7 36:3,6 37:6,7 47:1 48:25 61:25 74:23 78:11 78:15,17 79:20 80:16 82:12,25 83:1 83:24 84:9,14 85:4 86:14 88:3 96:12 97:17,19,20,22 101:9 111:19 112:13 124:1 131:4
pending 6:8
people 10:18 116:19 119:18
perceived 55:22
percent 75:13 94:25 111:20,24 112:3,16 126:25 127:5,12 128:10 131:19 132:15,16 137:17 138:5,17,21
performed 48:14 94:3 118:19
period 43:7 45:10 59:7 66:21 87:23 114:6 119:8 121:16 127:17
person 30:19
personal 41:15 115:15
pertaining 53:23
phase 125:22
phone 2:7,16,22 3:6 3:12 13:19 21:10
phrase 95:15 96:20 111:21 113:17 133:14 134:16
physical 83:6,7 89:15 112:23
physically 79:23 96:9 103:24 104:1 107:19 131:18 132:2
pick 81:6,7
picked 91:12
Pioneer 2:2 6:2 84:6 84:7,24 85:1 86:12 87:3
place 7:7 19:1 34:24 35:1 57:1 59:15 102:16 126:13,16
placed 143:6
Planner 11:21
planning 114:17

play 114:9 115:8
played 119:16
pla@idahowaters.... 3:7
please 7:13 16:17 34:13 42:18 43:5 93:19,22 102:23 105:2 107:2,8 108:15 123:8 130:17 135:18 137:6
PMB 1:20
point 10:17,20 11:14 15:4 34:4 39:23 46:9 51:24 54:4 57:5 65:4 68:8 70:24 78:12 79:7 80:9 90:22 92:9 108:15 111:14 113:25 133:8 135:11
pointing 87:9
portion 37:5 44:16 122:16 135:18 138:3,11,25 139:10 139:12
portions 122:20 123:16 129:10,12 137:12
posed 12:13
position 10:13 27:24
positive 50:8
possession 125:12
possibility 52:12
possible 56:8,18 83:13 97:4
possibly 31:20,21 72:21 100:8 121:15
Post 3:11
power 30:9 31:5 81:20 82:5 90:14
practical 52:5
preceding 137:24
prefer 7:23
preparation 18:25 20:12 21:15,16 119:5 134:20,21
prepare 17:23 18:8 18:11
prepared 15:2 16:19 17:20 19:14,21,24 40:16 46:1 65:18 97:13 101:6
preparing 16:20 19:12 97:6 120:22
present 28:24 29:11 71:5 121:25 130:20
pretty 13:1 119:17 132:12 140:22
prevent 96:11
previous 40:22 60:21 68:22,22 90:17 97:5
previously 5:3 6:16 42:12,22 118:4
primary 61:13
print 33:23 60:25 106:8
printed 18:17 33:2 99:2 106:10,14
printer 33:1
printing 23:17 105:18
prints 34:2
print-out 39:3
prior 15:23 30:18 50:14 68:23 69:10 69:11 79:3 101:9,13 101:15 102:1,5 112:22 119:2 120:24
priorities 25:24,25 26:2
priority 75:12,19 76:23 124:1,3
probably 13:21 17:25 18:4,5,20,20 20:9 28:11 32:19 79:3 80:25 99:17 116:18 122:9 123:19 135:13
procedure 8:14 17:2 33:20 65:17 67:20 68:13,24 69:3,4,16 69:17 82:18
procedures 8:1,2 20:25 53:2,7,13,23 57:4 66:14 67:17 68:19 69:8 70:12 73:21 94:2,6 101:6 104:18,19 115:5,9 117:2 133:7
proceed 64:16
proceeded 61:6
proceeding 93:18
proceedings 143:5
process 8:20 10:8,11 10:19 13:14 16:22 17:22 18:12 19:12 48:11 51:19,22 52:5 53:8,14 59:10,14,23 60:9 62:20 63:5 64:18 67:6 73:10 75:16 89:8 114:10 114:13 116:16,20 121:6 128:20 137:22
processes 52:10 65:9
processing 52:21
produced 51:15 97:7
professional 12:1 100:10 132:20,23
professionalism 48:5
professionally 133:5
professionals 133:23
program 5:13,14 21:21,23 22:9,15,18 22:22,23,23 23:2 24:9,13 25:11,23 29:22 30:23 32:10 34:23 35:1,2,4,8,10 35:16,17,18 36:13 37:1,21 38:5,6,7,8 38:18,19,21,24 39:1 39:5,7,14,16,20 40:2,6,11,13,16,17 41:12,19,20,21 42:3 42:6,20 43:7 45:7 48:18 49:16 50:1 51:2,3,4,7,8,9,10,11 51:14,16,16 53:16 53:25 55:24 56:13 56:13 57:5,7 59:11 59:15,21,24,25 60:25 61:14,19 63:9 67:15 68:8 73:5,5,7 73:12,12 74:5,6,16 74:18,21 75:1,5,12 75:17,21 77:14,15 77:18 79:22 80:1 81:14,23 82:2,9,14 83:1 85:11 86:24 87:6,12,13,14,25 88:5 89:3,4,6 91:16 92:22 93:3,8 94:4 94:12 101:5 103:4 104:20,20 105:12 105:17 106:3 107:11,15,16 109:1 109:7 112:22 122:17,18 125:20 126:7,24 127:17 129:5,9,24 130:10 131:3 133:22 134:5 134:5 138:4
programmed 26:18
programming 36:8 36:25
programs 36:19 38:12 41:23 49:20 51:2 55:1,12,17 57:22 58:13 59:3 61:4 63:7,18 64:17 65:18,25 66:9,15,20 66:24 67:16 68:5,16 72:6,16,25 73:23 74:10 118:20 133:15
progress 121:11
progresses 113:18,19
project 3:3 58:23
promulgated 66:13
prong 95:15
properly 67:3
Prosecuting 2:19,20
protracted 9:7
provide 8:12 18:16 41:22
provided 21:22 22:21 42:12 61:22 62:1,5 62:10,17,22 63:6,16 65:15 122:21 130:24 143:12
provisions 85:7
public 6:7 65:22 66:3 72:11,22
publish 99:15
published 70:16 72:5 73:16 99:17
pull 71:22
pulled 42:24

Pulsifer 1:19 6:6 143:3,21
purpose 99:20
purposes 7:18 8:9 52:5 81:21 100:3
pursuant 73:21 143:12
pursue 128:17
put 10:3 14:20 15:13 17:1 33:9 36:24 37:2,3 88:4 103:19 109:19 130:16
putting 105:17
p.m 93:12 142:3,5

Q

QnA 1:19
quantifiable 96:4,21
quantities 75:17 97:3 97:19,21 114:5
quantity 95:10
question 8:25 9:1,4 9:15,17,19,20,21 21:18,19 22:3 32:6 35:5 37:23 63:4,14 68:1,13 102:1 106:24 128:17 130:4 131:2 132:22
questions 8:8,21,22 8:23 9:25 10:20 12:13 13:13 21:11 41:19 71:17,22,24 72:1 84:25 86:10 107:5 109:20 110:21 113:13
quick 139:15
quite 80:22 108:6 133:5
quote 74:18 92:22

R

R 2:1 3:1 143:1
rain 97:18
ran 30:23
Ranch 5:8,11,21 26:3 26:6 46:25 48:25 61:25 74:23 78:2,3 78:7,14 79:20 80:24 81:9,18 82:1,3,10 82:13 83:23,24 84:9 84:15 85:2,5 88:2 101:23 111:19 112:12 137:16 138:4
RDR 1:19 143:21
reach 20:2 22:20 38:14
reached 100:10 137:17 138:7 139:6
read 16:25 38:3,9 49:5 60:2 64:12 71:16 92:24 93:23 95:1 96:13 106:4 107:4,7 113:12 131:10,20 137:6,13 137:19 139:4
reading 46:23 70:17 113:14
reads 133:10
real 54:7 86:10
realize 93:15
realized 56:1,8,19,25
really 65:7 68:1 80:14 82:17 83:17 84:3,13 88:15 91:3 102:1 115:7 117:23
realtimeqna@msn.... 1:21
reason 8:24 80:16 106:23
recall 12:23,25 15:17 20:6 22:7 31:7,11 36:23 37:4,10 52:24 53:23 54:13 59:2 61:12,21,23 62:8 64:2,5,7,9,12 65:11 66:11 69:2 72:7 73:3 94:3 101:20 102:11 116:15 117:23 119:22 120:9,14,17 121:23 121:24 122:21 136:21 137:1 141:14
receive 48:16
received 14:15 61:13 62:13 137:16
recess 32:3 71:3 93:11 139:16 142:3
Reclamation 2:9 12:19 13:16,20 15:17 16:21 19:14 19:21 47:12,15,20 47:22 49:24 50:5 52:8,13,23 53:3,8 61:8,11,14 62:2,4,9 62:17,21 64:20 70:2 81:19 83:14 100:15 101:13 102:7,12 114:8,20 115:23 116:16 118:9,23 121:5 122:2,4 124:13 132:1
reclassified 11:24
recognize 23:25 118:6,8 124:14,14
recognizes 126:7
recognizing 126:12
recollection 12:9 13:18 17:24 50:4 52:14 59:19 116:21 118:16,17
recommendations 120:8,9,18
recommended 117:15 120:6
reconcile 46:10 83:17
reconciled 83:12 89:16 92:1,9
reconciliation 43:9 45:25 89:7 90:6,21 90:23 91:3,10 102:5 102:13,17
reconciling 101:22
reconvene 10:15
record 6:23 7:18 8:12 8:18 31:25 32:5 38:4 71:2,8 93:14 99:13 108:8 120:3 143:10
recorded 143:8
records 66:2 97:7,12 98:16 99:10,17 103:17 110:22
Reese 116:17,18
refer 7:23
reference 5:4 6:17 16:8 24:21 35:20 36:21 37:11 43:23 44:6 72:20 73:9 74:25 103:6 131:13 139:11
referenced 28:25 49:1
references 26:22 44:15 103:12 109:22
referred 123:24
referring 42:21 46:2 46:6,24 96:1 139:8
refill 84:20 85:6 104:6 114:1,2 124:2 125:22 132:2 133:12 134:23
refilled 136:19
reflect 34:6,9,23 35:1 35:3,16 38:20 42:7 66:2
reflected 19:25 29:14 29:18 38:13 44:13 46:13,16 62:12 72:24 98:21 99:4 100:24 101:9 103:7 128:20 133:15
reflects 39:22 43:16 43:17 44:21
refresh 123:1
regard 29:17 35:19 84:25 99:19 134:4 136:6
regarding 51:23
regardless 82:4,19
regulation 66:14 86:17
regulations 73:20 74:3,8
relate 72:1
related 135:4 141:13
relates 16:2 48:13
relating 134:15
relative 38:24 143:15
relatively 8:20
release 80:11,12,16 82:24 95:7,8 100:11 113:21
released 44:11 82:9 82:16 96:9 97:20,21 114:5 126:3,8 131:17 133:11,21
releases 79:23 80:8

81:24 92:15 113:25 129:25
releasing 81:19
relevant 27:3 129:3,7 129:11,13,23 130:6
relied 53:24 66:6 109:22 120:23 123:13
rely 123:17
relying 48:5
remain 85:18
remaining 76:7,14 79:16 87:7 88:8
remember 13:25 62:6 68:25 116:19 141:25
remembered 64:23
remove 78:7,17 79:13 85:20
removed 76:8
removes 76:4
repeat 112:8
repeatedly 25:22
rephrase 9:16 67:25 73:2
replace 19:6 30:23
report 60:20,21 72:18,19,23 73:4,10 73:11 117:6,10,15 119:9,11,15,17,20 120:14,16,18,20,22 121:1 134:1 136:15 136:16,17 141:19
reported 135:6
reporter 6:7,17 8:16 16:15 143:4,21
REPORTING 1:19
reports 20:22,23 60:20 103:3 107:13 108:7,9,12 109:18 111:5,8 138:2 141:16
represent 24:8 38:25 39:2 40:11,15 41:21 44:17 94:2 100:20 124:16
representation 39:10 39:13,23 40:1
representations 40:9
representatives 121:24
represents 40:1,5 128:8
request 19:10 55:25 88:12,23 143:12
requested 6:25 57:2 62:11 142:7
requesting 55:21
reschedule 141:4
reservation 118:1 120:5
reservoir 1:5 5:7,10 5:20 6:11 13:5 16:10,24 17:6 33:19 36:3,4,6 40:20 43:14,20 46:12 47:21 48:16 49:1,2 49:6 50:3 59:18 62:13 63:1 70:9,17 75:15,18,23,24 76:1 76:2,4,6,9,11,23 77:18 78:17,19 80:8 80:24 81:3,5,6,10 82:1,3,7,10,19,23 82:23 83:7 85:14 87:8,17 91:18 93:4 93:5,5 96:12 97:17 101:23,24 104:11 107:15 112:23 116:25 124:1,3 126:23 127:2 130:8 131:4
reservoirs 5:8,11,21 16:9 43:19 44:19 45:16,22,23 46:23 47:1,5 48:24 52:13 61:20 62:25 63:24 64:7 74:22 75:3,11 75:19 76:12,13,20 79:23 80:4,17 83:11 84:10 87:24 90:4 91:24 94:24 96:9 103:21 111:19 112:1,2,12 113:23 114:1,6 120:24 126:2 131:18 133:23
resolution 33:23
resource 11:20,21,22 11:25 12:3 16:23 17:5,8,9,17 30:14 44:12
Resources 11:24 12:4 12:6,16 24:10 27:9 29:9 40:10 41:6 48:15 49:18 53:1,6 53:12 64:22 66:13 67:22 68:10,14 69:6 70:20,21 72:5 73:16 73:20 74:4,9 94:7 101:18,21 102:17 105:14 107:18 109:15 114:9,15 115:17 116:3 121:13 124:25 134:4
respect 20:2 38:23 53:8 62:18 63:17 65:14 66:15,19 70:22 74:4 94:3,8 95:14 96:20 115:8
respective 74:24 75:3
respond 8:21 9:4,12 61:2
responded 22:11
response 55:24
restrict 101:2
result 56:1,12 116:24
results 42:6 60:2,3,4 63:8 103:3 107:9,12 108:24,25 109:5,10 109:17 111:11 138:3
retired 12:6 21:20 29:11 30:21 31:4 34:24 40:3 67:10 72:13
retirement 54:17
review 16:4,17 19:13 19:20,25 20:6 97:6 97:23 99:12 101:2 102:23 104:21,25 109:16 110:24 117:1,6 129:16 143:13
reviewed 19:16,22 63:23 64:5,10 98:2 103:2 107:13 111:2 111:7 123:1 129:16
revised 115:19 117:8 117:16 120:1 121:5 121:10 122:11
revision 115:24 117:19 121:3
re-read 123:20
right 5:14 7:20 9:10 9:17 12:17 13:13 16:1,22 17:16,18 18:24 19:19 20:6,11 21:19 22:14 23:10 24:6 25:3 28:6,9,12 30:24 31:2,3 32:13 32:16,20 34:12,19 35:15 38:5,18,20 40:5,8 43:6 44:18 44:21,24 45:2,7 46:6,10 47:9 50:24 51:17 55:8,23 56:7 56:16 57:15 59:5,25 64:16 65:2 70:1 71:24 74:4 75:15,21 75:22,23 76:6 77:24 78:1,10,19,24 79:2 79:10 82:24 85:8 86:9 89:5 91:10,15 93:9 94:25 101:4 103:14,20 106:2 108:4 109:19 110:13 111:13 112:1 115:4 116:24 119:22 121:18 122:10,14 123:21 124:22 126:9,13,14 126:17 130:12,15 131:20 132:15,19 137:2,9
rights 43:20 45:16 65:16 69:1 74:24 75:4,8,10,10,13,19 78:19 111:18 112:2 112:2,11,15 126:9
RINGERT 2:15
risk 120:5
river 5:17 16:23 20:21 24:11 38:4,6 38:8,17,25 43:14 44:13,19 45:15 48:16 49:10,11,13 49:15,21,22,23,23 53:19 54:5 59:3

63:24 65:16 68:11 68:17 70:10,18,22 72:14 74:4,5,22 75:2,6 76:20,24 77:4,7,11,24 79:25 80:9,13 82:4 83:11 84:4 94:24 95:11,21 96:9,12 97:8,14,19 98:18 99:23 101:8 101:14,21 102:4 105:13 109:1 112:12 117:7 118:11 126:23 127:22 128:23 133:25
RJS 36:21,23 103:12 103:14
RJS-June 37:11
Robert 1:10,25 2:25 3:24 4:3,24 5:5,25 6:1,19,28 7:15,28 8:28 9:28 10:28 11:28 12:28 13:28 14:28 15:28 16:28 17:28 18:28 19:28 20:28 21:28 22:28 23:28 24:28 25:28 26:28 27:28 28:28 29:28 30:28 31:28 32:28 33:28 34:28 35:28 36:28 37:28 38:28 39:28 40:28 41:28 42:28 43:28 44:28 45:28 46:28 47:28 48:28 49:28 50:28 51:28 52:28 53:28 54:28 55:28 56:28 57:28 58:28 59:28 60:28 61:28 62:28 63:28 64:28 65:28 66:28 67:28 68:28 69:28 70:28 71:28 72:28 73:28 74:28 75:28 76:28 77:28 78:28 79:28 80:28 81:28 82:28 83:28 84:28 85:28 86:28 87:28 88:28 89:28 90:28 91:28 92:28 93:28 94:28 95:28 96:28 97:28 98:28 99:28 100:28 101:28 102:28 103:28 104:28 105:28 106:28 107:28 108:28 109:28 110:28 111:28 112:28 113:28 114:28 115:28 116:28 117:28 118:28 119:28 120:28 121:28 122:28 123:28 124:28 125:28 126:28 127:28 128:28 129:28 130:28 131:28 132:28 133:28 134:28 135:28 136:28 137:28 138:28 139:28 140:28 141:28 142:24 143:25
Robertson 58:22 61:5 64:19 67:8,9 67:12 116:6 121:14
Rock 1:14 2:4 6:5
role 27:20 29:16 30:10 114:10 115:8 115:11,13,14 119:16 122:17
ROSHOLT 3:4,10
routine 33:9,13,14,15 33:18,18
rule 66:13 120:10
rules 10:5,6,8 73:20 73:24 74:3,8
run 45:7 51:1,4,6,10 74:16 87:3,15,25 88:20,24 89:2,15 101:5 112:22
Runaway 33:24 34:2
running 59:6,11 76:16
runs 12:17 21:19 52:4 63:10 86:24,25 88:12,23 128:14 134:5
run-off 94:23 95:4,10 95:15,21 96:1,8,16 96:21,25 97:1,9,10 114:2

S

S 2:1,14 3:1 5:1
safe 117:9
safety 117:2
Sandpoint 67:10,11
sat 129:14
satellite 49:24 50:4
satisfied 59:22
satisfies 75:12
save 52:15
saying 12:20 39:22 85:9 92:19 109:9 110:17 132:6 136:2
says 25:12,14,17,20 32:14,15,20 36:3 37:14 75:22 77:25 89:11 111:17
scenarios 97:2
school 10:25 11:1,2,7 11:8,12
Scott 2:3 32:23 70:24
se 42:3,5
seal 143:17
season 5:7,10,20 45:9 45:12,13,17 75:9 81:24 85:3 87:1,4 88:18 90:17,18 91:3 91:8 92:14 132:4
second 74:17 95:24 107:7 110:25 138:14
secondary 124:1
section 12:4,6 27:17 27:21 28:2,16 29:1 29:6,12 30:15,16,22 48:14 49:19 50:13 51:1 53:22 54:16,18 54:21 58:19 69:7,13 116:7,12 117:3 125:14
see 10:1 13:21 19:25 25:18 26:16 28:9,14 32:20,25 35:24 37:12,15 42:25 43:23 44:23 46:17 46:18 64:11 76:13 98:23 105:2 110:12 111:20 121:7 126:20 131:8 139:11 141:11 142:1
seeing 68:25
seen 62:24
seldom 83:7
send 141:2
sends 90:11
sense 35:5 36:9 97:1 105:23 139:22
sent 19:3 121:1 129:15
sentence 74:17 92:21 95:24 96:13 107:7 111:1 113:16 131:7 131:21 133:9 137:24 138:12
sentences 123:18 137:11,13,19
separate 89:2 130:4
September 89:21 99:11
sequence 30:20
serve 15:16
service 14:10
set 41:18 58:13 66:9 94:15 95:10 143:17
sets 43:11
Settlers 2:2 6:3
seven 18:10
shake-down 60:9
shape 36:15
sheet 45:25 46:7 128:6
sheets 43:8,9,11,13 46:3,6
Sheryl 30:22
shifted 89:24 90:2
shop 7:6
shortfall 133:12
Shorthand 143:3,21
shot 124:12
shoulder 63:10
showed 138:3
showing 40:17 60:24 98:17
shows 40:20 43:13,19 107:15 138:17

side 22:25,25 35:24 100:17 103:13 128:7
signature 142:7 143:14
signed 19:19
significance 123:22
similar 25:18 57:2,4 102:12 133:19
simple 8:20 68:23
simplified 69:3
simply 90:24
Simpson 3:4,9,10 71:6
sir 7:25 9:2,9,14,18 9:22,23 29:7 36:5 36:12 44:8 66:4 105:11 108:15 112:4 118:7 119:12 119:13,14 124:9,16 125:8,18 132:24 133:8
Sisco 57:15,17,20 66:6,8 68:23
sit 83:13,22 121:10
situation 79:4 88:19 124:2
situations 95:6
six 20:10 132:13
sixty 132:15,16
skill 143:11
slap 10:7
slc@moffatt.com 2:8
slight 136:19
slightly 33:2
slowly 14:20
small 31:21 45:20 100:17 136:23,24
smaller 106:11,14
Snake 55:20 56:14 57:3,6,7 65:7 126:2 127:22 128:23 133:19
snow 97:18
software 105:19 106:11
somebody 34:3 80:7 133:7
someplace 46:13 127:23 134:3
somewhat 10:2
sorry 54:14 74:19 106:22,23 110:3 111:13,15 135:24
sort 8:13 10:2,4,19 35:21 55:15 67:19 86:7
sounds 122:14
source 21:4
sources 49:18 50:25 77:17
south 1:14 2:5,15 6:5 77:10
Southern 55:19
so-called 46:21
space 40:21,24 61:19 92:23 93:2,5,6 95:1 96:10 101:23 114:2 118:1 123:25 126:6 127:1 132:3
speak 73:25
specific 120:9 134:12
specifically 20:18 31:12 120:13
speculate 36:24
speediest 7:7
spell 7:14
spelled 7:16 57:17
spoke 21:17
spot 32:19
SRBA 1:4
staff 65:24
stage 46:25 47:2,8 48:11,22 49:4,5,5 50:3
standardize 65:8
standpoint 114:17 117:2
stands 37:18
stapled 117:24
start 91:2 122:10
started 56:14 59:18 116:23
Starting 123:18
starts 131:7
state 1:2 6:9 7:13 90:2 125:15 138:6
stated 94:11
statement 25:13,15 25:17,21 32:13,20 33:8,17 34:3 38:11 38:23 83:7 84:22 91:21 95:3 109:5,16 110:16,25 111:16 125:20 139:4
statements 8:8,11,17 8:19 25:11,16,18 35:7,13 39:19 83:9 94:16,19 105:17 106:15
States 2:10,11 15:9
station 80:23 98:4,18
stations 70:18
statistical 133:6
statistics 5:16 98:4
status 81:12
stem 76:24 77:1,2,7
stenographically 143:8
Steve 65:6,6
stickies 125:5
stood 142:3
stop 33:23 45:23 87:24 93:10 95:25
stopped 114:1
storage 5:7,10,12,20 12:14,21 13:5 16:8 17:3 21:21 24:11 25:19,23 31:20 33:9 38:7,18,25 39:18 40:17 41:11 42:19 43:9 44:1,18,22,24 45:16,25 46:9,11,18 46:18,20,22 51:9 56:4,13 57:7 59:25 61:18,24 62:11,18 62:22 63:9,10,17,23 64:14 74:5,24 75:3 75:15 80:12 81:11 81:12,19 82:15,15 82:23,24 86:13 87:14,24,25 88:1,2 88:6,8 89:10,11,12 89:14 91:17 92:1,23 94:25 96:8 101:5,22 101:25 102:6,18 103:3 104:20 107:15 111:18 112:21,25 125:23 125:25 126:3,12,12 126:16,25 127:6 128:19 130:1,3 131:16,17,20,20 132:3 133:10,11,20 133:20
store 75:10 79:18 96:10
stored 76:5 80:6,11 80:15 83:10 84:8,8 84:12 85:20 90:17 113:6,21 125:21 126:6 131:18
stores 77:8
storing 80:7
Stout 2:11
strange 110:6
stream 16:23 17:5,8 17:16 90:9 91:4
streamflow 17:14 90:10
Street 2:11,15,20
strictly 44:4
studies 119:25 120:4
Subcase 1:4 6:11
submitted 8:7 15:24 17:25
subparagraph 91:22
subsection 94:22 96:7
subsections 94:2
subsequent 72:24
subsequently 126:3
substantial 22:4
subtracted 88:6 90:19,24 91:5,15,16 91:17
suffer 55:6
suggest 97:8 104:24
suggested 20:5 117:7 119:25
Suite 1:20 2:21 3:5
sum 88:2
summarize 82:16
summarized 92:9,16
supervisory 29:16 70:21
supply 84:21 88:1,16
supposed 9:12 135:15
sure 13:1 19:23 21:2

27:25 31:16 36:14 37:3,18 50:7,22 53:19 59:23 61:17 66:25 68:1 70:9 71:1 73:8 84:9 89:22 91:1 105:22 119:14 128:11 140:22
surface 5:16 98:3
Survey 47:13,14,17 47:18 49:14 70:11
suspected 21:2
Sutter 1:10,25 2:25 3:24 4:3,24 5:5,25 6:1,19,22,28 7:13 7:15,17,18,23,28 8:28 9:28 10:24,28 11:28 12:11,28 13:28 14:28 15:28 16:1,15,28 17:28 18:28 19:13,28 20:28 21:28 22:28 23:22,28 24:28 25:28 26:28 27:28 28:28 29:28 30:28 31:28 32:6,28 33:28 34:16,28 35:28 36:16,28 37:28 38:28 39:28 40:9,28 41:28 42:17,28 43:3 43:28 44:28 45:28 46:28 47:28 48:28 49:28 50:28 51:28 52:28 53:28 54:28 55:28 56:28 57:28 58:28 59:28 60:28 61:28 62:28 63:22 63:28 64:28 65:28 66:28 67:28 68:28 69:28 70:28 71:8,20 71:28 72:28 73:28 74:28 75:28 76:28 77:28 78:28 79:28 80:28 81:28 82:28 83:28 84:28 85:28 86:28 87:28 88:28 89:28 90:28 91:28 92:28 93:14,28 94:28 95:28 96:28 97:28 98:12,28 99:28 100:28 101:28 102:23,28 103:28 104:28 105:2,8,28 106:28 107:2,28 108:13,28 109:28 110:11,28 111:28 112:28 113:28 114:28 115:28 116:28 117:28 118:3,28 119:28 120:28 121:28 122:28 123:7,28 124:16,28 125:17,28 126:28 127:28 128:28 129:28 130:28 131:6,28 132:28 133:28 134:28 135:28 136:14,28 137:3,28 138:28 139:28 140:28 141:28 142:24 143:25
sworn 6:20
synonym 44:24
system 49:25 61:16 68:11 72:14 75:25 76:5 78:8,18 79:13 80:17 86:13,17 91:23 92:3,7 95:12 95:22 97:8,14 99:22 104:1,6,10,11 111:6 113:6 117:9 118:11 126:23 127:1,2 128:9 130:8 132:14
systems 52:18
S-i-s-c-o 57:17,18
S-u-t-t-e-r 7:16

T

T 4:1 5:1 143:1,1
table 20:19 40:20 62:13 108:17 135:20 139:8
tables 20:23 21:4 60:24 107:25
take 10:9,14 23:18 31:22 47:2,10 54:12 55:2 59:15 67:15 70:25 78:5,16 79:4 79:11,13 84:4,6 124:4,10 139:15
taken 6:2 7:24 51:9 93:11 102:16 126:13 143:5
takes 75:21 76:3,6 77:7
talk 13:6 58:23 74:16 91:23 96:7 137:12
talked 20:15 84:24 94:20 139:25
talking 14:18 23:14 25:15 26:11 27:22 31:18 35:24 48:11 60:7 74:15 77:14 97:16 108:4,16 110:19 112:24
talks 95:24
Tara 2:3
tasked 57:21
tasks 28:3
technical 119:25
techniques 52:21
technological 52:18
telephone 1:22 12:23 50:17
tell 9:16 10:25 12:11 16:17 17:20 24:6 26:14 36:22 48:22 60:19 69:4 75:16 87:6,7 93:23 96:15 98:15 105:15 113:13,17 117:18 118:5 119:15,24 124:9 125:24 137:7 137:23 138:10
tells 8:24
ten 132:12
tenure 53:1
term 17:9,9,12 22:1,2 22:4 29:11 46:11,17 46:18 60:8 81:11 95:4 96:15 111:10 112:19 113:1,3 122:7 125:24 126:1 126:18 131:25 133:15,18,22,25 134:8,11,11
termed 83:4 133:12
terminology 16:5
terms 15:15 17:18 19:17 45:4 53:3 55:6 61:3 64:16 75:16 94:15,22 95:9 97:2 103:10 119:15 120:8 123:21 125:1 130:6 137:11
testified 6:20 73:6
testimony 6:13 143:7
text 23:12
Thank 7:8 34:20 35:19 63:22 105:4 118:17 131:6 141:7
theDistrict 6:8
theState 6:7
thick 118:1 129:9
thicker 24:24
thing 9:10 10:4 22:5 77:22 86:2
things 8:13 18:1 31:21 56:19 58:12 92:12 118:2 133:19 141:24
think 12:1,13,18 13:12,20 14:11,12 17:11,23 18:4 19:3 19:5 27:3,5 28:4,10 28:19 31:10 34:18 37:24 39:21 40:13 47:13,14 50:22 52:12,21 57:14 59:17 60:16 62:6,25 64:11,19 76:25 78:3 79:2,2,14 89:21,22 93:9 99:15 100:8 108:23 112:9,25 116:13,17,24 118:14 120:17 122:2 123:3 129:3,8 129:23 130:6 132:11 133:9 135:9 135:17 136:18 140:8,10,16,17 141:23,24
third 2:15 25:12 32:11 49:13 138:14
thirty 86:7 114:24
Thomas 1:14 2:4 6:4
thought 110:6,17 129:11 130:12

thousand 136:24
three 20:4 25:23 30:24 44:19 47:1 48:19 49:17 50:25 52:16,17 54:1 59:5 59:12 60:9 61:20 76:12,13 83:11 84:10 88:20 91:23 103:21 110:12,13 112:1,1,2,12 116:18 123:18 132:13
three-month 59:7 66:21
three-quarters 35:21 117:25
Thursday 140:2,4
tied 87:11
time 10:9,21 11:19 13:18 17:20 27:23 28:4,5,7,17 29:2,3 31:3,8,23 37:20 39:24 40:21 51:24 54:22 55:18 56:6 65:4 68:8 69:18 70:15,17 71:23 79:4 80:14 83:17 93:10 118:15 121:16 124:4 132:15,16 143:6
times 33:22 34:2 36:25 39:17 63:2 88:20 128:3 132:13
timing 120:10
tinkered 59:7
tired 10:11
title 54:15
tlm@moffatt.com 2:8
today 13:21 27:22 77:22 98:6 107:22 124:11 128:15 139:19
today's 134:20
told 13:14 29:20 54:19 67:1 111:5
tool 39:16 60:1
top 35:21,22,25 37:2 118:13 135:21 138:16
total 75:23 94:25 97:12,15
totals 89:12
track 80:11 81:23 82:9,12 83:2 91:5 131:3
tracks 82:11 125:21 126:25 127:17
traditional 89:22
Traditionally 89:20
training 31:8 48:8 53:20
trains 53:18
transcribed 143:9
transcript 10:3 71:5
transmit 50:23
transmitted 49:18,24 50:5,17
travel 139:17
tremendous 83:16,25
trial 8:12
trouble 54:9
true 38:23 143:10
truthful 9:12
try 63:2 126:19
trying 21:2 28:1 54:11 56:10 57:14 62:6 86:3,7 95:6 97:1 109:11 110:15 123:2 130:16
turn 34:12 67:19 93:19 107:1 113:9 124:8 125:17 138:10
turning 74:12
Tuthill 116:8
twice 18:22
Twin 1:2 3:6 6:10
two 8:9 13:12 18:4,5 20:4 21:25 23:23 24:16 25:18,25 26:2 26:6,15 30:5 31:13 31:23 43:3,8,10 46:2 49:8,19 51:1 54:5 55:11,17 59:3 59:19 60:9,11,12 61:4 65:25 68:5 74:10 88:20 91:11 95:6 97:2 110:6 118:19 123:11,23 123:25 127:11 132:13 137:11,13 137:19 141:3
two-page 45:5
two-word 18:10
type 49:13 95:25
types 17:4 25:16 48:19 49:8
typical 17:3 86:20 113:20
typically 45:11,17,24 74:16 113:17,18

U

Uh-huh 9:7
unaccounted 125:23 125:24 126:17 131:16 133:10
unaccounted-for 112:25 126:11 127:6 128:18 130:1 130:3 133:20
unclear 9:15
uncomfortable 7:17
understand 7:6 8:14 9:13,17,21 12:11 14:1 36:7 37:22 38:11 39:21,21 45:2 60:18 65:10 71:9 75:20 80:22 82:8 85:25 86:7 92:19 109:12 110:15,20 110:21 122:7 126:21 133:9
understandable 86:1
understanding 26:18 69:16 130:20 140:3
understood 9:20 110:17 130:11,15 130:18
United 2:10,11 15:9
University 11:3,9,11 11:15 31:11
updated 117:8
updates 51:25
upgraded 52:17,20
Upper 55:20 56:14 57:3,6,7 65:7 126:2 133:19
use 5:7,10,20 10:10 17:12 18:12 21:3 26:3 34:16 42:3 44:7,9,13,18,21 46:11 54:6 56:4 60:8,8 77:25 81:12 83:24 84:1,2,3 85:1 85:3,4,5,16 89:11 90:8,16,24 91:16 92:1,13 107:10 109:6,25 122:7 132:21 133:4
user 31:20 84:4 88:7 93:7
users 55:20 61:1 65:16,23 66:7,9 72:14 88:16 93:6 118:10 121:22 122:1,8
user-friendly 60:6
uses 43:21,22 44:4 46:9 75:7,13 88:6 89:11,12 90:4,12,16 90:22 91:12 92:4,6 92:7,14
USGS 5:16,17 47:22 51:24 52:8,13,20 53:2,7 54:11 70:6 70:14,16 98:3,16 99:10
usually 10:18 79:14 79:16 90:1 99:15,15
utilization 49:19
utilize 56:6 118:18 122:16,20
utilized 50:25 51:6 51:19 53:2,7,13 62:21 68:9,14 70:14 94:7 134:11
utilizes 124:19
U.S 47:13,13,14,16 47:17 49:14 70:10

V

vaguely 141:25
valid 75:10 78:18,24
validate 63:16
validity 53:12
valuable 15:11
values 20:19 62:14 135:23
varies 88:15

various 17:4 18:17 28:2,3 40:24 44:17 49:14 56:19 66:25 75:18 93:6 115:2 118:2 119:18
verification 53:24 63:5 67:2,6,13
verify 53:1,6,12 62:16 63:3,16 66:22 67:16 69:7 100:13 108:4 136:11
versions 18:17
versus 24:21 96:25
Vic 116:18
viewed 100:3
Visual 5:21 105:19 106:3,11,15
volume 1:11,25 2:25 3:24 4:24 5:25 6:1 6:28 7:28 8:28 9:28 10:28 11:28 12:28 13:28 14:28 15:28 16:28 17:28 18:28 19:28 20:28 21:28 22:28 23:28 24:28 25:28 26:28 27:28 28:28 29:28 30:28 31:28 32:28 33:28 34:28 35:28 36:28 37:28 38:28 39:28 40:28 41:28 42:28 43:28 44:28 45:28 46:28 47:28 48:28 49:28 50:28 51:28 52:28 53:28 54:28 55:28 56:28 57:28 58:28 59:28 60:28 61:28 62:28 63:28 64:28 65:28 66:28 67:28 68:28 69:28 70:28 71:28 72:28 73:28 74:28 75:28 76:28 77:28 78:28 79:28 80:28 81:28 82:28 83:28 84:28 85:28 86:28 87:28 88:28 89:28 90:28 91:28 92:28 93:28 94:28 95:21,28 96:28 97:7,28 98:28 99:28 100:28 101:28 102:28 103:28 104:28 105:28 106:28 107:28 108:28 109:28 110:28 111:28 112:28 113:28 114:28 115:28 116:28 117:28 118:28 119:28 120:28 121:28 122:28 123:28 124:28 125:28 126:28 127:28 128:28 129:28 130:28 131:28 132:28 133:28 134:28 135:28 136:28 137:28 138:28 139:28 140:28 141:28 142:24 143:25

W

wait 99:11
want 9:16 10:9,11 16:4 31:22 55:2 57:11 61:2 85:1,5 85:14,25 86:12,16 105:22 126:20 137:3 139:19
wanted 19:8 41:7 57:4 64:11 106:21
wants 85:3,4
warn 124:10
wasn't 51:6 104:17 126:7 129:7
water 5:14,16,23 11:20,20,22,23,24 11:25 12:3,4,6,14 12:16,17,21 13:5,13 16:8,22 17:3,4 21:19 24:10 25:5 26:4 27:9 28:6,8,12 29:8,10 30:23 31:3 38:5,18 40:10,24 41:6 43:6,17,21 44:1,7,9,11,18,21 44:24 45:7,17,24 46:10,12,20,22 48:15 49:18 52:20 52:25 53:5,11,18 55:20,21,23 56:4,6 56:16,17 59:25 61:1 64:21 65:9,16,16,23 66:7,9,12 67:22,23 68:10,11,14 69:6 70:20,21 72:5,14 73:15,19 74:3,4,9 74:21 75:2,8,10,14 75:17,19 77:8,10 78:24 79:5,11,18 80:6,7,8,11,12,15 81:20,25 82:13 83:10,15,23,23 84:8 84:8,10,13,14,15,15 84:18,21 85:2,3,4,5 85:17,21 86:13 87:4 87:7 88:1,2,6,8,15 88:16,17 89:20 90:9 90:11,12,13,14,16 90:20,25 91:2,4,5 92:13,23 93:4 94:7 95:11 96:8 97:7,18 97:20 98:3,24 99:10 99:12,16 101:4,18 101:21,25 102:17 104:21,25 105:14 107:18 109:15 113:5,21,24 114:5,9 114:15 115:17,18 116:3 117:8,16,18 118:10,15 120:1 121:13,22,25 122:8 122:11,13,16,25 123:11 124:15,19 124:20,24 126:3,13 126:13,17 127:16 128:1,8,18,19 129:25 130:7 131:3 131:18 134:4
watermaster 20:22 20:23 24:11 49:10 50:3,10,15 52:9,19 53:13,17,20 54:10 56:22,25 57:15,24 58:10 60:19,20,21 61:7 64:19 66:6 68:22 70:3,12,14 72:17,18,23 88:10 88:13,19 101:22 102:4 103:3 104:18 107:13 108:7,9,12 110:22 111:5 136:17 138:2 141:16
watermasters 56:9 56:22 68:23 70:22
watermaster's 73:3,9 73:11 86:17 111:7 134:1
way 14:20 15:14 16:7 19:8 58:11 69:19 78:8 94:14 117:20 122:11 126:8 131:24 140:25
website 98:16
Wednesday 142:4
week 7:7 13:22,23 86:18,22 88:17,20 88:22
weeks 17:21 18:4,6 20:10
Weimin 26:17
went 8:12 11:11,12 13:6 31:4,16 51:11 107:19 128:23
weren't 18:2
West 2:20 3:5
we're 78:23
winter 79:15 92:18
wintertime 44:11 78:20,23 82:10
wit 6:13
witness 15:16 16:7 23:12 31:24 33:1,4 110:3 135:13 140:2 140:22 141:15,21 142:6 143:6
word 15:3 16:7 18:13 19:6 43:23 103:22
Wordpad 33:4
words 21:25 116:22 130:16 133:21
word-recording 18:12
work 11:19 27:16 31:5 54:18 58:12 66:19,21 83:16 84:1

85:24,25 119:11 140:21
worked 27:14 29:10 31:8 54:10 58:2
working 7:4 28:16
works 12:16 30:9 77:15 79:21
worksheets 134:7
worried 88:16
wouldn't 78:20 84:1 84:3 85:23
Wow 54:24
write 94:19
writing 17:2
written 14:21 18:16 20:1
wrong 81:11 133:8
wrote 36:12 66:24 103:22 117:6 119:17,20 129:15

X

X 4:1,1 5:1,1

Y

Y 36:10
yeah 28:23 81:1 92:20 102:3 125:9 128:16 133:24
year 13:2 17:3 22:22 35:11 40:22,25 42:13 45:20 59:17 59:24 60:15 83:12 83:18,20 84:17,18 84:19,19,21,23 85:20 87:20 88:15 89:9,13,18,18,20 90:7,15 91:11,13 92:2,17 94:23 95:4 95:10,14,22,25 96:1 96:8,10,15,18,20,25 97:1,5,9,10,20 98:23,24 99:10,12 99:13,16,16,18 100:4,11 103:15,20 109:1,2 111:7 116:24 128:8 134:6 134:17,19 136:15 136:18,20
years 17:4 30:5,24 45:19 55:19 59:20 60:9,11,12 86:7 97:23,25 98:19,20 100:21,23 101:3,4 101:11,15,17 103:1 103:16 104:9,10,14 104:21,25 107:10 108:18 109:6,10,17 110:12,13,23 111:2 111:25 112:13 114:24 120:3 127:25 132:12 134:22 135:1,2,5 136:12 137:15,23 137:25
year's 90:20
yesterday 7:5 13:21 13:22,23 77:19
York 78:22 79:1,8,10 79:11 81:17 84:5
Yucky 5:11 36:3,6 37:7

0

02/07/08 5:18

1

1 1:12 5:3,14 6:15 44:17 45:8,11,17 89:21,24 90:19,22 92:8,12
1st 43:7,12 74:17,20 87:21,21 91:19 99:11 143:17
1,000 79:14
1:00 140:20 141:1 142:4
1:15 93:12
10th 1:14 2:6 6:6 99:3
10,000 85:13,17
100 75:13 94:25 111:20,24 112:3,16 126:25 127:5,12 128:9 131:19 137:16 138:5,17,20
100-percent 50:8 130:2 139:9
101 1:14 2:5 6:5
102 5:18
105 5:21
11:54 93:11
111 1:20
113 3:5
12 5:5
123 5:23
126,473 135:25 136:4
13 137:18 138:8 139:1,7
13206000 5:17
133 1:20
143 1:12
15 90:1
15,372 136:1,6
16 5:5 117:22 124:8 142:4
16th 139:24 140:9,11 140:13,15 141:2
17th 140:1,7,13
19 11:6 121:17
1955 69:20
1961 2:11
1963 11:8
1968 11:10
1969 11:20 69:13,24 70:20
1972 138:23
1973 12:3
1974 116:25 119:9
1975 138:23
1976 138:23
1977 55:18 56:14 117:11 119:9
1978 138:23
1980s 64:3
1985 122:12,16,17 124:18
1986 35:2,5,12,13,16 38:4,12 39:1 40:12 40:14,16 41:12 51:20,24 52:11,18 55:11 56:21 57:22 58:19 59:16 60:14 60:14 61:4 62:23 63:7,18 64:4,17 65:11,18,24 66:10 66:20 67:20,22 68:5 68:16 69:11,17,18 69:20 70:3 72:6,12 72:15,20,21,25 73:2 73:17,22 97:25 98:19,20 101:3,7,9 101:13,16 102:1,5,8 102:13,19 103:16 104:10,14,22,25 107:11,13 109:7,17 111:8 127:25 132:11 135:2 136:14,15,17 137:25
1987 60:15 72:21
1988 60:15,16
1989 108:18 135:2,23 135:25 136:4 138:20
1993 108:18 135:2,25 136:6
1995 12:5 30:18,22 54:17
1997 28:15 36:22,24 37:12 55:18
1998 37:15
1999 5:13,14,15 42:13,20 43:8,12 108:18 135:3 136:1 136:9

2

2 38:2,2 44:3,10 55:6 55:7,9 71:13,15 108:15 135:10
200 2:20
2000 32:14 33:22
2002 12:7 23:1 24:14 26:17,20 28:8,20 29:5 30:11 31:4 32:10 34:24 40:2 50:14 54:17,20 69:14 70:20 72:13 72:15 73:17,23 74:10 127:25
2006 107:14 111:8
2007 97:25 98:20,21 98:24 99:9 101:3 111:8 132:11 137:18,25 138:8 139:1,7
2008 1:16 5:5 6:4 99:3,17 103:15,16 104:10 142:4

143:18
2009 99:18
208 1:22 2:7,7,16,17 2:22,22 3:6,7,12,12
2139 3:11
219 1:20
23 5:8,11
2500 32:21 34:1
26 5:3 6:15 110:8,9
27 5:5 16:13,16 17:13 17:19 19:12,20 20:12 37:24 38:2 55:7 68:4 71:12 93:19 107:1,8 110:16 113:9 137:2
28 1:16 5:6 23:11,23 24:7,8,9,16,21 25:1 25:6,9,13 26:15,22 28:25 29:14,18 31:14 32:7,18 33:7 33:13 34:4,6,9 37:5 38:13,17,20 40:5 42:9 105:2,3,15,16 105:25 106:1,9
28th 6:3
287-7700 2:22
287-7719 2:22
29 5:9 23:20,23 24:7 24:12,16,21 25:10 31:15 32:7,10,12,13 33:7,14,21 34:4,13 34:20 35:9,10,15,20 37:6 38:13,17,20,24 38:25 39:10,22 40:1 42:9

3

3 25:14 44:3 91:21 93:19 118:4,18,18 118:24 119:2,5
3:10 142:3
30 5:12 42:15,18,19 43:4 89:21 110:8,9
30th 6:25 99:11
303 3:5
31 5:14 43:1,5,5,6 44:16 45:5,11 46:3 46:14 87:9
31st 6:25 92:8,10,11 92:12
3191 2:21
32 5:16 98:10,13,16 100:24 103:6
33 5:18 102:21,24 103:7,10 104:8 110:8,9 112:7
336-0700 3:12
34 5:19 105:6,8,18,24 105:25 106:14
342-4591 2:16
344-6034 3:12
345-2000 2:7
35 5:22 123:5,8,10,11
354 1:20 143:22
385-4657 2:17
385-5384 2:7
39576 1:5

4

4 32:19,25 46:6,7,13 71:13,15,25 74:12 74:15 83:3 89:8 91:22 92:21 96:7 107:8 110:16 131:7 135:20 138:13
42 5:13
43 5:15
44 109:23,24 110:5
44s 110:6
455 2:15
484-6309 1:22

5

5 5:15 17:13 32:23,24 46:6
5th 43:8,12
53 120:2

6

6 93:22,24 94:1,8,16 94:19,22 95:24
6,968 136:1,9
60,000 123:24,25
62 43:25 44:17
63 11:9
63-3618 1:4 6:11
68 11:12
69 11:12 54:20

7

7 4:4 107:4,8 111:1 111:16
7th 103:15
7-15 5:22 123:12,16 123:19
7-16 5:22 123:12
70s 141:20
72 136:12
733-0700 3:6
735-2444 3:7
74 12:3
75 136:12
76 136:12
78 136:12

8

8 113:9,16 125:18 133:10
8th 2:11
80s 115:19 121:17,19 121:19
80294 2:12
83301-6167 3:6
83701 2:6,16 3:11
83702 1:15 2:21 6:6
83702-7200 1:21
87 72:25 73:3

9

9 108:17 109:18,21 111:5 137:5,6,11
9:00 1:16 140:16
90s 47:19
93 135:23,24 138:20
98 5:17 37:21
99 135:23 138:20
998 32:13,21 33:17 33:18

RONALD J. TENPAS
Acting Assistant Attorney General
Environment and Natural Resources Division
DAVID W. GEHLERT
Natural Resources Section
Environment and Natural Resources Division
U.S. Department of Justice
1961 Stout Street, 8th Floor
Denver, Colorado 80294
Phone: (303) 844-1386
Fax: (303) 844-1350

Counsel for the United States

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	)	
	)	
Case No. 39576	)	Subcase Nos. 63-3618
	)	
	)	**AFFIDAVIT OF ROBERT J. SUTTER**
	)	
STATE OF IDAHO	)	
	) ss.	
County of Ada	)	

I, ROBERT SUTTER, being duly sworn upon oath, state as follows:

1. I am a registered Professional Engineer in the state of Idaho. I was employed as a Water Resource Engineer in the Hydrology Section of the State of Idaho Department of Water Resources from 1969 to 1995. I served as Hydrology Section Manager for the State of Idaho Department of Water Resources from 1995 to 2002.

2. In 1986, I developed the Boise River Water Right Accounting computer program (hereafter called the "Accounting Program") and the Boise River Storage Allocation computer program (hereafter called the "Allocations Program") for the Boise River. These two programs have been used by the Idaho Department of Water Resources (Department) and the Boise River Watermaster (Watermaster) to account for natural flow and reservoir storage water each and every year since 1986. The Department runs both the Accounting Program and the Allocations Program. However, the Department and the Watermaster work closely with each other, exchanging information in an iterative manner while making all program runs. The Watermaster uses the results of these programs to correctly deliver natural flow and storage water throughout the year. I have reviewed both the Accounting and the Allocations programs that are currently being used by the Department and the Watermaster and have found both to be essentially the same as when I left the Department in 2002.

3. For water right accounting purposes, the Department uses an "irrigation year," which begins on November 1 and ends on October 31. It includes the non-irrigation season period from November 1 to April 1 when reservoirs store water, as well as the period after April 1 when the irrigation season begins. In many years reservoirs continue to store water into the irrigation season, sometimes as late as July.

4. Typically the Accounting Program is first run sometime between February and April for the time period beginning November 1, the first day of the irrigation year. For each day after November 1, the Accounting Program calculates the amount of water that is credited to each of the Boise River Reservoirs, Arrowrock, Anderson Ranch and Lucky Peak, according to their respective storage rights. The accumulated amount of storage credited to each reservoir storage

right is often termed "paper fill," as opposed to the measured contents of the reservoir, which is termed "physical fill." The physical fill in a reservoir seldom equals the paper fill because: a) the system (Arrowrock, Anderson Ranch, And Lucky Peak reservoirs) storage fill and use is not reconciled until the end of the irrigation year; and b) the three Boise River reservoirs are operated as a system and therefore storage water credited "on paper" to one reservoir can physically be stored in a different reservoir. The Accounting Program only accounts for the fill of the reservoir storage right. The Accounting Program does not calculate the amount of storage water that accrues to individual space entitlements.

5. As natural flow recedes, reservoir storage rights (which are generally later in time than irrigation natural flow rights) go out of priority, and reservoirs stop accruing stored water. Reservoir storage rights go out of priority typically sometime between April 1 and July 31, depending on the magnitude of runoff. Once the reservoirs stop accruing storage, the Allocations Program is run to calculate stored water allocations for individual space entitlements. The United States Bureau of Reclamation provides a list of space entitlements in each reservoir to the Watermaster and the Department. The Allocations Program computes storage water allocations for these entitlements in Arrowrock, Anderson Ranch and Lucky Peak reservoirs simultaneously based on the paper fill of each reservoir.

6. There are two different situations for which the Allocations Program calculates the amount of water that has been stored in each space entitlement:

a) In a year of low to moderate runoff, the paper fill in one or more of the Boise River reservoirs may not fill to 100 percent of its storage right (or total allocated space). In this type of year, the Allocations Program distributes the amount of the accumulated paper fill to all

space entitlements proportional to their entitlement. This is typically done sometime after April 1 when the reservoir rights cease to accumulate paper fill.

b) In a year of above average runoff, storage water may be physically released from the Boise River reservoirs early in the irrigation year to make space to store anticipated high natural flows to prevent flooding in the lower Boise River below Lucky Peak Reservoir. This flood control operation typically can occur anytime from January through May.

7. When storage is released for flood control, the paper fill of each reservoir in the Accounting Program is not affected, and continues to increase until each reservoir fills to 100 percent of its storage right. I have examined accounting results for all years since the inception of the use of the Accounting Program in 1986. As a result of this examination, I have found that for years when system flood control operations have occurred on the Boise River, the paper fill of all storage rights in Arrowrock, Anderson Ranch and Lucky Peak reservoirs has never failed to initially fill to 100 percent. It is logical that the system will fill completely in any year in which there is a system flood control operation because the criteria for flood releases are based on the presence of insufficient space in the system to capture the forecasted runoff.

8. As the flood control operation typically progresses, the reservoirs cease storage releases and begin to physically refill as the high runoff is then stored to prevent downstream flooding. The Accounting Program tracks the amount of natural flow stored during the refill phase of a flood operation as "unaccounted for" storage. When the accumulation of "unaccounted for" storage ends, the flood operation is completed. The end of flood operations typically occurs sometime from April through July. At the end of a flood operation, ideally the amount of "unaccounted for" storage will be equal to the amount of storage released for flood

control so that the amount of water stored physically in the reservoirs will be equal to the paper fill, which is 100 percent of the storage right (or allocated storage). If the "unaccounted for" storage is less than the storage released for flood control, this shortfall is termed the "failure to refill due to flood control."

9. At the end of the flood control operation the Allocations Program is then run to calculate stored water allocations for individual space entitlements. Again, the Allocations Program computes allocations for all three Boise River reservoirs simultaneously using the paper fill of each reservoir. In this system flood control situation, the paper fill of Arrowrock Reservoir and Anderson Ranch Reservoir remains at 100 percent of their storage right (or allocated space). The Allocations Program therefore allocates a full supply of storage to all individual entitlements in Arrowrock and Anderson Ranch reservoirs. From 1986 through 2007, there have been ten years for which system flood control releases were made. I have examined these years and in all cases, Arrowrock and Anderson Ranch entitlements received 100 percent allocation. The same conclusion was reached by Mary Mellema in her Affidavit dated November 13, 2007.

10. The paper fill of Lucky Peak Reservoir used by the Allocations Program is equal to its allocated space less any "failure to refill due to flood control." This "shortfall" is subtracted from the Lucky Peak Reservoir paper fill because Lucky Peak Reservoir has the latest water right priority of the three Boise River reservoirs, and Lucky Peak Reservoir is the primary flood control facility. In the case where there is a "shortfall" in Lucky Peak Reservoir paper fill, the Allocations Program allocates the fill in Lucky Peak as follows: If the shortfall is 60,000 acre-feet or less, all entitlements in Lucky Peak Reservoir receive 100 percent of their allocation except for the Streamflow Maintenance entitlement in Lucky Peak Reservoir, which receives an

amount equal to its entitlement less the shortfall. Additionally, if the shortfall is greater than 60,000 acre-feet, the amount in excess of 60,000 acre-feet is taken proportionally from all entitlements in Lucky Peak, including the remainder of the Streamflow Maintenance entitlement.

11. Storage in the Streamflow Maintenance entitlement has always been released beginning sometime in October after the end of the irrigation season in order to maintain a flow in the Boise River below Lucky Peak Reservoir. These Boise River storage releases continue throughout the non-irrigation season (November 1 to April 1) unless flood control releases preclude the need for such flow maintenance.

Further your affiant sayeth naught.

DATED this 12 Day of FEB 2008.

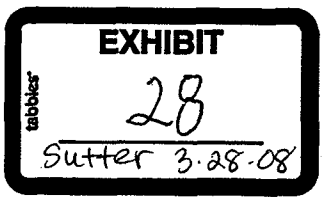
Robert J. Sutter, P.E.

SUBSCRIBED AND SWORN to before me this 12th Day of February, 2008.

KATY LOOMIS NOTARY PUBLIC STATE OF IDAHO

Notary Public for Idaho Katy Loomis
Residing at: Boise, Ada County, Idaho
My Commission Expires: 10/17/2009

```
C*****************************************************************************
C
C       PROGRAM BOISTO.FOR TO COMPUTE BEGINNING OF IRRIGATION SEASON
C       RESERVOIR STORAGE BY CANAL OR USE FOR ANDERSON RANCH, ARROWROCK,
C       AND LUCKY PEAK RESERVOIRS.        RJS -  JUNE 1997
C                                         MODIFIED CAK - OCT. 1998.
CC*****************************************************************************
      DIMENSION CTOT(10),STOR(80,5),ID(80),ID2(80),UNAME(80),STOT(10)
      DIMENSION USED(80),EXCS(80),RFWB(80),CRYO(80,5),OCTB(80)
      DIMENSION BALN(80),IK(80),KRYO(80,5),RTOT(80),SSTOT(5)
      DIMENSION FILL(5),SPACE(5),YIELD(5),EVAP(5),TOTR(80,5)
      DIMENSION CTOTC(5),CTOTR(5),SUBT(80),NSTO(80,5),CNSTO(5)
      DIMENSION T(5),RNAME(5),BANK(80),TNSTO(80),TCRYO(80)
      DIMENSION PAVAIL(5),TRANS(80),RFTR(80),RRTOT(80),DLOSS(150)
C       THE OLD DIMENSIONS ARE THE FOLLOWING.
C      DIMENSION CTOT(10),STOR(80,3),ID(80),ID2(80),UNAME(80),STOT(9)
C      DIMENSION USED(80),EXCS(80),RFWB(80),CRYO(80,3),OCTB(80)
C      DIMENSION BALN(80),IK(80),KRYO(80,3),RTOT(80)
C      DIMENSION FILL(4),SPACE(4),YIELD(4),EVAP(4),TOTR(80,3)
C      DIMENSION CTOTC(3),CTOTR(3),SUBT(80),NSTO(80,3),CNSTO(3)
C      DIMENSION T(4),RNAME(4),BANK(80)
C      DIMENSION PAVAIL(3),TRANS(80),RFTR(80)
C       WEIMIN LI 7/9/2002
      DIMENSION IPTAB(80),FILLATE(8),TFILL(8)
      CHARACTER*9 RUNDATE
      CHARACTER*18 UNAME,U,RNAME
C       THE OLD CHARACTER IS THE FOLLOWING.
C      CHARACTER*16 RNAME
C       WEIMIN LI 7/15/2002
      REAL*8 CTOT,STOR,STOT,CTOTC,CRYO,CTOTR,SUBT,CSUBT,TBANK,BANK
      REAL*8 FILL,SPACE,YIELD,GTOT,T,TOTR,RTOT,KRYO
      REAL*8 CNSTO,NSTO,FILLLPL,TTRANS,TRANS,UNCA
      CALL DATE_AND_TIME(RUNDATE)
C      CALL ASSIGN(1,'BOISTO.IND')
C      CALL ASSIGN(5,'BOISTO.CRY')
C      CALL ASSIGN(6,'BOISTO.RPT')
C      CALL ASSIGN(7,'BOISTO.SPA')
C      CALL ASSIGN(9,'BOISTO.USE')
C      CALL ASSIGN(10,'BOISTO.UNC')
      OPEN(UNIT=1,NAME='BOISTO.IND',TYPE='OLD')
      OPEN(UNIT=5,NAME='BOISTO.CRY',TYPE='OLD')
      OPEN(UNIT=6,NAME='BOISTO.RPT',TYPE='NEW')
      OPEN(UNIT=7,NAME='BOISTO.SPA',TYPE='OLD')
      OPEN(UNIT=9,NAME='BOISTO.USE',TYPE='OLD')
      OPEN(UNIT=10,NAME='BOISTO.UNC',TYPE='OLD')
      L=1
      I=1
      IN2=10
   30 READ(7,10,END=25) ID(I),IK(I),UNAME(I),(STOR(I,K),K=1,5)
   10 FORMAT(I8,A1,A18,5F9.0)
C       THE OLD READ STATEMENT AND FORMAT ARE THE FOLLOWING.
C    30 READ(7,10,END=25) ID(I),IK(I),UNAME(I),(STOR(I,K),K=1,3)
C    10 FORMAT(I8,A1,A18,4F10.0)
C       WEIMIN LI 7/18/2002
      IF(ID(I).EQ.13201991) IUN=I
      IF(ID(I).EQ.13202995) IPEN=I
      IF(ID(I).EQ.13203000) INYK=I
      IF(ID(I).EQ.13209480) IPHL=I
      IF(ID(I).EQ.13210005) ICAL=I
      IF(ID(I).EQ.99999100) IEG=I
      IF(ID(I).EQ.0) GO TO 25
      I=I+1
      GO TO 30
```

```
   25 CONTINUE
      IE=I-1
      DO 40 I=1,IE
      READ(5,12,END=5) ID2(I),U,(CRYO(I,J),J=1,5),TRANS(I),BANK(I)
   12 FORMAT(I8,1X,A18,F5.1,2F8.1,2F3.1,2F10.1)
C       THE OLD FORMAT IS THE FOLLOWING.
C    12 FORMAT(I8,1X,A18,5F7.0,2F6.0)
C       WEIMIN LI 10/22/2002
C       THE OLD STATEMENT IS THE FOLLOWING.
C      READ(5,12,END=5) ID2(I),U,(CRYO(I,J),J=1,3),TRANS(I),BANK(I)
C    12 FORMAT(I8,1X,A18,5F10.0)
C       WEIMIN LI 7/23/2002
      IF(ID2(I).EQ.ID(I)) GO TO 40
      TYPE 2, ID2(I),ID(I)
    2 FORMAT(' DIVERSION ',I8,' FROM BOISTO.CRY IS DIFFERENT THAN DIVERS
     1ION ',I8,' FROM BOISTO.SPA')
      PAUSE
      STOP
   40 CONTINUE
      READ(10,305,ERR=310) UNCA
  305 FORMAT(21X,F9.1)
      GO TO 5
  310 TYPE 306
  306 FORMAT(' ERR READING BOISTO.UNC ')
      PAUSE
      STOP
    5 TYPE *, ' '
      TYPE *, '  ENTER FOUR DIGIT YEAR FOR WHICH YOU WANT  '
      TYPE *, '  TO COMPUTE STORAGE ALLOCATION AND USE.      '
      TYPE *, '  FOR EXAMPLE: 1998
      TYPE *, ' '
      ACCEPT 49,IYR
   49 FORMAT(I4)
      READ(1,55) (RNAME(K),SPACE(K),FILL(K),EVAP(K),K=1,5)
C       THE OLD STATEMENT IS THE FOLLOWING.
C      READ(1,55) (RNAME(K),SPACE(K),FILL(K),EVAP(K),K=1,4)
C       WEIMIN LI 7/9/2002
   55 FORMAT(9X,A18,3F10.0)
      TYPE *, SPACE(1)
      TYPE *, SPACE(2)
      TYPE *, SPACE(3)
      TYPE *, SPACE(4)
C
C***** COMPUTE AND PRINT TABLE OF EACH RESERVOIR'S SPACE, FILL,
C***** EVAPORATION AND YIELD.
C
      IT=1
      DO 90 K=1,5
C       THE OLD STATEMENT IS THE FOLLOWING.
C      DO 90 K=1,3
C       WEIMIN LI 7/9/2002
      YIELD(K)=FILL(K)-EVAP(K)
      PAVAIL(K)=0.0
      IF(FILL(K).GT.0.0) PAVAIL(K)=YIELD(K)/FILL(K)
   90 CONTINUE
      WRITE(6,100) RUNDATE,IT,IYR
  100 FORMAT(1H1////////102X,A9///////////////,40X,'TABLE'I3,'. ',I4,
     1  ' BOISE RIVER STORED WATER BY RESERVOIR'//55X,' (ACRE-FEET)'/)
      WRITE(6,101)
  101 FORMAT(32X,9HRESERVOIR,14X,5HSPACE, 8X,4HFILL, 3X,11HEVAPORATION,
     1  5X,5HYIELD/)
      DO 105 K=1,5
  105 T(K)=0.0
```

```
      DO 110 K=1,5
C       THE OLD STATEMENT IS THE FOLLOWING.
C      DO 110 K=1,3
C       WEIMIN LI 7/9/2002
      T(1)=T(1)+SPACE(K)
      T(2)=T(2)+FILL(K)
      T(3)=T(3)+EVAP(K)
      T(4)=T(4)+YIELD(K)
      WRITE(6,120) RNAME(K),SPACE(K),FILL(K),EVAP(K),YIELD(K)
  120 FORMAT(32X,A18,4F12.1)
  110 CONTINUE
      WRITE(6,130) (T(K),K=1,4)
C       THE OLD STATEMENT IS THE FOLLOWING.
C      WRITE(6,130) (T(K),K=1,3)
C       WEIMIN LI 7/9/2002
  130 FORMAT(/32X,5HTOTAL,13X,4F12.1)
C
C***** WRITE TABLE OF SPACE ALLOCATED TO EACH ENTITY OR USE IN
C***** ALL THREE BOISE RIVER RESERVOIRS BASED ON COMPLETELY
C***** FULL RESERVOIRS.
C
      IT=2
      DO 155 K=1,10
  155 CTOT(K)=0.0
      WRITE(6,160) RUNDATE,IT,IYR
  160 FORMAT(1H1/////120X,A9////36X,6HTABLE ,I2,'. ',I4,
     1  ' BOISE RIVER RESERVOIR SPACE BY USER. (ACRE-FEET)'//)
      WRITE(6,97)
   97 FORMAT(1H ,23X,'NUMBER',3X,'USER',16X,'ARROWROCK',3X,'ANDERSON',
     11X,'LUCKY PEAK',3X,'ANDERSON',1X,'LUCKY PEAK',6X,'TOTAL'/)
C       THE OLD FORMAT IS THE FOLLOWING.
C   97 FORMAT(1H ,23X,13HNUMBER   USER,14X,'  ARROWROCK   ANDERSON LUCKY
C     1PEAK      TOTAL'/)
C       WEIMIN LI 7/18/2002
      DO 3 K=1,5
C       THE OLD STATEMENT IS THE FOLLOWING.
C      DO 3 K=1,3
C       WEIMIN LI 7/11/2002
      CTOTR(K)=0.0
    3 CTOTC(K)=0.0
      DO 80 I=1,IE
      CRYO(I,1)=0.0
      RTOT(I)=0.0
      IPTAB(I)=0
      DO 60 K=1,5
C       THE OLD STATEMENT SI THE FOLLOWING.
C      DO 60 K=1,3
C       WEIMIN LI 7/18/2002
      CTOT(K)=CTOT(K)+STOR(I,K)
      RTOT(I)=RTOT(I)+STOR(I,K)
      NSTO(I,K)=0.0
   60 CONTINUE
      CTOT(6)=CTOT(6)+RTOT(I)
C       THE OLD STATEMENT SI THE FOLLOWING.
C      CTOT(4)=CTOT(4)+RTOT(I)
C       WEIMIN LI 7/18/2002
      IF(RTOT(I).GT.0.0) THEN
      WRITE(6,71) ID(I),UNAME(I),(STOR(I,K),K=1,5),RTOT(I)
   71 FORMAT(24X,I8,1X,A18,6F11.1)
C       THE OLD WRITE STATEMENT AND FORMAT ARE THE FOLLOWING.
C      WRITE(6,71) ID(I),UNAME(I),(STOR(I,K),K=1,3),RTOT(I)
C   71 FORMAT(32X,I8,1X,A18,4F11.1)
C       WEIMIN LI 7/18/2002
```

```
      IPTAB(I)=1
      ENDIF
   80 CONTINUE
      WRITE(6,21) (CTOT(K),K=1,6)
   21 FORMAT(/33X,5HTOTAL,13X,6F11.1)
C       THE OLD WRITE STATEMENT AND FORMAT ARE THE FOLLOWING.
C      WRITE(6,21) (CTOT(K),K=1,4)
C   21 FORMAT(/41X,5HTOTAL,13X,4F11.1)
C       WEIMIN LI 7/18/2002
C
C***** IF THE SPACE IN ANDERSON RANCH HAS ENTIRELY FILLED, ZERO
C***** OUT THE CARRYOVER FROM THE PREVIOUS YEAR. (DO NOT DO THIS
C***** FOR BOISE).  IF DID NOT FILL, CHECK FOR FLOOD CONTROL.
C
      DIFF=SPACE(2)-FILL(2)
      IF(DIFF.LE.0.01) GO TO 18
   31 TYPE *, ' '
      PRINT 32
   32 FORMAT(' WAS THE FAILURE TO FILL AT ANDERSON RANCH DUE TO'/
     !' A FLOOD CONTROL OPERATION? Y/N: '$)
      ACCEPT 26, FL
   26 FORMAT(A1)
      IF(FL.EQ.'N') GO TO 18
      IF(FL.NE.'Y') GO TO 31
      DO 19 I=1,IE
   19 CRYO(I,2)=0.0
   18 CONTINUE
C
C***** IF LUCKY PEAK SPACE DID NOT FILL, INQUIRE IF THIS WAS THE
C***** RESULT OF A FLOOD CONTROL OPERATION.  IF IT WAS, THEN
C***** COMPUTE LUCKY PEAK STORAGE ALLOCATIONS WITH THE FINAL 60000
C***** ACRE-FEET HAVING THE LAST FILL.  TO DO THIS, REMOVE THE
C***** 60000 FROM THE TOTAL ALLOCABLE STORAGE AND THE STREAMFLOW
C***** MAINTENANCE SPACE. IF ANY OF THE LAST 60000 HAS FILLED
C***** (FILLLPL) ADD THIS BACK IN AFTER THE OTHER STORAGE HAS BEEN
C***** ALLOCATED.
C
      DIFF=SPACE(3)-FILL(3)
      IF(DIFF.LE.0.01) GO TO 24
   28 TYPE *, ' '
      PRINT 27
   27 FORMAT(' WAS THE FAILURE TO FILL AT LUCKY PEAK DUE TO A'/
     !' FLOOD CONTROL OPERATION? Y/N: '$)
      ACCEPT 26, FL
      IF(FL.EQ.'N') GO TO 24
      IF(FL.NE.'Y') GO TO 28
      STOR(IUN,3)=STOR(IUN,3)-60000.
      CTOT(3)=CTOT(3)-60000
      FILLLPL=FILL(3)-CTOT(3)
      IF(FILLLPL.LT.0.0) FILLLPL=0.0
      FILL(3)=FILL(3)-FILLLPL
C
C***** IF THE SPACE IN LUCKY PEAK DID NOT FILL DUE TO
C***** FLOOD CONTROL AND IF NONE OF THE 60000 EXCLUSIVE
C***** FLOOD SPACE FILLED, ZERO OUT THE CARRYOVER FROM THE
C***** PREVIOUS YEAR. THE CARRYOVER COULD BE ZEROED OUT FOR
C***** OTHER CONDITIONS, BUT LEE SISCO WANTS TO SHOW LAST
C***** YEAR'S CARRYOVER IN THE TABLE EVEN IF THE IRRIGATION
C***** SPACE FILLS COMPLETELY.
C
      IF(FILLLPL.EQ.0.0) THEN
            DO 23 I=1,IE
   23       CRYO(I,3)=0.0
```

```
            ENDIF
   24 CONTINUE
C
C
C***** COMPUTE NEW FILL TO EACH RESERVOIR BY SUBTRACTING CARRYOVER
C***** FROM TOTAL FILL, THEN ALLOCATE NEW FILL TO INDIVIDUAL
C***** ENTITIES AND USES WITHIN EACH RESERVOIR PROPORTIONAL TO
C***** SPACE OWNED.
C
      DO 1 K=1,5
C       THE OLD STATEMENT IS THE FOLLOWING.
C      DO 1 K=1,3
C       WEIMIN LI 7/23/2002
      IF(FILL(K).GT.CTOT(K)) TYPE 997, RNAME(K),FILL(K),CTOT(K)
  997 FORMAT(1X,A18,' HAS FILL =',F10.1,' > TOTAL SPACE =',F10.1)
      DO 29 I=1,IE
   29 CTOTC(K)=CTOTC(K)+CRYO(I,K)
      CNSTO(K)=FILL(K)-CTOTC(K)
      WAT=CNSTO(K)
      J=0
    6 EXCESS=0.0
      J=J+1
      IF(J.GT.2500) TYPE 998, RNAME(K)
  998 FORMAT(' RUNAWAY LOOP ALLOCATING ',A18,' STORAGE')
      TYPE 999, J,WAT
  999 FORMAT(1X,I5,F10.1)
      DO 4 I=1,IE
C       THE FOLLOWING IF-THEN IS ADDED.
        IF(ABS(CTOT(K)).GT.0.001) THEN
      NSTO(I,K)=((STOR(I,K)/CTOT(K))*WAT)+NSTO(I,K)
        ENDIF
C       THE ABOVE IF-THEN IS ADDED.
C       WEIMIN LI 7/23/2002
      TOTR(I,K)=NSTO(I,K)+CRYO(I,K)
      IF(TOTR(I,K).LE.STOR(I,K)) GO TO 4
      EXCESS=EXCESS+TOTR(I,K)-STOR(I,K)
      TOTR(I,K)=STOR(I,K)
      NSTO(I,K)=STOR(I,K)-CRYO(I,K)
    4 CONTINUE
      WAT=EXCESS
      IF(EXCESS.GT.0.01) GO TO 6
    1 CONTINUE
C
C***** RECOMPUTE LUCKY PEAK STREAMFLOW MAINTENANCE STORAGE TO INCLUDE
C***** NEW FILL IN LAST 60000 ACRE-FEET.
C
      NSTO(IUN,3)=NSTO(IUN,3)+FILLLPL
      TOTR(IUN,3)=TOTR(IUN,3)+FILLLPL
      CNSTO(3)=CNSTO(3)+FILLLPL
C
C***** PRINT TABLE OF BEGINNING OF YEAR STORAGE ACCOUNTS.
C
      IT=3
  145 WRITE(6,150) RUNDATE,IT,IYR
  150 FORMAT(1H1/////120X,A9////20X,6HTABLE ,I2,'. ',I4,' BOISE
     1RIVER RESERVOIR STORAGE ACCOUNTS.  (ACRE-FEET)'//)
      WRITE(6,95)
   95 FORMAT(1H ,37X,'ARROWROCK *-----ANDERSON RANCH-----* *-------LUCKY
     1 PEAK-------*'/11X,13HNUMBER   USER,14X,'  STORAGE CARRYOVER NEW FI
     2LL STORAGE  CARRYOVER NEW FILL STORAGE'/)
C
        CTCRYO=0.0
        CTNSTO=0.0
```

```
      CSUBT=0.0
      DO 1082 M=1,5
      CTOTR(M)=0.0
1082  CONTINUE
C     THE ABOVE STATEMENTS ARE ADDED.
C     WEIMIN LI 7/19/2002
      DO 82 I=1,IE
      TCRYO(I)=0.0
      TNSTO(I)=0.0
      SUBT(I)=0.0
      DO 81 M=1,5
C     THE OLD STATEMENT IS THE FOLLOWING.
C     DO 81 M=1,3
C     WEIMIN LI 7/11/2002
      TCRYO(I)=TCRYO(I)+CRYO(I,M)
      TNSTO(I)=TNSTO(I)+NSTO(I,M)
      SUBT(I)=SUBT(I)+TOTR(I,M)
C
      CTOTR(M)=CTOTR(M)+TOTR(I,M)
C     THE ABOVE STATEMENT IS PUT BACK. AND
C     THE LOCATION WOULD BE DIFFERENT.
C     WEIMIN LI 7/19/2002
81    CONTINUE
C
      CTCRYO=CTCRYO+TCRYO(I)
      CTNSTO=CTNSTO+TNSTO(I)
      CSUBT=CSUBT+SUBT(I)
C     THE ABOVE STATEMENTS ARE ADDED.
C     WEIMIN LI 7/19/2002
      IF(IPTAB(I).GT.0.OR.RTOT(I).GT.0.0) THEN
      WRITE(6,70)ID(I),UNAME(I),TOTR(I,1),CRYO(I,2),NSTO(I,2),
     1           TOTR(I,2),CRYO(I,3),NSTO(I,3),TOTR(I,3)
70    FORMAT(11X,I8,1X,A18,7F9.1)
      ENDIF
82    CONTINUE
C     THE OLD STATEMENTS ARE THE FOLLOWING.
C     IF(IPTAB(I).GT.0.OR.RTOT(I).GT.0.0) WRITE(6,70) ID(I),
C    1UNAME(I),TOTR(I,1),CRYO(I,2),NSTO(I,2),TOTR(I,2),CRYO(I,3),
C    2NSTO(I,3),TOTR(I,3),SUBT(I)
C  70 FORMAT(11X,I8,1X,A18,8F9.1)
C     WEIMIN LI 7/9/2002
      WRITE(6,22)CTOTR(1),CTOTC(2),CNSTO(2),CTOTR(2),
     1           CTOTC(3),CNSTO(3),CTOTR(3)
22    FORMAT(/20X,5HTOTAL,13X,7F9.1)
C     THE OLD STATEMENTS ARE THE FOLLOWING.
C     WRITE(6,22) CTOTR(1),CTOTC(2),CNSTO(2),CTOTR(2),CTOTC(3),
C    1 CNSTO(3),CTOTR(3),CSUBT
C  22 FORMAT(/20X,5HTOTAL,13X,8F9.1)
C     WEIMIN LI 7/9/2002
  200 CONTINUE
C     PRINT THE PAGE 2 OF THE TABLE 3
      WRITE(6,151) RUNDATE,IT,IYR
  151 FORMAT(1H1/////120X,A9////26X,6HTABLE ,I2,' (CONTINUED). ',
     1 I4,' BOISE RIVER RESERVOIR STORAGE ACCOUNTS.  (ACRE-FEET)'//)
      WRITE(6,96)
   96 FORMAT(1H ,37X,'*ANDERSON RANCH LAST FILL *
     1 *-- LUCKY PEAK LAST FILL -* *--------- TOTAL ---------*'/
     2       12X,'NUMBER',9X,'USER',7X,'CARRYOVER',1X,'NEW FILL',2X,
     3       'STORAGE',1X,'CARRYOVER',1X,'NEW FILL',2X,
     4       'STORAGE',1X,'CARRYOVER',1X,'NEW FILL',2X,'STORAGE'/)
      DO 84 I=1,IE
      IF(IPTAB(I).GT.0.OR.SUBT(I).GT.0.0) THEN
      WRITE(6,72) ID(I),UNAME(I),CRYO(I,4),NSTO(I,4),TOTR(I,4),
```

```
     1              CRYO(I,5),NSTO(I,5),TOTR(I,5),
     2              TCRYO(I),TNSTO(I),SUBT(I)
72       FORMAT(11X,I8,1X,A18,3F9.1,1X,3F9.1,1X,3F9.1)
         ENDIF
84       CONTINUE
         WRITE(6,1023) CTOTC(4),CNSTO(4),CTOTR(4),CTOTC(5),CNSTO(5),
     1                 CTOTR(5),CTCRYO,CTNSTO,CSUBT
1023     FORMAT(/16X,5HTOTAL,17X,3F9.1,1X,3F9.1,1X,3F9.1)
C        PRINT THE PAGE 2 OF THE TABLE 3
C        WEIMIN LI 7/9/2002
C
C***** COMPUTE YIELD OF SPACE VALUES AFTER EVAPORATION.
C
       DO 165 I=1,IE
       DO 175 K=1,5
C        THE OLD STATEMENT IS THE FOLLOWING.
C       DO 175 K=1,3
C        WEIMIN LI 7/11/2002
  175 TOTR(I,K)=TOTR(I,K)*PAVAIL(K)
C ADDED 12/3/02 PDP
       TOTR(I,2)=TOTR(I,2)+TOTR(I,4)
       TOTR(I,3)=TOTR(I,3)+TOTR(I,5)
  165 CONTINUE
C
C***** WRITE TABLE OF STORAGE ALLOCATED TO EACH ENTITY OR USER
C***** IN ALL THREE BOISE RIVER RESERVOIRS AFTER EVAPORATION
C***** WITH WATER BANK AND OTHER TRANSACTIONS.
C
       IT=4
       WRITE(6,161) RUNDATE,IT,IYR
  161 FORMAT(1H1/////120X,A9/33X,6HTABLE ,I2,'. ',I4,
     1  ' BOISE RIVER RESERVOIR NET STORAGE BY USER. (ACRE-FEET)'//)
       WRITE(6,168)
  168 FORMAT(1H ,10X,13HNUMBER   USER,16X,'ARROWROCK   ANDERSON  LU
     1CKY PEAK  SUBTOTAL  TRANSFERS   RNT POOL      TOTAL AFTER LOSS'/)
C        THE OLD FORMAT IS THE FOLLOWING.
C  168 FORMAT(1H ,10X,13HNUMBER   USER,16X,'ARROWROCK   ANDERSON  LU
C     1CKY PEAK  SUBTOTAL  TRANSFERS   RNT POOL      TOTAL'/)
C        WEIMIN LI 7/9/2002
       TBANK=0.0
       TTRANS=0.0
       GTOT=0.0
       CSUBT=0.0
         CRRTOT=0.0
C        THE ABOVE STATEMENT IS ADDED.
C        WEIMIN LI 7/16/2002
C       DO 65 K=1,5
C        THE OLD STATEMENT IS THE FOLLOWING.
       DO 65 K=1,3
C        WEIMIN LI 7/11/2002
   65 CTOTR(K)=0.0
       DO 85 I=1,IE
       SUBT(I)=0.0
C       DO 83 M=1,5
C        THE OLD STATEMENT IS THE FOLLOWING.
       DO 83 M=1,3
C        WEIMIN LI 7/11/2002
       CTOTR(M)=CTOTR(M)+TOTR(I,M)
   83 SUBT(I)=SUBT(I)+TOTR(I,M)
       RTOT(I)=SUBT(I)+TRANS(I)+BANK(I)
         RRTOT(I)=RTOT(I)*0.973
C           THE ABOVE STATEMENT IN ADDED.  WEIMIN LI 7/9/2002
C ADDED 10/21/2002 TO EXCLUDE USBR, F&G, ANDERSON DAM POWRER AND ANDERSON
```

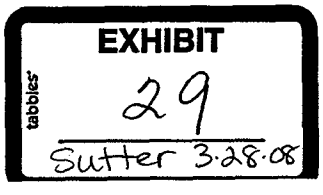
```
C UNCONTRACTED AND ENDANGERED SPECIES FROM OPERATIONAL LOSS. PPACE
      IF(ID(I).EQ.13201990.OR.ID(I).EQ.13201991)RRTOT(I)=RTOT(I)
      IF(ID(I).EQ.99999050.OR.ID(I).EQ.99999080)RRTOT(I)=RTOT(I)
      IF(ID(I).EQ.99999090.OR.ID(I).EQ.99999950)RRTOT(I)=RTOT(I)
      IF(ID(I).EQ.99999200.OR.ID(I).EQ.99999300)RRTOT(I)=RTOT(I)
      DLOSS(I)=0.0
      DLOSS(I)=RTOT(I)-RRTOT(I)
C
      CSUBT=CSUBT+SUBT(I)
      TTRANS=TTRANS+TRANS(I)
      TBANK=TBANK+BANK(I)
      GTOT=GTOT+RTOT(I)
        CRRTOT=CRRTOT+RRTOT(I)
C       THE ABOVE STATEMENT IS ADDED.
C       WEIMIN LI 7/16/2002
      IF (IPTAB(I).GT.0.OR.RTOT(I).GT.0.0) WRITE (6,75) ID(I),
     1UNAME(I),TOTR(I,1),TOTR(I,2),TOTR(I,3),
     2SUBT(I),TRANS(I),BANK(I),RTOT(I),RRTOT(I)
C       THE OLD STATEMENT IS THE FOLLOWING.
C      IF (IPTAB(I).GT.0.OR.RTOT(I).GT.0.0) WRITE (6,75) ID(I),
C     1UNAME(I),TOTR(I,1),TOTR(I,2),TOTR(I,3),
C     2SUBT(I),TRANS(I),BANK(I),RTOT(I),RRTOT(I)
C       WEIMIN LI 7/25/2002
   75 FORMAT (11X,I8,1X,A18,8F11.1)
C       THE OLD STATEMENTS ARE THE FOLLOWING.
C      IF (IPTAB(I).GT.0.OR.RTOT(I).GT.0.0) WRITE (6,75) ID(I),
C     1UNAME(I),TOTR(I,1),TOTR(I,2),TOTR(I,3),SUBT(I),TRANS(I),
C     2BANK(I),RTOT(I)
C   75 FORMAT (11X,I8,1X,A18,7F11.1)
C       WEIMIN LI 7/9/2002
   85 CONTINUE
      WRITE (6,35) CTOTR(1),CTOTR(2),
     1             CTOTR(3),CSUBT,TTRANS,
     1TBANK,GTOT,CRRTOT
   35 FORMAT (/20X,5HTOTAL,13X,8F11.1)
C       THE OLD STATEMENTS ARE THE FOLLOWING.
C      WRITE (6,35) CTOTR(1),CTOTR(2),CTOTR(3),CSUBT,TTRANS,
C     1TBANK,GTOT
C   35 FORMAT (/20X,5HTOTAL,13X,7F11.1)
C       WEIMIN LI 7/9/2002
C
C***** COMPUTE END OF SEASON STORAGE BALANCES
C
      IT=3
      JDI=0
      EGU=0.0
      DO 315 I=1,IE
      IF(JDI.EQ.1) THEN
      JDI=0
      GO TO 262
      ENDIF
      READ(9,260,END=16,ERR=400) JD,T1
  260 FORMAT(I8,8X,F10.0)
  262 IF(JD.EQ.ID(I)) GO TO 320
   16 USED(I)=0.0
      JDI=1
      GO TO 315
  320 USED(I)=T1
   17 IF(IK(I).EQ.'E') EGU=EGU+USED(I)
  315 CONTINUE
      DO 325 I=1,IE
      EXCS(I)=0.0
      RFWB(I)=0.0
```

```
      OCTB(I)=0.0
      DO 316 K=1,5
C       THE OLD STATEMENT IS THE FOLLOWING.
C      DO 316 K=1,3
C       WEIMIN LI 7/11/2002
  316 KRYO(I,K)=TOTR(I,K)
      IF(I.EQ.IEG) USED(I)=EGU
      IF(I.EQ.INYK) USED(I)=USED(I)+USED(IPEN)
      IF(I.EQ.IPHL) USED(I)=USED(I)+USED(ICAL)
      OCTB(I)=RRTOT(I)-USED(I)
C THE FOLLOWING LINE ADDED 12/7/2005
       RFTR(I)=TRANS(I)
C      BALN(I)=BANK(I)-USED(I)
C THE FOLLOWING LINES ADDED 10/21/02 TO EXCLUDE USBR AND F&G FROM
C OPERATIONAL LOSS. PPACE
       BALN(I)=BANK(I)-USED(I)-DLOSS(I)
       RFWB(I)=BALN(I)/(0.973)
       IF(ID(I).EQ.13201990.OR.ID(I).EQ.13201991)RFWB(I)=BALN(I)
       IF(BALN(I).GT.0.0001)GO TO 325
C      IF(BALN(I).GT.0.0) GO TO 325
      RFWB(I)=0.0
      BALN(I)=BALN(I)+TRANS(I)
      RFTR(I)=BALN(I)
      IF(BALN(I).GT.0.0) GO TO 325
      RFTR(I)=0.0
      DO 295 K=1,3
      BALN(I)=BALN(I)+TOTR(I,K)
      KRYO(I,K)=BALN(I)
      IF(BALN(I).GT.0.0) GO TO 325
      KRYO(I,K)=0.0
  295 CONTINUE
C      EXCS(I)=BALN(I)*(-1.0)
C ADD 10/21/2002 FOR OPERATIONAL LOSS. PPACE
       EXCS(I)=BALN(I)*(-1.0)/(0.973)
  325 CONTINUE
C
C***** PRINT TABLE
C
      IT=5
      WRITE(6,7) RUNDATE,IT,IYR
    7 FORMAT(1H1////120X,A9////27X,6HTABLE ,I2,'. ',I4,' BOISE
     1RIVER RESERVOIR STORAGE ACCOUNTS - OCTOBER 31.  (ACRE-FEET)'//)
      WRITE(6,9)
    9 FORMAT(1H ,35X,'BEGINNING  STORAGE  BALANCE    UNUSED    UNUSED  E
     1XCESS ARROWROCK  ANDERSON LUCKY PEAK'/    7X,13HNUMBER   USER,16X,
     2'  STORAGE     USED   OCT 31 TRANSFERS      BANK    USED    UNUSED
     3 CARRYOVER  CARRYOVER'/)
      DO 11 M=1,9
   11 STOT(M)=0.0
      DO 8 I=1,IE
      IF(IK(I).EQ.'S'.OR.IK(I).EQ.'E') GO TO 8
      IF(I.EQ.IPEN.OR.I.EQ.ICAL) GO TO 8
      STOT(1)=STOT(1)+RRTOT(I)
      STOT(2)=STOT(2)+USED(I)
      STOT(3)=STOT(3)+OCTB(I)
      STOT(4)=STOT(4)+RFTR(I)
      STOT(5)=STOT(5)+RFWB(I)
      STOT(6)=STOT(6)+EXCS(I)
      STOT(7)=STOT(7)+KRYO(I,1)
      STOT(8)=STOT(8)+KRYO(I,2)
      STOT(9)=STOT(9)+KRYO(I,3)
      IF(RTOT(I).GT.0.0.OR.IPTAB(I).GT.0.OR.USED(I).GT.0.0)
     1WRITE(6,13) ID(I),UNAME(I),RRTOT(I),USED(I),OCTB(I),RFTR(I),
```

```
     2RFWB(I),EXCS(I),(KRYO(I,M),M=1,3)
   13 FORMAT(7X,I8,1X,A18,F11.1,2F9.1,2F10.1,F8.1,2F10.1,F11.1)
    8 CONTINUE
      WRITE(6,14) (STOT(M),M=1,9)
   14 FORMAT(/16X,5HTOTAL,13X,F11.1,2F9.1,2F10.1,F8.1,2F10.1,F11.1)
C
C*******SUMMARIZE CARRYOVER FOR SYSTEM
C
      GRTOT=0.0
      DO 640 I=7,9
  640 GRTOT=GRTOT+STOT(I)
      UNCA=0.0
C     TYPE 20
C  20 FORMAT(' DO YOU WISH TO ENTER UNACCOUNTED FOR CARRYOVER? Y/N ' $)
C      ACCEPT 26, ANSWER
C      IF(ANSWER.NE.'Y') GO TO 44
C      TYPE *,' '
C   43 TYPE 41, UNACCT
C   41 FORMAT(1X,'UNACCOUNTED CARRYOVER = ',F10.1,' ENTER NEW VALUE?
C     1Y/N '$)
C      ACCEPT 26, ANSWER
C      IF(ANSWER.NE.'Y') GO TO 44
C      TYPE 45
C   45 FORMAT(1X,'ENTER UNACCOUNTED FOR CARRYOVER = '$)
C      ACCEPT 42, UNACCT
C   42 FORMAT(F10.0)
C      GO TO 43
   44 SGRTOT=GRTOT+UNCA
      WRITE(6,642) RUNDATE
  642 FORMAT(1H1/////////////120X,A9)
      DO 56 K=1,3
   56 FILLATE(K)=0.0
      TYPE 46
   46 FORMAT('  DO YOU WISH TO ENTER LATE SEASON RESERVOIR FILL? Y/N '$)
      ACCEPT 26,ANSWER
      TYPE *, ' '
      IF(ANSWER.NE.'Y') GO TO 54
   58 DO 69 K=1,5
      PRINT 51, RNAME(K),FILLATE(K)
   51 FORMAT(1X,'LATE SEASON FILL FOR       ',A18,' = ',F10.1,' ENTER
     1NEW FILL? Y/N/Q '$)
      ACCEPT 26,ANSWER
      IF(ANSWER.EQ.'Q') GO TO 88
      IF(ANSWER.NE.'Y') GO TO 69
      PRINT 59,RNAME(K)
   59 FORMAT(1X,'ENTER LATE SEASON FILL FOR  ',A18,' = '$)
      ACCEPT 61,FILLATE(K)
   61 FORMAT(F10.0)
   69 CONTINUE
   88 TYPE 76
   76 FORMAT(' DO YOU WISH TO REENTER LATE SEASON RESERVOIR
     1FILL? Y/N '$)
      ACCEPT 26, ANSWER
      IF(ANSWER.EQ.'Y') GO TO 58
   54 WRITE(6,142) IYR
  142 FORMAT(/////////27X, 'TABLE 6.  ',I4,' WATER DISTRICT 63
     1RESERVOIR TOTAL STORAGE - OCTOBER 31 (ACRE-FEET)'
     2///43X,'RESERVOIR',16X,'CARRYOVER',3X,'LATE FILL',7X,'TOTAL'/)
C
      DO 1020 M=1,5
      SSTOT(M)=0.0
1020  CONTINUE
      SSTOT(1)=STOT(7)
```

```
        SSTOT(2)=STOT(8)
        SSTOT(3)=STOT(9)
        SGRTOT=0.0
        DO 1030 M=1,5
        SGRTOT=SGRTOT+SSTOT(M)
1030    CONTINUE
C       THE ABOVE STATEMENTS ARE ADDED.
C       WEIMIN LI 7/19/2002
      TLATE=0.0
      GTFILL=0.0
      STOT(10)=UNCA
      DO 146 K=1,5
C       THE OLD STATEMENT IS THE FOLLOWING.
C      DO 146 K=1,4
C       WEIMIN LI 7/16/2002
      IF(K.EQ.6) GO TO 146
      TFILL(K)=SSTOT(K)+FILLATE(K)
      TLATE=TLATE+FILLATE(K)
      GTFILL=GTFILL+TFILL(K)
      WRITE(6,144) RNAME(K),SSTOT(K),FILLATE(K),TFILL(K)
C       THE OLD STATEMENT IS THE FOLLOWING.
C      WRITE(6,144) RNAME(K),STOT(K),FILLATE(K),TFILL(K)
C       WEIMIN LI 7/19/2002
  144 FORMAT(43X,A18,4X,3F12.1)
  146 CONTINUE
      WRITE(6,73) SGRTOT,TLATE,GTFILL
   73 FORMAT(/43X,'TOTAL',17X,3F12.1)
   38 PRINT 91
   91 FORMAT('  DO YOU WANT TO CREATE A FILE OF THE CARRYOVER'/' BY
     1CANAL AND RESERVOIR? Y/N:  '$)
      ACCEPT 26, FILE
      IF(FILE.NE.'Y') GO TO 15
      OPEN (UNIT=10,NAME='CARRYOUT',TYPE='NEW',CARRIAGECONTROL='LIST')
      DO 37 I=1,IE
   37 WRITE(10,34) ID(I),UNAME(I),(KRYO(I,K),K=1,3)
   34 FORMAT(I8,1X,A18,6F10.1)
      GO TO 15
  400 TYPE 1401
 1401 FORMAT(' ERROR ENCOUNTERED READING STORAGE USED DATA')
   15 PAUSE
      STOP
      END
```

```
C**********************************************************************
C
C       PROGRAM BOISTO.FOR TO COMPUTE BEGINNING OF IRRIGATION SEASON
C       RESERVOIR STORAGE BY CANAL OR USE FOR ANDERSON RANCH, ARROWROCK,
C       AND YUCKY PEAK RESERVOIRS.       RJS -  JUNE 1997
C**********************************************************************
      DIMENSION CTOT(10),STOR(80,3),ID(80),ID2(80),UNAME(80),STOT(9)
      DIMENSION USED(80),EXCS(80),RFWB(80),CRYO(80,3),OCTB(80)
      DIMENSION BALN(80),IK(80),KRYO(80,3),RTOT(80)
      DIMENSION FILL(4),SPACE(4),YIELD(4),EVAP(4),TOTR(80,3)
      DIMENSION CTOTC(3),CTOTR(3),SUBT(80),NSTO(80,3),CNSTO(3)
      DIMENSION T(4),RNAME(4),BANK(80)
      DIMENSION PAVAIL(3),TRANS(80),RFTR(80)
      DIMENSION IPTAB(80),FILLATE(8),TFILL(8)
      CHARACTER*9 RUNDATE
      CHARACTER*18 UNAME,U
      CHARACTER*16 RNAME
      REAL*8 CTOT,STOR,STOT,CTOTC,CRYO,CTOTR,SUBT,CSUBT,TBANK,BANK
      REAL*8 FILL,SPACE,YIELD,GTOT,T,TOTR,RTOT,KRYO
      REAL*8 CNSTO,NSTO,FILLLPL,TTRANS,TRANS,UNACCT
      CALL DATE(RUNDATE)
      CALL ASSIGN(1,'BOISTO.IND')
      CALL ASSIGN(5,'BOISTO.CRY')
      CALL ASSIGN(6,'BOISTO.RPT')
      CALL ASSIGN(7,'BOISTO.SPA')
      CALL ASSIGN(9,'BOISTO.USE')
      CALL ASSIGN(10,'BOISTO.UNC')
      L=1
      I=1
      IN2=10
   30 READ(7,10,END=25) ID(I),IK(I),UNAME(I),(STOR(I,K),K=1,3)
   10 FORMAT(I8,A1,A18,4F10.0)
      IF(ID(I).EQ.13201991) IUN=I
      IF(ID(I).EQ.13202995) IPEN=I
      IF(ID(I).EQ.13203000) INYK=I
      IF(ID(I).EQ.13209480) IPHL=I
      IF(ID(I).EQ.13210005) ICAL=I
      IF(ID(I).EQ.99999100) IEG=I
      IF(ID(I).EQ.0) GO TO 25
      I=I+1
      GO TO 30
   25 CONTINUE
      IE=I-1
      DO 40 I=1,IE
      READ(5,12,END=5) ID2(I),U,(CRYO(I,J),J=1,3),TRANS(I),BANK(I)
   12 FORMAT(I8,1X,A18,5F10.0)
      IF(ID2(I).EQ.ID(I)) GO TO 40
      TYPE 2, ID2(I),ID(I)
    2 FORMAT(' DIVERSION ',I8,' FROM BOISTO.CRY IS DIFFERENT THAN DIVERS
     1ION ',I8,' FROM BOISTO.SPA')
      STOP
   40 CONTINUE
      READ(10,305,ERR=310) UNACCT
  305 FORMAT(11X,F9.1)
      GO TO 5
  310 TYPE 306
  306 FORMAT(' ERR READING BOISTO.UNC ')
      STOP
    5 TYPE *, ' '
      TYPE *, '  ENTER FOUR DIGIT YEAR FOR WHICH YOU WANT  '
      TYPE *, '  TO COMPUTE STORAGE ALLOCATION AND USE.        '
      TYPE *, '  FOR EXAMPLE: 1998                             '
      TYPE *, ' '
      ACCEPT 49,IYR
   49 FORMAT(I4)
      READ(1,55) (RNAME(K),SPACE(K),FILL(K),EVAP(K),K=1,4)
   55 FORMAT(9X,A16,3F10.0)
C
C***** COMPUTE AND PRINT TABLE OF EACH RESERVOIR'S SPACE, FILL,
C***** EVAPORATION AND YIELD.
C
      IT=1
      DO 90 K=1,3
      YIELD(K)=FILL(K)-EVAP(K)
      PAVAIL(K)=0.0
      IF(FILL(K).GT.0.0) PAVAIL(K)=YIELD(K)/FILL(K)
   90 CONTINUE
      WRITE(6,100) RUNDATE,IT,IYR
  100 FORMAT(1H1////////102X,A9///////////////,40X,'TABLE'I3,'. ',I4,
     1  ' BOISE RIVER STORED WATER BY RESERVOIR'//55X,' (ACRE-FEET)'/)
```



```
      WRITE(6,101)
  101 FORMAT(32X,9HRESERVOIR,14X,5HSPACE, 8X,4HFILL, 1X,11HEVAPORATION,
     1  7X,5HYIELD/)
      DO 105 K=1,3
  105 T(K)=0.0
      DO 110 K=1,3
      T(1)=T(1)+SPACE(K)
      T(2)=T(2)+FILL(K)
      T(3)=T(3)+EVAP(K)
      T(4)=T(4)+YIELD(K)
      WRITE(6,120) RNAME(K),SPACE(K),FILL(K),EVAP(K),YIELD(K)
  120 FORMAT(32X,A16,4F12.1)
  110 CONTINUE
      WRITE(6,130) (T(K),K=1,4)
  130 FORMAT(/32X,5HTOTAL,11X,4F12.1)
C
C***** WRITE TABLE OF SPACE ALLOCATED TO EACH ENTITY OR USE IN
C***** ALL THREE BOISE RIVER RESERVOIRS BASED ON COMPLETELY
C***** FULL RESERVOIRS.
C
      IT=2
      DO 155 K=1,10
  155 CTOT(K)=0.0
      WRITE(6,160) RUNDATE,IT,IYR
  160 FORMAT(1H1/////120X,A9/////////36X,6HTABLE ,I2,'. ',I4,
     1  ' BOISE RIVER RESERVOIR SPACE BY USER. (ACRE-FEET)'//)
      WRITE(6,97)
   97 FORMAT(1H ,31X,13HNUMBER   USER,14X,'  ARROWROCK   ANDERSON LUCKY
     1PEAK      TOTAL'/)
      DO 3 K=1,3
      CTOTR(K)=0.0
    3 CTOTC(K)=0.0
      DO 80 I=1,IE
      CRYO(I,1)=0.0
      RTOT(I)=0.0
      IPTAB(I)=0
      DO 60 K=1,3
      CTOT(K)=CTOT(K)+STOR(I,K)
      RTOT(I)=RTOT(I)+STOR(I,K)
      NSTO(I,K)=0.0
   60 CONTINUE
      CTOT(4)=CTOT(4)+RTOT(I)
      IF(RTOT(I).GT.0.0) THEN
      WRITE(6,71) ID(I),UNAME(I),(STOR(I,K),K=1,3),RTOT(I)
   71 FORMAT(32X,I8,1X,A18,4F11.1)
      IPTAB(I)=1
      ENDIF
   80 CONTINUE
      WRITE(6,21) (CTOT(K),K=1,4)
   21 FORMAT(/41X,5HTOTAL,13X,4F11.1)
C
C***** IF THE SPACE IN ANDERSON RANCH HAS ENTIRELY FILLED, ZERO
C***** OUT THE CARRYOVER FROM THE PREVIOUS YEAR. (DO NOT DO THIS
C***** FOR BOISE).  IF DID NOT FILL, CHECK FOR FLOOD CONTROL.
C
      DIFF=SPACE(2)-FILL(2)
      IF(DIFF.LE.0.01) GO TO 18
   31 TYPE *, ' '
      PRINT 32
   32 FORMAT(' WAS THE FAILURE TO FILL AT ANDERSON RANCH DUE TO'/
     !' A FLOOD CONTROL OPERATION? Y/N: '$)
      ACCEPT 26, FL
   26 FORMAT(A1)
      IF(FL.EQ.'N') GO TO 18
      IF(FL.NE.'Y') GO TO 31
      DO 19 I=1,IE
   19 CRYO(I,2)=0.0
   18 CONTINUE
C
C***** IF LUCKY PEAK SPACE DID NOT FILL, INQUIRE IF THIS WAS THE
C***** RESULT OF A FLOOD CONTROL OPERATION.  IF IT WAS, THEN
C***** COMPUTE LUCKY PEAK STORAGE ALLOCATIONS WITH THE FINAL 60000
C***** ACRE-FEET HAVING THE LAST FILL.  TO DO THIS, REMOVE THE
C***** 60000 FROM THE TOTAL ALLOCABLE STORAGE AND THE STREAMFLOW
C***** MAINTENANCE SPACE. IF ANY OF THE LAST 60000 HAS FILLED
C***** (FILLLPL) ADD THIS BACK IN AFTER THE OTHER STORAGE HAS BEEN
C***** ALLOCATED.
C
      DIFF=SPACE(3)-FILL(3)
      IF(DIFF.LE.0.01) GO TO 24
```

```
   28 TYPE *, ' '
      PRINT 27
   27 FORMAT(' WAS THE FAILURE TO FILL AT LUCKY PEAK DUE TO A'/
     !' FLOOD CONTROL OPERATION? Y/N: '$)
      ACCEPT 26, FL
      IF(FL.EQ.'N') GO TO 24
      IF(FL.NE.'Y') GO TO 28
      STOR(IUN,3)=STOR(IUN,3)-60000.
      CTOT(3)=CTOT(3)-60000
      FILLLPL=FILL(3)-CTOT(3)
      IF(FILLLPL.LT.0.0) FILLLPL=0.0
      FILL(3)=FILL(3)-FILLLPL
C
C***** IF THE SPACE IN LUCKY PEAK DID NOT FILL DUE TO
C***** FLOOD CONTROL AND IF NONE OF THE 60000 EXCLUSIVE
C***** FLOOD SPACE FILLED, ZERO OUT THE CARRYOVER FROM THE
C***** PREVIOUS YEAR. THE CARRYOVER COULD BE ZEROED OUT FOR
C***** OTHER CONDITIONS, BUT LEE SISCO WANTS TO SHOW LAST
C***** YEAR'S CARRYOVER IN THE TABLE EVEN IF THE IRRIGATION
C***** SPACE FILLS COMPLETELY.
C
      IF(FILLLPL.EQ.0.0) THEN
            DO 23 I=1,IE
   23       CRYO(I,3)=0.0
            ENDIF
   24 CONTINUE
C
C
C***** COMPUTE NEW FILL TO EACH RESERVOIR BY SUBTRACTING CARRYOVER
C***** FROM TOTAL FILL, THEN ALLOCATE NEW FILL TO INDIVIDUAL
C***** ENTITIES AND USES WITHIN EACH RESERVOIR PROPORTIONAL TO
C***** SPACE OWNED.
C
      DO 1 K=1,3
      IF(FILL(K).GT.CTOT(K)) TYPE 997, RNAME(K),FILL(K),CTOT(K)
  997 FORMAT(1X,A16,' HAS FILL =',F10.1,' > TOTAL SPACE =',F10.1)
      DO 29 I=1,IE
   29 CTOTC(K)=CTOTC(K)+CRYO(I,K)
      CNSTO(K)=FILL(K)-CTOTC(K)
      WAT=CNSTO(K)
      J=0
    6 EXCESS=0.0
      J=J+1
      IF(J.GT.2000) TYPE 998, RNAME(K)
  998 FORMAT(' RUNAWAY LOOP ALLOCATING ',A16,' STORAGE')
      TYPE 999, J,WAT
  999 FORMAT(1X,I5,F10.1)
      DO 4 I=1,IE
      NSTO(I,K)=((STOR(I,K)/CTOT(K))*WAT)+NSTO(I,K)
      TOTR(I,K)=NSTO(I,K)+CRYO(I,K)
      IF(TOTR(I,K).LE.STOR(I,K)) GO TO 4
      EXCESS=EXCESS+TOTR(I,K)-STOR(I,K)
      TOTR(I,K)=STOR(I,K)
      NSTO(I,K)=STOR(I,K)-CRYO(I,K)
    4 CONTINUE
      WAT=EXCESS
      IF(EXCESS.GT.0.01) GO TO 6
    1 CONTINUE
C
C***** RECOMPUTE LUCKY PEAK STREAMFLOW MAINTENANCE STORAGE TO INCLUDE
C***** NEW FILL IN LAST 60000 ACRE-FEET.
C
      NSTO(IUN,3)=NSTO(IUN,3)+FILLLPL
      TOTR(IUN,3)=TOTR(IUN,3)+FILLLPL
      CNSTO(3)=CNSTO(3)+FILLLPL
C
C***** PRINT TABLE OF BEGINNING OF YEAR STORAGE ACCOUNTS.
C
      IT=3
  145 WRITE(6,150) RUNDATE,IT,IYR
  150 FORMAT(1H1/////120X,A9///////36X,6HTABLE ,I2,'. ',I4,' BOISE
     1RIVER RESERVOIR STORAGE ACCOUNTS.  (ACRE-FEET)'//)
      WRITE(6,95)
   95 FORMAT(1H ,37X,'ARROWROCK *------ANDERSON RANCH------* *--------LUCKY
     1 PEAK--------*'/11X,13HNUMBER   USER,14X,'  STORAGE CARRYOVER NEW FI
     2LL STORAGE CARRYOVER NEW FILL STORAGE  SUBTOTAL'/)
      CSUBT=0.0
      DO 82 I=1,IE
      DO 81 M=1,3
      SUBT(I)=SUBT(I)+TOTR(I,M)
```

```
   81 CTOTR(M)=CTOTR(M)+TOTR(I,M)
      CSUBT=CSUBT+SUBT(I)
      IF(IPTAB(I).GT.0.OR.RTOT(I).GT.0.0) WRITE(6,70) ID(I),
     1UNAME(I),TOTR(I,1),CRYO(I,2),NSTO(I,2),TOTR(I,2),CRYO(I,3),
     2NSTO(I,3),TOTR(I,3),SUBT(I)
   70 FORMAT(11X,I8,1X,A18,8F9.1)
   82 CONTINUE
      WRITE(6,22) CTOTR(1),CTOTC(2),CNSTO(2),CTOTR(2),CTOTC(3),
     1 CNSTO(3),CTOTR(3),CSUBT
   22 FORMAT(/20X,5HTOTAL,13X,8F9.1)
  200 CONTINUE
C
C***** COMPUTE YIELD OF SPACE VALUES AFTER EVAPORATION.
C
      DO 165 I=1,IE
      DO 175 K=1,3
  175 TOTR(I,K)=TOTR(I,K)*PAVAIL(K)
  165 CONTINUE
C
C***** WRITE TABLE OF STORAGE ALLOCATED TO EACH ENTITY OR USER
C***** IN ALL THREE BOISE RIVER RESERVOIRS AFTER EVAPORATION
C***** WITH WATER BANK AND OTHER TRANSACTIONS.
C
      IT=4
      WRITE(6,161) RUNDATE,IT,IYR
  161 FORMAT(1H1/////120X,A9/28X,6HTABLE ,I2,'. ',I4,
     1  ' BOISE RIVER RESERVOIR NET STORAGE BY USER. (ACRE-FEET)'//)
      WRITE(6,168)
  168 FORMAT(1H ,10X,13HNUMBER   USER,16X,'ARROWROCK   ANDERSON  LU
     1CKY PEAK  SUBTOTAL  TRANSFERS   RNT POOL      TOTAL'/)
      TBANK=0.0
      TTRANS=0.0
      GTOT=0.0
      CSUBT=0.0
      DO 65 K=1,3
   65 CTOTR(K)=0.0
      DO 85 I=1,IE
      SUBT(I)=0.0
      DO 83 M=1,3
      CTOTR(M)=CTOTR(M)+TOTR(I,M)
   83 SUBT(I)=SUBT(I)+TOTR(I,M)
      RTOT(I)=SUBT(I)+TRANS(I)+BANK(I)
      CSUBT=CSUBT+SUBT(I)
      TTRANS=TTRANS+TRANS(I)
      TBANK=TBANK+BANK(I)
      GTOT=GTOT+RTOT(I)
      IF (IPTAB(I).GT.0.OR.RTOT(I).GT.0.0) WRITE (6,75) ID(I),
     1UNAME(I),TOTR(I,1),TOTR(I,2),TOTR(I,3),SUBT(I),TRANS(I),
     2BANK(I),RTOT(I)
   75 FORMAT (11X,I8,1X,A18,7F11.1)
   85 CONTINUE
      WRITE (6,35) CTOTR(1),CTOTR(2),CTOTR(3),CSUBT,TTRANS,
     1TBANK,GTOT
   35 FORMAT (/20X,5HTOTAL,13X,7F11.1)
C
C***** COMPUTE END OF SEASON STORAGE BALANCES
C
      IT=3
      JDI=0
      EGU=0.0
      DO 315 I=1,IE
      IF(JDI.EQ.1) THEN
      JDI=0
      GO TO 262
      ENDIF
      READ(9,260,END=16,ERR=400) JD,T1
  260 FORMAT(I8,8X,F10.0)
  262 IF(JD.EQ.ID(I)) GO TO 320
   16 USED(I)=0.0
      JDI=1
      GO TO 315
  320 USED(I)=T1
   17 IF(IK(I).EQ.'E') EGU=EGU+USED(I)
  315 CONTINUE
      DO 325 I=1,IE
      EXCS(I)=0.0
      RFWB(I)=0.0
      OCTB(I)=0.0
      DO 316 K=1,3
  316 KRYO(I,K)=TOTR(I,K)
```

```
      IF(I.EQ.IEG) USED(I)=EGU
      IF(I.EQ.INYK) USED(I)=USED(I)+USED(IPEN)
      IF(I.EQ.IPHL) USED(I)=USED(I)+USED(ICAL)
      OCTB(I)=RTOT(I)-USED(I)
      BALN(I)=BANK(I)-USED(I)
      RFWB(I)=BALN(I)
      IF(BALN(I).GT.0.0) GO TO 325
      RFWB(I)=0.0
      BALN(I)=BALN(I)+TRANS(I)
      RFTR(I)=BALN(I)
      IF(BALN(I).GT.0.0) GO TO 325
      RFTR(I)=0.0
      DO 295 K=1,3
      BALN(I)=BALN(I)+TOTR(I,K)
      KRYO(I,K)=BALN(I)
      IF(BALN(I).GT.0.0) GO TO 325
      KRYO(I,K)=0.0
  295 CONTINUE
      EXCS(I)=BALN(I)*(-1.0)
  325 CONTINUE
C
C***** PRINT TABLE
C
      IT=5
      WRITE(6,7) RUNDATE,IT,IYR
    7 FORMAT(1H1////120X,A9////////27X,6HTABLE ,I2,'. ',I4,' BOISE
     1RIVER RESERVOIR STORAGE ACCOUNTS - OCTOBER 31.  (ACRE-FEET)'//)
      WRITE(6,9)
    9 FORMAT(1H ,35X,'BEGINNING  STORAGE  BALANCE    UNUSED    UNUSED  E
     1XCESS ARROWROCK  ANDERSON LUCKY PEAK'/    7X,13HNUMBER   USER,16X,
     2'  STORAGE     USED   OCT 31 TRANSFERS      BANK    USED    UNUSED
     3 CARRYOVER  CARRYOVER'/)
      DO 11 M=1,9
   11 STOT(M)=0.0
      DO 8 I=1,IE
      IF(IK(I).EQ.'S'.OR.IK(I).EQ.'E') GO TO 8
      IF(I.EQ.IPEN.OR.I.EQ.ICAL) GO TO 8
      STOT(1)=STOT(1)+RTOT(I)
      STOT(2)=STOT(2)+USED(I)
      STOT(3)=STOT(3)+OCTB(I)
      STOT(4)=STOT(4)+RFTR(I)
      STOT(5)=STOT(5)+RFWB(I)
      STOT(6)=STOT(6)+EXCS(I)
      STOT(7)=STOT(7)+KRYO(I,1)
      STOT(8)=STOT(8)+KRYO(I,2)
      STOT(9)=STOT(9)+KRYO(I,3)
      IF(RTOT(I).GT.0.0.OR.IPTAB(I).GT.0.OR.USED(I).GT.0.0)
     1WRITE(6,13) ID(I),UNAME(I),RTOT(I),USED(I),OCTB(I),RFTR(I),
     2RFWB(I),EXCS(I),(KRYO(I,M),M=1,3)
   13 FORMAT(7X,I8,1X,A18,F11.1,2F9.1,2F10.1,F8.1,2F10.1,F11.1)
    8 CONTINUE
      WRITE(6,14) (STOT(M),M=1,9)
   14 FORMAT(/16X,5HTOTAL,13X,F11.1,2F9.1,2F10.1,F8.1,2F10.1,F11.1)
C
C*******SUMMARIZE CARRYOVER FOR SYSTEM
C
      GRTOT=0.0
      DO 640 I=7,9
  640 GRTOT=GRTOT+STOT(I)
C     UNACCT=0.0
C     TYPE 20
C  20 FORMAT(' DO YOU WISH TO ENTER UNACCOUNTED FOR CARRYOVER? Y/N ' $)
C      ACCEPT 26, ANSWER
C      IF(ANSWER.NE.'Y') GO TO 44
C      TYPE *,' '
C   43 TYPE 41, UNACCT
C   41 FORMAT(1X,'UNACCOUNTED CARRYOVER = ',F10.1,' ENTER NEW VALUE?
C     1Y/N '$)
C      ACCEPT 26, ANSWER
C      IF(ANSWER.NE.'Y') GO TO 44
C      TYPE 45
C   45 FORMAT(1X,'ENTER UNACCOUNTED FOR CARRYOVER = '$)
C      ACCEPT 42, UNACCT
C   42 FORMAT(F10.0)
C      GO TO 43
   44 SGRTOT=GRTOT+UNACCT
      WRITE(6,642) RUNDATE
  642 FORMAT(1H1/////////////120X,A9)
      DO 56 K=1,3
   56 FILLATE(K)=0.0
```

```
      TYPE 46
   46 FORMAT('  DO YOU WISH TO ENTER LATE SEASON RESERVOIR FILL? Y/N '$)
      ACCEPT 26,ANSWER
      TYPE *, ' '
      IF(ANSWER.NE.'Y') GO TO 54
   58 DO 69 K=1,3
      PRINT 51, RNAME(K),FILLATE(K)
   51 FORMAT(1X,'LATE SEASON FILL FOR       ',A14,' = ',F10.1,' ENTER
     1NEW FILL? Y/N/Q '$)
      ACCEPT 26,ANSWER
      IF(ANSWER.EQ.'Q') GO TO 88
      IF(ANSWER.NE.'Y') GO TO 69
      PRINT 59,RNAME(K)
   59 FORMAT(1X,'ENTER LATE SEASON FILL FOR  ',A14,' = '$)
      ACCEPT 61,FILLATE(K)
   61 FORMAT(F10.0)
   69 CONTINUE
   88 TYPE 76
   76 FORMAT(' DO YOU WISH TO REENTER LATE SEASON RESERVOIR
     1FILL? Y/N '$)
      ACCEPT 26, ANSWER
      IF(ANSWER.EQ.'Y') GO TO 58
   54 WRITE(6,142) IYR
  142 FORMAT(/////////25X, 'TABLE 6.  ',I4,' WATER DISTRICT 63
     1RESERVOIR TOTAL STORAGE - OCTOBER 31 (ACRE-FEET)'
     2///43X,'RESERVOIR',12X,'CARRYOVER   LATE FILL',7X,'TOTAL'/)
      TLATE=0.0
      GTFILL=0.0
      STOT(10)=UNACCT
      DO 146 K=1,4
      IF(K.EQ.6) GO TO 146
      K1=K+6
      TFILL(K)=STOT(K1)+FILLATE(K)
      TLATE=TLATE+FILLATE(K)
      GTFILL=GTFILL+TFILL(K)
      WRITE(6,144) RNAME(K),STOT(K1),FILLATE(K),TFILL(K)
  144 FORMAT(43X,A14,4X,3F12.1)
  146 CONTINUE
      WRITE(6,73) SGRTOT,TLATE,GTFILL
   73 FORMAT(/43X,'TOTAL',13X,3F12.1)
   38 PRINT 91
   91 FORMAT('  DO YOU WANT TO CREATE A FILE OF THE CARRYOVER'/' BY
     1CANAL AND RESERVOIR? Y/N:  '$)
      ACCEPT 26, FILE
      IF(FILE.NE.'Y') GO TO 15
      OPEN (UNIT=10,NAME='CARRYOUT',TYPE='NEW',CARRIAGECONTROL='LIST')
      DO 37 I=1,IE
   37 WRITE(10,34) ID(I),UNAME(I),(KRYO(I,K),K=1,3)
   34 FORMAT(I8,1X,A18,6F10.1)
      GO TO 15
  400 TYPE 401
  401 FORMAT(' ERROR ENCOUNTERED READING STORAGE USED DATA')
   15 STOP
      END
```

14-DEC-99

TABLE 1. 1999 BOISE RIVER STORED WATER BY RESERVOIR

(ACRE-FEET)

RESERVOIR	SPACE	FILL	EVAPORATION	YIELD
ARROWROCK	286600.0	286600.0	2987.6	283612.4
ANDERSON RANCH	464200.0	464200.0	6107.1	458092.9
LUCKY PEAK	264370.0	257402.0	3898.0	253504.0
TOTAL	1015170.0	1008202.0	12992.7	995209.3

1999 ALLOCATIONS PROGRAM OUTPUT SHOWING FAILURE TO REFILL CALCULATIONS

14-DEC-99

TABLE 2. 1999 BOISE RIVER RESERVOIR SPACE BY USER. (ACRE-FEET)

NUMBER	USER	ARROWROCK	ANDERSON	LUCKY PEAK	TOTAL
13189600	TRINITY SPRINGS	0.0	800.0	0.0	800.0
13201050	LUCKY PEAK NURSERY	200.0	0.0	0.0	200.0
13201990	FISH & GAME FLOW	0.0	0.0	50000.0	50000.0
13201991	USBR FLOW	0.0	0.0	143352.0	143352.0
13203000	NEW YORK	254571.0	359662.0	0.0	614233.0
13203527	SURPRIS VY/MICRON	0.0	3000.0	0.0	3000.0
13203760	RIDENBAUGH	3832.0	15137.0	0.0	18969.0
13204005	BUBB	0.0	543.0	500.0	1043.0
13204060	ROSSI MILL	0.0	0.0	700.0	700.0
13204190	BOISE CITY	0.0	0.0	1000.0	1000.0
13204200	BOISE WATER CORP	0.0	1000.0	0.0	1000.0
13205515	SETTLERS	2878.0	6082.0	10000.0	18960.0
13205517	DAVIS	0.0	0.0	1500.0	1500.0
13205622	THURMAN MILL	0.0	0.0	800.0	800.0
13205640	FARMERS UNION	2874.0	5727.0	10000.0	18601.0
13205641	BOISE VALLEY	0.0	961.0	2500.0	3461.0
13205643	CAPITOL VIEW	0.0	460.0	300.0	760.0
13206090	NEW DRY CREEK	0.0	1296.0	3000.0	4296.0
13206092	NEW UNION	0.0	0.0	1400.0	1400.0
13206265	BALLENTYNE	0.0	376.0	1300.0	1676.0
13208710	MIDDLETON	0.0	0.0	11000.0	11000.0
13209480	PHYLLIS	21018.0	25582.0	16000.0	62600.0
13209482	EUREKA #1	0.0	0.0	2800.0	2800.0
13209630	LITTLE PIONEER	0.0	2174.0	500.0	2674.0
13209990	CANYON COUNTY	0.0	0.0	6000.0	6000.0
13210992	SEBREE	1227.0	0.0	0.0	1227.0
99999050	ANDERSON DAM POWER	0.0	400.0	0.0	400.0
99999080	ANDSN UNCONTRACTED	0.0	41000.0	0.0	41000.0
99999100	EAGLE IS CANALS	0.0	0.0	1718.0	1718.0
	TOTAL	286600.0	464200.0	264370.0	1015170.0

TABLE 3. 1999 BOISE RIVER RESERVOIR STORAGE ACCOUNTS. (ACRE-FEET)

NUMBER	USER	ARROWROCK STORAGE	*-----ANDERSON RANCH-----* CARRYOVER	NEW FLL	STORAGE	*-------LUCKY PEAK-------* CARRYOVER	NEW FILL	STORAGE	SUBTOTAL
13189600	TRINITY SPRINGS	0.0	799.8	0.2	800.0	0.0	0.0	0.0	800.0
13201050	LUCKY PEAK NURSERY	200.0	0.0	0.0	0.0	0.0	0.0	0.0	200.0
13201990	FISH & GAME FLOW	0.0	0.0	0.0	0.0	47402.8	2597.2	50000.0	50000.0
13201991	USBR FLOW	0.0	0.0	0.0	0.0	97247.8	39136.2	136384.0	136384.0
13203000	NEW YORK	254571.0	257285.0	102377.0	359662.0	0.0	0.0	0.0	614233.0
13203527	SURPRIS VY/MICRON	0.0	0.0	3000.0	3000.0	0.0	0.0	0.0	3000.0
13203760	RIDENBAUGH	3832.0	3937.3	11199.7	15137.0	0.0	0.0	0.0	18969.0
13204005	BUBB	0.0	447.3	95.7	543.0	500.0	0.0	500.0	1043.0
13204060	ROSSI MILL	0.0	0.0	0.0	0.0	700.0	0.0	700.0	700.0
13204190	BOISE CITY	0.0	0.0	0.0	0.0	937.7	62.3	1000.0	1000.0
13204200	BOISE WATER CORP	0.0	637.0	363.0	1000.0	0.0	0.0	0.0	1000.0
13205515	SETTLERS	2878.0	4867.5	1214.5	6082.0	10000.0	0.0	10000.0	18960.0
13205517	DAVIS	0.0	0.0	0.0	0.0	1500.0	0.0	1500.0	1500.0
13205622	THURMAN MILL	0.0	0.0	0.0	0.0	800.0	0.0	800.0	800.0
13205640	FARMERS UNION	2874.0	5018.6	708.4	5727.0	10000.0	0.0	10000.0	18601.0
13205641	BOISE VALLEY	0.0	646.0	315.0	961.0	2500.0	0.0	2500.0	3461.0
13205643	CAPITOL VIEW	0.0	0.0	460.0	460.0	172.0	128.0	300.0	760.0
13206090	NEW DRY CREEK	0.0	1296.0	0.0	1296.0	3000.0	0.0	3000.0	4296.0
13206092	NEW UNION	0.0	0.0	0.0	0.0	1379.6	20.4	1400.0	1400.0
13206265	BALLENTYNE	0.0	277.7	98.3	376.0	1300.0	0.0	1300.0	1676.0
13208710	MIDDLETON	0.0	0.0	0.0	0.0	10055.2	944.8	11000.0	11000.0
13209480	PHYLLIS	21018.0	20932.9	4649.1	25582.0	16000.0	0.0	16000.0	62600.0
13209482	EUREKA #1	0.0	0.0	0.0	0.0	2189.8	610.2	2800.0	2800.0
13209630	LITTLE PIONEER	0.0	2065.1	108.9	2174.0	500.0	0.0	500.0	2674.0
13209990	CANYON COUNTY	0.0	0.0	0.0	0.0	5200.8	799.2	6000.0	6000.0
13210992	SEBREE	1227.0	0.0	0.0	0.0	0.0	0.0	0.0	1227.0
99999050	ANDERSON DAM POWER	0.0	400.0	0.0	400.0	0.0	0.0	0.0	400.0
99999080	ANDSN UNCONTRACTED	0.0	41000.0	0.0	41000.0	0.0	0.0	0.0	41000.0
99999100	EAGLE IS CANALS	0.0	0.0	0.0	0.0	1718.0	0.0	1718.0	1718.0
	TOTAL	286600.0	339610.2	124589.8	464200.0	213103.7	44298.3	257402.0	1008202.0

14-DEC-99

TABLE 4. 1999 BOISE RIVER RESERVOIR NET STORAGE BY USER. (ACRE-FEET)

NUMBER	USER	ARROWROCK	ANDERSON	LUCKY PEAK	SUBTOTAL	TRANSFERS	RNT POOL	TOTAL
13189600	TRINITY SPRINGS	0.0	789.5	0.0	789.5	0.0	0.0	789.5
13201050	LUCKY PEAK NURSERY	197.9	0.0	0.0	197.9	0.0	0.0	197.9
13201990	FISH & GAME FLOW	0.0	0.0	49242.8	49242.8	0.0	0.0	49242.8
13201991	USBR FLOW	0.0	0.0	134318.7	134318.7	0.0	-40932.0	93386.7
13203000	NEW YORK	251917.3	354930.2	0.0	606847.5	-4123.0	0.0	602724.5
13203527	SURPRIS VY/MICRON	0.0	2960.5	0.0	2960.5	0.0	0.0	2960.5
13203760	RIDENBAUGH	3792.1	14937.9	0.0	18729.9	4123.0	0.0	22852.9
13204005	BUBB	0.0	535.9	492.4	1028.3	0.0	-500.0	528.3
13204060	ROSSI MILL	0.0	0.0	689.4	689.4	0.0	0.0	689.4
13204190	BOISE CITY	0.0	0.0	984.9	984.9	0.0	0.0	984.9
13204200	BOISE WATER CORP	0.0	986.8	0.0	986.8	0.0	3000.0	3986.8
13205515	SETTLERS	2848.0	6002.0	9848.6	18698.5	0.0	-500.0	18198.5
13205517	DAVIS	0.0	0.0	1477.3	1477.3	0.0	0.0	1477.3
13205622	THURMAN MILL	0.0	0.0	787.9	787.9	0.0	0.0	787.9
13205640	FARMERS UNION	2844.0	5651.7	9848.6	18344.3	0.0	0.0	18344.3
13205641	BOISE VALLEY	0.0	948.4	2462.1	3410.5	0.0	-1000.0	2410.5
13205643	CAPITOL VIEW	0.0	453.9	295.4	749.4	0.0	0.0	749.4
13206090	NEW DRY CREEK	0.0	1278.9	2954.6	4233.5	0.0	0.0	4233.5
13206092	NEW UNION	0.0	0.0	1378.8	1378.8	0.0	0.0	1378.8
13206265	BALLENTYNE	0.0	371.1	1280.3	1651.4	0.0	0.0	1651.4
13208710	MIDDLETON	0.0	0.0	10833.4	10833.4	0.0	0.0	10833.4
13209480	PHYLLIS	20798.9	25245.4	15757.7	61802.0	0.0	0.0	61802.0
13209482	EUREKA #1	0.0	0.0	2757.6	2757.6	0.0	0.0	2757.6
13209630	LITTLE PIONEER	0.0	2145.4	492.4	2637.8	0.0	0.0	2637.8
13209990	CANYON COUNTY	0.0	0.0	5909.1	5909.1	0.0	0.0	5909.1
13210992	SEBREE	1214.2	0.0	0.0	1214.2	0.0	-1214.2	0.0
99999050	ANDERSON DAM POWER	0.0	394.7	0.0	394.7	0.0	0.0	394.7
99999080	ANDSN UNCONTRACTED	0.0	40460.6	0.0	40460.6	0.0	0.0	40460.6
99999100	EAGLE IS CANALS	0.0	0.0	1692.0	1692.0	0.0	0.0	1692.0
99999200	ENDANGERED SPECIES	0.0	0.0	0.0	0.0	0.0	40932.0	40932.0
99999950	BOISE R WATER BANK	0.0	0.0	0.0	0.0	0.0	214.0	214.0
	TOTAL	283612.4	458092.9	253504.0	995209.3	0.0	-0.2	995209.1

TABLE 5. 1999 BOISE RIVER RESERVOIR STORAGE ACCOUNTS - OCTOBER 31. (ACRE-FEET)

NUMBER	USER	BEGINNING STORAGE	STORAGE USED	BALANCE OCT 31	UNUSED TRANSFERS	UNUSED BANK	EXCESS USED	ARROWROCK UNUSED	ANDERSON CARRYOVER	LUCKY PEAK CARRYOVER
13189600	TRINITY SPRINGS	789.5	0.0	789.5	0.0	0.0	0.0	0.0	789.5	0.0
13201050	LUCKY PEAK NURSERY	197.9	103.1	94.8	0.0	0.0	0.0	94.8	0.0	0.0
13201990	FISH & GAME FLOW	49242.8	2856.2	46386.6	0.0	0.0	0.0	0.0	0.0	46386.6
13201991	USBR FLOW	93386.7	6069.5	87317.1	0.0	0.0	0.0	0.0	0.0	87317.1
13203000	NEW YORK	602724.5	379720.3	223004.2	0.0	0.0	0.0	0.0	223004.2	0.0
13203527	SURPRIS VY/MICRON	2960.5	0.0	2960.5	0.0	0.0	0.0	0.0	2960.5	0.0
13203760	RIDENBAUGH	22852.9	22852.8	0.1	0.0	0.0	0.0	0.0	0.1	0.0
13204005	BUBB	528.3	117.0	411.3	0.0	0.0	0.0	0.0	0.0	411.3
13204060	ROSSI MILL	689.4	0.0	689.4	0.0	0.0	0.0	0.0	0.0	689.4
13204190	BOISE CITY	984.9	377.3	607.6	0.0	0.0	0.0	0.0	0.0	607.6
13204200	BOISE WATER CORP	3986.8	2081.8	1905.0	0.0	918.2	0.0	0.0	986.8	0.0
13205515	SETTLERS	18198.5	4969.8	13228.7	0.0	0.0	0.0	0.0	3380.2	9848.6
13205517	DAVIS	1477.3	41.7	1435.6	0.0	0.0	0.0	0.0	0.0	1435.6
13205622	THURMAN MILL	787.9	0.0	787.9	0.0	0.0	0.0	0.0	0.0	787.9
13205640	FARMERS UNION	18344.3	9556.3	8788.0	0.0	0.0	0.0	0.0	0.0	8788.0
13205641	BOISE VALLEY	2410.5	713.8	1696.7	0.0	0.0	0.0	0.0	0.0	1696.7
13205643	CAPITOL VIEW	749.4	0.0	749.4	0.0	0.0	0.0	0.0	453.9	295.4
13206090	NEW DRY CREEK	4233.5	0.0	4233.5	0.0	0.0	0.0	0.0	1278.9	2954.6
13206092	NEW UNION	1378.8	0.0	1378.8	0.0	0.0	0.0	0.0	0.0	1378.8
13206265	BALLENTYNE	1651.4	30.2	1621.2	0.0	0.0	0.0	0.0	340.9	1280.3
13208710	MIDDLETON	10833.4	1739.8	9093.6	0.0	0.0	0.0	0.0	0.0	9093.6
13209480	PHYLLIS	61802.0	30313.1	31488.9	0.0	0.0	0.0	0.0	15731.2	15757.7
13209482	EUREKA #1	2757.6	747.7	2009.9	0.0	0.0	0.0	0.0	0.0	2009.9
13209630	LITTLE PIONEER	2637.8	11.0	2626.8	0.0	0.0	0.0	0.0	2134.4	492.4
13209990	CANYON COUNTY	5909.1	2421.4	3487.7	0.0	0.0	0.0	0.0	0.0	3487.7
13210992	SEBREE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99999050	ANDERSON DAM POWER	394.7	0.0	394.7	0.0	0.0	0.0	0.0	394.7	0.0
99999080	ANDSN UNCONTRACTED	40460.6	0.0	40460.6	0.0	0.0	0.0	0.0	40460.6	0.0
99999100	EAGLE IS CANALS	1692.0	210.1	1481.9	0.0	0.0	0.0	0.0	0.0	1481.9
99999200	ENDANGERED SPECIES	40932.0	40932.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99999950	BOISE R WATER BANK	214.0	214.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	TOTAL	995209.1	506078.9	489130.2	0.0	918.2	0.0	94.8	291916.0	196201.1

14-DEC-99

TABLE 6. 1999 WATER DISTRICT 63 RESERVOIR TOTAL STORAGE - OCTOBER 31 (ACRE-FEET)

RESERVOIR	CARRYOVER	LATE FILL	TOTAL
ARROWROCK	94.8	24427.6	24522.4
ANDERSON RANCH	291916.0	0.0	291916.0
LUCKY PEAK	196201.1	454.9	196656.0
UNACCOUNTED	0.0	0.0	0.0
TOTAL	488212.0	24882.5	513094.5*

* THIS TOTAL INCLUDES 26,594.5 ACRE FEET OF STORAGE WATER THAT WENT PAST MIDDLETON AND WAS NOT CHARGED TO A STORAGE ACCOUNT. THIS AMOUNT WAS TAKEN OUT OF ARROWROCK & ANDERSON RANCH FOR IY 2000. ALSO INCLUDES 918.2 ACRE FEET OF STORAGE RENTED BUT NOT USED BY BOISE WATER CORP. THEY HAVE UNTIL MARCH 2000 TO USE THE WATER OR IT WILL REVERT.

WATER DISTRICT 63 - BOISE RIVER FLOW ACCOUNTING - JUL 1, 1999 1-DEC-99

	REACH FLOWS IN CFS		ACTUAL DATE	NATURAL FLOW	ACTUAL FLOW	RMAINING NAT FLOW	OPERATN FLOW	STORED FLOW	RESRVOIR EVAP	NATURAL FLOW DIV	TOTAL RCH DIV	REACH GAIN	LAST RIGHT
1	TWIN SPRINGS		JUL 1	2784.	2784.	2784.	0.	0.	0.	0.	0.	2784.	19401209
2	FEATHERVILLE		JUL 1	1701.	1701.	1701.	0.	0.	0.	0.	0.	1701.	19401209
3	FTHRVL TO ANDERSN RANCH		JUL 1	1951.	1905.	1951.	0.	-46.	54.	0.	0.	250.	19401209
4	ANDSN RANCH TO ARROWROCK		JUL 1	6892.	6810.	6892.	0.	-82.	37.	0.	0.	2157.	19401209
5	MORES CREEK		JUL 1	301.	301.	301.	0.	0.	0.	0.	0.	301.	19401209
6	ARROWROCK TO LUCKY PEAK		JUL 1	5297.	4628.	5297.	0.	-669.	33.	0.	1.	-1896.	19401209
7	LUCKY PEAK TO DIVSN DAM	*	JUL 1	5295.	2328.	2994.	0.	-666.	0.	2300.	2300.	-3.	19401209
8	DIVSN DAM TO BOISE	*	JUL 1	5295.	1741.	2407.	0.	-666.	0.	587.	587.	0.	19401209
9	BOISE TO GLENWOOD BR		JUL 1	5345.	1376.	2042.	0.	-666.	0.	415.	415.	50.	19401209
10	GLENWOOD BR TO MIDDLTN		JUL 1	5807.	977.	1393.	250.	-666.	0.	862.	862.	463.	19401209
11	MIDDLETON TO CALDWELL	*	JUL 1	6624.	1270.	1905.	50.	-685.	0.	505.	524.	817.	19401209
12	CALDWELL TO NOTUS	*	JUL 1	6819.	1296.	2010.	50.	-764.	0.	90.	169.	195.	19401209
13	NOTUS TO PARMA		JUL 1	7220.	1545.	2359.	0.	-814.	0.	102.	152.	401.	19401209
									TOTALS	4862.	5010.	7220.	

* - INDICATES FLOW ESTIMATED, NOT MEASURED

	RESERVOIR	PREV CONT (AF)	CURR CONT (AF)	CHNG CONT (CFS)	ACCR STOR (CFS)	TOTL STOR (AF)	TOTL EV (AF)
1	ANDERSON RANCH	423178.0	423134.0	-22.2	0.0	464200.0	3664.8
2	ARROWROCK	285112.0	285424.0	157.3	0.0	286600.0	2224.8
3	LUCKY PEAK	256717.0	257448.0	368.5	0.0	264370.0	2252.3
4	DIVERSION DAM	438.0	433.0	-2.5	0.0	0.0	0.0
	TOTAL	965445.0	966439.0	501.1	0.0	1015170.0	8141.9
		CHANGE IN CONTENT	STORAGE USED	MIDDLETON STORED	TOTAL STORED	UNACCT STORED	
	YEAR-TO-DATE AF	457159.0	87.8	659381.7	514143.2	610136.9	

PRIORITY	RESERVOIR	RIGHT (AF)	STORED (AF)
1	ARROWROCK	275000.0	275000.0
2	ARROWROCK	11600.0	11600.0
3	ANDERSON RANCH	464200.0	464200.0
4	LUCKY PEAK	264370.0	264370.0
	TOTAL	1015170.0	1015170.0

TOTAL EARLY SEASON FILL - 0.0

STEWART DECREE - 100% BRYAN DECREE - 100%

	DIVERSION	CFS DIVN	CFS STOR	AF USED	AF RMNG
1	LUCKY PEAK NURSE	1	1	81	-81
2	FISH AND GAME FL	0	0	0	0
3	USBR FLOW	0	0	0	0
4	PENITENTIARY	4	0	0	0
5	NEW YORK	2297	0	0	0
6	SURPRIS VY/MICRN	2	0	0	0
7	RIDENBAUGH	523	0	0	0
8	BUBB	7	0	0	0
9	HERRICK	0	0	0	0
10	MEEVES	1	0	0	0
11	ROSSI MILL	6	0	0	0
12	BOISE CITY	32	0	0	0
13	BOISE WATER CORP	16	0	0	0
14	SETTLERS	161	0	0	0
15	DAVIS	7	0	0	0
16	BOISE CITY PARKS	0	0	0	0
17	THURMAN MILL	25	0	0	0
18	FARMERS UNION	170	0	0	0
19	BOISE VALLEY	45	0	0	0
20	CAPITOL VIEW	7	0	0	0
21	NEW DRY CREEK	47	0	0	0
22	NEW UNION	9	0	0	0
23	LEMP	3	0	0	0
24	WARM SPRINGS	5	0	0	0
25	GRAHAM-GILBERT	1	0	0	0
26	BALLENTYNE	14	0	0	0
27	CONWAY-HAMMING	3	0	0	0
28	EAGLE ISLAND PAR	0	0	0	0
29	THOMAS AIKEN	3	0	0	0
30	MACE-CATLIN	7	0	0	0
31	MACE-MACE	0	0	0	0
32	WROTEN	0	0	0	0
33	HART-DAVIS	9	0	0	0
34	MIDDLETON	157	0	0	0
35	BARBER	1	0	0	0
36	SEVEN SUCKERS	1	0	0	0
37	PHYLLIS	425	0	0	0
38	EUREKA #1	33	0	0	0
39	LITTLE PIONEER	30	0	7	-7
40	CANYON COUNTY	65	0	0	0
41	CALDWELL HIGHLIN	48	0	0	0
42	RIVERSIDE	153	0	0	0
43	PIONEER DIXIE	76	18	1638	-1638
44	SEBREE	264	0	0	0
45	CAMPBELL	24	0	0	0
46	SIEBENBERG	7	0	0	0
47	SHIPLEY	0	0	0	0
48	WAGNER	0	0	61	-61
49	SIMPLOT	1	1	109	-109
50	EUREKA #2	106	56	6836	-6836
51	UPPER CENTER POI	22	7	893	-893
52	MCMANUS AND TEAT	5	2	266	-266
53	LOWER CENTER POI	35	14	1658	-1658
54	BOWMAN AND SWISH	12	3	354	-354
55	BAXTER	10	6	605	-605
56	ANDREWS	12	0	0	0
57	MAMMON	7	0	0	0
58	HAAS	10	0	0	0
59	PARMA	22	9	1182	-1182
60	ISLAND HIGHLINE	37	17	1843	-1843
61	CRAWFORTH	1	0	0	0
62	MCCONNEL ISLAND	43	15	2480	-2480

tabbies EXHIBIT 31 Sutter 3.28.08

WATER DISTRICT 63 - BOISE RIVER FLOW ACCOUNTING - JUL 2, 1999 1-DEC-99

	REACH FLOWS IN CFS		ACTUAL DATE	NATURAL FLOW	ACTUAL FLOW	RMAINING NAT FLOW	OPERATN FLOW	STORED FLOW	RESRVOIR EVAP	NATURAL FLDW DIV	TOTAL RCH DIV	REACH GAIN	LAST RIGHT
1	TWIN SPRINGS		JUL 2	2693.	2693.	2693.	0.	0.	0.	0.	0.	2693.	19401209
2	FEATHERVILLE		JUL 2	1628.	1628.	1628.	0.	0.	0.	0.	0.	1628.	19401209
3	FTHRVL TO ANDERSN RANCH		JUL 2	1845.	1806.	1845.	0.	-40.	45.	0.	0.	217.	19401209
4	ANDSN RANCH TO ARROWROCK		JUL 2	6701.	6193.	6701.	0.	-508.	31.	0.	0.	2163.	19401209
5	MORES CREEK		JUL 2	286.	286.	286.	0.	0.	0.	0.	0.	286.	19401209
6	ARROWROCK TO LUCKY PEAK		JUL 2	5060.	4563.	5060.	0.	-498.	27.	0.	1.	-1927.	19401209
7	LUCKY PEAK TO DIVSN DAM	*	JUL 2	5060.	2259.	2757.	0.	-497.	0.	2303.	2303.	-1.	19401209
8	DIVSN DAM TO BOISE	*	JUL 2	5060.	1671.	2168.	0.	-497.	0.	588.	588.	0.	19401209
9	BOISE TO GLENWOOD BR		JUL 2	5091.	1286.	1783.	0.	-497.	0.	416.	416.	31.	19401209
10	GLENWOOD BR TO MIDDLTN		JUL 2	5540.	864.	1111.	250.	-497.	0.	871.	871.	449.	19401209
11	MIDDLETON TO CALDWELL	*	JUL 2	6353.	1155.	1621.	50.	-516.	0.	503.	522.	813.	19401209
12	CALDWELL TO NOTUS	*	JUL 2	6539.	1172.	1717.	50.	-595.	0.	90.	169.	186.	19401209
13	NOTUS TO PARMA		JUL 2	6925.	1405.	2051.	0.	-646.	0.	102.	153.	386.	19401209
									TOTALS	4874.	5023.	6925.	

* - INDICATES FLOW ESTIMATED, NOT MEASURED

	RESERVOIR	PREV CONT (AF)	CURR CONT (AF)	CHNG CONT (CFS)	ACCR STOR (CFS)	TOTL STOR (AF)	TOTL EV (AF)
1	ANDERSON RANCH	423134.0	422992.0	-71.6	0.0	464200.0	3754.1
2	ARROWROCK	285424.0	285331.0	-46.9	0.0	286600.0	2285.3
3	LUCKY PEAK	257448.0	258369.0	464.3	0.0	264370.0	2306.2
4	DIVERSION DAM	433.0	432.0	-0.5	0.0	0.0	0.0
	TOTAL	966439.0	967124.0	345.3	0.0	1015170.0	8345.6
		CHANGE IN CONTENT	STORAGE USED	MIDDLETON STORED	TOTAL STORED	UNACCT STORED	
	YEAR-TO-DATE AF	457844.0	88.8	659381.7	514143.2	611123.3	

	PRIORITY	RESERVOIR	RIGHT (AF)	STORED (AF)
	1	ARROWROCK	275000.0	275000.0
	2	ARROWROCK	11600.0	11600.0
	3	ANDERSON RANCH	464200.0	464200.0
	4	LUCKY PEAK	264370.0	264370.0
		TOTAL	1015170.0	1015170.0
		TOTAL EARLY SEASON FILL -		0.0
		STEWART DECREE - 100%	BRYAN DECREE - 100%	

	DIVERSION	CFS DIVN	CFS STOR	AF USED	AF RMNG		DIVERSION	CFS DIVN	CFS STOR	AF USED	AF RMNG		DIVERSION	CFS DIVN	CFS STOR	AF USED	AF RMNG
1	LUCKY PEAK NURSE	1	1	82	-82	22	NEW UNION	9	0	0	0	43	PIONEER DIXIE	77	19	1675	-1675
2	FISH AND GAME FL	0	0	0	0	23	LEMP	3	0	0	0	44	SEBREE	262	0	0	0
3	USBR FLOW	0	0	0	0	24	WARM SPRINGS	5	0	0	0	45	CAMPBELL	24	0	0	0
4	PENITENTIARY	4	0	0	0	25	GRAHAM-GILBERT	1	0	0	0	46	SIEBENBERG	7	0	0	0
5	NEW YORK	2300	0	0	0	26	BALLENTYNE	14	0	0	0	47	SHIPLEY	0	0	0	0
6	SURPRIS VY/MICRN	2	0	0	0	27	CONWAY-HAMMING	3	0	0	0	48	WAGNER	0	0	62	-62
7	RIDENBAUGH	524	0	0	0	28	EAGLE ISLAND PAR	0	0	0	0	49	SIMPLOT	1	1	111	-111
8	BUBB	7	0	0	0	29	THOMAS AIKEN	3	0	0	0	50	EUREKA #2	106	56	6948	-6948
9	HERRICK	0	0	0	0	30	MACE-CATLIN	7	0	0	0	51	UPPER CENTER POI	22	7	907	-907
10	MEEVES	1	0	0	0	31	MACE-MACE	0	0	0	0	52	MCMANUS AND TEAT	5	1	268	-268
11	ROSSI MILL	6	0	0	0	32	WROTEN	0	0	0	0	53	LOWER CENTER POI	35	13	1685	-1685
12	BOISE CITY	33	0	0	0	33	HART-DAVIS	9	0	0	0	54	BOWMAN AND SWISH	12	3	360	-360
13	BOISE WATER CORP	16	0	0	0	34	MIDDLETON	158	0	0	0	55	BAXTER	10	6	617	-617
14	SETTLERS	161	0	0	0	35	BARBER	1	0	0	0	56	ANDREWS	12	0	0	0
15	DAVIS	7	0	0	0	36	SEVEN SUCKERS	1	0	0	0	57	MAMMON	7	0	0	0
16	BOISE CITY PARKS	0	0	0	0	37	PHYLLIS	431	0	0	0	58	HAAS	9	0	0	0
17	THURMAN MILL	25	0	0	0	38	EUREKA #1	33	0	0	0	59	PARMA	22	9	1200	-1200
18	FARMERS UNION	171	0	0	0	39	LITTLE PIONEER	30	0	7	-7	60	ISLAND HIGHLINE	37	17	1877	-1877
19	BOISE VALLEY	45	0	0	0	40	CANYON COUNTY	66	0	0	0	61	CRAWFORTH	1	0	0	0
20	CAPITOL VIEW	7	0	0	0	41	CALDWELL HIGHLIN	50	0	0	0	62	MCCONNEL ISLAND	43	16	2511	-2511
21	NEW DRY CREEK	47	0	0	0	42	RIVERSIDE	153	0	0	0						

WATER DISTRICT 63 - BOISE RIVER FLOW ACCOUNTING - JUL 3, 1999 1-DEC-99

	REACH FLOWS IN CFS		ACTUAL DATE	NATURAL FLOW	ACTUAL FLOW	RMAINING NAT FLOW	OPERATN FLOW	STORED FLOW	RESRVOIR EVAP	NATURAL FLOW DIV	TOTAL RCH DIV	REACH GAIN	LAST RIGHT
1	TWIN SPRINGS		JUL 3	2422.	2422.	2422.	0.	0.	0.	0.	0.	2422.	19401209
2	FEATHERVILLE		JUL 3	1491.	1491.	1491.	0.	0.	0.	0.	0.	1491.	19401209
3	FTHRVL TO ANDERSN RANCH		JUL 3	1703.	1718.	1703.	0.	15.	36.	0.	0.	212.	19401209
4	ANDSN RANCH TO ARROWROCK		JUL 3	6008.	5575.	6008.	0.	-433.	24.	0.	0.	1883.	19401209
5	MORES CREEK		JUL 3	272.	272.	272.	0.	0.	0.	0.	0.	272.	19401209
6	ARROWROCK TO LUCKY PEAK		JUL 3	4630.	4547.	4630.	0.	-83.	22.	0.	1.	-1649.	19401209
7	LUCKY PEAK TO DIVSN DAM	*	JUL 3	4630.	2246.	2329.	0.	-83.	0.	2301.	2301.	0.	19401209
8	DIVSN DAM TO BOISE	*	JUL 3	4630.	1657.	1739.	0.	-83.	0.	590.	590.	0.	19401209
9	BOISE TO GLENWOOD BR		JUL 3	4646.	1256.	1338.	0.	-83.	0.	417.	417.	16.	19401209
10	GLENWOOD BR TO MIDDLTN		JUL 3	5067.	800.	632.	250.	-83.	0.	878.	878.	422.	19401209
11	MIDDLETON TO CALDWELL	*	JUL 3	5891.	1104.	1156.	50.	-102.	0.	501.	520.	824.	19401209
12	CALDWELL TO NOTUS	*	JUL 3	6092.	1136.	1267.	50.	-180.	0.	90.	168.	201.	19401209
13	NOTUS TO PARMA		JUL 3	6488.	1378.	1610.	0.	-232.	0.	102.	154.	396.	19401209
									TOTALS	4878.	5028.	6488.	

* - INDICATES FLOW ESTIMATED, NOT MEASURED

	RESERVOIR	PREV CONT (AF)	CURR CONT (AF)	CHNG CONT (CFS)	ACCR STOR (CFS)	TOTL STOR (AF)	TOTL EV (AF)
1	ANDERSON RANCH	422992.0	422949.0	-21.7	0.0	464200.0	3825.0
2	ARROWROCK	285331.0	284801.0	-267.2	0.0	286600.0	2333.4
3	LUCKY PEAK	258369.0	259020.0	328.2	0.0	264370.0	2349.1
4	DIVERSION DAM	432.0	432.0	0.0	0.0	0.0	0.0
	TOTAL	967124.0	967202.0	39.3	0.0	1015170.0	8507.4
		CHANGE IN CONTENT	STORAGE USED	MIDDLETON STORED	TOTAL STORED	UNACCT STORED	
	YEAR-TO-DATE AF	457922.0	89.8	659381.7	514143.2	611287.0	

PRIORITY	RESERVOIR	RIGHT (AF)	STORED (AF)
1	ARROWROCK	275000.0	275000.0
2	ARROWROCK	11600.0	11600.0
3	ANDERSON RANCH	464200.0	464200.0
4	LUCKY PEAK	264370.0	264370.0
	TOTAL	1015170.0	1015170.0

TOTAL EARLY SEASON FILL - 0.0

STEWART DECREE - 100% BRYAN DECREE - 100%

	DIVERSION	CFS DIVN	CFS STOR	AF USED	AF RMNG
1	LUCKY PEAK NURSE	1	1	83	-83
2	FISH AND GAME FL	0	0	0	0
3	USBR FLOW	0	0	0	0
4	PENITENTIARY	4	0	0	0
5	NEW YORK	2297	0	0	0
6	SURPRIS VY/MICRN	2	0	0	0
7	RIDENBAUGH	525	0	0	0
8	BUBB	7	0	0	0
9	HERRICK	0	0	0	0
10	MEEVES	1	0	0	0
11	ROSSI MILL	6	0	0	0
12	BOISE CITY	33	0	0	0
13	BOISE WATER CORP	16	0	0	0
14	SETTLERS	162	0	0	0
15	DAVIS	7	0	0	0
16	BOISE CITY PARKS	0	0	0	0
17	THURMAN MILL	25	0	0	0
18	FARMERS UNION	172	0	0	0
19	BOISE VALLEY	45	0	0	0
20	CAPITOL VIEW	7	0	0	0
21	NEW DRY CREEK	48	0	0	0
22	NEW UNION	9	0	0	0
23	LEMP	3	0	0	0
24	WARM SPRINGS	5	0	0	0
25	GRAHAM-GILBERT	1	0	0	0
26	BALLENTYNE	14	0	0	0
27	CONWAY-HAMMING	3	0	0	0
28	EAGLE ISLAND PAR	0	0	0	0
29	THOMAS AIKEN	3	0	0	0
30	MACE-CATLIN	7	0	0	0
31	MACE-MACE	0	0	0	0
32	WROTEN	0	0	0	0
33	HART-DAVIS	9	0	0	0
34	MIDDLETON	158	0	0	0
35	BARBER	1	0	0	0
36	SEVEN SUCKERS	1	0	0	0
37	PHYLLIS	437	0	0	0
38	EUREKA #1	33	0	0	0
39	LITTLE PIONEER	29	0	7	-7
40	CANYDN COUNTY	66	0	0	0
41	CALDWELL HIGHLIN	50	0	0	0
42	RIVERSIDE	154	0	0	0
43	PIONEER DIXIE	77	19	1713	-1713
44	SEBREE	259	0	0	0
45	CAMPBELL	23	0	0	0
46	SIEBENBERG	6	0	0	0
47	SHIPLEY	0	0	0	0
48	WAGNER	0	0	63	-63
49	SIMPLOT	1	1	112	-112
50	EUREKA #2	107	57	7061	-7061
51	UPPER CENTER POI	22	7	920	-920
52	MCMANUS AND TEAT	5	1	271	-271
53	LOWER CENTER POI	34	13	1710	-1710
54	BOWMAN AND SWISH	13	4	367	-367
55	BAXTER	10	6	629	-629
56	ANDREWS	12	0	0	0
57	MAMMON	7	0	0	0
58	HAAS	9	0	0	0
59	PARMA	22	9	1217	-1217
60	ISLAND HIGHLINE	37	17	1910	-1910
61	CRAWFORTH	1	0	0	0
62	MCCDNNEL ISLAND	44	17	2544	-2544

BOISE RIVER STORED WATER SUPPLY (ACRE-FEET)

DATE: JULY 3, 1999

SUPPLY:		
ACCOUNTED FOR STORAGE	1,015,050.0	
UNACCOUNTED FOR STORAGE	611,287.0	
LATE SEASON FILL		
TOTAL STORAGE AVAILABLE		1,626,337.0
USE:		
CANALS AND PUMPS	89.9	
FISH AND GAME		
USBR STREAMFLOW		
ENDANGERED SPECIES		
EVAPORATION	8,507.4	
FLOOD CONTROL	617,464.8	
TOTAL STORAGE USED		626,163.1
NET STORAGE		1,000,173.9
ACTUAL STORAGE (967,202 + 41,000)		1,008,202.0
AVERAGING ERROR		<8,028.1>

BOISE RIVER STORED WATER SUPPLY (ACRE-FEET)

DATE: JULY 3, 1999 (RE-START)

SUPPLY:		
ACCOUNTED FOR STORAGE	1,008,202.0	
UNACCOUNTED FOR STORAGE		
LATE SEASON FILL		
TOTAL STORAGE AVAILABLE		1,008,202.0
USE:		
CANALS AND PUMPS		
FISH AND GAME		
USBR STREAMFLOW		
ENDANGERED SPECIES		
EVAPORATION		
FLOOD CONTROL		
TOTAL STORAGE USED		
NET STORAGE		1,008,202.0
ACTUAL STORAGE (967,202 + 41,000)		1,008,202.0
AVERAGING ERROR		

WATER DISTRICT 63 - BOISE RIVER FLOW ACCOUNTING - JUL 4, 1999 7-DEC-99

	REACH FLOWS IN CFS		ACTUAL DATE	NATURAL FLOW	ACTUAL FLOW	RMAINING NAT FLOW	OPERATN FLOW	STORED FLOW	RESRVOIR EVAP	NATURAL FLOW DIV	TOTAL RCH DIV	REACH GAIN	LAST RIGHT
1	TWIN SPRINGS		JUL 4	2189.	2189.	2189.	0.	0.	0.	0.	0.	2189.	19031214
2	FEATHERVILLE		JUL 4	1373.	1373.	1373.	0.	0.	0.	0.	0.	1373.	19031214
3	FTHRVL TO ANDERSN RANCH		JUL 4	1574.	1578.	1574.	0.	4.	45.	0.	0.	202.	19031214
4	ANDSN RANCH TO ARROWROCK		JUL 4	5263.	4958.	5263.	0.	-305.	30.	0.	0.	1500.	19031214
5	MORES CREEK		JUL 4	261.	261.	261.	0.	0.	0.	0.	0.	261.	19031214
6	ARROWROCK TO LUCKY PEAK		JUL 4	4255.	4543.	4255.	0.	288.	27.	0.	1.	-1269.	19031214
7	LUCKY PEAK TO DIVSN DAM	*	JUL 4	4255.	2242.	2030.	0.	212.	0.	2225.	2301.	0.	19031214
8	DIVSN DAM TO BOISE	*	JUL 4	4255.	1652.	1452.	0.	200.	0.	578.	590.	0.	19031214
9	BOISE TO GLENWOOD BR		JUL 4	4275.	1253.	1053.	0.	200.	0.	418.	418.	19.	19031214
10	GLENWOOD BR TO MIDDLTN		JUL 4	4688.	784.	0.	584.	200.	0.	883.	883.	414.	19031214
11	MIDDLETON TO CALDWELL	*	JUL 4	5528.	1106.	875.	50.	181.	0.	498.	518.	840.	19401209
12	CALDWELL TO NOTUS	*	JUL 4	5753.	1162.	1010.	50.	102.	0.	90.	168.	224.	19401209
13	NOTUS TO PARMA		JUL 4	6167.	1423.	1372.	0.	51.	0.	102.	155.	414.	19401209

* - INDICATES FLOW ESTIMATED, NOT MEASURED TOTALS 4795. 5034. 6167.

	RESERVOIR	PREV CONT (AF)	CURR CONT (AF)	CHNG CONT (CFS)	ACCR STOR (CFS)	TOTL STOR (AF)	TOTL EV (AF)
1	ANDERSON RANCH	422949.0	422807.0	-71.6	0.0	464200.0	89.3
2	ARROWROCK	284801.0	283997.0	-405.3	0.0	286600.0	60.5
3	LUCKY PEAK	259020.0	259074.0	27.2	0.0	257402.0	54.1
4	DIVERSION DAM	432.0	432.0	0.0	0.0	0.0	0.0
	TOTAL	967202.0	966310.0	-449.7	0.0	1008202.0	203.8

	CHANGE IN CONTENT	STORAGE USED	MIDDLETON STORED	TOTAL STORED	UNACCT STORED
YEAR-TO-DATE AF	-892.0	175.8	396.7	0.0	0.0

PRIORITY	RESERVOIR	RIGHT (AF)	STORED (AF)
1	ARROWROCK	275000.0	275000.0
2	ARROWROCK	11600.0	11600.0
3	ANDERSON RANCH	464200.0	464200.0
4	LUCKY PEAK	264370.0	257402.0
	TOTAL	1015170.0	1008202.0

TOTAL EARLY SEASON FILL - 0.0

STEWART DECREE - 100% BRYAN DECREE - 100%

	DIVERSION	CFS DIVN	CFS STOR	AF USED	AF RMNG
1	LUCKY PEAK NURSE	1	1	1	197
2	FISH AND GAME FL	0	0	0	49243
3	USBR FLOW	0	0	0	93387
4	PENITENTIARY	4	0	0	0
5	NEW YORK	2298	76	151	606322
6	SURPRIS VY/MICRN	2	0	0	2961
7	RIDENBAUGH	525	0	0	18730
8	BUBB	7	0	0	1028
9	HERRICK	0	0	0	0
10	MEEVES	1	0	0	0
11	ROSSI MILL	6	0	0	689
12	BOISE CITY	33	0	0	985
13	BOISE WATER CORP	16	12	23	1488
14	SETTLERS	162	0	0	18699
15	DAVIS	7	0	0	1477
16	BOISE CITY PARKS	0	0	0	0
17	THURMAN MILL	24	0	0	788
18	FARMERS UNION	173	0	0	18344
19	BOISE VALLEY	45	0	0	3411
20	CAPITOL VIEW	7	0	0	749
21	NEW DRY CREEK	47	0	0	4234
22	NEW UNION	9	0	0	1379
23	LEMP	3	0	0	0
24	WARM SPRINGS	5	0	0	0
25	GRAHAM-GILBERT	1	0	0	0
26	BALLENTYNE	13	0	0	1651
27	CONWAY-HAMMING	3	0	0	0
28	EAGLE ISLAND PAR	0	0	1	-1
29	THOMAS AIKEN	3	0	0	0
30	MACE-CATLIN	7	0	0	0
31	MACE-MACE	0	0	0	0
32	WROTEN	0	0	0	0
33	HART-DAVIS	9	0	0	0
34	MIDDLETON	158	0	0	10833
35	BARBER	1	0	0	0
36	SEVEN SUCKERS	1	0	0	0
37	PHYLLIS	443	0	0	61802
38	EUREKA #1	33	0	0	2758
39	LITTLE PIONEER	29	0	0	2638
40	CANYON COUNTY	67	0	0	5909
41	CALDWELL HIGHLIN	50	0	0	0
42	RIVERSIDE	155	0	0	0
43	PIONEER DIXIE	77	19	38	-38
44	SEBREE	257	0	0	1214
45	CAMPBELL	23	0	0	0
46	SIEBENBERG	6	0	0	0
47	SHIPLEY	0	0	0	0
48	WAGNER	0	0	1	-1
49	SIMPLOT	1	1	1	-1
50	EUREKA #2	108	58	115	-115
51	UPPER CENTER POI	21	7	13	-13
52	MCMANUS AND TEAT	4	1	2	-2
53	LOWER CENTER POI	33	12	24	-24
54	BOWMAN AND SWISH	13	3	7	-7
55	BAXTER	10	6	12	-12
56	ANDREWS	12	0	0	0
57	MAMMON	7	0	0	0
58	HAAS	9	0	0	0
59	PARMA	21	9	17	-17
60	ISLAND HIGHLINE	37	17	34	-34
61	CRAWFORTH	1	0	0	0
62	MCCONNEL ISLAND	44	17	34	-34

WATER DISTRICT 63 - BOISE RIVER FLOW ACCOUNTING - JUL 5, 1999 7-DEC-99

	REACH FLOWS IN CFS		ACTUAL DATE	NATURAL FLOW	ACTUAL FLOW	RMAINING NAT FLOW	OPERATN FLOW	STORED FLOW	RESRVOIR EVAP	NATURAL FLOW DIV	TOTAL RCH DIV	REACH GAIN	LAST RIGHT
1	TWIN SPRINGS		JUL 5	2039.	2039.	2039.	0.	0.	0.	0.	0.	2039.	19031214
2	FEATHERVILLE		JUL 5	1282.	1282.	1282.	0.	0.	0.	0.	0.	1282.	19031214
3	FTHRVL TO ANDERSN RANCH		JUL 5	1462.	1580.	1462.	0.	118.	44.	0.	0.	180.	19031214
4	ANDSN RANCH TO ARROWROCK		JUL 5	4540.	4340.	4540.	0.	-200.	30.	0.	0.	1039.	19031214
5	MORES CREEK		JUL 5	248.	248.	248.	0.	0.	0.	0.	0.	248.	19031214
6	ARROWROCK TO LUCKY PEAK		JUL 5	3974.	4548.	3974.	0.	573.	26.	0.	1.	-813.	19031214
7	LUCKY PEAK TO DIVSN DAM	*	JUL 5	3974.	2247.	1935.	0.	312.	0.	2039.	2301.	0.	19031214
8	DIVSN DAM TO BOISE	*	JUL 5	3974.	1657.	1357.	0.	300.	0.	578.	590.	0.	19031214
9	BOISE TO GLENWOOD BR		JUL 5	3998.	1262.	962.	0.	300.	0.	419.	419.	24.	19031214
10	GLENWOOD BR TO MIDDLTN		JUL 5	4408.	783.	0.	483.	300.	0.	888.	889.	410.	19031214
11	MIDDLETON TO CALDWELL	*	JUL 5	5256.	1116.	786.	50.	280.	0.	496.	516.	848.	19401209
12	CALDWELL TO NOTUS	*	JUL 5	5491.	1183.	931.	50.	202.	0.	90.	168.	235.	19401209
13	NOTUS TO PARMA		JUL 5	5910.	1447.	1297.	0.	150.	0.	102.	155.	419.	19401209

* - INDICATES FLOW ESTIMATED, NOT MEASURED TOTALS 4612. 5037. 5910.

	RESERVOIR	PREV CONT (AF)	CURR CONT (AF)	CHNG CONT (CFS)	ACCR STOR (CFS)	TOTL STOR (AF)	TOTL EV (AF)
1	ANDERSON RANCH	422807.0	422426.0	-192.1	0.0	464200.0	175.9
2	ARROWROCK	283997.0	283441.0	-280.3	0.0	286600.0	119.1
3	LUCKY PEAK	259074.0	258585.0	-246.5	0.0	257402.0	106.6
4	DIVERSION DAM	432.0	432.0	0.0	0.0	0.0	0.0
	TOTAL	966310.0	964884.0	-718.9	0.0	1008202.0	401.6

	CHANGE IN CONTENT	STORAGE USED	MIDDLETON STORED	TOTAL STORED	UNACCT STORED
YEAR-TO-DATE AF	-2318.0	719.3	991.8	0.0	0.0

PRIORITY	RESERVOIR	RIGHT (AF)	STORED (AF)
1	ARROWROCK	275000.0	275000.0
2	ARROWROCK	11600.0	11600.0
3	ANDERSON RANCH	464200.0	464200.0
4	LUCKY PEAK	264370.0	257402.0
	TOTAL	1015170.0	1008202.0

TOTAL EARLY SEASON FILL - 0.0

STEWART DECREE - 100% BRYAN DECREE - 100%

	DIVERSION	CFS DIVN	CFS STOR	AF USED	AF RMNG
1	LUCKY PEAK NURSE	1	1	2	196
2	FISH AND GAME FL	0	0	0	49243
3	USBR FLOW	0	0	0	93387
4	PENITENTIARY	4	0	0	0
5	NEW YORK	2297	261	669	605803
6	SURPRIS VY/MICRN	2	0	0	2961
7	RIDENBAUGH	526	0	0	18730
8	BUBB	7	0	0	1028
9	HERRICK	0	0	0	0
10	MEEVES	0	0	0	0
11	ROSSI MILL	6	0	0	689
12	BOISE CITY	33	0	0	985
13	BOISE WATER CORP	16	12	47	1465
14	SETTLERS	162	0	0	18699
15	DAVIS	7	0	0	1477
16	BOISE CITY PARKS	0	0	0	0
17	THURMAN MILL	24	0	0	788
18	FARMERS UNION	174	0	0	18344
19	BOISE VALLEY	45	0	0	3411
20	CAPITOL VIEW	7	0	0	749
21	NEW DRY CREEK	47	0	0	4234
22	NEW UNION	9	0	0	1379
23	LEMP	3	0	0	0
24	WARM SPRINGS	4	0	0	0
25	GRAHAM-GILBERT	1	0	0	0
26	BALLENTYNE	13	0	0	1651
27	CONWAY-HAMMING	3	0	0	0
28	EAGLE ISLAND PAR	0	0	1	-1
29	THOMAS AIKEN	3	0	0	0
30	MACE-CATLIN	7	0	0	0
31	MACE-MACE	0	0	0	0
32	WROTEN	0	0	0	0
33	HART-DAVIS	9	0	0	0
34	MIDDLETON	159	0	0	10833
35	BARBER	1	0	0	0
36	SEVEN SUCKERS	1	0	0	0
37	PHYLLIS	448	0	0	61802
38	EUREKA #1	33	0	0	2758
39	LITTLE PIONEER	28	0	0	2638
40	CANYON COUNTY	68	0	0	5909
41	CALDWELL HIGHLIN	51	0	0	0
42	RIVERSIDE	155	0	0	0
43	PIONEER DIXIE	78	20	78	-78
44	SEBREE	254	0	0	1214
45	CAMPBELL	22	0	0	0
46	SIEBENBERG	6	0	0	0
47	SHIPLEY	0	0	0	0
48	WAGNER	0	0	2	-2
49	SIMPLOT	1	1	2	-2
50	EUREKA #2	109	59	231	-231
51	UPPER CENTER POI	21	6	26	-26
52	MCMANUS AND TEAT	4	1	4	-4
53	LOWER CENTER POI	32	11	46	-46
54	BOWMAN AND SWISH	13	3	13	-13
55	BAXTER	10	6	24	-24
56	ANDREWS	13	0	0	0
57	MAMMON	7	0	0	0
58	HAAS	9	0	0	0
59	PARMA	21	9	34	-34
60	ISLAND HIGHLINE	37	17	67	-67
61	CRAWFORTH	1	0	0	0
62	MCCONNEL ISLAND	45	18	69	-69

National Water Information System: Web Interface

USGS Water Resources

Data Category: Surface Water | Geographic Area: United States | GO

News: Available soon in NWISWeb

USGS Surface-Water Monthly Statistics for the Nation

The statistics generated from this site are based on approved daily-mean data and may not match those published by the USGS in official publications. The user is responsible for assessment and use of statistics from this site. For more details on why the statistics may not match, click here.

USGS 13206000 BOISE RIVER AT GLENWOOD BRIDGE NR BOISE ID

Available data for this site | Time-series: Monthly statistics | GO

Ada County, Idaho
Hydrologic Unit Code 17050114
Latitude 43°39'38", Longitude 116°16'45" NAD83
Drainage area 2,800 square miles
Contributing drainage area 2,800 square miles
Gage datum 2,600 feet above sea level NGVD29

Output formats
HTML table of all data
Tab-separated data
Reselect output format

EXHIBIT
32
Sutter 3-28-08

00060, Discharge, cubic feet per second,												
YEAR	Monthly mean in cfs (Calculation Period: 1986-01-01 -> 2007-09-30) Period-of-record for statistical calculation restricted by user											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1986	366.1	1,668	6,372	6,753	4,872	3,784	817.9	706.1	477.4	268.5	1,406	583.1
1987	187.3	187.7	189.1	586.0	754.6	620.0	673.2	583.9	466.8	276.1	173.8	171.5
1988	146.2	149.7	173.6	619.5	847.4	763.5	727.1	645.8	372.6	205.8	177.5	170.0
1989	176.2	187.6	244.5	2,933	1,297	833.4	819.0	734.9	503.1	248.7	171.1	175.1
1990	175.5	173.0	165.0	677.6	655.1	684.6	762.3	695.2	535.0	229.8	178.6	168.2
1991	171.4	164.6	169.5	578.8	740.0	879.6	875.5	661.9	342.7	224.3	152.5	143.9
1992	140.6	139.2	110.5	639.4	773.5	650.0	554.2	499.7	266.4	150.2	105.9	106.0
1993	107.4	108.2	166.1	949.2	3,654	1,188	1,173	911.8	681.7	388.6	271.4	276.0
1994	274.1	251.6	236.2	766.9	811.3	804.3	1,178	913.3	412.4	222.0	166.3	194.4
1995	150.6	185.9	168.7	1,440	4,195	2,586	2,331	1,068	802.0	433.1	268.6	983.3
1996	924.9	4,208	6,538	5,256	4,751	4,045	1,277	1,223	768.9	479.4	251.7	542.0
1997	5,903	7,059	7,037	6,850	5,262	3,861	1,315	1,443	870.6	435.7	181.4	261.8
1998	275.7	1,295	1,919	1,836	5,314	5,116	1,734	1,332	845.8	424.6	255.9	242.8
1999	186.9	1,616	6,437	4,846	1,870	2,686	1,390	1,241	861.2	514.5	257.9	265.3
2000	268.5	279.9	1,294	2,498	1,103	1,123	970.3	1,070	739.8	416.2	273.8	271.8
2001	270.8	266.4	276.6	460.1	886.1	874.4	800.4	785.9	435.0	204.9	181.0	183.0
2002	184.3	191.9	188.4	752.8	1,254	1,240	1,125	886.5	700.3	409.2	249.4	235.7

2003	252.8	279.9	260.4	680.0	942.3	1,204	1,292	1,216	757.7	495.0	259.5	264.0
2004	300.8	603.4	330.7	799.4	897.0	1,022	1,201	1,015	638.6	442.4	290.3	277.3
2005	274.5	272.9	259.2	500.0	734.5	836.8	1,015	1,143	673.8	335.4	279.4	268.8
2006	442.3	3,793	3,372	5,413	6,482	2,776	1,275	1,176	646.3	372.0	282.9	260.5
2007	354.3	261.4	254.3	741.7	820.8	1,118	1,401	881.2	558.5			
Mean of monthly Discharge	524	1,060	1,640	2,120	2,220	1,760	1,120	947	607	342	278	288
** No Incomplete data have been used for statistical calculation												

Questions about sites/data?
Feedback on this web site
Automated retrievals

Top
Explanation of terms

Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey
Title: Surface Water data for USA: USGS Surface-Water Monthly Statistics
URL: http://waterdata.usgs.gov/nwis/monthly?

Page Contact Information: NWISWeb Support Team
Page Last Modified: 2008-03-10 12:12:48 EDT
2.12 1.45 va04

NOTES RTS 2/07/08

		RIGHT 1/	FTF 2/	
F	1986	FILLED	FTF FC	NOTES I USED TO SHOW ANDERSON & ARROW ROCK FILL
	87			
	88			
F	89	FILLED	FTF FC	
	90			
	91			
	92			
F	93	FILLED	FTF FC	
	94			
F	95	FILLED	NO FTF FC	
F	96	FILLED	NO FTF FC	
F	97	FILLED	NO FTF FC	
F	98	FILLED	NO FTF FC	
F	99	FILLED	FTF FC	
F	00	FILLED	NO FTF FC	
	01			
	02			
	03			
	04			
	05			
F	06	FILLED	NO FTF FC	
	07			
	08			

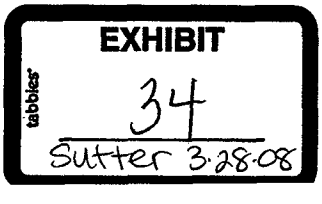
1/ ALL 3 RESERVOIR RIGHTS - PAPER FILL

2/ FAILURE TO FILL DUE TO FLOOD CONTROL

F = SYSTEM FLOOD CONTROL OPERATION

EXHIBIT
33
Sutter 3-28-08

```
C*****************************************************************************
C
C       PROGRAM BOISTO.FOR TO COMPUTE BEGINNING OF IRRIGATION SEASON
C       RESERVOIR STORAGE BY CANAL OR USE FOR ANDERSON RANCH, ARROWROCK,
C       AND LUCKY PEAK RESERVOIRS.        RJS -  JUNE 1997
C                                         MODIFIED CAK - OCT. 1998.
CC*****************************************************************************
      DIMENSION CTOT(10),STOR(80,5),ID(80),ID2(80),UNAME(80),STOT(10)
      DIMENSION USED(80),EXCS(80),RFWB(80),CRYO(80,5),OCTB(80)
      DIMENSION BALN(80),IK(80),KRYO(80,5),RTOT(80),SSTOT(5)
      DIMENSION FILL(5),SPACE(5),YIELD(5),EVAP(5),TOTR(80,5)
      DIMENSION CTOTC(5),CTOTR(5),SUBT(80),NSTO(80,5),CNSTO(5)
      DIMENSION T(5),RNAME(5),BANK(80),TNSTO(80),TCRYO(80)
      DIMENSION PAVAIL(5),TRANS(80),RFTR(80),RRTOT(80),DLOSS(150)
C     THE OLD DIMENSIONS ARE THE FOLLOWING.
C      DIMENSION CTOT(10),STOR(80,3),ID(80),ID2(80),UNAME(80),STOT(9)
C      DIMENSION USED(80),EXCS(80),RFWB(80),CRYO(80,3),OCTB(80)
C      DIMENSION BALN(80),IK(80),KRYO(80,3),RTOT(80)
C      DIMENSION FILL(4),SPACE(4),YIELD(4),EVAP(4),TOTR(80,3)
C      DIMENSION CTOTC(3),CTOTR(3),SUBT(80),NSTO(80,3),CNSTO(3)
C      DIMENSION T(4),RNAME(4),BANK(80)
C      DIMENSION PAVAIL(3),TRANS(80),RFTR(80)
C     WEIMIN LI 7/9/2002
      DIMENSION IPTAB(80),FILLATE(8),TFILL(8)
      CHARACTER*9 RUNDATE
      CHARACTER*18 UNAME,U,RNAME
C     THE OLD CHARACTER IS THE FOLLOWING.
C      CHARACTER*16 RNAME
C     WEIMIN LI 7/15/2002
      REAL*8 CTOT,STOR,STOT,CTOTC,CRYO,CTOTR,SUBT,CSUBT,TBANK,BANK
      REAL*8 FILL,SPACE,YIELD,GTOT,T,TOTR,RTOT,KRYO
      REAL*8 CNSTO,NSTO,FILLLPL,TTRANS,TRANS,UNCA
      CALL DATE_AND_TIME(RUNDATE)
C      CALL ASSIGN(1,'BOISTO.IND')
C      CALL ASSIGN(5,'BOISTO.CRY')
C      CALL ASSIGN(6,'BOISTO.RPT')
C      CALL ASSIGN(7,'BOISTO.SPA')
C      CALL ASSIGN(9,'BOISTO.USE')
C      CALL ASSIGN(10,'BOISTO.UNC')
      OPEN(UNIT=1,NAME='BOISTO.IND',TYPE='OLD')
      OPEN(UNIT=5,NAME='BOISTO.CRY',TYPE='OLD')
      OPEN(UNIT=6,NAME='BOISTO.RPT',TYPE='NEW')
      OPEN(UNIT=7,NAME='BOISTO.SPA',TYPE='OLD')
      OPEN(UNIT=9,NAME='BOISTO.USE',TYPE='OLD')
      OPEN(UNIT=10,NAME='BOISTO.UNC',TYPE='OLD')
      L=1
      I=1
      IN2=10
   30 READ(7,10,END=25) ID(I),IK(I),UNAME(I),(STOR(I,K),K=1,5)
   10 FORMAT(I8,A1,A18,5F9.0)
C     THE OLD READ STATEMENT AND FORMAT ARE THE FOLLOWING.
C    30 READ(7,10,END=25) ID(I),IK(I),UNAME(I),(STOR(I,K),K=1,3)
C    10 FORMAT(I8,A1,A18,4F10.0)
C     WEIMIN LI 7/18/2002
      IF(ID(I).EQ.13201991) IUN=I
      IF(ID(I).EQ.13202995) IPEN=I
      IF(ID(I).EQ.13203000) INYK=I
      IF(ID(I).EQ.13209480) IPHL=I
      IF(ID(I).EQ.13210005) ICAL=I
      IF(ID(I).EQ.99999100) IEG=I
      IF(ID(I).EQ.0) GO TO 25
      I=I+1
      GO TO 30
   25 CONTINUE
      IE=I-1
      DO 40 I=1,IE
      READ(5,12,END=5) ID2(I),U,(CRYO(I,J),J=1,5),TRANS(I),BANK(I)
   12 FORMAT(I8,1X,A18,F5.1,2F8.1,2F3.1,2F10.1)
C     THE OLD FORMAT IS THE FOLLOWING.
C    12 FORMAT(I8,1X,A18,5F7.0,2F6.0)
C     WEIMIN LI 10/22/2002
C     THE OLD STATEMENT IS THE FOLLOWING.
C      READ(5,12,END=5) ID2(I),U,(CRYO(I,J),J=1,3),TRANS(I),BANK(I)
C    12 FORMAT(I8,1X,A18,5F10.0)
C     WEIMIN LI 7/23/2002
      IF(ID2(I).EQ.ID(I)) GO TO 40
      TYPE 2, ID2(I),ID(I)
    2 FORMAT(' DIVERSION ',I8,' FROM BOISTO.CRY IS DIFFERENT THAN DIVERS
     1ION ',I8,' FROM BOISTO.SPA')
      PAUSE
```



```
      STOP
   40 CONTINUE
      READ(10,305,ERR=310) UNCA
  305 FORMAT(21X,F9.1)
      GO TO 5
  310 TYPE 306
  306 FORMAT(' ERR READING BOISTO.UNC ')
      PAUSE
      STOP
    5 TYPE *, ' '
      TYPE *, '  ENTER FOUR DIGIT YEAR FOR WHICH YOU WANT  '
      TYPE *, '  TO COMPUTE STORAGE ALLOCATION AND USE.        '
      TYPE *, '  FOR EXAMPLE: 1998                             '
      TYPE *, ' '
      ACCEPT 49,IYR
   49 FORMAT(I4)
      READ(1,55) (RNAME(K),SPACE(K),FILL(K),EVAP(K),K=1,5)
C     THE OLD STATEMENT IS THE FOLLOWING.
C      READ(1,55) (RNAME(K),SPACE(K),FILL(K),EVAP(K),K=1,4)
C     WEIMIN LI 7/9/2002
   55 FORMAT(9X,A18,3F10.0)
      TYPE *, SPACE(1)
      TYPE *, SPACE(2)
      TYPE *, SPACE(3)
      TYPE *, SPACE(4)
C
C***** COMPUTE AND PRINT TABLE OF EACH RESERVOIR'S SPACE, FILL,
C***** EVAPORATION AND YIELD.
C
      IT=1
      DO 90 K=1,5
C     THE OLD STATEMENT IS THE FOLLOWING.
C      DO 90 K=1,3
C     WEIMIN LI 7/9/2002
      YIELD(K)=FILL(K)-EVAP(K)
      PAVAIL(K)=0.0
      IF(FILL(K).GT.0.0) PAVAIL(K)=YIELD(K)/FILL(K)
   90 CONTINUE
      WRITE(6,100) RUNDATE,IT,IYR
  100 FORMAT(1H1/////////102X,A9/////////////////,40X,'TABLE'I3,'. ',I4,
     1  ' BOISE RIVER STORED WATER BY RESERVOIR'//55X,' (ACRE-FEET)'/)
      WRITE(6,101)
  101 FORMAT(32X,9HRESERVOIR,14X,5HSPACE, 8X,4HFILL, 3X,11HEVAPORATION,
     1  5X,5HYIELD/)
      DO 105 K=1,5
  105 T(K)=0.0
      DO 110 K=1,5
C     THE OLD STATEMENT IS THE FOLLOWING.
C      DO 110 K=1,3
C     WEIMIN LI 7/9/2002
      T(1)=T(1)+SPACE(K)
      T(2)=T(2)+FILL(K)
      T(3)=T(3)+EVAP(K)
      T(4)=T(4)+YIELD(K)
      WRITE(6,120) RNAME(K),SPACE(K),FILL(K),EVAP(K),YIELD(K)
  120 FORMAT(32X,A18,4F12.1)
  110 CONTINUE
      WRITE(6,130) (T(K),K=1,4)
C     THE OLD STATEMENT IS THE FOLLOWING.
C      WRITE(6,130) (T(K),K=1,3)
C     WEIMIN LI 7/9/2002
  130 FORMAT(/32X,5HTOTAL,13X,4F12.1)
C
C***** WRITE TABLE OF SPACE ALLOCATED TO EACH ENTITY OR USE IN
C***** ALL THREE BOISE RIVER RESERVOIRS BASED ON COMPLETELY
C***** FULL RESERVOIRS.
C
      IT=2
      DO 155 K=1,10
  155 CTOT(K)=0.0
      WRITE(6,160) RUNDATE,IT,IYR
  160 FORMAT(1H1/////120X,A9////36X,6HTABLE ,I2,'. ',I4,
     1  ' BOISE RIVER RESERVOIR SPACE BY USER. (ACRE-FEET)'//)
      WRITE(6,97)
   97 FORMAT(1H ,23X,'NUMBER',3X,'USER',16X,'ARROWROCK',3X,'ANDERSON',
     11X,'LUCKY PEAK',3X,'ANDERSON',1X,'LUCKY PEAK',6X,'TOTAL'/)
C     THE OLD FORMAT IS THE FOLLOWING.
C   97 FORMAT(1H ,23X,13HNUMBER   USER,14X,'  ARROWROCK   ANDERSON LUCKY
C     1PEAK      TOTAL'/)
C     WEIMIN LI 7/18/2002
```

```
      DO 3 K=1,5
C     THE OLD STATEMENT IS THE FOLLOWING.
C      DO 3 K=1,3
C     WEIMIN LI 7/11/2002
      CTOTR(K)=0.0
    3 CTOTC(K)=0.0
      DO 80 I=1,IE
      CRYO(I,1)=0.0
      RTOT(I)=0.0
      IPTAB(I)=0
      DO 60 K=1,5
C     THE OLD STATEMENT SI THE FOLLOWING.
C      DO 60 K=1,3
C     WEIMIN LI 7/18/2002
      CTOT(K)=CTOT(K)+STOR(I,K)
      RTOT(I)=RTOT(I)+STOR(I,K)
      NSTO(I,K)=0.0
   60 CONTINUE
      CTOT(6)=CTOT(6)+RTOT(I)
C     THE OLD STATEMENT SI THE FOLLOWING.
C      CTOT(4)=CTOT(4)+RTOT(I)
C     WEIMIN LI 7/18/2002
      IF(RTOT(I).GT.0.0) THEN
      WRITE(6,71) ID(I),UNAME(I),(STOR(I,K),K=1,5),RTOT(I)
   71 FORMAT(24X,I8,1X,A18,6F11.1)
C     THE OLD WRITE STATEMENT AND FORMAT ARE THE FOLLOWING.
C      WRITE(6,71) ID(I),UNAME(I),(STOR(I,K),K=1,3),RTOT(I)
C    71 FORMAT(32X,I8,1X,A18,4F11.1)
C     WEIMIN LI 7/18/2002
      IPTAB(I)=1
      ENDIF
   80 CONTINUE
      WRITE(6,21) (CTOT(K),K=1,6)
   21 FORMAT(/33X,5HTOTAL,13X,6F11.1)
C     THE OLD WRITE STATEMENT AND FORMAT ARE THE FOLLOWING.
C      WRITE(6,21) (CTOT(K),K=1,4)
C    21 FORMAT(/41X,5HTOTAL,13X,4F11.1)
C     WEIMIN LI 7/18/2002
C
C***** IF THE SPACE IN ANDERSON RANCH HAS ENTIRELY FILLED, ZERO
C***** OUT THE CARRYOVER FROM THE PREVIOUS YEAR. (DO NOT DO THIS
C***** FOR BOISE).  IF DID NOT FILL, CHECK FOR FLOOD CONTROL.
C
      DIFF=SPACE(2)-FILL(2)
      IF(DIFF.LE.0.01) GO TO 18
   31 TYPE *, ' '
      PRINT 32
   32 FORMAT(' WAS THE FAILURE TO FILL AT ANDERSON RANCH DUE TO'/
     !' A FLOOD CONTROL OPERATION? Y/N: '$)
      ACCEPT 26, FL
   26 FORMAT(A1)
      IF(FL.EQ.'N') GO TO 18
      IF(FL.NE.'Y') GO TO 31
      DO 19 I=1,IE
   19 CRYO(I,2)=0.0
   18 CONTINUE
C
C***** IF LUCKY PEAK SPACE DID NOT FILL, INQUIRE IF THIS WAS THE
C***** RESULT OF A FLOOD CONTROL OPERATION.  IF IT WAS, THEN
C***** COMPUTE LUCKY PEAK STORAGE ALLOCATIONS WITH THE FINAL 60000
C***** ACRE-FEET HAVING THE LAST FILL.  TO DO THIS, REMOVE THE
C***** 60000 FROM THE TOTAL ALLOCABLE STORAGE AND THE STREAMFLOW
C***** MAINTENANCE SPACE. IF ANY OF THE LAST 60000 HAS FILLED
C***** (FILLLPL) ADD THIS BACK IN AFTER THE OTHER STORAGE HAS BEEN
C***** ALLOCATED.
C
      DIFF=SPACE(3)-FILL(3)
      IF(DIFF.LE.0.01) GO TO 24
   28 TYPE *, ' '
      PRINT 27
   27 FORMAT(' WAS THE FAILURE TO FILL AT LUCKY PEAK DUE TO A'/
     !' FLOOD CONTROL OPERATION? Y/N: '$)
      ACCEPT 26, FL
      IF(FL.EQ.'N') GO TO 24
      IF(FL.NE.'Y') GO TO 28
      STOR(IUN,3)=STOR(IUN,3)-60000.
      CTOT(3)=CTOT(3)-60000
      FILLLPL=FILL(3)-CTOT(3)
      IF(FILLLPL.LT.0.0) FILLLPL=0.0
      FILL(3)=FILL(3)-FILLLPL
```

```
C
C***** IF THE SPACE IN LUCKY PEAK DID NOT FILL DUE TO
C***** FLOOD CONTROL AND IF NONE OF THE 60000 EXCLUSIVE
C***** FLOOD SPACE FILLED, ZERO OUT THE CARRYOVER FROM THE
C***** PREVIOUS YEAR. THE CARRYOVER COULD BE ZEROED OUT FOR
C***** OTHER CONDITIONS, BUT LEE SISCO WANTS TO SHOW LAST
C***** YEAR'S CARRYOVER IN THE TABLE EVEN IF THE IRRIGATION
C***** SPACE FILLS COMPLETELY.
C
      IF(FILLLPL.EQ.0.0) THEN
            DO 23 I=1,IE
   23       CRYO(I,3)=0.0
            ENDIF
   24 CONTINUE
C
C
C***** COMPUTE NEW FILL TO EACH RESERVOIR BY SUBTRACTING CARRYOVER
C***** FROM TOTAL FILL, THEN ALLOCATE NEW FILL TO INDIVIDUAL
C***** ENTITIES AND USES WITHIN EACH RESERVOIR PROPORTIONAL TO
C***** SPACE OWNED.
C
      DO 1 K=1,5
C     THE OLD STATEMENT IS THE FOLLOWING.
C      DO 1 K=1,3
C     WEIMIN LI 7/23/2002
      IF(FILL(K).GT.CTOT(K)) TYPE 997, RNAME(K),FILL(K),CTOT(K)
  997 FORMAT(1X,A18,' HAS FILL =',F10.1,' > TOTAL SPACE =',F10.1)
      DO 29 I=1,IE
   29 CTOTC(K)=CTOTC(K)+CRYO(I,K)
      CNSTO(K)=FILL(K)-CTOTC(K)
      WAT=CNSTO(K)
      J=0
    6 EXCESS=0.0
      J=J+1
      IF(J.GT.2500) TYPE 998, RNAME(K)
  998 FORMAT(' RUNAWAY LOOP ALLOCATING ',A18,' STORAGE')
      TYPE 999, J,WAT
  999 FORMAT(1X,I5,F10.1)
      DO 4 I=1,IE
C     THE FOLLOWING IF-THEN IS ADDED.
      IF(ABS(CTOT(K)).GT.0.001) THEN
      NSTO(I,K)=((STOR(I,K)/CTOT(K))*WAT)+NSTO(I,K)
      ENDIF
C     THE ABOVE IF-THEN IS ADDED.
C     WEIMIN LI 7/23/2002
      TOTR(I,K)=NSTO(I,K)+CRYO(I,K)
      IF(TOTR(I,K).LE.STOR(I,K)) GO TO 4
      EXCESS=EXCESS+TOTR(I,K)-STOR(I,K)
      TOTR(I,K)=STOR(I,K)
      NSTO(I,K)=STOR(I,K)-CRYO(I,K)
    4 CONTINUE
      WAT=EXCESS
      IF(EXCESS.GT.0.01) GO TO 6
    1 CONTINUE
C
C***** RECOMPUTE LUCKY PEAK STREAMFLOW MAINTENANCE STORAGE TO INCLUDE
C***** NEW FILL IN LAST 60000 ACRE-FEET.
C
      NSTO(IUN,3)=NSTO(IUN,3)+FILLLPL
      TOTR(IUN,3)=TOTR(IUN,3)+FILLLPL
      CNSTO(3)=CNSTO(3)+FILLLPL
C
C***** PRINT TABLE OF BEGINNING OF YEAR STORAGE ACCOUNTS.
C
      IT=3
  145 WRITE(6,150) RUNDATE,IT,IYR
  150 FORMAT(1H1/////120X,A9////20X,6HTABLE ,I2,'. ',I4,' BOISE
     1RIVER RESERVOIR STORAGE ACCOUNTS.  (ACRE-FEET)'//)
      WRITE(6,95)
   95 FORMAT(1H ,37X,'ARROWROCK *-----ANDERSON RANCH-----* *-------LUCKY
     1 PEAK-------*'/11X,13HNUMBER   USER,14X,'  STORAGE CARRYOVER NEW FI
     2LL STORAGE  CARRYOVER NEW FILL STORAGE'/)
C
      CTCRYO=0.0
      CTNSTO=0.0
      CSUBT=0.0
      DO 1082 M=1,5
      CTOTR(M)=0.0
1082  CONTINUE
C     THE ABOVE STATEMENTS ARE ADDED.
```

```
C     WEIMIN LI 7/19/2002
      DO 82 I=1,IE
      TCRYO(I)=0.0
      TNSTO(I)=0.0
      SUBT(I)=0.0
      DO 81 M=1,5
C     THE OLD STATEMENT IS THE FOLLOWING.
C      DO 81 M=1,3
C     WEIMIN LI 7/11/2002
      TCRYO(I)=TCRYO(I)+CRYO(I,M)
      TNSTO(I)=TNSTO(I)+NSTO(I,M)
      SUBT(I)=SUBT(I)+TOTR(I,M)
C
      CTOTR(M)=CTOTR(M)+TOTR(I,M)
C     THE ABOVE STATEMENT IS PUT BACK. AND
C     THE LOCATION WOULD BE DIFFERENT.
C     WEIMIN LI 7/19/2002
81    CONTINUE
C
      CTCRYO=CTCRYO+TCRYO(I)
      CTNSTO=CTNSTO+TNSTO(I)
      CSUBT=CSUBT+SUBT(I)
C     THE ABOVE STATEMENTS ARE ADDED.
C     WEIMIN LI 7/19/2002
      IF(IPTAB(I).GT.0.OR.RTOT(I).GT.0.0) THEN
      WRITE(6,70)ID(I),UNAME(I),TOTR(I,1),CRYO(I,2),NSTO(I,2),
     1           TOTR(I,2),CRYO(I,3),NSTO(I,3),TOTR(I,3)
70    FORMAT(11X,I8,1X,A18,7F9.1)
      ENDIF
82    CONTINUE
C     THE OLD STATEMENTS ARE THE FOLLOWING.
C      IF(IPTAB(I).GT.0.OR.RTOT(I).GT.0.0) WRITE(6,70) ID(I),
C     1UNAME(I),TOTR(I,1),CRYO(I,2),NSTO(I,2),TOTR(I,2),CRYO(I,3),
C     2NSTO(I,3),TOTR(I,3),SUBT(I)
C   70 FORMAT(11X,I8,1X,A18,8F9.1)
C     WEIMIN LI 7/9/2002
      WRITE(6,22)CTOTR(1),CTOTC(2),CNSTO(2),CTOTR(2),
     1           CTOTC(3),CNSTO(3),CTOTR(3)
22    FORMAT(/20X,5HTOTAL,13X,7F9.1)
C     THE OLD STATEMENTS ARE THE FOLLOWING.
C      WRITE(6,22) CTOTR(1),CTOTC(2),CNSTO(2),CTOTR(2),CTOTC(3),
C     1 CNSTO(3),CTOTR(3),CSUBT
C   22 FORMAT(/20X,5HTOTAL,13X,8F9.1)
C     WEIMIN LI 7/9/2002
   200 CONTINUE
C     PRINT THE PAGE 2 OF THE TABLE 3
      WRITE(6,151) RUNDATE,IT,IYR
  151 FORMAT(1H1/////120X,A9////26X,6HTABLE ,I2,' (CONTINUED). ',
     1 I4,' BOISE RIVER RESERVOIR STORAGE ACCOUNTS.  (ACRE-FEET)'//)
      WRITE(6,96)
   96 FORMAT(1H ,37X,'*ANDERSON RANCH LAST FILL *
     1 *-- LUCKY PEAK LAST FILL -* *---------- TOTAL ----------*'/
     2       12X,'NUMBER',9X,'USER',7X,'CARRYOVER',1X,'NEW FILL',2X,
     3       'STORAGE',1X,'CARRYOVER',1X,'NEW FILL',2X,
     4       'STORAGE',1X,'CARRYOVER',1X,'NEW FILL',2X,'STORAGE'/)
      DO 84 I=1,IE
      IF(IPTAB(I).GT.0.OR.SUBT(I).GT.0.0) THEN
      WRITE(6,72) ID(I),UNAME(I),CRYO(I,4),NSTO(I,4),TOTR(I,4),
     1             CRYO(I,5),NSTO(I,5),TOTR(I,5),
     2             TCRYO(I),TNSTO(I),SUBT(I)
72    FORMAT(11X,I8,1X,A18,3F9.1,1X,3F9.1,1X,3F9.1)
      ENDIF
84    CONTINUE
      WRITE(6,1023) CTOTC(4),CNSTO(4),CTOTR(4),CTOTC(5),CNSTO(5),
     1               CTOTR(5),CTCRYO,CTNSTO,CSUBT
1023  FORMAT(/16X,5HTOTAL,17X,3F9.1,1X,3F9.1,1X,3F9.1)
C     PRINT THE PAGE 2 OF THE TABLE 3
C     WEIMIN LI 7/9/2002
C
C***** COMPUTE YIELD OF SPACE VALUES AFTER EVAPORATION.
C
      DO 165 I=1,IE
      DO 175 K=1,5
C     THE OLD STATEMENT IS THE FOLLOWING.
C      DO 175 K=1,3
C     WEIMIN LI 7/11/2002
  175 TOTR(I,K)=TOTR(I,K)*PAVAIL(K)
C ADDED 12/3/02 PDP
      TOTR(I,2)=TOTR(I,2)+TOTR(I,4)
      TOTR(I,3)=TOTR(I,3)+TOTR(I,5)
```

```
  165 CONTINUE
C
C***** WRITE TABLE OF STORAGE ALLOCATED TO EACH ENTITY OR USER
C***** IN ALL THREE BOISE RIVER RESERVOIRS AFTER EVAPORATION
C***** WITH WATER BANK AND OTHER TRANSACTIONS.
C
      IT=4
      WRITE(6,161) RUNDATE,IT,IYR
  161 FORMAT(1H1/////120X,A9/33X,6HTABLE ,I2,'. ',I4,
     1  ' BOISE RIVER RESERVOIR NET STORAGE BY USER. (ACRE-FEET)'//)
      WRITE(6,168)
  168 FORMAT(1H ,10X,13HNUMBER   USER,16X,'ARROWROCK   ANDERSON  LU
     1CKY PEAK  SUBTOTAL  TRANSFERS   RNT POOL      TOTAL AFTER LOSS'/)
C     THE OLD FORMAT IS THE FOLLOWING.
C  168 FORMAT(1H ,10X,13HNUMBER   USER,16X,'ARROWROCK   ANDERSON  LU
C     1CKY PEAK  SUBTOTAL  TRANSFERS   RNT POOL      TOTAL'/)
C     WEIMIN LI 7/9/2002
      TBANK=0.0
      TTRANS=0.0
      GTOT=0.0
      CSUBT=0.0
      CRRTOT=0.0
C     THE ABOVE STATEMENT IS ADDED.
C     WEIMIN LI 7/16/2002
C      DO 65 K=1,5
C     THE OLD STATEMENT IS THE FOLLOWING.
      DO 65 K=1,3
C     WEIMIN LI 7/11/2002
   65 CTOTR(K)=0.0
      DO 85 I=1,IE
      SUBT(I)=0.0
C      DO 83 M=1,5
C     THE OLD STATEMENT IS THE FOLLOWING.
      DO 83 M=1,3
C     WEIMIN LI 7/11/2002
      CTOTR(M)=CTOTR(M)+TOTR(I,M)
   83 SUBT(I)=SUBT(I)+TOTR(I,M)
      RTOT(I)=SUBT(I)+TRANS(I)+BANK(I)
      RRTOT(I)=RTOT(I)*0.973
C          THE ABOVE STATEMENT IN ADDED.  WEIMIN LI 7/9/2002
C ADDED 10/21/2002 TO EXCLUDE USBR, F&G, ANDERSON DAM POWRER AND ANDERSON
C UNCONTRACTED AND ENDANGERED SPECIES FROM OPERATIONAL LOSS. PPACE
      IF(ID(I).EQ.13201990.OR.ID(I).EQ.13201991)RRTOT(I)=RTOT(I)
      IF(ID(I).EQ.99999050.OR.ID(I).EQ.99999080)RRTOT(I)=RTOT(I)
      IF(ID(I).EQ.99999090.OR.ID(I).EQ.99999950)RRTOT(I)=RTOT(I)
      IF(ID(I).EQ.99999200.OR.ID(I).EQ.99999300)RRTOT(I)=RTOT(I)
      DLOSS(I)=0.0
      DLOSS(I)=RTOT(I)-RRTOT(I)
C
      CSUBT=CSUBT+SUBT(I)
      TTRANS=TTRANS+TRANS(I)
      TBANK=TBANK+BANK(I)
      GTOT=GTOT+RTOT(I)
      CRRTOT=CRRTOT+RRTOT(I)
C     THE ABOVE STATEMENT IS ADDED.
C     WEIMIN LI 7/16/2002
      IF (IPTAB(I).GT.0.OR.RTOT(I).GT.0.0) WRITE (6,75) ID(I),
     1UNAME(I),TOTR(I,1),TOTR(I,2),TOTR(I,3),
     2SUBT(I),TRANS(I),BANK(I),RTOT(I),RRTOT(I)
C     THE OLD STATEMENT IS THE FOLLOWING.
C      IF (IPTAB(I).GT.0.OR.RTOT(I).GT.0.0) WRITE (6,75) ID(I),
C     1UNAME(I),TOTR(I,1),TOTR(I,2),TOTR(I,3),
C     2SUBT(I),TRANS(I),BANK(I),RTOT(I),RRTOT(I)
C     WEIMIN LI 7/25/2002
   75 FORMAT (11X,I8,1X,A18,8F11.1)
C     THE OLD STATEMENTS ARE THE FOLLOWING.
C      IF (IPTAB(I).GT.0.OR.RTOT(I).GT.0.0) WRITE (6,75) ID(I),
C     1UNAME(I),TOTR(I,1),TOTR(I,2),TOTR(I,3),SUBT(I),TRANS(I),
C     2BANK(I),RTOT(I)
C   75 FORMAT (11X,I8,1X,A18,7F11.1)
C     WEIMIN LI 7/9/2002
   85 CONTINUE
      WRITE (6,35) CTOTR(1),CTOTR(2),
     1             CTOTR(3),CSUBT,TTRANS,
     1TBANK,GTOT,CRRTOT
   35 FORMAT (/20X,5HTOTAL,13X,8F11.1)
C     THE OLD STATEMENTS ARE THE FOLLOWING.
C      WRITE (6,35) CTOTR(1),CTOTR(2),CTOTR(3),CSUBT,TTRANS,
C     1TBANK,GTOT
C   35 FORMAT (/20X,5HTOTAL,13X,7F11.1)
```

```
C     WEIMIN LI 7/9/2002
C
C***** COMPUTE END OF SEASON STORAGE BALANCES
C
      IT=3
      JDI=0
      EGU=0.0
      DO 315 I=1,IE
      IF(JDI.EQ.1) THEN
      JDI=0
      GO TO 262
      ENDIF
      READ(9,260,END=16,ERR=400) JD,T1
  260 FORMAT(I8,8X,F10.0)
  262 IF(JD.EQ.ID(I)) GO TO 320
   16 USED(I)=0.0
      JDI=1
      GO TO 315
  320 USED(I)=T1
   17 IF(IK(I).EQ.'E') EGU=EGU+USED(I)
  315 CONTINUE
      DO 325 I=1,IE
      EXCS(I)=0.0
      RFWB(I)=0.0
      OCTB(I)=0.0
      DO 316 K=1,5
C     THE OLD STATEMENT IS THE FOLLOWING.
C      DO 316 K=1,3
C     WEIMIN LI 7/11/2002
  316 KRYO(I,K)=TOTR(I,K)
      IF(I.EQ.IEG) USED(I)=EGU
      IF(I.EQ.INYK) USED(I)=USED(I)+USED(IPEN)
      IF(I.EQ.IPHL) USED(I)=USED(I)+USED(ICAL)
      OCTB(I)=RRTOT(I)-USED(I)
C THE FOLLOWING LINE ADDED 12/7/2005
      RFTR(I)=TRANS(I)
C      BALN(I)=BANK(I)-USED(I)
C THE FOLLOWING LINES ADDED 10/21/02 TO EXCLUDE USBR AND F&G FROM
C OPERATIONAL LOSS. PPACE
      BALN(I)=BANK(I)-USED(I)-DLOSS(I)
      RFWB(I)=BALN(I)/(0.973)
      IF(ID(I).EQ.13201990.OR.ID(I).EQ.13201991)RFWB(I)=BALN(I)
      IF(BALN(I).GT.0.0001)GO TO 325
C      IF(BALN(I).GT.0.0) GO TO 325
      RFWB(I)=0.0
      BALN(I)=BALN(I)+TRANS(I)
      RFTR(I)=BALN(I)
      IF(BALN(I).GT.0.0) GO TO 325
      RFTR(I)=0.0
      DO 295 K=1,3
      BALN(I)=BALN(I)+TOTR(I,K)
      KRYO(I,K)=BALN(I)
      IF(BALN(I).GT.0.0) GO TO 325
      KRYO(I,K)=0.0
  295 CONTINUE
C      EXCS(I)=BALN(I)*(-1.0)
C ADD 10/21/2002 FOR OPERATIONAL LOSS. PPACE
      EXCS(I)=BALN(I)*(-1.0)/(0.973)
  325 CONTINUE
C
C***** PRINT TABLE
C
      IT=5
      WRITE(6,7) RUNDATE,IT,IYR
    7 FORMAT(1H1////120X,A9////27X,6HTABLE ,I2,'. ',I4,' BOISE
     1RIVER RESERVOIR STORAGE ACCOUNTS - OCTOBER 31.  (ACRE-FEET)'//)
      WRITE(6,9)
    9 FORMAT(1H ,35X,'BEGINNING  STORAGE  BALANCE    UNUSED    UNUSED  E
     1XCESS ARROWROCK  ANDERSON LUCKY PEAK'/    7X,13HNUMBER   USER,16X,
     2'  STORAGE     USED   OCT 31 TRANSFERS      BANK    USED    UNUSED
     3 CARRYOVER  CARRYOVER'/)
      DO 11 M=1,9
   11 STOT(M)=0.0
      DO 8 I=1,IE
      IF(IK(I).EQ.'S'.OR.IK(I).EQ.'E') GO TO 8
      IF(I.EQ.IPEN.OR.I.EQ.ICAL) GO TO 8
      STOT(1)=STOT(1)+RRTOT(I)
      STOT(2)=STOT(2)+USED(I)
      STOT(3)=STOT(3)+OCTB(I)
      STOT(4)=STOT(4)+RFTR(I)
```

```
      STOT(5)=STOT(5)+RFWB(I)
      STOT(6)=STOT(6)+EXCS(I)
      STOT(7)=STOT(7)+KRYO(I,1)
      STOT(8)=STOT(8)+KRYO(I,2)
      STOT(9)=STOT(9)+KRYO(I,3)
      IF(RTOT(I).GT.0.0.OR.IPTAB(I).GT.0.OR.USED(I).GT.0.0)
     1WRITE(6,13) ID(I),UNAME(I),RRTOT(I),USED(I),OCTB(I),RFTR(I),
     2RFWB(I),EXCS(I),(KRYO(I,M),M=1,3)
   13 FORMAT(7X,I8,1X,A18,F11.1,2F9.1,2F10.1,F8.1,2F10.1,F11.1)
    8 CONTINUE
      WRITE(6,14) (STOT(M),M=1,9)
   14 FORMAT(/16X,5HTOTAL,13X,F11.1,2F9.1,2F10.1,F8.1,2F10.1,F11.1)
C
C*******SUMMARIZE CARRYOVER FOR SYSTEM
C
      GRTOT=0.0
      DO 640 I=7,9
  640 GRTOT=GRTOT+STOT(I)
      UNCA=0.0
C     TYPE 20
C  20 FORMAT(' DO YOU WISH TO ENTER UNACCOUNTED FOR CARRYOVER? Y/N ' $)
C      ACCEPT 26, ANSWER
C      IF(ANSWER.NE.'Y') GO TO 44
C      TYPE *,' '
C   43 TYPE 41, UNACCT
C   41 FORMAT(1X,'UNACCOUNTED CARRYOVER = ',F10.1,' ENTER NEW VALUE?
C     1Y/N '$)
C      ACCEPT 26, ANSWER
C      IF(ANSWER.NE.'Y') GO TO 44
C      TYPE 45
C   45 FORMAT(1X,'ENTER UNACCOUNTED FOR CARRYOVER = '$)
C      ACCEPT 42, UNACCT
C   42 FORMAT(F10.0)
C      GO TO 43
   44 SGRTOT=GRTOT+UNCA
      WRITE(6,642) RUNDATE
  642 FORMAT(1H1//////////////120X,A9)
      DO 56 K=1,3
   56 FILLATE(K)=0.0
      TYPE 46
   46 FORMAT('  DO YOU WISH TO ENTER LATE SEASON RESERVOIR FILL? Y/N '$)
      ACCEPT 26,ANSWER
      TYPE *, ' '
      IF(ANSWER.NE.'Y') GO TO 54
   58 DO 69 K=1,5
      PRINT 51, RNAME(K),FILLATE(K)
   51 FORMAT(1X,'LATE SEASON FILL FOR       ',A18,' = ',F10.1,' ENTER
     1NEW FILL? Y/N/Q '$)
      ACCEPT 26,ANSWER
      IF(ANSWER.EQ.'Q') GO TO 88
      IF(ANSWER.NE.'Y') GO TO 69
      PRINT 59,RNAME(K)
   59 FORMAT(1X,'ENTER LATE SEASON FILL FOR  ',A18,' = '$)
      ACCEPT 61,FILLATE(K)
   61 FORMAT(F10.0)
   69 CONTINUE
   88 TYPE 76
   76 FORMAT(' DO YOU WISH TO REENTER LATE SEASON RESERVOIR
     1FILL? Y/N '$)
      ACCEPT 26, ANSWER
      IF(ANSWER.EQ.'Y') GO TO 58
   54 WRITE(6,142) IYR
  142 FORMAT(/////////27X, 'TABLE 6.  ',I4,' WATER DISTRICT 63
     1RESERVOIR TOTAL STORAGE - OCTOBER 31 (ACRE-FEET)'
     2///43X,'RESERVOIR',16X,'CARRYOVER',3X,'LATE FILL',7X,'TOTAL'/)
C
      DO 1020 M=1,5
      SSTOT(M)=0.0
1020  CONTINUE
      SSTOT(1)=STOT(7)
      SSTOT(2)=STOT(8)
      SSTOT(3)=STOT(9)
      SGRTOT=0.0
      DO 1030 M=1,5
      SGRTOT=SGRTOT+SSTOT(M)
1030  CONTINUE
C     THE ABOVE STATEMENTS ARE ADDED.
C     WEIMIN LI 7/19/2002
      TLATE=0.0
      GTFILL=0.0
```

```
      STOT(10)=UNCA
      DO 146 K=1,5
C     THE OLD STATEMENT IS THE FOLLOWING.
C      DO 146 K=1,4
C     WEIMIN LI 7/16/2002
      IF(K.EQ.6) GO TO 146
      TFILL(K)=SSTOT(K)+FILLATE(K)
      TLATE=TLATE+FILLATE(K)
      GTFILL=GTFILL+TFILL(K)
      WRITE(6,144) RNAME(K),SSTOT(K),FILLATE(K),TFILL(K)
C     THE OLD STATEMENT IS THE FOLLOWING.
C      WRITE(6,144) RNAME(K),STOT(K),FILLATE(K),TFILL(K)
C     WEIMIN LI 7/19/2002
  144 FORMAT(43X,A18,4X,3F12.1)
  146 CONTINUE
      WRITE(6,73) SGRTOT,TLATE,GTFILL
   73 FORMAT(/43X,'TOTAL',17X,3F12.1)
   38 PRINT 91
   91 FORMAT('  DO YOU WANT TO CREATE A FILE OF THE CARRYOVER'/' BY
     1CANAL AND RESERVOIR? Y/N:  '$)
      ACCEPT 26, FILE
      IF(FILE.NE.'Y') GO TO 15
      OPEN (UNIT=10,NAME='CARRYOUT',TYPE='NEW',CARRIAGECONTROL='LIST')
      DO 37 I=1,IE
   37 WRITE(10,34) ID(I),UNAME(I),(KRYO(I,K),K=1,3)
   34 FORMAT(I8,1X,A18,6F10.1)
      GO TO 15
  400 TYPE 1401
 1401 FORMAT(' ERROR ENCOUNTERED READING STORAGE USED DATA')
   15 PAUSE
      STOP
      END
```

2. When the probability of controlling the expected flood to 6,500 cfs is less than 80 percent, regulated flows at the Glenwood gage must be increased to the 80-percent control probability level (20-percent risk).

The regulation objective necessary to maintain an 80-percent control probability from April through July is evaluated by routing two synthetic 20-percent exceedence flood hydrographs through the Boise River reservoir system to determine the minimum constant flow required at the Glenwood gage to control the expected floods. These two synthetic hydrographs (one with a 50-percent timing distribution and a 20-percent exceedence volume and a second hydrograph with a 50-percent volume and a 20-percent early timing exceedence) can be developed by any of the following methods:

1. Using the joint (Bureau-Corps) operational runoff volume forecast and its standard error of estimate, the two synthetic hydrographs are calculated with the inflow projection equations and standard errors listed in Exhibit B.

2. Using the joint (Bureau-Corps) operational runoff volume forecast and the unregulated summary hydrograph, the forecasted volume is distributed to represent each of the two synthetic flood hydrographs.

3. Using the SSARR computer model with the 50-percent and 20-percent exceedence runoff volume forecasts, 20-percent and 50-percent exceedence temperature sequences are input into the model to generate the early and normal timing distributions for the synthetic hydrographs.

The procedures outlined in the preceding paragraphs should be repeated each time that a new operational runoff volume forecast is made (normally near the first of each month and mid-month during the 1 April through 1 June period). Plate 7-4 provides 95-percent refill assurance information which can be used to evaluate how proposed flood control regulation will impact refill during this period. Plate 7-5 provides 1-percent flood control space information which can be used to evaluate risks being taken with proposed flood control regulation.

The final 60,000 acre-feet of reservoir system space to be refilled each year (within the Anderson Ranch, Arrowrock, Lucky Peak projects, excluding surcharge) will be used jointly for flood control protection for late

season, large rainstorms; underestimation of remaining runoff; river regulation during emergency conditions (such as canal breaks, construction within the Boise River channel, etc.); and storage of water for stream maintenance flows and municipal and industrial uses. The Bureau of Reclamation has the temporary State permit for Lucky Peak Lake storage and will be finalizing the permit by requesting that the Lucky Peak Lake noncontracted space be assigned as follows:

1. 13,950 acre-feet of water volume between pool elevations 3055 to 3060 for exclusive flood control.

2. 102,300 acre-feet for stream maintenance flows and municipal and industrial uses.

Even though the 60,000 acre-feet of space has last priority in the Boise reservoir system for the purpose of improving the flood control operation, the regulating agencies should try to refill the space because the water stored in the space is critical to maintaining minimum Boise River stream maintenance flows.

When Anderson Ranch, Arrowrock, and Lucky Peak projects have a total of 60,000 acre-feet of space or less (excluding surcharge) during the annual snowmelt flood control season, reservoir regulation will be guided by current basin conditions such as snowpack water contents, expected precipitation and temperatures, current irrigation diversions, and any other data which are available and indicate current flood potential. The regulating agencies will jointly determine current flood control requirements for existing basin conditions. If it is deemed safe to refill a portion of the final 60,000 acre-feet of space, the regulating agencies must agree on the proposed regulation schedule before additional planned filling begins. This filling will be limited by the "Final Fill Flood Control Requirements" shown on Plate 7-3A when unregulated inflows are greater than 10,000 cfs.

d. Constraints and Considerations. As part of the plans presented for each of the three flood control periods, there are some general constraints and considerations which affect final flood control regulation. The following information outlines these items.

(1) Regulation Objectives. The purpose of regulating the Boise River for flood control is to prevent loss of life and limit property damage due to flooding of the Boise River. To accomplish these goals,