

BEFORE THE DEPARTMENT OF WATER RESOURCES
OF THE STATE OF IDAHO

IN THE MATTER OF LICENSE) DOCKET NO. P-DR-2017-002
NO. 37-07842 IN THE NAME OF)
THE IDAHO WATER RESOURCE BOARD)
)

BEFORE

HEARING OFFICER: GARY SPACKMAN

Date: November 2, 2018

Location: Lincoln County Community Center
201 S. Beverly Street
Shoshone, Idaho

TRANSCRIBED BY:

KAMRA TOALSON, CSR No. 756

Notary Public

Page 2		Page 4	
1	APPEARANCES	1	(Beginning of Audio MZ000008.)
2		2	THE HEARING OFFICER: Okay. Today is November
3	For Petitioners:	3	2nd. This is the second day of the hearing for a
4	BROWN & JAMES	4	challenge to the issuance of the license for Water Right
5	BY MR. JOSEPH F. JAMES	5	No. 37-7842. And we finished yesterday with testimony
6	125 Fifth Avenue West	6	from Michele Edl. And so I think the order of
7	Gooding, ID 83330	7	presentation now, Ann, it's your turn to call witnesses,
8	joe@brownjameslaw.com	8	and you may call your first witness.
9		9	MS. VONDE: Thank you. I'd like to call Lynn
10	For Idaho Water Resource Board:	10	Harmon.
11	DEPUTY ATTORNEY GENERAL	11	THE HEARING OFFICER: Mr. Harmon, come
12	BY MS. ANN Y. VONDE	12	forward, please.
13	P.O. Box 83720	13	LYNN HARMON,
14	Boise, ID 83720-0010	14	having been called as a witness by the Respondent and
15	ann.vonde@ag.idaho.gov	15	duly sworn to tell the truth relating to said cause,
16		16	testified as follows:
17	For Idaho Department of Water Resources:	17	DIRECT EXAMINATION
18	DEPUTY ATTORNEY GENERAL	18	BY MS. VONDE:
19	BY MS. EMMI BLADES	19	Q. Good morning, Mr. Harmon. Could you please
20	P.O. Box 83720	20	state your name and spell it for the record.
21	Boise, ID 83720-0010	21	A. Lynn Harmon. L-y-n-n, H-a-r-m-o-n.
22		22	Q. Thank you. What is your current occupation?
23		23	A. I'm retired.
24		24	Q. And what was your previous occupation before
25		25	you retired?
Page 3		Page 5	
1	INDEX	1	A. I was manager of the American Falls Reservoir
2	TESTIMONY OF LYNN HARMON	2	District 2 at Big Wood Canal Company for 20 years.
3	Direct Examination by Ms. Vonde	3	Q. And what was your role there?
4	Cross-Examination by Mr. James	4	A. I was general manager. I overseen (sic) all
5	Redirect Examination by Ms. Vonde	5	the operations.
6	Recross-Examination by Mr. James	6	Q. And what duties does that entail?
7	Examination by The Hearing Officer	7	A. Oh, the delivery and handling of irrigation
8	TESTIMONY OF ERICK POWELL	8	water, and maintenance of the town system.
9	Direct Examination by Ms. Vonde	9	Q. And how would you describe the extent of your
10	Cross-Examination by Mr. James	10	personal knowledge about the Big Wood and AFRD Canal
11	Redirect Examination by Ms. Vonde	11	systems?
12	Recross-Examination by Mr. James	12	A. In 20 years, I know pretty well.
13	Examination by The Hearing Officer	13	Q. So you've driven the ditches?
14		14	A. Yeah. There's not -- I don't think there's
15	EXHIBITS	15	too many miles of that system I have not traveled up and
16	NO.	16	down a few times.
17	PETITIONER	17	Q. And have you seen all of the gauges and all of
18	205	18	the measurement devices, and you're familiar with how
19	206	19	everything works; is that correct?
20		20	A. Yes.
21		21	Q. Okay. I'd like you to take a look at Exhibit
22		22	100, please. It should be in that big fat binder in
23		23	front of you. Do you recognize the area that that
24		24	depicts?
25		25	A. Yes. This is on the Little Wood River at

Page 6

1 Richfield just next to the head of the Dietrich Main.
2 Q. Have you personally visited the sites that are
3 on that map?
4 A. Oh, yes.
5 THE HEARING OFFICER: Is he looking at a map?
6 BY MS. VONDE:
7 Q. Oh, are you on, sorry, Exhibit 100? It's
8 Figure 3, the Richfield Canal conveyance. Flip the
9 other direction. That one, yes. Okay. Let's go
10 through those questions again.
11 Do you recognize what this map depicts, the
12 area this map depicts?
13 A. Yes.
14 Q. And what is it?
15 A. It is a map of the portion of the canal
16 system --
17 Q. Which portion?
18 A. -- which includes most of the Richfield area.
19 Q. Okay. Have you personally visited the sites
20 depicted on the map or some of the sites?
21 A. Yes, I have.
22 Q. Based on your personal knowledge, does this
23 map accurately depict the Richfield Canal system?
24 A. Yes.
25 Q. Okay. I'd like to have you take a look at the

Page 7

1 demonstrative exhibit, the big poster that's there, and
2 take a look at that and compare it with Exhibit No. 100.
3 Can you show us on the big one the area that
4 is depicted in Exhibit 100 on the big map up there?
5 A. Yeah. The area in question is beginning of
6 the head of the Richfield diversion. It takes in the
7 area of the east-west Jim Byrne Slough and shows the
8 Little Wood River from the end of the Jim Byrne Slough,
9 Dietrich Main, and area.
10 Q. Okay. Great. Thank you. And as we go
11 through this, feel free to refer to that map if you
12 think it will be easier for people to see if you're
13 pointing things out.
14 A. Okay.
15 Q. Okay. So going back to Exhibit 100, where is
16 Magic Reservoir on this map?
17 A. Well, it actually is not shown on this
18 particular map. It would be onto the north of what is
19 depicted as Gauge Station No. 4 there.
20 Q. Okay. And what river flows into Magic
21 Reservoir?
22 A. Big Wood River.
23 Q. And is Magic Reservoir an onstream reservoir
24 on the Big Wood?
25 A. Yes.

Page 8

1 Q. So the Big Wood flows out of that reservoir;
2 is that correct?
3 A. That's correct.
4 Q. Okay. At the top of Exhibit 100, you've
5 already stated there's a dot marked No. 4. Can you
6 describe what that dot represents?
7 A. It represents the stream-gauge measuring
8 station on the diversion of the Richfield Canal off of
9 the Wood River.
10 Q. So what is the source of water that is
11 diverted?
12 A. That is the Magic Reservoir source. Big Wood.
13 Q. The Big Wood. And so Gauge No. 4 measures all
14 of the water that flows into the Richfield Canal; is
15 that correct?
16 A. That's correct.
17 Q. Using the larger demonstrative exhibit maybe
18 would be easier. Can you describe for us where the Big
19 Wood River flows after Gauge No. 4, downstream from
20 Gauge No. 4?
21 A. Certainly. From Gauge Station 4, it comes on
22 down the natural river channel. It comes through and
23 around Kinsey Butte on down to just north of Shoshone
24 here and then westward toward Gooding.
25 Q. Thank you. Looking back at Exhibit 100, where

Page 9

1 is the next point of measurement on the Richfield Canal
2 after Gauge No. 4?
3 A. It actually would be what is the -- what we
4 refer to as "The Forks." It's where the Richfield Canal
5 basically ends. It terminates there and splits into the
6 Jim Byrne Slough, the East Main, and West Main Canals.
7 Q. Okay. And I might have you go back up to the
8 demonstrative exhibit again, because on Exhibit No. 100,
9 it might be a little hard to see.
10 But can you describe for us that fork that you
11 just described in terms of how that split actually
12 works? Does the head of the Jim Byrne Slough come off
13 first and then the other two split off? How does that
14 work exactly? If you could describe that, please.
15 A. Yes, that's correct. It actually comes down,
16 terminates here. Jim Byrne Slough goes to the north
17 where it says "HJB." Then you have a short section,
18 probably, maybe 500 yards, and you'll go down, and the
19 West Main comes off, and the East Main proceeds onto the
20 east.
21 Q. Thank you. Are there any diversions off the
22 Richfield Canal between Gauge No. 4 and the HJB
23 measurement gauge?
24 A. There's probably at least four headgates that
25 come off for farm delivery and one old lateral that's no

Page 10

1 longer really used.

2 Q. Okay. And we've already talked about this.
3 Below the HJB there are two more green dots. They
4 represent the East and West Mains; is that correct?

5 A. That's correct.

6 Q. So could you please describe what happens to
7 the water flowing in the East and West Mains?

8 A. The East Main goes out and around, of course,
9 the east side of what they call Johnson Butte, and there
10 is seven or eight laterals that feed irrigation water to
11 that area, which would be this area here and coming
12 around down through here. Most of that --

13 Q. And are you indicating there the area between
14 the --

15 A. Between the East Main and the Byrne Slough.

16 Q. Thank you. Go ahead.

17 A. Those laterals tail off, and tail water comes
18 back into the Byrne Slough and actually ends up back
19 here at what they call the mouth of the JB just before
20 it enters Little Wood River. The West Main comes down
21 the west side of the Johnson Butte, waters the area west
22 toward the desert and into the south toward what we call
23 Marley.

24 The two actually do connect on the south side,
25 Johnson Butte, in about this area here. You can see on

Page 11

1 the map. And then it will actually come back into
2 Little Wood at what they call Marley, which is another
3 gauge measuring station that the watermaster's office
4 has where they measure that return flow back to Little
5 Wood River.

6 Q. Thank you. Is that place at Marley, is that
7 the only place that those two reconnect to the Little
8 Wood River?

9 A. No. There's at least four other waste streams
10 that come back between the mouth of the Jim Byrne and
11 Marley. I think they're listed on our records as A, B,
12 C, D, and E.

13 Q. Thank you. In your personal knowledge, is
14 water ever diverted into the East and West Mains outside
15 of the irrigation season?

16 A. Not during the time that I was there. Maybe a
17 little stock water for domestic purposes in the fall.

18 Q. Going back up to where the Richfield Canal
19 splits with the HJB, where does the water that goes into
20 the Jim Byrne Slough flow?

21 A. That flow is the primary source of water
22 during the irrigation season for the Dietrich Canal and
23 the irrigation of the Dietrich area project.

24 Q. Are there any diversions out of the Jimmy
25 Byrne Slough between the HJB gauge and the MJB gauge?

Page 12

1 A. There is, I think, one private headgate in a
2 small lateral, what we call 253, that -- I think it runs
3 five or six feet now is about all.

4 Q. Are there any inflows into the slough between
5 the HJB and the MJB gauges?

6 A. Yeah. There's seven or eight laterals that
7 come off of that East Main -- and I'm estimating those
8 laterals, I don't know the exact number -- that come
9 back and tail back into the Byrne Slough.

10 Q. Okay. I'm going to have you take a look at
11 what has been marked as Exhibit 101. It should be a
12 photograph. Do you recognize, from your personal
13 experience, where that photograph was taken?

14 A. Yes, I do.

15 Q. Where was it taken?

16 A. That's at the end of the Jim Byrne Slough
17 where it comes into Little Wood River.

18 Q. Okay. So referring back to Exhibit 100, could
19 you please mark on Exhibit 100, just make a little X at
20 the place where the photograph in Exhibit 101 was
21 approximately taken.

22 A. Would you repeat that, please?

23 Q. So I'd like you to mark on Exhibit 101 the
24 approximate location of where -- excuse me, on Exhibit
25 100 the approximate location of where this photograph in

Page 13

1 Exhibit 101 was taken.

2 And then next to that, could you just write
3 "Exhibit 101" for me?

4 Thank you. And then would you mind, also,
5 just for everybody's sake, pointing out on the
6 demonstrative exhibit where you made that mark.

7 A. It would be right here next to where they show
8 on this map as Station 11. It kind of overlaps it where
9 the green mark is there.

10 Q. Great. Thank you.

11 MS. BLADES: I'm sorry. Can I interrupt just
12 one second?

13 MS. VONDE: Uh-huh.

14 MS. BLADES: You've got these marked as
15 official exhibits --

16 MS. VONDE: Oh, sure. Do you want to mark on
17 there?

18 MS. BLADES: It would be helpful to maybe
19 transfer that over to the witness right now and give
20 Gary the copy.

21 MS. VONDE: Yeah. I'm going to have him do
22 that a couple more times, though.

23 MS. BLADES: Okay. I'm sorry to interrupt
24 your presentation here.

25 MS. VONDE: No. Thank you.

Page 14

1 MS. BLADES: Thank you.
2 (Unintelligible.)
3 THE HEARING OFFICER: And, Joe, for your
4 benefit, if you want to approach the witness and see
5 where he's marked...
6 THE WITNESS: So you want me to mark on this
7 copy?
8 MS. VONDE: Yes, please.
9 BY MS. VONDE:
10 Q. Okay. Thank you. Now, going back to Exhibit
11 101, which is the photograph, in the center of that
12 photograph you see a label that says "Jim Byrne Slough
13 flow." Is that label correct to your knowledge?
14 A. Yes.
15 Q. And what is the source of water that is
16 flowing from the Jim Byrne Slough?
17 A. That is water from the Big Wood River and
18 Magic Reservoir.
19 Q. The labels on the left and the right of
20 Exhibit 1 say "Little Wood River flow." Do those labels
21 accurately depict the flow of water in the Little Wood
22 River at this spot?
23 A. Yes.
24 Q. Where is the MJB gauge located in this photo?
25 Where would it be?

Page 15

1 A. Well, it actually isn't shown in this photo.
2 It is to the right and to the north of this
3 area.
4 Q. And that would be located on the Jim Byrne
5 Slough; is that correct?
6 A. Yes.
7 Q. So it correct to say that the MJB gauge
8 measures Big Wood River water in the Jim Byrne Slough
9 just before it dumps into the Little Wood River?
10 A. Yes. It's a quarter mile probably upstream of
11 where this confluence is.
12 Q. Is it also accurate to say that that Exhibit
13 101 depicts the point at which the big and Little Wood
14 River water commingle?
15 A. Yes.
16 Q. To the best of your knowledge, was everything
17 that is depicted in Exhibit -- sorry. Moving back to
18 Exhibit 100, is everything that is depicted in that map,
19 was that there and in existence between the time period
20 of 1982 and 1992?
21 A. To my knowledge, yes.
22 Q. So given all of this description and your
23 personal knowledge of the system, is it possible to get
24 Big Wood River water into the Little Wood River?
25 A. Yes.

Page 16

1 Q. Given your personal knowledge of the system,
2 does Exhibit 100, the map, does that accurately depict
3 the Big Wood River/Richfield Canal system?
4 A. Yes.
5 Q. Okay. Let's take a look at Exhibit 102. Do
6 you recognize from your personal experience the area
7 that this depicts?
8 A. Yes.
9 Q. And what area is that?
10 A. This is the -- it shows the Little Wood River
11 flowing toward the top of the page to the left, and then
12 it shows Gauge Station 11, which is the head of the
13 Dietrich Main, and then the Dietrich Main Canal
14 proceeding to the south and west.
15 Q. And could you please point out on the big
16 demonstrative exhibit the area that this map depicts?
17 A. Yeah. It would be commencing here at No. 11.
18 It shows the Little Wood River, the blue line here,
19 going down to the southwest; Dietrich Main Canal coming
20 down here, this white line, and proceeding into the
21 Dietrich portion of the project.
22 Q. Thank you. Okay. At the top of Exhibit 102,
23 you've already addressed this a little bit, the little
24 dot marked No. 11, what does that represent?
25 A. That is the stream-gauge measuring station for

Page 17

1 flows going into the Dietrich Main Canal.
2 Q. Is Gauge No. 11 located on, I guess it would
3 sort of be the south side of the Little Wood River?
4 A. Yes.
5 Q. There's an area on Exhibit 102 marked with
6 yellow squares. What does this represent; do you know?
7 A. That's what we commonly refer to as the
8 Dietrich floodway.
9 Q. And is there a headgate off of the Dietrich
10 Canal that goes into that basin?
11 A. Yes.
12 Q. To your knowledge, how long has that diversion
13 into that basin existed?
14 A. My understanding, it went in there somewhere
15 in the late '70s.
16 Q. Okay. Continuing back with Exhibit 102, can
17 you please describe where the Dietrich Canal flows past
18 that point of the basin headgate.
19 A. From the floodway, it continues to the south
20 and then onto the west across the upper end of the
21 Dietrich project.
22 Q. There's a dot marked on Exhibit 102 labeled as
23 the "F waste."
24 A. Uh-huh.
25 Q. What does that represent?

Page 18

1 A. That is the Water District's measuring station
2 at the end of the Dietrich Main Canal where they measure
3 those outflows that come back to the Little Wood River.

4 Q. So the F waste, is that just before the
5 Dietrich reenters the Little Wood River; is that
6 correct?

7 A. Yes.

8 Q. And how much water, in your personal
9 knowledge, would approximately be flowing through the
10 F waste?

11 A. It will vary between 2 CFS to probably 15 on
12 an average.

13 Q. Are there any other terminuses or exits where
14 water from the Dietrich Canal flows or ends or --

15 A. In the Little Wood?

16 Q. Anywhere.

17 A. There are a couple of areas where we have
18 waste that comes back into the Milner-Gooding, and there
19 is another. The primary one would be at what we call
20 Lateral 1158 which comes in just above the bifurcation
21 on the Milner-Gooding Canal.

22 Q. And how much water would normally be flowing
23 out of those?

24 A. Oh, if you had all of them together, you might
25 end up with 3 CFS, possibly 4.

Page 19

1 Q. And when would those normally be flowing?
2 Would it be during the irrigation season or during the
3 winter?

4 A. Primarily during irrigation season.

5 Q. Okay. Let's take a look at Exhibit 103. It
6 should be a photograph. Do you recognize, from your
7 personal experience, where this photograph was taken?

8 A. Yeah. This is located on the Little Wood
9 River just downstream of the confluence with the MJB and
10 the head of the Dietrich Main.

11 Q. Okay. And then taking a look -- I'm going to
12 have you do the same process again. Could you please
13 mark on Exhibit 102, the map, where this photograph --
14 approximately where this photograph would have been
15 taken.

16 A. You mean on 100?

17 Q. Nope, on 102, the map you were just looking at
18 of the Dietrich Canal.

19 A. Oh, okay.

20 Q. If you could just make a little mark
21 approximately where this photograph was taken of the
22 Little Wood check structure.

23 A. Okay.

24 Q. And then if you could please mark that, that
25 mark, label it as Exhibit 103. And then I don't know if

Page 20

1 it's helpful, but could you also point it out on the big
2 map, too?

3 A. Certainly. Okay. It's located approximately
4 right in this area just to the west, or it would be to
5 the left of Station No. 11, the gauge that's on this big
6 map.

7 Q. Thank you. All right. Let's take a look back
8 at Exhibit 103, the photograph. You already indicated
9 this is a check structure. What is the purpose of this
10 check structure.

11 A. This is the primary area where we back up
12 water flows to push water into the Dietrich Main Canal.

13 Q. Can water flow around this check structure and
14 continue down the Little Wood?

15 A. There is a -- as you can see in this picture,
16 there are two stock-wall gates there that will pass
17 water there. During irrigation season, they're normally
18 closed, so the only way water goes beyond there is over
19 the weir here, which you indicate on this check
20 structure, or there is a clean-water bypass that was put
21 in in 1998 that actually takes Little Wood water on
22 downstream before the confluence of the Jim Byrne Slough
23 comes in.

24 It was done for water quality purposes
25 because, at that point in time, prior to that, when

Page 21

1 things were not as much sprinkler irrigation taking
2 place, a lot of mud and return-flow water would come in,
3 and it was bad for the fishery, so they actually put in
4 the clean-water bypass to take the clean Little Wood
5 water on downstream for fishery and the irrigation
6 water, which went on down into the Dietrich Canal.

7 Q. Okay. Let's take a look at Exhibit 104,
8 another photograph. Do you recognize where that
9 photograph was taken from your personal experience?

10 A. Yes.

11 Q. And where is that?

12 A. This is where the Little Wood River and the
13 Jim Byrne Slough meet on the south side of the river
14 across from that confluence, and flow goes to the
15 Dietrich Canal.

16 Q. Can you mark on Exhibit 102 the approximate
17 location where this photograph was taken.

18 A. Yes. Good thing they're approximates.

19 Q. Yeah, it's approximate. And then could you
20 label that mark as Exhibit 104, please.

21 A. Okay.

22 Q. Okay. Going back to Exhibit 104, the
23 photograph, there's a label in the upper left-hand
24 corner that says "Little Wood River flow." Does that
25 label accurately depict the flow of the Little Wood

Page 22

1 River at this spot?
2 A. Yes.
3 Q. And we also see a label on the lower left
4 corner of the exhibit that says "Jim Byrne Slough flow."
5 Does that label accurately depict the flow of water
6 coming from the Jim Byrne Slough and into the Little
7 Wood River at this spot?
8 A. Yes.
9 Q. Then on the middle right of the photo we see a
10 label that says "Dietrich Canal flow." Does that label
11 accurately depict the flow of water going into the
12 Dietrich Canal at this spot?
13 A. Yes.
14 Q. It may not be visible, but where approximately
15 would Gauge No. 11 be in this photograph?
16 A. It would be from the mark on the map that says
17 "Dietrich Canal flow" probably 200 yards to the right of
18 this photo downstream the canal.
19 Q. And where's the check structure that is
20 depicted in Exhibit 103 located in relation to the photo
21 taken in 104?
22 A. It is located to the left of this photo
23 downstream on Little Wood River just below where the
24 Byrne Slough comes in.
25 Q. Okay. So I'll just touch on this. The grated

Page 23

1 structure in the middle of the photograph, what is that?
2 A. That is the clean-water bypass that was
3 installed to take the cleaner water from Little Wood on
4 downstream for fishery purposes.
5 Q. So the check structure that you described in
6 Exhibit 103, does it serve the purpose of backing up
7 Little Wood water so that it can flow into the Dietrich
8 Canal?
9 A. Yes.
10 Q. And does it also serve the purpose of pushing
11 Big Wood River water from the Jim Byrne Slough into the
12 Dietrich Canal, as well?
13 A. Yes.
14 Q. So in Exhibit 104 here, this photograph, does
15 this depict Little Wood River water commingling with Big
16 Wood River water and it being pushed into the Dietrich
17 Canal?
18 A. Yes, it does.
19 Q. Okay. I'd like to go back to Exhibit 102
20 again just briefly. That's the map.
21 To the best of your knowledge, was
22 everything -- is everything that is depicted on this
23 Exhibit 102, was it in existence during the time period
24 between 1982 and 1992?
25 A. No, it was basically the same. There was one

Page 24

1 change. They did replace the diversion structure on the
2 Little Wood there. It takes water -- backs the water
3 up, but it's still in the same location, so...
4 Q. So they just rebuilt it?
5 A. Just rebuilt it.
6 Q. So based on your personal knowledge of the
7 system and everything we've just discussed, is it
8 possible for water from the Big Wood River to flow into
9 the Dietrich Canal?
10 A. Yes.
11 Q. And based on your personal knowledge of the
12 system, is it also possible for water from the Little
13 Wood River to flow into the Dietrich Canal?
14 A. Yes.
15 Q. Would you describe those two sources as
16 commingled at that point?
17 A. Yes.
18 Q. All right. Let's move onto Exhibit 105. Go
19 through the same process here. Do you recognize, from
20 your personal experience, the area that this depicts?
21 A. Yes, I do.
22 Q. And what area is that?
23 A. It is the area where Little Wood River comes
24 in below F waste toward the bifurcation, and the
25 Milner-Gooding Canal comes in from the south toward the

Page 25

1 Little Wood River and the bifurcation area.
2 Q. Does this -- can you show us on the big
3 demonstrative exhibit where this Exhibit 105 portion is
4 located?
5 A. It would be in this area from approximately
6 just upstream at 53 across through the lattice where the
7 Milner-Gooding hits Big Wood and Little Wood flows on
8 toward Gooding.
9 Q. Thank you. Okay. Let's take a look at
10 Exhibit 105. On the far right, you've indicated we see
11 an indication for the F waste. And is that where the
12 Dietrich Canal empties into the Little Wood River?
13 A. Yes.
14 Q. And the Little Wood River is depicted on
15 Exhibit 105 in what color?
16 A. Blue. It's dark blue.
17 Q. So following the blue Little Wood River line
18 from right to left on Exhibit 105, there comes a point
19 where we see a green line with kind of a black middle.
20 What does that represent?
21 A. That is the Milner-Gooding Canal.
22 Q. And where does the Milner-Gooding Canal begin?
23 A. It begins at Milner Reservoir.
24 Q. On the Milner-Gooding Canal, we see a dot
25 marked No. 53. What does that depict?

Page 26

1 A. That is the stream-gauging station on the
2 Milner-Gooding Canal just upstream of the area of the
3 bifurcation where flows are measured coming from Milner.

4 Q. And so what would be the source of water
5 that's being measured there?

6 A. Snake River.

7 Q. The map then just north of 53 contains a label
8 that says "bifurcation." What does that represent?

9 A. That is where the Milner-Gooding water,
10 actually a portion of it commingles with Little Wood
11 water and is taken to Gooding.

12 Q. So is the bifurcation located at the crossing
13 of the Little Wood River water and the Milner-Gooding
14 Canal?

15 A. Yes.

16 Q. All right. Let's take a look at Exhibit 106.
17 It should be a photograph. Do you recognize where this
18 photo was taken and what it depicts?

19 A. Yeah. This is a picture of the bifurcation
20 structure where the water from the Milner-Gooding meets
21 the Little Wood River.

22 Q. And does it accurately depict the bifurcation
23 structure?

24 A. Yes.

25 Q. So I'm going to have you do again what we've

Page 27

1 done before. If you could please use Exhibit 105 and
2 mark on Exhibit 105 the location of the bifurcation that
3 is depicted in Exhibit 106.

4 A. You want that labeled as "106"?

5 Q. Yes, please. And then if you could please
6 point that out on the big demonstrative exhibit where
7 you put that mark.

8 A. It would be in this point right here where it
9 meets the Little Wood River.

10 Q. And are you indicating just before, just
11 upstream on the Milner-Gooding before Gauge No. 56?

12 A. Yes.

13 Q. Thank you. All right. So let's go back to
14 Exhibit 106, the photograph. So we see a label on that
15 photograph on the right-hand side that says
16 "Milner-Gooding flow." What is the source of water that
17 is coming from that direction?

18 A. Snake River.

19 Q. And is that label accurate as to the direction
20 of flow where it's coming from?

21 A. Yes.

22 Q. All right. And the general flow of water in
23 Exhibit 106 is from the right-hand side of the
24 photograph to the left-hand side of the photograph; is
25 that correct?

Page 28

1 A. Yes.

2 Q. In the upper middle of Exhibit 106, there's a
3 label that says "siphon flow." Does that accurately
4 depict the flow of water entering the siphon in the
5 bifurcation?

6 A. Yes.

7 Q. And where does water entering the siphon go?

8 A. It goes on down toward Station 56 and proceeds
9 across where it flumes over Big Wood and delivers
10 irrigation water to North Shoshone and North Gooding.

11 Q. So the siphon actually takes water underneath
12 the Little Wood River; is that correct?

13 A. Yes.

14 Q. And then in this photo, is the Little Wood
15 River located just off the edge of the left-hand side of
16 the photo where we can't quite see it?

17 A. Well, it's just at the top edge of that. It
18 would be at the top of that photo.

19 Q. At the top, okay. In the middle of Exhibit
20 106, water appears to be flowing out of the
21 Milner-Gooding Canal and toward the photographer; is
22 that correct?

23 A. That's correct.

24 Q. If you could see under that cascade of water
25 coming towards the photographer, what would be

Page 29

1 underneath there?

2 A. There's a concrete wall probably approximately
3 five foot high that sits across there.

4 Q. On the left-hand side of Exhibit 106, there's
5 a label that says "flow to the Little Wood River." Does
6 that accurately depict that water can flow from the
7 Milner-Gooding Canal and into the Little Wood?

8 A. Yes.

9 Q. So is it accurate to say that in Exhibit 106,
10 Snake River water flowing in the Milner-Gooding Canal is
11 both going into the siphon and also dumping into the
12 Little Wood River?

13 A. Yes.

14 Q. Is it possible for the reverse to happen? In
15 other words, can Little Wood River water back up and
16 into the Milner-Gooding Canal and go through the siphon?

17 A. Generally during irrigation flow, not.
18 However, in the spring of 2017, I observed a flow in the
19 Milner-Gooding of somewhere in the neighborhood of 300
20 CFS. Little Wood was running probably about five, and
21 we actually had water that was coming, upgrading through
22 that channel, under the radial gate, and around it going
23 down on down to the north toward Station 56 through the
24 siphon.

25 Q. So you have personally witnessed water backing

Page 30

1 up from the Little Wood River into the Milner-Gooding
2 Canal and flowing down the Milner Canal?
3 A. Yes. And then during the off-season, if you
4 do not put a cofferdam in below this radial gate, which
5 you see at the bottom right of the Exhibit 106, water
6 from the Little Wood will actually come out and flow and
7 go down -- will proceed north through that siphon. They
8 have to go in every year and put in an earthen cofferdam
9 to keep that water out of the canal.
10 Q. Okay. So water flowing in the Little Wood
11 that reaches this point, is it -- in your experience, is
12 that water a commingling of both Big and Little Wood
13 River water?
14 A. It can be, yes.
15 Q. All right. Let's go back to Exhibit 105.
16 There's a green dot there marked No. 56. What does that
17 depict?
18 A. That is a stream-gauge station where
19 measurements of the flow is recorded going on up the --
20 well, downstream to Milner-Gooding north of Little Wood.
21 Q. And the Gauge No. 56 is downstream or north of
22 the bifurcation; is that correct?
23 A. Yes.
24 Q. So what are the possible sources of water that
25 could potentially be measured at Gauge No. 56?

Page 31

1 A. Depending on the time of year, it could be
2 Milner-Gooding flow, it could be Little Wood flow. And
3 if there's return flow coming from Big Wood through the
4 Richfield portion of the system, it could also include
5 some Big Wood water.
6 Q. So that would be Snake River water, Little
7 Wood River water, and Big Wood River water; is that
8 correct?
9 A. Correct.
10 Q. And then there's a number -- a green dot
11 No. 57 on the map. What does that represent?
12 A. That is another stream-gauging station. That
13 one was installed at the time that the Lower Snake River
14 Aquifer Recharge District's diversion was put in on the
15 canal taking water into the recharge area there north of
16 Shoshone.
17 Q. And the yellow hash marks indicated on the map
18 there, what, to your knowledge, does that represent?
19 A. That is commonly referred to as the Lower
20 Snake River Recharge District's recharge site.
21 Q. And there is a headgate off of the
22 Milner-Gooding Canal into that site; is that correct?
23 A. That's correct.
24 Q. And where is that headgate into the recharge
25 site located?

Page 32

1 A. It's just upstream of the Station 57 just
2 maybe 50, 60 feet.
3 Q. So could you please mark on Exhibit -- make a
4 mark on Exhibit 105 as to the approximate location of
5 that Shoshone recharge site diversion structure. And if
6 you could just please label that mark "Shoshone site
7 headgate" or something like that.
8 And then if you could please, just for
9 everybody, indicate on the big demonstrative exhibit
10 where you put that mark.
11 A. On this map, it would be right here just
12 upstream of the indicator for the Station 57 measuring
13 gauge.
14 Q. Thank you. Okay. Are there any diversions,
15 headgates, or other structures between Gauge No. 53 and
16 the bifurcation?
17 A. There are at least three headgates.
18 Q. Are there any diversions, headgates, or other
19 structures between the bifurcation and Gauge No. 56?
20 A. There is one.
21 Q. Other than the Shoshone recharge site
22 headgates, which we already talked about, are there any
23 diversions, headgates, or any structures between No. 56
24 and No. 57?
25 A. There is one there.

Page 33

1 Q. Besides the Shoshone?
2 A. Yes.
3 Q. Okay. So given your personal knowledge of the
4 system and everything we talked about, could Snake River
5 water be diverted at the Shoshone recharge site?
6 A. Yes.
7 Q. And how would that happen?
8 A. Well, it would proceed from the -- through the
9 Milner-Gooding Canal under the siphon under Little Wood
10 River -- through the siphon under the Little Wood River
11 and on down through past Station 56 to the diversion of
12 just above Station 57.
13 Q. And given your personal knowledge of the
14 system, could Big -- I'll call it Big/Little Wood River
15 water, be diverted at the Shoshone recharge site?
16 A. Yes.
17 Q. And how would that --
18 A. Well, you would bring it from Little Wood back
19 into the Milner-Gooding Canal and on down the
20 Milner-Gooding Canal to the north of Little Wood River
21 in the same manner that you did with the Snake River
22 water. It would go from 56 down to 57 and discharge at
23 the recharge area.
24 Q. Okay. So, to the best of your knowledge, is
25 everything that is depicted in Exhibit 105, was it in

Page 34

Page 36

1 existence at the time period between 1982 and 1992?

2 A. Yes.

3 Q. Okay. So now we have the lay of the land.

4 Let's talk about -- let's go back to the Richfield
5 Canal, and you can certainly look at Exhibit 100, if
6 that's helpful. But to your knowledge, are there any
7 year-round stock-water rights diverted through the
8 Richfield Canal? Or were there -- let me rephrase that.
9 Strike that. Let me rephrase it.

10 Were there any year-round stock-water rights
11 diverted through the Richfield Canal between 1982 and
12 1992 to your knowledge?

13 A. No.

14 Q. Are there any other types of water rights on
15 the Richfield Canal that, to your knowledge, would have
16 had a year-round season of use during that time period?

17 A. Yeah. The normal seepage that comes from Magic
18 Reservoir out of the toe drains at the dam and some
19 spring inflow from just downstream of the dam flows
20 year-round and is diverted on into the Richfield Canal,
21 and it flows there year-round.

22 Q. And how much would that be?

23 A. Depending on the height of the reservoir,
24 anywhere from 7 to 20 feet.

25 Q. CFS?

1 little bit too cold for growing conditions in that area
2 to start irrigating that early.

3 Q. Okay. So to the extent that you saw measured
4 diversions on the Richfield at Gauge No. 4 before May
5 1st, would you say, in your personal experience, that
6 those were for irrigation?

7 A. Before May 1st?

8 Q. Before May 1st.

9 A. No. I would not imagine they were for
10 irrigation, no.

11 Q. Would those diversions be for stock water?

12 A. A good possibility it could be stock water.

13 Q. And did you say before that there were no
14 stock-water diversions on the Richfield year-round?

15 A. There are no recorded rights that I'm aware
16 of.

17 Q. Okay. So there's no water rights for stock
18 water on the Richfield?

19 A. Not that I'm aware of, no.

20 Q. So in your personal experience, when does the
21 irrigation season usually end on the Richfield Canal?

22 A. Generally 1st of October.

23 Q. And how do you know that?

24 A. That was historically what the company listed
25 as their irrigation cutoff date.

Page 35

Page 37

1 A. Yes.

2 Q. In your personal experience with the Richfield
3 Canal, when does irrigation demand usually begin on the
4 Richfield?

5 A. May 1st.

6 Q. And how do you know that?

7 A. It's actually in the bylaws of the company.
8 At one point, they had it established that way. But it
9 historically is usually May 1st.

10 Q. And is that an average May 1st? Could it be
11 earlier or later, or is that a pretty normal start date?

12 A. That's pretty normal. We have started it,
13 during the time I was there, as early as the 24th of
14 April a couple of years. You know, they had a high
15 water year, a lot of water. And they went ahead --
16 rather than waste it, they put it to use.

17 Q. That would be unusual?

18 A. Yes.

19 Q. Many of the irrigation water rights in
20 Richfield Canal have a season of use that starts on
21 April 15th on the face of the water right.

22 Why, in your experience, does the irrigation
23 season usually actually begin later than April 15th?
24 What is it about the Richfield?

25 A. Usually weather conditions. It's usually a

1 Q. So is it sometimes earlier and sometimes later
2 than October 1st?

3 A. Depending on the water supply, it's been as
4 early as June. Generally, you know, through some of the
5 drought areas, it was scattered anywhere from mid August
6 to like early September. Generally, I would say between
7 the 15th of September and the 1st of October, if it was
8 going to be early, unless it was something out of their
9 control.

10 Q. So to the extent you saw measured diversions
11 into the Richfield Canal at Gauge No. 4 after October
12 1st, would you say that those were likely for irrigation
13 or likely not for irrigation?

14 A. After October 1st, it would be probably
15 stock-water flow or just a leak coming through the
16 system.

17 Q. And when you say "stock-water flow," there are
18 no water rights for stock water on the Richfield; is
19 that correct?

20 A. No. But the canal company will have what they
21 call a domestic run. They did it for years. They would
22 come on after the 1st of October, probably anywhere
23 between the last week in October to the first week or so
24 of November, and run a small flow for a few days to fill
25 stock ponds for livestock watering for the fall pasture.

Page 38

1 Q. So would that have been a fairly short
2 duration?
3 A. Three or four days usually is about all.
4 Q. And how much water would that have been?
5 A. Oh, they would run 2- or 300 CFS.
6 Q. Just for a couple of days?
7 A. Yeah, just for a few days. Kind of fill the
8 system right quick and shut off.
9 Q. Okay. Is any portion of the Richfield Canal
10 or the Jim Byrne Slough lined with concrete or in some
11 other manner?
12 A. No.
13 Q. All right. So let's move onto the Dietrich.
14 In your experience, when does irrigation demand usually
15 begin on the Dietrich Canal?
16 A. Oh, it's somewhere around probably about the
17 10th of April.
18 Q. And how do you know that?
19 A. From historic records and from practical
20 experience running the system.
21 Q. Why does irrigation on the Richfield -- or,
22 excuse me, the Dietrich Canal begin slightly earlier
23 than on the Richfield Canal?
24 A. It's a little lower elevation. It becomes
25 warm earlier, and the crop planting starts a little

Page 39

1 earlier, and the demand for water comes on earlier.
2 Q. When you say that April 10th, April 15th an
3 average start date for irrigation on the Dietrich
4 system, in some years it might be a bit earlier, and in
5 some years it might be a bit later?
6 A. It varies a little bit, yeah.
7 Q. Okay. When the irrigators begin taking water
8 an April 10th, April 15th, on average, are the
9 irrigators usually getting a full supply of irrigation
10 water at that time?
11 A. They'll get the full supply that is due at
12 their headgate. It will not be the full supply that we
13 run for the summer. Probably, maybe half. 100 to 150
14 CFS would be all.
15 Q. So early season -- we'll call it early-season
16 irrigation demand on the Dietrich Canal is about 100 --
17 A. It will range between 100 and 150 CFS.
18 Q. Okay. So when would the irrigators on the
19 Dietrich Canal usually begin to manage their -- I'll
20 call it their full irrigation supply -- what they really
21 need to get going for the summer? At what --
22 A. Somewhere around the 1st of June. Between the
23 15th of May, 1st of June.
24 Q. Okay. So on May 31, June 15th, that average
25 time period, sometimes it will be a little earlier, and

Page 40

1 sometimes it will be a later?
2 A. Yes.
3 Q. So between approximately April 10th, April
4 15th, and June 1st, would it be fair to call that an
5 early irrigation season on the Dietrich?
6 A. Yeah, probably.
7 Q. And you stated that the demand during that
8 time period would be between 100 and 150 CFS; is that
9 correct?
10 A. Yes.
11 Q. Okay. And how do you know that that's the
12 demand?
13 A. Just from running the system for 20 years and
14 looking at what the demand is.
15 Q. So, generally, that's what people are needing
16 at that time?
17 A. That's generally about where we were at, yes.
18 Q. Okay. So on June 1st, approximately, when
19 people start to want their full amount of water, how
20 much water is that normally?
21 A. Oh, it will go on up to peak of somewhere
22 around 270. It has been as high as 305, but the average
23 usually is about 270.
24 Q. Okay. So what is the total canal capacity of
25 the Dietrich Canal?

Page 41

1 A. We've run as high as 400 CFS at least as far
2 down as the floodway. Below that, we couldn't handle
3 that much.
4 Q. Okay. And how do you know 400 CFS? How do
5 you know that?
6 A. We've measured that kind of flow down the
7 system on the years that we actually put water into that
8 floodway.
9 Q. Are there any stock-water rights diverted
10 through the Dietrich Canal?
11 A. Yes. There is a 75 CFS winter stock-water
12 right that is assigned to the Big Wood Canal Company.
13 Q. And when is that stock-water right diverted?
14 A. It usually commences shortly after irrigation
15 season. I don't think, and I'm not positive on that
16 date, but I think it's around the 1st of November that
17 that right comes into effect.
18 Q. And when does it go out of priority?
19 A. It usually terminates somewhere around the 1st
20 of April, and then there's an irrigation right that
21 kicks on shortly right in that same time frame.
22 Q. Okay. So is there an overlap in time period
23 where both the stock water and the irrigation rights
24 would be diverted at the same time?
25 A. I believe so, yes.

Page 42

Page 44

1 Q. And when would that time period be?
2 A. Generally spring, probably, rather than in the
3 fall. Because the fall, usually, the irrigation season
4 ends before that stock-water right comes on.
5 Q. So did you say that the stock-water right
6 usually goes out about April 1st?
7 A. Yes.
8 Q. But the first irrigation right doesn't start
9 diverting until approximately --
10 A. Approximately the 10th. But they'll start
11 flushing canals and whatnot. There will be some water
12 brought in for that purpose.
13 Q. Okay. All right. Let's go back to Exhibit
14 105, which is the map of the Milner-Gooding system.
15 So Gauge No. 53 on the map, you stated that
16 that measures Snake River water flowing in the
17 Milner-Gooding Canal; is that correct?
18 A. Yes.
19 Q. And Measurement Device No. 56 is also on the
20 Milner-Gooding Canal just north of bifurcation; is that
21 correct?
22 A. Correct.
23 Q. Okay. In your experience, if you saw that
24 there was a gain in the amount of water between Gauge
25 No. 53 and Gauge No. 56; in other words, Gauge No. 56 is

1 Q. And could you please describe it.
2 A. Well, the very first one here that you have
3 the exhibit number on is just a blank piece of paper,
4 but the following page reads from May of 1982. It lists
5 the gauge stations across the top of the page, and the
6 columns indicate gauge readings and flows, water
7 elevations, and corresponding flows.
8 Q. Okay. So let's back up to the blank page.
9 A. Okay.
10 Q. Is there a tab on that page that says "1982"?
11 A. Yes.
12 Q. Okay. And what does that 1982 indicate? What
13 does that mean?
14 A. That would be the water year.
15 Q. The water year, okay. And then flipping to
16 the following page, which is Bates No. 3290, let's take
17 a look at the column headings at the top of the page.
18 Well, first of all, let's take a look at the
19 very top heading that says "May 1982." What does that
20 indicate?
21 A. That indicates that it was the month of May in
22 the year 1982.
23 Q. Okay. And then the column on the far left
24 that has the numbers 1 through 31, what do those numbers
25 represent?

Page 43

Page 45

1 reading higher than Gauge No. 53, where would you
2 conclude the water from that would have come from?
3 A. My first thought would be it would have to
4 come from the Little Wood River.
5 Q. Why is that?
6 A. Because there's really no other indicators, no
7 other place for it to flow into the canal from at that
8 point.
9 Q. Okay. The Shoshone recharge diversion
10 headgate is located between Gauge No. 56 and Gauge
11 No. 57; is that correct?
12 A. Yes.
13 Q. Given your experience, if you saw that flows
14 measured at Gauge No. 57 were lower than flows measured
15 at Gauge No. 56, what would you conclude would be the
16 cause of that loss between those?
17 A. Well, my first thought would be to go out and
18 check and see if there was an error in reading the
19 gauges. Then, the rest of it, if it's lower, I would be
20 looking for potential leaks in that canal, unless we
21 were just strictly running recharge water, in which case
22 the canal would be dry at 57, and you'd have flow at 56.
23 Q. Okay. Let's take a look at Exhibit No. 107.
24 Do you recognize what this document is?
25 A. Yes.

1 A. Those are the dates of the month.
2 Q. Okay. Dates of the month. And then going
3 back up to the column headings at the top of the page,
4 we see one labeled "Magic," one labeled "No. 3,"
5 etcetera. What do those represent?
6 A. Those are the names of the individual
7 stream-gauging stations.
8 Q. So, just as an example, let's follow Magic
9 down. There are two columns under Magic. Can you
10 describe what is represented in that first column with
11 the number 931.5?
12 A. The first column is the elevation reading on
13 the reservoir. And it's a little bit misleading,
14 because there's actually a four that's supposed to be in
15 front of that 931, but they never put it down on those
16 elevations.
17 The other one is the acre-foot capacity of the
18 reservoir at that elevation.
19 Q. Okay. And then for an example, the next
20 column, No. 3, can you describe what those numbers
21 represent?
22 A. Those are the -- that is the elevation of the
23 Big Wood River below Magic on the USGS stream gauge
24 there that indicates a level and a corresponding flow.
25 Q. So, for example, under Gauge No. 3 on May 3rd,

Page 46

1 we have a 7.76. Is that, I guess, the staff-gauge
2 measurement?
3 A. That is a staff-gauge measurement at that
4 station.
5 Q. And then I believe it's a 3680?
6 A. Yes, 3680. That would 3,680 CFS.
7 Q. That CFS corresponds to a staff-gauge
8 measurement; is that correct? Is it calculated from the
9 staff-gauge measurement?
10 A. Yes. There's an established rating table that
11 corresponds the elevation to that flow.
12 Q. Okay. So can you sort of describe for us how
13 these numbers are placed into this ledger. Does someone
14 go out look at the staff gauge? Can you just describe
15 that sort of the process that Big Wood Canal Company
16 goes to collect these measurements.
17 A. Generally, in the case of Magic, it's the dam
18 tender. In the case of these others, many of them are
19 the ditch riders, or the watermaster on the rivers, what
20 he calls his river riders, go out and take the reading
21 every morning.
22 Some of these we double-check against the
23 visual reading and the one that's recorded in up through
24 USGS or through automated gauging that has started to be
25 put in over the last few years. At this point in time,

Page 47

1 it would all have been visual, other than the No. 3
2 gauge station.
3 Q. So once these measurements are put together by
4 the Big Wood Canal Company, what happens to them?
5 A. We record them in our ledger. The watermaster
6 records them for the Little Wood and Big Wood River,
7 records them in his records, and they are further
8 established and recorded in the water -- the "Black
9 Book," as they call it, that the watermaster's office
10 prints out every year of the stream-gauging flows and
11 irrigation flows.
12 Q. Okay. So between this handwritten ledger and
13 the Black Book that the watermaster produces, could
14 adjustments have been made to flows? Is there feedback
15 there in terms of errors, or how does that work?
16 A. Yes. There's some possibility of some errors.
17 And every two weeks, as a general rule, they go in and
18 they will remeasure at each of these stations what the
19 flow is and make adjustments, according to the rating
20 curve that was established at that gauge station, so
21 that the corresponding gauge station and the flows are
22 correct, because you have a constant issue of either
23 sedimentation or mossing or someone went out and cleaned
24 the canal or there was something done that varied the
25 channel, and any changes in that channel will affect the

Page 48

1 corresponding flow. So you have to adjust those rating
2 curves periodically to match.
3 Q. So the flows recorded in this document,
4 Exhibit 107, would be as accurate as you can get, given
5 what you have to work with?
6 A. It's probably as accurate as they had at that
7 time, yes.
8 Q. Yeah, okay. Might there be Big Wood Canal
9 Company -- might the Big Wood Canal Company keep
10 measurements in its ledgers, its handwritten ledgers,
11 that the watermaster would not keep?
12 A. It's possible. Generally, the watermaster was
13 right there off the river when these readings were
14 recorded. So they usually get together every morning,
15 and he comes over to the office, and he goes through the
16 whole process.
17 Q. Okay. Is the watermaster mostly concerned
18 with the irrigation season?
19 A. Yeah. They have not been in the habit of
20 recording any off-season flows during a non-irrigation
21 season. They probably should, but they have not.
22 Q. Okay. All right. I think those are all my
23 questions. Thank you.
24 THE HEARING OFFICER: Thank you, Ann.
25 Okay. Joe, do you want to start

Page 49

1 cross-examination? Do you want to break?
2 MR. JAMES: Let's take just about five minutes
3 is all, really quick.
4 THE HEARING OFFICER: Let's take about ten.
5 (Recess.)
6 THE HEARING OFFICER: We're recording again
7 after the morning recess. Joe, you may cross-examine
8 the witness.
9 MR. JAMES: Thank you, Director.
10 CROSS-EXAMINATION
11 BY MR. JAMES:
12 Q. Lynn, when would you say that you started with
13 the Big Wood Canal Company, American Falls?
14 A. It would have been January 6th of 1997.
15 Q. And there's been a lot of testimony and
16 questions saying "to your knowledge" or "your personal
17 knowledge," and I want to define that a little bit. In
18 my mind, personal knowledge is something you observe
19 with your own senses.
20 Did you have any familiarity with the Big Wood
21 Canal Company, American Falls District 2 system prior to
22 January of '97?
23 A. No, not really.
24 Q. You had never visited the head of the Jim
25 Byrne Slough prior to your employment?

Page 50

1 A. No. I did a little fishing on the Richfield
2 Main. But I had never been there, no.
3 Q. So the testimony, as far as your experience in
4 all the years you were there, your personal experience
5 would be limited to that after January of '97?
6 A. Yes.
7 Q. It's my understanding the Big Wood Canal
8 Company has various rights on the Big and Little Wood
9 River and that those would include, at least on the Big
10 Wood site, storage rights?
11 A. Uh-huh.
12 Q. And you've got the irrigation from storage
13 rights?
14 A. Yes.
15 Q. And you have irrigation rights from natural
16 flows?
17 A. Yes.
18 Q. And you have stock-water rights from natural
19 flows?
20 A. Yeah, there is one. You pointed it out to me
21 at the break. It's one I forgot.
22 Q. And we'll just take care of this real quick.
23 I think I'm at No. 205.
24 Lynn, if you could take a look at that for a
25 minute. And, Lynn, what is that document?

Page 51

1 A. It's a copy of the Department of Water
2 Resources' Water Right No. 37-1315 for stock water.
3 Q. And the owner of that water right?
4 A. Is the Big Wood Canal Company.
5 Q. And the source of the water?
6 A. It says Big Wood (unintelligible).
7 Q. If you look at the initial diversion point, do
8 you recognize that?
9 A. Well, there's a number of them, but yes. I
10 remember the particulars on this one because it was a
11 very late filing that occurred late in the adjudication
12 due to some stockholders going in to try to file on the
13 leak coming from the dam.
14 Q. And it looks -- the initial diversion pointing
15 to Blaine County, that would be the head of the
16 Richfield Canal?
17 A. Yes.
18 Q. It looks like the 1909 priority date?
19 A. Yeah. They list the old priority date. That
20 was the time of the installation of the dam, so that
21 would have been about the time that they somewhat
22 created this right from the seepage out of the dam.
23 MR. JAMES: Director, I'd move for the
24 admission of Exhibit No. 205.
25 THE HEARING OFFICER: Ann?

Page 52

1 MS. VONDE: I'll object to the extent that
2 this was not disclosed during discovery.
3 MR. JAMES: In response --
4 MS. VONDE: I haven't seen it before this
5 right now.
6 MR. JAMES: In response, Director, this is
7 rebuttal based on Lynn's testimony that there was no
8 stock-water right out of the Richfield Canal. My only
9 attempt to introduce it is to rebut his prior testimony.
10 THE HEARING OFFICER: Objection overruled.
11 The document marked as Petitioner's Exhibit 205 is
12 received into evidence.
13 (Petitioner's Exhibit 205 admitted.)
14 MR. JAMES: Thank you, Director.
15 BY MR. JAMES:
16 Q. Lynn, at the beginning of the irrigation year
17 on the Big Wood side, does the company use natural flows
18 to provide irrigation?
19 A. On years that natural flow is available, yes.
20 Q. Okay. And it looks like the majority of Big
21 Wood Canal Company's irrigation rights run from April
22 1st to October 31st; is that correct?
23 A. You know, I don't remember all of them
24 exactly, but that's probably pretty close.
25 Q. Well, can you list any natural-flow irrigation

Page 53

1 right that has a period of use starting after April 1st?
2 A. Well, I could bring it to mind there could,
3 but actually there's so many of those rights that was
4 filed on that it's hard to bring them all to mind.
5 Q. Would reviewing the permit details from the
6 Idaho Department of Water Resources refresh your
7 recollection?
8 A. Well, I haven't looked at those rights in
9 quite some time, all of them, so...
10 MR. JAMES: Director, at this time, I'm not
11 marking these, or it's not my intent to ask they be
12 admitted. I'm just simply using them to see if they'll
13 refresh Mr. Harmon's recollection of the period of use
14 for the Big Wood Canal Company's rights.
15 BY MR. JAMES:
16 Q. Lynn, have you had an opportunity to review
17 the documents that were provided? Did you get a chance
18 to look at them?
19 A. Yes.
20 Q. Do they help you recall when the Big Wood
21 Canal Company's irrigation right of period of use
22 commences?
23 A. Yes.
24 Q. And when is that?
25 A. April 1.

Page 54

1 Q. And Big Wood Canal Company's irrigation rights
2 typically terminate on October 31st?
3 A. That's what is on the face of the water right.
4 Q. And you talked earlier about a stock-water
5 right through the Little Wood River?
6 A. There is a winter stock-water right, I
7 believe, at 75 CFS.
8 Q. And the period of use on that right would
9 typically be --
10 A. As I remember, and like I say, this is off of
11 memory, it's somewhere around November 1 to April 1.
12 Q. And that's my question. Lynn, you have
13 stock-water rights that basically abut, that come up to
14 the commencement of your irrigation rights. Is that
15 true?
16 A. The face of the right says that's the way it
17 is. As I say, there's a lot of those rights. To
18 remember them all, I don't know if you've ever looked
19 through all of them, there's a lot of rights.
20 Q. And I guess the adjudications help clear some
21 of that up, some on consolidation and some --
22 A. Yes. There's been a number of changes from
23 what it was originally.
24 Q. Other than the Big Wood Canal Company, are
25 there other decrees that divert water from the Big Wood

Page 55

1 River at the head of the Richfield Canal?
2 A. There are a number of decree rights that
3 belong to individual stockholders of the canal company,
4 that the canal company delivers those rights under the
5 purview of the river watermaster's guidance to --
6 through their system to those users.
7 Q. Okay. And I guess to ask the question another
8 way or to clarify, the watermaster is in charge of
9 monitoring those rights, but he does so with the
10 assistance of the Big Wood Canal Company?
11 A. That's correct.
12 Q. And vice versa. He may also -- I take that
13 back.
14 Are you familiar with what's commonly known as
15 the "Big Cottonwood rights"?
16 A. I know there was Big Wood Cotton -- Big
17 Cottonwood Canal Company ceased to exist, and a lot of
18 those rights were bought up by the Big Wood Canal
19 Company or transferred over to the Big Wood Canal
20 Company.
21 Q. And some of those rights were either purchased
22 or retained by individual shareholders?
23 A. There are some that belong to individuals,
24 yes.
25 Q. And those are Little Wood River rights -- or,

Page 56

1 excuse me, Big Wood River rights?
2 A. Yes.
3 Q. Okay. And they would be delivered through the
4 Richfield Canal?
5 A. Yes.
6 Q. And on some of those decree holders, those
7 rights are diverted through the Richfield Canal to the
8 Jim Byrne Slough, injected into the Little Wood, and
9 then re-diverted out of the Little Wood?
10 A. That's correct.
11 Q. Okay. And that would be -- that would include
12 delivery west of Shoshone and west of the bifurcation?
13 A. I believe there are a few, yes.
14 Q. Lynn, do you recall when the priority date on
15 Big Cottonwood water is?
16 A. No, I don't, off the top of my head.
17 Q. Do you recall when the period of use for the
18 Big Cottonwood water is?
19 A. You know, I don't. Usually those rights were
20 administered by the State's watermaster, and they varied
21 with individual users. So to tell you all those,
22 without having records to go through, I don't remember,
23 primarily because the watermaster for the river you see
24 administered all those, so they just sent over decree
25 slips, and we delivered according to those dates.

Page 57

1 Q. Lynn, do you remember Kenny Leonard's
2 (phonetic) place?
3 A. I know where it's at, yes.
4 Q. And do you recall if that had Big Cottonwood
5 water on it?
6 A. Boy, you know, I don't.
7 Q. Let me ask you another question. You talked
8 about decree users which have their own decree rights
9 out of the Big Wood River and that the Big Wood Canal
10 Company facilitates that diversion through the Richfield
11 Canal; is that correct?
12 A. Not all of them go through the Richfield
13 Canal. Some of them come down through the Shoshone Main
14 and deliver the other direction.
15 Q. Well, do any come through the Richfield Canal?
16 A. Yes.
17 Q. Okay. Do any of those have a period of use
18 from March 15th to November 15th for irrigation?
19 A. You know, I don't recall on those individual
20 rights.
21 Q. Is it possible?
22 A. I'm sure it's possible.
23 Q. Whatever those rights would be would be within
24 the records of the Department?
25 A. They should be, yes.

Page 58

1 Q. So, anyway, there's at least a possibility
2 that irrigation right is on the commencement of the
3 period of use in mid March?

4 A. There is that possibility. But as I
5 mentioned, there's a 1936 court case on a lot of those
6 individual rights that were on the river prior to the
7 canal company. And according to that lawsuit, if the
8 water that was in the river was not adequate to deliver
9 those rights below the dam, then those rights could all
10 be stored.

11 So, primarily, those rights are all delivered
12 during the normal irrigation season along with the canal
13 shares.

14 Q. All right. My memory of that litigation was
15 based on measurements of inflow into the reservoir, as
16 well as calculated river loss --

17 A. Yes.

18 Q. What was the figure? 60 CFS?

19 A. I think it was 70 CFS coming into the
20 reservoir. If it was above that, then use can be
21 deliverable.

22 Most of the people that had those rights were
23 more than happy to have that water right stored, because
24 it made a lot better water right for them than to try to
25 have it delivered in the off-season.

Page 59

1 Q. So to step back, one thing at a time, other
2 times in -- has there been years, to your knowledge,
3 that flows into the Magic Reservoir on March 15th is 70
4 CFS or better?

5 A. Years that it was?

6 Q. Yeah.

7 A. Yeah. There were several years that it was.

8 Q. And the decree holder can either choose to
9 allow Big Wood Canal Company, if they weren't covered by
10 the -- let me step back.

11 The decree users could either choose the water
12 to be stored in the Magic Reservoir or, if the
13 conditions were met, as far as inflow, demand delivery?

14 A. Yeah, I don't know if anybody ever did.

15 Q. And, again, your personal knowledge begins
16 in --

17 A. '97.

18 Q. -- '97. Now, I want to switch gears a little
19 bit. When the Big Wood Canal Company is looking to
20 commence the irrigation system -- or irrigation season,
21 is there a process of charging the system and filling
22 the canals?

23 A. Well, there should be, but there really isn't.
24 Due to the extensive number of short years, they have
25 got to -- they just basically bring the water in and

Page 60

1 pretty much bring it up to what the early-season demand
2 is in a matter of about two days, and you're there.
3 They have gotten away from doing it otherwise.

4 Q. Okay. And that's on the Big Wood side?

5 A. On the Big Wood side.

6 Q. How about the Little Wood side?

7 A. Well, the Little Wood, if there's water in the
8 river, it will go into that Little Wood right, and
9 they'll start water to Dietrich at a little bit slower
10 pace than that, but...

11 Q. But I guess to follow-up, delivery isn't
12 instantaneous? As you indicated, two days sometimes?

13 A. There's areas the system will take three or
14 four days to get totally through the system.

15 Q. Okay.

16 A. It's a big system scattered out over a lot of
17 miles.

18 Q. Looking at the Richfield Canal and the Jim
19 Byrne Slough, from the head of the Richfield Canal to
20 the mouth of the Jim Byrne Slough, how long is it?

21 A. Oh, roughly, canal miles, it's around 24 miles
22 we figured.

23 Q. And how long would it take water to make that?

24 A. About 48 hours, if we've got water in the
25 system.

Page 61

1 Q. And back to the question of charging the
2 system, if you're trying to charge a blank canal, how
3 long would it take?

4 A. Well, with the volume that they bring in, it
5 doesn't take much longer than 48 hours to push it
6 through.

7 Q. Lynn, to clarify, Gauge No. 4, where is that?

8 A. What's that?

9 Q. Gauge No. 4?

10 A. It's there at the head of the Richfield Main
11 Canal.

12 Q. Okay. If 300 CFS was diverted into the
13 Richfield Canal, approximately how long would it take to
14 get to the East Canal?

15 A. You can put it through there in probably about
16 six to eight hours.

17 Q. Okay. And that would be the same for the West
18 Canal?

19 A. To the head of it, yes.

20 Q. And that would also be the same for the head
21 of the Jim Byrne, six to eight hours?

22 A. Yeah.

23 Q. So I guess if an individual went to the head
24 of the Richfield Canal and turned out 300 CFS and got in
25 his pickup and measured what he was doing with his daily

Page 62

1 measurements and drove from the head of the Richfield
2 Canal to the head of the East Canal, measurements very
3 well could be zero?
4 A. If you drive straight through, well, it won't
5 be zero, because a little bit of the wintertime flow
6 could be there. But if you drive straight down there,
7 it's not going to be down there the minute you get
8 there. It's going to take -- it takes a few hours.
9 Q. Okay. Lynn, would you look at Bates No. 3057.
10 A. Okay.
11 THE HEARING OFFICER: Which exhibit?
12 MR. JAMES: 108, Director.
13 THE HEARING OFFICER: Page what?
14 MR. JAMES: Page 18 of 3057.
15 THE HEARING OFFICER: Thank you.
16 BY MR. JAMES:
17 Q. Lynn, on the upper table, do you see a portion
18 that's highlighted?
19 A. Uh-huh. Yes, I do.
20 Q. And you see the measurement of 300 CFS at
21 Gauging Station No. 4?
22 A. On the 27th?
23 Q. No, on 11-1-87.
24 A. Oh, okay. Yeah, I see it.
25 Q. Could it be that that was the date the water

Page 63

1 was turned in?
2 A. You know, I do not know.
3 Q. The previous day on October 31, '87,
4 everything was zero, including Gauge 4; is that correct?
5 A. That's what the sheet says.
6 Q. So it would have to have been turned in at
7 some point?
8 A. That's true.
9 Q. And the first indication of there being water
10 turned in was on the following day, November 1, '87.
11 A. Okay.
12 Q. And you see the next measuring is at the East
13 Canal and zero?
14 A. Well, if they've got the gate closed, it's not
15 going to go down the East Canal. There is a gate there
16 that would prevent water from going down the East Canal.
17 Q. Okay. Would that be a circumstance of the --
18 it would all stay where?
19 A. It would all stay in the -- it would all go
20 into the HJB. If the East Main is closed off,
21 everything will go down to the Byrne Slough.
22 Q. Well, doesn't it also indicate that the Byrne
23 Slough was at zero?
24 A. Yeah.
25 Q. And then the very next day it appears that

Page 64

1 there's water all along the waterway?
2 A. My assumption is that they turned the 300 in,
3 and they listed it as going to be a recharge flow, even
4 though it did not reach through to those points. And
5 the next day, if you'll notice, it had reached through
6 in the various canals.
7 Q. So that would indicate to me that the
8 explanation is that it was turned in and hadn't reached
9 those individual stations yet?
10 A. It's a possibility.
11 Q. Lynn, I want to ask about return from the
12 Dietrich Canal into the Little Wood River. You
13 indicated that there was a return. Are there also
14 several laterals that return from the Dietrich Main into
15 the --
16 A. There are three or four laterals that come off
17 of the Dietrich system that return into the
18 (unintelligible) Canal.
19 Q. Okay. Are there any laterals other than --
20 are there any laterals that return into the Little Wood?
21 A. Other than the F waste, no, not as far as off
22 the Dietrich system.
23 Q. Okay. And then how many laterals off the
24 Dietrich Canal return inflow to the Gooding River?
25 (Unintelligible.)

Page 65

1 BY MR. JAMES:
2 Q. How many laterals off the Dietrich system have
3 returns into the Gooding-Milner?
4 A. There's four or five.
5 Q. Is there any mechanism to measure that return?
6 A. There are some weirs at the tail end of part
7 of those. At that time, I think there was probably at
8 all of them. But since that point in time, some of
9 those do not return due to pipelines and changes in
10 irrigation practices.
11 Q. In the period from 1980 to 1992, was there --
12 and if you don't have any knowledge of this, don't say
13 it. But do you have any knowledge of whether there was
14 measuring devices on those?
15 A. I don't.
16 Q. Lynn, also, you testified earlier about the
17 Dietrich floodway. What is that?
18 A. The Dietrich floodway?
19 Q. Uh-huh.
20 A. It was put in there by the Army Corps of
21 Engineers, to my knowledge, in the late '70s. The main
22 purpose of its installation was to alleviate flooding on
23 downstream on the Little Wood River. High water years,
24 the river gets high enough, and it floods outside its
25 banks, and it was to protect Shoshone and Gooding from

Page 66

1 floods.
2 Q. Okay. And in time of flood, a water permit
3 isn't necessary to divert it into that floodway; is that
4 correct?
5 A. We were always asked to do that.
6 Q. Okay. And who were you asked by?
7 A. The watermaster, a lot of times, asked us to
8 divert that. The Corps of Engineers in 2006 came in and
9 requested it, as I recall.
10 Q. I'm assuming there was probably a request in
11 2017, as well?
12 A. We released water in there. Yeah, I don't
13 remember a request, but I know we released water into
14 that.
15 Q. And what was the purpose of that release?
16 A. It was to help cut down flooding downstream.
17 Q. Okay. Are you aware of any requests either by
18 the Lower Snake -- hold on a second.
19 Are you aware of any requests made by the
20 Lower Snake River Recharge District or by the Idaho
21 Water Resources Board to divert water through the
22 Dietrich floodway?
23 A. I don't recall any.
24 Q. And you talked earlier about split duties
25 between the canal company and the watermaster. It's my

Page 67

1 understanding that floodway, there's a headgate on the
2 Dietrich Canal with 1970 written on it?
3 A. I don't remember the exact date, but I know it
4 was sometime in the '70s.
5 Q. Okay. Is that the headgate that would divert
6 water from the Dietrich Canal? Is that the floodway
7 you're talking about?
8 A. Yes.
9 Q. Okay. Who's responsible for that headgate?
10 Is it the canal company or the water --
11 A. The canal company goes out and operates the
12 actual facility, yes.
13 Q. And if there was a request by the Lower Snake
14 River Recharge District to deliver their recharge water,
15 would there be a record of that within the canal
16 company?
17 A. There might be. I can't say for sure. There
18 was not a lot of records kept on some of that stuff, not
19 early on.
20 Q. And then on the Gooding-Milner Canal -- you
21 might have answered this question and I didn't get it.
22 On the Gooding-Milner Canal between Station 53 and
23 Station 56, are there any diversions?
24 A. I was thinking there was one. In hindsight,
25 there is not. I had to think about that later. That

Page 68

1 old diversion does not exist anymore.
2 Q. Okay. And when did it cease to exist?
3 A. It was either just barely before I started or
4 just after.
5 Q. So that would be calendar year '96 to '97?
6 A. Yeah. And it was just a small diversion.
7 Q. Okay. So in the period 1980 through 1992,
8 there was a diversion there?
9 A. As I recall, I believe that's correct.
10 MR. JAMES: I think that's all I have,
11 Director.
12 THE HEARING OFFICER: Redirect, Ann?
13 MS. VONDE: Yes. Thank you. I have just a
14 couple of things.
15 REDIRECT EXAMINATION
16 BY MS. VONDE:
17 Q. And I'll be happy to toot your horn a little
18 bit here, which you probably know how to do, but you've
19 worked for the Big Wood Canal Company for 20 years.
20 Would you say there's anyone living, and I don't mean to
21 be crass, but anybody living who has a better knowledge
22 of the system and how it operates and how it works than
23 you?
24 A. Of the individuals there in the management
25 portion of it, as far as managers and assistant

Page 69

1 managers, they're all deceased.
2 Q. So you're the institutional knowledge for the
3 Big Wood Canal Company. Is that fair to say?
4 A. I guess.
5 Q. Whether you want that or not.
6 So you were handed some water rights to take a
7 look at, and those water rights have the season of use
8 on the face of the water right; is that correct?
9 A. Yes.
10 Q. And do all water rights have the season of use
11 listed on them? Do all water rights have a season of
12 use listed on them?
13 A. Yes.
14 Q. And in your experience, do water right holders
15 always use their water in exact accordance with the
16 season of use on the face of their water rights?
17 A. They're not required to, as long as they don't
18 start before that season of use or after that season of
19 use. They can start and stop anytime in between.
20 Q. So what sort of variables might affect start
21 and stop dates for irrigation?
22 A. Water supply, weather. Those are two things
23 that come to mind, initially.
24 Q. So when you testified earlier about the
25 average start dates for irrigation seasons of use, that

Page 70

1 was based on some of those variables. Is that fair?
2 A. That was based on my knowledge and then
3 looking at historic records for the canal company.
4 Q. Okay. And then I guess just one more
5 question. Do you have any personal knowledge about
6 whether water sinks into the basin off of the Dietrich
7 Canal? Does water drain through it?
8 A. It will sink out there. It takes it a while,
9 but it does soak in.
10 Q. Okay. I think that's all I have. Thank you.
11 THE HEARING OFFICER: Recross, Joe?
12 MR. JAMES: Just a couple. Lynn through me
13 this bone, so I have to ask.
14 RECROSS-EXAMINATION
15 BY MR. JAMES:
16 Q. Was Joe Paplico (phonetic), Sr., on the board
17 for American Falls Reservoir District 2?
18 A. Yeah, I believe he was on both boards at one
19 time.
20 Q. So on the question of any living person that
21 might have more institutional knowledge, is that a
22 possibility?
23 A. I don't know for sure what Joe has and
24 retained. My statement was management and assistant
25 managers that understood the day-to-day operations. We

Page 71

1 have a lot of directors that have sat on that board that
2 could not tell you how to get water from point A to
3 point B, not trying to downgrade their knowledge, but
4 they do not understand the general system.
5 Q. That was a little attempt at levity. I think
6 Joe is 97 now? 98?
7 A. And my understanding is his memory is still
8 pretty clear.
9 Q. So do you know of any testing that was done on
10 the floodway, or the basin where the floodway enters
11 into, as to where the water goes from there?
12 A. I'm not aware of the permeability studies, no.
13 MR. JAMES: No further questions, Director.
14 THE HEARING OFFICER: Okay. Lynn, I have a
15 few questions.
16 EXAMINATION
17 BY THE HEARING OFFICER:
18 Q. And what I want to focus on is the operation
19 of bifurcation. I want to understand how it actually
20 works. I had visited the bifurcation a couple of times,
21 many years ago. And then a couple of years ago I think
22 we were there -- I don't recall if any of you were, but
23 I think we visited with Kevin Lakey at the site.
24 And so I want you to just generally -- if
25 you'll refer to Exhibit 106, which is a photograph of

Page 72

1 the bifurcation structure.
2 A. Okay.
3 Q. So you referred to a concrete wall, a concrete
4 seal, that's about five feet tall that divides the
5 channel that delivers water to the Little Wood River and
6 the flow path for the siphon?
7 A. Yes.
8 Q. And that's five feet?
9 A. That's an estimate on height. But there is a
10 wall that goes across there. It may not be quite that
11 tall, but there is a wall that goes across there.
12 Q. And that wall is a fixed wall?
13 A. It is a fixed wall, yes.
14 Q. It's irremovable then?
15 A. Yes.
16 Q. And so how do you control the amounts of water
17 that flow into the siphon versus the amount of water
18 that is discharged to the Little Wood River?
19 A. You cannot see it, but at the very bottom of
20 this photo, if you can see, there's a gearbox there for
21 another radial gate. So there's a radial gate that sits
22 at that point, plus there's a radial gate that sits at
23 the head of the siphon. So regulations are done through
24 those radial gates to adjust the additional flow.
25 The other is just kind of -- as you order

Page 73

1 water into the system, before you make the adjustments
2 on that gauge, it gives it a place to spill over, and
3 instead of overtopping your canal, you actually overflow
4 that into the Little Wood River and then make the
5 adjustment back. But, generally, we always leave a
6 little bit of water over that wall just as normal
7 operations so it cuts down on the amount of time with
8 any fluctuation.
9 Q. So there is a flow path --
10 A. Under the radial gate.
11 Q. -- under the radial gate, and that flow path
12 is in the direction from the bottom right of the
13 photograph to the top left?
14 A. Yes.
15 Q. And then as additional water contributed to
16 the Little Wood River, that flows over top of the
17 five-foot wall?
18 A. Yes.
19 Q. And then you can control the amount of
20 backwater -- I suppose I can call it backwater -- by
21 adjusting two radial gates then and refining that
22 adjustment and determine how much water flows to the
23 siphon and the Little Wood River?
24 A. That's correct.
25 Q. And can you tell me approximately what the

Page 74

1 difference in head is between the Little Wood River,
2 elevation and the (unintelligible) above the radial
3 gates?
4 A. Boy, you know, I do not -- I know it's fairly
5 close to surface elevation, and the floor of that canal
6 below that radial gate are very close to equal. But
7 I've never shot those elevations to know exactly what
8 they are.
9 Q. Now, tell me again what you think is
10 approximately equal.
11 A. The surface lateral in the river, at low
12 flows, is just about the same elevation as the floor of
13 that canal. So, you know, if there's any bouncing
14 around, usually it's -- I'm trying to figure out how to
15 word this so it's correct.
16 For instance, with a flow of maybe 60 CFS in
17 that river, you'll get 20 to 30 of it flow back into
18 that canal if there's no water in that Milner-Gooding
19 Canal.
20 Q. And that's with a radial gate?
21 A. Even with the radial gate closed, it will leak
22 that much. Those seals just do not hold.
23 Q. So it leaks past the radial gate?
24 A. Yeah. It will leak right underneath and
25 around that radial gate.

Page 75

1 Q. And so the purpose of constructing a
2 cofferdam --
3 A. Is to keep the river in the river.
4 Q. And the cofferdam then prevents that leakage
5 from flowing upstream into the canal?
6 A. That's correct.
7 Q. And has it been the practice, at least while
8 you've been managing the canal, to construct that
9 cofferdam to prevent that leakage?
10 A. Yes, it has.
11 Q. And is that true every year that you've
12 managed the canal?
13 A. Yeah. We put one in every year.
14 Q. And you referred to the year 2017 as a year
15 when you observed flow in the Milner-Gooding Canal
16 during the non-irrigation season.
17 A. Uh-huh.
18 Q. And as I recall your observation, it was that
19 you observed about three minutes CFS?
20 A. Yeah. The flow -- no, it's during irrigation
21 season. I do need to correct that. The flow was
22 somewhere in the neighborhood of 300 CFS. The river was
23 probably running between five and six. And the head
24 pressure was great enough that that water was actually
25 flowing upstream under that radial gate against the

Page 76

1 Milner flow and going around and down that siphon.
2 Q. So it was during the irrigation season?
3 A. Yeah, just the very start of irrigation
4 season.
5 Q. And what kind of year would you characterize
6 2017 being?
7 A. It was a high water season. We had high
8 water. I did not witness the previous high water years.
9 I don't think I was even out there at those points in
10 time. But I'm going to assume that a similar occurrence
11 could have taken place on other high water years when
12 flows were of a similar nature.
13 Q. And would it be an incorrect statement for me
14 to characterize the conditions on the lands at Magic
15 Valley as being a wash in floodwaters?
16 A. Yeah, there was a lot of water around. I
17 don't know if it was a wash, but...
18 Q. Well, were there floodwaters that actually
19 flowed into the Milner-Gooding Canal from lands that
20 were inundated in and around the canal itself?
21 A. Prior to irrigation. Most of that runoff had
22 occurred prior to irrigation season.
23 Q. Okay.
24 A. Across the desert.
25 Q. Okay. Thank you. I have a better

Page 77

1 understanding of the operation of bifurcation. I don't
2 have any further questions. Anybody want to follow-up?
3 MS. VONDE: No, thank you.
4 THE HEARING OFFICER: Joe?
5 (No verbal response.)
6 THE HEARING OFFICER: Okay. Thanks. Thank
7 you.
8 MS. VONDE: Thank you.
9 THE HEARING OFFICER: Do you want to move that
10 this witness be excused, Ann?
11 MS. VONDE: Yes, please.
12 THE HEARING OFFICER: Do you want a break, or
13 do you want to just forge ahead?
14 MS. VONDE: Maybe just a five-minute bathroom
15 break.
16 THE HEARING OFFICER: That will be fine. Five
17 minutes.
18 (Recess.)
19 THE HEARING OFFICER: We're recording again
20 after a morning recess. Ann, your next witness.
21 MS. VONDE: I'd like to call Erick Powell,
22 please.
23 THE HEARING OFFICER: Mr. Powell, if you would
24 come forward.
25 GEORGE ERICK POWELL,

Page 78

1 having been called as a witness by the Respondent and
2 duly sworn to tell the truth relating to said cause,
3 testified as follows:

4 THE HEARING OFFICER: You may examine the
5 witness.

6 MS. VONDE: Thank you.

7 DIRECT EXAMINATION

8 BY MS. VONDE:

9 Q. Mr. Powell, could you please introduce
10 yourself and spell your name for the record.

11 A. Absolutely. My name is George, G-e-o-r-g-e;
12 Erick, E-r-i-c-k; Powell, P-o-w-e-l-l.

13 Q. What is your formal education?

14 A. I have a bachelor's and master's degree in
15 civil and environmental engineering, and a PhD in
16 agricultural engineering.

17 Q. And what professional licenses do you hold?

18 A. I am a registered professional engineer in the
19 State of Idaho, Utah, and Oregon.

20 Q. And are you also a certified water rights
21 examiner in the State of Idaho?

22 A. I am a certified water rights examiner.

23 Q. What is involved in becoming a certified water
24 rights examiner?

25 A. The Code spells out that you must be a

Page 79

1 professional engineer or a professional geologist and
2 have experience with measuring water flow.

3 Q. And what is your understanding of the
4 statutory rule of water rights examiner? Where do they
5 come into the water rights process?

6 A. So when a water right is first applied for for
7 the State, the State, if they approve that, issues a
8 permit. A permit phase includes the development of a
9 water right to bring that water to the beneficial use.

10 During that development period end, the
11 applicant or the permit holder is required to file a
12 proof of beneficial use statement. And at that time
13 they can either have the Department of Water Resources
14 come out and do a beneficial field exam, or they can
15 hire a certified water rights examiner to do that exam
16 to speed up the process.

17 Q. Is your certified water rights examiner
18 accreditation up to date?

19 A. It is.

20 Q. I don't know if it ever expires, but...

21 A. Yeah, every year.

22 Q. Does it expire?

23 A. Every year we have to renew that
24 certification.

25 Q. And how do you renew it?

Page 80

1 A. We pay the State a \$50 fee. I believe it's
2 \$50.

3 Q. Okay. What previous job experience do you
4 have that you feel is applicable to your work as a
5 certified water rights examiner?

6 A. I did a lot of work as a graduate student on
7 measuring surface-water flow. That was in Ohio. And so
8 I have extensive experience in measuring surface-water
9 flow.

10 As a professional engineer, I've measured
11 pipe-flow ease, morphosis, and meters. And so we
12 measure a lot of enclosed systems but also measure
13 surface flow with different flow meters, as well.

14 Q. Do you have any publications or other
15 accreditations that you think are applicable to your
16 work as a certified water rights examiner?

17 A. No publications. I've written lots of
18 reports. I've done a lot of water right analysis
19 transfers, expert witness for water right proceedings,
20 but nothing that's published.

21 Q. Okay. Where are you currently employed?

22 A. I am employed at Brockway Engineering in Twin
23 Falls, Idaho.

24 Q. And what are your duties there? What do you
25 do?

Page 81

1 A. I'm a professional engineer dealing with a
2 variety of water-related issues. Our firm specializes
3 in water, water engineering, water resource engineering,
4 hydrology, hydraulics. I include water rights -- I'm a
5 project engineer so I receive a variety of projects
6 throughout the whole State of Idaho.

7 Q. And so in addition to engineering work, I
8 guess, is your engineering work sometimes geared towards
9 the water rights process and transfers acquiring water
10 rights, that sort of thing?

11 A. Yes. Some of it is.

12 Q. While employed with Brockway Engineering, have
13 you worked on any other water right cases as a certified
14 water rights examiner?

15 A. I have.

16 Q. And what were those?

17 A. They are a variety of different ones. The
18 most recent one was a domestic heating and cooling
19 system that was up in the Sawtooth Valley, in the
20 Stanley Basin.

21 Q. And did you provide a beneficial use field
22 report for that?

23 A. I did do the beneficial use field exam and
24 provided, yeah, the scope of what was necessary to get
25 that water right permit licensed.

Page 82

1 Q. How many times have you testified as a
2 certified water rights examiner in an administrative
3 water rights case?

4 A. Does that include being an expert witness on
5 any case? Or does it have to be geared towards just as
6 a certified water rights examiner?

7 Q. Right now I'm just asking about certified
8 water rights examiner, and then we can talk about just
9 expert, in general.

10 A. Okay. I don't think I've ever served as an
11 expert witness for any water right permit through the
12 licensing exam. It has never gone that far.

13 Q. Okay. And then how many times have you just
14 testified as an expert in an administrative hearing or
15 even a court trial?

16 A. I think about four. I think I've done this
17 four times.

18 Q. Okay.

19 A. So this would be the fifth.

20 Q. And what were those generally?

21 A. Two of them were -- actually, no, I take that
22 back. One was a permit application for recharge in the
23 Albion Basin. I served as a witness for opposition to
24 permit applications in the Big Wood Valley, transfer --
25 groundwater transfer also in the Albion Valley, and then

Page 83

1 I was an expert witness in a civil court case. And that
2 was just outside of Jerome.

3 Q. And what was the general content of your
4 expert testimony in those cases? Was it as a certified
5 water rights examiner? Was it as an engineer? What was
6 your --

7 A. It definitely included water rights,
8 heavy-dosed water rights in every one of those cases.
9 But my expertise as an engineer also came into play,
10 whether that was groundwater modeling or surface
11 measurements or, you know, just the scope of my
12 education and experience.

13 Q. So, did I ask you to provide a certified water
14 rights examiner analysis of the beneficial use of water
15 made between 1982 and 1992 for water right 37-7842?

16 A. You did, yes.

17 Q. So let's take a look at that report, which is
18 Exhibit 108. Are there any documents that you reviewed
19 in preparation of this report but did not include in the
20 report?

21 A. Yes. I did look at a variety of things that I
22 thought were interesting but not really entirely real
23 relevant, including weather data and just historical
24 evidence that's found as public information that's
25 available on the internet.

Page 84

1 Q. Did you review the back file for water right
2 37-7842?

3 A. Yes.

4 Q. And did you review the back file for water
5 right 01-7054?

6 A. I looked at that briefly. I did not review
7 that in as much detail as I looked at the water right in
8 question of 7842.

9 Q. So the documents that you reviewed and
10 ultimately did not include in your report, was that
11 because you just did not find them relevant to your
12 analysis?

13 A. Or they were redundant or they just, yeah,
14 were outside the scope of what I felt was germane to the
15 hearing.

16 Q. Okay. So when you were presented with water
17 right permit 37-7842 to review, how did you begin to
18 narrow the scope of what you were going to do your
19 analysis on?

20 A. Well, I started with the water back file to
21 try to get an understanding of what had been done, why
22 we were in the situation we're in. And so I definitely
23 reviewed the documents that were available from the
24 State in that water right back file.

25 I also used heavily, and we'll get into this a

Page 85

1 little bit later on, but the records from the Big Wood
2 Canal Company that were handwritten that led to the
3 development of the watermaster annual diversion book
4 that's been referred to several times already in this
5 hearing.

6 Q. Okay. Did you look at the application for
7 37-7842, the application document itself?

8 A. Yes, and that's part of the back file. And
9 that's where I started.

10 Q. And did you look at -- and I guess that
11 application is also, in this case, the permit for the
12 water right; is that correct?

13 A. Yes. When the permit was approved, there were
14 some other conditions that were added on. But that's
15 the permit.

16 Q. Okay. And did you also review the
17 advertisement --

18 A. I did.

19 Q. -- that was the original one that was sent out
20 on this water right?

21 A. Yes.

22 Q. Okay. Let's flip to Appendix B and C. Let's
23 take a look at, well, B first. Do those appendixes
24 include the application, that advertisement, and the
25 permit for water right 37-7842?

Page 86

1 A. Appendix B includes the application and the
2 advertisement. The actual permit, I believe, is in
3 Appendix C.
4 Q. Okay. So we'll go back to -- let's look at
5 Appendix B, the application for permit, and just discuss
6 this again. I believe Michele already touched on this.
7 But this is a little bit different than what
8 we would normally see. There aren't two documents.
9 There's not a permit and an application. In this case,
10 they are one in the same documents; is that correct?
11 A. Correct. Yes.
12 Q. So when you were looking at the elements of
13 determining what the permit said, what did you consider
14 to be the elements of the permit?
15 A. So I considered the elements of the permit,
16 those that were applied for and approved by the
17 Department of Water Resources. So do you want to go
18 through all those?
19 Q. Not -- you don't have to right now.
20 A. Okay.
21 Q. But just in terms of -- the application itself
22 sets forth those elements; is that correct?
23 A. Absolutely.
24 Q. Yeah, okay. And then the permit addendum,
25 which is on Water Resource Board page No. 3090 is simply

Page 87

1 an approval of those elements as set forth in the
2 application, and then did it also add some conditions,
3 as well?
4 A. Correct. And so this is the approval of the
5 permit application that was filed.
6 Q. Did the information contained in the
7 application permit and the advertisement help you to
8 develop a biogs or framework or sort of bookends for
9 your analysis?
10 A. It did.
11 Q. And how did it do that?
12 A. So a permit, when it's applied for, is the
13 maximum amount of water, kind of the big picture,
14 everything that they would like to develop during that
15 period. And so that puts constraints on what can be
16 developed.
17 Q. Okay. So can you take a look at Exhibit 108,
18 Appendix D, which starts on page -- well, the actual
19 document starts on page 3095.
20 A. Yes.
21 Q. And then you can just kind of flip also to
22 Appendix E, which starts on page 3114. What are those
23 two documents?
24 A. These documents, Appendix D on page 3095, is
25 the additional information that was provided by Gerald

Page 88

1 Martens, the certified water rights examiner, in 1993,
2 which was requested by the Department after the original
3 materials were submitted in 1992.
4 And then, as was discussed yesterday in great
5 detail, Appendix E on page 3114, is the memorandum that
6 was prepared by Michele Edl regarding this permit
7 evaluation from IDWR staff, and her, specifically.
8 Q. And did you review those documents?
9 A. I did.
10 Q. Did you feel that your analysis of beneficial
11 use needed to or should be constrained by what was in
12 those documents?
13 A. I did not, because I was given the instruction
14 to take a look at this permit application with kind of
15 fresh eyes, not be constrained about what was done
16 previously. And so I viewed this and approached this as
17 I was looking at a brand new permit application for
18 beneficial use during the development period.
19 Q. So I guess it's fair to say maybe that the
20 permit and advertisement created sort of bookends
21 regarding the elements of the water right? Is that a
22 fair characterization of how you approached the
23 analysis?
24 A. Yes. That's a fair process for any permit
25 application, I would say.

Page 89

1 Q. Okay. Did you also need to put some bookends
2 on the dates that you were going to look at in terms of
3 the development period for this water right?
4 A. Yeah. There definitely was a lot of
5 additional information that was after 1992 that I did
6 not consider because of the reinstatement order that
7 kind of set the parameters from the approval of the
8 permit on June 2nd of 1982 through June 1st of 1992.
9 And so that's why I focused my investigation during
10 those periods.
11 Q. Okay. So can you take a look at Exhibit 108,
12 and can you see -- and we'll start on page 3090, which
13 contains the approval, the permit portion of the
14 application.
15 A. Okay.
16 Q. And then if you could just walk through that
17 document and the ones after it and describe what you
18 gleaned from those documents in terms of the development
19 period.
20 A. All right. So on page 3090 is the approval of
21 the permit with the proof date for the permit listed as
22 June 1, 1987. And then the following page, which I
23 don't see a page number, but I presume it's 3091, is a
24 request by the Lower Snake Aquifer Recharge District to
25 extend the development period from June 1, 1987 through

Page 90 1 June 1st of 1992. 2 Q. Was that approved, that request? 3 A. It was approved, yes. 4 Q. And to what date was it extended? 5 A. It was extended -- it was approved to June 1, 6 1992. 7 Q. Okay. And then does the reinstatement order 8 confirm those dates of the development period? 9 A. Yes, it does. 10 Q. Okay. So based on all these documents, what 11 did you conclude was the development period for this 12 water right? 13 A. So based on all the information, looking in 14 the water right back file, the development period was 15 from June 2, 1992 through June 1st of 1992. 16 Q. Okay. Have you ever tried to reconstruct 17 beneficial use on a water right from that long ago 18 before? 19 A. I have done some forensics hydrology 20 previously, and it's not an easy task. It's not an easy 21 task to evaluate what water was done or used for 22 beneficial use. I have tried to recreate a lapse permit 23 and develop a license exam for that. Unfortunately, I 24 don't recall the number for that, but it was off of the 25 Snake River. But there was -- I've actually done it	Page 92 1 applicant, the Department, to evaluate that and protest 2 it. I mean, it's really hard to just, you know, try to 3 recreate that data. 4 Q. All right. So let's take a look at sticking 5 with -- are we still on Exhibit C? Yeah, sticking with 6 Exhibit 108, Appendix C, and let's look at the Bates 7 page 3086, which is the first page of the application. 8 When you looked at the face of the 9 application, what did that tell you about who owned this 10 water right? 11 A. So the applicant was actually a group of four 12 individuals that, upon reading the back file, 13 additionally, were the group that were originally going 14 to form the Lower Snake Aquifer Recharge District. But 15 they were doing this proactively so they could get a 16 better priority date. 17 Q. So when you looked at that and you saw that 18 the Water Resource Board was not the original owner, did 19 you try to go back and recreate the ownership chain of 20 this water right? 21 A. I did. I tried to figure out how it went from 22 the applicants to the Lower Snake Aquifer Recharge 23 District and then that assignment eventually to the 24 Idaho Water Resource Board. 25 Q. Can you take a look at the same exhibit,
Page 91 1 twice, in addition to this work, on trying to recreate 2 historical beneficial use. 3 Q. Okay. What challenges or concerns does just 4 trying to recreate beneficial use that far -- what does 5 that pose for you? 6 A. It's just lack of information, lack of 7 records, especially diversion rates are very difficult 8 to determine and verify, not to mention the relying on a 9 lot of information that may be spot information, like 10 aerial photography that was taken on one snapshot one 11 day in time as opposed to continuous records of 12 information. 13 Q. Do you find that there are often holes in 14 documentation that long ago? Maybe people didn't 15 document things as thoroughly as we might do them now? 16 A. Absolutely. Absolutely. 17 Q. So we have to work with what we have to work 18 with. Is that fair? 19 A. Yes. 20 Q. So in your opinion, does a delay in trying to 21 do a beneficial use exam like this, does that kind of 22 put the applicant at a disadvantage in terms of 23 demonstrating beneficial use? 24 A. Yes. I would feel, you know, it makes it 25 difficult for all parties involved, whether it's the	Page 93 1 Appendix G, Bates No. 3187 to 3192. And can you just 2 please walk me through those documents and what they 3 have to say about ownership of this water right? 4 A. Absolutely. So Appendix G talks about the 5 assignment of the permit from Dan McFadden, who was the 6 chairman of the Lower Snake Aquifer Recharge District, 7 and assigned a permit to the Idaho Water Resource Board 8 in 1999, so that was after proof was filed and the 9 beneficial use exam by Gerald Martens was done. 10 The following documents that's Bates No. 3188, 11 3189, going on to the end of that appendix, 3192, are 12 documents, first of all, agreeing -- the first three are 13 agreeing to the assignment of that permit by the Water 14 Resource Board. 15 I'm sorry. That's an agreement from between 16 the Board and the Snake Aquifer Recharge District. Then 17 the last page is the resolution by the Board to accept 18 the permit assignment. 19 Q. And based on those documents, what did you 20 conclude with regard to the ownership of this water 21 right? 22 A. So based on those documents, I concluded that 23 the Department correctly -- the ownership shifted from 24 or changed from the Lower Snake Aquifer Recharge 25 District to the Idaho Water Resource Board.

Page 94

1 Q. Okay. Let's go back to Exhibit -- or Appendix
2 C, please. And you can just reference this as needed.
3 But what did the permit and advertisement
4 indicate to you with regard to the scope of the sources
5 of water that could be used under permit 37-7842?
6 A. So both the permit application and the permit
7 approval and the advertisement of the permit application
8 list the source of water as the Big Wood and Little Wood
9 Rivers.
10 Q. And what do those same documents indicate to
11 you with regard to the scope of the quantity of water
12 that could be used under the permit?
13 A. So the request was made for 800 CFS from
14 either or both sources.
15 Q. And what did those documents indicate to you,
16 with regard to the scope of the purpose of use, that
17 water right 37-7842 could be put to?
18 A. The purpose was for recharge, groundwater
19 recharge.
20 Q. And what did they indicate with regard to the
21 points of diversion?
22 A. There is one point of diversion that was
23 listed and advertised in the southwest and southeast
24 quarter, Section 24, Township 4 south, 19 east.
25 Q. Okay. Taking a look at Exhibit 108, Figure 1,

Page 95

1 which is on Bates page 3062, did you create this map?
2 A. I did create this map.
3 Q. Okay. And how did you create it?
4 A. Using RJIS and information that was available,
5 public information, aerial photography, data from the
6 Department of Water Resources for river systems and
7 canal systems, and then identifying aspects of the
8 permit, place of use, and point of diversion as
9 identified in the permit application, advertisement, and
10 approval.
11 Q. So you looked at the permit and the
12 advertisement and placed the POD on this map?
13 A. Correct.
14 Q. And can you point out where that POD was
15 located?
16 A. The POD is Township 4 south, Range 19 east.
17 It's shown -- my map is in black and white, so I don't
18 know what color it is.
19 Q. Yeah. Mine is, too.
20 A. I don't remember what colors.
21 Q. Is it magenta or green? Magenta.
22 A. On that one?
23 Q. Okay, yeah. So when you -- and then did you
24 also look at the permit application in terms of the
25 place of use and also indicate that place of use on this

Page 96

1 map?
2 A. I did include the place of use, and those are
3 highlighted in yellow, I believe. All the township and
4 ranges that were requested on the application map, there
5 is some discrepancy from the map that was included in
6 the application material and actually what was
7 advertised. And so I used the map application, because
8 that's what was approved.
9 Q. Okay. And then did you also include the canal
10 systems that were indicated on the face of the permit?
11 A. I did. So the canal systems are also showing
12 delivery of water from the Big Wood/Little Wood Rivers,
13 the Richfield Canal, the Dietrich Canal, and then the
14 Milner-Gooding Canal with water delivery from the Snake
15 River.
16 Q. And why did you include those canal systems in
17 the POD?
18 A. The canal systems were included because they
19 were included in the application material that was on
20 No. 6 talking about the description of the delivery of
21 that water, use of that water to the POU.
22 Q. And was that same description also contained
23 in the advertisement?
24 A. It was.
25 MS. BLADES: Can I interpret you just for a

Page 97

1 second?
2 MS. VONDE: Sure.
3 MS. BLADES: If you have a color version of
4 this, would you be able to put it actually in the
5 exhibits? He's referring to colors, and the official
6 color we have is black and white.
7 MS. VONDE: Yeah, all of mine are black and
8 white, too.
9 (Unintelligible.)
10 BY MS. VONDE:
11 Q. Is that the only map that you can get printed
12 in color?
13 A. No, none of them are in color.
14 Q. None of them are in color?
15 A. I have colored copies in my stuff, as well.
16 Q. Okay.
17 A. Mine are hole-punched in that binder, so..
18 THE HEARING OFFICER: It would be better if
19 the witness refers to color that the exhibits also
20 exhibit color, if not for me, for somebody else looking
21 at them.
22 MS. BLADES: Maybe just as we go, if we're
23 referring to color (unintelligible.)
24 MS. VONDE: Sure. They should be in the other
25 exhibits.

Page 98

Page 100

1 THE WITNESS: Okay.

2 BY MS. VONDE:

3 Q. Is there anything else that we didn't talk
4 about that went into your initial determination of the
5 scope of what you're going to be sort of analyzing with
6 this water right, in terms of the elements of the water
7 right?

8 A. Not that I can think of off the top of my
9 head.

10 Q. So the permit was the starting point for your
11 analysis. What was your next step to gain familiarity
12 with what was going on on the ground in this area?

13 A. So the next step that I undertook was to
14 review the previous work that was done just to see what
15 was available in terms from Mr. Martens and Ms. Edl on
16 that information that was provided.

17 Q. Did you conduct any interviews to get an
18 understanding of the canal system and the physical --
19 sort of the physical geography of this area?

20 A. I talked to -- most specifically I talked to
21 Lynn Harmon several times on the phone and got, you
22 know, inside information with his expertise of the canal
23 system operation. Also, just in our office, I talked to
24 both Chuck Brockway, Sr., and Chuck Brockway, Jr., who
25 have extensive knowledge of that whole area, as well.

1 A. That's correct.

2 Q. Based on your review of the Richfield, the
3 Dietrich, and the Milner-Gooding Canal systems, in all
4 the research you did, what did you conclude with regard
5 to the sources of water that could have been used in the
6 place of use listed on the permit application and
7 advertisement?

8 A. I'm sorry. Can you restate that for me?

9 Q. What did you conclude with regard to the
10 sources of water that would have been used and were used
11 under this water right permit?

12 A. Under this permit, I determined that water
13 from both the Big Wood and Little Wood water -- Little
14 Wood River waters could be delivered -- could be
15 diverted and delivered for use of recharge.

16 Q. So is it possible to get Big Wood water into
17 the Richfield Canal?

18 A. It is possible to get Big Wood water into the
19 Richfield Canal.

20 Q. And did you find recharge of Big Wood River
21 water in the Richfield Canal? And you don't have to get
22 into the details at the moment, but...

23 A. Yes, I did.

24 Q. Okay. Is it possible to get Big and Little
25 Wood River water into the Dietrich Canal?

Page 99

Page 101

1 Q. Did you do any site visits?

2 A. I did do a site visit to look specifically
3 again at the bifurcation and the diversion from the
4 Little Wood into the Dietrich Canal system. Years ago I
5 visited the diversion into the Richfield system, and I
6 didn't think it was warranted to go back and look at
7 those.

8 Q. And did you take the photographs that are
9 attached to the report?

10 A. I did.

11 Q. And did you then put together some maps based
12 on what you found in terms of on the ground, geography
13 of the system?

14 A. I did put together the maps. I obviously did
15 not walk or drive the entire length of all the canals.
16 And so I relied on the Department and the information
17 that was provided by the Department on the location of
18 those canals.

19 Q. And did Lynn Harmon testify to the content of
20 those maps?

21 A. He did.

22 Q. Okay. So you've already stated that the
23 permit and advertisement contemplated that water from
24 both the Big and Little Wood Rivers could be used under
25 water right 37-7842; is that correct?

1 A. It is possible, yes.

2 Q. And did you find recharge of Big and Little
3 Wood River water in the Dietrich Canal?

4 A. Yes.

5 Q. And is it possible to get Big and Little Wood
6 River water into the Milner-Gooding Canal?

7 A. It is possible.

8 Q. And did you find recharge of those sources at
9 the Shoshone site?

10 A. I did find recharge there.

11 Q. So let's take a look at Exhibit 108, Figure 1
12 again, the map.

13 A. Okay.

14 Q. That figure depicts the location of the point
15 of diversion that we've already mentioned is in magenta.
16 When you looked at that point of diversion a little bit
17 closer, what did you notice about it?

18 A. That it is not on any of the water courses.
19 It's on the Big Wood River or the Little Wood River.

20 Q. And so did that cause you to think you needed
21 to investigate the point of diversion a little bit more?

22 A. Absolutely. And there's also references in
23 the back file on notes that that point of diversion was
24 incorrect.

25 Q. So let's take a look at Exhibit 108, Appendix

Page 102

1 H, which begins on Bates No. 3193.
2 A. Yes.
3 Q. Are those the documents that you referred to?
4 A. They are. Uh-huh.
5 Q. And what do those documents indicate?
6 A. It just indicates that the point of diversion
7 that's described in the application appears to be an
8 error and that the point of diversion appears to be in
9 the same quarter-quarter, just in Section 25 of the same
10 township and range.
11 Q. Okay. So it was recognized fairly early on
12 that that probably wasn't a correct location?
13 A. Yeah, in 1981.
14 Q. Okay.
15 A. And then there's another note saying that
16 Glen's notes are correct.
17 Q. So you recognized at that point the diversion
18 was likely incorrect. What do you think, even though it
19 was maybe -- where do you think it should have been?
20 Where do you think they meant for it to be, and what
21 were they trying to incapsulate with that point of
22 diversion probably back in the day?
23 A. So I would agree with the notes in the back
24 file, that it's the same quarter-quarter, just in a
25 different section on the same township and range, and

Page 103

1 that location is where the Jimmy Byrne Slough
2 confluences with the Little Wood River.
3 And so with the application, I tried to figure
4 out why it was so limited -- the application is limited
5 to one point of diversion in the application. So I
6 think that they were trying to describe the source of
7 both waters from the Big Wood and the Little Wood coming
8 together and being diverted at that location, so...
9 Q. So that's not how points of diversion would be
10 recommended today --
11 A. No.
12 Q. -- for a water right like this? Do you
13 recommend that the points of diversion -- was it your
14 conclusion that they should match the point of diversion
15 that was listed on the permit and advertisement, or
16 should they be different?
17 A. So I recommended that the point of diversion
18 is different than what's listed on the application.
19 Q. And in your experience, is it unusual for a
20 point of diversion to change locations from what was
21 contemplated on the permit?
22 A. Not always. Usually they try to stay within
23 the same quarter-quarter, but it's often times they do
24 change those points of diversion, especially with wells
25 for a variety of different reasons, but it's not

Page 104

1 uncommon.
2 Q. And is there a statutory process for changing
3 a point of diversion that's listed on a permit?
4 A. There is an amendment process. Often times
5 that will have to be re-advertised.
6 Q. All of the points of diversion that you
7 ultimately ended up recommending in your report, are
8 they still within the original permitted advertised
9 place of use?
10 A. Yes, if you include the canal delivery
11 systems.
12 Q. So your analysis of where the points of
13 diversion would be, was that based also in part on where
14 you ultimately found indications of recharge?
15 A. Correct. Yes.
16 Q. All right. Let's take a look at -- so, yeah.
17 Let's take a look at Exhibit 108, Figure 7, which starts
18 on Bates page 3068.
19 Does your recommended place of use that you
20 depict here -- is this the right one? No, not the right
21 one. Yes. Sorry. That is correct.
22 Does this -- does the recommended place of use
23 that you depict here, does that exactly overlap the
24 place of use that was described in the permit and
25 application or advertisement?

Page 105

1 A. The place of use described here is much
2 smaller than the applied place of use in the
3 application.
4 Q. Why --
5 A. Significantly smaller.
6 Q. And why did you end up reducing the POU?
7 A. The original application contemplated recharge
8 throughout the entire Lower Snake Aquifer Recharge
9 District boundary, which was numerous township and
10 ranges throughout the whole area, and I did not find any
11 records that recharge occurred any other location
12 besides along the Richfield Canal at the Dietrich
13 recharge site and the Shoshone recharge site.
14 Q. So based on that, you decided to reduce the
15 place of use?
16 A. Correct.
17 Q. And is that unusual, for a permitted place of
18 use to be reduced?
19 A. No, especially -- you know, they threw the net
20 very wide during this application. And so that's not
21 unusual.
22 Q. All right.
23 A. Sorry. Not to interrupt, but if we're going
24 to do this one, do you have a copy?
25 Q. Yes. Thank you for reminding me.

Page 106

1 A. Thank you.

2 Q. When you began to analyze the quantity of
3 water used under permit 37-7842, you decided to focus on
4 canal measurements; is that correct?

5 A. That is correct.

6 Q. And why did you just decide to look at canal
7 measurements?

8 A. That's the only data I could find from the
9 development period that I could rely on.

10 Q. Why was that the most reliable?

11 A. Because the Big Wood Canal Company does have a
12 lot of quality control associated with measurement of
13 data, and they do the best job they can, and then they
14 provide that to the watermaster who further evaluates it
15 and refines it, and then it's submitted to the
16 Department as the official record of what was delivered.

17 Q. So let's take a look at Exhibit 108, Appendix
18 K, which begins on Bates page 3288. Lynn Harmon has
19 already testified to at least a portion of these
20 documents. So let's have you briefly describe what
21 documents are contained in Appendix K.

22 A. So I made a request to the Big Wood Canal
23 Company for all the measurement data that they had on
24 record from 1982 through 1992 for the area in question.
25 And so these are all the records they provided, which

Page 107

1 usually include some sort of measurement reading,
2 whether that's elevation or staff-gauge measurements,
3 and then the equivalent, especially for Magic Reservoir
4 the storage volume, or through the canal systems the
5 flow rates that were measured.

6 Q. And then can you please take a look at Exhibit
7 108, Appendix J, which begins on Bates page 3199.
8 That's not correct. I don't think I got that Bates page
9 correct.

10 A. Yeah, that's correct.

11 Q. Is that correct?

12 A. Yeah. That's the appendix title, 3199.

13 Q. All right. Can you please describe what these
14 records are and how you obtained them.

15 A. So these are the measurement records from the
16 watermaster as part of his official annual report to the
17 Department of Water Resources that are again from 1982
18 through 1992 on the measurements for the same canal as
19 our study area. And I got those either from the books
20 themselves that we have in our office, or the ones that
21 we do not have, I got those from Kevin Lakey's office
22 directly.

23 Q. And were these -- would those books be what
24 Lynn Harmon referred to as the "Black Books"?

25 A. The Black Books, yes.

Page 108

1 Q. And to your knowledge, are watermaster records
2 public documents?

3 A. They are.

4 Q. So looking at -- let's just take the first
5 page there, Idaho Water Resource Board 3200, just as an
6 example. Can you just run us through quickly what data
7 is included on that document?

8 A. Absolutely. So the first describes what water
9 district we're in. This is information for Water
10 District 37, 37M. It describes that these are
11 discharges in second feet or CFS for the Jimmy Byrne
12 head canal, or what we have always labeled JBH, for the
13 area September 30, 1982.

14 Across the top the columns are the months, and
15 then the day is listed in rows on the left-hand side, 1
16 through 31, and then each individual day. So the first
17 entry, looks like May 4, is 29 CFS that was recorded on
18 that day.

19 On the bottom they have 24-hour CFS values
20 that they have included. And they have a mean-flow rate
21 for the month, and then they have data-feet volume for
22 the year, and then they total up the yearly mean and the
23 total acre-feet volume delivered.

24 Q. When you were doing your analysis, did you
25 rely equally on both the Big Wood Canal Company

Page 109

1 handwritten documents and the watermaster measurements,
2 or how did you work with both these sets of documents?

3 A. So I relied on the watermaster records
4 primarily. But the handwritten documents from the canal
5 company had a lot more information that was outside of
6 what is published by the watermaster. This only ends --
7 all this data ends September 30th every year and often
8 times does not start when the first measurements were
9 actually measured.

10 Q. So would it be fair to say that you used the
11 watermaster documents first as being sort of the
12 official record and then went to the Big Wood Canal
13 Company documents to fill in any gaps?

14 A. Yes, to see what other additional information
15 was available for each year.

16 Q. Okay. So you've already testified that you
17 limited your review of water use to 1982 to 1992.
18 Between those dates, are you aware of whether or not
19 there was a recharge basin off of the Richfield Canal?

20 A. To my knowledge, there's not a recharge basin
21 off of the Richfield Canal.

22 Q. Is there a recharge basin off of the Richfield
23 Canal now, to your knowledge?

24 A. To my knowledge, no.

25 Q. So if there was no recharge basin off of the

Page 110

1 Richfield Canal at the time, why did you still consider
2 the Richfield as a possible place of use for this water
3 right?
4 A. So the Richfield Canal, I think, was
5 contemplated always to deliver Big Wood River water to
6 the basins for delivery. My experience in the State of
7 Idaho is that water that seeps in a canal during the
8 non-irrigation season and when irrigation water is not
9 delivered is considered recharge, as well. And so
10 that's why I included the Richfield Canal as a place of
11 use.
12 Q. So having determined that you were going to
13 look for possible in-canal recharge on the Richfield
14 Canal, you already stated that you looked just outside
15 the irrigation season; is that correct?
16 A. That's correct.
17 Q. And that is because -- and can you explain
18 just once again why that is?
19 A. So I did not include the irrigation season
20 because that is -- when irrigation water is being
21 delivered and used, the State hasn't recognized any
22 seepage in a canal system as recharge, and so I was
23 limiting my scope to outside in the shoulder seasons,
24 and that irrigation season was described by Mr. Harmon
25 previously.

Page 111

1 Q. So let's get to that a little bit. How did
2 you determine what the irrigation season was on the
3 Richfield?
4 A. I determined that by asking Mr. Harmon when
5 irrigation water was delivered, and so he indicated that
6 that was typically -- May 1st was when irrigation water
7 was first delivered and that the irrigation season
8 usually ended middle of September toward the end of
9 September.
10 Q. Did you look at the face of some irrigation
11 water rights that divert off the Richfield to see what
12 the season of use was on this condition?
13 A. I have looked at those previously, and in a
14 lot of cases I know that water is delivered well past
15 the start of the irrigation season.
16 Q. So you looked at the face of the water rights
17 and then you talked with Lynn Harmon who said that the
18 irrigation season often starts later. Why did you feel
19 it was reasonable to rely on Mr. Harmon's assessment of
20 when the irrigation season started on the Richfield?
21 A. Because, I mean, just practicality. He knows
22 when that irrigation water is delivered and called for
23 by the farmers, and that irrigation water never was
24 delivered before that May 1st date.
25 Q. And you just indicated, but what did

Page 112

1 Mr. Harmon -- what did Mr. Harmon indicate to you was
2 the approximate average beginning of the irrigation
3 season on the Richfield Canal?
4 A. He said it never started before May 1st. And
5 often times it ended in the middle of September. So I
6 used my brackets for my irrigation season on the
7 Richfield from May 1st through September 30th.
8 Q. So having determined what were the average
9 irrigation season dates on the Richfield, how did you go
10 about calculating the amount of recharge that might have
11 been occurring within the canal during the development
12 period?
13 A. So I started with the diversion from the Big
14 Wood River into the Richfield Canal at Gauge No. 4. And
15 I originally started looking at what -- actually, let me
16 back up a little bit.
17 The other thing that Mr. Harmon told me is
18 that a real good indication is if irrigation is
19 occurring is if water is delivered or diverted into the
20 East and West Main Canals. And if water is not
21 diverted, if there's no record of water being diverted,
22 then you can pretty much guarantee that no irrigation is
23 occurring on the Richfield Canal.
24 And so based on that, I mean, I looked at the
25 data, and if there was water being diverted into the

Page 113

1 West or East Canals, I considered that as irrigation
2 demand and did not include that in my analysis.
3 I started looking at the difference or the
4 seepage that occurred, the change in flow measurements
5 from Station No. 4 to the year the mouth of the Jim
6 Byrne Slough intersects with the Little Wood River.
7 But as I was looking at the data closer, I
8 noticed that there were some anomalies, and rare, but
9 they did occur, that there was an increase in flow from
10 the HJB to the head of the Jim Byrne Slough, to the
11 mouth of the Jim Byrne Slough, which indicated that at
12 some times it was a gain reach for some reason. Often,
13 most of the time it was not.
14 But in order to eliminate that as a potential
15 -- and to be more conservative, I took the recharge
16 amount from Station No. 4 to the head of the HJB or the
17 head of the Jim Byrne Slough.
18 Q. So between the HJB and the MJB you sometimes
19 found that that was a gain reach. What would that mean
20 in terms of determining an amount of recharge? Would
21 that give you a higher amount of recharge or a lower
22 amount of recharge?
23 A. If it was gaining during that reach, it would
24 give us a lower amount of recharge. If the MJB was less
25 than the HJB, which it is most of the time, it would

Page 114

1 give us more recharge than what I calculated.
2 Q. So by not looking at that reach, because of
3 those gains in the slough, did that give you a more
4 conservative number of quantity of recharge, or a larger
5 quantity of recharge?
6 A. It gave us a smaller number throughout the
7 development period, to be more conservative.
8 Q. Okay. And so what you did to discount that
9 possible false number was to go up and just look at the
10 gauges between No. 4 and the HJB; is that correct?
11 A. That's correct.
12 Q. So when you saw losses in the canal between
13 Gauge No. 4 and the HJB outside of the irrigation
14 season -- you saw a diversion at Gauge No. 4 and a loss
15 between No. 4 and the HJB outside the irrigation season,
16 what did you conclude -- where did you conclude that
17 water must have gone?
18 A. So I concluded the water seeped into the
19 canal, into the canal bed and recharged the aquifer.
20 Q. Is there anywhere else, to your knowledge,
21 along that reach that it could have gone?
22 A. Not to my knowledge.
23 Q. So in your opinion, why is it reasonable to
24 conclude that that water, that lost water, was recharge?
25 A. So during that period, my understanding is

Page 115

1 that that's the only right that was on for delivery. It
2 was this permit. So water was diverted out of the Big
3 Wood River into the Richfield Canal system as part of
4 this permit. And any loss of that water, as it was
5 delivered to the other places of use, was also
6 considered recharge.
7 Q. Let's take a look at Exhibit 108, Bates page
8 3057. There are two tables on this page, Table No. 13
9 and Table No. 14. Can you please describe what these
10 tables are and what they're telling us.
11 A. So Table No. 13 is just an example of, I
12 believe, the next end, which is all the data. But I
13 just picked out half of April and half of October into
14 November of delivery and the measurement data associated
15 with the Richfield Canal.
16 So Table 13 has the date, the flow and Station
17 No. 4, East Canal, West Canal measurements, the head of
18 the Jim Byrne Slough, and then the recharge value, which
19 was the difference between the flow in No. 4 and the
20 head of the Jim Byrne Slough.
21 Q. Okay. So let's back up just one step. This
22 table is just representative of some of the data that
23 you collected; is that correct?
24 A. Correct, yes.
25 Q. And why did you choose these sets of data from

Page 116

1 1987 to put into this table?
2 A. Because it included the peak flow rates
3 calculated during the development period.
4 Q. So this the table includes the year where you
5 found the highest loss between Gauge No. 4 and the HJB;
6 is that correct?
7 A. Correct.
8 Q. Okay. So let's just talk through the table a
9 little more carefully. We have the Gauge No. 4 flow; is
10 that correct?
11 A. That's correct.
12 Q. And we have the East Canal flow; is that
13 correct?
14 A. That's correct.
15 Q. And the West Canal flow?
16 A. Correct.
17 Q. And do we have the HJB?
18 A. Correct, also.
19 Q. Okay. Why did you include the East Canal and
20 the West Canal measurements?
21 A. To illustrate the comment that Mr. Harmon
22 made, that if water was diverted into the East and West
23 Canals, then that was an indication of irrigation
24 occurring.
25 Q. So anytime that you saw in the data that the

Page 117

1 East and West Canals had a measurement showing that
2 water was going into those canals, did you basically
3 just discount those days?
4 A. Absolutely.
5 Q. Okay. So the calculation that you did in this
6 table is fairly simple. You took Gauge No. 4, the
7 measurement at Gauge No. 4, and you subtracted the
8 measurement at the HJB; is that correct?
9 A. That's correct.
10 Q. And that resulted in the calculated number,
11 which is in the recharge column; is that correct?
12 A. That's correct.
13 Q. So once again, when you saw these numbers come
14 out from that calculation that are listed in the
15 recharge columns of this table, what did you conclude
16 about that? What does that represent?
17 A. So I concluded there was a loss of water that
18 was diverted into the Richfield Canal, and that water
19 was lost -- I couldn't find any evidence that it was
20 lost to any other diversion except for recharge.
21 Q. And did Mr. Harmon indicate that there are
22 other diversions?
23 A. He did not indicate that to me. In his
24 testimony, he alluded to some small ones, and I don't
25 recall. I don't know the system nearly as well as he

Page 118

1 did. And I don't remember where those are, but he
2 alluded to a lot more diversions than he ever alluded to
3 me on the phone.

4 Q. But when we are looking at this table, this is
5 outside of the irrigation season, so would those
6 diversions really even be a factor?

7 A. They should not be, no.

8 Q. And then let's take a look at Table No. 14 on
9 the same page, please. Can you describe what that table
10 indicates?

11 A. Absolutely. So the year -- the development
12 period, excuse me, from 1982 to 1992 are shown in the
13 first column, and then the maximum flow rate observed in
14 each of those years is identified in the second column
15 as the max flow CFS column.

16 Q. So is it fair to say that what you did was
17 basically take the analysis of Table No. 13 and do that
18 for each of the development period years based on the
19 measurements that you have, and then you translated that
20 into Table No. 14; is that correct?

21 A. It's correct in terms of Table 13 is just a
22 small subset of the entire data set for 1987. So, you
23 know, I replicated every year from 1982 to 1992, which
24 is in Appendix N, and then found the highest flow given
25 those parameters that we've discussed, yes.

Page 119

1 Q. So when we see 1982 max flow, 110 CFS, in
2 Table 14, does that kind of correspond for 1982 to the
3 highlighted 300 CFS that you found in 1987? It would be
4 the same number, I guess.

5 A. Yeah. It might be on a different day. I
6 mean, chances are it definitely was on a different day,
7 usually in the spring as opposed to November. But yes.
8 The math would be the same.

9 Q. The math would be the same?

10 A. Yeah.

11 Q. Okay. And so what does that Table 14 indicate
12 in terms of which year had the highest loss between
13 Gauge No. 4 and the HJB?

14 A. So the highest loss was observed or calculated
15 in 1987.

16 Q. And so you used that loss number then to say
17 that was the quantity of water recharged in the
18 Richfield; is that correct?

19 A. Correct.

20 Q. Are there any uncertainties inherent in this
21 analysis that you did for the Richfield Canal?

22 A. Yes.

23 Q. What are some of those uncertainties?

24 A. There's a lot of uncertainty relying on data
25 that I did not measure specifically for the permit

Page 120

1 license exam. So we rely on third-party information as
2 best as we can, as much as we can rely on it. You know,
3 it's not new data measured specifically for this
4 purpose.

5 There's a lot of assumptions. Mr. James
6 talked about travel time, and we did not incorporate
7 travel time into any sort of analysis just because that
8 adds a lot more uncertainty in a lot of cases. And so
9 those are, I think, the two big ones.

10 Q. And then the irrigation start and end dates
11 that you used are averages; is that correct?

12 A. I don't know if I'd call them averages. I
13 would call them -- like those were basically the extent
14 of when the irrigation season begins and ends according
15 to the manager, former manager.

16 Q. Yeah, and I guess maybe average isn't -- those
17 irrigation start and end dates, they might move a few
18 days here and there every year --

19 A. Right.

20 Q. -- depending on water variability?

21 A. Correct.

22 Q. So, you know, we've talked about this before,
23 but when you go back and do this kind of analysis 30
24 years later, are those uncertainties somewhat inherent
25 in what you're doing?

Page 121

1 A. Absolutely. And a lot of them can be.

2 Q. And so why do you consider that your analysis
3 with the Richfield is reasonable, even given all of
4 those uncertainties?

5 A. Well, there definitely is a trend. I mean,
6 the data is there to support that water was diverted
7 during the non-irrigation season or when the irrigation
8 demand was not present based on the lack of delivery to
9 the East and West Canals. Water was delivered into the
10 Richfield system, which appears to be shepherded down to
11 the Little Wood River, and there was definite loss that
12 was calculated in the canal system itself.

13 Q. Okay. So let's move onto the Dietrich. Was
14 there a recharge basin off the Dietrich Canal in
15 existence during the development period, to your
16 knowledge, or that you researched?

17 A. Yes. To my knowledge, there was an existing
18 basin that was diverted, and water was diverted into
19 that basin.

20 Q. And was that recharge basin listed as a place
21 of use on the permit?

22 A. Yes, with some qualifications. The place is
23 slightly different in the application. But, to me, it
24 looked like that was the intent of the application.

25 Q. And when you say it was slightly different in

Page 122

1 the application, slightly different from what is
2 actually on the ground or --

3 A. Yes.

4 Q. Okay.

5 A. Slightly different than what's on the ground.

6 Q. And just -- was it like just a couple of
7 sections off?

8 A. Yeah, it was a little bit south of where
9 evidence of recharge actually does occur.

10 Q. Okay. So because there was a recharge basin
11 off the Dietrich Canal, did you limit yourself to only
12 canal measurements outside the irrigation season?

13 A. No. I included data that was within the
14 irrigation system, as well.

15 Q. Okay. And so why did you do that on the
16 Dietrich? Why did you include irrigation season
17 measurements?

18 A. Because we weren't considering in-channel
19 recharge -- or in-canal recharge. This was actually
20 diverted water out of the canal system into a basin that
21 was dedicated for recharge.

22 Q. So, once again, how did you determine what the
23 irrigation season was on the Dietrich Canal?

24 A. So, again, relying on Mr. Harmon's evaluation
25 or knowledge of the system, he indicated that the

Page 123

1 Dietrich Canal irrigation season starts on April 15th
2 and continues through the irrigation season. But he
3 also indicated that there usually is not any excess
4 water that's diverted, that any water after May 31st is
5 dedicated all for irrigation.

6 And so I limited my evaluation to April 15th
7 through May 31st as potential times that recharge could
8 happen, or after the irrigation season into October and
9 November, if data was there.

10 Q. And is that because the capacity of the canal
11 after May 31st, really, there wouldn't be any room to
12 carry extra water above and beyond irrigation water at
13 that point; is that --

14 A. Yeah. It would probably not be worth fussing
15 with it.

16 Q. Right.

17 A. You know, there's probably capacity but just,
18 you know, not the volume that they want to get.

19 Q. So just as a refresher, what dates did you use
20 for the early irrigation system on the Dietrich?

21 A. So I used between April 15th and May 31st on
22 the Dietrich Canal.

23 Q. So if you could just walk through your
24 analysis of how you determined the quantity of water
25 that was recharged in the Dietrich system.

Page 124

1 A. Absolutely. So Ms. Edl, in her testimony,
2 talked about the irrigation demand in that early part of
3 the irrigation season as being 150 CFS. My conversation
4 with Mr. Harmon indicated that while there might be some
5 maximum diversion during that time of 150, he felt that
6 120 was a much more reasonable value on an average
7 demand for the Dietrich Canal during that period.

8 And based on my experience in Idaho, April and
9 May, when my kids play soccer, it's not very warm,
10 usually. And so the demand -- I could agree with
11 Mr. Harmon. The demand is probably not very high.

12 And so I used 120 as the average demand during
13 that irrigation -- that early irrigation season. And so
14 I looked at the measurements from the -- the measurement
15 data and the watermaster data from Station No. 11 that
16 was diverted into the Dietrich Canal. And then I
17 subtract off the top, through every day, 120 CFS to look
18 at what was the potential flow available for recharge.

19 I also looked at what was returned from the
20 system in the F waste back to the Little Wood River.
21 And if there was water being delivered or measured in
22 the F waste, I also subtracted that from the analysis.
23 And then the resulting data is how much recharge water
24 potentially was available.

25 Q. So let's take a look at Exhibit 108, Tables 9

Page 125

1 and 10, which are on Bates page 3052 and going over to
2 3053.

3 A. Okay.

4 Q. Let's take a look at Table 9, and walk me
5 through once again what this table represents, please.

6 A. Okay. So this is, again, a small subset, one
7 month, the month of May, 1984, which walks through the
8 same math that I just tried to describe. And so the
9 first column is the date of the month of May, and this
10 table is actually split up into two different sections
11 right by themselves.

12 But we have the dates from May 1st through May
13 31st, the flow measured in Station No. 11, the average
14 demand for irrigation through just the average of that,
15 as I described, any measured F waste flow that was
16 reported, measured and reported, and then the recharge
17 amount was Station No. 11 minus the demand minus any
18 flow that was coming through the F waste.

19 Q. Did you account for any possible stock-water
20 usage, and if not, why not, when you did your
21 calculations?

22 A. I did not include any stock water. Mr. Harmon
23 indicated that 120 demand was all the water, so maybe
24 calling it just irrigation could probably -- maybe it
25 had been a misstatement on my part, but any demand from

Page 126

Page 128

1 the system was that 120 value.

2 Q. So let's take a look at Table 10. If you
3 could describe what that table does.

4 A. So that table, Table 10, is the annual maximum
5 flow rate calculated, as described in Table 9, for each
6 of those years, and the maximum flow value that was
7 calculated.

8 Q. And when was the maximum flow rate that you
9 found for recharge off the Dietrich?

10 A. So the maximum flow rate I found was the same
11 as Ms. Edl. It was in 1984 at 276 CFS.

12 Q. So are there uncertainties in here in the
13 analysis that you did for the Dietrich? And what are
14 they?

15 A. Absolutely. The biggest uncertainty for the
16 Dietrich Canal is the seepage in my mind. So canal
17 seepage does occur. I don't have data to support what
18 that seepage might be. That was outside the scope of
19 what I was asked to do, if I would measure seepage. And
20 so that definitely is a large uncertainty, especially
21 with that.

22 Q. So you're talking about -- are you talking
23 about canal seepage that might have occurred before the
24 water got to the recharge basin and therefore wasn't
25 accounted for in your calculations; is that correct?

1 sense.

2 There's definitely evidence, visual evidence,
3 that water has been routinely diverted into that basin
4 through aerial photography, and so that area has
5 obviously seen water on a regular basis. And so the
6 evidence points to water that is diverted there. And so
7 trying to quantify how much is there, what's the
8 parameters, how much can we reasonably deduce that water
9 was diverted, it seemed like it was a reasonable
10 defensible approach.

11 Q. And is it your opinion, when you see water
12 diverted and lost, that it's reasonable to assume that
13 that went into the ground and was recharged in this
14 particular instance?

15 A. In this particular instance, I don't see any
16 other place for it to go.

17 Q. All right. So this might get a little bit
18 repetitive. I apologize. I'll try not to be too
19 repetitive, but let's take a look back at Exhibit 105,
20 Water Resource Board Exhibit 105, which is the map. We
21 could probably use the demonstrative one.

22 A. What was the number again?

23 Q. 105. It should be the Milner-Gooding map.

24 So can you describe, using this map, the
25 methodology that you used to determine the amount of

Page 127

Page 129

1 A. Or, yeah, it was lost in the canal. You know,
2 we're attributing that all to the recharge area, and
3 that loss may have occurred somewhere else in the canal
4 system.

5 Q. On the Dietrich Canal, are there gauge
6 measurements on either side of the recharge basin?

7 A. No.

8 Q. So, did that pose any issues for you?

9 A. Absolutely. Obviously, it would have been
10 better -- I mean, the more data -- I'm an engineer. I
11 like data. So the more data we have, the better off
12 we're going to be. So if we had one upstream and
13 downstream of the diversion, we can know exactly what
14 was diverted into that basin. We don't have that
15 situation here, and so...

16 Q. Did you use the F waste to try and --

17 A. To account for some of that? Yes.

18 Q. So given all of what we've talked about, why
19 do you consider that your analysis of recharge on the
20 Dietrich is reasonable and accurate, given everything
21 that we know?

22 A. Well, to me, it's reasonable because, you
23 know, it first reflects similar to the analysis that was
24 done by the State, and so it was in the same kind of
25 parameters that were already established, and it makes

1 recharge that could have been occurring at the Shoshone
2 recharge site?

3 A. Yes. So there are measurement data associated
4 with Station 53, which is flow from the Snake River in
5 the Milner-Gooding Canal as it flows north. You have
6 also measurements at Station 56, which is on the
7 downstream side of the Milner-Gooding Canal after the
8 bifurcation.

9 And so we have a measurement that's not that
10 far distant on either side of the Little Wood River.
11 And typically we saw a decrease in flow. So there was
12 more water at Station 53, and water was lost when I
13 looked at Station 56. And so there was loss of water in
14 the Milner-Gooding Canal, which makes sense that
15 obviously most of that water is diverted at the
16 bifurcation into the Little Wood River.

17 However, there were times, regularly, that we
18 would see an increase in flow and not just a small
19 increase but a substantial increase, that Station No. 53
20 and 56 would see a jump. And so it wasn't just once
21 that would indicate some sort of measurement error, but
22 there was kind of -- that would occur on a frequent
23 basis.

24 And so the only real source of water,
25 especially on that scale, was the Little Wood River.

Page 130

1 And so water -- and according to the testimony and the
2 conversations that I had with Lynn Harmon, he told me
3 that that does happen on a regular basis, including the
4 times that they have to cofferdam off that bifurcation
5 to prevent that from happening.

6 So I concluded that, on a regular basis, water
7 from the Little Wood River did enter the Milner-Gooding
8 Canal to flow underneath the siphon towards the recharge
9 basin. There is a measurement just downstream of the
10 headgate to the Shoshone recharge basin. And so the
11 difference between Station 56 and 57 indicate how much
12 was lost or was used for recharge and diverted for
13 recharge at that place of use.

14 Q. Okay. So let's look at -- let's go back to
15 Exhibit 108, Table 11, which is on Bates page 3054.

16 And can you describe what Table 11 indicates
17 and is trying to demonstrate?

18 A. Okay. So, again, Table 11 is a small
19 one-month subset of April 1984 from the entire
20 development period, which is, I think, Appendix M.

21 This shows the measurement flow at Station 53
22 for every date in the month of April of 1984, so the
23 measurements at Station 53, which is downstream of the
24 bifurcation -- sorry, upstream. I was thinking south.
25 It's upstream from the bifurcation, what's coming from

Page 131

1 the Snake River into the bifurcation.

2 Q. The measurements of flow at No. 53, that would
3 be Snake River water; is that correct?

4 A. Correct, uh-huh.

5 Q. Okay.

6 A. Measurement at Station 56, which is on the
7 downstream side of the bifurcation, and so that is after
8 the water -- the Milner-Gooding Canal goes through the
9 siphon at the bifurcation, and then measurement No. 57,
10 which is the measurement at the other side of the
11 recharge basin. The total recharge column is the
12 difference between Station No. 56 and 57.

13 Q. And what would that total recharge column --
14 what sources are included in those numbers, what sources
15 of water?

16 A. Okay. The total recharge includes water from
17 the Snake River, Little Wood River, Big Wood River. So
18 it's inclusive. It's total recharge that's occurring.

19 And then the column, Big Wood River and Little
20 Wood River recharge is the difference between the
21 measurement Station 56 on the north side of the Little
22 Wood River and Station No. 53, which is the measurement
23 on the south side of the Little Wood River, which is
24 Snake River water. And so there's a substantial
25 difference of those measurements, which that water had

Page 132

1 to come from, from the Little Wood River, was my
2 determination.

3 Q. So the Big Wood/Little Wood River recharge
4 number indicates the total amount of water that would
5 have been added to the Milner-Gooding flow from the
6 Little Wood River; is that correct?

7 A. Correct.

8 Q. And so how does that number relate to the
9 total recharge number? Which number did you recommend
10 be the quantity and why?

11 A. So I recommended if the Big Wood/Little Wood
12 River recharge column was greater than recharge, I only
13 recommended the recharge, total recharge value. I don't
14 recall that ever occurring. I think that the increase
15 in flow from 53 to 56 was always less than the total
16 recharge.

17 And so I recommended all that water diverted
18 under -- or from the Little Wood River as recharge
19 water, because there's no other -- there was no other
20 permit application being diverted, or water right.

21 Q. And then let's take a look at Table 12, which
22 is on the following page, Bates page 3055.

23 Can you talk us through that table, as well?

24 A. Absolutely. So this table is, again, the
25 development period from 1982 through 1992 and the

Page 133

1 maximum flow for each of those years that was calculated
2 using that same process that we talked about in
3 Table 11.

4 Q. So were there as many uncertainties for you in
5 this analysis as in some of the others?

6 A. Well, my first main question and concern that
7 I had was, was there any sort of other diversion from
8 the Little Wood River into the Milner-Gooding Canal?
9 Was there any other sort of increase in flow? And
10 during my site visit, I did not determine that there was
11 any.

12 And so I had questions about could the
13 bifurcation function reverse, opposite of what it was, I
14 think, originally designed to do. And based on the
15 testimony from Lynn Harmon and evidence that, yes, that
16 could occur, I have not seen it personally.

17 Q. So why do you consider your analysis of
18 recharge at the Shoshone site to be reasonable and
19 accurate?

20 A. Again, there's definitely evidence that water
21 has been diverted for recharge. And so the question is,
22 is it possible that water from the Big Wood and Little
23 Wood Rivers could be diverted for part of that recharge
24 use. And based on the measurement data available, yes,
25 that is possible and likely had to occur.

Page 134

1 Q. Based on the canal measurements, you could
2 demonstrate that it did occur?
3 A. Yes.
4 Q. Okay. So let's save the same exhibits. Let's
5 go to Table 15, which is on page 3058. So can you walk
6 us through this table, please.
7 A. So this table is basically all those other
8 tables that we had discussed previously during the
9 development period of 1982 through 1992, all the max
10 diversion rates for each of those three analyses that
11 were performed, and then total of those based on annual
12 diversions that were calculated.
13 Q. So the maximum diversion on the Dietrich, the
14 first column there, did those numbers come from the
15 previous table in the Dietrich section that we just
16 talked about?
17 A. Yes, that was Table 10.
18 Q. Table 10? So those are the same numbers as
19 are in Table 10?
20 A. Correct.
21 Q. And then the same for each of the following
22 columns?
23 A. Right. The Shoshone site is the values in
24 Table 12, and the Richfield site are the values in
25 Table 14.

Page 135

1 Q. And so then you just took the lines across for
2 each year and added them up to come up with the total
3 diversion rate for the whole place of use, all of the
4 possible places of use?
5 A. Correct.
6 Q. And then you have 1984 highlighted there. Why
7 did you choose 1984?
8 A. I chose 1984 because that was the highest
9 total diversion rate that was calculated.
10 Q. In a single year?
11 A. In a single year.
12 Q. Okay. So let's flip to Appendix F,
13 Exhibit 108, which starts on page 3182. What is this
14 document?
15 A. So this is the beneficial use building report
16 form that I filled out to accompany this analysis that I
17 did. So this is the form that you use for any sort
18 of -- or any beneficial use exam done for the Department
19 by a certified water rights examiner.
20 Q. And could you just -- so does this form
21 contain basically all of your conclusions that we just
22 talked about in terms of all of the elements of what
23 this water right should be?
24 A. Correct.
25 Q. Okay. Can you just, you know, quickly walk us

Page 136

1 through what those elements -- what you concluded those
2 elements should be?
3 A. Absolutely. So the general information is the
4 owner contact information, the examiner's name, my name,
5 when the exam date was done, who accompanied the
6 representative over the field exam, the examiner in the
7 field and what their relationship is to the owner,
8 contact information, what the source of the water that
9 was put to beneficial use, what source that is, and what
10 the surface water with that source is tributary to.
11 Q. So let's stop there. What did you recommend?
12 What was your conclusion about what the beneficial
13 use -- what sources were beneficial use between 1982 and
14 1992 for this water right?
15 A. So I calculated and determined that water from
16 both the Big Wood and Little Wood Rivers were used for
17 beneficial use for recharge.
18 Q. And are those two sources -- would you
19 recommend that those would be used interchangeably with
20 each other?
21 A. With the exception of the Richfield Canal,
22 which is just Big Wood River water, so any seepage that
23 occurs along that canal during the non-irrigation
24 season. Once the Big Wood River water interjects and
25 injects into the Little Wood River, then they're

Page 137

1 interchangeable.
2 Q. So the sources of water that could be used in
3 the Dietrich place of use, for instance, are both the
4 Big -- could be both the Big and Little Wood River water
5 commingled, or it could be just Big Wood River water or
6 just Little Wood River water; is that correct?
7 A. Correct.
8 Q. And the same thing for the Shoshone site?
9 A. Correct.
10 Q. Okay. I'll let you continue with the -- would
11 you please just start again with overlap review.
12 A. Okay. Section B talks about overlap review,
13 other water rights with the same place of use.
14 The only water right that shares the place of
15 use that I recommended was water right permit 1-7054,
16 which we've alluded to before in these proceedings. But
17 there are no other recharge rights that have the same
18 place of use, and so that's the only one that exists.
19 Number 2 of the overlap review is any rights
20 that have the same source or the same point of
21 diversion. And so I do list the table that has all the
22 water rights that have the same point of diversion and
23 the same source, and that is Table 3 on Exhibit 108,
24 page number 3045, that has all those water rights there.
25 Q. So let's talk about the recommended points of

Page 138

1 diversion. I think we touched on this earlier but maybe
2 didn't fully describe them. It might help to refer back
3 to Figure 6 of your report, which is Bates No. 3067.
4 What were your ultimate recommendations in
5 terms of the points of diversion that should be on this?
6 A. So I recommended that the Big Wood River would
7 have a point of diversion just downstream at Magic
8 Reservoir, which is the start of the Richfield Canal.
9 And that's 67. So then that's shown in yellow. That's
10 in Township 2 south, Range 18 east, the start of the
11 Richfield Canal, and that would be the Big Wood River
12 point of diversion.
13 The Big Wood River then would have a point of
14 injection, which would have the same -- well, it would
15 be -- the point of injection should be where the Jim
16 Byrne Slough enters the Little Wood River. And that's
17 my understanding how the Department views them. The
18 point of injection is when you inject or divert a water
19 right back into a natural water system. And so you have
20 a point of injection into the Little Wood River.
21 In that same quarter-quarter is where the
22 Dietrich Canal is diverted. And so there would be a Big
23 Wood River point of re-diversion at that location and a
24 Little Wood River point of diversion into the Dietrich
25 Canal to the Dietrich recharge site.

Page 139

1 At the Shoshone site there would be another
2 Big Wood River point of re-diversion and a Little Wood
3 River point of diversion.
4 Q. And would that last one you just described at
5 the Shoshone site, would that be approximately where the
6 bifurcation is?
7 A. Where the bifurcation is, exactly.
8 Q. Okay. Is there anything else in that you
9 wanted to point out?
10 A. Just on that figure itself, you know, the
11 original permit point of diversion is shown, also, which
12 is just that one section that I think was acknowledged
13 as a typo on the original application.
14 Q. Okay. So let's move back to Appendix F on
15 3182. Well, maybe let's not.
16 What is the -- what is the next portion of
17 that field report?
18 A. So the next point is Section C, which is
19 delivering a diversion delivery system. And so the
20 first numbered points of diversion are the ones that I
21 just outlined; the point of diversion for the Big Wood
22 River, point of injection, point of re-diversion for the
23 Big Wood River, and then the Little Wood River point of
24 diversions on both the Dietrich Canal and at the
25 bifurcation.

Page 140

1 Q. And then how about the place of use, what was
2 your final determination of that?
3 A. So my determination for the place of use was
4 really using remote sensing data and then determining
5 where the Richfield Canal extended from the point of
6 diversion through the system until it injected back into
7 the Little Wood River -- until it injected into the
8 Little Wood River, and so the entire length of the
9 Richfield Canal, not including the East or West Main
10 Canals, because that was indication that irrigation was
11 occurring.
12 Q. And sorry to interrupt. Would it help you to
13 refer back to the recommended place of use?
14 A. Figure 7?
15 Q. Figure 7. Do you have a colored copy of that?
16 A. Yes, I do.
17 Q. Would that -- sorry. Would that help you to
18 refer back to where your recommended place of use would
19 be?
20 A. Yes. So the Richfield Canal system just
21 mimics the canal path as it moves from the Big Wood
22 River down the Little Wood River through the course of
23 that path that's been explained.
24 The Dietrich recharge site is off of the
25 Dietrich Canal. And I identified that, using aerial

Page 141

1 photography, evidence that water has been there on a
2 regular basis. And you can see that visually on the
3 aerial photography.
4 The recharge site for Shoshone was done the
5 same way with aerial photography.
6 Q. Okay. So your overall conclusions with the
7 place of use were the Richfield Canal system in the
8 canal itself, not including the East and West Mains; is
9 that correct?
10 A. That's correct.
11 Q. And then the Dietrich recharge basin; is that
12 correct?
13 A. That's correct.
14 Q. And the Shoshone recharge basin; is that
15 correct?
16 A. Correct.
17 Q. Okay. Let's flip back to Exhibit F. And
18 let's go to the next page, 3183. Is there anything --
19 you want to describe this page and what is written on
20 it?
21 A. So question number 3 asks for a delivery
22 system diagram. That's basically Figure No. 7 that was
23 in my report, so I didn't recreate that here.
24 Number 4 is not included. Section D is
25 recorded flow measurements. Since we were light on the

Page 142

1 IDWR accepted measurement data for those canals, that's
2 discussed in my report, so there's nothing else that I
3 need to elaborate on that page.

4 Q. Okay. And could you please continue on to the
5 next page, 3184.

6 A. 3184 talks about the narrative. I think
7 that's covered fairly well in the report on where I got
8 the conclusions.

9 And then the second part of the narrative
10 talks about has the permit holder met all the conditions
11 of the permit approval. And most of those discuss
12 IDWR's acceptance of things, and so those were outside
13 kind of my scope of what I was able to evaluate. But
14 especially the fact that IDWR issued a permit, I
15 concluded that those conditions were all met.

16 Q. So you relied on IDWR's conclusions regarding
17 the condition?

18 A. Correct.

19 Q. Whether the conditions of the permit had been
20 met?

21 A. Correct.

22 Q. And you didn't investigate those things
23 further yourself; is that correct?

24 A. I did not, no.

25 Q. And then if you could just flip to the last

Page 143

1 page, 3185, and discuss the conclusions that were
2 memorialized there.

3 A. All right. So Section F talks about flow
4 calculations, on where the total flow came from. That's
5 discussed in the report and the table that we've
6 outlined. And that was Table 15?

7 Q. Fifteen, I believe.

8 A. So, yeah, Table 15 is a cumulative summary of
9 that. The volume calculations -- I don't know how much
10 you want to go into volume right now.

11 Q. Yeah. So let's just say, what was the
12 beneficial use that you recommended?

13 A. So I recommended recharge because that's the
14 only fate of that water I could determine.

15 Q. And period of use?

16 A. I left as applied for from January 1st through
17 December 31st.

18 Q. And what was the rate of diversion that you
19 concluded was --

20 A. Was that maximum diversion rate calculated in
21 1984, 634 CFS.

22 Q. Okay. And then the annual volume, which you
23 pointed out has been left blank, can you discuss with us
24 why that is left blank?

25 A. I left that blank but included some

Page 144

1 calculations in Appendix O. But the point of recharge
2 is to divert water when it's available during high flow
3 events, which are seasonally very -- they're very
4 variable. They vary extremely.

5 And so on page 3059, I discuss just very
6 briefly just something really quick, recurrence interval
7 flows based on the development period, and the highest
8 recurrence interval that existed downstream -- this was
9 using the USGS gauge on the Big Wood River below Magic
10 Dam near Richfield. It has a fairly long period of
11 record. The highest flow rate that we saw there
12 occurred in 1984, which corresponded to a 17-year
13 recurrence interval event.

14 Q. And what is recurrence interval event?

15 A. It's really a statistical evaluation at how
16 frequent that flow will occur. And so we typically
17 refer to as a hundred-year event being the max flood,
18 and that's what FEMA designs everything to, is that
19 hundred-year event, which has the probability of
20 occurrence at .01 or a one-percent occurrence over a
21 hundred-year period. And so the recurrence interval
22 just says, you know, approximately this flow will occur
23 once every 17 years.

24 Q. And you were looking at the flow below Magic;
25 is that correct?

Page 145

1 A. Correct, on the Big Wood River, which
2 definitely has impounds of Magic Reservoir, as well.

3 And so I just wanted to get some sort of
4 quantification on the variability that, you know,
5 limiting a groundwater recharge right only to the volume
6 available during the five- or ten-year development
7 period really hampers the ability to divert and recharge
8 water when those extreme events do occur.

9 And I included just some other dates, 2006 and
10 2017, which were 21-year events, and 2006 as a 54-year
11 event, and 2017. If we would limit the volume of just
12 what was diverted during the development period for
13 recharge, it would really prevent us from capturing
14 those events when they occur.

15 On the flip side, the development period from
16 '82 to '92 included six years that had a recurrence
17 interval of 1.5 years or less, or very low flows. And
18 so there were only a few years that we even have had the
19 opportunity to recharge a large amount of volume.

20 And, you know, typically, runoff events are
21 fairly flashy. When they do occur is when those low
22 events or frequent events occur. They're not a long
23 duration. So we don't have a chance to really capture a
24 large volume.

25 And so given the rules that exist in the IDAPA

Page 146

Page 148

1 Code that talks about the seasonal variability, it seems
2 like hampering a recharge right only during the
3 development period artificially limits that recharge
4 volume if it's occurring -- when it's there under large
5 events.

6 Q. So in a large year like 2017, using this water
7 right, what might occur if you were limited to say
8 13,000 acre-feet in terms of volume? What might occur
9 with that right?

10 A. That the right could still be on in priority.
11 There would still be volume available for recharge, but
12 you would have to cease recharging because you met some
13 arbitrary threshold of the volume. Even though there's
14 still flood concerns, you still have all those other
15 things that are occurring, the concern would be that the
16 right would have to be shut off for recharge under that
17 volume.

18 MS. VONDE: All right. I think that's all I
19 have on direct.

20 THE HEARING OFFICER: Okay. We're into the
21 lunch hour. What are the desires of the parties? To
22 break for lunch?

23 MR. JAMES: Let's break for lunch, Director.
24 We'll still get done today, I think.

25 THE HEARING OFFICER: Okay. Let's reconvene

1 of diversion listed on the permit; is that correct?

2 A. They are the points of diversion or points of
3 re-diversion that I identified in my report.

4 Q. Okay. So when you say the same source, it's
5 either the Little Wood or Big Wood but not the same
6 point of diversion as the permit?

7 A. No. So I identified points of diversion or
8 points of re-diversion, and this table indicates the
9 water rights that have the same source and those same
10 points of diversion that I identified.

11 Q. And I think we're on the same --

12 A. Okay.

13 Q. So these are the same source as the points of
14 diversion that you identified?

15 A. Correct.

16 Q. Okay. And not the same point of diversion as
17 listed on the permit?

18 A. No.

19 Q. Okay. And what did you use those water rights
20 listed for in the research?

21 A. These are rights that have the same point of
22 diversion based on IDWR's database.

23 Q. And what did you use them for in your
24 analysis? What was the point?

25 A. That's one of the items requested in the field

Page 147

Page 149

1 at what, 1:30? Is that acceptable? That gives us just
2 a little over an hour.

3 MS. VONDE: Yeah.

4 THE HEARING OFFICER: All right. Let's come
5 back at 1:30.

6 (Lunch recess.)

7 THE HEARING OFFICER: We're recording.

8 Joe, I assume you worked all through lunch?

9 MR. JAMES: No. I went and ate.

10 THE HEARING OFFICER: I didn't want to hear
11 your stomach growling on the record.

12 All right. After lunch, you may cross-examine
13 the witness, Joe.

14 MR. JAMES: Thank you, Director.

15 CROSS-EXAMINATION

16 BY MR. JAMES:

17 Q. Erick, I want to refer you back to the Table
18 3. I don't have a Bates page. It's page 6 in the
19 expert report.

20 A. Table 3 you said? Or on page 3?

21 Q. No, page 6, Table 3.

22 A. Oh, okay. All right.

23 Q. And the caption there, you testified somewhat
24 regarding that these water rights have the same point of
25 diversion. And just to be clear, that isn't the point

1 exam, just any point of diversion that has the same
2 source and the same point of diversion.

3 Q. And what would the purpose of that be?

4 A. I don't know. The Department requested it.

5 Q. Would those water rights possibly have the
6 same period of use as the subject water right?

7 A. They could definitely have the same period of
8 use.

9 Q. And it may be appropriate then to kind of look
10 at any overlap or potential volume in the stream flows
11 using that water right information?

12 A. What the Department does with that
13 information, I'm not sure. I'm not sure what sort of
14 internal analysis they do on that.

15 Q. Well, let me ask you another question. Would
16 those rights have specific periods of use?

17 A. They would have a period of use, yes.

18 Q. And it could include irrigation?

19 A. I'm sorry?

20 Q. The rights could also be for irrigation?

21 A. There definitely are irrigation rights
22 associated with that.

23 Q. And was part of your analysis based on the
24 irrigation season?

25 A. Yes.

Page 150

1 Q. Okay. And so --
2 MR. JAMES: And, Director, I'm going to ask
3 you to take official notice of the Department's water
4 right files regarding those rights listed on Table 3.
5 And, Director, I'd make further comment. As
6 indicated by the witness, they're required to be
7 included on the field exam for the Department's benefit,
8 so the Department would have access to look at those
9 permit details. And for the State to review any
10 license, I think the Department should still have the
11 authority to look at those details.
12 THE HEARING OFFICER: All right. Here's what
13 I'll do. Rather than -- and I guess I could say I'm
14 taking notice of them without making them part of the
15 record. Thoughts, Ann?
16 MS. VONDE: Yeah, I guess that would be my
17 thought. The Department always has access to those fact
18 files or those water rights. I don't know that they
19 need to become part of the official record of this
20 proceeding in order for you to have access to that
21 information.
22 MR. JAMES: My response to that, Director, is
23 I think if the Department can take official notice if it
24 becomes part of the record, I mean, that's the --
25 MS. VONDE: I guess I don't see the value of

Page 151

1 having them in the record.
2 THE HEARING OFFICER: Well, my question is, if
3 this matter is appealed, it goes up, do I then have to
4 include copies of all of these water right files and
5 everything that's a part of it? I don't want to have to
6 do that. I think that's too expansive.
7 I think what I'll say is, I'll take notice of
8 these particular files. And if there's germane
9 information in those files that bear on the decision,
10 then I'll specifically refer to those documents as
11 important, one way or another.
12 And it may be that the licensing and the
13 identification for point of diversion in the license for
14 a subsequent decree might be valid. I don't know. And
15 if we limit it to the documents that are actually
16 referenced in the decision, I think that limited number
17 of documents will have to be included in the record.
18 So is that a reasonable compromise?
19 MR. JAMES: I think that's fine, Director.
20 MS. VONDE: That's acceptable.
21 THE HEARING OFFICER: Okay.
22 BY MR. JAMES:
23 Q. Sir, is it possible that those rights listed
24 specifically as out of the Big Wood River and for
25 irrigation purposes have a period of use commencing as

Page 152

1 early as March 15th?
2 A. On the face of the water right, I'm sure that
3 there are a variety of different periods of uses.
4 Q. Did you review any of the water rights listed
5 on Table 3 as part of your analysis?
6 A. I looked at a few of them, and I don't recall
7 which ones. I relied on Lynn's testimony that
8 irrigation water was not delivered until May 1st.
9 Q. And let's step back. If I recall Lynn's
10 testimony, it was: Not typically. Is that the
11 information he relayed to you, as well?
12 A. He told me water was not delivered until after
13 May 1st, and the watermaster records usually confirm
14 that volume or high flow rates associated with
15 irrigation not delivered until after May.
16 Q. Okay. Were you present when Lynn testified?
17 A. I was.
18 Q. And did you hear him talk, delivery -- in his
19 recollection there was delivery as early as April 24th?
20 A. He did say that, yes.
21 Q. And do you recall him saying that the
22 irrigation typically commences on May 1st?
23 A. I don't remember him using those exact words,
24 but May 1st is the date for sure.
25 Q. Is the date you utilized?

Page 153

1 A. Yes.
2 Q. Okay. In your analysis -- and I guess I'll
3 start with the Richfield Canal -- you used actual data
4 entered to calculate water in the stream or the stream
5 channel; is that correct?
6 A. Yes.
7 Q. And then in estimating any outlet for that
8 water, what did you look at?
9 A. The measurement at the headgate of the Jim
10 Byrne Slough.
11 Q. And what I'm talking about is just -- okay.
12 Let's move onto the Dietrich Canal.
13 A. Okay.
14 Q. Same thing. Did you use the actual
15 measurements from Gauge Station 11 for the input to the
16 Dietrich Canal?
17 A. Correct.
18 Q. Okay. And then how did you calculate the
19 outflows from the Dietrich Canal?
20 A. Measurements at the F waste gate.
21 Q. And did you look at any another laterals
22 coming off?
23 A. The laterals, in my conversation with Lynn,
24 those only flow during the peak irrigation season, so
25 July/August time frame. And so if there is water that's

Page 154

1 there, it's not very much, and it's only when the
2 canal's at full distribution. And so I did not include
3 any other laterals.
4 Q. So if you're not using -- I'm just not
5 understanding.
6 A. No, that's fine.
7 Q. So if there's -- if irrigation commences in
8 May --
9 A. The Dietrich starts in April.
10 Q. Okay. And I think you testified to this. In
11 your calculations, what date did you use as a start
12 date?
13 A. In the Dietrich on April 15th.
14 Q. 15th, okay. And you used a figure of 120 CSF;
15 is that correct?
16 A. Uh-huh.
17 Q. And that was for water that was being diverted
18 out of the Dietrich?
19 A. Correct.
20 Q. For irrigation purposes?
21 A. Correct.
22 Q. Okay. What I'm asking you is, did you look at
23 the headgate information or the diversion records out of
24 the Dietrich, or did you just use an estimate?
25 A. I just used an estimate.

Page 155

1 Q. Did you inquire of Kevin if those headgate
2 records were available?
3 A. So Kevin doesn't manage the Dietrich. He
4 diverts water out of the Little Wood into the Dietrich
5 Canal. The Dietrich then is managed by the Big Wood
6 Canal Company, is my understanding.
7 Q. Okay.
8 A. And I asked the canal company for the records
9 they had. So I did not evaluate any individual headgate
10 diversions.
11 Q. Did you ask -- one question at a time. Did
12 you ask -- so you didn't ask the watermaster if he had
13 any records of diversions out of the Dietrich Canal.
14 Did you ask Big Wood Canal Company if they had
15 any headgate measurements or records for diversions out
16 of the Dietrich Canal?
17 A. I did not.
18 Q. Okay. And you chose just to use an average or
19 an estimate?
20 A. An estimated average.
21 Q. Okay. And I guess that's kind of twofold.
22 It's an estimated average?
23 A. Uh-huh.
24 Q. Okay. So in your analysis, you're looking at
25 actual stream flows and channel flows as to what's in

Page 156

1 the river and then estimating on average what would come
2 out on a meter; is that correct?
3 A. Yes. I would say that that's correct.
4 Q. And I guess the point being that, maybe
5 another way to look at it, you came out with the
6 recommendation based on the max grade of diversion in
7 1984; is that correct?
8 A. I believe that '84 is right for the Dietrich
9 Canal.
10 Q. Well, let's look at what exhibit is your field
11 exam.
12 A. This is 84 on page 13 of my report.
13 Q. Well, I want to look -- let's go to your --
14 we'll probably go back to where the appendix is at, and
15 you have Bates stamps on these, but it would be the last
16 page of the exam, Bates stamp 3185. And you came up
17 with a total rate of diversion of 634 CFS; is that
18 correct?
19 A. That's correct.
20 Q. Okay. And that was based on a date in 1984?
21 A. That was the calculated maximum diversions
22 from all three sites in 1984.
23 Q. Did it come from a specific date?
24 A. It did not.
25 Q. So how did you -- did you take the highest --

Page 157

1 well, explain to me, how did you come up with that max
2 rate if you didn't look at specific data?
3 A. The maximum rate for each of those sites was
4 calculated, as discussed previously.
5 Do we need to go through each one of those,
6 Mr. James?
7 Q. No.
8 A. Okay. So I went through each individual site
9 and determined maximum diversion rate per year, and then
10 each of those diversion rates per year is in Table 15 of
11 my report, which is on page -- Bates page 3058.
12 And so for the maximum diversion for 1984 for
13 the Dietrich site, for the Shoshone site, and for the
14 Richfield Canal, the total diversion rate recommended is
15 the sum of those three in 1984.
16 Q. And that's my question. Looking at Table 15,
17 1984, from the Dietrich, you listed a max diversion of
18 276; is that correct?
19 A. That's correct.
20 Q. Okay. And then you take those on across the
21 table, including the Shoshone recharge site and the
22 Richfield Canal, and come up with 634?
23 A. Uh-huh.
24 Q. Okay. My question -- those are cumulative.
25 Were those -- was the diversion at the Dietrich Canal

Page 158

Page 160

1 for the 276 diversion at the same time as the diversion
2 from Shoshone?

3 A. They were on different dates within 1984.

4 Q. So you're allowed to be cumulative? You can
5 take data on this date and divert this much, and I
6 stopped diverting, and the next day I diverted another
7 amount, and I add those together?

8 A. In my experience -- and I speak most recently
9 on a recharge site that we did a license exam in the
10 Bellevue Triangle, we put HOBO transducers in
11 measurement flumes, and we measured those every 15
12 minutes, and the State said we can evaluate and pick the
13 largest diversion rate measured at all those sites and
14 that we weren't limited to a certain date. And so we
15 have historic -- you know, historical evidence that, you
16 know, the State evaluates those.

17 Q. So step back, though. You installed some
18 equipment to measure certain flows?

19 A. Uh-huh.

20 Q. Okay.

21 A. Yes.

22 Q. And you received data from that?

23 A. Uh-huh. Yes.

24 Q. Is that correct?

25 A. Yes.

1 what the average outtake from the Dietrich Canal was in
2 the prove-up period?

3 A. I was not.

4 Q. And you indicated, I think several times in
5 your testimony, that this permit could be the only basis
6 for water in a particular system, and that would be the
7 Richfield Canal or the Dietrich Canal.

8 How did you do that calculation? How did you
9 determine that?

10 A. I'm not understanding the question.

11 Q. Well, did you eliminate the other permitted
12 water sources?

13 A. Well, I mean, walk through each of those. So
14 the Richfield Canal, I was told by Mr. Harmon that their
15 irrigation season did not start until May 1st, that the
16 stock-water rights are off on the 31st of March, and so
17 they're not active in April. And so if there's water
18 being delivered in April, the only permit that is really
19 valid is that.

20 Q. And that's my question, the only permit that's
21 valid. Did you investigate those other permits listed
22 on Table 3 and see if they were possibly or could be
23 utilized?

24 A. They definitely had a period of use that
25 covers that same time, I think, if that's what you're

Page 159

Page 161

1 Q. So when you said that they didn't -- was it
2 more than one permit or one license you were doing a
3 field exam on in that case?

4 A. It was a combined system, and water was
5 diverted three different directions, and it was the
6 maximum diversion rate for that year.

7 Q. And not to get so off track, but in this case
8 you're literally saying, we took this much on a certain
9 day in 1984, and then at some other point we took this
10 much from a different source on a different date and
11 then added those together in three different
12 measurements to come up with the total of 634?

13 A. Yes.

14 Q. Do you know what the max diversion at any
15 particular point in time for water right 37-7842 was?

16 A. I have not calculated that.

17 Q. And I also want to verify, you -- and, again,
18 we'll start with the Dietrich Canal. You took your
19 estimate of 120 CFS as being utilized for irrigation
20 demand from a statement from Lynn; is that correct?

21 A. That's correct.

22 Q. And that was based on Lynn's experience since
23 he's been manager of the Big Wood Canal Company?

24 A. Correct.

25 Q. Were you able to gather any information on

1 asking. But the management of the canal was that that
2 water was not delivered during that period of time.

3 Q. But my question is, basically you're just --
4 other than Lynn saying that now this is when the
5 irrigation season starts, that's your only information
6 that you used to obtain your estimates?

7 A. That's the best information that I had.

8 Q. Okay. Well, would the permits have been
9 another source of information?

10 A. The water rights?

11 Q. Uh-huh.

12 A. You know, there's lots of water rights that
13 have periods of use that are not delivered until later
14 within that period. And so that's standard practice,
15 and I didn't question that too much.

16 Q. Well, let's step back. Lynn testified that,
17 other than the Big Wood Canal Company, there are other
18 decree holders downstream that can call for delivery of
19 their water during their period of use, and that can be
20 in the spring before May 1st or after October 1st.

21 And if you recall, he mentioned the agreements
22 for that, and he mentioned the court case, that
23 basically his testimony was that if there's 70 CFS flow
24 into the Magic, they can call for delivery of that
25 water.

Page 162

Page 164

1 A. I didn't see any evidence in the watermaster
2 records, especially in the East and West Canal, to
3 support that irrigation water was delivered.
4 Q. And your testimony is that's where irrigation
5 water would be delivered, would be those two -- if you
6 had Big Wood water through the Richfield Canal, if it
7 was for irrigation purposes, it would have to go through
8 the East and West Main?
9 A. Yes. And, again, that's from Mr. Harmon.
10 Q. And so I've handed you the water right detail
11 for Water Right No. 37-10343. That's one of the rights
12 listed on Table 3. Do you recognize that?
13 A. Yes. Well, I have not looked into this water
14 right before.
15 Q. Okay. You looked at the source of water?
16 A. It's from the Big Wood River.
17 Q. Okay. And you notice the various points of
18 diversion, which also include off the Big Wood River in
19 Blaine County?
20 A. There is a point of injection in Blaine
21 County. The point of diversion is in Lincoln County.
22 Q. Oh, okay. Do you recognize that point of
23 injection into Blaine County?
24 A. I'm trying to locate that. I can see the
25 township and the range section.

Page 163

1 Q. Is it correspondent with any known diversions?
2 A. It looks like this water right has a
3 description of a point of injection from the Richfield
4 Canal into the Jim Byrne Slough.
5 Q. Okay. So that would come from the -- and
6 what's the purpose of that right?
7 A. It's for irrigation.
8 Q. And the period of use?
9 A. From March 15th to November 15th.
10 MR. JAMES: Your Honor, I'm going to move for
11 the admission of Exhibit 206.
12 THE HEARING OFFICER: Ann?
13 MS. VONDE: Yeah, I'll just make this
14 objection as to 205 (sic). I haven't seen this document
15 before today.
16 THE HEARING OFFICER: What's the basis?
17 MS. VONDE: I haven't seen this document. It
18 wasn't disclosed in discovery.
19 MR. JAMES: In response, Director, he just
20 testified from his knowledge that no water diverted from
21 the Richfield Canal into the Jim Byrne Slough for
22 irrigation. He said it all went to the East or West.
23 THE HEARING OFFICER: Yeah, this is
24 cross-examination. Offered for rebuttal. Objection
25 overruled. I'll receive the document marked as 206.

1 It's not marked Petitioner's Exhibit, but I
2 think it is in consecutive order, so we'll refer to it
3 as Petitioner's Exhibit No. 206 as received into
4 evidence.
5 (Petitioner's Exhibit 206 admitted.)
6 BY MR. JAMES:
7 Q. And I guess your information from Mr. Harmon
8 may have been incorrect as to irrigation water through
9 the Jim Byrne Slough?
10 A. I wouldn't go that far. I mean, I would trust
11 Mr. Harmon's experience and his knowledge. I don't have
12 any evidence this water right was delivered. And so on
13 the face of the right, I can say that it could have
14 been, but I have no knowledge that it was.
15 Q. And to step back, I'll have you look at 206
16 again. And the current owner, as well as the original
17 owner, neither one is the Big Wood Canal Company; is
18 that correct?
19 A. That's correct.
20 Q. So this isn't a water right held by the Big
21 Wood Canal Company?
22 A. It's in combination with water from the Big
23 Wood Canal Company. It's Condition No. 6.
24 Q. Yeah. But this right isn't held by the Big
25 Wood Canal Company, is it?

Page 165

1 A. That's right. It is not.
2 Q. And this water right has a priority date of
3 1899?
4 A. It does.
5 Q. And it looks like it was at least a valid
6 water right through the prove-up period?
7 A. What do you mean by "prove-up period"?
8 Q. The period in which the permit holder had the
9 time to submit proof of beneficial use specifically on
10 that 37-7842.
11 A. Yes.
12 Q. And it appears -- looks like in the upper left
13 corner there's a printout date. Do you see that?
14 A. Oh, of today's date?
15 Q. Is it today's date?
16 A. Yeah.
17 Q. And so, anyway, there's no indication that
18 that water right has been forfeited or it's not a valid
19 right and it was in existence during the prove-up
20 period?
21 A. There's no indication that it was -- yes.
22 Q. And if it hadn't been used for a period of
23 time, it would have been subject to forfeiture?
24 A. That's for the Department to decide, not me.
25 Q. You don't know anything about forfeiture?

Page 166

Page 168

1 A. Well, I know about forfeiture, but I can't
2 declare forfeiture, you know, for these last rights that
3 haven't been used for numerous years that are still
4 valid on the face of the rights, so...
5 Q. Even after the adjudication?
6 A. In some cases, yes.
7 Q. Okay. When you talked to Mr. Harmon regarding
8 this water right, did you inquire if there was any
9 records with the Big Wood Canal Company regarding a
10 delivery request by this permit holder?
11 A. I did not ask that question.
12 Q. And did you inquire of the Lower Snake River
13 Recharge District if they had ever made a demand for
14 delivery of that recharge water?
15 A. Of the permit in question?
16 Q. Yeah.
17 A. I did not ask the Lower Snake Recharge
18 District that question.
19 Q. And you conducted this field exam on behalf of
20 the Idaho Water Resources Board?
21 A. Correct.
22 Q. Okay. And did you go through their records to
23 see if there was a request or a demand for delivery?
24 A. No. I'm not sure there's a formal request for
25 delivery form.

1 was: No other place to go. Is that correct?
2 A. That appeared to me to be the logical place
3 for it to go, yes.
4 Q. Okay. So did you go physically view the site?
5 A. I have been to the diversion. I did not go
6 down to the actual recharge basin.
7 Q. Okay. And how far away from the canal was the
8 basin?
9 A. The headgates on the canal?
10 Q. Uh-huh.
11 A. So adjacent to the canal.
12 Q. Okay. At the time you viewed it, was there
13 any water going through the headgate, the headgate from
14 the Dietrich Canal into the flood basin?
15 A. No. I have not been to that location.
16 Q. Okay. So you don't know how long water stands
17 or if it evaporates or if it's consumed by vegetation?
18 Or you don't have any personal knowledge as to how that
19 water dissipates from that area?
20 A. I don't. We've never done any recharge
21 studies there. We have done recharge studies in other
22 locations in the same area, so I have an idea of how it
23 will function. But no.
24 Q. And so I think, you know, Lynn testified -- he
25 referred to it as a "flood basin." I've heard it

Page 167

Page 169

1 Q. Do you know if you called anybody? Did you
2 find any record of any type for any request for
3 delivery?
4 A. I have lots of delivery -- or lots of
5 measurement data from the canal company.
6 Q. Again, I'm showing you Exhibit 201. And, sir,
7 that was previously admitted. I believe it was admitted
8 yesterday. And do you recognize what this is?
9 A. Yes.
10 Q. And what is it?
11 A. It's a proof of beneficial use form submitted
12 by Gerald Martens.
13 Q. And on this subject? Water right?
14 A. For the water right in question, 37-7842.
15 Q. And in that, Mr. Gerald Martens indicates the
16 full extent to which the permit had been developed?
17 A. Yes.
18 Q. Okay. And so we do have a statement as to at
19 least what the permit holder perceived to be his use of
20 the water?
21 A. That's what the proof form is, yes.
22 Q. Okay. I think earlier on direct you were
23 talking about the basin off the Dietrich Canal, and the
24 question was regarding, in effect, where the water went,
25 if it went into the aquifer. I believe your response

1 equally referred to as a "recharge basin."
2 What's that based upon if there has been no
3 recharge studies done at that location?
4 A. I don't think there's an official, like, name
5 on it.
6 Q. So it's kind of privy to the person that's
7 talking?
8 A. Yeah. It was originally developed as a way to
9 spill excess water in a flood event. And so, you know,
10 back in the '70s, I think that's what they built it for.
11 You know, recharge water is flood water. You know, a
12 1980 surface water right isn't on except during a flood
13 event. And so whether they call that a "flood basin" or
14 a "recharge basin," to me, it's the same water being
15 diverted.
16 Q. Well, and I guess it kind of gets back to the
17 point it could be diverted for flood control out of the
18 Dietrich Canal through that headgate and not on demand
19 or request for diversion from this particular permit
20 holder?
21 A. But there is a valid permit that they can
22 divert water for that purpose, too.
23 Q. They can, but that doesn't necessarily mean
24 that is why it was diverted.
25 A. Yeah, and I don't know. I don't know. I

Page 170

1 wasn't there at that time, so I can't say definitively,
2 yes, they diverted it for this purpose. But I can say
3 that the evidence points to the water disappearing to
4 some degree.

5 Q. And that's true on all the diversions that you
6 listed as recharge in the report. You don't know the
7 basis of that diversion, why it was diverted?

8 A. That's true. But I don't have any evidence
9 that it wasn't diverted for that reason either.

10 MR. JAMES: I think that's all I have,
11 Director.

12 THE HEARING OFFICER: Redirect? I'll give you
13 a moment. Should we take ten minutes?

14 MS. VONDE: Yes, please. That would be
15 welcomed.

16 THE HEARING OFFICER: Okay.

17 MS. VONDE: Thank you.

18 (Recess.)

19 THE HEARING OFFICER: Okay. Are we ready?
20 We're recording again after a brief recess. Ann.

21 MS. VONDE: Yeah, I'll just have a couple of
22 questions on redirect.

23 REDIRECT EXAMINATION

24 BY MS. VONDE:

25 Q. You've gotten some questions about whether or

Page 172

1 watermaster, correct?

2 A. Correct.

3 Q. And then the watermaster will note that
4 delivery in his logbook and so will the ditch rider.

5 So I'm asking you, did you request those
6 records from Lynn?

7 A. I requested the measurements made of the canal
8 on the canals. I did not request any other records.

9 Q. Okay. And to clarify, there's all sorts of --
10 you know, there can be a delivery priority cutoff, more
11 water that, again, calls for delivery or demand for
12 delivery, and that can all be done informally, but it's
13 logged.

14 So that's my question. Have you seen any logs
15 or delivery records for this permit?

16 A. No.

17 Q. And regarding -- and that's the same question
18 you were asked earlier. Regarding the other diversions
19 from the Dietrich Canal, did you look at any of those
20 delivery records?

21 A. No.

22 Q. No further questions.

23 THE HEARING OFFICER: Okay. Erick, I have a
24 couple of questions.

25 EXAMINATION

Page 171

1 not there was a request made for the diversion of
2 recharge water under this permit.

3 To your knowledge, is that how diversions are
4 made, by some sort of formal request on a piece of paper
5 that's handed to somebody?

6 A. No.

7 Q. Can diversions be done informally?

8 A. Usually people, individuals, water right
9 holders will call the watermaster and ditch rider and
10 just say, I need X number, I need my water, and then the
11 water is delivered.

12 Q. So it could have been a phone call back in
13 1984 for all you know; is that correct?

14 A. It could have been.

15 Q. Does the lack of documentation, especially
16 paper documentation, in your opinion, mean that
17 something didn't occur?

18 A. No.

19 Q. That's all I have.

20 THE HEARING OFFICER: Joe?

21 MR. JAMES: I'll just follow-up on that.

22 RECROSS-EXAMINATION

23 BY MR. JAMES:

24 Q. So you'd call an informal call to the ditch
25 rider, and it's administered by the canal company or the

Page 173

1 BY THE HEARING OFFICER:

2 Q. So I want to just look at the three summaries
3 there that are in the main body of your report. You
4 have -- I think we start at Table 9, page 2052; and
5 there's Table 10, which lists the two-column table, and
6 that's years '82 through '92; and Table 11, which is a
7 summary of calculations to determine recharge of the
8 Shoshone site; Table 12, which was the years similar to
9 the previous tables; and then Table 13 and Table 14.

10 Just as a general question -- so these tables
11 are labeled as Example Recharge Flow Calculation. So I
12 just want to point out, to begin with, that Table 9 is
13 an example recharge flow calculation for what year?

14 A. For 1984.

15 Q. Okay. And Table 11 is a sample (sic)
16 calculation for what year?

17 A. Also 1984.

18 Q. And then I turn to Table 13, and it is a
19 sample calculation for what year?

20 A. 1987.

21 Q. And so just out of the chute, why are you
22 calculating and presenting example recharge flow
23 calculations for 1984 for two of the proposed recharge
24 sites but the third one you don't use 1984 but instead
25 you present 1987 data? Why is there a departure?

Page 174

1 A. That's a good question, and the reason why is
2 I decided to select the month and year that had the
3 highest flow calculation. And so for the Dietrich and
4 Shoshone site, that was both 1984. For the Richfield
5 Canal, that occurred in 1987.
6 And so I actually went back and forth
7 internally in my own mind, should I keep it 1984? But I
8 decided to use the maximum calculation value that I
9 determined during the development period.
10 Q. Okay. So I want to focus on Table 13, and you
11 have listed a maximum recharge of 300 CFS during that
12 year. And I'm interested, because the maximum recharge
13 occurred on November 1, 1987 for one day. Is that the
14 way you read the table?
15 A. That's the way I read the table.
16 Q. So it was recharged for one day, and then what
17 happened on the 2nd?
18 A. Well, so it goes back to logic on how I
19 approached this. I was told by Mr. Harmon that any
20 diversion to the East or West Canal indicated that that
21 was irrigation.
22 Do I think that someone was actually
23 irrigating on November 2, 1987? No, I don't think they
24 really were. I think it was probably excess flow that
25 they were just trying to get rid of. But based on the

Page 175

1 logic on how I approached it, I had to assume that that
2 was zero recharge.
3 Q. So you listened to the testimony of Lynn
4 Harmon about diversion of water that leaked for a brief
5 period of time. Do you remember his testimony?
6 A. That they kind of shocked the system almost?
7 Q. Yeah. As I recall, and maybe I can
8 paraphrase, but they sent water down through the
9 system -- and I'm paraphrasing -- to fill the existing
10 stock ponds for people, and it was for a short period of
11 time, and then they shut the water off.
12 A. I do recall that, yes.
13 Q. And so you cease this analysis on 11-2. Was
14 there a reason for the cessation of the analysis on
15 November 2nd?
16 A. It actually just filled the lines of the
17 table. There was no rhyme or reason.
18 Q. But were there continued diversions into the
19 East and West Canals?
20 A. There were a few more dates of diversion data.
21 Q. And then did they turn to zeros?
22 A. They just stopped recording.
23 Q. So would this be a possible illustration of
24 Lynn Harmon's testimony about delivering water late in
25 the season?

Page 176

1 A. That definitely could be the case.
2 Q. And so let's go back to November 1st, which it
3 appears then that No. 4 gauging station -- and as I
4 understand it, that's the head of the Richfield Canal,
5 right?
6 A. That's correct.
7 Q. And Mr. Harmon testified about the time that
8 it takes for water to reach and fill the canals down the
9 canal. And that period of time was somewhere in
10 between, I think, eight hours and 24 to 48 hours; is
11 that correct?
12 A. It varies. It will.
13 Q. So, yeah, a reading of 300 CFS at Gauge No. 4
14 and then an allocation or a crediting to recharge of 300
15 for a single day, knowing the time frame that it takes
16 for delivery of that water to fill the canal -- and I
17 guess I ask the questions.
18 Is this number even reasonable to list as a
19 maximum recharge value, given the short period of time,
20 given the testimony of Lynn Harmon about the time that
21 it takes to actually fill the canal?
22 A. So his testimony regarding kind of shocking
23 the system at the end of the season, that was new to me.
24 So I would maybe question this data as fulfilling that
25 approach.

Page 177

1 If we look in April on that same table, just
2 one on the left-hand side, we have a recharge value of
3 291 on April 30th. And so, you know, is the 300 exactly
4 right? Well, if that one's not, we have a value that's
5 also pretty close in that same ballpark, in that same
6 area.
7 Q. And I'm acting a little as if this is
8 cross-examination.
9 A. Sure.
10 Q. But my question was, is it reasonable to use
11 the 300 CFS value on November 1st for one day when we
12 know that it takes time to fill the canal? That's the
13 question, not whether 291 is a reasonable value or not.
14 Is this number that you listed a reasonable
15 value, given Lynn Harmon's testimony?
16 A. I would probably go back and look at that a
17 little closer, given his testimony again. That I get a
18 shocking system at the end of the season, that was brand
19 new to me today.
20 I viewed this, when I was looking at this data
21 specifically, that for some reason there was excess
22 water in the system, and they were trying to get rid of
23 it as soon as they can, and so that's why they opened up
24 both the East and West Canals.
25 Lynn never conveyed to me, upon my questioning

Page 178

Page 180

1 of him, that they flood the system at the end. And I
2 didn't see that on a regular basis in the data.

3 Q. Okay. I want to go back to this same table,
4 Table 13, and work through the numbers.

5 A. Okay.

6 Q. So on 4-21, given Lynn Harmon's testimony
7 again, we have 122 CFS diverted at No. 4, which is the
8 head of the Richfield Canal, right?

9 A. Correct.

10 Q. And then there's zeros diverted out of the
11 East Canal, zero in the West Canal, zero at the head of
12 the Jimmy Byrne, and so you credited the entire 122 CFS
13 to recharge.

14 Now, given what we just talked about, is the
15 credit of that 122 a reasonable number, knowing that it
16 takes time to charge the system?

17 A. So I did not go through and incorporate any
18 sort of travel time or charging delay on any of this
19 data.

20 Q. Well, I don't think you answered my question.
21 My question is, is it reasonable to assume that that
22 entire 122 CFS should be credited to recharge?

23 A. Probably not.

24 Q. Okay. So then we see two days of consistent
25 numbers that seem to be the same. And then on 4-24

1 Does it seem odd to you that those two numbers
2 are exactly the same?

3 A. It does.

4 Q. In consecutive days?

5 A. Uh-huh.

6 Q. And that each of those numbers is half, as I
7 look at it, of what the measured flow is at No. 4?

8 A. I'm sorry. Was that a question?

9 Q. Well, if it's equal, some of those numbers
10 should be the flow at No. 4, right?

11 A. That's correct.

12 Q. So they're exactly half of the flow measured
13 at No. 4, and they're exactly the same. Does that give
14 you pause looking at the data, two in a row?

15 A. It's a little suspect.

16 Q. Okay. And then 4-26, it's not exactly split,
17 not identical, but they're very close.

18 Okay. Now, I think you also heard Lynn Harmon
19 talk about the present method of delivering water
20 through the Richfield?

21 A. Yes.

22 Q. This shows a span of delivery through the
23 Richfield of -- you know, if I ignore, and I'm tempted
24 to -- the 4-21-87 number for recharge. But even if I
25 assume that the two numbers and the data that we talked

Page 179

Page 181

1 there's a departure, and I have 172 CFS diverted into
2 the Richfield but only 86 CFS measured at the head of
3 the Jim Byrne Canal.

4 And so you've determined then that recharge
5 occurred where? Where did the other 86 CFS -- where did
6 it go?

7 A. Through the canal system. Through the bed of
8 the canal system. I don't have any record of where that
9 water was delivered.

10 Q. So the assumption is that the remainder or the
11 loss all occurred between the head of the Richfield
12 Canal and the head of the Jim Byrne Slough, correct?

13 A. That's correct.

14 Q. And then the same thing would be true as we
15 work down through the rest of the numbers?

16 A. Correct.

17 Q. I want to look at 4-24, the numbers, and it
18 appears that the head of the Jim Byrne Canal was
19 measured at 86 CFS, and so the difference is 86.

20 Does it seem odd to you that those two numbers
21 are exactly the same?

22 A. It does seem odd.

23 Q. And then I come to the next study, and it says
24 4-25-87, and I end up with 93 at the head of the Jim
25 Byrne and 93 for recharge.

1 through are correct, I have about seven days of recharge
2 that was occurring.

3 And you heard Lynn Harmon testify about the
4 period of times in which they fill the Richfield Canal
5 and deliver water. And do you recall what his answer
6 was?

7 A. Not verbatim.

8 Q. Well, do you remember approximately a period
9 of time?

10 A. Forty-eight hours.

11 Q. Yeah. That's what I remember. And they don't
12 slowly fill the system. Now, he said it might be a good
13 thing and do, as I recall.

14 But do you think that this pattern right here
15 is the pattern that he would follow in delivering water
16 into the Richfield?

17 A. He very well could do that for sure.

18 Q. And the last question that I have is, do you
19 have any idea about whether this water was being
20 delivered from the Big Wood?

21 I'll withdraw that question.

22 I assume that in your calculations and in
23 looking at these tables and deriving numerical values
24 from Table 12 -- I'm sorry, 10, 12 and 14, that you
25 accumulated and calculated similar numbers for each of

Page 182

1 these (unintelligible). In other words, you calculated
2 a similar sample calculation for each of the three
3 recharge areas?

4 A. Yes. Appendixes L, M, and N have all those
5 calculations.

6 Q. Well, I thought there were some of them in the
7 appendixes, but I wasn't sure. I didn't -- I got
8 spreadsheet calculations of Dietrich site flows in L.

9 A. Yeah.

10 Q. I don't know whether these calculations
11 contain that information.

12 A. Yeah. So that's all the period of development
13 period record, especially calculations for the Dietrich
14 site in L.

15 Q. By year, that would compare to the --

16 A. Yes.

17 Q. -- sample calculations of Table 9, 11, and 13?

18 A. Yes.

19 Q. Okay. And then I have -- in the appendixes, I
20 also have Appendix M, which also is a spreadsheet
21 calculation of the Shoshone site flows. And this
22 particular appendix would also correspond at least to
23 the calculations for Shoshone that are depicted in
24 Table -- sorry, Table 11?

25 A. Correct.

Page 183

1 Q. But I don't have a corresponding calculation
2 for Richfield.

3 A. That's Appendix N.

4 Q. It is?

5 A. Yes.

6 Q. Appendix N in my binder is blank. I have
7 nothing in the three-ring binder, and that may be just a
8 mistake.

9 MS. VONDE: If it was a mistake, it was
10 probably mine in making copies.

11 THE HEARING OFFICER: Do we have M somewhere?
12 Okay. Is it in yours?

13 THE WITNESS: Yes.

14 THE HEARING OFFICERS: Okay. All right.
15 That's helpful, because I have no -- nothing. I just
16 wanted to know where they were, because I've spent quite
17 a bit of time looking at the Richfield, and I wanted to
18 see, year by year, what period of time that recharge is
19 even happening. And Lynn Harmon is saying that's not
20 typical. Maybe it was typical back during the
21 development period. But without the information, I
22 can't determine that, so...

23 MS. VONDE: Do you have it in your binder,
24 Erick?

25 THE WITNESS: It's in this binder, yeah.

Page 184

1 THE HEARING OFFICER: So if it's in the
2 original exhibits and the appendix, then that's fine. I
3 don't want to go through in detail. But I want to make
4 sure I can look at those and say: Is '87 an anomaly?
5 What's happening in all of those years?

6 I think it's important, for me at least. And
7 I'm just saying now -- I'm not asking a question -- but
8 for me at least, I look at what's happening in the
9 Richfield. And I go, I think it's really suspect. But
10 I'll look at all those calculations.

11 Okay. I don't have any more questions.

12 Now, have I raised some, Ann?

13 MS. VONDE: No, I don't think so.

14 THE WITNESS: The data is the data, so...

15 MS. VONDE: Yeah, it's all there for you to
16 look at.

17 MR. JAMES: And, Director, just to clarify.

18 RECROSS-EXAMINATION

19 BY MR. JAMES:

20 Q. Erick, you were -- when Lynn testified on
21 cross about charging the system to start up, he
22 specifically testified on that line item 11-1-87 on
23 Table 13. Do you recall that?

24 A. I don't recall him directly referring to that
25 table.

Page 185

1 Q. Yeah. And you reviewed -- that was the basis
2 of the question.

3 The other thing I'd point out on charging the
4 system, if you dump the water there might be an
5 absorption that's recaptured underground. And I note
6 that both on 11-2-87, the following day, there's
7 actually more going out of the Richfield Canal than was
8 going in, and the same is true on 4-22-87. The day
9 after the water is put in, there's actually -- the next
10 day there was actually more coming out than going in on
11 both occasions; is that correct?

12 A. That's correct.

13 Q. Okay.

14 THE HEARING OFFICER: Well, I want to tell
15 you, I look at the appendixes for -- let's see. What's
16 the first one? Appendix L, I guess. L, M and N. So
17 I'm going to look at what's happened with the data in
18 those.

19 Okay. More witnesses, Ann?

20 MS. VONDE: No, not from us.

21 THE HEARING OFFICER: Okay. Let's talk
22 about -- Erick, I guess you're excused.

23 THE WITNESS: Thank you.

24 THE HEARING OFFICER: Okay. Let's talk about
25 where we go from here. I'm not asking for oral

Page 186

1 argument. I think usually oral argument turns out to be
2 a review of the information that's already been
3 presented, and I think we'd be taking up time that's
4 unnecessary.

5 Do the parties want to brief, file posterior
6 briefs?

7 MS. VONDE: Yeah, in terms of oral argument at
8 the end, I do think it might just become a repetitive
9 review of what's already been said today, so I'm okay
10 with that.

11 I guess I don't necessarily -- I'm not
12 requesting posterior briefing, unless there's something
13 specific that you would like to see from us, and then I
14 would be, of course, happy to oblige.

15 THE HEARING OFFICER: Okay. Well, let me just
16 talk through some issues that I guess I will
17 be interested in. And I to do this with some backlash,
18 but I think it's important for the parties, and
19 sometimes when I write a decision, the attorneys will
20 say, Well, wait a minute, we've been blindsided. We
21 didn't know the director or the hearing officer was
22 looking at these particular issues or these subjects,
23 and we didn't have an opportunity to address this.

24 And this won't be a complete or a
25 comprehensive list of issues. But one of them, I can

Page 187

1 tell you right out of the chute, is that I am concerned
2 about the passive or latent nature of the recharge and
3 its relationship to then assert that there's been a
4 diversion in placing water to beneficial use, because
5 for me, at least, everything that I've heard today has
6 not been an active and overaction on the part of the
7 permit holder to divert water and put it to beneficial
8 use.

9 And I just thought I'll say -- and maybe this
10 is for Wes' benefit or for Ann or whoever else -- my
11 understanding, at least in looking at this, and it's not
12 the same thing, but the Water Board, honestly, is
13 expecting out of people who are conducting recharge very
14 careful measurements about how much water is being
15 diverted and how much is being put into the canal.
16 There isn't any additional water. And if there is,
17 there has to be a very, very exact accounting and an
18 exact accounting of how much water is going back into
19 the river.

20 And so I sort of look at this and say to
21 myself, Well, based on the passive nature of this, what
22 am I supposed to do here? And then I look at it, as
23 well, and I look at the data. And I can tell you, at
24 least for at least two of the three, I think the data is
25 suspect related to any reasonable standard of

Page 188

1 measurement in determining quantity.

2 And that's -- and I'll tell you, that's the
3 Richfield and that's the Dietrich, because I have my
4 (unintelligible) estimates backing into those. And I
5 guess I look at it and say, I'm not sure that's an
6 appropriate standard. So you can argue those things.
7 I'm not sure what I'd do with it.

8 The Shoshone site, in my opinion, as I look at
9 it, has a more exact measurement. But it is -- it
10 relies on a structural relationship. It's a structural
11 hydraulic relationship between water levels in the Wood
12 River -- in the Little Wood River and the elevations of
13 water in the Milner-Gooding Canal, and it relies on
14 those relationships during the irrigation season, not
15 during the non-irrigation season.

16 So because of that relationship and because
17 that's the way the water is passively delivered and
18 delivered to a dedicated recharge site, I have greater
19 comfort in looking at that particular site. But because
20 of the reliance on an existing structure and passive
21 nature again of the diversion, I'm concerned that if
22 there's an authorization of this recharge, without
23 limitation, that water right will be enlarged beyond
24 what the beneficial use was.

25 In other words, the period of time within

Page 189

1 which -- and this is my take. The period of time within
2 which the recharge water in the Little Wood River would
3 contribute some water to the Milner-Gooding Canal would
4 be limited, and it would be within the irrigation
5 season, not within a non-irrigation season, because
6 there was a cofferdam that's built there.

7 So perhaps there's an opportunity for a
8 quantity and a flow rate. But to just say the volume,
9 any volume can be diverted with that flow rate over the
10 course of the entire wintertime recharge period, I'm not
11 sure that's helpful for me to reference.

12 So all of those issues, I guess, are out
13 there, as well as the issue about lending the recharge
14 right to a particular party. Anyway, to me, that's a
15 central concern that I have in looking at this. And
16 there are some other procedural concerns. I don't know
17 whether they're significant or not, so let me just talk
18 about them.

19 What's the effect of an amendment that's
20 signed by the Board that designates where the point of
21 diversion will be and where the place of use will be?
22 Does it have some sort of effect of saying, This is what
23 we have and this is all that we have?

24 And the second question is raised and related
25 to the filing of the proof of beneficial use. I know,

Page 190

Page 192

1 Joe, you referred to language on proof of beneficial
2 use, and a decision by James Cefalo relied on a
3 signature that says, We hereby relinquish the remainder
4 of the water to the State of Idaho.
5 So is that effective as against the Board in
6 limiting this particular water right? I don't know the
7 answer, but I know what the processes are for requiring
8 that licensing amendment, and I know that the Department
9 essentially says, Sign this or else you won't get a
10 license.
11 And so I also know that there's some equities
12 there that I think are not fair, but I suppose that's an
13 issue. And I don't know whether there are other
14 procedural issues in this, but I think I've voiced my
15 main concern in looking at all of the data and the
16 presentation that's been presented.
17 So I don't know that I have anything else. Do
18 you guys? Do you want to mention anything?
19 MS. VONDE: I don't think so.
20 THE HEARING OFFICER: Okay. All right.
21 So now my question is do you want to prepare
22 briefs?
23 MR. JAMES: Director, Ann and I talked
24 beforehand. I said yesterday I wasn't really inclined
25 to brief it but today I was, and I kind of didn't spend

Page 191

1 a lot of -- or tried not to spend a lot of time talking
2 too much today, because I assumed we'd have an
3 opportunity to brief it, in other words. And so I think
4 briefs would be appropriate. I've got a trial next
5 week, so I'd ask for some time.
6 MS. VONDE: Yeah, I'm happy to brief.
7 THE HEARING OFFICER: Okay.
8 MS. VONDE: Do you envision an order asking us
9 for certain things that you want to see from us, or do
10 you want us to just go for it?
11 THE HEARING OFFICER: No, just go for it.
12 MS. VONDE: All right.
13 THE HEARING OFFICER: But I thought, verbally,
14 that I had to at least express those concerns so you
15 know at least what made me central to some of them.
16 Okay. Well, how do you want to do it? Thirty
17 days to submit an initial brief, or maybe we ought to
18 make it multiple, the 28th and 14th? So the 28th,
19 initial briefing, and then the 14th for any kind of
20 response? Is that okay?
21 MS. VONDE: What does that put us out to?
22 THE HEARING OFFICER: Christmas, probably.
23 MS. VONDE: Christmas?
24 THE HEARING OFFICER: Well, not quite.
25 MR. JAMES: I think both Thanksgiving and

1 Christmas.
2 THE HEARING OFFICER: It will be the middle of
3 December.
4 UNIDENTIFIED SPEAKER: November 30th is 28
5 days for the initial brief.
6 THE HEARING OFFICER: Yeah, so the 14th of
7 November or the 13th -- or December.
8 UNIDENTIFIED SPEAKER: The 14th of December
9 for responses.
10 THE HEARING OFFICER: And, you know, if you
11 want the holidays to write briefs, that's okay with me.
12 We can make it the first of January. Anybody?
13 MR. JAMES: I'm fine with the 14th, if we can
14 get another week on the initial.
15 MS. VONDE: Do the week before Christmas?
16 UNIDENTIFIED SPEAKER: Do you want until
17 December 7th? That would put you at December 7th and
18 then December 21st for responses.
19 MR. JAMES: That would be fine.
20 UNIDENTIFIED SPEAKER: So December 21st?
21 December 7th for initial briefs and December 21st for
22 responses.
23 (Off the record.)
24 (The hearing was concluded.)
25 (End of Audio MZ000008.)

Page 193

1 **REPORTER'S CERTIFICATE**
2
3 I, KAMRA TOALSON, CSR No. 756, Certified
4 Shorthand Reporter, certify:
5 That the audio recording of the proceedings were
6 transcribed by me or under my direction.
7 That the foregoing is a true and correct
8 transcription of all testimony given, to the best of my
9 ability.
10 I further certify that I am not a relative or
11 employee of any attorney or party, nor am I financially
12 interested in the action.
13 In witness whereof, I set my hand and seal this
14 5th day of December, 2018.
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1984
1985

	acquiring (1) 81:9	administrative (2) 82:2,14	108:12;110:5;132:15;150:17
\$	acre-feet (2) 108:23;146:8	admission (2) 51:24;163:11	amendment (3) 104:4;189:19;190:8
\$50 (2) 80:1,2	acre-foot (1) 45:17	admitted (5) 52:13;53:12;164:5;167:7,7	American (4) 5:1;49:13,21;70:17
A	across (12) 17:20;21:14;25:6;28:9;29:3; 44:5;72:10,11;76:24;108:14; 135:1;157:20	advertised (3) 94:23;96:7;104:8	amount (17) 40:19;42:24;72:17;73:7,19; 87:13;112:10;113:16,20,21,22, 24;125:17;128:25;132:4; 145:19;158:7
ability (1) 145:7	acting (1) 177:7	advertisement (14) 85:17,24;86:2;87:7;88:20; 94:3,7;95:9,12;96:23;99:23; 100:7;103:15;104:25	amounts (1) 72:16
able (3) 97:4;142:13;159:25	active (2) 160:17;187:6	aerial (6) 91:10;95:5;128:4;140:25; 141:3,5	analyses (1) 134:10
above (5) 18:20;33:12;58:20;74:2; 123:12	actual (7) 67:12;86:2;87:18;153:3,14; 155:25;168:6	affect (2) 47:25;69:20	analysis (32) 80:18;83:14;84:12,19;87:9; 88:10,23;98:11;104:12;108:24; 113:2;118:17;119:21;120:7,23; 121:2;123:24;124:22;126:13; 127:19,23;133:5,17;135:16; 148:24;149:14,23;152:5;153:2; 155:24;175:13,14
Absolutely (15) 78:11;86:23;91:16,16;93:4; 101:22;108:8;117:4;118:11; 121:1;124:1;126:15;127:9; 132:24;136:3	actually (42) 7:17;9:3,11,15;10:18,24; 11:1;15:1;20:21;21:3;26:10; 28:11;29:21;30:6;35:7,23;41:7; 45:14;53:3;71:19;73:3;75:24; 76:18;82:21;90:25;92:11;96:6; 97:4;109:9;112:15;122:2,9,19; 125:10;151:15;174:6,22; 175:16;176:21;185:7,9,10	AFRD (1) 5:10	analyze (1) 106:2
absorption (1) 185:5	add (2) 87:2;158:7	again (33) 6:10;9:8;19:12;23:20;26:25; 49:6;59:15;74:9;77:19;86:6; 99:3;101:12;107:17;110:18; 117:13;122:22,24;125:5,6; 128:22;130:18;132:24;133:20; 137:11;159:17;162:9;164:16; 167:6;170:20;172:11;177:17; 178:7;188:21	analyzing (1) 98:5
abut (1) 54:13	added (4) 85:14;132:5;135:2;159:11	against (3) 46:22;75:25;190:5	Ann (13) 4:7;48:24;51:25;68:12; 77:10,20;150:15;163:12; 170:20;184:12;185:19;187:10; 190:23
accept (1) 93:17	addendum (1) 86:24	ago (5) 71:21,21;90:17;91:14;99:4	annual (5) 85:3;107:16;126:4;134:11; 143:22
acceptable (2) 147:1;151:20	addition (2) 81:7;91:1	agree (2) 102:23;124:10	anomalies (1) 113:8
acceptance (1) 142:12	additional (6) 72:24;73:15;87:25;89:5; 109:14;187:16	agreeing (2) 93:12,13	anomaly (1) 184:4
accepted (1) 142:1	additionally (1) 92:13	agreement (1) 93:15	answered (2) 67:21;178:20
access (3) 150:8,17,20	address (1) 186:23	agreements (1) 161:21	anymore (1) 68:1
accompanied (1) 136:5	addressed (1) 16:23	agricultural (1) 78:16	apologize (1) 128:18
accompany (1) 135:16	adds (1) 120:8	ahead (3) 10:16;35:15;77:13	appealed (1) 151:3
accordance (1) 69:15	adequate (1) 58:8	Albion (2) 82:23,25	appeared (1) 168:2
according (5) 47:19;56:25;58:7;120:14; 130:1	adjacent (1) 168:11	alleviate (1) 65:22	appears (8) 28:20;63:25;102:7,8;121:10; 165:12;176:3;179:18
account (2) 125:19;127:17	adjudication (2) 51:11;166:5	allocation (1) 176:14	Appendix (30) 85:22;86:1,3,5;87:18,22,24; 88:5;92:6;93:1,4,11;94:1; 101:25;106:17,21;107:7,12; 118:24;130:20;135:12;139:14; 144:1;156:14;182:20,22;183:3, 6;184:2;185:16
accounted (1) 126:25	adjudications (1) 54:20	allow (1) 59:9	appendixes (5) 85:23;182:4,7,19;185:15
accounting (2) 187:17,18	adjust (2) 48:1;72:24	allowed (1) 158:4	applicable (2) 80:4,15
accreditation (1) 79:18	adjusting (1) 73:21	alluded (4) 117:24;118:2,2;137:16	applicant (4)
accreditations (1) 80:15	adjustment (2) 73:5,22	almost (1) 175:6	
accumulated (1) 181:25	adjustments (3) 47:14,19;73:1	along (5) 58:12;64:1;105:12;114:21; 136:23	
accurate (7) 15:12;27:19;29:9;48:4,6; 127:20;133:19	administered (3) 56:20,24;171:25	always (8) 66:5;69:15;73:5;103:22;	
accurately (9) 6:23;14:21;16:2;21:25;22:5; 11;26:22;28:3;29:6			
acknowledged (1) 139:12			

79:11;91:22;92:1,11 applicants (1) 92:22 application (41) 82:22;85:6,7,11,24;86:1,5,9, 21;87:2,5,7;88:14,17,25;89:14; 92:7,9;94:6,7;95:9,24;96:4,6,7, 19;100:6;102:7;103:3,4,5,18; 104:25;105:3,7,20;121:23,24; 122:1;132:20;139:13 applications (1) 82:24 applied (5) 79:6;86:16;87:12;105:2; 143:16 approach (3) 14:4;128:10;176:25 approached (4) 88:16,22;174:19;175:1 appropriate (3) 149:9;188:6;191:4 approval (8) 87:1,4;89:7,13,20;94:7; 95:10;142:11 approve (1) 79:7 approved (6) 85:13;86:16;90:2,3,5;96:8 approximate (6) 12:24,25;21:16,19;32:4; 112:2 approximately (18) 12:21;18:9;19:14,21;20:3; 22:14;25:5;29:2;40:3,18;42:9; 10;61:13;73:25;74:10;139:5; 144:22;181:8 approximates (1) 21:18 April (30) 35:14,21,23;38:17;39:2,2,8, 8;40:3,3;41:20;42:6;52:21; 53:1,25;54:11;115:13;123:1,6, 21;124:8;130:19,22;152:19; 154:9,13;160:17,18;177:1,3 Aquifer (10) 31:14;89:24;92:14,22;93:6, 16,24;105:8;114:19;167:25 arbitrary (1) 146:13 area (41) 5:23;6:12,18;7:3,5,7,9;10:11, 11,13,21,25;11:23;15:3;16:6,9, 16;17:5;20:4,11;24:20,22,23; 25:1,5;26:2;31:15;33:23;36:1; 98:12,19,25;105:10;106:24; 107:19;108:13;127:2;128:4; 168:19,22;177:6 areas (4) 18:17;37:5;60:13;182:3 argue (1) 188:6 argument (3) 186:1,1,7	Army (1) 65:20 around (17) 8:23;10:8,12;20:13;29:22; 38:16;39:22;40:22;41:16,19; 54:11;60:21;74:14,25;76:1,16, 20 artificially (1) 146:3 aspects (1) 95:7 assert (1) 187:3 assessment (1) 111:19 assigned (2) 41:12;93:7 assignment (4) 92:23;93:5,13,18 assistance (1) 55:10 assistant (2) 68:25;70:24 associated (5) 106:12;115:14;129:3; 149:22;152:14 assume (7) 76:10;128:12;147:8;175:1; 178:21;180:25;181:22 assumed (1) 191:2 assuming (1) 66:10 assumption (2) 64:2;179:10 assumptions (1) 120:5 ate (1) 147:9 attached (1) 99:9 attempt (2) 52:9;71:5 attorneys (1) 186:19 attributing (1) 127:2 Audio (2) 4:1;192:25 August (1) 37:5 authority (1) 150:11 authorization (1) 188:22 automated (1) 46:24 available (13) 52:19;83:25;84:23;95:4; 98:15;109:15;124:18,24; 133:24;144:2;145:6;146:11; 155:2 average (19)	18:12;35:10;39:3,8,24;40:22; 69:25;112:2,8;120:16;124:6, 12;125:13,14;155:18,20,22; 156:1;160:1 averages (2) 120:11,12 aware (6) 36:15,19;66:17,19;71:12; 109:18 away (2) 60:3;168:7	81:20;82:23;109:19,20,22,25; 121:14,18,19,20;122:10,20; 126:24;127:6,14;128:3;130:9, 10;131:11;141:11,14;167:23; 168:6,8,14,25;169:1,13,14 basins (1) 110:6 basis (10) 128:5;129:23;130:3,6;141:2; 160:5;163:16;170:7;178:2; 185:1 Bates (20) 44:16;62:9;92:6;93:1,10; 95:1;102:1;104:18;106:18; 107:7,8;115:7;125:1;130:15; 132:22;138:3;147:18;156:15, 16;157:11 bathroom (1) 77:14 bear (1) 151:9 become (2) 150:19;186:8 becomes (2) 38:24;150:24 becoming (1) 78:23 bed (2) 114:19;179:7 beforehand (1) 190:24 began (1) 106:2 begin (8) 25:22;35:23;38:15,22;39:7, 19;84:17;173:12 Beginning (4) 4:1;7:5;52:16;112:2 begins (6) 25:23;59:15;102:1;106:18; 107:7;120:14 behalf (1) 166:19 Bellevue (1) 158:10 belong (2) 55:3,23 Below (10) 10:3;22:23;24:24;30:4;41:2; 45:23;58:9;74:6;144:9,24 beneficial (29) 79:9,12,14;81:21,23;83:14; 88:10,18;90:17,22;91:2,4,21, 23;93:9;135:15,18;136:9,12,13, 17;143:12;165:9;167:11;187:4, 7;188:24;189:25;190:1 benefit (3) 14:4;150:7;187:10 Besides (2) 33:1;105:12 best (6) 15:16;23:21;33:24;106:13; 120:2;161:7
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better (8) 58:24;59:4;68:21;76:25; 92:16;97:18;127:10,11 beyond (3) 20:18;123:12;188:23 bifurcation (32) 18:20;24:24;25:1;26:3,8,12, 19,22;27:2;28:5;30:22;32:16, 19;42:20;56:12;71:19,20;72:1; 77:1;99:3;129:8,16;130:4,24, 25;131:1,7,9;133:13;139:6,7,25 Big (132) 5:2,10,22;7:1,3,4,22,24;8:1, 12,13,18;14:17;15:8,13,24; 16:3,15;20:1,5;23:11,15;24:8; 25:2,7;27:6;28:9;30:12;31:3,5, 7;32:9;33:14;41:12;45:23; 46:15;47:4,6;48:8,9;49:13,20; 50:7,8,9;51:4,6;52:17,20;53:14, 20;54:1,24,25;55:10,15,16,16, 18,19;56:1,15,18;57:4,9,9;59:9, 19;60:4,5,16;68:19;69:3;82:24; 85:1;87:13;94:8;96:12;99:24; 100:13,16,18,20,24;101:2,5,19, 103:7;106:11,22;108:25; 109:12;110:5;112:13;115:2; 120:9;131:17,19;132:3,11; 133:22;136:16,22,24;137:4,4,5; 138:6,11,13,22;139:2,21,23; 140:21;144:9;145:1;148:5; 151:24;155:5,14;159:23; 161:17;162:6,16,18;164:17,20, 22,24;166:9;181:20 Big/Little (1) 33:14 biggest (1) 126:15 binder (6) 5:22;97:17;183:6,7,23,25 biogs (1) 87:8 bit (21) 16:23;36:1;39:4,5,6;45:13; 49:17;59:19;60:9;62:5;68:18; 73:6;85:1;86:7;101:16,21; 111:1;112:16;122:8;128:17; 183:17 black (8) 25:19;47:8,13;95:17;97:6,7; 107:24,25 BLADES (8) 13:11,14,18,23;14:1;96:25; 97:3,22 Blaine (4) 51:15;162:19,20,23 blank (7) 44:3,8;61:2;143:23,24,25; 183:6 blindsided (1) 186:20 blue (4) 16:18;25:16,16,17 Board (17)	66:21;70:16;71:1;86:25; 92:18,24;93:7,14,16,17,25; 108:5;128:20;166:20;187:12; 189:20;190:5 boards (1) 70:18 body (1) 173:3 bone (1) 70:13 Book (3) 47:9,13;85:3 bookends (3) 87:8;88:20;89:1 books (4) 107:19,23,24,25 both (21) 29:11;30:12;41:23;70:18; 94:6,14;98:24;99:24;100:13; 103:7;108:25;109:2;136:16; 137:3,4;139:24;174:4;177:24; 185:6,11;191:25 bottom (4) 30:5;72:19;73:12;108:19 bought (1) 55:18 bouncing (1) 74:13 boundary (1) 105:9 Boy (2) 57:6;74:4 brackets (1) 112:6 brand (2) 88:17;177:18 break (6) 49:1;50:21;77:12,15;146:22, 23 brief (8) 170:20;175:4;186:5;190:25; 191:3,6,17;192:5 briefing (2) 186:12;191:19 briefly (4) 23:20;84:6;106:20;144:6 briefs (5) 186:6;190:22;191:4;192:11, 21 bring (7) 33:18;53:2,4;59:25;60:1; 61:4;79:9 Brockway (4) 80:22;81:12;98:24,24 brought (1) 42:12 building (1) 135:15 built (2) 169:10;189:6 Butte (4) 8:23;10:9,21,25 bylaws (1)	35:7 bypass (3) 20:20;21:4;23:2 Byrne (48) 7:7,8;9:6,12,16;10:15,18; 11:10,20,25;12:9,16;14:12,16; 15:4,8;20:22;21:13;22:4,6,24; 23:11;38:10;49:25;56:8;60:19, 20;61:21;63:21,22;103:1; 108:11;113:6,10,11,17;115:18, 20;138:16;153:10;163:4,21; 164:9;178:12;179:3,12,18,25	169:21,23;170:2;171:7;172:10, 12;175:7;177:23;184:4;186:25; 187:23;188:6;189:9;192:12,13 Canal (307) 5:2,10;6:8,15,23;8:8,14;9:1, 4,22;11:18,22;16:3,13,19;17:1, 10,17;18:2,14,21;19:18;20:12; 21:6,15;22:10,12,17,18;23:8, 12,17;24:9,13,25;25:12,21,22, 24;26:2,14;28:21;29:7,10,16; 30:2,2,9;31:15,22;33:9,19,20; 34:5,8,11,15,20;35:3,20;36:21; 37:11,20;38:9,15,22,23;39:16, 19;40:24,25;41:10,12;42:17, 20;43:7,20,22;46:15;47:4,24; 48:8,9;49:13,21;50:7,51,4,16; 52:8,21;53:14,21;54:1,24;55:1, 3,4,10,17,18,19;56:4,7;57:9,11, 13,15;58:7,12;59:9,19;60:18, 19,21;61:2,11,13,14,18,24; 62:2,2;63:13,15,16;64:12,18, 24;66:25;67:2,6,10,11,15,20, 22;68:19;69:3;70:3,7,73;3; 74:5,13,18,19;75:5,8,12,15; 76:19,20;85:2;95:7;96:9,11,13, 13,14,16,18;98:18,22;99:4; 100:3,17,19,21,25;101:3,6; 104:10;105:12;106:4,6,11,22; 107:4,18;108:12,25;109:4,12, 19,21,23;110:1,4,7,10,14,22; 112:3,11,14,23;114:12,19,19; 115:3,15,17,17;116:12,15,19, 20;117:18;119:21;121:12,14; 122:11,12,20,23;123:1,10,22; 124:7,16;126:16,16,23;127:1,3, 5;129:5,7,14;130:8;131:8; 133:8;134:1;136:21,23;138:8, 11,22,25;139:24;140:5,9,20,21, 25;141:7,8;153:3,12,16,19; 155:5,6,8,13,14,16;156:9; 157:14,22,25;159:18,23;160:1, 7,7,14;161:1,17;162:2,6;163:4, 21;164:17,21,23,25;166:9; 167:5,23;168:7,9,11,14;169:18; 171:25;172:7,19;174:5,20; 176:4,9,16,21;177:12;178:8,11, 11;179:3,7,8,12,18;181:4; 185:7;187:15;188:13;189:3 Canals (18) 9:6;42:11;59:22;64:6;99:15, 18;112:20;113:1;116:23;117:1, 2;121:9;140:10;142:1;172:8; 175:19;176:8;177:24 canal's (1) 154:2 capacity (4) 40:24;45:17;123:10,17 caption (1) 147:23 capture (1) 145:23 capturing (1) 145:13
--	---	---	---

care (1) 50:22 careful (1) 187:14 carefully (1) 116:9 carry (1) 123:12 cascade (1) 28:24 case (13) 43:21;46:17,18;58:5;82:3,5; 83:1;85:11;86:9;159:3,7; 161:22;176:1 cases (6) 81:13;83:4,8;111:14;120:8; 166:6 cause (4) 4:15;43:16;78:2;101:20 cease (3) 68:2;146:12;175:13 ceased (1) 55:17 Cefalo (1) 190:2 center (1) 14:11 central (2) 189:15;191:15 certain (4) 158:14,18;159:8;191:9 Certainly (3) 8:21;20:3;34:5 certification (1) 79:24 certified (15) 78:20,22,23;79:15,17;80:5, 16;81:13;82:2,6,7;83:4,13; 88:1;135:19 cessation (1) 175:14 CFS (47) 18:11,25;29:20;34:25;38:5; 39:14,17;40:8;41:1,4,11;46:6, 7;54:7;58:18,19;59:4;61:12,24; 62:20;74:16;75:19,22;94:13; 108:11,17,19;118:15;119:1,3; 124:3,17;126:11;143:21; 156:17;159:19;161:23;174:11; 176:13;177:11;178:7,12,22; 179:1,2,5,19 chain (1) 92:19 chairman (1) 93:6 challenge (1) 4:4 challenges (1) 91:3 chance (2) 53:17;145:23 chances (1) 119:6	change (4) 24:1;103:20,24;113:4 changed (1) 93:24 changes (3) 47:25;54:22;65:9 changing (1) 104:2 channel (7) 8:22;29:22;47:25,25;72:5; 153:5;155:25 characterization (1) 88:22 characterize (2) 76:5,14 charge (3) 55:8;61:2;178:16 charging (5) 59:21;61:1;178:18;184:21; 185:3 check (8) 19:22;20:9,10,13,19;22:19; 23:5;43:18 choose (4) 59:8,11;115:25;135:7 chose (2) 135:8;155:18 Christmas (4) 191:22,23;192:1,15 Chuck (2) 98:24,24 chute (2) 173:21;187:1 circumstance (1) 63:17 civil (2) 78:15;83:1 clarify (4) 55:8;61:7;172:9;184:17 clean (1) 21:4 cleaned (1) 47:23 cleaner (1) 23:3 clean-water (3) 20:20;21:4;23:2 clear (3) 54:20;71:8;147:25 close (5) 52:24;74:5,6;177:5;180:17 closed (4) 20:18;63:14,20;74:21 closer (3) 101:17;113:7;177:17 Code (2) 78:25;146:1 cofferdam (7) 30:4,8;75:2,4,9;130:4;189:6 cold (1) 36:1 collect (1) 46:16	collected (1) 115:23 color (10) 25:15;95:18;97:3,6,12,13,14, 19,20,23 colored (2) 97:15;140:15 colors (2) 95:20;97:5 column (16) 44:17,23;45:3,10,12,20; 117:11;118:13,14,15;125:9; 131:11,13,19;132:12;134:14 columns (5) 44:6;45:9;108:14;117:15; 134:22 combination (1) 164:22 combined (1) 159:4 comfort (1) 188:19 coming (17) 10:11;16:19;22:6;26:3; 27:17,20;28:25;29:21;31:3; 37:15;51:13;58:19;103:7; 125:18;130:25;153:22;185:10 commence (1) 59:20 commencement (2) 54:14;58:2 commences (4) 41:14;53:22;152:22;154:7 commencing (2) 16:17;151:25 comment (2) 116:21;150:5 commingle (1) 15:14 commingled (2) 24:16;137:5 commingles (1) 26:10 commingling (2) 23:15;30:12 commonly (3) 17:7;31:19;55:14 Company (50) 5:2;35:7;36:24;37:20;41:12; 46:15;47:4;48:9,9;49:13,21; 50:8;51:4;52:17;54:24;55:3,4, 10,17,19,20;57:10;58:7;59:9, 19;66:25;67:10,11,16;68:19; 69:3;70:3;85:2;106:11,23; 108:25;109:5,13;155:6,8,14; 159:23;161:17;164:17,21,23, 25;166:9;167:5;171:25 Company's (4) 52:21;53:14,21;54:1 compare (2) 7:2;182:15 complete (1) 186:24	comprehensive (1) 186:25 compromise (1) 151:18 concern (4) 133:6;146:15;189:15;190:15 concerned (3) 48:17;187:1;188:21 concerns (4) 91:3;146:14;189:16;191:14 conclude (10) 43:2,15;90:11;93:20;100:4,9; 114:16,16,24;117:15 concluded (8) 93:22;114:18;117:17;130:6; 136:1;142:15;143:19;192:24 conclusion (2) 103:14;136:12 conclusions (5) 135:21;141:6;142:8,16;143:1 concrete (4) 29:2;38:10;72:3,3 condition (3) 111:12;142:17;164:23 conditions (9) 35:25;36:1;59:13;76:14; 85:14;87:2;142:10,15,19 conduct (1) 98:17 conducted (1) 166:19 conducting (1) 187:13 confirm (2) 90:8;152:13 confluence (4) 15:11;19:9;20:22;21:14 confluences (1) 103:2 connect (1) 10:24 consecutive (2) 164:2;180:4 conservative (3) 113:15;114:4,7 consider (6) 86:13;89:6;110:1;121:2; 127:19;133:17 considered (4) 86:15;110:9;113:1;115:6 considering (1) 122:18 consistent (1) 178:24 consolidation (1) 54:21 constant (1) 47:22 constrained (2) 88:11,15 constraints (1) 87:15 construct (1)
--	--	--	--

75:8	corresponds (2) 46:7,11		decision (4) 151:9,16;186:19;190:2
constructing (1) 75:1	Cotton (1) 55:16	D	declare (1) 166:2
consumed (1) 168:17	Cottonwood (5) 55:15,17;56:15,18;57:4	daily (1) 61:25	decrease (1) 129:11
contact (2) 136:4,8	County (5) 51:15;162:19,21,21,23	dam (8) 34:18,19;46:17;51:13,20,22; 58:9;144:10	decree (9) 55:2;56:6,24;57:8,8;59:8,11; 151:14;161:18
contain (2) 135:21;182:11	couple (11) 13:22;18:17;35:14;38:6; 68:14;70:12;71:20,21;122:6; 170:21;172:24	Dan (1) 93:5	decrees (1) 54:25
contained (3) 87:6;96:22;106:21	course (4) 10:8;140:22;186:14;189:10	dark (1) 25:16	dedicated (3) 122:21;123:5;188:18
contains (2) 26:7;89:13	courses (1) 101:18	data (51) 83:23;92:3;95:5;106:8,13,23; 108:6;109:7;112:25;113:7; 115:12,14,22,25;116:25; 118:22;119:24;120:3;121:6; 122:13;123:9;124:15,15,23; 126:17;127:10,11,11;129:3; 133:24;140:4;142:1;153:3; 157:2;158:5,22;167:5;173:25; 175:20;176:24;177:20;178:2, 19;180:14,25;184:14,14; 185:17;187:23,24;190:15	deduce (1) 128:8
contemplated (4) 99:23;103:21;105:7;110:5	court (4) 58:5;82:15;83:1;161:22	database (1) 148:22	defensible (1) 128:10
content (2) 83:3;99:19	covered (2) 59:9;142:7	data-feet (1) 108:21	define (1) 49:17
continue (3) 20:14;137:10;142:4	covers (1) 160:25	date (31) 35:11;36:25;39:3;41:16; 51:18,19;56:14;62:25;67:3; 79:18;89:21;90:4;92:16; 111:24;115:16;125:9;130:22; 136:5;152:24,25;154:11,12; 156:20,23;158:5,14;159:10; 165:2,13,14,15	definite (1) 121:11
continued (1) 175:18	crass (1) 68:21	dates (16) 45:1,2;56:25;69:21,25;89:2; 90:8;109:18;112:9;120:10,17; 123:19;125:12;145:9;158:3; 175:20	definitely (13) 83:7;84:22;89:4;119:6; 121:5;126:20;128:2;133:20; 145:2;149:7,21;160:24;176:1
continues (2) 17:19;123:2	create (3) 95:1,2,3	day (22) 4:3;63:3,10,25;64:5;91:11; 102:22;108:15,16,18;119:5,6; 124:17;158:6;159:9;174:13,16; 176:15;177:11;185:6,8,10	definitively (1) 170:1
Continuing (1) 17:16	created (2) 51:22;88:20	days (14) 37:24;38:3,6,7;60:2,12,14; 117:3;120:18;178:24;180:4; 181:1;191:17;192:5	degree (2) 78:14;170:4
continuous (1) 91:11	credit (1) 178:15	day-to-day (1) 70:25	delay (2) 91:20;178:18
contribute (1) 189:3	credited (2) 178:12,22	dealing (1) 81:1	deliver (5) 57:14;58:8;67:14;110:5; 181:5
contributed (1) 73:15	crediting (1) 176:14	deceased (1) 69:1	deliverable (1) 58:21
control (5) 37:9;72:16;73:19;106:12; 169:17	crop (1) 38:25	December (10) 143:17;192:3,7,8,17,17,18, 20,21,21	delivered (33) 56:3,25;58:11,25;100:14,15; 106:16;108:23;110:9,21;111:5, 7,14,22,24;112:19;115:5; 121:9;124:21;152:8,12,15; 160:18;161:2,13;162:3,5; 164:12;171:11;179:9;181:20; 188:17,18
conversation (2) 124:3;153:23	cross (1) 184:21	decide (2) 106:6;165:24	delivering (4) 139:19;175:24;180:19; 181:15
conversations (1) 130:2	cross-examination (5) 49:1,10;147:15;163:24;177:8	decided (4) 105:14;106:3;174:2,8	delivers (3) 28:9;55:4;72:5
conveyance (1) 6:8	cross-examine (2) 49:7;147:12		delivery (33) 5:7;9:25;56:12;59:13;60:11; 96:12,14,20;104:10;110:6; 115:1,14;121:8;139:19;141:21; 152:18,19;161:18,24;166:10, 14,23,25;167:3,4;172:4,10,11, 12,15,20;176:16;180:22
conveyed (1) 177:25	crossing (1) 26:12		demand (25) 35:3;38:14;39:1,16;40:7,12, 14;59:13;60:1;113:2;121:8; 124:2,7,10,11,12;125:14,17,23, 25;159:20;166:13,23;169:18; 172:11
cooling (1) 81:18	CSF (1) 154:14		demonstrate (2)
copies (3) 97:15;151:4;183:10	cumulative (3) 143:8;157:24;158:4		
copy (5) 13:20;14:7;51:1;105:24; 140:15	current (2) 4:22;164:16		
corner (3) 21:24;22:4;165:13	currently (1) 80:21		
Corps (2) 65:20;66:8	curve (1) 47:20		
correctly (1) 93:23	curves (1) 48:2		
correspond (2) 119:2;182:22	cut (1) 66:16		
corresponded (1) 144:12	cutoff (2) 36:25;172:10		
correspondent (1) 163:1	cuts (1) 73:7		
corresponding (5) 44:7;45:24;47:21;48:1;183:1			

130:17;134:2 demonstrating (1) 91:23 demonstrative (9) 7:1;8:17;9:8;13:6;16:16; 25:3;27:6;32:9;128:21 Department (23) 51:1;53:6;57:24;79:13; 86:17;88:2;92:1;93:23;95:6; 99:16,17;106:16;107:17; 135:18;138:17;149:4,12;150:8, 10,17,23;165:24;190:8 Department's (2) 150:3,7 departure (2) 173:25;179:1 Depending (4) 31:1;34:23;37:3;120:20 depict (14) 6:23;14:21;16:2;21:25;22:5, 11;23:15;25:25;26:22;28:4; 29:6;30:17;104:20,23 depicted (11) 6:20;7:4,19;15:17,18;22:20; 23:22;25:14;27:3;33:25;182:23 depicts (9) 5:24;6:11,12;15:13;16:7,16; 24:20;26:18;101:14 deriving (1) 181:23 describe (25) 5:9;8:6,18;9:10,14;10:6; 17:17;24:15;44:1;45:10,20; 46:12,14;89:17;103:6;106:20; 107:13;115:9;118:9;125:8; 126:3;128:24;130:16;138:2; 141:19 described (9) 9:11;23:5;102:7;104:24; 105:1;110:24;125:15;126:5; 139:4 describes (2) 108:8,10 description (4) 15:22;96:20,22;163:3 desert (2) 10:22;76:24 designates (1) 189:20 designed (1) 133:14 designs (1) 144:18 desires (1) 146:21 detail (4) 84:7;88:5;162:10;184:3 details (4) 53:5;100:22;150:9,11 determination (4) 98:4;132:2;140:2,3 determine (10) 73:22;91:8;111:2;122:22;	128:25;133:10;143:14;160:9; 173:7;183:22 determined (9) 100:12;110:12;111:4;112:8; 123:24;136:15;157:9;174:9; 179:4 determining (4) 86:13;113:20;140:4;188:1 develop (3) 87:8,14;90:23 developed (3) 87:16;167:16;169:8 development (28) 79:8,10;85:3;88:18;89:3,18, 25;90:8,11,14;106:9;112:11; 114:7;116:3;118:11,18;121:15; 130:20;132:25;134:9;144:7; 145:6,12,15;146:3;174:9; 182:12;183:21 Device (1) 42:19 devices (2) 5:18;65:14 diagram (1) 141:22 Dietrich (111) 6:1;7:9;11:22,23;16:13,13, 19,21;17:1,8,9,17,21;18:2,5,14; 19:10,18;20:12;21:6,15;22:10, 12,17;23:7,12,16;24:9,13; 25:12;38:13,15,22;39:3,16,19; 40:5,25;41:10;60:9;64:12,14, 17,22,24;65:2,17,18;66:22; 67:2,6;70:6;96:13;99:4;100:3, 25;101:3;105:12;121:13,14; 122:11,16,23;123:1,20,22,25; 124:7,16;126:9,13,16;127:5,20; 134:13,15;137:3;138:22,24,25; 139:24;140:24,25;141:11; 153:12,16,19;154:9,13,18,24; 155:3,4,5,13,16;156:8;157:13, 17,25;159:18;160:1,7;167:23; 168:14;169:18;172:19;174:3; 182:8,13;188:3 difference (8) 74:1;113:3;115:19;130:11; 131:12,20,25;179:19 different (20) 80:13;81:17;86:7;102:25; 103:16,18,25;119:5,6;121:23, 25;122:1,5;125:10;152:3; 158:3;159:5,10,10,11 difficult (2) 91:7,25 DIRECT (4) 4:17;78:7;146:19;167:22 direction (5) 6:9;27:17,19;57:14;73:12 directions (1) 159:5 directly (2) 107:22;184:24 Director (19)	49:9;51:23;52:6,14;53:10; 62:12;68:11;71:13;146:23; 147:14;150:2,5,22;151:19; 163:19;170:11;184:17;186:21; 190:23 directors (1) 71:1 disadvantage (1) 91:22 disappearing (1) 170:3 discharge (1) 33:22 discharged (1) 72:18 discharges (1) 108:11 disclosed (2) 52:2;163:18 discount (2) 114:8;117:3 discovery (2) 52:2;163:18 discrepancy (1) 96:5 discuss (5) 86:5;142:11;143:1,23;144:5 discussed (7) 24:7;88:4;118:25;134:8; 142:2;143:5;157:4 dissipates (1) 168:19 distant (1) 129:10 distribution (1) 154:2 District (16) 5:2;49:21;66:20;67:14; 70:17;89:24;92:14,23;93:6,16, 25;105:9;108:9,10;166:13,18 District's (3) 18:1;31:14,20 ditch (4) 46:19;171:9,24;172:4 ditches (1) 5:13 diversion (102) 7:6;8:8;17:12;24:1;31:14; 32:5;33:11;43:9;51:7,14;57:10; 68:1,6,8;85:3;91:7;94:21,22; 95:8;99:3,5;101:15,16,21,23; 102:6,8,17,22;103:5,9,13,14,17, 20,24;104:3,6,13;112:13; 114:14;117:20;124:5;127:13; 133:7;134:10,13;135:3,9; 137:21,22;138:1,5,7,12,24; 139:3,11,19,20,21;140:6; 143:18,20;147:25;148:1,2,6,7, 10,14,16,22;149:1,2;151:13; 154:23;156:6,17;157:9,10,12, 14,17,25;158:1,1,13;159:6,14; 162:18,21;168:5;169:19;170:7; 171:1;174:20;175:4,20;187:4;	188:21;189:21 diversions (25) 9:21;11:24;32:14,18,23;36:4, 11,14;37:10;67:23;117:22; 118:2,6;134:12;139:24;155:10, 13,15;156:21;163:1;170:5; 171:3,7;172:18;175:18 divert (12) 54:25;66:3,8,21;67:5;111:11; 138:18;144:2;145:7;158:5; 169:22;187:7 diverted (55) 8:11;11:14;33:5,15;34:7,11, 20;41:9,13,24;56:7;61:12; 100:15;103:8;112:19,21,21,25; 115:2;116:22;117:18;121:6,18, 18;122:20;123:4;124:16; 127:14;128:3,6,9,12;129:15; 130:12;132:17,20;133:21,23; 138:22;145:12;154:17;158:6; 159:5;163:20;169:15,17,24; 170:2,7,9;178:7,10;179:1; 187:15;189:9 diverting (2) 42:9;158:6 diverts (1) 155:4 divides (1) 72:4 document (13) 43:24;48:3;50:25;52:11; 85:7;87:19;89:17;91:15;108:7; 135:14;163:14,17,25 documentation (3) 91:14;171:15,16 documents (32) 53:17;83:18;84:9,23;86:8,10; 87:23,24;88:8,12;89:18;90:10; 93:2,10,12,19,22;94:10,15; 102:3,5;106:20,21;108:2; 109:1,2,4,11,13;151:10,15,17 domestic (3) 11:17;37:21;81:18 done (24) 20:24;27:1;47:24;71:9; 72:23;80:18;82:16;84:21; 88:15;90:19,21,25;93:9;98:14; 127:24;135:18;136:5;141:4; 146:24;168:20,21;169:3;171:7; 172:12 dot (7) 8:5,6;16:24;17:22;25:24; 30:16;31:10 dots (1) 10:3 double-check (1) 46:22 down (38) 5:16;8:22,23;9:15,18;10:12, 20;16:19,20;20:14;21:6;28:8; 29:23,23;30:2,7;33:11,19,22; 41:2,6;45:9,15;57:13;62:6,7; 63:15,16,21;66:16;73:7;76:1;
--	---	---	---

121:10;140:22;168:6;175:8; 176:8;179:15 downgrade (1) 71:3 downstream (20) 8:19;19:9;20:22;21:5;22:18, 23:23;4:30;20:21;34:19;65:23; 66:16;127:13;129:7;130:9;23; 131:7;138:7;144:8;161:18 drain (1) 70:7 drains (1) 34:18 drive (3) 62:4,6;99:15 driven (1) 5:13 drought (1) 37:5 drove (1) 62:1 dry (1) 43:22 due (4) 39:11;51:12;59:24;65:9 duly (2) 4:15;78:2 dump (1) 185:4 dumping (1) 29:11 .dumps (1) 15:9 duration (2) 38:2;145:23 during (50) 11:16,22;19:2,2,4;20:17; 23:23;29:17;30:3;34:16;35:13; 40:7;48:20;52:2;58:12;75:16, 20;76:2;79:10;87:14;88:18; 89:9;105:20;110:7;112:11; 113:23;114:25;116:3;121:7,15; 124:5,7,12;133:10;134:8; 136:23;144:2;145:6,12;146:2; 153:24;161:2,19;165:19; 169:12;174:9,11;183:20; 188:14,15 duties (3) 5:6;66:24;80:24	30:8 ease (1) 80:11 easier (2) 7:12;8:18 East (36) 9:6,19,20;10:4,7,8,9,15; 11:14;12:7;61:14;62:2;63:12, 15,16,20;94:24;95:16;112:20; 113:1;115:17;116:12,19,22; 117:1;121:9;138:10;140:9; 141:8;162:2,8;163:22;174:20; 175:19;177:24;178:11 east-west (1) 7:7 easy (2) 90:20,20 edge (2) 28:15,17 Edl (5) 4:6;88:6;98:15;124:1;126:11 education (2) 78:13;83:12 effect (4) 41:17;167:24;189:19,22 effective (1) 190:5 eight (5) 10:10;12:6;61:16,21;176:10 either (13) 47:22;55:21;59:8,11;66:17; 68:3;79:13;94:14;107:19; 127:6;129:10;148:5;170:9 elaborate (1) 142:3 elements (10) 86:12,14,15,22;87:1;88:21; 98:6;135:22;136:1,2 elevation (9) 38:24;45:12,18,22;46:11; 74:2,5,12;107:2 elevations (4) 44:7;45:16;74:7;188:12 eliminate (2) 113:14;160:11 else (9) 97:20;98:3;114:20;127:3; 139:8;142:2;187:10;190:9,17 employed (3) 80:21,22;81:12 employment (1) 49:25 empties (1) 25:12 enclosed (1) 80:12 end (20) 7:8;12:16;17:20;18:2,25; 36:21;65:6;79:10;93:11;105:6; 111:8;115:12;120:10,17; 176:23;177:18;178:1;179:24; 186:8;192:25 ended (3)	104:7;111:8;112:5 ends (7) 9:5;10:18;18:14;42:4;109:6, 7;120:14 engineer (8) 78:18;79:1;80:10;81:1,5; 83:5,9;127:10 engineering (8) 78:15,16;80:22;81:3,3,7,8,12 Engineers (2) 65:21;66:8 enlarged (1) 188:23 enough (2) 65:24;75:24 entail (1) 5:6 enter (1) 130:7 entered (1) 153:4 entering (2) 28:4,7 enters (3) 10:20;71:10;138:16 entire (8) 99:15;105:8;118:22;130:19; 140:8;178:12,22;189:10 entirely (1) 83:22 entry (1) 108:17 environmental (1) 78:15 envision (1) 191:8 equal (3) 74:6,10;180:9 equally (2) 108:25;169:1 equipment (1) 158:18 equities (1) 190:11 equivalent (1) 107:3 Erick (8) 77:21,25;78:12;147:17; 172:23;183:24;184:20;185:22 E-r-i-c-k (1) 78:12 error (3) 43:18;102:8;129:21 errors (2) 47:15,16 especially (10) 91:7;103:24;105:19;107:3; 126:20;129:25;142:14;162:2; 171:15;182:13 essentially (1) 190:9 established (5) 35:8;46:10;47:8,20;127:25	estimate (5) 72:9;154:24,25;155:19; 159:19 estimated (2) 155:20,22 estimates (2) 161:6;188:4 estimating (3) 12:7;153:7;156:1 etcetera (1) 45:5 evaluate (5) 90:21;92:1;142:13;155:9; 158:12 evaluates (2) 106:14;158:16 evaluation (4) 88:7;122:24;123:6;144:15 evaporates (1) 168:17 even (13) 64:3;74:21;76:9;82:15; 102:18;118:6;121:3;145:18; 146:13;166:5;176:18;180:24; 183:19 event (7) 144:13,14,17,19;145:11; 169:9,13 events (8) 144:3;145:8,10,14,20,22,22; 146:5 eventually (1) 92:23 everybody (1) 32:9 everybody's (1) 13:5 evidence (16) 52:12;83:24;117:19;122:9; 128:2,2,6;133:15,20;141:1; 158:15;162:1;164:4,12;170:3,8 exact (7) 12:8;67:3;69:15;152:23; 187:17,18;188:9 exactly (12) 9:14;52:24;74:7;104:23; 127:13;139:7;177:3;179:21; 180:2,12,13,16 exam (18) 79:14,15;81:23;82:12;90:23; 91:21;93:9;120:1;135:18; 136:5,6;149:1;150:7;156:11, 16;158:9;159:3;166:19 EXAMINATION (6) 4:17;68:15;71:16;78:7; 170:23;172:25 examine (1) 78:4 examiner (17) 78:21,22,24;79:4,15,17;80:5, 16;81:14;82:2,6,8;83:5,14; 88:1;135:19;136:6 examiner's (1)
E			
earlier (15) 35:11;37:1;38:22,25;39:1,1, 4,25;54:4;65:16;66:24;69:24; 138:1;167:22;172:18 early (14) 35:13;36:2;37:4,6,8;39:15; 40:5;67:19;102:11;123:20; 124:2,13;152:1,19 early-season (2) 39:15;60:1 earthen (1)			

136:4 example (8) 45:8,19,25;108:6;115:11; 173:11,13,22 except (2) 117:20;169:12 exception (1) 136:21 excess (4) 123:3;169:9;174:24;177:21 excuse (4) 12:24;38:22;56:1;118:12 excused (2) 77:10;185:22 Exhibit (107) 5:21;6:7;7:1,2,4,15;8:4,17, 25;9:8,8;12:11,18,19,20,23,24; 13:1,3,6;14:10,20;15:12,17,18; 16:2,5,16,22;17:5,16,22;19:5, 13,25;20:8;21:7,16,20,22;22:4, 20;23:6,14,19,23;24:18;25:3,3, 10,15,18;26:16;27:1,2,3,6,14, 23;28:2,19;29:4,9;30:5,15; 32:3,4,9;33:25;34:5;42:13; 43:23;44:3;48:4;51:24;52:11, 13;62:11;71:25;83:18;87:17; 89:11;92:5,6,25;94:1,25;97:20; 101:11,25;104:17;106:17; 107:6;115:7;124:25;128:19,20; 130:15;135:13;137:23;141:17; 156:10;163:11;164:1,3,5;167:6 exhibits (6) 13:15;97:5,19,25;134:4; 184:2 exist (3) 55:17;68:2;145:25 existed (2) 17:13;144:8 existence (5) 15:19;23:23;34:1;121:15; 165:19 existing (3) 121:17;175:9;188:20 exists (1) 137:18 exit (1) 68:1 exits (1) 18:13 expansive (1) 151:6 expecting (1) 187:13 experience (27) 12:13;16:6;19:7;21:9;24:20; 30:11;35:2,22;36:5,20;38:14, 20;42:23;43:13;50:3,4;69:14; 79:2;80:3,8;83:12;103:19; 110:6;124:8;158:8;159:22; 164:11 expert (8) 80:19;82:4,9,11,14;83:1,4; 147:19	expertise (2) 83:9;98:22 expire (1) 79:22 expires (1) 79:20 explain (2) 110:17;157:1 explained (1) 140:23 explanation (1) 64:8 express (1) 191:14 extend (1) 89:25 extended (3) 90:4,5;140:5 extensive (3) 59:24;80:8;98:25 extent (6) 5:9;36:3;37:10;52:1;120:13; 167:16 extra (1) 123:12 extreme (1) 145:8 extremely (1) 144:4 eyes (1) 88:15	25:10;41:1;44:23;50:3; 59:13;64:21;68:25;82:12;91:4; 129:10;164:10;168:7 farm (1) 9:25 farmers (1) 111:23 fat (1) 5:22 fate (1) 143:14 fee (1) 80:1 feed (1) 10:10 feedback (1) 47:14 feel (5) 7:11;80:4;88:10;91:24; 111:18 feet (6) 12:3;32:2;34:24;72:4,8; 108:11 felt (2) 84:14;124:5 FEMA (1) 144:18 few (11) 5:16;37:24;38:7;46:25; 56:13;62:8;71:15;120:17; 145:18;152:6;175:20 field (11) 79:14;81:21,23;136:6,7; 139:17;148:25;150:7;156:10; 159:3;166:19 Fifteen (1) 143:7 fifth (1) 82:19 Figure (15) 6:8;58:18;74:14;92:21; 94:25;101:11,14;103:3;104:17; 138:3;139:10;140:14,15; 141:22;154:14 figured (1) 60:22 file (12) 51:12;79:11;84:1,4,20,24; 85:8;90:14;92:12;101:23; 102:24;186:5 filed (3) 53:4;87:5;93:8 files (5) 150:4,18;151:4,8,9 filing (2) 51:11;189:25 fill (10) 37:24;38:7;109:13;175:9; 176:8,16,21;177:12;181:4,12 filled (2) 135:16;175:16 filling (1) 59:21	final (1) 140:2 find (10) 84:11;91:13;100:20;101:2,8, 10;105:10;106:8;117:19;167:2 fine (6) 77:16;151:19;154:6;184:2; 192:13,19 finished (1) 4:5 firm (1) 81:2 first (30) 4:8;9:13;37:23;42:8;43:3,17; 44:2,18;45:10,12;63:9;79:6; 85:23;92:7;93:12,12;108:4,8, 16;109:8,11;111:7;118:13; 125:9;127:23;133:6;134:14; 139:20;185:16;192:12 fishery (3) 21:3,5;23:4 fishing (1) 50:1 five (9) 12:3;29:3,20;49:2;65:4;72:4, 8;75:23;77:16 five- (1) 145:6 five-foot (1) 73:17 five-minute (1) 77:14 fixed (2) 72:12,13 flashy (1) 145:21 Flip (7) 6:8;85:22;87:21;135:12; 141:17;142:25;145:15 flipping (1) 44:15 flood (11) 66:2;144:17;146:14;168:14, 25;169:9,11,12,13,17;178:1 flooding (2) 65:22;66:16 floods (2) 65:24;66:1 floodwaters (2) 76:15,18 floodway (12) 17:8,19;41:2,8;65:17,18; 66:3,22;67:1,6;71:10,10 floor (2) 74:5,12 flow (113) 11:4,20,21;14:13,20,21; 20:13;21:14,24,25;22:4,5,10, 11,17;23:7;24:8,13;27:16,20, 22;28:3,4;29:5,6,17,18;30:6,19; 31:2,2,3;37:15,17,24;41:6;43:7, 22;45:24;46:11;47:19;48:1; 52:19;62:5;64:3;72:6,17,24;
F			
face (12) 35:21;54:3,16;69:8,16;92:8; 96:10;111:10,16;152:2;164:13; 166:4 facilitates (1) 57:10 facility (1) 67:12 fact (2) 142:14;150:17 factor (1) 118:6 fair (10) 40:4;69:3;70:1;88:19,22,24; 91:18;109:10;118:16;190:12 fairly (7) 38:1;74:4;102:11;117:6; 142:7;144:10;145:21 fall (4) 11:17;37:25;42:3,3 Falls (5) 5:1;49:13,21;70:17;80:23 false (1) 114:9 familiar (2) 5:18;55:14 familiarity (2) 49:20;98:11 far (12)			

73:9,11;74:16,17;75:15,20,21; 76:1;79:2;80:7,9,13,13;107:5; 113:4,9;115:16,19;116:2,9,12, 15;118:13,15,24;119:1;124:18; 125:13,15,18;126:5,6,8,10; 129:4,11,18;130:8,21;131:2; 132:5,15;133:1,9;141:25; 143:3,4;144:2,11,16,22,24; 152:14;153:24;161:23;173:11, 13,22;174:3,24;180:7,10,12; 189:8,9	formal (3) 78:13;166:24;171:4 former (1) 120:15 forth (3) 86:22;87:1;174:6 Forty-eight (1) 181:10 forward (2) 4:12;77:24 found (9) 83:24;99:12;104:14;113:19; 116:5;118:24;119:3;126:9,10 four (10) 9:24;11:9;38:3;45:14;60:14; 64:16;65:4;82:16,17;92:11 frame (3) 41:21;153:25;176:15 framework (1) 87:8 free (1) 7:11 frequent (3) 129:22;144:16;145:22 fresh (1) 88:15 front (2) 5:23;45:15 fulfilling (1) 176:24 full (7) 39:9,11,12,20;40:19;154:2; 167:16 fully (1) 138:2 function (2) 133:13;168:23 further (7) 47:7;71:13;77:2;106:14; 142:23;150:5;172:22 fussing (1) 123:14	Gauge (58) 7:19;8:13,19,20,21;9:2,22, 23;11:3,25,25;14:24;15:7; 16:12;17:2;20:5;22:15;27:11; 30:21,25;32:13,15,19;36:4; 37:11;42:15,24,25,25;43:1,10, 10,14,15;44:5,6;45:23,25; 46:14;47:2,20,21;61:7,9;63:4; 73:2;112:14;114:13,14;116:5; 9;117:6,7;119:13;127:5;144:9; 153:15;176:13 gauges (4) 5:17;12:5;43:19;114:10 gauging (3) 46:24;62:21;176:3 gave (1) 114:6 gearbox (1) 72:20 geared (2) 81:8;82:5 gears (1) 59:18 general (8) 5:4;27:22;47:17;71:4;82:9; 83:3;136:3;173:10 Generally (12) 29:17;36:22;37:4,6;40:15,17; 42:2;46:17;48:12;71:24;73:5; 82:20 geography (2) 98:19;99:12 geologist (1) 79:1 GEORGE (2) 77:25;78:11 G-e-o-r-g-e (1) 78:11 Gerald (4) 87:25;93:9;167:12,15 germane (2) 84:14;151:8 gets (2) 65:24;169:16 given (18) 15:22;16:1;33:3,13;43:13; 48:4;88:13;118:24;121:3; 127:18,20;145:25;176:19,20; 177:15,17;178:6,14 gives (2) 73:2;147:1 gleaned (1) 89:18 Glen's (1) 102:16 goes (17) 9:16;10:8;11:19;17:10; 20:18;21:14;28:8;42:6;46:16; 48:15;67:11;71:11;72:10,11; 131:8;151:3;174:18 Good (6) 4:19;21:18;36:12;112:18; 174:1;181:12	Gooding (6) 8:24;25:8;26:11;28:10; 64:24;65:25 Gooding-Milner (3) 65:3;67:20,22 grade (1) 156:6 graduate (1) 80:6 grated (1) 22:25 Great (4) 7:10;13:10;75:24;88:4 greater (2) 132:12;188:18 green (6) 10:3;13:9;25:19;30:16; 31:10;95:21 ground (5) 98:12;99:12;122:2,5;128:13 groundwater (4) 82:25;83:10;94:18;145:5 group (2) 92:11,13 growing (1) 36:1 growling (1) 147:11 guarantee (1) 112:22 guess (28) 17:2;46:1;54:20;55:7;60:11; 61:23;69:4;70:4;81:8;85:10; 88:19;119:4;120:16;150:13,16, 25;153:2;155:21;156:4;164:7; 169:16;176:17;185:16,22; 186:11,16;188:5;189:12 guidance (1) 55:5 guys (1) 190:18
flowed (1) 76:19 flowing (13) 10:7;14:16;16:11;18:9,22; 19:1;28:20;29:10;30:2,10; 42:16;75:5,25 flows (39) 7:20;8:1,14,19;17:1,17; 18:14;20:12;25:7;26:3;34:19, 21;43:13,14;44:6,7;47:10,11, 14,21;48:3,20;50:16,19;52:17; 59:3;73:16,22;74:12;76:12; 129:5;144:7;145:17;149:10; 155:25,25;158:18;182:8,21 fluctuation (1) 73:8 flumes (2) 28:9;158:11 flushing (1) 42:11 focus (3) 71:18;106:3;174:10 focused (1) 89:9 follow (2) 45:8;181:15 following (9) 25:17;44:4,16;63:10;89:22; 93:10;132:22;134:21;185:6 follows (2) 4:16;78:3 follow-up (3) 60:11;77:2;171:21 foot (1) 29:3 forensics (1) 90:19 forfeited (1) 165:18 forfeiture (4) 165:23,25;166:1,2 forge (1) 77:13 forgot (1) 50:21 fork (1) 9:10 Forks (1) 9:4 form (7) 92:14;135:16,17,20;166:25; 167:11,21	formal (3) 78:13;166:24;171:4 former (1) 120:15 forth (3) 86:22;87:1;174:6 Forty-eight (1) 181:10 forward (2) 4:12;77:24 found (9) 83:24;99:12;104:14;113:19; 116:5;118:24;119:3;126:9,10 four (10) 9:24;11:9;38:3;45:14;60:14; 64:16;65:4;82:16,17;92:11 frame (3) 41:21;153:25;176:15 framework (1) 87:8 free (1) 7:11 frequent (3) 129:22;144:16;145:22 fresh (1) 88:15 front (2) 5:23;45:15 fulfilling (1) 176:24 full (7) 39:9,11,12,20;40:19;154:2; 167:16 fully (1) 138:2 function (2) 133:13;168:23 further (7) 47:7;71:13;77:2;106:14; 142:23;150:5;172:22 fussing (1) 123:14	G	habit (1) 48:19 half (5) 39:13;115:13,13;180:6,12 hampering (1) 146:2 hampers (1) 145:7 handed (3) 69:6;162:10;171:5 handle (1) 41:2 handling (1) 5:7 handwritten (5) 47:12;48:10;85:2;109:1,4 happen (4) 29:14;33:7;123:8;130:3 happened (2)

174:17;185:17 happening (4) 130:5;183:19;184:5,8 happens (2) 10:6;47:4 happy (4) 58:23;68:17;186:14;191:6 hard (3) 9:9;53:4;92:2 Harmon (33) 4:10,11,13,19,21;98:21; 99:19;106:18;107:24;110:24; 111:4,17;112:1,1,17;116:21; 117:21;124:4,11;125:22;130:2; 133:15;160:14;162:9;164:7; 166:7;174:19;175:4;176:7,20; 180:18;181:3;183:19 H-a-r-m-o-n (1) 4:21 Harmon's (7) 53:13;111:19;122:24; 164:11;175:24;177:15;178:6 hash (1) 31:17 head (34) 6:1;7:6;9:12;16:12;19:10; 49:24;51:15;55:1;56:16;60:19; 61:10,19,20,23;62:1,2;72:23; 74:1;75:23;98:9;108:12; 113:10,16,17;115:17,20;176:4; 178:8,11;179:2,11,12,18,24 headgate (20) 12:1;17:9,18;31:21,24;32:7; 39:12;43:10;67:1,5,9;130:10; 153:9;154:23;155:1,9,15; 168:13,13;169:18 headgates (7) 9:24;32:15,17,18,22,23; 168:9 heading (1) 44:19 headings (2) 44:17;45:3 hear (2) 147:10;152:18 heard (4) 168:25;180:18;181:3;187:5 HEARING (64) 4:2,3,11;6:5;14:3;48:24;49:4; 6:51;25;52:10;62:11,13,15; 68:12;70:11;71:14,17;77:4,6,9, 12,16,19,23;78:4;82:14;84:15; 85:5;97:18;146:20,25;147:4,7, 10;150:12;151:2,21;163:12,16, 23;170:12,16,19;171:20; 172:23;173:1;183:11,14;184:1; 185:14,21,24;186:15,21; 190:20;191:7,11,13,22,24; 192:2,6,10,24 heating (1) 81:18 heavily (1) 84:25	heavy-dosed (1) 83:8 height (2) 34:23;72:9 held (2) 164:20,24 help (7) 53:20;54:20;66:16;87:7; 138:2;140:12,17 helpful (5) 13:18;20:1;34:6;183:15; 189:11 hereby (1) 190:3 Here's (1) 150:12 high (13) 29:3;35:14;40:22;41:1; 65:23,24;76:7,7,8,11;124:11; 144:2;152:14 higher (2) 43:1;113:21 highest (9) 116:5;118:24;119:12,14; 135:8;144:7,11;156:25;174:3 highlighted (4) 62:18;96:3;119:3;135:6 hindsight (1) 67:24 hire (1) 79:15 historic (3) 38:19;70:3;158:15 historical (3) 83:23;91:2;158:15 historically (2) 35:9;36:24 hits (1) 25:7 HJB (18) 9:17,22;10:3;11:19,25;12:5; 63:20;113:10,16,18,25;114:10, 13,15;116:5,17;117:8;119:13 HOB0 (1) 158:10 hold (3) 66:18;74:22;78:17 holder (8) 59:8;79:11;142:10;165:8; 166:10;167:19;169:20;187:7 holders (4) 56:6;69:14;161:18;171:9 hole-punched (1) 97:17 holes (1) 91:13 holidays (1) 192:11 honestly (1) 187:12 Honor (1) 163:10 horn (1)	68:17 hour (2) 146:21;147:2 hours (8) 60:24;61:5,16,21;62:8; 176:10,10;181:10 hundred-year (3) 144:17,19,21 hydraulic (1) 188:11 hydraulics (1) 81:4 hydrology (2) 81:4;90:19 I Idaho (14) 53:6;66:20;78:19,21;80:23; 81:6;92:24;93:7,25;108:5; 110:7;124:8;166:20;190:4 IDAPA (1) 145:25 idea (2) 168:22;181:19 identical (1) 180:17 identification (1) 151:13 identified (7) 95:9;118:14;140:25;148:3,7, 10,14 identifying (1) 95:7 IDWR (3) 88:7;142:1,14 IDWR's (3) 142:12,16;148:22 ignore (1) 180:23 illustrate (1) 116:21 illustration (1) 175:23 imagine (1) 36:9 important (3) 151:11;184:6;186:18 impounds (1) 145:2 in-canal (2) 110:13;122:19 incapsulate (1) 102:21 in-channel (1) 122:18 inclined (1) 190:24 include (22) 31:4;50:9;56:11;81:4;82:4; 83:19;84:10;85:24;96:2,9,16; 104:10;107:1;110:19;113:2; 116:19;122:16;125:22;149:18;	151:4;154:2;162:18 included (16) 83:7;96:5,18,19;108:7,20; 110:10;116:2;122:13;131:14; 141:24;143:25;145:9,16;150:7; 151:17 includes (5) 6:18;79:8;86:1;116:4;131:16 including (6) 63:4;83:23;130:3;140:9; 141:8;157:21 inclusive (1) 131:18 incorporate (2) 120:6;178:17 incorrect (4) 76:13;101:24;102:18;164:8 increase (6) 113:9;129:18,19,19;132:14; 133:9 indicate (19) 20:19;32:9;44:6,12,20;63:22; 64:7;94:4,10,15,20;95:25; 102:5;112:1;117:21,23;119:11; 129:21;130:11 indicated (16) 20:8;25:10;31:17;60:12; 64:13;96:10;111:5,25;113:11; 122:25;123:3;124:4;125:23; 150:6;160:4;174:20 indicates (8) 44:21;45:24;102:6;118:10; 130:16;132:4;148:8;167:15 indicating (2) 10:13;27:10 indication (7) 25:11;63:9;112:18;116:23; 140:10;165:17,21 indications (1) 104:14 indicator (1) 32:12 indicators (1) 43:6 individual (11) 45:6;55:3,22;56:21;57:19; 58:6;61:23;64:9;108:16;155:9; 157:8 individuals (4) 55:23;68:24;92:12;171:8 inflow (4) 34:19;58:15;59:13;64:24 inflows (1) 12:4 informal (1) 171:24 informally (2) 171:7;172:12 information (35) 83:24;87:6,25;89:5;90:13; 91:6,9,9,12;95:4,5;98:16,22; 99:16;108:9;109:5,14;120:1; 136:3,4,8;149:11,13;150:21;
--	--	--	--

151:9;152:11;154:23;159:25; 161:5,7,9;164:7;182:11; 183:21;186:2	interval (6) 144:6,8,13,14,21;145:17	39:7,9,18	K
inherent (2) 119:20;120:24	interviews (1) 98:17	irritation (1) 20:17	
initial (8) 51:7,14;98:4;191:17,19; 192:5,14,21	into (125) 7:20;8:14;9:5;10:18,22;11:1, 14,19;12:4,9,17;15:9,24;16:20; 17:1,10,13;18:18;20:12;21:6; 22:6,11;23:7,11,16;24:8,13; 25:12;29:7,11,11,16;30:1; 31:15,22,24;33:19;34:20; 37:11;41:7,17;43:7;46:13; 52:12;56:8;58:15,19;59:3;60:8; 61:12;63:20;64:12,14,17,20; 65:3;66:3,13;70:6;71:11;72:17; 73:1,4;74:17;75:5;76:19;79:5; 83:9;84:25;98:4;99:4,5;100:16, 18,22,25;101:6;112:14,19,25; 114:18,19;115:3,13;116:1,22; 117:2,18;118:20;120:7;121:9, 18;122:20;123:8;124:16; 125:10;127:14;128:3,13; 129:16;131:1;133:8;136:25; 138:19,20,24;140:6,7;143:10; 146:20;155:4;161:24;162:13, 23;163:4,21;164:3;167:25; 168:14;175:18;179:1;181:16; 187:15,18;188:4	issuance (1) 4:4	J
initially (1) 69:23	introduce (2) 52:9;78:9	issue (3) 47:22;189:13;190:13	
inject (1) 138:18	inundated (1) 76:20	issued (1) 142:14	JAMES (41) 49:2,9,11;51:23;52:3,6,14, 15;53:10,15;62:12,14,16;65:1; 68:10;70:12,15;71:13;120:5; 146:23;147:9,14,16;150:2,22; 151:19,22;157:6;163:10,19; 164:6;170:10;171:21,23; 184:17,19;190:2,23;191:25; 192:13,19
injected (3) 56:8;140:6,7	investigate (3) 101:21;142:22;160:21	issues (8) 79:7;81:2;127:8;186:16,22, 25;189:12;190:14	
injection (8) 138:14,15,18,20;139:22; 162:20,23;163:3	investigation (1) 89:9	item (1) 184:22	keep (5) 30:9;48:9,11;75:3;174:7
injects (1) 136:25	involved (2) 78:23;91:25	items (1) 148:25	
input (1) 153:15	irremovable (1) 72:14	January (5) 49:14,22;50:5;143:16;192:12	Kenny (1) 57:1
inquire (3) 155:1;166:8,12	irrigating (2) 36:2;174:23	JB (1) 10:19	kept (1) 67:18
inside (1) 98:22	irrigation (125) 5:7;10:10;11:15,22,23;19:2, 4;21:1,5;28:10;29:17;35:3,19, 22;36:6,10,21,25;37:12,13; 38:14,21;39:3,9,16,20;40:5; 41:14,20,23;42:3,8;47:11; 48:18;50:12,15;52:16,18,21,25; 53:21;54:1,14;57:18;58:2,12; 59:20,20;65:10;69:21,25; 75:20;76:2,3,21,22;110:8,15, 19,20,24;111:2,5,6,7,10,15,18, 20,22,23;112:2,6,9,18,22; 113:1;114:13,15;116:23;118:5; 120:10,14,17;121:7;122:12,14, 16,23;123:1,2,5,8,12,20;124:2, 3,13,13;125:14,24;140:10; 149:18,20,21,24;151:25;152:8, 15,22;153:24;154:7,20;159:19; 160:15;161:5;162:3,4,7;163:7, 22;164:8;174:21;188:14;189:4	JBH (1) 108:12	Kevin (4) 71:23;107:21;155:1,3
installation (2) 51:20;65:22	irrigators (3)	Jerome (1) 83:2	kicks (1) 41:21
installed (3) 23:3;31:13;158:17		Jim (38) 7:7,8;9:6,12,16;11:10,20; 12:16;14:12,16;15:4,8;20:22; 21:13;22:4,6;23:11;38:10; 49:24;56:8;60:18,20;61:21; 113:5,10,11,17;115:18,20; 138:15;153:9;163:4,21;164:9; 179:3,12,18,24	kids (1) 124:9
instance (4) 74:16;128:14,15;137:3		Jimmy (4) 11:24;103:1;108:11;178:12	kind (24) 13:8;25:19;38:7;41:6;72:25; 76:5;87:13,21;88:14;89:7; 91:21;119:2;120:23;127:24; 129:22;142:13;149:9;155:21; 169:6,16;175:6;176:22;190:25; 191:19
instantaneous (1) 60:12		job (2) 80:3;106:13	Kinsey (1) 8:23
instead (2) 73:3;173:24		Joe (12) 14:3;48:25;49:7;70:11,16,23; 71:6;77:4;147:8,13;171:20; 190:1	knowing (2) 176:15;178:15
institutional (2) 69:2;70:21		Johnson (3) 10:9,21,25	knowledge (49) 5:10;6:22;11:13;14:13; 15:16,21,23;16:1;17:12;18:9; 23:21;24:6,11;31:18;33:3,13, 24;34:6,12,15;49:16,17,18; 59:2,15;65:12,13,21;68:21; 69:2;70:2,5,21;71:3;98:25; 108:1;109:20,23,24;114:20,22; 121:16,17;122:25;163:20; 164:11,14;168:18;171:3
instruction (1) 88:13		Jr (1) 98:24	known (2) 55:14;163:1
intent (2) 53:11;121:24		July/August (1) 153:25	knows (1) 111:21
interchangeable (1) 137:1		jump (1) 129:20	L
interchangeably (1) 136:19		June (14) 37:4;39:22,23,24;40:4,18; 89:8,8,22,25;90:1,5,15,15	
interested (2) 174:12;186:17			label (16) 14:12,13;19:25;21:20,23,25; 22:3,5,10,10;26:7;27:14,19; 28:3;29:5;32:6
interesting (1) 83:22			labeled (6) 17:22;27:4;45:4,4;108:12; 173:11
interjects (1) 136:24			labels (2) 14:19,20
internal (1) 149:14			lack (4) 91:6,6;121:8;171:15
internally (1) 174:7			Lakey (1) 71:23
internet (1) 83:25			Lakey's (1) 107:21
interpret (1) 96:25			land (1) 34:3
interrupt (4) 13:11,23;105:23;140:12			lands (2) 76:14,19
intersects (1) 113:6			language (1)

190:1 lapse (1) 90:22 large (5) 126:20;145:19,24;146:4,6 larger (2) 8:17;114:4 largest (1) 158:13 last (8) 37:23;46:25;93:17;139:4; 142:25;156:15;166:2;181:18 late (5) 17:15;51:11,11;65:21;175:24 latent (1) 187:2 later (10) 35:11,23;37:1;39:5;40:1; 67:25;85:1;111:18;120:24; 161:13 lateral (4) 9:25;12:2;18:20;74:11 laterals (13) 10:10,17;12:6,8;64:14,16,19, 20,23;65:2;153:21,23;154:3 lattice (1) 25:6 lawsuit (1) 58:7 lay (1) 34:3 leak (4) 37:15;51:13;74:21,24 leakage (2) 75:4,9 leaked (1) 175:4 leaks (2) 43:20;74:23 least (19) 9:24;11:9;32:17;41:1;50:9; 58:1;75:7;106:19;165:5; 167:19;182:22;184:6,8;187:5, 11,24,24;191:14,15 leave (1) 73:5 led (1) 85:2 ledger (3) 46:13;47:5,12 ledgers (2) 48:10,10 left (13) 14:19;16:11;20:5;22:3,22; 25:18;44:23;73:13;143:16,23, 24,25;165:12 left-hand (6) 21:23;27:24;28:15;29:4; 108:15;177:2 lending (1) 189:13 length (2) 99:15;140:8	Leonard's (1) 57:1 less (3) 113:24;132:15;145:17 level (1) 45:24 levels (1) 188:11 levity (1) 71:5 license (8) 4:4;90:23;120:1;150:10; 151:13;158:9;159:2;190:10 licensed (1) 81:25 licenses (1) 78:17 licensing (3) 82:12;151:12;190:8 light (1) 141:25 likely (4) 37:12,13;102:18;133:25 limit (3) 122:11;145:11;151:15 limitation (1) 188:23 limited (9) 50:5;103:4,4;109:17;123:6; 146:7;151:16;158:14;189:4 limiting (3) 110:23;145:5;190:6 limits (1) 146:3 Lincoln (1) 162:21 line (5) 16:18,20;25:17,19;184:22 lined (1) 38:10 lines (2) 135:1;175:16 list (6) 51:19;52:25;94:8;137:21; 176:18;186:25 listed (26) 11:11;36:24;64:3;69:11,12; 89:21;94:23;100:6;103:15,18; 104:3;108:15;117:14;121:20; 148:1,17,20;150:4;151:23; 152:4;157:17;160:21;162:12; 170:6;174:11;177:14 listened (1) 175:3 lists (2) 44:4;173:5 literally (1) 159:8 litigation (1) 58:14 Little (156) 5:25;7:8;9:9;10:20;11:2,4,7, 17;12:17,19;14:20,21;15:9,13,	24;16:10,18,23,23;17:3;18:3,5, 15;19:8,20,22;20:14,21;21:4, 12,24,25;22:6,23;23:3,7,15; 24:2,12,23;25:1,7,12,14,17; 26:10,13,21;27:9;28:12,14; 29:5,7,12,15,20;30:1,6,10,12, 20;31:2,6;33:9,10,18,20;36:1; 38:24,25;39:6,25;43:4;45:13; 47:6;49:17;50:1,8;54:5;55:25; 56:8,9;59:18;60:6,7,8,9;62:5; 64:12,20;65:23;68:17;71:5; 72:5,18;73:4,6,16,23;74:1; 85:1;86:7;94:8;99:4,24;100:13, 13,24;101:2,5,16,19,21;103:2, 7;111:1;112:16;113:6;116:9; 121:11;122:8;124:20;128:17; 129:10,16,25;130:7;131:17,19, 21,23;132:1,6,18;133:8,22; 136:16,25;137:4,6;138:16,20, 24;139:2,23;140:7,8,22;147:2; 148:5;155:4;177:7,17;180:15; 188:12;189:2 livestock (1) 37:25 living (3) 68:20,21;70:20 locate (1) 162:24 located (13) 14:24;15:4;17:2;19:8;20:3; 22:20,22;25:4;26:12;28:15; 31:25;43:10;95:15 location (15) 12:24,25;21:17;24:3;27:2; 32:4;99:17;101:14;102:12; 103:1,8;105:11;138:23;168:15; 169:3 locations (2) 103:20;168:22 logbook (1) 172:4 logged (1) 172:13 logic (2) 174:18;175:1 logical (1) 168:2 logs (1) 172:14 long (11) 17:12;60:20,23;61:3,13; 69:17;90:17;91:14;144:10; 145:22;168:16 longer (2) 10:1;61:5 look (85) 5:21;6:25;7:2;12:10;16:5; 19:5,11;20:7;21:7;25:9;26:16; 34:5;43:23;44:17,18;46:14; 50:24;51:7;53:18;62:9;69:7; 83:17,21;85:6,10,23;86:4; 87:17;88:14;89:2,11;92:4,6,25; 94:25;95:24;99:2,6;101:11,25;	104:16,17;106:6,17;107:6; 110:13;111:10;114:9;115:7; 118:8;124:17,25;125:4;126:2; 128:19;130:14;132:21;149:9; 150:8,11;153:8,21;154:22; 156:5,10,13;157:2;164:15; 172:19;173:2;177:1,16;179:17; 180:7;184:4,8,10,16;185:15,17; 187:20,22,23;188:5,8 looked (19) 53:8;54:18;84:6,7;92:8,17; 95:11;101:16;110:14;111:13, 16;112:24;121:24;124:14,19; 129:13;152:6;162:13,15 looking (30) 6:5;8:25;19:17;40:14;43:20; 59:19;60:18;70:3;86:12;88:17; 90:13;97:20;108:4;112:15; 113:3,7;114:2;118:4;144:24; 155:24;157:16;177:20;180:14; 181:23;183:17;186:22;187:11; 188:19;189:15;190:15 looks (7) 51:14,18;52:20;108:17; 163:2;165:5,12 loss (13) 43:16;58:16;114:14;115:4; 116:5;117:17;119:12,14,16; 121:11;127:3;129:13;179:11 losses (1) 114:12 lost (7) 114:24;117:19,20;127:1; 128:12;129:12;130:12 lot (29) 21:2;35:15;49:15;54:17,19; 55:17;58:5,24;60:16;66:7; 67:18;71:1;76:16;80:6,12,18; 89:4;91:9;106:12;109:5; 111:14;118:2;119:24;120:5,8, 8;121:1;191:1,1 lots (4) 80:17;161:12;167:4,4 low (3) 74:11;145:17,21 lower (19) 22:3;31:13,19;38:24;43:14, 19;66:18,20;67:13;89:24; 92:14,22;93:6,24;105:8; 113:21,24;166:12,17 lunch (6) 146:21,22,23;147:6,8,12 Lynn (42) 4:9,13,21;49:12;50:24,25; 52:16;53:16;54:12;56:14;57:1; 61:7;62:9,17;64:11;65:16; 70:12;71:14;98:21;99:19; 106:18;107:24;111:17;130:2; 133:15;152:16;153:23;159:20; 161:4,16;168:24;172:6;175:3, 24;176:20;177:15,25;178:6; 180:18;181:3;183:19;184:20 L-y-n-n (1)
---	---	---	--

4:21 Lynn's (4) 52:7;152:7,9;159:22	27:2,7;32:3,4,6,10 marked (12) 8:5;12:11;13:14;14:5;16:24; 17:5,22;25:25;30:16;52:11; 163:25;164:1	11:4;18:2;65:5;80:12,12; 119:25;126:19;158:18 measured (23) 26:3,5;30:25;36:3;37:10; 41:6;43:14,14;61:25;80:10; 107:5;109:9;120:3;124:21; 125:13,15,16;158:11,13;179:2, 19;180:7,12	9:7,9;18:24;39:4,5;48:8,9; 67:17,21;69:20;70:21;91:15; 112:10;119:5;120:17;124:4; 126:18,23;128:17;138:2;146:7, 8;151:14;181:12;185:4;186:8
M	marking (1) 53:11	measurement (35) 5:18;9:1,23;42:19;46:2,3,8,9; 62:20;106:12,23;107:1,15; 115:14;117:1,7,8;124:14; 129:3,9,21;130:9,21;131:6,9, 10,21,22;133:24;142:1;153:9; 158:11;167:5;188:1,9	mile (1) 15:10
magenta (3) 95:21,21;101:15	marks (1) 31:17	measurements (34) 30:19;46:16;47:3;48:10; 58:15;62:1,2;83:11;106:4,7; 107:2,18;109:1,8;113:4; 115:17;116:20;118:19;122:12, 17;124:14;127:6;129:6;130:23; 131:2,25;134:1;141:25;153:15, 20;155:15;159:12;172:7; 187:14	miles (4) 5:15;60:17,21,21
Magic (20) 7:16,20,23;8:12;14:18;34:17; 45:4,8,9,23;46:17;59:3,12; 76:14;107:3;138:7;144:9,24; 145:2;161:24	Marley (4) 10:23;11:2,6,11	measures (3) 8:13;15:8;42:16	Milner (4) 25:23;26:3;30:2;76:1
Main (29) 6:1;7:9;9:6,19,19;10:8,15, 20;12:7;16:13,13,19;17:1;18:2; 19:10;20:12;50:2;57:13;61:10; 63:20;64:14;65:21;112:20; 133:6;140:9;162:8;173:3; 190:15	Martens (5) 88:1;93:9;98:15;167:12,15	mechanism (1) 65:5	Milner-Gooding (44) 18:18,21;24:25;25:7,21,22, 24;26:2,9,13,20;27:11,16; 28:21;29:7,10,16,19;30:1,20; 31:2,22;33:9,19,20;42:14,17, 20;74:18;75:15;76:19;96:14; 100:3;101:6;128:23;129:5,7, 14;130:7;131:8;132:5;133:8; 188:13;189:3
Mains (4) 10:4,7;11:14;141:8	master's (1) 78:14	measuring (10) 8:7;11:3;16:25;18:1;32:12; 63:12;65:14;79:2;80:7,8	mimics (1) 140:21
maintenance (1) 5:8	match (2) 48:2;103:14	meet (1) 21:13	mind (7) 13:4;49:18;53:2,4;69:23; 126:16;174:7
majority (1) 52:20	material (2) 96:6,19	meets (2) 26:20;27:9	Mine (4) 95:19;97:7,17;183:10
makes (3) 91:24;127:25;129:14	materials (1) 88:3	memorandum (1) 88:5	minus (2) 125:17,17
making (2) 150:14;183:10	math (3) 119:8,9;125:8	memorialized (1) 143:2	minute (3) 50:25;62:7;186:20
manage (2) 39:19;155:3	matter (2) 60:2;151:3	memory (3) 54:11;58:14;71:7	minutes (5) 49:2;75:19;77:17;158:12; 170:13
managed (2) 75:12;155:5	max (8) 118:15;119:1;134:9;144:17; 156:6;157:1,17;159:14	mention (2) 91:8;190:18	misleading (1) 45:13
management (3) 68:24;70:24;161:1	maximum (19) 87:13;118:13;124:5;126:4,6, 8,10;133:1;134:13;143:20; 156:21;157:3,9,12;159:6; 174:8,11,12;176:19	mentioned (4) 58:5;101:15;161:21,22	misstatement (1) 125:25
manager (5) 5:1,4;120:15,15;159:23	may (47) 4:8;22:14;35:5,9,10;36:4,7,8; 39:23,24;44:4,19,21;45:25; 49:7;55:12;72:10;78:4;91:9; 108:17;111:6,24;112:4,7; 123:4,7,11,21;124:9;125:7,9, 12,12;127:3;147:12;149:9; 151:12;152:8,13,15,22,24; 154:8;160:15;161:20;164:8; 183:7	met (5) 59:13;142:10,15,20;146:12	mistake (2) 183:8,9
managers (3) 68:25;69:1;70:25	maybe (23) 8:17;9:18;11:16;13:18;32:2; 39:13;74:16;77:14;88:19; 91:14;97:22;102:19;120:16; 125:23,24;138:1;139:15;156:4; 175:7;176:24;183:20;187:9; 191:17	meter (1) 156:2	MJB (7) 11:25;12:5;14:24;15:7;19:9; 113:18,24
managing (1) 75:8	McFadden (1) 93:5	meters (2) 80:11,13	modeling (1) 83:10
manner (2) 33:21;38:11	mean (17) 19:16;44:13;68:20;92:2; 108:22;111:21;112:24;113:19; 119:6;121:5;127:10;150:24; 160:13;164:10;165:7;169:23; 171:16	method (1) 180:19	moment (2) 100:22;170:13
many (10) 5:15;35:19;46:18;53:3; 64:23;65:2;71:21;82:1,13; 133:4	mean-flow (1) 108:20	methodology (1) 128:25	monitoring (1) 55:9
map (41) 6:3,5,11,12,15,20,23;7:4,11, 16,18;11:1;13:8;15:18;16:2,16; 19:13,17;20:2,6;22:16;23:20; 26:7;31:11,17;32:11;42:14,15; 95:1,2,12,17;96:1,4,5,7,97:11; 101:12;128:20,23,24	meant (1) 102:20	Michele (3) 4:6;86:6;88:6	month (9) 44:21;45:1,2;108:21;125:7,7, 9;130:22;174:2
maps (3) 99:11,14,20	measure (8)	mid (2) 37:5;58:3	months (1) 108:14
March (6) 57:18;58:3;59:3;152:1; 160:16;163:9		middle (8) 22:9;23:1;25:19;28:2,19; 111:8;112:5;192:2	more (26) 10:3;13:22;58:23;70:4,21; 101:21;109:5;113:15;114:1,3, 7;116:9;118:2;120:8;124:6; 127:10,11;129:12;159:2; 172:10;175:20;184:11;185:7, 10,19;188:9
mark (19) 12:19,23;13:6,9,16;14:6; 19:13,20,24,25;21:16,20;22:16;		might (26)	morning (5) 4:19;46:21;48:14;49:7;77:20

morphosis (1) 80:11 mossing (1) 47:23 most (12) 6:18;10:12;58:22;76:21; 81:18;98:20;106:10;113:13,25; 129:15;142:11;158:8 mostly (1) 48:17 mouth (5) 10:19;11:10;60:20;113:5,11 move (9) 24:18;38:13;51:23;77:9; 120:17;121:13;139:14;153:12; 163:10 moves (1) 140:21 Moving (1) 15:17 much (30) 18:8,22;21:1;34:22;38:4; 40:20;41:3;60:1;61:5;73:22; 74:22;84:7;105:1;112:22; 120:2;124:6,23;128:7,8; 130:11;143:9;154:1;158:5; 159:8,10;161:15;187:14,15,18; 191:2 mud (1) 21:2 multiple (1) 191:18 must (2) 78:25;114:17 myself (1) 187:21 MZ000008 (2) 4:1;192:25	66:3;81:24 need (8) 39:21;75:21;89:1;142:3; 150:19;157:5;171:10,10 needed (3) 88:11;94:2;101:20 needing (1) 40:15 neighborhood (2) 29:19;75:22 neither (1) 164:17 net (1) 105:19 new (4) 88:17;120:3;176:23;177:19 next (20) 6:1;9:1;13:2,7;45:19;63:12; 25:64;5;77:20;98:11,13; 115:12;139:16,18;141:18; 142:5;158:6;179:23;185:9; 191:4 none (2) 97:13,14 non-irrigation (7) 48:20;75:16;110:8;121:7; 136:23;188:15;189:5 Nope (1) 19:17 normal (5) 34:17;35:11,12;58:12;73:6 normally (5) 18:22;19:1;20:17;40:20;86:8 north (16) 7:18;8:23;9:16;15:2;26:7; 28:10,10;29:23;30:7,20,21; 31:15;33:20;42:20;129:5; 131:21 note (3) 102:15;172:3;185:5 notes (3) 101:23;102:16,23 notice (7) 64:5;101:17;150:3,14,23; 151:7;162:17 noticed (1) 113:8 November (17) 4:2;37:24;41:16;54:11; 57:18;63:10;115:14;119:7; 123:9;163:9;174:13,23;175:15; 176:2;177:11;192:4,7 number (31) 12:8;31:10;44:3;45:11;51:9; 54:22;55:2;59:24;89:23;90:24; 114:4,6,9;117:10;119:4,16; 128:22;132:4,8,9,9;137:19,24; 141:21,24;151:16;171:10; 176:18;177:14;178:15;180:24 numbered (1) 139:20 numbers (18) 44:24,24;45:20;46:13;	117:13;131:14;134:14,18; 178:4,25;179:15,17,20;180:1,6, 9,25;181:25 numerical (1) 181:23 numerous (2) 105:9;166:3	153:22;159:7;160:16;162:18; 167:23;175:11;192:23 Offered (1) 163:24 office (6) 11:3;47:9;48:15;98:23; 107:20,21 OFFICER (58) 4:2,11;6:5;14:3;48:24;49:4, 6;51:25;52:10;62:11,13,15; 68:12;70:11;71:14,17;77:4,6,9, 12,16,19,23;78:4;97:18;146:20, 25;147:4,7,10;150:12;151:2, 21;163:12,16,23;170:12,16,19; 171:20;172:23;173:1;183:11; 184:1;185:14,21,24;186:15,21; 190:20;191:7,11,13,22,24; 192:2,6,10 OFFICERS (1) 183:14 official (9) 13:15;97:5;106:16;107:16; 109:12;150:3,19,23;169:4 off-season (3) 30:3;48:20;58:25 often (7) 91:13;103:23;104:4;109:7; 111:18;112:5;113:12 Ohio (1) 80:7 old (3) 9:25;51:19;68:1 once (8) 47:3;110:18;117:13;122:22; 125:5;129:20;136:24;144:23 one (59) 6:9;7:3;9:25;12:1;13:12; 18:19;23:25;31:13;32:20,25; 35:8;44:2;45:4,4,17;46:23; 50:20,21;51:10;59:1;67:24; 70:4,18;75:13;81:18;82:22; 83:8;85:19;86:10;91:10,10; 94:22;95:22;103:5;104:20,21; 105:24;115:21;125:6;127:12; 128:21;137:18;139:4,12; 148:25;151:11;155:11;157:5; 159:2,2;162:11;164:17;173:24; 174:13,16;177:2,11;185:16; 186:25 one-month (1) 130:19 one-percent (1) 144:20 ones (7) 81:17;89:17;107:20;117:24; 120:9;139:20;152:7 one's (1) 177:4 only (23) 11:7;20:18;52:8;97:11; 106:8;109:6;115:1;122:11; 129:24;132:12;137:14,18; 143:14;145:5,18;146:2;153:24;
N			
name (6) 4:20;78:10,11;136:4,4;169:4 names (1) 45:6 narrative (2) 142:6,9 narrow (1) 84:18 natural (6) 8:22;50:15,18;52:17,19; 138:19 natural-flow (1) 52:25 nature (4) 76:12;187:2,21;188:21 near (1) 144:10 nearly (1) 117:25 necessarily (2) 169:23;186:11 necessary (2)			

154:1;160:5,18,20;161:5;179:2 onstream (1) 7:23 onto (7) 7:18;9:19;17:20;24:18; 38:13;121:13;153:12 opened (1) 177:23 operates (2) 67:11;68:22 operation (3) 71:18;77:1;98:23 operations (3) 5:5;70:25;73:7 opinion (5) 91:20;114:23;128:11; 171:16;188:8 opportunity (5) 53:16;145:19;186:23;189:7; 191:3 opposed (2) 91:11;119:7 opposite (1) 133:13 opposition (1) 82:23 oral (3) 185:25;186:1,7 order (8) 4:6;72:25;89:6;90:7;113:14; 150:20;164:2;191:8 Oregon (1) 78:19 original (9) 85:19;88:2;92:18;104:8; 105:7;139:11,13;164:16;184:2 originally (5) 54:23;92:13;112:15;133:14; 169:8 others (2) 46:18;133:5 otherwise (1) 60:3 ought (1) 191:17 out (65) 7:13;8:1;10:8;11:24;13:5; 16:15;18:23;20:1;27:6;28:20; 30:6,9;34:18;37:8;41:18;42:6; 43:17;46:14,20;47:10,23; 50:20;51:22;52:8;56:9;57:9; 60:16;61:24;67:11;70:8;74:14; 76:9;78:25;79:14;85:19;92:21; 95:14;103:4;115:2,13;117:14; 122:20;135:16;139:9;143:23; 151:24;154:18,23;155:4,13,15; 156:2,5;169:17;173:12,21; 178:10;185:3,7,10;186:1; 187:1,13;189:12;191:21 outflows (2) 18:3;153:19 outlet (1) 153:7	outlined (2) 139:21;143:6 outside (13) 11:14;65:24;83:2;84:14; 109:5;110:14,23;114:13,15; 118:5;122:12;126:18;142:12 outtake (1) 160:1 over (16) 13:19;20:18;28:9;46:25; 48:15;55:19;56:24;60:16;73:2; 6,16;125:1;136:6;144:20; 147:2;189:9 overaction (1) 187:6 overall (1) 141:6 overflow (1) 73:3 overlap (6) 41:22;104:23;137:11,12,19; 149:10 overlaps (1) 13:8 overruled (2) 52:10;163:25 overseen (1) 5:4 overtopping (1) 73:3 own (3) 49:19;57:8;174:7 owned (1) 92:9 owner (6) 51:3;92:18;136:4,7;164:16, 17 ownership (4) 92:19;93:3,20,23	paraphrasing (1) 175:9 part (16) 65:6;85:8;104:13;107:16; 115:3;124:2;125:25;133:23; 142:9;149:23;150:14,19,24; 151:5;152:5;187:6 particular (12) 7:18;128:14,15;151:8; 159:15;160:6;169:19;182:22; 186:22;188:19;189:14;190:6 particulars (1) 51:10 parties (4) 91:25;146:21;186:5,18 party (1) 189:14 pass (1) 20:16 passive (3) 187:2,21;188:20 passively (1) 188:17 past (4) 17:17;33:11;74:23;111:14 pasture (1) 37:25 path (5) 72:6;73:9,11;140:21,23 pattern (2) 181:14,15 pause (1) 180:14 pay (1) 80:1 peak (3) 40:21;116:2;153:24 people (8) 7:12;40:15,19;58:22;91:14; 171:8;175:10;187:13 per (2) 157:9,10 perceived (1) 167:19 performed (1) 134:11 perhaps (1) 189:7 period (75) 15:19;23:23;34:1,16;39:25; 40:8;41:22;42:1;53:1,13,21; 54:8;56:17;57:17;58:3;65:11; 68:7;79:10;87:15;88:18;89:3; 19,25;90:8,11,14;106:9; 112:12;114:7,25;116:3;118:12, 18;121:15;124:7;130:20; 132:25;134:9;143:15;144:7,10, 21;145:7,12,15;146:3;149:6,7, 17;151:25;160:2,24;161:2,14, 19;163:8;165:6,7,8,20,22; 174:9;175:5,10;176:9,19; 181:4,8;182:12,13;183:18,21; 188:25;189:1,10	periodically (1) 48:2 periods (4) 89:10;149:16;152:3;161:13 permeability (1) 71:12 permit (88) 53:5;66:2;79:8,8,11;81:25; 82:11,22,24;84:17;85:11,13,15, 25;86:2,5,9,13,14,15,24;87:5,7, 12;88:6,14,17,20,24;89:8,13, 21,21;90:22;93:5,7,13,18;94:3, 5,6,6,7,12;95:8,9,11,24;96:10; 98:10;99:23;100:6,11,12; 103:15,21;104:3,24;106:3; 115:2,4;119:25;121:21;132:20; 137:15;139:11;142:10,11,14, 19;148:1,6,17;150:9;159:2; 160:5,18,20;165:8;166:10,15; 167:16,19;169:19,21;171:2; 172:15;187:7 permits (2) 160:21;161:8 permitted (3) 104:8;105:17;160:11 person (2) 70:20;169:6 personal (24) 5:10;6:22;11:13;12:12; 15:23;16:1,6;18:8;19:7;21:9; 24:6,11,20;33:3,13;35:2;36:5, 20;49:16,18;50:4,59:15;70:5; 168:18 personally (4) 6:2,19;29:25;133:16 Petitioner's (5) 52:11,13;164:1,3,5 phase (1) 79:8 PhD (1) 78:15 phone (3) 98:21;118:3;171:12 phonetic (2) 57:2;70:16 photo (11) 14:24;15:1;22:9,18,20,22; 26:18;28:14,16,18;72:20 photograph (26) 12:12,13,20,25;14:11,12; 19:6,7,13,14,21;20:8;21:8,9,17, 23;22:15;23:1,14;26:17;27:14, 15,24,24;71:25;73:13 photographer (2) 28:21,25 photographs (1) 99:8 photography (6) 91:10;95:5;128:4;141:1,3,5 physical (2) 98:18,19 physically (1) 168:4
P			
pace (1) 60:10 page (54) 16:11;44:4,5,8,10,16,17; 45:3;62:13,14;86:25;87:18,19, 22,24;88:5;89:12,20,22,23; 92:7,7;93:17;95:1;104:18; 106:18;107:7,8;108:5;115:7,8; 118:9;125:1;130:15;132:22,22; 134:5;135:13;137:24;141:18, 19;142:3,5;143:1;144:5; 147:18,18,20,21;156:12,16; 157:11,11;173:4 paper (3) 44:3;171:4,16 Paplico (1) 70:16 parameters (4) 89:7;118:25;127:25;128:8 paraphrase (1) 175:8			

pick (1) 158:12 picked (1) 115:13 pickup (1) 61:25 picture (3) 20:15;26:19;87:13 piece (2) 44:3;171:4 pipe-flow (1) 80:11 pipelines (1) 65:9 place (40) 11:6,7;12:20;21:2;43:7;57:2; 73:2;76:11;95:8,25,25;96:2; 100:6;104:9,19,22,24;105:1,2, 15,17;110:2,10;121:20,22; 128:16;130:13;135:3;137:3,13, 14,18;140:1,3,13,18;141:7; 168:1,2;189:21 placed (2) 46:13;95:12 places (2) 115:5;135:4 placing (1) 187:4 planting (1) 38:25 play (2) 83:9;124:9 please (34) 4:12,19;5:22;9:14;10:6; 12:19,22;14:8;16:15;17:17; 19:12,24;21:20;27:1,5,5;32:3,6, 8;44:1;77:11,22;78:9;93:2; 94:2;107:6,13;115:9;118:9; 125:5;134:6;137:11;142:4; 170:14 plus (1) 72:22 POD (4) 95:12,14,16;96:17 point (79) 9:1;15:13;16:15;17:18;20:1, 25;24:16;25:18;27:6,8;30:11; 35:8;43:8;46:25;51:7;63:7; 65:8;71:2,3;72:22;94:22;95:8, 14;98:10;101:14,16,21,23; 102:6,8,17,21;103:5,14,17,20; 104:3;123:13;137:20,22;138:7, 12,13,15,18,20,23,24;139:2,3,9, 11,18,21,22,22,23;140:5;144:1; 147:24,25;148:6,16,21,24; 149:1,2;151:13;156:4;159:9, 15;162:20,21,22;163:3;169:17; 173:12;185:3;189:20 pointed (2) 50:20;143:23 pointing (3) 7:13;13:5;51:14 points (20)	64:4;76:9;94:21;103:9,13,24; 104:6,12;128:6;137:25;138:5; 139:20;148:2,2,7,8,10,13; 162:17;170:3 ponds (2) 37:25;175:10 portion (12) 6:15,17;16:21;25:3;26:10; 31:4;38:9;62:17;68:25;89:13; 106:19;139:16 pose (2) 91:5;127:8 positive (1) 41:15 possibility (6) 36:12;47:16;58:1,4;64:10; 70:22 possible (23) 15:23;24:8,12;29:14;30:24; 48:12;57:21,22;100:16,18,24; 101:1,5,7;110:2,13;114:9; 125:19;133:22,25;135:4; 151:23;175:23 possibly (3) 18:25;149:5;160:22 poster (1) 7:1 posterior (2) 186:5,12 potential (5) 43:20;113:14;123:7;124:18; 149:10 potentially (2) 30:25;124:24 POU (2) 96:21;105:6 Powell (5) 77:21,23,25;78:9,12 P-o-w-e-l-l (1) 78:12 practical (1) 38:19 practicality (1) 111:21 practice (2) 75:7;161:14 practices (1) 65:10 preparation (1) 83:19 prepare (1) 190:21 prepared (1) 88:6 present (4) 121:8;152:16;173:25;180:19 presentation (3) 4:7;13:24;190:16 presented (3) 84:16;186:3;190:16 presenting (1) 173:22 pressure (1)	75:24 presume (1) 89:23 pretty (8) 5:12;35:11,12;52:24;60:1; 71:8;112:22;177:5 prevent (4) 63:16;75:9;130:5;145:13 prevents (1) 75:4 previous (7) 4:24;63:3;76:8;80:3;98:14; 134:15;173:9 previously (7) 88:16;90:20;110:25;111:13; 134:8;157:4;167:7 Primarily (4) 19:4;56:23;58:11;109:4 primary (3) 11:21;18:19;20:11 printed (1) 97:11 printout (1) 165:13 prints (1) 47:10 prior (7) 20:25;49:21,25;52:9;58:6; 76:21,22 priority (8) 41:18;51:18,19;56:14;92:16; 146:10;165:2;172:10 private (1) 12:1 privy (1) 169:6 proactively (1) 92:15 probability (1) 144:19 probably (34) 9:18,24;15:10;18:11;22:17; 29:2,20;37:14,22;38:16;39:13; 40:6;42:2;48:6,21;52:24;61:15; 65:7;66:10;68:18;75:23; 102:12,22;123:14,17;124:11; 125:24;128:21;156:14;174:24; 177:16;178:23;183:10;191:22 procedural (2) 189:16;190:14 proceed (2) 30:7;33:8 proceeding (3) 16:14,20;150:20 proceedings (2) 80:19;137:16 proceeds (2) 9:19;28:8 process (12) 19:12;24:19;46:15;48:16; 59:21;79:5,16;81:9;88:24; 104:2,4;133:2 processes (1)	190:7 produces (1) 47:13 professional (6) 78:17,18;79:1,1;80:10;81:1 project (4) 11:23;16:21;17:21;81:5 projects (1) 81:5 proof (8) 79:12;89:21;93:8;165:9; 167:11,21;189:25;190:1 proposed (1) 173:23 protect (1) 65:25 protest (1) 92:1 prove-up (4) 160:2;165:6,7,19 provide (4) 52:18;81:21;83:13;106:14 provided (6) 53:17;81:24;87:25;98:16; 99:17;106:25 public (3) 83:24;95:5;108:2 publications (2) 80:14,17 published (2) 80:20;109:6 purchased (1) 55:21 purpose (14) 20:9;23:6,10;42:12;65:22; 66:15;75:1;94:16,18;120:4; 149:3;163:6;169:22;170:2 purposes (6) 11:17;20:24;23:4;151:25; 154:20;162:7 purview (1) 55:5 push (2) 20:12;61:5 pushed (1) 23:16 pushing (1) 23:10 put (29) 20:20;21:3;27:7;30:4,8; 31:14;32:10;35:16;41:7;45:15; 46:25;47:3;61:15;65:20;75:13; 89:1;91:22;94:17;97:4;99:11, 14;116:1;136:9;158:10;185:9; 187:7,15;191:21;192:17 puts (1) 87:15
Q			
qualifications (1) 121:22 quality (2)			

20:24;106:12 quantification (1) 145:4 quantify (1) 128:7 quantity (9) 94:11;106:2;114:4,5;119:17; 123:24;132:10;188:1;189:8 quarter (2) 15:10;94:24 quarter-quarter (4) 102:9,24;103:23;138:21 quick (4) 38:8;49:3;50:22;144:6 quickly (2) 108:6;135:25 quite (5) 28:16;53:9;72:10;183:16; 191:24	re-advertised (1) 104:5 ready (1) 170:19 real (4) 50:22;83:22;112:18;129:24 really (20) 10:1;39:20;43:6;49:3,23; 59:23;83:22;92:2;118:6; 123:11;140:4;144:6,15;145:7, 13,23;160:18;174:24;184:9; 190:24 reason (6) 113:12;170:9;174:1;175:14, 17;177:21 reasonable (17) 111:19;114:23;121:3;124:6; 127:20,22;128:9,12;133:18; 151:18;176:18;177:10,13,14; 178:15,21;187:25 reasonably (1) 128:8 reasons (1) 103:25 rebuilt (2) 24:4,5 rebut (1) 52:9 rebuttal (2) 52:7;163:24 recall (23) 53:20;56:14,17;57:4,19;66:9, 23;68:9;71:22;75:18;90:24; 117:25;132:14;152:6,9,21; 161:21;175:7,12;181:5,13; 184:23,24 recaptured (1) 185:5 receive (2) 81:5;163:25 received (3) 52:12;158:22;164:3 recent (1) 81:18 recently (1) 158:8 Recess (7) 49:5,7;77:18,20;147:6; 170:18,20 Recharge (154) 31:14,15,20,20,24;32:5,21; 33:5,15,23;43:9,21;64:3;66:20; 67:14,14;82:22;89:24;92:14, 22;93:6,16,24;94:18,19;100:15, 20;101:2,8,10;104:14;105:7,8, 11,13,13;109:19,20,22,25; 110:9,13,22;112:10;113:15,20, 21,22,24;114:1,4,5,24;115:6, 18;117:11,15,20;121:14,20; 122:9,10,19,19,21;123:7; 124:18,23;125:16;126:9,24; 127:2,6,19;129:1,2;130:8,10, 12,13;131:11,11,13,16,18,20;	132:3,9,12,12,13,13,16,18; 133:18,21,23;136:17;137:17; 138:25;140:24;141:4,11,14; 143:13;144:1;145:5,7,13,19; 146:2,3,11,16;157:21;158:9; 166:13,14,17;168:6,20,21; 169:1,3,11,14;170:6;171:2; 173:7,11,13,22,23;174:11,12; 175:2;176:14,19;177:2;178:13, 22;179:4,25;180:24;181:1; 182:3;183:18;187:2,13;188:18, 22;189:2,10,13 recharged (5) 114:19;119:17;123:25; 128:13;174:16 recharging (1) 146:12 recognize (13) 5:23;6:11;12:12;16:6;19:6; 21:8;24:19;26:17;43:24;51:8; 162:12,22;167:8 recognized (3) 102:11,17;110:21 recollection (3) 53:7,13;152:19 recommend (4) 103:13;132:9;136:11,19 recommendation (1) 156:6 recommendations (1) 138:4 recommended (15) 103:10,17;104:19,22;132:11, 13,17;137:15,25;138:6;140:13, 18;143:12,13;157:14 recommending (1) 104:7 reconnect (1) 11:7 reconstruct (1) 90:16 reconvene (1) 146:25 record (19) 4:20;47:5;67:15;78:10; 106:16,24;109:12;112:21; 144:11;147:11;150:15,19,24; 151:1,17;167:2;179:8;182:13; 192:23 recorded (8) 30:19;36:15;46:23;47:8; 48:3,14;108:17;141:25 recording (6) 48:20;49:6;77:19;147:7; 170:20;175:22 records (31) 11:11;38:19;47:6,7,7;56:22; 57:24;67:18;70:3;85:1;91:7,11; 105:11;106:25;107:14,15; 108:1;109:3;152:13;154:23; 155:2,8,13,15;162:2;166:9,22; 172:6,8,15,20 recreate (6)	90:22;91:1,4;92:3,19;141:23 Recross (1) 70:11 RECROSS-EXAMINATION (3) 70:14;171:22;184:18 recurrence (6) 144:6,8,13,14,21;145:16 Redirect (5) 68:12,15;170:12,22,23 re-diversion (5) 138:23;139:2,22;148:3,8 re-diverted (1) 56:9 reduce (1) 105:14 reduced (1) 105:18 reducing (1) 105:6 redundant (1) 84:13 reenters (1) 18:5 refer (11) 7:11;9:4;17:7;71:25;138:2; 140:13,18;144:17;147:17; 151:10;164:2 reference (2) 94:2;189:11 referenced (1) 151:16 references (1) 101:22 referred (9) 31:19;72:3;75:14;85:4; 102:3;107:24;168:25;169:1; 190:1 referring (4) 12:18;97:5,23;184:24 refers (1) 97:19 refines (1) 106:15 refining (1) 73:21 reflects (1) 127:23 refresh (2) 53:6,13 refresher (1) 123:19 regard (7) 93:20;94:4,11,16,20;100:4,9 regarding (11) 88:6,21;142:16;147:24; 150:4;166:7,9;167:24;172:17, 18;176:22 registered (1) 78:18 regular (5) 128:5;130:3,6;141:2;178:2 regularly (1) 129:17
R			
radial (16) 29:22;30:4;72:21,21,22,24; 73:10,11,21;74:2,6,20,21,23, 25;75:25 raised (2) 184:12;189:24 range (6) 39:17;95:16;102:10,25; 138:10;162:25 ranges (2) 96:4;105:10 rare (1) 113:8 rate (19) 108:20;118:13;126:5,8,10; 135:3,9;143:18,20;144:11; 156:17;157:2,3,9,14;158:13; 159:6;189:8,9 rates (6) 91:7;107:5;116:2;134:10; 152:14;157:10 rather (3) 35:16;42:2;150:13 rating (3) 46:10;47:19;48:1 reach (7) 64:4;113:12,19,23;114:2,21; 176:8 reached (2) 64:5,8 reaches (1) 30:11 read (2) 174:14,15 reading (8) 43:1,18;45:12;46:20,23; 92:12;107:1;176:13 readings (2) 44:6;48:13 reads (1) 44:4			

regulations (1) 72:23 reinstatement (2) 89:6;90:7 relate (1) 132:8 related (2) 187:25;189:24 relating (2) 4:15;78:2 relation (1) 22:20 relationship (5) 136:7;187:3;188:10,11,16 relationships (1) 188:14 relayed (1) 152:11 release (1) 66:15 released (2) 66:12,13 relevant (2) 83:23;84:11 reliable (1) 106:10 reliance (1) 188:20 relied (5) 99:16;109:3;142:16;152:7; 190:2 relies (2) 188:10,13 relinquish (1) 190:3 rely (5) 106:9;108:25;111:19;120:1,2 relying (3) 91:8;119:24;122:24 remainder (2) 179:10;190:3 remeasure (1) 47:18 remember (14) 51:10;52:23;54:10,18;56:22; 57:1;66:13;67:3;95:20;118:1; 152:23;175:5;181:8,11 reminding (1) 105:25 remote (1) 140:4 renew (2) 79:23,25 repeat (1) 12:22 repetitive (3) 128:18,19;186:8 rephrase (2) 34:8,9 replace (1) 24:1 replicated (1) 118:23	report (21) 81:22;83:17,19,20;84:10; 99:9;104:7;107:16;135:15; 138:3;139:17;141:23;142:2,7; 143:5;147:19;148:3;156:12; 157:11;170:6;173:3 reported (2) 125:16,16 reports (1) 80:18 represent (12) 10:4;16:24;17:6,25;25:20; 26:8;31:11,18;44:25;45:5,21; 117:16 representative (2) 115:22;136:6 represented (1) 45:10 represents (3) 8:6,7;125:5 request (16) 66:10,13;67:13;89:24;90:2; 94:13;106:22;166:10,23,24; 167:2;169:19;171:1,4;172:5,8 requested (6) 66:9;88:2;96:4;148:25; 149:4;172:7 requesting (1) 186:12 requests (2) 66:17,19 required (3) 69:17;79:11;150:6 requiring (1) 190:7 research (2) 100:4;148:20 researched (1) 121:16 Reservoir (21) 5:1;7:16,21,23,23;8:1,12; 14:18;25:23;34:18,23;45:13, 18;58:15,20;59:3,12;70:17; 107:3;138:8;145:2 resolution (1) 93:17 resource (9) 81:3;86:25;92:18,24;93:7,14, 25;108:5;128:20 Resources (7) 53:6;66:21;79:13;86:17; 95:6;107:17;166:20 Resources' (1) 51:2 Respondent (2) 4:14;78:1 response (7) 52:3,6;77:5;150:22;163:19; 167:25;191:20 responses (3) 192:9,18,22 respondible (1) 67:9	rest (2) 43:19;179:15 restate (1) 100:8 resulted (1) 117:10 resulting (1) 124:23 retained (2) 55:22;70:24 retired (2) 4:23,25 return (10) 11:4;31:3;64:11,13,14,17,20, 24;65:5,9 returned (1) 124:19 return-flow (1) 21:2 returns (1) 65:3 reverse (2) 29:14;133:13 review (17) 53:16;84:1,4,6,17;85:16; 88:8;98:14;100:2;109:17; 137:11,12,19;150:9;152:4; 186:2,9 reviewed (4) 83:18;84:9,23;185:1 reviewing (1) 53:5 rhyme (1) 175:17 Richfield (106) 6:1,8,18,23;7:6;8:8,14,9;1,4, 22;11:18;31:4;34:4,8,11,15,20; 35:2,4,20,24;36:4,14,18,21; 37:11,18;38:9,21,23;50:1; 51:16;52:8;55:1;56:4,7;57:10, 12,15;60:18,19;61:10,13,24; 62:1;96:13;99:5;100:2,17,19, 21;105:12;109:19,21,22;110:1, 2,4,10,13;111:3,11,20;112:3,7, 9,14,23;115:3,15;117:18; 119:18,21;121:3,10;134:24; 136:21;138:8,11;140:5,9,20; 141:7;144:10;153:3;157:14,22; 160:7,14;162:6;163:3,21; 174:4;176:4;178:8;179:2,11; 180:20,23;181:4,16;183:2,17; 184:9;185:7;188:3 rid (2) 174:25;177:22 rider (3) 171:9,25;172:4 riders (2) 46:19,20 Right (158) 4:4;13:7,19;14:19;15:2;20:4, 7;22:9,17;24:18;25:10,18; 26:16;27:8,13,22;30:5,15; 32:11;35:21;38:8,13;41:12,13,	17,20,21;42:4,5,8,13;48:13,22; 51:2,3,22;52:5,8;53:1,21;54:3, 5,6,8,16;58:2,14,23,24;60:8; 69:8,14;73:12;74:24;79:6,9; 80:18,19;81:13,25;82:7,11; 83:15;84:1,5,7,17,24;85:12,20, 25;86:19;88:21;89:3,20;90:12, 14,17;92:4,10,20;93:3,21; 94:17;98:6,7;99:25;100:11; 103:12;104:16,20,20;105:22; 107:13;110:3;115:1;120:19; 123:16;125:11;128:17;132:20; 134:23;135:23;136:14;137:14, 15;138:19;143:3,10;145:5; 146:2,7,9,10,16,18;147:4,12, 22;149:6,11;150:4,12;151:4; 152:2;156:8;159:15;162:10,11, 14;163:2,6;164:12,13,20,24; 165:1,2,6,18,19;166:8;167:13, 14;169:12;171:8;176:5;177:4; 178:8;180:10;181:14;183:14; 187:1;188:23;189:14;190:6,20; 191:12 right-hand (2) 27:15,23 rights (94) 34:7,10,14;35:19;36:15,17; 37:18;41:9,23;50:8,10,13,15, 18;52:21;53:3,8,14;54:1,13,14, 17,19;55:2,4,9,15,18,21,25; 56:1,7,19;57:8,20,23;58:6,9,9, 11,22;69:6,7,10,11,16;78:20, 22,24;79:4,5,15,17;80:5,16; 81:4,9,10,14;82:2,3,6,8;83:5,7, 8,14;88:1;111:11,16;135:19; 137:13,17,19,22,24;147:24; 148:9,19,21;149:5,16,20,21; 150:4,18;151:23;152:4;160:16; 161:10,12;162:11;166:2,4 River (171) 5:25;7:8,20,22;8:9,19,22; 10:20;11:5,8;12:17;14:17,20, 22;15:8,9,14,24,24;16:10,18; 17:3;18:3,5;19:9,21;12,13,24; 22:1,7,23;23:11,15,16;24:8,13, 23;25:1,12,14,17;26:6,13,21; 27:9,18;28:12,15;29:5,10,12, 15;30:1,13;31:6,7,7,13,20;33:4, 10,10,14,20,21;42:16;43:4; 45:23;46:20;47:6;48:13;50:9; 54:5;55:1,5,25;56:1,23;57:9; 58:6,8,16;60:8;64:12,24;65:23, 24;66:20;67:14;72:5,18;73:4, 16,23;74:1,11,17;75:3,3,22; 90:25;95:6;96:15;100:14,20, 25;101:3,6,19,19;103:2;110:5; 112:14;113:6;115:3;121:11; 124:20;129:4,10,16,25;130:7; 131:1,3,17,17,17,19,20,22,23, 24;132:1,3,6,12,18;133:8; 136:22,24,25;137:4,5,6;138:6, 11,13,16,20,23,24;139:2,3,22, 23,23;140:7,8,22,22;144:9;
--	--	---	--

145:1;151:24;156:1;162:16,18; 166:12;187:19;188:12,12; 189:2 River/Richfield (1) 16:3 rivers (6) 46:19;94:9;96:12;99:24; 133:23;136:16 RJIS (1) 95:4 role (1) 5:3 room (1) 123:11 roughly (1) 60:21 routinely (1) 128:3 row (1) 180:14 rows (1) 108:15 rule (2) 47:17;79:4 rules (1) 145:25 run (7) 37:21,24;38:5;39:13;41:1; 52:21;108:6 running (5) 29:20;38:20;40:13;43:21; 75:23 runoff (2) 76:21;145:20 runs (1) 12:2	92:17;114:12,14;116:25; 117:13;129:11;144:11 Sawtooth (1) 81:19 saying (8) 49:16;102:15;152:21;159:8; 161:4;183:19;184:7;189:22 scale (1) 129:25 scattered (2) 37:5;60:16 scope (11) 81:24;83:11;84:14,18;94:4; 11,16;98:5;110:23;126:18; 142:13 seal (1) 72:4 seals (1) 74:22 season (67) 11:15,22;19:2,4;20:17;34:16; 35:20,23;36:21;39:15;40:5; 41:15;42:3;48:18,21;58:12; 59:20;69:7,10,11,16,18,18; 75:16,21;76:2,4,7,22;110:8,15, 19,24;111:2,7,12,15,18,20; 112:3,6,9;114:14,15;118:5; 120:14;121:7;122:12,16,23; 123:1,2,8;124:3,13;136:24; 149:24;153:24;160:15;161:5; 175:25;176:23;177:18;188:14, 15;189:5,5 seasonal (1) 146:1 seasonally (1) 144:3 seasons (2) 69:25;110:23 second (8) 4:3;13:12;66:18;97:1; 108:11;118:14;142:9;189:24 section (11) 9:17;94:24;102:9,25;134:15; 137:12;139:12,18;141:24; 143:3;162:25 sections (2) 122:7;125:10 sedimentation (1) 47:23 seem (4) 178:25;179:20,22;180:1 seemed (1) 128:9 seems (1) 146:1 seepage (9) 51:22;110:22;113:4;126:16, 17,18,19,23;136:22 seeped (1) 114:18 seeps (1) 110:7 select (1)	174:2 sense (2) 128:1;129:14 senses (1) 49:19 sensing (1) 140:4 sent (3) 56:24;85:19;175:8 September (8) 37:6,7;108:13;109:7;111:8,9; 112:5,7 serve (2) 23:6,10 served (2) 82:10,23 set (3) 87:1;89:7;118:22 sets (3) 86:22;109:2;115:25 seven (3) 10:10;12:6;181:1 several (5) 59:7;64:14;85:4;98:21;160:4 shareholders (1) 55:22 shares (2) 58:13;137:14 sheet (1) 63:5 shepherded (1) 121:10 shifted (1) 93:23 shocked (1) 175:6 shocking (2) 176:22;177:18 short (5) 9:17;38:1;59:24;175:10; 176:19 shortly (2) 41:14,21 Shoshone (32) 8:23;28:10;31:16;32:5,6,21; 33:1,5,15;43:9;56:12;57:13; 65:25;101:9;105:13;129:1; 130:10;133:18;134:23;137:8; 139:1,5;141:4,14;157:13,21; 158:2;173:8;174:4;182:21,23; 188:8 shot (1) 74:7 shoulder (1) 110:23 show (3) 7:3;13:7;25:2 showing (3) 96:11;117:1;167:6 shown (6) 7:17;15:1;95:17;118:12; 138:9;139:11 shows (6)	7:7;16:10,12,18;130:21; 180:22 shut (3) 38:8;146:16;175:11 sic (3) 5:4;163:14;173:15 side (24) 10:9,21,24;17:3;21:13;27:15, 23,24;28:15;29:4;52:17;60:4,5, 6;108:15;127:6;129:7,10; 131:7,10,21,23;145:15;177:2 siege (1) 34:17 Sign (1) 190:9 signature (1) 190:3 signed (1) 189:20 significant (1) 189:17 Significantly (1) 105:5 similar (6) 76:10,12;127:23;173:8; 181:25;182:2 simple (1) 117:6 simply (2) 53:12;86:25 single (3) 135:10,11;176:15 sink (1) 70:8 sinks (1) 70:6 siphon (17) 28:3,4,7,11;29:11,16,24; 30:7;33:9,10;72:6,17,23;73:23; 76:1;130:8;131:9 site (40) 31:20,22,25;32:5,6,21;33:5, 15;50:10;71:23;99:1,2;101:9; 105:13,13;129:2;133:10,18; 134:23,24;137:8;138:25;139:1, 5;140:24;141:4;157:8,13,13, 21;158:9;168:4;173:8;174:4; 182:8,14,21;188:8,18,19 sites (7) 6:2,19,20;156:22;157:3; 158:13;173:24 sits (3) 29:3;72:21,22 situation (2) 84:22;127:15 six (5) 12:3;61:16,21;75:23;145:16 slightly (5) 38:22;121:23,25;122:1,5 slips (1) 56:25 Slough (43) 7:7,8;9:6,12,16;10:15,18;
S			
sake (1) 13:5 same (71) 19:12;23:25;24:3,19;33:21; 41:21,24;61:17,20;74:12; 86:10;92:25;94:10;96:22; 102:9,9,24,25;103:23;107:18; 118:9;119:4,8,9;125:8;126:10; 127:24;133:2;134:4,18,21; 137:8,13,17,20,20,22,23; 138:14,21;141:5;147:24;148:4, 5,9,9,11,13,16,21;149:1,2,6,7; 153:14;158:1;160:25;168:22; 169:14;172:17;177:1,5,5; 178:3,25;179:14,21;180:2,13; 185:8;187:12 sample (4) 173:15,19;182:2,17 sat (1) 71:1 save (1) 134:4 saw (11) 36:3;37:10;42:23;43:13;			

11:20;25;12:4,9,16;14:12,16; 15:5,8;20:22;21:13;22:4,6,24; 23:11;38:10;49:25;56:8;60:19; 20:63;21,23;103:1;113:6,10,11, 17;114:3;115:18,20;138:16; 153:10;163:4,21;164:9;179:12 slower (1) 60:9 slowly (1) 181:12 small (8) 12:2;37:24;68:6;117:24; 118:22;125:6;129:18;130:18 smaller (3) 105:2,5;114:6 Snake (28) 26:6;27:18;29:10;31:6,13,20; 33:4,21;42:16;66:18,20;67:13; 89:24;90:25;92:14,22;93:6,16, 24;96:14;105:8;129:4;131:1,3, 17,24;166:12,17 snapshot (1) 91:10 soak (1) 70:9 soccer (1) 124:9 somebody (2) 97:20;171:5 someone (3) 46:13;47:23;174:22 sometime (1) 67:4 sometimes (8) 37:1,1;39:25;40:1;60:12; 81:8;113:18;186:19 somewhat (3) 51:21;120:24;147:23 somewhere (11) 17:14;29:19;38:16;39:22; 40:21;41:19;54:11;75:22; 127:3;176:9;183:11 soon (1) 177:23 sorry (15) 6:7;13:11,23;15:17;93:15; 100:8;104:21;105:23;130:24; 140:12,17;149:19;180:8; 181:24;182:24 sort (22) 17:3;46:12,15;69:20;81:10; 87:8;88:20;98:5,19;107:1; 109:11;120:7;129:21;133:7,9; 135:17;145:3;149:13;171:4; 178:18;187:20;189:22 sorts (1) 172:9 source (22) 8:10,12;11:21;14:15;26:4; 27:16;51:5;94:8;103:6;129:24; 136:8,9,10;137:20,23;148:4,9, 13;149:2;159:10;161:9;162:15 sources (13)	24:15;30:24;94:4,14;100:5; 10;101:8;131:14,14;136:13,18; 137:2;160:12 south (13) 10:22,24;16:14;17:3,19; 21:13;24:25;94:24;95:16; 122:8;130:24;131:23;138:10 southeast (1) 94:23 southwest (2) 16:19;94:23 span (1) 180:22 speak (1) 158:8 SPEAKER (4) 192:4,8,16,20 specializes (1) 81:2 specific (4) 149:16;156:23;157:2;186:13 specifically (10) 88:7;98:20;99:2;119:25; 120:3;151:10,24;165:9;177:21; 184:22 speed (1) 79:16 spell (2) 4:20;78:10 spells (1) 78:25 spend (2) 190:25;191:1 spent (1) 183:16 spill (2) 73:2;169:9 split (5) 9:11,13;66:24;125:10;180:16 splits (2) 9:5;11:19 spot (5) 14:22;22:1,7,12;91:9 spreadsheet (2) 182:8,20 spring (5) 29:18;34:19;42:2;119:7; 161:20 sprinkler (1) 21:1 squares (1) 17:6 Sr (2) 70:16;98:24 staff (2) 46:14;88:7 staff-gauge (5) 46:1,3,7,9;107:2 stamp (1) 156:16 stamps (1) 156:15 standard (3)	161:14;187:25;188:6 stands (1) 168:16 Stanley (1) 81:20 start (27) 35:11;36:2;39:3;40:19;42:8, 10;48:25;60:9;69:18,19,20,25; 76:3;89:12;109:8;111:15; 120:10,17;137:11;138:8,10; 153:3;154:11;159:18;160:15; 173:4;184:21 started (11) 35:12;46:24;49:12;68:3; 84:20;85:9;111:20;112:4,13, 15;113:3 starting (2) 53:1;98:10 starts (11) 35:20;38:25;87:18,19,22; 104:17;111:18;123:1;135:13; 154:9;161:5 state (15) 4:20;78:19,21;79:7,7;80:1; 81:6;84:24;110:6,21;127:24; 150:9;158:12,16;190:4 stated (5) 8:5;40:7;42:15;99:22;110:14 statement (5) 70:24;76:13;79:12;159:20; 167:18 State's (1) 56:20 Station (45) 7:19;8:8,21;11:3;13:8;16:12, 25;18:1;20:5;26:1;28:8;29:23; 30:18;31:12;32:1,12;33:11,12; 46:4;47:2,20,21;62:21;67:22, 23;113:5,16;115:16;124:15; 125:13,17;129:4,6,12,13,19; 130:11,21,23;131:6,12,21,22; 153:15;176:3 stations (4) 44:5;45:7;47:18;64:9 statistical (1) 144:15 statutory (2) 79:4;104:2 stay (3) 63:18,19;103:22 step (9) 59:1,10;98:11,13;115:21; 152:9;158:17;161:16;164:15 sticking (2) 92:4,5 still (12) 24:3;71:7;92:5;104:8;110:1; 146:10,11,14,14,24;150:10; 166:3 stock (10) 11:17;36:11,12,17;37:18,25; 41:23;51:2;125:22;175:10 stockholders (2)	51:12;55:3 stock-wall (1) 20:16 stock-water (17) 34:7,10;36:14;37:15,17;41:9, 11,13;42:4,5;50:18;52:8;54:4, 6,13;125:19;160:16 stomach (1) 147:11 stop (3) 69:19,21;136:11 stopped (2) 158:6;175:22 storage (3) 50:10,12;107:4 stored (3) 58:10,23;59:12 straight (2) 62:4,6 stream (5) 45:23;149:10;153:4,4;155:25 stream-gauge (3) 8:7;16:25;30:18 stream-gauging (4) 26:1;31:12;45:7;47:10 streams (1) 11:9 strictly (1) 43:21 Strike (1) 34:9 structural (2) 188:10,10 structure (14) 19:22;20:9,10,13,20;22:19; 23:1,5;24:1;26:20,23;32:5; 72:1;188:20 structures (3) 32:15,19,23 student (1) 80:6 studies (4) 71:12;168:21,21;169:3 study (2) 107:19;179:23 stuff (2) 67:18;97:15 subject (3) 149:6;165:23;167:13 subjects (1) 186:22 submit (2) 165:9;191:17 submitted (3) 88:3;106:15;167:11 subsequent (1) 151:14 subset (3) 118:22;125:6;130:19 substantial (2) 129:19;131:24 subtract (1) 124:17
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subtracted (2) 117:7;124:22 sum (1) 157:15 summaries (1) 173:2 summary (2) 143:8;173:7 summer (2) 39:13,21 supply (6) 37:3;39:9,11,12,20;69:22 support (3) 121:6;126:17;162:3 suppose (2) 73:20;190:12 supposed (2) 45:14;187:22 sure (18) 13:16;57:22;67:17;70:23; 97:2,24;149:13,13;152:2,24; 166:24;177:9;181:17;182:7; 184:4;188:5,7;189:11 surface (6) 74:5,11;80:13;83:10;136:10; 169:12 surface-water (2) 80:7,8 suspect (3) 180:15;184:9;187:25 switch (1) 59:18 sworn (2) 4:15;78:2 system (73) 5:8,15;6:16,23;15:23;16:1,3; 24:7,12;31:4;33:4,14;37:16; 38:8,20;39:4;40:13;41:7;42:14; 49:21;55:6;59:20,21;60:13,14, 16,25;61:2;64:17,22;65:2; 68:22;71:4;73:1;81:19;98:18, 23;99:4,5,13;110:22;115:3; 117:25;121:10,12;122:14,20, 25;123:20,25;124:20;126:1; 127:4;138:19;139:19;140:6,20; 141:7,22;159:4;160:6;175:6,9; 176:23;177:18,22;178:1,16; 179:7,8;181:12;184:21;185:4 systems (11) 5:11;80:12;95:6,7;96:10,11, 16,18;100:3;104:11;107:4	143:5,6,8;147:17,20,21;148:8; 150:4;152:5;157:10,16,21; 160:22;162:12;173:4,5,5,6,8,9, 9,12,15,18;174:10,14,15; 175:17;177:1;178:3,4;181:24; 182:17,24,24;184:23,25 tables (7) 115:8,10;124:25;134:8; 173:9,10;181:23 tail (4) 10:17,17;12:9;65:6 talk (12) 34:4;82:8;98:3;116:8; 132:23;137:25;152:18;180:19; 185:21,24;186:16;189:17 talked (21) 10:2;32:22;33:4;54:4;57:7; 66:24;98:20,20,23;111:17; 120:6,22;124:2;127:18;133:2; 134:16;135:22;166:7;178:14; 180:25;190:23 talking (8) 67:7;96:20;126:22,22; 153:11;167:23;169:7;191:1 talks (6) 93:4;137:12;142:6,10;143:3; 146:1 tall (2) 72:4,11 task (2) 90:20,21 telling (1) 115:10 tempted (1) 180:23 ten (2) 49:4;170:13 tender (1) 46:18 ten-year (1) 145:6 terminate (1) 54:2 terminates (3) 9:5,16;41:19 terminuses (1) 18:13 terms (17) 9:11;47:15;86:21;89:2,18; 91:22;95:24;98:6,15;99:12; 113:20;118:21;119:12;135:22; 138:5;146:8;186:7 testified (17) 4:16;65:16;69:24;78:3;82:1, 14;106:19;109:16;147:23; 152:16;154:10;161:16;163:20; 168:24;176:7;184:20,22 testify (2) 99:19;181:3 testimony (23) 4:5;49:15;50:3;52:7,9;83:4; 117:24;124:1;130:1;133:15; 152:7,10;160:5;161:23;162:4;	175:3,5,24;176:20,22;177:15, 17;178:6 testing (1) 71:9 Thanks (1) 77:6 Thanksgiving (1) 191:25 therefore (1) 126:24 thinking (2) 67:24;130:24 third (1) 173:24 third-party (1) 120:1 Thirty (1) 191:16 thoroughly (1) 91:15 though (5) 13:22;64:4;102:18;146:13; 158:17 thought (7) 43:3,17;83:22;150:17;182:6; 187:9;191:13 Thoughts (1) 150:15 three (14) 32:17;38:3;60:13;64:16; 75:19;93:12;134:10;156:22; 157:15;159:5,11;173:2;182:2; 187:24 three-ring (1) 183:7 threshold (1) 146:13 threw (1) 105:19 throughout (4) 81:6;105:8,10;114:6 times (20) 5:16;13:22;59:2;66:7;71:20; 82:1,13,17;85:4;98:21;103:23; 104:4;109:8;112:5;113:12; 123:7;129:17;130:4;160:4; 181:4 title (1) 107:12 Today (9) 4:2;103:10;146:24;163:15; 177:19;186:9;187:5;190:25; 191:2 today's (2) 165:14,15 toe (1) 34:18 together (8) 18:24;47:3;48:14;99:11,14; 103:8;158:7;159:11 told (5) 112:17;130:2;152:12; 160:14;174:19	took (6) 113:15;117:6;135:1;159:8,9, 18 toot (1) 68:17 top (16) 8:4;16:11,22;28:17,18,19; 44:5,17,19;45:3;56:16;73:13, 16;98:8;108:14;124:17 total (18) 40:24;108:22,23;131:11,13, 16,18;132:4,9,13,15;134:11; 135:2,9;143:4;156:17;157:14; 159:12 totally (1) 60:14 touch (1) 22:25 touched (2) 86:6;138:1 toward (11) 8:24;10:22,22;16:11;24:24, 25;25:8;28:8,21;29:23;111:8 towards (4) 28:25;81:8;82:5;130:8 town (1) 5:8 Township (8) 94:24;95:16;96:3;102:10,25; 105:9;138:10;162:25 track (1) 159:7 transducers (1) 158:10 transfer (3) 13:19;82:24,25 transferred (1) 55:19 transfers (2) 80:19;81:9 translated (1) 118:19 travel (3) 120:6,7;178:18 traveled (1) 5:15 trend (1) 121:5 trial (2) 82:15;191:4 Triangle (1) 158:10 tributary (1) 136:10 tried (6) 90:16,22;92:21;103:3;125:8; 191:1 true (7) 54:15;63:8;75:11;170:5,8; 179:14;185:8 trust (1) 164:10 truth (2)
T			
tab (1) 44:10 table (83) 46:10;62:17;115:8,9,11,16, 22;116:1,4,8;117:6,15;118:4,8, 9,17,20,21;119:2,11;125:4,5, 10;126:2,3,4,4,5;130:15,16,18; 132:21,23,24;133:3;134:5,6,7, 15,17,18,19,24,25;137:21,23;			

4:15;78:2 try (8) 51:12;58:24;84:21;92:2,19; 103:22;127:16;128:18 trying (13) 61:2;71:3;74:14;91:1,4,20; 102:21;103:6;128:7;130:17; 162:24;174:25;177:22 turn (3) 4:7;173:18;175:21 turned (6) 61:24;63:1,6,10;64:2,8 turns (1) 186:1 twice (1) 91:1 Twin (1) 80:22 two (27) 9:13;10:3,24;11:7;20:16; 24:15;45:9;47:17;60:2,12; 69:22;73:21;82:21;86:8;87:23; 115:8;120:9;125:10;136:18; 162:5;173:23;178:24;179:20; 180:1,14,25;187:24 two-column (1) 173:5 twofold (1) 155:21 type (1) 167:2 types (1) 34:14 typical (2) 183:20,20 typically (8) 54:2,9;111:6;129:11;144:16; 145:20;152:10,22 typo (1) 139:13	understood (1) 70:25 undertook (1) 98:13 Unfortunately (1) 90:23 UNIDENTIFIED (4) 192:4,8,16,20 Unintelligible (9) 14:2;51:6;64:18,25;74:2; 97:9,23;182:1;188:4 unless (3) 37:8;43:20;186:12 unnecessary (1) 186:4 unusual (4) 35:17;103:19;105:17,21 up (41) 5:15;7:4;9:7;10:18;11:18; 18:25;20:11;23:6;24:3;29:15; 30:1,19;40:21;44:8;45:3;46:23; 54:13,21;55:18;60:1;79:16,18; 81:19;104:7;105:6;108:22; 112:16;114:9;115:21;125:10; 135:2,2;151:3;156:16;157:1, 22;159:12;177:23;179:24; 184:21;186:3 upgrading (1) 29:21 upon (3) 92:12;169:2;177:25 upper (5) 17:20;21:23;28:2;62:17; 165:12 upstream (11) 15:10;25:6;26:2;27:11;32:1, 12;75:5,25;127:12;130:24,25 usage (1) 125:20 use (109) 27:1;34:16;35:16,20;52:17; 53:1,13,21;54:8;56:17;57:17; 58:3,20;69:7,10,12,15,16,18,19, 25;79:9,12;81:21,23;83:14; 88:11,18;90:17,22;91:2,4,21, 23;93:9,94:16;95:8,25,25;96:2, 21;100:6,15;104:9,19,22,24; 105:1,2,15,18;109:17;110:2,11; 111:12;115:5;121:21;123:19; 127:16;128:21;130:13;133:24; 135:3,4,15,17,18;136:9,13,13, 17;137:3,13,15,18;140:1,3,13, 18;141:7;143:12,15;148:19,23; 149:6,8,16,17;151:25;153:14; 154:11,24;155:18;160:24; 161:13,19;163:8;165:9;167:11, 19;173:24;174:8;177:10;187:4, 8;188:24;189:21,25;190:2 used (29) 10:1;84:25;90:21;94:5,12; 96:7;99:24;100:5,10,10;106:3; 109:10;110:21;112:6;119:16; 120:11;123:21;124:12;128:25;	130:12;136:16,19;137:2;153:3; 154:14,25;161:6;165:22;166:3 users (4) 55:6;56:21;57:8;59:11 uses (1) 152:3 USGS (3) 45:23;46:24;144:9 Using (12) 8:17;53:12;95:4;128:24; 133:2;140:4,25;144:9;146:6; 149:11;152:23;154:4 usually (27) 35:3,9,23,25,25;36:21;38:3, 14;39:9,19;40:23;41:14,19; 42:3,6;48:14;56:19;74:14; 103:22;107:1;111:8;119:7; 123:3;124:10;152:13;171:8; 186:1 Utah (1) 78:19 utilized (3) 152:25;159:19;160:23	91:8;159:17 versa (1) 55:12 version (1) 97:3 versus (1) 72:17 vice (1) 55:12 view (1) 168:4 viewed (3) 88:16;168:12;177:20 views (1) 138:17 visible (1) 22:14 visit (2) 99:2;133:10 visited (6) 6:2,19;49:24;71:20,23;99:5 visits (1) 99:1 visual (3) 46:23;47:1;128:2 visually (1) 141:2 voiced (1) 190:14 volume (21) 61:4;107:4;108:21,23; 123:18;143:9,10,22;145:5,11, 19,24;146:4,8,11,13,17;149:10; 152:14;189:8,9 VONDE (49) 4:9,18;6:6;13:13,16,21,25; 14:8,9;52:1,4;68:13,16;77:3,8, 11,14,21;78:6,8;97:2,7,10,24; 98:2;146:18;147:3;150:16,25; 151:20;163:13,17;170:14,17, 21,24;183:9,23;184:13,15; 185:20;186:7;190:19;191:6,8, 12,21,23;192:15
U		V	
ultimate (1) 138:4 ultimately (3) 84:10;104:7,14 uncertainties (6) 119:20,23;120:24;121:4; 126:12;133:4 uncertainty (4) 119:24;120:8;126:15,20 uncommon (1) 104:1 under (21) 28:24;29:22;33:9,9,10;45:9, 25;55:4;73:10,11;75:25;94:5, 12;99:24;100:11,12;106:3; 132:18;146:4,16;171:2 underground (1) 185:5 underneath (4) 28:11;29:1;74:24;130:8		valid (7) 151:14;160:19,21;165:5,18; 166:4;169:21 Valley (4) 76:15;81:19;82:24,25 value (13) 115:18;124:6;126:1,6; 132:13;150:25;174:8;176:19; 177:2,4,11,13,15 values (4) 108:19;134:23,24;181:23 variability (3) 120:20;145:4;146:1 variable (1) 144:4 variables (2) 69:20;70:1 varied (2) 47:24;56:20 varies (2) 39:6;176:12 variety (6) 81:2,5,17;83:21;103:25; 152:3 various (3) 50:8;64:6;162:17 vary (2) 18:11;144:4 vegetation (1) 168:17 verbal (1) 77:5 verbally (1) 191:13 verbatim (1) 181:7 verify (2)	W
			wait (1) 186:20 walk (8) 89:16;93:2;99:15;123:23; 125:4;134:5;135:25;160:13 walks (1) 125:7 wall (9) 29:2;72:3,10,11,12,12,13; 73:6,17 warm (2) 38:25;124:9 warranted (1) 99:6 wash (2) 76:15,17 waste (15)

11:9;17:23;18:4,10,18;24:24; 25:11;35:16;64:21;124:20,22; 125:15,18;127:16;153:20 Water (444) 4:4;5:8;8:10,14;10:7,10,17; 11:14,17,19,21;14:15,17,21; 15:8,14,24;18:1,8,14,22;20:12, 12,13,17,18,21,24;21:2,5,6; 22:5,11;23:3,7,11,15,16;24:2,2, 8,12;26:4,9,11,13,20;27:16,22; 28:4,7,10,11,20,24;29:6,10,15, 21,25;30:5,9,10,12,13,24;31:5, 6,7,7,15;33:5,15,22;34:14; 35:15,15,19,21;36:11,12,17,18; 37:3,18,18;38:4;39:1,7,10; 40:19,20;41:7,23;42:11,16,24; 43:2,21;44:6,14,15;47:8;51:1,2, 2,3,5;53:6;54:3,25;56:15,18; 57:5;58:8,23,24;59:11,25;60:7, 9,23,24;62:25;63:9,16;64:1; 65:23;66:2,12,13,21,21;67:6, 10,14;69:6,7,8,10,11,14,15,16, 22;70:6,7;71:2,11;72:5,16,17; 73:1,6,15,22;74:18;75:24;76:7, 8,8,11,16;78:20,22,23;79:2,4,5, 6,9,9,13,15,17;80:5,16,18,19; 81:3,3,3,4,9,9,13,14,25;82:2,3, 6,8,11;83:5,7,8,13,14,15;84:1,4, 7,16,20,24;85:12,20,25;86:17, 25;87:13;88:1,21;89:3;90:12, 14,17,21;92:10,18,20,24;93:3, 7,13,20,25;94:5,8,11,17;95:6; 96:12,14,21,21;98:6,6;99:23, 25;100:5,10,11,12,13,16,18,21, 25;101:3,6,18;103:12;106:3; 107:17;108:5,8,9;109:17; 110:2,5,7,8,20;111:5,6,11,14, 16,22,23;112:19,20,21,25; 114:17,18,24,24;115:2,4; 116:22;117:2,17,18;119:17; 120:20;121:6,9,18;122:20; 123:4,4,12,12,24;124:21,23; 125:22,23;126:24;128:3,5,6,8, 11,20;129:12,12,13,15,24; 130:1,6;131:3,8,15,16,24,25; 132:4,17,19,20;133:20,22; 135:19,23;136:8,10,14,15,22, 24;137:2,4,5,6,13,14,15,22,24; 138:18,19;141:1;143:14;144:2; 145:8;146:6;147:24;148:9,19; 149:5,6,11;150:3,18;151:4; 152:2,4,8,12;153:4,8,25; 154:17;155:4;159:4,15;160:6, 12,17;161:2,10,12,19,25;162:3, 5,6,10,11,13,15;163:2,20; 164:8,12,20,22;165:2,6,18; 166:8,14,20;167:13,14,20,24; 168:13,16,19;169:9,11,11,12, 14,22;170:3;171:2,8,10,11; 172:11;175:4,8,11,24;176:8,16; 177:22;179:9;180:19;181:5,15, 19;185:4,9;187:4,7,12,14,16, 18;188:11,13,17,23;189:2,3;	190:4,6 watering (1) 37:25 watermaster (26) 46:19;47:5,13;48:11,12,17; 55:8;56:20,23;66:7,25;85:3; 106:14;107:16;108:1;109:1,3, 6,11;124:15;152:13;155:12; 162:1;171:9;172:1,3 watermaster's (3) 11:3;47:9;55:5 water-related (1) 81:2 waters (3) 10:21;100:14;103:7 waterway (1) 64:1 way (11) 20:18;35:8;54:16;55:8; 141:5;151:11;156:5;169:8; 174:14,15;188:17 weather (3) 35:25;69:22;83:23 week (5) 37:23,23;191:5;192:14,15 weeks (1) 47:17 weir (1) 20:19 weirs (1) 65:6 welcomed (1) 170:15 wells (1) 103:24 weren't (3) 59:9;122:18;158:14 Wes' (1) 187:10 West (31) 9:6,19;10:4,7,20,21,21; 11:14;16:14;17:20;20:4;56:12, 12;61:17;112:20;113:1;115:17; 116:15,20,22;117:1;121:9; 140:9;141:8;162:2,8;163:22; 174:20;175:19;177:24;178:11 westward (1) 8:24 whatnot (1) 42:11 what's (16) 55:14;61:8;103:18;122:5; 128:7;130:25;155:25;163:6,16; 169:2;184:5,8;185:15,17; 186:9;189:19 where's (1) 22:19 white (4) 16:20;95:17;97:6,8 whole (5) 48:16;81:6;98:25;105:10; 135:3 Who's (1)	67:9 wide (1) 105:20 winter (3) 19:3;41:11;54:6 wintertime (2) 62:5;189:10 withdraw (1) 181:21 within (12) 57:23;67:15;103:22;104:8; 112:11;122:13;158:3;161:14; 188:25;189:1,4,5 without (4) 56:22;150:14;183:21;188:22 witness (24) 4:8,14;13:19;14:4,6;49:8; 76:8;77:10,20;78:1,5;80:19; 82:4,11,23;83:1;97:19;98:1; 147:13;150:6;183:13,25; 184:14;185:23 witnessed (1) 29:25 witnesses (2) 4:7;185:19 Wood (230) 5:2,10,25;7:8,22,24;8:1,9,12, 13,19;10:20;11:2,5,8;12:17; 14:17,20,21;15:8,9,13,24,24; 16:3,10,18;17:3;18:3,5,15;19:8, 22;20:14,21;21:4,12,24,25; 22:7,23;23:3,7,11,15,16;24:2,8, 13,23;25:1,7,7,12,14,17;26:10, 13,21;27:9;28:9,12,14;29:5,7, 12,15,20;30:1,6,10,12,20,31,2, 3,5,7,7;33:9,10,14,18,20;41:12; 43:4;45:23;46:15;47:4,6,6; 48:8,9;49:13,20;50:7,8,10;51:4, 6,52;17:21;53:14,20;54:1,5,24, 25;55:10,16,18,19,25;56:1,8,9; 57:9,9;59:9,19;60:4,5,6,7,8; 64:12,20;65:23;68:19;69:3; 72:5,18;73:4,16,23;74:1;82:24; 85:1;94:8,8;96:12;99:4,24; 100:13,13,14,16,18,20,25; 101:3,5,19,19;103:2,7,7; 106:11,22;108:25;109:12; 110:5;112:14;113:6;115:3; 121:11;124:20;129:10,16,25; 130:7;131:17,17,19,20,22,23; 132:1,3,6,11,18;133:8,22,23; 136:16,16,22,24,25;137:4,5,6; 138:6,11,13,16,20,23,24;139:2, 2,21,23,23;140:7,8,21,22; 144:9;145:1;148:5,5;151:24; 155:4,5,14;159:23;161:17; 162:6,16,18;164:17,21,23,25; 166:9;181:20;188:11,12;189:2 Wood/Little (3) 96:12;132:3,11 word (1) 74:15 words (6)	29:15;42:25;152:23;182:1; 188:25;191:3 work (15) 9:14;47:15;48:5;80:4,6,16; 81:7,8;91:1,17,17;98:14;109:2; 178:4;179:15 worked (3) 68:19;81:13;147:8 works (4) 5:19;9:12;68:22;71:20 worth (1) 123:14 write (3) 13:2;186:19;192:11 written (3) 67:2;80:17;141:19
Y			
yards (2) 9:18;22:17 year (40) 30:8;31:1;35:15;44:14,15,22; 47:10;52:16;68:5;75:11,13,14, 14;76:5;79:21,23;108:22; 109:7,15;113:5;116:4;118:11, 23;119:12;120:18;135:2,10,11; 146:6;157:9,10;159:6;173:13, 16,19;174:2,12;182:15;183:18, 18 yearly (1) 108:22 year-round (6) 34:7,10,16,20,21;36:14 years (35) 5:2,12;35:14;37:21;39:4,5; 40:13;41:7;46:25;50:4;52:19; 59:2,5,7,24;65:23;68:19;71:21, 21;76:8,11;99:4;118:14,18; 120:24;126:6;133:1;144:23; 145:16,17,18;166:3;173:6,8; 184:5 yellow (4) 17:6;31:17;96:3;138:9 yesterday (4) 4:5;88:4;167:8;190:24			
Z			
zero (8) 62:3,5;63:4,13,23;175:2; 178:11,11 zeros (2) 175:21;178:10			
0			
01 (1) 144:20 01-7054 (1) 84:5			

1	124:6,12,17;125:23;126:1; 154:14;159:19	89:22,25;116:1;118:22; 119:3,15;173:20,25;174:5,13, 23	253 (1) 12:2
1 (13) 14:20;44:24;53:25;54:11,11; 63:10;89:22,25;90:5;94:25; 101:11;108:15;174:13	122 (4) 178:7,12,15,22 13 (12) 115:8,11,16;118:17,21; 156:12;173:9,18;174:10;178:4; 182:17;184:23	1992 (22) 15:20;23:24;34:1,12;65:11; 68:7;83:15;88:3;89:5,8;90:1,6, 15,15;106:24;107:18;109:17; 118:12,23;132:25;134:9; 136:14	270 (2) 40:22,23 276 (3) 126:11;157:18;158:1
1.5 (1) 145:17	13,000 (1) 146:8	1993 (1) 88:1	27th (1) 62:22
1:30 (2) 147:1,5	13th (1) 192:7	1997 (1) 49:14	28 (1) 192:4
10 (8) 125:1;126:2,4;134:17,18,19; 173:5;181:24	14 (8) 115:9;118:8,20;119:2,11; 134:25;173:9;181:24	1998 (1) 20:21	28th (2) 191:18,18
100 (19) 5:22;6:7;7:2,4,15;8:4,25;9:8; 12:18,19,25;15:18;16:2,19;16; 34:5;39:13,16,17;40:8	14th (5) 191:18,19;192:6,8,13	1999 (1) 93:8	29 (1) 108:17
101 (7) 12:11,20,23;13:1,3;14:11; 15:13	15 (7) 18:11;134:5;143:6,8;157:10, 16;158:11	1st (39) 35:5,9,10;36:5,7,8,22;37:2,7, 12,14,22;39:22,23;40:4,18; 41:16,19;42:6;52:22;53:1;89:8; 90:1,15;111:6,24;112:4,7; 125:12;143:16;152:8,13,22,24; 160:15;161:20,20;176:2; 177:11	291 (2) 177:3,13
102 (10) 16:5,22;17:5,16,22;19:13,17; 21:16;23:19,23	150 (5) 39:13,17;40:8;124:3,5		2nd (4) 4:3;89:8;174:17;175:15
103 (5) 19:5,25;20:8;22:20;23:6	15th (19) 35:21,23;37:7;39:2,8,23,24; 40:4;57:18,18;59:3;123:1,6,21; 152:1;154:13,14;163:9,9		
104 (5) 21:7,20,22;22:21;23:14	17 (1) 144:23	2	3
105 (14) 24:18;25:3,10,15,18;27:1,2; 30:15;32:4;33:25;42:14; 128:19,20,23	1-7054 (1) 137:15	2 (8) 5:2;18:11;49:21;70:17; 90:15;137:19;138:10;174:23	3 (16) 6:8;18:25;45:4,20,25;47:1; 137:23;141:21;147:18,20,20, 21;150:4;152:5;160:22;162:12
106 (11) 26:16;27:3,4,14,23;28:2,20; 29:4,9;30:5;71:25	172 (1) 179:1	2- (1) 38:5	3,680 (1) 46:6
107 (2) 43:23;48:4	17-year (1) 144:12	20 (6) 5:2,12;34:24;40:13;68:19; 74:17	30 (3) 74:17;108:13;120:23
108 (16) 62:12;83:18;87:17;89:11; 92:6;94:25;101:11,25;104:17; 106:17;107:7;115:7;124:25; 130:15;135:13;137:23	18 (2) 62:14;138:10	200 (1) 22:17	300 (13) 29:19;38:5;61:12,24;62:20; 64:2;75:22;119:3;174:11; 176:13,14;177:3,11
10th (5) 38:17;39:2,8;40:3;42:10	1899 (1) 165:3	2006 (3) 66:8;145:9,10	3045 (1) 137:24
11 (19) 13:8;16:12,17,24;17:2;20:5; 22:15;124:15;125:13,17; 130:15,16,18;133:3;153:15; 173:6,15;182:17,24	19 (2) 94:24;95:16	201 (1) 167:6	305 (1) 40:22
110 (1) 119:1	1909 (1) 51:18	2017 (7) 29:18;66:11;75:14;76:6; 145:10,11;146:6	3052 (1) 125:1
11-1-87 (2) 62:23;184:22	1936 (1) 58:5	205 (5) 50:23;51:24;52:11,13;163:14	3053 (1) 125:2
11-2 (1) 175:13	1970 (1) 67:2	2052 (1) 173:4	3054 (1) 130:15
11-2-87 (1) 185:6	1980 (3) 65:11;68:7;169:12	206 (5) 163:11,25;164:3,5,15	3055 (1) 132:22
1158 (1) 18:20	1981 (1) 102:13	21st (3) 192:18,20,21	3057 (3) 62:9,14;115:8
12 (5) 132:21;134:24;173:8;181:24, 24	1982 (22) 15:20;23:24;34:1,11;44:4,10, 12,19,22;83:15;89:8;106:24; 107:17;108:13;109:17;118:12, 23;119:1,2;132:25;134:9; 136:13	21-year (1) 145:10	3058 (2) 134:5;157:11
120 (7)	1984 (24) 125:7;126:11;130:19,22; 135:6,7,8;143:21;144:12; 156:7,20,22;157:12,15,17; 158:3;159:9;171:13;173:14,17, 23,24;174:4,7	24 (3) 60:21;94:24;176:10	3059 (1) 144:5
	1987 (11)	24-hour (1) 108:19	3062 (1) 95:1
		24th (2) 35:13;152:19	3067 (1) 138:3
		25 (1) 102:9	3068 (1) 104:18
			3086 (1) 92:7
			3090 (3) 86:25;89:12,20
			3091 (1) 89:23

3095 (2) 87:19,24 30th (4) 109:7;112:7;177:3;192:4 31 (4) 39:24;44:24;63:3;108:16 3114 (2) 87:22;88:5 3182 (2) 135:13;139:15 3183 (1) 141:18 3184 (2) 142:5,6 3185 (2) 143:1;156:16 3187 (1) 93:1 3188 (1) 93:10 3189 (1) 93:11 3192 (2) 93:1,11 3193 (1) 102:1 3199 (2) 107:7,12 31st (9) 52:22;54:2;123:4,7,11,21; 125:13;143:17;160:16 3200 (1) 108:5 3288 (1) 106:18 3290 (1) 44:16 3680 (2) 46:5,6 37 (1) 108:10 37-10343 (1) 162:11 37-1315 (1) 51:2 37-7842 (13) 4:5;83:15;84:2,17;85:7,25; 94:5,17;99:25;106:3;159:15; 165:10;167:14 37M (1) 108:10 3rd (1) 45:25	180:7,10,13 400 (2) 41:1,4 4-21 (1) 178:6 4-21-87 (1) 180:24 4-22-87 (1) 185:8 4-24 (2) 178:25;179:17 4-25-87 (1) 179:24 4-26 (1) 180:16 48 (3) 60:24;61:5;176:10 50 (1) 32:2 500 (1) 9:18 53 (16) 25:6,25;26:7;32:15;42:15,25; 43:1;67:22;129:4,12,19; 130:21,23;131:2,22;132:15 54-year (1) 145:10 56 (25) 27:11;28:8;29:23;30:16,21, 25;32:19,23;33:11,22;42:19,25, 25;43:10,15,22;67:23;129:6,13, 20;130:11;131:6,12,21;132:15 57 (12) 31:11;32:1,12,24;33:12,22; 43:11,14,22;130:11;131:9,12 6 (5) 96:20;138:3;147:18,21; 164:23 60 (3) 32:2;58:18;74:16 634 (4) 143:21;156:17;157:22; 159:12 67 (1) 138:9 6th (1) 49:14	70s (4) 17:15;65:21;67:4;169:10 75 (2) 41:11;54:7 7842 (1) 84:8 7th (3) 192:17,17,21 8 800 (1) 94:13 82 (2) 145:16;173:6 84 (2) 156:8,12 86 (4) 179:2,5,19,19 87 (3) 63:3,10;184:4 9 9 (6) 124:25;125:4;126:5;173:4, 12;182:17 92 (2) 145:16;173:6 93 (2) 179:24,25 931 (1) 45:15 931.5 (1) 45:11 96 (1) 68:5 97 (6) 49:22;50:5;59:17,18;68:5; 71:6 98 (1) 71:6
4	7	
4 (39) 7:19;8:5,13,19,20,21;9:2,22; 18:25;36:4;37:11;61:7,9;62:21; 63:4;94:24;95:16;108:17; 112:14;113:5,16;114:10,13,14, 15;115:17,19;116:5,9;117:6,7; 119:13;141:24;176:3,13;178:7;	7 (5) 34:24;104:17;140:14,15; 141:22 7.76 (1) 46:1 70 (3) 58:19;59:3;161:23	