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BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

BOARD MEETING
JULY 31, 2015

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TRANSCRIPT OF PROCEEDINGS

Heard at Room 111 of the Metcalf Building
1520 East Sixth Avenue
Helena, Montana
July 31, 2015
9:00 a.m.

BEFORE CHAIRMAN JOAN MILES,
BOARD MEMBERS MARIETTA CANTY,
CHRIS TWEETEN, DR. ROBERT BYRON,
ROY SAYLES O'CONNOR, ROBIN SHROPSHIRE,
and MICHELE REINHART LEVINE

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COURT REPORTER, NOTARY PUBLIC

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WHEREUPON, the following proceedings were
had and testimony taken, to-wit:

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CHAIRMAN MILES: Good morning, everyone.
Welcome to the Board of Environmental Review
meeting. We have a lot of new members today and
also some other new folks, so I would like to
start with a few introductions before we get into
business.

First, I'm Joan Miles. I've been on the
Board for two years now, and was asked to chair
the Board, so this is actually my first meeting as
Chair. And I think what we'll do is maybe start
with Robin over here. Just introduce yourself,
and if you occupy one of the designated seats on
the Board. The Board of Environmental Review has
four designated seats for a hydrologist, someone
with environmental sciences background, a
physician or health officer, and a local
government representative.

I'm actually in the local government
position. I worked with Lewis & Clark County for
about 18 years. Robin.

BOARD MEMBER SHROPSHIRE: Good morning.
My name is Robin Shropshire. I'm the

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hydrogeologist on the Board. I've been on the
Board I think since 2005. Awhile. And what else
did you want me to say?

CHAIRMAN MILES: I think that's it,
unless you want to say anything else. I just want
to thank Robin again for her two years as Chair.
As I said in communication to her a little while
ago, I wish I had paid a little bit closer
attention to what she did for the two years. She
did a wonderful job as chair, I hope I can do the

11 same. Chris.

12 BOARD MEMBER TWEETEN: I'm Chris
13 Tweeten. I am the designated attorney member of
14 the Board, I guess, and this is my second year on
15 the Board.

16 BOARD MEMBER REINHART-LEVINE: I'm
17 Michele Reinhart-Levine. I'm also an attorney
18 from Great Falls, and I have a masters in
19 environmental studies.

20 MR. REED: I'm Ben Reed. I'm the
21 designated attorney for the Board of Environmental
22 Review.

23 CHAIRMAN MILES: By the way, I'm an
24 attorney also. I guess we have a number of us on
25 this Board.

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1 BOARD MEMBER DR. BYRON: I'm Dr. Robert
2 Byron, an internist from Hardin, Montana, new
3 member, physician.

4 BOARD MEMBER CANTY: I'm Marietta Canty,
5 and the role I play on the Board is environmental
6 scientist. I'm a scientist and an engineer as
7 well, and this is also my second year on the
8 Board.

9 BOARD MEMBER O'CONNOR: I'm Roy
10 O'Connor, and I'm new to the Board.

11 CHAIRMAN MILES: George, I was going to
12 introduce you next anyway. George Mathieus, who
13 is the new Deputy Director for DEQ and the Board
14 liaison, and I'd like to have you say a few words.

15 MR. MATHIEUS: Thank you. It feels a
16 little bit different being at the table today for
17 all the years I've sat in the back or at the
18 podium. So I'm excited about that. I just would
19 say, similar to what the Chair said, I watched my
20 boss, Director Livers, sit at this table for 13
21 years, and I wish I would have listened to what he
22 said as well. Hopefully if I need a bail out
23 today, he'll help me, but it is a pleasure to be
24 here, and looking forward to it. Thank you.

25 CHAIRMAN MILES: Thanks, George. We

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1 look forward to working with you. And I know
2 we'll hear from a lot of people in the audience,
3 but a few other introductions. The Director of
4 the Department of Environmental Quality, Tom
5 Livers, I appreciate your being here; and John
6 North, who is the Chief Legal Counsel for the
7 Department who also will be providing assistance
8 to the Board, and already has provided me with a
9 fair amount of assistance already.

10 And then two really important people.
11 Joyce Wittenberg, I think all of you Board members
12 met her yesterday, but Joyce is the person who
13 schedules all of our meetings, and gets
14 information together, and makes coffee, which we
15 appreciate. And our Court Reporter, Laurie
16 Crutcher. I appreciate Laurie being here. She's
17 a great reporter. She's also a heck of a tennis
18 player, and when Laurie tells me it is time for a
19 break, we take a break. We'll be doing that at
20 least probably about an hour and a half or
21 thereabouts, depending on where we're at in the

22 meeting.
 23 So I think with that, we'll open the
 24 meeting. We're going to start with review and
 25 approval of the minutes, but I am just going to

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1 say that the doughnut rule is in effect, and if
 2 you don't know what that is, if anybody has a
 3 telephone that goes off or causes a disruption,
 4 you might have to get doughnuts, or maybe
 5 chocolate -- chocolate sounds pretty good --
 6 chocolate if your phone goes off. So please mute
 7 your phones.

8 Assuming the Board members had an
 9 opportunity to look at the minutes from May 29th,
 10 do we have any questions? Any changes? Is there
 11 a motion to approve the minutes?

12 BOARD MEMBER SHROPSHIRE: I would move
 13 that we approve the minutes.

14 CHAIRMAN MILES: It's been moved by
 15 Robin Shropshire. Is there a second?

16 BOARD MEMBER CANTY: Second.

17 CHAIRMAN MILES: Thanks, Marietta. Is
 18 there any discussion or changes that are noted in
 19 the minutes?

20 (No response)

21 CHAIRMAN MILES: All in favor of
 22 approving the minutes from May 29th, please say
 23 aye.

24 (Response)

25 CHAIRMAN MILES: Opposed.

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1 (No response)

2 CHAIRMAN MILES: Hearing none, the
 3 motion passes unanimously.

4 An additional item that we added to this
 5 agenda is just a quick update on the October
 6 meeting that has been changed from October 9th
 7 until October 16th. I know that survey was sent
 8 out, and I'm not sure if we officially got notice
 9 out that the next meeting will be on October 16th.
 10 The December meeting is on December 4th, and at
 11 that meeting is when we will schedule our 2016
 12 meeting calendar. Part of the reason for waiting
 13 on the 2016 meetings is to get the calendar out,
 14 the rulemaking calendar for the State, so we can
 15 sort of time our meetings accordingly. So we'll
 16 set those meetings. Any questions?

17 (No response)

18 CHAIRMAN MILES: We'll get into the
 19 briefing items, and for those of you who are new
 20 on the Board, this is where we have an opportunity
 21 to just get updated on some of the contested cases
 22 that we have assigned to a Hearings Examiner, and
 23 Ben will give us an update on these items. Thank
 24 you, Ben.

25 MR. REED: Thank you, Madam Chair. For

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1 the enforcement cases that have been assigned to
 2 me, on matters "A" through "E," those matters are
 3 currently going through discovery between and
 4 among the parties. I think the exception to that
 5 is perhaps "C." I think negotiations for
 6 settlement are ongoing between and among the

7 parties.

8 But as the Board can see, the next
9 matter up, the next two matters will be Normont
10 and Somont Oil which are taking place in October.
11 So that should be right before the next Board
12 meeting, and I expect to have a more substantive
13 report on those matters at that time. Until then,
14 as I say, these matters are ongoing, and there is
15 not much to report on them.

16 For nonenforcement cases, those are
17 again ongoing. I've signed an order extending the
18 stay and reporting deadlines by a non-contested
19 motion between the parties for Yellowstone Energy
20 Limited Partnership.

21 For Phillips 66, the parties have
22 stipulated, and are as far I am aware complying
23 with the terms of the stipulation as Phillips 66
24 comes into and maintains compliance with
25 Department requirements.

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1 And then there is a scheduling order out
2 for Columbia Falls Aluminum Company's appeal, and
3 that proceeds at pace.

4 CHAIRMAN MILES: And Item No. 3?

5 MR. REED: I think that Mr. North is
6 perhaps better able to speak to that than I am.

7 MR. NORTH: Madam Chair, members of the
8 Board. John North, Chief Legal Counsel for the
9 Department.

10 This is a case that was filed in front
11 of the Board, but also there was a contention made
12 that it was more properly in front of a District
13 Court. The Plaintiffs did file in District Court,
14 and that is now proceeding in Helena District
15 Court on motions for summary judgment. Oral
16 argument has been held, and we're waiting for a
17 decision from the Judge.

18 CHAIRMAN MILES: Thank you, John. Are
19 there any questions from Board members about
20 these?

21 (No response)

22 CHAIRMAN MILES: Okay. We had, in a
23 recent conversation I had with the Department,
24 requested that we take a little bit of time for
25 legislative briefing. I don't know if any of that

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1 was covered at the main meeting. I was not here
2 at the main meeting. I didn't see it in the
3 minutes. So there are a number of pieces of
4 legislation that impact this Board directly, and
5 George is going to give us an update on those,
6 particularly one of them that I think is relevant
7 to the hearing that we're going to be having, or
8 the discussion we're to be having on proposed
9 rulemaking this morning. George.

10 MR. MATHIEUS: Thank you, Madam Chair.
11 The Chair requested that I print out copies of one
12 of the specific pieces of legislation, so I'll do
13 that now, Senate Bill 325. (Provides document)

14 So there is four pieces of legislation
15 this morning that I'm going to discuss and
16 describe to you. The first one is Senate Bill 97.
17 Senate Bill 97 was introduced at the request of

18 the Department of Environmental Quality. It
 19 changes the criteria that the Board must use to
 20 reclassify State waters that are misclassified in
 21 our current classification system.

22 Under current law, the Board may
 23 reclassify a water body only if it determines that
 24 that water body was misclassified back in 1967
 25 when the current classification system was

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1 adopted. In many situations this information is
 2 non-existent.

3 This bill will give the Board authority
 4 to use the most current science to appropriately
 5 develop new use classes for misclassified streams
 6 as necessary. It will benefit surface water
 7 discharge permit holders who are currently asked
 8 to meet permit limits that may not reflect the
 9 receiving water in which they discharge. This
 10 bill does not provide a process for lowering water
 11 quality levels that will harm beneficial uses.

12 CHAIRMAN MILES: What was the bill
 13 number of this one?

14 MR. MATHIEUS: Senate Bill 97. So
 15 basically this bill gives the Department and the
 16 Board another tool in the tool box to deal with
 17 water quality issues as we move into the future.

18 CHAIRMAN MILES: Any questions?

19 (No response)

20 MR. MATHIEUS: Moving right along,
 21 Senate Bill 102. Senate Bill 102 was introduced
 22 at the request of the DEQ. This bill amends the
 23 fee provisions of the Clean Air Act of Montana.
 24 Air quality fees are set by the Board in
 25 rulemaking proceedings, so this bill directly

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1 affects the Board's rulemaking authority.

2 Under the air quality rules, certain oil
 3 and gas operations do not need an air quality
 4 permit. Instead they may simply register the
 5 operation with the Department. Senate Bill 102
 6 amends the Clean Air Act to expressly provide that
 7 we can continue to collect and use registration
 8 fees for the administration of existing and future
 9 registration programs.

10 The Department plans to develop
 11 additional registration programs where appropriate
 12 in the future as an alternative to the traditional
 13 case-by-case permitting program that requires far
 14 more time and effort by the agency and the
 15 applicants. These registration programs would be
 16 brought forward before the Board for approval.
 17 Registration programs reduce time and resources
 18 that would otherwise be spent on issuance of a
 19 case-by-case permit, and in many situations are a
 20 much more efficient and effective means of meeting
 21 air quality obligations.

22 This bill also removed the requirement
 23 that certain air quality fees be adjusted annually
 24 to account for changes to the Consumer Price
 25 Index. It is unnecessary to adjust these fees

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1 annually. This would usually result in an upward
 2 adjustment of the fee.

3 Finally, this bill does not increase air
4 fees, does not allow the Department to collect for
5 fees from those that are currently subject to air
6 fees, and does not expand the air quality
7 regulatory authority of the Department.

8 CHAIRMAN MILES: Any comments or
9 questions?

(No response)

11 MR. MATHIEUS: So the next bill is
12 Senate Bill 112. This bill does not affect the
13 Board's rulemaking function, but it does create
14 another type of appeal that may be made to the
15 Board. Senate Bill 112 applies when the
16 Department receives an application for a discharge
17 permit on an impaired water body. It sets an
18 initial deadline of 180 days for the Department to
19 develop a TMDL water quality restoration plan
20 after receipt of the application.

21 It allows the Department thirty days to
22 assess whether adequate data and information
23 exists to meet that deadline. If the Department
24 determines that there is not adequate data, the
25 bill allows the Department to set an alternative

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1 deadline for completion. If the applicant
2 disagrees with that time frame, the applicant can
3 appeal to the Board. If inadequate resources are
4 identified by the Department, the Department may
5 request the applicant provide funding for the
6 development of that TMDL.

7 I saved Senate Bill 325 for last. So
8 Senate Bill 325 has two distinct components that
9 I'd like to point out. First it sets the natural
10 condition of a stream as the water quality
11 standard when the existing standard is more
12 stringent than the natural condition of that
13 stream. This bill limits natural as the
14 non-anthropogenic condition. The bill expressly
15 requires the Department to protect downstream
16 water quality standards.

17 Secondly, this bill allows the
18 Department to issue a temporary variance to a
19 discharger when the receiving stream exceeds water
20 quality standards due to upstream pollution.

21 Finally, this bill triggers two
22 rulemaking efforts for the Board: One to define
23 how non-anthropogenic is determined; and second on
24 how the variance is implemented.

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25 CHAIRMAN MILES: So what can we expect
1 in terms of when the Board needs to adopt the
2 rules? How that is going to happen procedurally?
3 Will the Department be drafting something for the
4 Board to consider?

5 MR. MATHIEUS: Madam Chair, members of
6 the Board, the timeline for the Department is
7 sometime this fall that we're expecting to --
8 we're working towards the draft rule at the
9 moment, and we're looking at a fall time frame.

10 CHAIRMAN MILES: Board implementation,
11 full implementation of Senate Bill 325?

12 MR. MATHIEUS: For a proposal to
13 initiate rulemaking.

14 CHAIRMAN MILES: Does anyone have any
15 questions or comments? That one is a fairly
16 complicated bill, and it will impact, certainly
17 will impact some of the work we do, since we do
18 have standards on streams that are probably more
19 stringent than the natural non-human caused
20 conditions. Robi n.

21 BOARD MEMBER SHROPSHIRE: Madam Chair,
22 George, that was my question, was in terms of the
23 initiation of rulemaking that's on our agenda
24 today. How do we approach incorporating a future
25 rulemaking? I'm confused if that would impact the

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1 initiation of rulemaking that we're looking at
2 today.

3 MR. MATHIEUS: Madam Chair, Ms.
4 Shropshire. The two concepts and the two
5 rulemakings are related, but not necessarily
6 dependent on each other. So the rulemaking before
7 you today is for site specific standards, so
8 specific to a specific water body; and the
9 rulemaking to determine natural is going to be a
10 broader brush across the state of Montana. And
11 the rulemaking before you today will help inform
12 the Department on the second rulemaking because
13 we're talking about natural.

14 CHAIRMAN MILES: What do you mean the
15 second rulemaking? In Senate Bill 325?

16 MR. MATHIEUS: Yes.

17 CHAIRMAN MILES: Mich e l e.

18 BOARD MEMBER REINHART-LEVINE: Madam
19 Chair, George. I'm a little bit confused.
20 Wouldn't it make sense to have an over-arching
21 definition of what counts as natural, sort of a
22 framework, and then proceed with stream by stream
23 after that? I'm wondering if we're putting the
24 cart before the horse here.

25 MR. MATHIEUS: Madam Chair, Ms.

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1 Reinhart-Levine. That's a good question, and I
2 would recommend that listening to the
3 presentations today, and seeing why we are where
4 we are today, and why we think that it is
5 important to make this decision today, might put
6 that more in context for you.

7 CHAIRMAN MILES: I think that that's
8 true. Some of these questions might be more
9 relevant to the actual action item that we get
10 into, but I think they're very pertinent
11 questions. But in terms of understanding the
12 overall bill, Senate Bill 325, I think; wanted
13 everyone to see the bill, and see the language,
14 and then we can maybe explore that little bit
15 further during that discussion.

16 Anything else there? With that, we'll
17 move right into our action items. Thank you,
18 George. I appreciate that, and we'll look forward
19 to hearing more about that, and seeing the
20 initiation of rulemaking for Senate Bill 325.

21 We have three action items today. We
22 have a new contested case, and then we have two
23 requests for initiation of rulemaking. The new
24 contested case, that was fairly detailed in your

25 Board packets. I hope you had a chance to go

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1 through that. That deals with Water Quality Act
2 violations by Buscher Construction and development
3 in the Billings area. This goes back to -- I
4 think it was 2012 and 2013.

5 Once an issue goes into the contested
6 case status, we do not take any public testimony
7 on it. The issue for us today is whether we want
8 to hear this case directly, or assign it to a
9 permanent Hearings Examiner who will decide the
10 matter. Ben, should we ask you to take that on,
11 are you prepared to do so?

12 MR. REED: I am able, and I think it's
13 appropriate, Madam Chair.

14 CHAIRMAN MILES: Any questions? Any
15 discussion? Is there a motion to either assign a
16 permanent Hearings Examiner, or for the Board to
17 hear the matter?

18 BOARD MEMBER SHROPSHIRE: I'd move that
19 we assign Ben as the permanent Hearing Examiner.

20 CHAIRMAN MILES: Thank you, Robin. Is
21 there a second?

22 BOARD MEMBER O'CONNOR: I will second
23 that.

24 CHAIRMAN MILES: Any discussion on the
25 issue?

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1 (No response)

2 CHAIRMAN MILES: All in favor, please

3 say aye.

4 (Response)

5 CHAIRMAN MILES: Opposed.

6 (No response)

7 CHAIRMAN MILES: Motion passes

8 unani mousl y. Thank you.

9 The first initiation of rulemaking is a
10 proposal from the Department to adopt site
11 specific electrical conductivity and sodium
12 adsorption rate criteria for Otter Creek, a
13 tributary of Tongue River. I anticipate that
14 we're going to have quite a bit of testimony on
15 this today. Can I actually see how many people
16 intend to comment on this proposal?

17 (Response)

18 CHAIRMAN MILES: We'll start with the
19 Department doing an explanation. Actually I'm
20 going to turn it over to George first to sort of
21 give an introduction, and then Department will
22 give their presentation, and then we'll open it up
23 to public comment. I would just ask that people
24 stay on point, concise, very clear, so the Board
25 can understand this. I understand we will have

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1 some visuals, and I appreciate that. I think that
2 will probably help us. And with that, I'll turn
3 it over to George.

4 And this is not a formal process here,
5 so we can ask questions. After presenters give
6 their comments, you certainly can ask questions at
7 that point and clarification. So have a good
8 discussion so we can proceed accordingly.

9 MR. MATHIEUS: Thank you, Madam Chair,

10 members of the Board. Since today is my first day
11 as well, I went ahead and wrote this speech down
12 as well to keep me focused.

13 Today the Department brings for your
14 consideration a rule package for site specific
15 water quality standards on Otter Creek. We fully
16 recognize and want you to know that this effort
17 has not come without public concern. It is why we
18 have increased the normal public involvement
19 process over the last year to include informal
20 open forums, public meetings, and presentations,
21 to discuss and seek input as we developed this
22 rule package.

23 I want to give you some context on how
24 we got here. The Department developed a TMDL,
25 which is a water quality plan, as required under

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1 the Water Quality Act. We were able to draw from
2 forty years worth of water quality data, which
3 clearly showed us the existing water quality
4 standards for EC and SAR rarely, if ever, existed
5 in Otter Creek. We then developed a watershed
6 model to better understand salt in Otter Creek
7 drainage. Finally, we received a permit
8 application for a discharge permit.

9 The current regulatory framework
10 presents problems for the Department when trying
11 to implement the water quality standard in a
12 permit. This is because the 500 EC standard
13 rarely exists in Otter Creek naturally. Current
14 law does not allow the Department to require
15 treatment purer than a natural condition.

16 When the Department set out to develop
17 these standards, we had three objectives: No. 1,
18 the numbers must protect uses in Otter Creek; No.
19 2, the numbers must protect the Tongue River; and
20 No. 3, those numbers must represent and maintain
21 the natural condition of Otter Creek. I believe
22 we have met those objectives today.

23 It is the Department's position that it
24 is appropriate to review and modify water quality
25 standards to ensure we capitalize on the newest

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1 and best information to ensure the protection of
2 our State waters.

3 So today we have a pretty awesome team
4 that's going to present to you today, led by Amy
5 Steinmetz with our Water Quality Standards
6 Program. So I'd like to welcome Amy, and I think
7 she's probably going to introduce her team. So
8 thank you, Amy.

9 CHAIRMAN MILES: Amy, and anyone else
10 who comes up to the podium, would you make sure
11 you introduce yourself, your full name, and spell
12 it for Laurie so she has the correct information
13 in the record.

14 MS. STEINMETZ: Good morning, Madam
15 Chair, members of the Board. My name is Amy
16 Steinmetz, S-T-E-I-N-M-E-T-Z. I work in the Water
17 Quality Standards Section, the Water Quality
18 Planning Bureau, at DEQ. I'm here today to
19 request initiation of rulemaking for site specific
20 standards for EC, electrical conductivity, and

21 sodium adsorption rate, SAR for Otter Creek. And
 22 I'd like to invite comments, questions, throughout
 23 the presentation. Feel free to interrupt.

24 Why are we here today? This slide just
 25 shows the chronology of how we got here today, and

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1 I'll go into a little bit more detail in the next
 2 couple of slides, but first we're here because an
 3 assessment of Otter Creek showed that it is water
 4 limited for EC and SAR, and if that's the case, a
 5 watershed plan to attain water quality standards,
 6 or as George described, a TMDL, is necessary for
 7 that water.

8 A pending permit application elevated
 9 the priority of that TMDL, and that TMDL process
 10 showed us that the natural condition is
 11 significantly different than the water quality
 12 standards that are currently on the books. So
 13 this is a water quality standards issue, and not a
 14 TMDL issue.

15 Assessment. Water quality beneficial
 16 use assessment. Data in 1996 showed high level of
 17 salts in Otter Creek. We determined that those
 18 levels of salts could negatively impact irrigated
 19 agriculture. In 2008, a comparison of real data
 20 to the standards that the Board adopted in 2003
 21 showed exceedence of those standards. So with
 22 that information Otter Creek is listed as water
 23 quality limited, or an impaired stream, on a
 24 303(d) list, a federal list that lists impaired
 25 streams that don't meet water quality uses.

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1 Like I said, when that's the case, the
 2 next step is to allocate load reduction of a
 3 pollutant so we can meet water quality standards,
 4 and those load reductions go to point sources --
 5 industry permitted discharges -- and nonpoint
 6 sources -- anybody who might add a pollutant to a
 7 stream. So that would include agriculture, other
 8 uses as well.

9 Water bodies can stay on that 303(d)
 10 list for a long time without having that watershed
 11 plan to reduce pollution, and one of the things
 12 that can elevate the priority of a TMDL, that
 13 watershed plan, is a pending permit application.
 14 The Department had information that a permit
 15 application was pending for Otter Creek. That,
 16 along with the decision of the State TMDL Advisory
 17 Group, elevated the priority of the TMDL.

18 TMDL stands for total maximum daily
 19 load. It is not a standard. It doesn't develop
 20 standards. It's a watershed plan to attain and
 21 maintain water quality standards by identifying
 22 significant sources, and then allocating load
 23 reduction to those sources, so that if each of
 24 those sources reduce their load to their assigned
 25 amount, the water quality standard would be met.

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1 So TMDLs protect water quality standards.
 2 Before I go any further with the Otter
 3 Creek TMDL, just a little bit of background
 4 information that will be helpful as we keep going.
 5 Electrical conductivity, EC, is the ability of

6 water to conduct electricity. It depends on the
7 amount of ions in the water, cations such as
8 sodium, calcium, magnesium; and anions, like
9 sulphate, bicarbonate. The measure that we use
10 for EC is microsiemens per centimeter, so you'll
11 hear that a lot today. And the way that EC can
12 negatively impact agriculture is that it competes
13 with the plants for water. So the higher the EC,
14 the harder it is for plants to uptake water.

15 Sodium adsorption rate, SAR, is the
16 ratio of sodium to calcium and magnesium. It is a
17 ratio, no units. This high levels of sodium
18 adsorption rate can negatively impact agriculture
19 because sodium is a large molecule. With high
20 SAR, we have lots of sodium. That sodium can push
21 the soil particles apart, causing loss of soil
22 structure. Then when clean water rinses the
23 sodium out of the soil, the soil collapses, forms
24 a hard crust. And you've probably all seen soil
25 that looks like this.

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1 When a TMDL is completed, we compare
2 water quality to water quality standards. These
3 are the water quality standards that apply to
4 Otter Creek. Electrical conductivity, 500
5 microsiemens per centimeter; sodium adsorption
6 ratio, three or five. Those are the numbers that
7 are in the Administrative Rules of Montana at
8 17.30.670.

9 I have "or natural" behind the
10 numbering. When the Board adopted these standards
11 in 2003. When the notice of adoption was
12 published in the Montana Administrative Register,
13 there were two responses to comments that
14 addressed this situation where the natural
15 condition is much higher than the standards; and
16 the Board said that if that's the case, then the
17 numbers don't apply in permits or assessments,
18 then natural applies.

19 And one of the responses to comments
20 specifically referred to Montana Code Annotated
21 75.5.306, which says that wastes don't need to be
22 treated to a purer condition than the natural
23 condition of the receiving water. So the response
24 to comment about permits and standards too low,
25 the lower than natural, was that natural would

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1 become the standard, would be implemented in
2 permits.

3 So these are our rules, statute, but
4 Montana doesn't have rules or guidance on how to
5 do that. That's why we're here today.

6 CHAIRMAN MILES: On natural? Defining
7 natural?

8 MS. STEINMETZ: On implementing natural
9 in the standards.

10 This is the current data that the TMDL
11 writer looked at compared to standards. Thousands
12 of data points for Otter Creek dating back to the
13 1970s, as you'll see.

14 SC is the measure of conductivity that
15 standardizes the measure to -- takes out the
16 influence of temperature. So specific

17 conductance, the ability of water to conduct
 18 electricity at 25 degrees Celsius. The data that
 19 we have is measured SC. The definition of EC in
 20 Montana rules is the same as the definition of SC,
 21 so when I use those two terms today, for our
 22 purposes, we use them interchangeably.
 23 3,050 daily SC data points. The daily
 24 data is information from a continuous gauge, a
 25 USGS gauge, that measures conductivity maybe every

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1 fifteen minutes, and then that data is averaged
 2 daily, so that's the daily data points.
 3 The grab samples are just somebody going
 4 out, dipping a bottle in the stream, and analyzing
 5 for EC, and then ions to calculate SAR.
 6 This in the next three charts, they're
 7 set up the same way, either SC or SAR on the "Y"
 8 axis; and day of calendar year on the "X" axis.
 9 Year is irrelevant. We're just looking at EC and
 10 SAR, SC and SAR, during different times of the
 11 year. January on the left, through December on
 12 the right.

13 This first chart shows the daily
 14 specific conductivity, specific conductance. We
 15 can see the standard, the red line on the bottom,
 16 500 microsiemens per centimeter; and the actual
 17 data mostly hovers between 2,500 and 3,500
 18 microsiemens per centimeter, significantly higher
 19 than the water quality standard.

20 CHAIRMAN MILES: Amy, excuse me. Where
 21 are these samples taken from?

22 MS. STEINMETZ: Thank you, Madam Chair.
 23 These samples are collected from a USGS gauge
 24 that's near Ashland, Montana, a couple of stream
 25 miles upstream of the confluence with the Tongue

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1 River; and the grab samples were collected near
 2 there. So for our purposes, we're seeing that all
 3 these samples were collected in same location.
 4 These are the grab samples. Shows about
 5 the same thing, most of the data between 2,500 and
 6 3,500 microsiemens per centimeter. Here we do see
 7 that four data points fall below the standard.
 8 And something to remember when we're looking at
 9 grab samples and the continuous samples, these are
 10 instantaneous values. The daily samples, you do
 11 see some averaging of highs and lows throughout
 12 the day, so we see higher values with grab
 13 samples, and we also see lower values with the
 14 grab samples.

15 BOARD MEMBER SHROPSHIRE: Madam Chair,
 16 if we have questions, do you want us to work
 17 through you?

18 CHAIRMAN MILES: No. I think it's
 19 important to ask it when it's on your mind.

20 BOARD MEMBER SHROPSHIRE: When is high
 21 flow or runoff? Typically when would you see the
 22 lowest flow on the "X" axis and the highest flow?

23 MS. STEINMETZ: You would typically --
 24 just time of year, low flow after August; and then
 25 the high flow, mostly probably January through

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1 June.

2 BOARD MEMBER SHROPSHIRE: So where
3 you're seeing the 500 level grab samples, those
4 are higher flow?

5 MS. STEINMETZ: Probably extreme high
6 flow, where there is so much precipitation that it
7 significantly dilutes the actual Otter Creek
8 water. And I do have some slides -- I didn't
9 include them in the presentation, but we can go to
10 them later -- that do show the relationship
11 between conductivity and flow. Until about 35
12 CFS, cubic feet per second, we don't see a
13 difference in conductivity. We don't see a
14 difference in conductivity until we get to very
15 high flow. Average flow for Otter Creek is about
16 five CFS. So it is all over the board.

17 So sodium adsorption ratio, this is the
18 continuous data averaged daily. We didn't start
19 taking this data until 2004, and in 2004, those
20 continuous data loggers were only employed between
21 March and the end of October, so just during the
22 growing season on the Tongue River. So here we
23 are missing some data from January through March,
24 November, December.

25 But we can see that the data that is

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1 available is almost all above that five standard.
2 That is the non-growing season standard;
3 corresponds to the Tongue River. We'll see in a
4 little bit, there is no growing season for Otter
5 Creek, but the Tongue River does have a growing
6 season. So almost of the data is above the
7 non-growing season standard. All of the data is
8 above the growing season standard of three.

9 The next slide is the grab samples.
10 These we have year around. Remember this later.
11 I'm going to come back to this. Year around,
12 again, most of it is above the non-growing season
13 standard. All but four points are above the
14 growing season standard.

15 So when the TMDL writer looked at all of
16 this information, looked for sources, it appeared
17 that the salts were coming from natural sources.
18 George mentioned a model. That's when we decided
19 that we would develop a model that would show us
20 what was coming from natural sources, and what was
21 coming from anthropogenic sources. This is an
22 easy one. The model showed that everything that's
23 there of any significance is coming from natural.

24 BOARD MEMBER SHROPSHIRE: Why is that?

25 MS. STEINMETZ: I should have probably

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1 had Eric make us a modeling report. He's
2 available to answer questions on the model. But
3 he put in any land use that's in the watershed,
4 and then removed any of the anthropogenic, and any
5 salt loads that that would contribute, and it
6 showed us that there are no anthropogenic sources.
7 And the only thing that could contribute to the
8 salts in this watershed would be from agriculture,
9 which is a very small portion of the total land.

10 And again, you'll see when I talk about
11 the type of agriculture that's being used, it
12 doesn't lend itself to that return of salts to the

13 stream. It is very natural and passive. But Eric
14 could answer more questions if you have them on
15 the model. He was here in March, but some of you
16 were not, so some of you did not have the
17 privilege of hearing his presentation on the
18 model.

19 Sometimes, some streams, it is going to
20 be very difficult to tease out what's
21 anthropogenic and what's natural. This watershed
22 is very natural. It was an easy one to determine.

23 BOARD MEMBER SHROPSHIRE: I'm still not
24 sure I understand. Let's say you had some
25 activity on the land that was historic.

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1 MS. STEINMETZ: Sure.

2 BOARD MEMBER SHROPSHIRE: That could be
3 impacting the concentrations in the river.

4 MS. STEINMETZ: Historic mining?

5 BOARD MEMBER SHROPSHIRE: Yes.

6 MS. STEINMETZ: That is one of the uses
7 that was considered in the model.

8 BOARD MEMBER SHROPSHIRE: So in the
9 model, you took off any potential impact, and you
10 were able to reproduce the numbers that you see;
11 is that correct?

12 MS. STEINMETZ: That's correct. Yes.
13 When he calibrated the model, the simulated
14 results and the actual data matched up very
15 closely.

16 BOARD MEMBER CANTY: So would it be
17 maybe correct to say there are some anthropogenic
18 sources, but they're just so insignificant in
19 comparison to background?

20 MS. STEINMETZ: That's correct.

21 BOARD MEMBER CANTY: They're sort of
22 negligible.

23 MS. STEINMETZ: So we can say that all
24 of that data that you saw on those previous four
25 slides, that those are the natural conditions.

0034

1 BOARD MEMBER SHROPSHIRE: And the
2 natural sources are what again?

3 MS. STEINMETZ: The geology of the area,
4 very high saline geology; used to be an inland
5 sea. I'm sure you would know this a lot better
6 than I do as a hydrologist. But yes. So as the
7 water flows through Otter Creek and flows over
8 land, picks up salts from the soil, from the
9 rocks, and that's where the salts are coming from.

10 At that point, seeing that we didn't
11 have any sources to require or ask load
12 reductions, it became a standards issue rather
13 than a TMDL issue. The existing tributary
14 standards for EC and SAR are significantly lower
15 than the natural condition. At that point, not
16 only can we technically not implement that
17 standard, but Montana Code Annotated 75.5.306
18 kicks in. So we want to set standards or apply
19 natural, and numeric standards provide more
20 certainty for everyone involved, for anybody who
21 has to implement those standards. The narrative
22 standard is just a statement that says that harm
23 can't occur.

24 And then the other thing -- and George
25 mentioned this, too. He did a really good job of

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1 summarizing everything that I'm going to say today
2 -- but water quality standards have to protect
3 uses. That's the purpose of a water quality
4 standard. It has to protect the use.

5 The uses on Otter Creek. Recreation is
6 one of the designated uses. These uses are
7 designated in the Administrative Rules of Montana.
8 We're not going to have an issue with salts and
9 recreation.

10 Aquatic life is one of the uses.
11 Aquatic life exists. The aquatic life that exists
12 there either exists because it's adapted to the
13 natural salts, or because the aquatic life that's
14 there can tolerate one way or another, but it is
15 there naturally. And so if we take a natural
16 approach, maintain the natural condition of Otter
17 Creek, aquatic life will be protected.

18 And agriculture is the third big use
19 that we need to protect. It's thought to be the
20 most sensitive use with regard to salts. In the
21 Administrative Rules of Montana, Otter Creek is
22 designated as a stream that's marginal for
23 agriculture, so we're going to talk about that
24 next. You won't see any sprinkler irrigation
25 occurring on Otter Creek, and you don't drive up

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1 through sprinkler irrigation. If you did, you
2 wouldn't see any plants because the salts in the
3 water would kill the plants.

4 What you do see -- this is a little bit
5 hard to see, but easier to see in the next slide
6 -- we see berms that are built up around these
7 fields. These berms capture water coming out of
8 the hills, out of clean side channels, and that's
9 how irrigation is occurring. It's capturing clean
10 water, precipitation, snow melt, or combination of
11 the two. Passive irrigation. The main method of
12 irrigation is precipitation.

13 Here's another picture that shows that.
14 Here's one of those berms. Otter Creek. The
15 other reason to build these berms is that we're
16 keeping water from Otter Creek off the fields. We
17 don't want that water on the fields typically.
18 The only time that the water would enter the field
19 is if there is enough precipitation, first of all,
20 to increase the volume, but also diluting the
21 salts.

22 And then the other thing that's
23 happening is that water, when it does overflow the
24 banks, is mixing with water that's already on the
25 fields or in the soil. So there is so much

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1 dilution by the time that this irrigation is
2 occurring, that you're not seeing those levels of
3 salts like you would see in that water that's
4 being applied to plants, and that's why I say that
5 the main method of irrigation is precipitation.

6 So far, we know we have standards that
7 we can't implement technically or legally. We
8 know that we need to protect the most sensitive

9 use; provide numeric standards to provide more
10 certainty to users; we need to set these standards
11 based on natural that will protect the uses that
12 exist naturally.

13 Site specific standards based on natural
14 conditions will protect Otter Creek's designated
15 uses because they maintain the current condition
16 under which those uses exist. We would require
17 status quo. We would require no change to
18 natural.

19 Site specific standards based on natural
20 are not a new concept by any means. They're not
21 common in Montana. We have a couple of examples.
22 These are recent examples. Some of you who have
23 been on the Board for awhile saw the nutrient
24 package comes through. These are nutrient
25 standards. The rest of these are from other

0038

1 states. Using site specific criteria based on
2 natural conditions is a common method of
3 developing water quality standards in other
4 states.

5 Just because it's common in other states
6 doesn't mean it is easy to understand, easy to
7 agree with. We knew that this was going to be a
8 challenge. We've provided a lot of stakeholder
9 outreach, much more than we usually do with water
10 quality standards. Most water quality standards
11 don't present the same challenges. In the last
12 nine months, since October of last year, we've
13 held twelve stakeholder outreach meetings in
14 different cities across Montana. Still doesn't
15 take away those challenges.

16 In fact, we were at the Water Pollution
17 Control Advisory Council meeting June 26th. Water
18 Pollution Advisory Council, WPCAC, is a Governor
19 appointed council that provides advice to the
20 Department on water quality issues. It is also a
21 precursor council before we come to you and
22 request initiation of rulemaking.

23 When we went to them in June, they
24 recommended that we don't initiate rulemaking,
25 that you don't initiate rulemaking. So why are we

0039

1 here? Why Otter Creek? Why now?

2 One, the natural condition is
3 significantly different from the standards, higher
4 than the standards. We can't implement the
5 standards, so really all we have is a narrative
6 statement that says we use natural. Two, we have
7 a statutory obligation to review standards and
8 update as necessary. Triennial review. We have
9 to continue to update, improve our water quality
10 standards. If we have information that says that
11 they need to be different, we have an obligation
12 to do that.

13 Numeric standards. They provide the
14 highest level of certainty. We have hundreds,
15 thousands actually, of data points that span forty
16 years. There is no lack of data from which to
17 calculate these site specific standards. And
18 finally, initiation of rulemaking will spark some
19 of those more in-depth conversations with a

20 broader range of stakeholders who would be
 21 impacted by these rules. Some of those
 22 stakeholders that maybe we haven't reached yet, or
 23 who haven't felt comfortable discussing the
 24 subject, because they don't want to see these
 25 kinds of standards.

0040

1 We know that we can't use 500, we can't
 2 use three and five. We need something. So the
 3 proposed new rules, new section, would be a new
 4 section in the Administrative Rules --

5 CHAIRMAN MILES: Amy, just a quick
 6 question before you get into that. The advisory
 7 council, what was their basis for recommending
 8 against that? Did they produce any kind of report
 9 or statement that was submitted to the Department?

10 MS. STEINMETZ: There was no report or
 11 statement that was written. It was verbal. I'd
 12 like to say it was more of an emotional statement.
 13 I'm going to say the preface to the motion was, "I
 14 don't believe in science or graphs or math, but I
 15 see trends." What they see is that salts in the
 16 system fluctuate. They fluctuate naturally. That
 17 was the basis for the motion not to initiate
 18 rulemaking. I wasn't going to throw them under
 19 the bus, but since you asked. I'm just being
 20 honest about how that --

21 CHAIRMAN MILES: -- that council, and
 22 what kind of a role they play, and whether they're
 23 just advising the Department, or do they provide
 24 advice to the Board as well?

25 MS. STEINMETZ: No, they're an advisory

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1 Counsel to the Department. Strictly advice. And
 2 when we went to them, understanding that it is
 3 challenging subject, we asked them for advice on
 4 the standards themselves. How can we make the
 5 standards better? That's what we were asking
 6 them. And we didn't get much discussion on the
 7 actual standards themselves.

8 BOARD MEMBER CANTY: Does that council
 9 have technical people on it?

10 MS. STEINMETZ: Some. And the decision
 11 was split. It ended up being three/two. WPCAC
 12 has eleven members. Six of them were present at
 13 that meeting, six of them, including the Chairman,
 14 so the Chairman would have voted if it would have
 15 broken a tie. So it ended up being three/two.
 16 The two people that voted for the standards,
 17 against the motion, were the technical people.
 18 The member who initiated the motion was the
 19 developer, big land developer; and then one of the
 20 other ones that voted for it is a conservation
 21 district member. The other one, which was more of
 22 a surprise, is a member that represents disposal
 23 of inorganic waste.

24 But that was a split. It was close.
 25 There wasn't the discussion that we were looking

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1 for, and that's why this last bullet point is
 2 important. We feel like maybe it would be more
 3 real if there was a rulemaking, if it was more
 4 pressing to get these conversations started. Not

5 that we can't have those discussions anyway, but
6 are they going to happen? They will happen if the
7 rulemaking is initiated. It is just a level of
8 discomfort. Like I said, the technical people on
9 the council were able to understand and agreed
10 with what the Department is doing.

11 MR. MATHIEUS: Madam Chair, I would just
12 add that, yes, this board is an advisory board to
13 the Department, and it isn't traditional that
14 there is an actual vote; but as I indicated in my
15 opening, and as you are all aware, is that this is
16 a very important rulemaking from the perspective
17 of -- there is a lot of interest, and there is a
18 lot of concern. So it would make sense that those
19 types of discussions have occurred and would
20 continue to occur.

21 From our perspective, we have the data
22 and information we need to show what natural is in
23 Otter Creek, and we don't have the appropriate
24 regulatory framework to implement that, and I
25 think that's really the bottom line I don't want

0043

1 folks to lose sight of. Thank you.

2 MS. STEINMETZ: Back to the proposed new
3 section in rule. This would be a place holder in
4 the Administrative Rules of Montana, where when we
5 do get to the point where we're developing other
6 site specific standards based on natural, this
7 section of rule would house those site specific
8 standards if and when they become necessary.

9 It consists of three sections. The
10 first section simply states that site specific
11 standards based on natural conditions are
12 protective of designated uses. For the reasons
13 that we've already talked about, those uses exist
14 under natural conditions. If we keep the
15 conditions natural, the uses will continue to
16 exist.

17 The second section, we haven't talked
18 about this yet today, but it's very important:
19 Protection of downstream water standards. George
20 did mention protection of the Tongue River. That
21 was one of the things that was important in this
22 rulemaking. So the second section of this rule
23 addresses that.

24 These two charts show EC or SC and
25 sodium adsorption ratio in the Tongue River.

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1 These samples are from the Brandenburg Bridge
2 which is near Ashland, so just downstream of where
3 Otter Creek enters the Tongue River. The second
4 bar of both of these charts is water from Otter
5 Creek. And then the third bar is groundwater from
6 the area. And you can see that Tongue River water
7 is cleaner in EC and SAR than both Otter Creek and
8 groundwater.

9 So that was a concern, is a concern for
10 irrigators on the Tongue River, that we're going
11 to be putting this water from Otter Creek into the
12 Tongue River, and that it will impact uses.
13 Something to remember, this water is already going
14 into the Tongue River naturally. We want to
15 maintain that natural condition. But just

16 maintaining the concentration, if we allow larger
 17 volumes, that would impact the Tongue River
 18 because the load would increase, the load of salts
 19 going into the Tongue River would increase.

20 That is why we've added a statement that
 21 protects against loading of parameters that would
 22 negatively affect the water quality of downstream
 23 waters. And this is a piece that we took -- it
 24 also includes the word "load" before this -- but
 25 we would require protection of downstream water

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1 quality standards. We would require that those
 2 water quality standards be maintained and
 3 attained.

4 The third section contains the numbers,
 5 the standards themselves. Water quality standards
 6 consist of three pieces: Magnitude, duration, and
 7 frequency. Magnitude is the number; duration is a
 8 period of time over which that standard can be
 9 exceeded and we not see negative results; and
 10 frequency is how often that can happen and the
 11 system can still recover.

12 Magnitude, duration, frequency are a
 13 part of every single water quality standard,
 14 surface water quality standard. We never expect
 15 that a point will never be exceeded, we expect
 16 statistically that exceedences will occur, but
 17 systems can naturally recover from those
 18 exceedences, so we write that into the rule.

19 Magnitude -- and this is taken from
 20 those data sets that you saw, the continuous data
 21 for the conductivity. Because we only had data
 22 from March through October for sodium adsorption
 23 ratio, we used the grab samples. Spanned more
 24 time. There weren't as many data points, but it
 25 spanned a longer period of time, and it was

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1 available year around. So those are the numbers
 2 that we used to calculate the magnitude for these
 3 standards: 3,100 microsiemens per centimeter
 4 conductivity; 6.5 sodium adsorption ratio. So
 5 80th percentile of the natural data sets.

6 Salts build up over years. It is a long
 7 term effect. There is national precedents for
 8 selecting anywhere from the 75th to 85th
 9 percentile to protect against long term effects.
 10 That's why we choose the 80th percentile.

11 Here, the magnitude, duration, and
 12 frequency, they're all selected because they
 13 reflect that natural condition. If we look at the
 14 actual data, one year as an averaging period makes
 15 sense because it is a long term effect; also more
 16 reflects a growing season. It would make sense to
 17 have a week, longer period of time for duration.
 18 And then frequency, once in a two year period.

19 The rule specifies that for assessments,
 20 we take the 80th percentile of an annual data set
 21 and compare that to the criterion, which is based
 22 on the long term data set, so we expect some
 23 fluctuation around that long term 80th percentile.
 24 That's what the one, two year period. That's what
 25 we would expect to see naturally. Because we're

0047

1 preserving natural, that's the duration of
2 frequency that we chose.

3 Then the other piece of this third
4 section specifies that the water quality standards
5 are to be met at the point that we took the data
6 from to calculate the standards. There are
7 differing conditions along Otter Creek we're
8 protecting at one point. Any discharge to Otter
9 Creek has to protect that point from a section to
10 the Tongue River. So there are all kind of layers
11 of protection going into these standards. Protect
12 uses. They reflect natural.

13 CHAIRMAN MILES: So would discharges be
14 new discharges, new development along Otter Creek?

15 MS. STEINMETZ: That's correct. There
16 is one discharge currently, and that's a publicly
17 owned treatment work type, waste water treatment,
18 and that's right above the Tongue River. So
19 that's the only discharge, surface water discharge
20 that we have in the Otter Creek watershed, so that
21 would apply to new sources.

22 BOARD MEMBER CANTY: So the flow of
23 Otter Creek is about five CFS on average. What is
24 the flow of the Tongue River? 500,000 or more?

25 MS. STEINMETZ: I don't remember. Can I

0048

1 get a hint from the audience?

2 MR. MAKUS: Somewhere around 51 average
3 maybe. 500 average maybe. My name is Erik Makus.

4 MS. STEINMETZ: The objectives, like
5 we've mentioned a couple of times throughout, the
6 objectives are to protect uses, to reflect
7 natural, to maintain the natural condition of the
8 watershed. But a water quality standard is just a
9 number. It doesn't do anything except inform
10 other decisions, decisions implemented by other
11 programs within the Department.

12 So we felt it was very important to have
13 an implementation plan that the water quality
14 standards people are working with the other people
15 who are implementing the numbers to make sure that
16 they're going to be protective. So we've drafted
17 an implementation guidance that explains
18 specifically how the numbers will be used in
19 assessments, how they'll be used in permits. Also
20 bringing in other pieces. Nondegradation is a
21 very important piece that will help protect the
22 natural condition, and help protect those clean
23 flushes. How to implement the numbers to develop
24 effluent limitations for both concentration and
25 load, so that implementation guidance directs

0049

1 other programs how to use these standards to make
2 sure that they're protective, to make sure that
3 they really maintain the natural condition of
4 Otter Creek.

5 So just coming back to the slide. Why
6 Otter Creek? Why now? Why are we requesting
7 initiation of rulemaking of you today? We're
8 requesting initiation of rulemaking from you today
9 because the natural condition is significantly
10 different from the standards. We know that we
11 can't implement these numbers, and we want to have

12 a numeric, concrete, certain way to make sure that
13 natural is being protected.

14 We have years of data. Like I
15 mentioned, there is no lack of data from which to
16 calculate these standards. We want to initiate
17 these discussions, and we have the obligation to
18 review and update our standards as necessary.

19 And I will take questions now. I'll
20 introduce some of the people from the team who
21 worked on these water quality standards. You
22 already met Erik Makus, hydrologist. He developed
23 the model, and answer questions on model and any
24 of the data. Jon Kenning is Bureau Chief of the
25 Water Protection Bureau that houses the Surface

0050

1 Water Discharge Permit Program. Eric Urban is
2 Bureau Chief of the Water Quality Protection
3 Bureau, which houses the Standards Section. And
4 there are many others here who can help answer
5 questions that I may not be able to answer.

6 CHAIRMAN MILES: Thanks, Amy. Any
7 immediate questions of Amy?

8 BOARD MEMBER TWEETEN: I have some,
9 Madam Chair. Amy, several times in your
10 presentation you referenced the desire to initiate
11 and maintain further discussions regarding this
12 issue in a more formal setting, I gather from your
13 comments. From that, I assume that you would
14 agree that if we were to initiate rulemaking,
15 we're not obligated to actually adopt a rule.

16 MS. STEINMETZ: Madam Chair, Mr.
17 Tweeten, that is correct.

18 BOARD MEMBER TWEETEN: So we're
19 certainly not here today to decide to whether your
20 proposed rule is right or wrong, simply whether we
21 want to initiate the process, correct?

22 MS. STEINMETZ: Correct.

23 CHAIRMAN MILES: Robin, did you have
24 other questions?

25 BOARD MEMBER SHROPSHIRE: I had a couple

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1 of questions. One relates to what Chris asked,
2 and that relates to the scope of the rulemaking,
3 and understanding that the scope is broad enough
4 to allow for those discussions to happen. And I
5 guess the question would be: If it were
6 determined that in fact natural, based on
7 different review of the data, was lower than the
8 numbers you have for EC and SAR, would the
9 rulemaking have lower numbers? Does that make
10 sense?

11 MS. STEINMETZ: Madam Chair, Ms.
12 Shropshire, it does, and that's what we've been
13 asking. That's what we've been asking of
14 stakeholders, we've asked of WPCAC, we ask of you.
15 Do things look right? Do you have other
16 suggestions? Is there something that we're
17 missing? That's what we've been asking, and
18 that's what we would be asking during a public, a
19 formal public process. So yes, it could look
20 different.

21 BOARD MEMBER SHROPSHIRE: The numbers in
22 the final rulemaking could be lower than what are

23 in this rulemaking?

24 MS. STEINMETZ: Yes.

25 BOARD MEMBER SHROPSHIRE: We aren't

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1 prohibited from having a lower number.

2 MS. STEINMETZ: No.

3 CHAIRMAN MILES: Or changing some of the
4 provisions of the rules.

5 BOARD MEMBER SHROPSHIRE: And I guess
6 the second question that I have is I recall when
7 you guys presented last time that the trends of
8 the EC and SAR were trending downward a little
9 bit, and so I don't know if there is -- and it
10 maybe getting too much in the weeds for this. My
11 main goal is that we're not limited by 3,100 and
12 6.5, if we were to look at the data differently
13 and determine that it needed to be lower. So if
14 we're not limited by that, I'm not sure that we
15 need to get into it, but I didn't know if you --

16 The data that you had was based on the
17 day of the year?

18 MS. STEINMETZ: Yes.

19 BOARD MEMBER SHROPSHIRE: But I don't
20 know if you had any data that you could show us
21 that is historic.

22 MS. STEINMETZ: I do have some. I'll
23 have to run over to the keyboard. Maybe I can
24 pull it up here. But yes, I can show some of
25 that. I can also show, like I mentioned earlier,

0053

1 the trends by flow. So we've looked at this data
2 as many ways as we could think of, and that others
3 have thought of.

4 This slide, the yellow line is the
5 proposed criterion, and the yellow diamonds are
6 the 80th percentile of each annual data set. And
7 we can see, and this slide was initially intended
8 to show that we expect about half and half. We
9 expect that some years that 80th percentile of the
10 annual data set is going to be a little higher
11 than that in the long term. Some years it is
12 going to be a little bit lower. And we see that.
13 We see these diamonds fluctuating around that
14 line.

15 We do see that in the last several years
16 we've had some really high flow years; and there
17 have been fires that have cleared out vegetation,
18 so that there is increased runoff; we've seen some
19 increase in the specific conductance. So this is
20 that trend by year, 1974 or 1975, I believe,
21 through 2014.

22 CHAIRMAN MILES: Any other questions?

23 BOARD MEMBER O'CONNOR: Yes. Amy, it
24 seems to me like the critical thing here is
25 protect irrigation water when it's being utilized,

0054

1 and your SAR, either of these numbers that you're
2 proposing, don't seem to protect it because they
3 can't the use the water when it's that high. So
4 the high flow periods are when the water is
5 accessible and usable, but can you set different
6 standards for various flows? It may be impossible
7 to monitor those and enforce them.

8 MS. STEINMETZ: That's a good question.
9 We have talked about different ways that we can do
10 that. The bottom line is that the clean flushes,
11 the irrigation water, that's protected through the
12 permit process. So when we read the
13 implementation guidance, we're saying how to
14 protect all of that.

15 And if you think about the way that
16 irrigation is occurring, it is precipitation
17 driven, and standards don't change that. And
18 because we're protecting the Tongue River, we're
19 going to be protecting against concentration and
20 loading. So we're not going to be allowing huge
21 volumes of high conductivity water. We're going
22 to be introducing small amounts of water that's
23 either 3,100 or below, and then when that
24 precipitation is added to the system, any small
25 addition to the system will be diluted.

0055

1 BOARD MEMBER O'CONNOR: I guess I'd like
2 to hear from the irrigators and see what their
3 perspective is.

4 CHAIRMAN MILES: I know that before the
5 day is out, I need to understand more about this
6 80th percentile concept, and how that's fitting in
7 here, but I think I'd like to go through and hear
8 the rest of the statements, and maybe have a
9 better big picture of what we're looking at here,
10 where some of the issues are, if that makes sense
11 with people, that we move on, but I think there
12 may be some questions later on.

13 MS. STEINMETZ: I agree. There will be.
14 And the other piece of the permitting is
15 nondegradation, so the Tongue River will be
16 protected through the nondegradation review, which
17 allows much less of a pollutant to be added. It
18 protects existing uses. So we can talk more
19 permitting pieces after you've heard from others.

20 CHAIRMAN MILES: Okay. I think that's
21 an important component as well. It is about ten
22 after ten. Let's take just a ten minute break, no
23 longer than that. And then I know that we have a
24 lot of people that want to testify. I would ask
25 the audience to keep in mind we also have a very

0056

1 significant hearing after this. We need to get on
2 with that. We had originally scheduled that for
3 11:00. I don't think that that's probably going
4 to happen. But I don't want to be starting that
5 at 3:00 this afternoon. We want to keep on task
6 here. So a quick ten minutes, and then we'll get
7 back to business here.

8 (Recess taken)

9 CHAIRMAN MILES: We're going to get
10 started again. With that, we'll open to public
11 comment. I want to remind people again. Please
12 stay as direct and on point as you can. I don't
13 want this to be like a legislative hearing where
14 comments are really limited. I want to make sure
15 that we hear from everybody, but we ask you to be
16 as concise and direct as you can. And we'll have
17 time and opportunity for questions, and maybe some
18 questions of the Department when we finish as

19 well. So open to public comment. Please come up
20 to the podium. This is not for proponents or
21 opponents. Do you have a visual?

22 MS. DUNNING: I do have a power point.
23 Get that loaded up. While we're waiting for that,
24 I'll spell my name for the record, D-A-R-A-N-N-E
25 D-U-N-N-I-N-G.

0057

1 Again, thank you all for the opportunity
2 to speak today. My name is Daranne Dunning, and
3 today I'm going to be presenting some comments on
4 behalf of the Northern Plains Resource Council.
5 I'm an attorney. I currently work here in Helena,
6 but I am from Otter Creek. My family has ranched
7 on Otter Creek for over 130 years. I'm the fifth
8 generation to have grown up on that same ranch in
9 Otter Creek. We're just a couple of miles from
10 the proposed mine.

11 My great great grandfather came to Otter
12 Creek in the 1880s, well before Montana was a
13 state. And he came as a horse trainer. Otter
14 Creek was the site of one of the largest horse
15 raising operations in the entire country, and my
16 family raised and trained horses for the Army
17 remount for generations. Really after World War
18 II did my family then transition into the
19 full-time business of raising cattle, and that's
20 what my family does on Otter Creek, and on some of
21 the tributaries that these standards would also
22 impact.

23 Our earliest water rights for the ranch
24 date to the 1800's, and as a ranch, as
25 individuals, we have over 100 years of

0058

1 generational knowledge about the irrigation
2 practices on Otter Creek, knowledge of when we can
3 irrigate, what water quality allows this, and
4 really the most important thing is how we can make
5 our ranch into an ongoing operation in what's
6 really a dry and arid region.

7 As I mentioned, I'm here testifying as a
8 member of Northern Plains. I think you're
9 probably familiar with the Northern Plains
10 Resource Council, but just in case you're not, it
11 is a grass roots organization that was started in
12 1972. It was started by -- shockingly -- a group
13 of ranchers that were concerned about proposed
14 coal development, and how that was going to impact
15 their water rights, their grazing, and their way
16 of life, and so group of ranchers organized, and
17 since then have been working on much those same
18 issues, although our membership has certainly
19 grown over those years.

20 I'm a visual person, so these are some
21 photographs of Otter Creek. So you can see what
22 Otter Creek looks like. It a beautiful, beautiful
23 area, and it is one of the last undeveloped jewels
24 of Montana. It is very productive, and this area
25 that you see, although the entire Otter Creek

0059

1 drainage is over 700 square miles, most of that is
2 productive ranch land, and that productive ranch
3 land is very important to southeastern Montana's

4 agricultural economy. Otter Creek is also a
5 tributary to the Tongue River, which of course is
6 even larger, and more important part of
7 southeastern Montana's ag economy.

8 Otter Creek is a beautiful region, but
9 it is also an arid region, and that landscape is
10 made productive by very careful use of water. And
11 water, especially good water, is a very scarce and
12 precious resource in the area.

13 In Otter Creek, as is common in the
14 surrounding areas, these coal seams actually serve
15 as the aquifers for the region. That's what feeds
16 the alluvial valley, and so we have to rely on
17 really careful management, one, to make sure that
18 we're protecting those surface waters that we use
19 for direct irrigation, but also because of the
20 connectivity between ground and surface water, we
21 need to make sure that we're protecting the
22 groundwater resources because subirrigation is
23 also a really important component of our ranching
24 operation.

25 Otter Creek is high in salts, and it is

0060

1 not usable for irrigation for most of the year.
2 But there are key points during the year when we
3 do irrigate out of Otter Creek and its
4 tributaries, and we rely on that irrigation.
5 Those events occur during early season high flow
6 events, and that is really critical to our
7 operation.

8 There are couple of things I want to go
9 through here today. I want to explain a little
10 bit about Otter Creek irrigation practices. I
11 find that nowadays when people think about
12 irrigation, they're thinking about sprinkler
13 systems and circle pivots coming out of the
14 Missouri River. Otter Creek really goes back to
15 the more traditional forms of irrigation, the
16 olden days of irrigation, but those are still
17 valid water right, still valid irrigation, and
18 still important uses that have to be protected.

19 I want to explain a little bit about the
20 importance of irrigation to our operations. I
21 want to talk a little bit about why this rule does
22 not protect Otter Creek users. As the DEQ said in
23 their presentation, they need to protect the most
24 sensitive use, and I want to talk about how this
25 proposed rulemaking fails to do that. I'll talk a

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1 little bit about why this rule also negatively
2 impacts downstream users in the Tongue River, and
3 there will also be a few other presenters that
4 have personal knowledge of the Tongue River, and
5 can talk a little bit more about the Tongue River
6 piece of this.

7 Finally I want to emphasize the
8 information that is needed to make changes to the
9 water quality standards that are already in place
10 for Otter Creek. I do disagree that the data that
11 has been collected by DEQ, based off of one
12 gauging station, is sufficient to establish what
13 is natural for the entire drainage. The proposed
14 rulemaking doesn't just impact one point of Otter

15 Creek, it impacts the entire drainage, and I'm
 16 going to talk a little bit more about that well.
 17 Let's talk about irrigation. This is a
 18 map kind of designed to show one particular
 19 schematic. This is from the D. Dunning Ranch. On
 20 this there is a direct diversion. So there is a
 21 direct diversion right here. There's actually a
 22 headgate on Otter Creek. That headgate can be
 23 controlled, and it can be opened during those
 24 times when you do want to irrigate, and can allow
 25 these fields up here to be irrigated.

0062

1 The field down here is overflow flood
 2 irrigation, but what's important about this
 3 particular system is that during those high flow
 4 events when traditionally we know we've been able
 5 to safely irrigate, the rest of the year that
 6 headgate can be closed off to keep water off of
 7 those fields.

8 I guess this is what's important to
 9 know. We've been ranching on Otter Creek for a
 10 long time, and what we're doing is we're relying
 11 on those generations of knowledge of when it is
 12 safe to irrigate. Ranchers don't have gauges at
 13 headgates. They don't have ability to test EC
 14 levels and SAR levels on particular fields and at
 15 particular points in the stream. So what we
 16 really have to do is rely on that narrative, and
 17 that generation knowledge that we have.

18 What's concerning about this proposed
 19 rule is that during those times when we can
 20 irrigate -- those are going to be those early
 21 season melt-offs, high precipitation events --
 22 that's also going to be when the Otter Creek Mine
 23 is going to be discharging the most as well. So at
 24 the times that are going to be most critical to
 25 our irrigation operation is also going to be the

0063

1 time that the mine is going to impact the quality
 2 as well, and that we're not really going to be
 3 able to safely rely on that traditional knowledge
 4 of, "Okay. We have a high flow. It's safe to
 5 irrigate. We know this from our past practice."

6 CHAIRMAN MILES: So you're saying at
 7 that point in time when the EC and SAR is the
 8 lowest concentration, there would be able to be
 9 more discharge put into the creek?

10 MS. DUNNING: Yes. That's the concern
 11 that we have. Thank you for that clarification.
 12 And I'll get into this hopefully a little bit more
 13 later to clarify that.

14 BOARD MEMBER SHROPSHIRE: Before you --
 15 can you go back? Just to confirm where Otter
 16 Creek is.

17 MS. DUNNING: So this is Otter Creek.

18 BOARD MEMBER SHROPSHIRE: Do you know
 19 the gauge station where the DEQ data is collected?
 20 Is it upstream or downstream?

21 MS. DUNNING: Downstream. Significantly
 22 downstream. So this ranch is on the tributaries
 23 of Otter Creek. If you're looking at a map, it's
 24 going to be on Oak Creek or Fifteen Mile, so it is
 25 going to be approximately fifteen miles from the

0064

1 gauge station roughly.

2 BOARD MEMBER SHROPSHIRE: Thank you.

3 MS. DUNNING: This is just an example of
4 a different irrigation system from a different
5 ranch on Otter Creek. This one is slightly
6 different, but you can see here. This is another
7 common scheme. So here is an irrigation diversion
8 dam. There is no headgate on this, but during
9 high flow events, it does allow diversion for
10 irrigation in spreader dikes and then can control
11 that flow over the fields.

12 What's important about this is unlike
13 the previous system with no headgate, during a
14 high flow event, there is going to be no way to
15 prevent that water from running into the fields.

16 So this is Otter Creek at its base flow
17 -- I was home just last week -- a very
18 representative picture of what this looks like
19 about this time of year in July. What's important
20 is that at the time this picture was taken, this
21 time of the year, ranchers would never irrigate
22 out of Otter Creek, so the levels, the EC and SAR
23 levels as they exist now, we would never irrigate
24 at.

25 There are really only going to be one,

0065

1 maybe a couple -- if you're lucky -- event in an
2 entire year when you would be able to safely
3 irrigate out of Otter Creek. So it is different
4 than irrigation practices maybe in western
5 Montana, where you're able to irrigate for an
6 entire season. So that's different in Otter
7 Creek.

8 BOARD MEMBER CANTY: I have a question.
9 Going back to that last picture. So you said
10 that's representative of right now?

11 MS. DUNNING: It looks very similar to
12 when I was home just last week, although it is
13 really going to depend on where you're at in the
14 Otter Creek drainage and how far upstream you are.
15 Of course, the further upstream you are, Otter
16 Creek gets significantly smaller. But this looks
17 very similar to what the water would look like on
18 our ranch right now.

19 BOARD MEMBER CANTY: But just as far as
20 like the shrubbery that is along the side that
21 don't have any leaves, was this taken in the
22 spring? Have they been impaired because of the
23 salt in the water?

24 MS. DUNNING: I think that this is -- I
25 think this picture is taken perhaps in the fall.

0066

1 I'm not certain about when this picture -- I
2 didn't take it. I recognize Otter Creek there.
3 But no, the plants, the riparian areas that you
4 see, there are cottonwood trees and various
5 shrubberies along it, and those are -- Because
6 Otter Creek as it exists right now, the plants are
7 used to that, and this is the natural use of Otter
8 Creek. So those aren't dead plants that are
9 shown. It is just a season when they don't have
10 foliage on them.

11 And I guess to address, what we're
12 concerned about are future impacts to Otter Creek,
13 not Otter Creek as it currently exists, if that
14 makes sense.

15 These are some photos taken in 2014 of
16 Otter Creek, just kind of showing -- these are
17 early season events. The bottom one is a thawing
18 event, the top one is a spring flood event, and
19 these are the events that we wait for and that you
20 look for, and there isn't a particular time of
21 year that this happens. You could have a thawing
22 event in February that could have good water that
23 you might be able to put onto the field. It could
24 be more of the traditional spring runoff that
25 could occur later in the year. But they are early

0067

1 season.

2 Right now, even if we got a flash flood,
3 a huge swell of water that comes down from the
4 tributaries into Otter Creek, we wouldn't irrigate
5 out of that in the summer, even if there is a
6 higher flow in the summer months, just because we
7 know that -- although we don't have the narrative
8 numbers, we just know from practice that that
9 water isn't going to produce good crops and is
10 going to harm our crops.

11 One thing that is also I think good to
12 know is that when we do have these high flow
13 discharge events, you don't irrigate right away.
14 You allow a day or two for that water to go
15 through and flush the salts out of the stream, to
16 kind of flush the stream out before you would open
17 your headgate and start to irrigate. So it allows
18 kind of that process to allow the stream to clean
19 itself, if you will, a bit before you start
20 putting that water on your fields.

21 And sometimes the best irrigation events
22 -- actually I shouldn't say sometimes. Usually
23 the best irrigation events for us are going to be
24 when this ground is frozen or partially frozen,
25 because it does help to keep some of the

0068

1 accumulation from salts from picking up into the
2 water.

3 And that's one of the things that we'll
4 talk a little bit about when we start looking at
5 the numbers of the proposed rule, is that these
6 numbers are going to be more skewed, the numbers
7 on which DEQ has proposed for the standards are
8 going to be more skewed to those summer events
9 that aren't going to be when we are irrigating.

10 BOARD MEMBER TWEETEN: Excuse me,
11 Counsel. You probably can't put a specific date
12 on this, but generally when does the irrigation
13 season end?

14 MS. DUNNING: I would say that for Otter
15 Creek -- and this is going to be very different
16 for the Tongue River, mind you. For Otter Creek,
17 we would end irrigation by -- my ranch would end
18 it by May, end of May, because we're usually
19 starting to hay about June 10th. So anything
20 later than that, we're going to start impacting
21 the hay that's on the ground. And a good year

22 with rain events, we might be able to get a second
 23 cutting on Otter Creek, of alfalfa on Otter Creek,
 24 but often you can only rely on the one cutting
 25 event.

0069

1 So we as a ranch only -- as I mentioned
 2 -- really only get one or two chances to irrigate,
 3 and those really are vitally important for the
 4 ranching operation. I'm sure it will come as no
 5 shock to anyone in this room, but ranches in
 6 Montana, especially those in a really arid region
 7 like Otter Creek, are operating on razor thin
 8 margins. And so if you have a year in which you
 9 have to buy all of your hay or a significant
 10 portion of your hay to be able to feed your cattle
 11 through the winter, that's a year that you are
 12 going to be operating at a loss.

13 And that's why these irrigation events
 14 are really important to our operation. This
 15 particular picture is not taken on Otter Creek.
 16 This is taken on Hanging Woman Creek, which is the
 17 next creek over from Otter Creek; very, very
 18 nearby. But similar to Otter Creek, the ranchers
 19 here are also relying on the generations of
 20 knowledge about how to irrigate and how to make
 21 their ranch into a viable operation.

22 I wanted to show these slides to really
 23 show the difference of what I'm talking about when
 24 I say that that one irrigation event is vitally
 25 important to a ranching operation. These pictures

0070

1 are taken at a family friend's ranch, the Bones
 2 Brothers Ranch. The picture on the left has one
 3 single irrigation event. Cattle were actually on,
 4 in this picture, the one on the left, until March.
 5 This picture on the right, the cattle were taken
 6 off the previous November, and there is no
 7 irrigation here. That's what we're talking about
 8 in the difference between grass and crop
 9 production that we can have to feed our cattle
 10 through the winter.

11 Now I want to turn a little bit to
 12 talking about the numbers on which the proposed
 13 standards to change the currently existing
 14 standards are in place. This is a graph. This
 15 shows the EC or the SC from April through November
 16 of 2013. This is taken at the gauging station in
 17 Ashland. And as you can see, this is a really
 18 highly variable system. Now --

19 CHAIRMAN MILES: This is the gauging
 20 station the Department is getting their data from?

21 MS. DUNNING: Correct. And so an EC
 22 level of 3,100, as you can see up here, certainly
 23 could be a high average, but there are periods of
 24 really large reduction. And these periods right
 25 here. Those periods of the large reduction in EC,

0071

1 that's going to be when ranchers on Otter Creek
 2 are going to irrigate. Also keep in mind when
 3 you're looking at the dates that this gauge
 4 station is the very terminus of Otter Creek, so
 5 ranches that are further up the drainage that are
 6 getting that runoff much earlier are going to be

7 irrigating a lot earlier than those May and early
8 June dates that are shown on this particular map.
9 And it is going to vary from year to year.

10 Now, these high flow events, these
11 numbers that you see down here, that doesn't
12 necessarily mean that they're flood events. I
13 mean the water still could be entirely within the
14 banks of Otter Creek during those times, but we
15 know that that is when the increase in flow allows
16 the EC levels to drop enough so that it is safe to
17 irrigate.

18 And the other thing that I do want to
19 point out here is that the specific numbers that
20 you see here -- DEQ talked about -- we'll get into
21 some maps of the drainage here in a bit -- but
22 talked about how, as the water travels through the
23 drainage, it is going to pick up additional salts
24 and other minerals. Remember that this is taken
25 at the terminus. This is after everything has

0072

1 traveled through the entire drainage. So the
2 numbers that you see here, the EC levels aren't
3 going to be reflective of what the actual EC
4 levels are going to be, say, on my family's ranch
5 where we're irrigating; or on Bear Creek, a
6 tributary to Otter Creek; or any of the other
7 drainages that are affected by the proposed
8 rulemaking.

9 This graph is just the inverse of the
10 previous one. This is showing flow or discharge.
11 And really what I want to show here is that those
12 big drops in EC level correspond to the flow. And
13 what we're concerned about is that we can no
14 longer rely on high flows in the winter and spring
15 being predictive of the decreased salt amounts in
16 the water.

17 So I've showed the slides for EC. This
18 is for the SAR levels. SAR levels, as I'm told --
19 I'm not a soils scientist, but as I'm told and as
20 I understand -- that it's actually the SAR levels
21 that impact crops and the land, the composition of
22 the land, even more than EC; and I'm also told --
23 again a I'm not a soils scientist -- but that
24 there is an important interrelationship between
25 these two levels, and that is something that I

0073

1 think that DEQ's current proposal of allowing caps
2 of both SAR and EC fails to take into context that
3 relationship between the two levels.

4 What I really want to point out here
5 with these SAR levels is that when you do have
6 these grab samples that are showing the low SAR
7 levels, that they are occurring the early months
8 of the year. That's when those are happening.
9 That's when we are going to be irrigating.

10 So getting to the point of setting a
11 standard, I guess the first point that I want to
12 make is that this Board and DEQ has already set
13 standards for Otter Creek. They've set standards
14 for the EC and the SAR levels. They've been
15 reviewed; they've been modified. The important
16 thing is that they were designed and implemented,
17 one, to protect crop health in this area of

18 Montana; and second, they were designed to make
 19 sure that the Tongue River users were also
 20 protected. These standards have been approved by
 21 the EPA, and have been upheld by the Montana
 22 Supreme Court.

23 And I want to put up some of this
 24 because it is easy, when we get to talking about
 25 some of this tech language of TMDLs, and EC

0074

1 levels, and SAR levels, and what this means. I
 2 just want to take a minute and step back, and
 3 remember that what the Clean Water Act, what DEQ,
 4 what the State of Montana -- it is not just to
 5 maintain, and it is not just to design a level
 6 that allows a polluter to pollute up to and nudge
 7 right up against the point that it is going to
 8 start impacting the existing users in Montana.

9 The State has a duty to not only
 10 maintain, but to restore and improve the existing
 11 conditions, and to make sure that those users in
 12 Montana are protected. Now, with current
 13 legislation that's been passed with Senate Bill
 14 325, with existing 75.5.306, the standards in
 15 Montana can't be more stringent than what is
 16 natural, and that's why we're here, to define what
 17 is natural, or to decide if natural needs to be
 18 defined in a rulemaking that is specific to Otter
 19 Creek.

20 The issue that I have, that Northern
 21 Plains has, with the proposed rule is that it
 22 defines natural based on an 80th percentile of a
 23 data set. Essentially it's based on a high year
 24 around average. It is not basing natural on the
 25 condition that ranchers are putting the water to

0075

1 beneficial use for irrigation.

2 And this is another map that -- what I
 3 want to show with this one. You can see here that
 4 a lot -- this is showing the EC levels plotted out
 5 with flow, and you can see that a lot of these
 6 grab samples -- Here is the proposed natural
 7 standard of EC. They do. They're up there along
 8 with the 3,100 for most of the year. But those
 9 aren't the ones that are important to ranchers.
 10 Those aren't the ones that are put to beneficial
 11 use through irrigation.

12 What I'm concerned about, what ranchers
 13 are concerned about, are these points down here.
 14 It is what I'm going term "a safe irrigation
 15 window." And so the beneficial use can only take
 16 place with these data points down here, and these
 17 data points are not ones that are protected, but
 18 these are the ones that do need to be protected
 19 for irrigators on Otter Creek.

20 And the other point that I want to make
 21 is that when we're talking about natural, these
 22 data points down here are just as natural. They
 23 occur naturally. They are just as natural as
 24 these data points up here. We feel it's arbitrary
 25 to set the level up here that's not protective of

0076

1 an equally natural state down here.

2 With this map, I want to show why the

3 proposed rule does not protect use. The proposed
4 rule sets a definition of natural which is the
5 80th percentile of a data set. So if you have ten
6 data points -- whatever they might be -- the 80th
7 percentile here and here is going to be what the
8 standard for EC is set at.

9 The issue that we have is under this --
10 and these are completely hypothetical data sets,
11 just for purposes of making a point. This data
12 point down here is safe to irrigate, maybe we have
13 a precipitation or we've got a thaw event. On
14 this one, there is no safe irrigation window.
15 There wouldn't be a use that's protected for
16 agriculture. But because this use down here, the
17 2,400, doesn't exceed 3,100, there is no way that
18 DEQ can enforce and to make sure that they're
19 actually protecting the existing uses because it's
20 not going to violate that 31 EC level, and there
21 are also variances written into the rule.

22 The other thing -- and again, just to
23 reemphasize that point. Our concern is that the
24 times we're irrigating is also going to be when
25 the mine is discharging the most.

0077

1 BOARD MEMBER TWEETEN: So do I
2 understand then that your concern is that the use
3 of the 80th percentile value will allow for
4 concentrations that will satisfy the standard,
5 while at the same time still being damaging to
6 irrigating agriculture?

7 MS. DUNNING: Absolutely. Another
8 point, too, with the 80th percentile. I'd alluded
9 to this earlier, and I forgot. Maybe I should go
10 back to look at some of those graphs.

11 But as DEQ explained in their
12 presentation, the data points that are used are
13 skewed towards the summer months, are going to be
14 skewed towards right now when it is easier to get
15 that data, but we also know at this time of year
16 that those EC levels are going to be the highest.
17 And so if you are missing, or don't have as many
18 data points from the early season or those winter
19 months when we're actually irrigating, that 80th
20 percentile is going to be skewed. It is not
21 actually going to be reflective if you wanted to
22 do a true average.

23 There are all different ways of
24 designing -- my point being that there are
25 multitudes of ways that you can define what

0078

1 natural means. An arbitrary designation of the
2 80th percentile at 3,100 does not protect the uses
3 that we use water at down here.

4 BOARD MEMBER CANTY: Excuse me. I have
5 a question. Why is it that the coal mine would be
6 discharging the most during the thaw?

7 MS. DUNNING: Good question. So as I
8 understand it, the way that Arch Coal -- and I'm
9 obviously not affiliated with Arch Coal -- but
10 they have a series of holding ponds that are going
11 to be designed. And so one, the process just of
12 mining. As I mentioned, the coal seam serves as
13 an aquifer in the area, and so the process of

14 mining -- and you see this at other mines in the
15 nearby region -- that produces a lot of water that
16 has to be held.

17 And so there is a series of holding
18 ponds that would hold this water. So during high
19 water events when you're seeing a lot of
20 precipitation, there is going to be more water in
21 the mine itself. There is also going to be a lot
22 more water that's going to be coming down
23 watersheds, a lot more rain, a lot more of that
24 clean water that normally would reach Otter Creek
25 that would go into various tributaries and feed

0079

1 into Otter Creek. All of that then is now going
2 to be going into the mine, and into those holding
3 ponds, and getting stuck there as well, and that
4 clean water isn't reaching. But just if you're
5 having a lot of rain that's reaching Otter Creek,
6 you're also going to be having a lot of rain
7 that's reaching the mine as well.

8 BOARD MEMBER CANTY: Would you expect
9 that water to also be diluted as well? Would it
10 have the normal concentration the rest of the year
11 in comparison? Would it also be diluted at that
12 time?

13 MS. DUNNING: When you ask water, which
14 water? The runoff water?

15 BOARD MEMBER CANTY: If you're having
16 the runoff water coming into the coal mine and
17 exceeding their holding ponds, let's say, and they
18 have to discharge, it would also be diluted then
19 by the precipitation, so their discharge might be
20 lower at that time in their concentrations?

21 MS. DUNNING: I don't have the slide,
22 but if you can remember from DEQ's previous
23 presentation, they had a slide up that was showing
24 -- it was a bar graph that was showing the EC and
25 SAR levels of the Knoblock Formation of Otter

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1 Creek and of the Tongue River.

2 The SAR levels that are in the Knoblock
3 Formation particularly are sky high, and I don't
4 recall the specific numbers. You might even be
5 able to ask DEQ to pull that slide back up.
6 That's the concern is that if you're taking that
7 really, really, really high SAR -- I don't have a
8 number to put with it -- but if you're taking that
9 water out of the coal seam, and that's what has to
10 be trapped within the holding pond. Even if you
11 dilute that with a normal amount of runoff, you're
12 not going to get to the same level of water
13 quality that even exists in Otter Creek right now
14 in July at 3,100.

15 I don't know the exact numbers, but
16 because the water, both the EC and SAR levels
17 within the formation itself are so much higher
18 than exists in Otter Creek or in the Tongue River,
19 that is the concern; that even if it is diluted,
20 it's still going to be really high.

21 BOARD MEMBER CANTY: Thank you.

22 BOARD MEMBER TWEETEN: Can I ask another
23 one? Off the presentation that you've made, the
24 concern seems reasonable to me. Did you have a

25 chance to explore that particular concern with the
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1 Department before today?

2 MS. DUNNING: Absolutely.

3 BOARD MEMBER TWEETEN: What was their
4 response? And I'll give them a chance to answer
5 the question, too, but I'm just curious as to how
6 you understood their reaction to this point that
7 you're making regarding this use of the 80th
8 percentile.

9 MS. DUNNING: I don't fully understand
10 the reasoning for pushing forward. We've been
11 very clear. There have been multiple meetings.
12 WPCAC has actually had two votes on this, and --

13 BOARD MEMBER TWEETEN: The Department
14 expressed some frustration with that process
15 because of the perceived lack of thoroughness, the
16 fact that a portion of the advisory committee
17 wasn't there; that there didn't seem to them to be
18 substantive discussion, is what the Department's
19 representative had to say. So they are not
20 apparently very impressed with the level of
21 discussion that's happened so far.

22 MS. DUNNING: I for the record disagree
23 with DEQ's characterization of the WPCAC
24 proceedings, so we'll put that out there. I
25 disagree with that characterization that was made
0082

1 earlier today. We do not feel that -- Although we
2 appreciate the extended opportunity that we've
3 been allowed to comment, and I think that's very
4 important, I feel our concerns haven't been taken
5 into account in changing any of these standards.

6 My perspective on that is that DEQ has a
7 permit that they -- I don't know if it is -- I'm
8 not exactly sure where in the process that is, and
9 they feel like they're getting a lot of pressure
that they need to respond to that permit.

11 BOARD MEMBER TWEETEN: Well, if we go to
12 rulemaking, they're going to have to respond as
13 part of the rulemaking process. They're obligated
14 by law to explain on the record why they either
15 agree or disagree with your concerns. And we as
16 the Board get to review that and decide what to do
17 with it in facing the question whether we adopt a
18 rule, and if so, what kind. And that's all
19 subject to judicial review down the road. So that
20 seems to me to be an argument for rulemaking
21 rather than against it.

22 MS. DUNNING: I'm not necessarily
23 opposed to rulemaking in general. I don't want to
24 make that point. What is confusing to me about
25 this process is this push to have a site specific
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1 rulemaking done that impacts the entire Otter
2 Creek drainage. It doesn't just impact the area
3 that the mine -- let's get to this. We can go
4 back. But this gets to sort of what my next point
5 is.

6 This is the whole area that this rule
7 would impact. It includes all of these drainages
8 that flow into Otter Creek. We've got the Otter
9 Creek Mine, one little area right here; the

10 gauging station right there. So this is a site
 11 specific rulemaking that's been proposed, but yet
 12 it is going to impact all of these drainages that
 13 are up here, that are going to flow into Otter
 14 Creek, over 700 miles, and it is not --

15 This rulemaking also impacts other
 16 industries besides the coal mine. This isn't
 17 going to be specific just to the permit that Arch
 18 Coal is going to apply for. This would apply to
 19 coal bed methane, it would apply to a gravel
 20 permit, a gravel mine permit, any number of things
 21 that could happen in the area.

22 That's one of my concerns, is that the
 23 proposed rulemaking is over broad in scope to
 24 address the issues that it feels it needs to
 25 address in the mine permit application. And if

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1 we're going to start establishing standards that
 2 are going to impact an entire drainage, I don't
 3 quite frankly understand why that needs to be done
 4 in this particular rulemaking, and perhaps it
 5 would be better to wait and see what other future
 6 rulemaking that is proposed, how that could be
 7 implemented first, before we look at making regi on
 8 wide rulemaking.

9 Let's be real here. It is done for the
 10 purposes of this mine, but the way it is drafted,
 11 it affects a lot more than just this mine.

12 BOARD MEMBER TWEETEN: How does it
 13 negatively affect the areas upstream from the mine
 14 on Otter Creek?

15 MS. DUNNING: Good question. So for
 16 instance -- Happy to talk about that, too.

17 BOARD MEMBER CANTY: Let me interrupt
 18 for one minute. Otter Creek flows to the north
 19 right here?

20 MS. DUNNING: Correct, and this right
 21 here is the Tongue River. Otter Creek flows into
 22 the Tongue.

23 There are a number of tributaries that,
 24 for instance Taylor Creek, Elk Creek, Bear Creek,
 25 Lion Creek, Fifteen Mile, all of these tributaries

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1 that flow into Otter Creek. Now, irrigators
 2 irrigate out of these tributaries as well, and in
 3 fact that's a big source of irrigation.

4 So for instance, our ranch. I grew up
 5 in a house on some in-holdings within the Custer
 6 National Forest that are right at the head of
 7 Taylor Creek. The main ranch is right here on
 8 Otter Creek, and the house I grew up in is right
 9 here on top of the Divide. So in our back yard
 10 essentially Taylor Creek forms, and we irrigate
 11 out of Taylor Creek during those spring flood
 12 events.

13 Now, that's all snow melt, and you don't
 14 have the same aquifer charging issues with the
 15 saltier water that Otter Creek has. This is just
 16 snow melt runoff that's coming out of these
 17 streams that we use to irrigate with. There is no
 18 way that those EC levels are going to be at 3,100.
 19 But this rule says that that's the maximum level.
 20 So next week, when Fidelity wants to start

21 drilling some coal bed methane wells, and operate
22 on some leases that our neighbors have had, and
23 all of a sudden they want to start discharging
24 into these waters, that level is going to be set
25 at 3,100 for these areas.

0086

1 That's not natural for what this
2 drainage is, but the way that the rule is
3 proposed, it encompasses all industries, it
4 encompasses all of these drainages, and the
5 standard that is set at natural is all determined
6 by way down at the end of the creek at that
7 gauging station after all of the water has
8 traveled all the way through all of the drainages
9 and picked up additional salts. So that's the
10 concern. It is over broad. It doesn't reflect
11 natural, and --

12 CHAIRMAN MILES: So you're saying it's
13 in the areas upstream -- if I could follow up what
14 Chris said -- the concentrations would be much
15 lower, and that would allow for perhaps
16 development increasing that load in those areas,
17 that's impacting the irrigators at that point if
18 there is future development.

19 MS. DUNNING: And the other piece of
20 this puzzle -- and I'm talking more about the
21 Otter Creek piece of the puzzle because that's
22 what I know, and there are going to be other
23 people more qualified to talk about the Tongue
24 River piece that they know. But the Tongue River
25 is in trouble. We all know that. It can't handle

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1 any more assimilation of salts. It has already
2 been out of compliance the first five months of
3 this year.

4 But right now, Otter Creek, what flows
5 out of this gauging station is pretty much what's
6 flowed out -- because there aren't major
7 anthropogenic influences on Otter Creek. So the
8 Tongue River is used to that. That's sort of
9 taken into consideration.

10 But if you are changing, say up here on
11 this little piece of land that we own up here at
12 the very top of the Divide, if all of a sudden
13 you're allowing an increase of 3,100 level up
14 here, the concern is then that you're going to
15 increase both the total volume and the total salt
16 load that's going to be flowing into the Tongue.

17 And that's the other piece of this to
18 keep in mind. We don't just have to remember, and
19 we don't have to be protective of the uses on Otter
20 Creek. We've got to be concerned about changes in
21 any total volume or total salt amount that's
22 coming out that's going to negatively impact the
23 Tongue River.

24 CHAIRMAN MILES: I know we're
25 interrupting with a lot of questions. If you can

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1 keep moving. I think we're taking a lot of time
2 here, but it is very important for us to hear
3 this.

4 MS. DUNNING: Basically I think we've
5 covered this point, that the Otter Creek Mine is

6 only one percent of the entire watershed, and
7 impacts a lot of other users.

8 So this actually goes right along with
9 what I was talking about, is making sure that we
10 need to protect the Tongue River as part of this.
11 This is a slide that shows the EC levels at the
12 Tongue River. The Tongue River is currently set
13 at 1,000 EC level. This is only March through
14 May, but it was out of compliance for the first
15 five months of the year.

16 CHAIRMAN MILES: This is at Miles City?

17 MS. DUNNING: Yes, this is a gauging
18 station at Miles City. And I think, like I said,
19 I'll allow Mark, Bunny, others, that know the
20 Tongue River a little bit better to talk about how
21 this proposed rule would impact their operations.
22 But the point, the take away point for me is that
23 what's natural at that gauge isn't what's natural
24 for the entire drainage, and natural is
25 arbitrarily defined as the 80th percentile of that

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1 data set, not what natural is for the uses that we
2 actually need.

3 BOARD MEMBER SHROPSHIRE: When you say
4 define, you mean DEQ's definition, not Senate Bill
5 325's definition?

6 MS. DUNNING: Correct. Senate Bill 325
7 didn't define what natural means for the stream,
8 so that's why we're here.

9 CHAIRMAN MILES: I'm presuming that
10 would be part of our rulemaking.

11 MS. DUNNING: Let me go back. I just
12 want to, on this slide, just want to show. As I
13 mentioned before, this right here is the Tongue
14 River; this is Otter Creek that's flowing into the
15 Tongue River; and I just want to note the
16 proximity of the Otter Creek Mine. And we're
17 talking about the Tongue River, all of the impacts
18 that it is already facing, the water quality
19 issues that it has from coal bed methane, from
20 other coal mines. And just note the proximity to
21 the Tongue River of the proposed Otter Creek Mine.

22 BOARD MEMBER REINHART-LEVINE: On that
23 point, Madam Chair, Ms. Dunning. Would the point
24 source pollution be very close to the Ashland
25 gauge then for the mine?

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1 MS. DUNNING: I am not certain of where
2 exactly -- I'm not certain if Arch Coal has -- if
3 they have applied -- I don't know where their
4 specific point source discharge would be. If it
5 is in the general area of where I know the mine
6 land to be, we're a couple of miles upstream from
7 that gauging station. And that's as the crow
8 flies, not as you're measuring a meandering
9 stream.

10 BOARD MEMBER CANTY: I have another
11 question. Back to that slide where you showed the
12 EC of the Tongue River. Why is it that it seems
13 to be opposite of Otter Creek, where the EC goes
14 down in Otter Creek during high flow, why is the
15 Tongue River going up during high flow months and
16 then down during the low flow months?

17 MS. DUNNING: I might have you hold that
 18 question for somebody on the Tongue River that
 19 might be able to answer that little bit better
 20 perhaps. Perhaps Mark, or Bunny, or somebody on
 21 the Tongue River could answer that little bit
 22 better for you.

23 BOARD MEMBER CANTY: Sure. No problem.
 24 Thanks.

25 MS. DUNNING: So here are the concerns,
 0091

1 just to summarize the deficiencies of this
 2 proposed rule. It is not protecting those
 3 sensitive uses that we need on Otter Creek; it is
 4 also not protecting the downstream users on the
 5 Tongue River; there is no enforcement mechanism
 6 that's written into the rule that would protect
 7 those landowners.

8 As has been addressed here, I'm confused
 9 about how SB 325, any rulemaking that may be
 10 involved with that, how it might affect this
 11 proceeding, but yet there have been no rules that
 12 this Board has approved for SB 325, whether that
 13 process has even been initiated.

14 And finally, and I think this is really
 15 important, that one of the big pieces of the
 16 puzzle here is the Tongue River and the quality of
 17 the water in the Tongue River. DEQ and EPA have
 18 not yet finalized the TMDL for the Tongue River,
 19 and I think that could have a tremendous impact on
 20 the site specific EC and SAR standards, if the
 21 Board decides that rulemaking needs to be
 22 initiated, that any rulemaking may change the
 23 existing EC and SAR standards.

24 What we do ask in protecting use of any
 25 water quality standards in Montana is that they

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 1 protect those narrow irrigation windows that we
 2 have and we utilize; that they involve the flow
 3 and an understanding of the quantity of water or
 4 the flow; that they're protecting the downstream
 5 users from discharge point onward; and also
 6 recognizing that connection between the surface
 7 and the groundwater, so that we're not having
 8 negative impacts on the subirrigation.

9 I've been talking a lot more here about
 10 our traditional water rights that we have, and
 11 those diversions onto the field, those surface
 12 irrigation events; but the subirrigation is also a
 13 really critical part of our operation.

14 I think just to kind of tie this all
 15 together, we've been on Otter Creek for a long
 16 time, and have a great connection to Otter Creek
 17 and what that means, but it is not just -- this
 18 isn't just something that's impacting us, it is
 19 also impacting a lot of other people in the area.
 20 We want to make sure that not only are those
 21 direct discharges that we have of the surface
 22 water off the fields, that those are protected,
 23 that we're protecting the groundwater, that we're
 24 protecting all of the other different users that
 25 we have that would have an impact on the alluvial

0093
 1 waters of Otter Creek.

2 If anyone else has any questions, I'd be
3 more than happy to answer them to the best that
4 I'm able.

5 CHAIRMAN MILES: Thank you. You may
6 hear from us before this is all over, unless there
7 is any questions right now. Michele.

8 BOARD MEMBER REINHART-LEVINE: Madam
9 Chair, Ms. Dunning. What is your characterization
10 of the WPCAC proceedings?

11 MS. DUNNING: There was a motion from
12 Dude Tyler. I do not agree with the
13 characterization that the WPCAC didn't believe in
14 math or graphs. Dude Tyler had said that he
15 wasn't an expert in this area.

16 What the concern, as I understood
17 WPCAC's concern to be, the reason that they made a
18 motion that the rulemaking should not be initiated
19 really came from a concern towards the cumulative
20 impact that this was going to have on the Tongue,
21 all of the other industry that does impact the
22 Tongue, and said that he felt that it was a trend
23 that was moving in the wrong direction to allow
24 that.

25 I do not agree with the characterization

0094

1 that it was an emotional decision. I think that
2 the members that were there made decisions on the
3 basis of the presentation of testimony, made the
4 decisions that was the basis on the information
5 that was made available to them. And I don't
6 think that -- I'm not, nor do I claim to be a
7 hydrogeologist or a soils scientist, but I can
8 certainly understand some of the big picture
9 things and how that operates.

10 And I thought that it was not a kind
11 characterization of people that are doing their
12 best to represent the citizens of Montana and the
13 state, the state's interest.

14 BOARD MEMBER TWEETEN: Just one more.
15 So just to cut to the chase here. Is it NPRC's
16 position that there should never be a site
17 specific rulemaking here, or if you allow for the
18 possibility that there could be at some point site
19 specific rulemaking, what does the Department have
20 to do before we get to the point where a site
21 specific rule would be ripe for consideration?

22 MS. DUNNING: Good question. I think
23 our standpoint is there is already rulemaking, not
24 that we don't want rulemaking, that there has
25 already been rulemaking approved and that has been

0095

1 approved for Otter Creek, and it was designed for
2 very specific purposes of protecting the Tongue
3 River. We're concerned about how any changes,
4 increases to that, are going to impact the Tongue.
5 The fact that a TMDL hasn't been set for the
6 Tongue, so that would be one thing that would need
7 to be done before I think we start tinkering with
8 what Otter Creek levels would be.

9 I think that if there is a -- we have a
10 site specific permit that's driving this entire
11 process. We have data from downstream. We don't
12 have data at the site where the proposed discharge

13 would be. We don't have data from any other of
14 the places on Otter Creek or those tributaries
15 that would also be impacted.

16 I am not comfortable making a
17 characterization of what the EC and SAR levels of
18 the entire drainage, based on what's coming out of
19 the terminus. I don't have that data, nor do I
20 really think that citizens, impacted ranchers,
21 should be the ones responsible for having to come
22 up and provide that. So we would ask that --

23 I think that there needs to be more data
24 that's collected about what natural means for the
25 entire drainage, and what natural means for the

0096

1 area where the mine is proposed. And when I say
2 that, having data at that gauging station, that's
3 important, and it is important for knowing what's
4 dumped into the Tongue River. So it is important,
5 and I'm not saying, just that that's not
6 sufficient in and of itself to create and propose
7 site specific definitions of natural to impact a
8 700 square mile region that don't have any other
9 industries right now, and don't have -- Some of
10 the land has been leased for coal bed methane
11 development, but nothing is knocking on the door
12 today, and they don't have any mines proposed that
13 would impact them.

14 So I think it is not saying that
15 rulemaking is never appropriate by any means. In
16 fact, there is rulemaking, there is something in
17 place, and it was done for a purpose. DEQ has
18 upheld that, has put out rationale supporting
19 that, and I don't think it's adequately addressed
20 the issue of how making a change for the benefit
21 of one mine is really going to protect those
22 existing users, as well as the Tongue River users.
23 That's my perspective.

24 CHAIRMAN MILES: Thank you. Thanks for
25 the very thorough explanation. Continued public

0097

1 comment. It is a little bit after eleven. We'd
2 really like to try to be finished by noon if
3 possible on this topic.

4 MR. HAYES: Good morning, Madam Chair
5 and members of the committee. My name is Art
6 Hayes, Jr. I'm the President of the Tongue River
7 Water Users, and a rancher on Tongue River and the
8 another tributary of the Tongue, Hanging Woman
9 Creek.

10 This is our main crop here on Tongue
11 River, and this is one of my fields. You can see
12 it is a laser eight level, very efficient
13 irrigation field that's alfalfa hay, and our main
14 source of income is these things here who are
15 waiting in the snowstorm for that bale of hay.

16 Other crops that we can raise on Tongue
17 River. We have John Hamilton here who is raising
18 melons, squash, watermelon. We can grow anything
19 here that they can raise in southern California.
20 We have the heat units and the long growing
21 season. We also have a winery on Tongue River.
22 We have two producers that are taking their
23 alfalfa hay up to the next level, and making

24 alfalfa tubes and cake out of them, and selling
25 them in several states.

0098

1 One thing I'd like to mention at this
2 time is we've had -- since these rules were
3 initiated in 2003, agriculture has changed
4 tremendously. We used to have flood irrigation,
5 like the field I show you. Right now, it is going
6 very rapidly to conserve water with sprinklers.
7 With sprinklers, you do not have the leaching
8 fractions that we did with flood irrigation.

9 A brief history of the Tongue River.
10 This dam is the original dam built in 1938, a
11 public works project, but it did store water for
12 irrigators on Tongue River for the year. In 1979,
13 we had a flood that changed this dam. It almost
14 took this dam out. We had 12 inches of rain in a
15 week above this dam. In the Big Horn Mountains,
16 we had flows up to 14,000 cubic feet. That
17 spillway almost failed.

18 From 1978 to 1999, we operated this dam
19 as a high hazard dam. We did not fill it, we just
20 tried to get enough water in it to irrigate
21 through the summer. In 1993, I believe it was,
22 the State and federal government settled the
23 Northern Cheyenne water rights, and under that
24 compact, we raised that dam four feet. It got
25 about 20,000 acre feet of additional storage, and

0099

1 this is what the new dam looks like today. It can
2 pass about 100,000 cubic feet of water.

3 But the problem is in 1972, we had
4 Decker Coal go in. This is one of Decker's
5 discharges. This, I want to emphasize, runs 2,900
6 gallons a minute, 24/7, 365 days a year. The
7 water in this coal is SAR 30. The water in the
8 coal in Otter Creek is going to be anywhere from
9 50 to 70.

10 SAR is a very important component of
11 these discharge permits. EC, we can get an
12 instant reading on. That's what we have to ride
13 on. You can have 3,000 EC, but SAR 70 water.

14 So this was one of the Fidelity's
15 discharge permits. Fidelity discharge is gone.
16 Now above Tongue River, I think they have two
17 wells running. They were permitted to dump a lot
18 of water. In the years Fidelity operated, they
19 dumped -- that is the amount of solids and total
20 dissolved solids that was going into that river
21 every year from one discharge permit. We had a
22 huge amount of salts, and those salts were
23 accumulating.

24 In Wyoming and Montana both, not so much
25 -- This is a shot of the Tongue River above

0100

1 Wyoming. They turned it into the land of 10,000
2 lakes. They stored this water in those ponds.
3 Some of them leaked. I took this last Sunday. I
4 had a friend that lives right on the border. He
5 had a ranch. No mineral, so he didn't have any
6 control.

7 There was a CBM pond above this bank,
8 and you can see where that water had leached

9 through that bank, and killed the Cedar tree here;
 10 and for about 50 yards downstream, it turned that
 11 bank sterile. That ground is now sterile, and the
 12 bottom of the creek is nothing but a salt laden
 13 weed bed. When a rain event comes along, these
 14 salts are going to be picked up and carried into
 15 Tongue River.

16 This was another method of disposal
 17 until Montana said you had to put it to beneficial
 18 use. They had these ponds, they had big pumps,
 19 they sprayed that water in the air trying to
 20 evaporate it. As you can see here, it wasn't
 21 staying in the pond, it was flying out over the
 22 land, and a lot of those salts accumulated on the
 23 land.

24 In Wyoming they used a lot of it, what
 25 they call -- under the guise of managed

0101

1 irrigation. They had these ponds, they stored
 2 water in the winter time, then they would pump
 3 these out on these pivots. They are all gone now,
 4 but the salts remain there on the surface for us
 5 to be picked up during a rainfall.

6 This spring. This is the banks of the
 7 Tongue River Reservoir. You can see we've got an
 8 accumulation of salt forming on the banks. In all
 9 in my years of living on Tongue River, I have
 10 never seen this before.

11 This is something this year has just
 12 occurred to us. This spring we were running at
 13 very low flows in Tongue River because we had made
 14 a call on Wyoming for water, and under that
 15 lawsuit we had to shut that river down as to 75
 16 CFS while we stored water in that reservoir. T&Y
 17 opened their ditch and two days later the banks of
 18 the Tongue River at Miles City turned white.

19 Just recently, I took this picture last
 20 Sunday. This is at Tongue River. You can see the
 21 reservoir in the background. We had the reservoir
 22 pump full. We were using some of our stored
 23 water. The bottom of that reservoir is starting
 24 to turn white again. And the black puff you see
 25 right there is Decker Coal blasting their coal at

0102

1 Decker.

2 Historical water quality. You look at
 3 this. The EC of Tongue River '59 to '99 is 800,
 4 mean SAR is 1.5. This spring we had 1,296 means
 5 at Miles City for awhile. The SAR data was not
 6 available because the USGS does not take that
 7 anymore.

8 But we've had significant increases of
 9 EC and SAR. We are starting to see the cumulative
 10 effects of coal bed methane in mining upstream of
 11 the dam. That salt is accumulating in that
 12 system.

13 One of our major concerns, as you can
 14 see here -- it doesn't show up real well -- but
 15 when you apply this high SAR water onto your
 16 soils, or a higher SAR water, you can change the
 17 composition of the chemicals in your soil. You
 18 can actually -- the sodium will replace the
 19 calcium and magnesium in the soil, and that is

20 what is very harmful. We feel we're starting to
 21 see that in Tongue River. We've been irrigating
 22 with higher sodium water the last fifteen, twenty
 23 years, and I think we're starting to see that.

24 This spring, my Board member John
 25 Hamilton, who ranches at Brandenburg, he had a

0103

1 choice. He either had to irrigate -- his crop was
 2 needing water -- and he looked at the EC, and he
 3 said, "Well, I'll chance it." EC at Brandenburg
 4 was over the limit at 1,000. It was running about
 5 1,100 to 1,200. This is where his end gun hit.
 6 It wiped out his crop. Over here is out of range
 7 of the end gun. And I'll have to admit. These
 8 were very salt sensitive soils, but when that
 9 water hit, it just turned it dead.

10 So we can't run a business saying we
 11 cannot use our water rights, we cannot use the
 12 water that we've bought from the State of Montana.

13 CHAIRMAN MILES: I appreciate all this
 14 background. Can you really tie this to the
 15 proposal in front of us and how that impacts --

16 MR. HAYES: I will. Otter Creek is a
 17 tributary of the Tongue. Right now the Tongue is
 18 overloaded with salts, and the cumulative effects
 19 of that is killing us. And if you add another
 20 source of it, we're not going to be able to ranch
 21 anymore.

22 I mentioned that Montana had sued
 23 Wyoming, and that case was heard by the US Supreme
 24 Court, Special Master Burton Thompson heard that
 25 case in Billings here. Montana this spring, we

0104

1 did not have the snow pack we normally had. We
 2 made a call on Wyoming. We told Wyoming that they
 3 could not use any of their post 50 water rights.
 4 They had to shut those down. People were
 5 irrigating. And also they could store the post 50
 6 water, but if Tongue River Reservoir did not fill,
 7 they would have to release that water.

8 Part of that, in that trial, the base
 9 flow, or the minimum flow historically was 75 CFS
 10 for Montana. I lowered that reservoir down -- or
 11 river flow to 75 CFS to match Wyoming. And it
 12 doesn't show up real well, but right up here, Pat
 13 Sherrill (phonetic), the State Engineer,
 14 complained that there was a raise of 23 cubic feet
 15 going over the T&Y Ditch on a certain date, and
 16 that was caused by a rain event. But he was
 17 saying we were wasting water.

18 This is going to be going into
 19 settlement talks, and what I'm trying to really
 20 say I can explain pretty closely with this next
 21 slide. You can see here. We're going along.
 22 We're trying to store as much water as we possibly
 23 can. We dropped the river down to 75 CFS.

24 In May we started getting calls here for
 25 water. We're well into the irrigation season. We

0105

1 get calls for water here from T&Y Ditch and other
 2 irrigators. We take the water up here. And then
 3 these two little calls up here is we are almost
 4 full. So I anticipated rather than have that

5 spill and a big flush go down the river, and flood
6 out some pumps of people. To bring the river that
7 low, they had to reset their pumps and had them
8 right on the bank. I had raised that water to let
9 them know that that water was coming. Then we get
10 a six inch rain event in the Big Horn Mountains.
11 That shot this flow to 4,000 CFS.

12 And when you figure things on average --
13 you can't. We don't run on averages anymore. If
14 you average the 4,000 with the 75, you come out
15 with a great number. We don't operate that dam or
16 operate that river on averages and means. We have
17 to have regulations that protect us at the lowest
18 possible flow. That's what 4,000 CFS looks like
19 coming over the Tongue River Dam.

20 This is my place on Hanging Woman Creek.
21 This is January 24th of this year. And you can
22 see, as Daranne pointed out in the slides before,
23 this is a dike irrigation that catches when that
24 rain event or that snow event. There is no
25 control on this. It is right at the mouth of a

0106

1 small creek, called Hackley Creek. Hanging Woman
2 is right there. This dike fills with water.

3 We may irrigate once every year or maybe
4 twice a year, or if we don't have snow, it may be
5 four or five years before we don't irrigate
6 anymore. It is just on a high rain event or a
7 snow event.

8 This is a view of Otter Creek. And to
9 tie this all in, we're very similar. But if you
10 look at these hills here. Do you see those white
11 spots? The reason those white spots are is
12 because that is very high sodium soil. Nothing
13 grows there. Nothing. And we have that in the
14 whole Tongue River drainage. We have lots of
15 natural high sodium soils. It was an inland sea
16 at one time, and when you do get a rain event, it
17 does pick up salts off of these things.

18 I have several hand-outs I'd like to
19 pass out. Some are back from when we were in
20 rulemaking. The first one is a letter from Larry
21 Munn. He's a professor of soil science, a doctor
22 in soil science at University of Wyoming, and he
23 wrote this letter to Gary Beach, Abe Horpestad,
24 and I'd like to point out in the emails, he
25 expressed concern about water quality criteria to

0107

1 assess impacts of CBM development on water quality
2 and irrigation. "My concern is from the common
3 use, simple mathematical means and averages are
4 representative of different water right
5 parameters." These are not going to work
6 according to him. You have to have actual, really
7 day-to-day basis. We cannot estimate this.

8 This is from an economic study that was
9 done on Tongue River by Tim Fitzgerald. I think I
10 have enough copies.

11 CHAIRMAN MILES: So are these back from
12 the original --

13 MR. HAYES: These are back from the
14 original rulemaking.

15 CHAIRMAN MILES: I want to make sure we

16 keep focused on the one in front of us today,
17 that's more pertinent here. We need to --

18 MR. HAYES: I will try to. Why I went
19 back and showed you Tongue River -- because that's
20 what I am familiar with -- but agriculture
21 produces \$25 million to \$30 million in every year,
22 and you capitalize that, it comes out to \$250
23 million.

24 This is recent data this week from Miles
25 City. And the reason I'm showing you this is this

0108

1 is why we have to have high quality water in both
2 Hanging Woman -- or all these creeks, and Tongue
3 River at the same time. And just looking, I
4 guess, Madam Chair, we have to look at the whole
5 system. We cannot isolate one little spot for EC
6 and SAR changes in Otter Creek. There are lots of
7 tributaries of Tongue River. Some of them don't
8 run water, some of them do. Hanging Woman runs
9 about one CFS, very similar to Otter Creek.

10 But I'll emphasize that these are -- and
11 I may not have enough copies of this to go around.
12 But you can see what happens. If you look at that
13 flow at Miles City, it takes a jump. A couple
14 days ago they had some big rain events, up to an
15 inch and a half. And a lot of that country is
16 just like this. This is what I'm trying to point
17 out. These are high sodium outcrops that they're
18 going to be mining, in that area down here. That
19 soil has washed off these hills and accumulated
20 here. The soils in that mine area are going to be
21 very, very high in sodium.

22 And this handout is of Pumpkin Creek.
23 This is where it came from, and that has a lot of
24 these high sodium soils.

25 So when we get in these rain events,

0109

1 sometimes they bring a lot of salt in. It just
2 depends on where they fall. And if you have mine
3 spoils with these high sodium spoils, and that
4 water spills over into the river, as it does at
5 Decker -- Right on the banks of the river, we have
6 three mines at Decker. Two of them are done.
7 They're still mining at Decker east, and Decker
8 north is done, and Decker west is done.

9 What we saw is -- we use that water for
10 dust control. Water evaporates. The salts remain
11 on the surface. When you get a rain event, it
12 picks up those concentrated salts, and takes them
13 to their discharge permit where it is put into the
14 river. So you have to remember that.

15 The last handout I have is the US
16 geological investigative report done back in 1985
17 of the dissolved solids at Otter Creek. And what
18 I would really like to point -- you can read this,
19 study it -- but it will tell you that Otter Creek,
20 mining of Otter Creek will pollute that creek for
21 hundreds of years. The water coming back through
22 those spoils will pretty much be there for
23 hundreds and hundreds of years.

24 Just like we're seeing from the CBM
25 development. We're going to be haunted by CBM

0110

1 development for hundreds of years, because those
 2 salts are brought to the surface. And Larry Munn
 3 once told me when you bring these highly saline
 4 waters up from these deep geological formations,
 5 and you put them on the surface, it is going to
 6 have a dramatic effect on irrigated agriculture.
 7 Is there any questions?

8 BOARD MEMBER TWEETEN: I'm going to ask
 9 you the same question that I asked the
 10 representative of the NPRC. So would you say that
 11 there should never be a rulemaking that's specific
 12 to the Otter Creek Mine proposal, or are there
 13 things that you would like to see DEQ do, or
 14 things you would like to see happen before you
 15 think it would be ripe to go ahead and make a rule
 16 like the one that's been proposed?

17 MR. HAYES: Madam Chair, Chris. I think
 18 before we do anything on Otter Creek, we have to
 19 look at the whole drainage. The rules adopted by
 20 the BER back in 2003 are not working. We are
 21 seeing constant over 1,000 EC on the lower end;
 22 we're seeing damage. It may be better to
 23 reevaluate the current rules.

24 And living on Hanging Woman Creek, I
 25 irrigate very much, and it is pretty much the

0111

1 common rule of thumb for people. When the trash
 2 goes by the headgate and the water is running
 3 clear, you pretty much flush the creek out, and it
 4 is a simple easy rule to remember.

5 But yes. I don't think -- The rules
 6 that we have now are not working. We're seeing
 7 damage, and our agricultural change switching to
 8 sprinkler irrigation to be more conservative is
 9 going to have a big effect, and more so is this
 10 court case with Wyoming. It is going to change
 11 the way that we completely operate that dam and
 12 that whole drainage. We are going to have to be
 13 very, very conservative with our water.

14 In those court hearings Wyoming says,
 15 "Why don't you just shut the gate in the winter
 16 and let it fill?" We can't do that for safety
 17 reasons. But we have to conserve that water, and
 18 we try to fill as high as we can possibly go
 19 without damage to the dam in the winter, but then
 20 we have all these discharges above the dam from
 21 the coal mines and all of the residue from CBM.
 22 So we end up in the spring, if we have to store
 23 water, we have to shut the flow down. We have
 24 very high EC.

0112

25 And like this spring, there was a lot of

1 irrigators that chose not to irrigate. John made
 2 a mistake. He said, "I've got to get water on my
 3 crop." Does that help if you have a water right
 4 and you can't use the water? No, it does not.
 5 And these people pay a lot of money. We pay
 6 \$147,000 to the State. We committed \$5 million to
 7 building that dam, the water users did, and we got
 8 not one acre foot of storage. So we have got a
 9 big financial commitment, and we expect the
 10 highest quality water from this state that we can
 11 get.

12 CHAIRMAN MILES: Thank you. Any further
13 questions? May I ask how many more people intend
14 to comment?

15 (Response)

16 CHAIRMAN MILES: We'll take a short
17 break for five minutes, please, and then we'll get
18 through the rest of the comments.

19 (Recess taken)

20 CHAIRMAN MILES: We'd like to get
21 started, please. Next public commenter, please.
22 Good morning.

23 MR. FIX: Good morning, Madam Chair, and
24 members of the Board of Environmental Review. I'm
25 Mark Fix, I'm a rancher and irrigator on the

0113

1 Tongue about 20 miles southwest of Miles City.
2 And I will be affected by any changes in water
3 quality that occur in the Otter Creek drainage.
4 Art Hayes gave you a graph here a little
5 bit ago, and I guess I ended up running the same
6 ones, and I'll pass them out. They were the
7 Tongue River at Miles City and Pumpkin Creek. So
8 I'm pass those around. I have twenty copies so I
9 should have enough for everyone.

10 I'm irrigating with the water from the
11 Tongue as we speak. The electrical conductivity
12 is around 500 microsiemens per centimeter. I know
13 that this clean water from the Big Horn Mountains
14 will make my crops grow and protect my soils. It
15 is not right to add 3,100 microsiemens per
16 centimeter water from Otter Creek into this great
17 water.

18 I think that the first thing that needs
19 to be looked at is the mission of the Department
20 of Environmental Quality. Their first priority is
21 to protect the water. It is not to issue
22 discharge permits that allow degradation to the
23 water. The original standards set for the
24 tributaries do reflect the natural condition of
25 Otter Creek, just not the worst water that

0114

1 naturally occurs.

2 In fact, the State of Montana in
3 defending the current standards in District Court
4 wrote that, and I quote, "Federal law requires
5 that standards be set to protect designated uses
6 irrespective of ambient water quality." That's in
7 the Pinnacle versus DEQ suit.

8 There is no assimilative capacity to add
9 point source discharges into Otter Creek. In
10 DEQ's final rationale for EC and SAR standards, the
11 agency defended the 500 microsiemens per
12 centimeter standard because an increase from 500
13 to even 600 microsiemens per centimeter has a
14 precipitous impact on production of, for example,
15 alfalfa. In the rationale document, such an
16 increase was reported to lead to root zone
17 salinities that corresponded to decreases in
18 yields of alfalfa ranging from 4.8 percent to 9.3
19 percent. The 500 microsiemens per centimeter was
20 selected to be protective of target crop
21 production.

22 Pumpkin Creek is another tributary to

23 the Tongue River. The EC in Pumpkin Creek varies,
24 as does the EC in Otter Creek. The EC can get as
25 high as 2,000 microsiemens per centimeter.

0115

1 There was some recent rain events that
2 cause Pumpkin Creek to have an increased flow. I
3 checked the USGS gauging station at Miles City
4 downstream from Pumpkin Creek, and when the flow
5 increased in Pumpkin Creek, it raised the EC at
6 Miles City from 600 to about 1,600 electrical
7 conductivity. That is with the smaller flow in
8 the Tongue River. I think it was around 200 CFS.

9 The same sort of flow increase will
10 happen when the ponds that Arch is planning for
11 Otter Creek overflow and breach from a big rain
12 event. The difference is that Pumpkin Creek is
13 natural. The water stored in the ponds by Arch is
14 not natural. The sodium adsorption ratio of the
15 coal water is much higher than natural conditions
16 found in Otter Creek. Arch reported at the last
17 WPCAC meeting that the mine water is 1,500 EC.
18 Why are DEQ and Arch asking for 3,100?

19 The standards that are in existence were
20 years in the making. I want to personally thank
21 the BER for spending six years of your life
22 setting these standards. EPA is still reviewing
23 those standards and will hopefully approve them in
24 the near future. By changing the standards on
25 Otter Creek, the State of Montana is putting

0116

1 justification for the standards into question.

2 We worry that EPA may never approve the
3 tributary standards if the State of Montana raises
4 concerns over them. DEQ should not jeopardize a
5 justification that has been used to defend the
6 standards. DEQ must defend the standards and the
7 state of Montana and its water users.

8 Agricultural use is not protected with a
9 discharge set at 3,100 microsiemens per
10 centimeter. I did an analysis of the data from
11 the USGS gauging station at Miles City after coal
12 bed methane started discharging into the Tongue
13 River. In May, the electric conductivity
14 increased by 13.2 percent from water quality prior
15 to 1999 when coal bed methane started discharging.
16 In May, the sodium adsorption ratio increased by
17 53.6 percent. I did this analysis in 2008. This
18 is a dramatic increase, and we do not want to see
19 it again.

20 Coal bed methane is on the downturn, and
21 I thought the water quality this spring would be
22 better. It was not. I found out recently that
23 many of the ponds in Wyoming have been taken out,
24 and the salts have permeated the soils in Wyoming
25 and are flushing down the tributaries and coming

0117

1 into the Tongue River, and will affect the water
2 quality of the Tongue for many years until the
3 remnants of the salt finally wash out.

4 Otter Creek is currently listed as
5 impaired for salinity, and a TMDL is required. If
6 the standard is changed to the level that DEQ is
7 recommending, there will not be a TMDL required.

8 There will not be a record of the salt load in
 9 Otter Creek without the TMDL. You will not be
 10 able to see what the salt load is before and after
 11 discharges from the Otter Creek Mine.

12 The standard must not be changed to stop
 13 the TMDL. The TMDL is needed for when the TMDL is
 14 done on the Tongue River. Tributaries like Otter
 15 Creek take a large salt load into the Tongue, and
 16 must be considered. The cumulative impacts of all
 17 the discharges into the Tongue must be looked at.
 18 Looking only at Otter Creek without looking at the
 19 Tongue will degrade the Tongue.

20 We are struggling to make our soils
 21 produce food and fiber. We ask you to keep the
 22 standards as they are, and you not change them to
 23 a level that is an authorization to degrade. Do
 24 not go forward with rulemaking. Keep the
 25 standards as they are. Thank you.

0118

1 CHAIRMAN MILES: Thank you very much.
 2 Is there any comments or questions for Mr. Fix?

3 (No response)

4 CHAIRMAN MILES: You raised some
 5 interesting comments about TMDL, and we might have
 6 some questions for the Department about that.
 7 Thank you very much.

8 Next commenter.

9 MS. FRENCH: Hello. My name is Kate
 10 French. I'm here from Bozeman, Montana. I'm
 11 friends with many of the ranchers and farmers who
 12 are here, and have attended many other BER and
 13 WPCAC meetings regarding this proposed rulemaking.

14 What concerns me and what I want to
 15 speak about is the degree of public input that DEQ
 16 implied that they'd be taking into consideration
 17 during the rulemaking process. There seems to be
 18 a contradiction here because DEQ has done a great
 19 job of reaching out and seeking public input, or
 20 providing the forum for public input, but it seems
 21 that they have not taken any of the comments or
 22 information provided into sincere consideration.

23 This rulemaking was initiated in October
 24 2014. Many water users and irrigators from the
 25 area came to that initial meeting. February 2015,

0119

1 WPCAC had a meeting which many water users
 2 attended. From that meeting, WPCAC advised that
 3 rulemaking does not proceed, that it does not go
 4 forward. Again, that was during the legislative
 5 session when many of these rules hearings on
 6 Senate Bill 325 was being considered.

7 In May 2015, DEQ created an
 8 implementation document which they circulated
 9 around. They had meetings in Ashland, in Miles
 10 City. Again, many members from the public
 11 attended these meetings and provided their
 12 information, their testimony, and their comments.
 13 Again, in 2015, as we heard earlier, WPCAC also
 14 had a meeting, and decided to advise the BER not
 15 to continue with rulemaking.

16 So the characterization that was brought
 17 earlier that the public is somehow holding back or
 18 is scared because this is a controversial issue I

19 would say is erroneous. There have been many,
 20 many people from this watershed who have come a
 21 long ways, six hour drive or an eight hour drive,
 22 to come, and testify and speak at these meetings,
 23 and meet with the members of the BER, with WPCAC
 24 members, during formal hearings. They are here
 25 during very busy times of the year to share what

0120

1 they know, and these same farmers and ranchers are
 2 warning you that these new standards would render
 3 the water unusable, and probably further from the
 4 natural condition that DEQ is proposing.

5 It is worth taking their input into
 6 consideration. Rulemaking is fine if it is done
 7 with complete, honest, and robust data sets. This
 8 rulemaking process does not seem to be done with,
 9 or would not be done with full and complete data.
 10 And I don't think that they would all of a sudden
 11 start -- DEQ would all of a sudden start taking
 12 the public's input into consideration, because
 13 these standards have not changed during this
 14 entire process. The standards have never been
 15 changed from the initial meeting in 2014.

16 So it seems naive of us to say, "Oh,
 17 well, once the rulemaking is initiated, then we're
 18 going to incorporate the public's concern." When
 19 it comes to salty water and irrigated land, there
 20 is no do over. There is no room to say, "Sorry we
 21 didn't take the time to measure and understand the
 22 natural conditions and historic uses of this
 23 waterway correctly."

24 BOARD MEMBER TWEETEN: Excuse me, Ms.
 25 French. I'll ask you the same question I asked

0121

1 Ms. Dunning. In the context of rulemaking, DEQ
 2 doesn't have any choice. They have to take the
 3 comments into consideration. They have to
 4 specifically respond to them. And all of those,
 5 both the comments and the responses, are going to
 6 be compared to each other by a reviewing Court,
 7 and the Court is going to make a determination as
 8 to whether the rule ought to be upheld or not. So
 9 isn't this a little different than the informal
 10 process that's gone on heretofore?

11 MS. FRENCH: It just seems that if they
 12 were sincere about taking the public's input into
 13 consideration, that they would have done so
 14 already to some degree at least, and they have
 15 not.

16 BOARD MEMBER TWEETEN: That argues for
 17 rulemaking again rather than against it, because
 18 then once you get into rulemaking, they have to
 19 take into it into consideration, and they have to
 20 formally respond to it. They can't just blow you
 21 off like you allege they've done so far.

22 MS. FRENCH: But for many people, the
 23 rules as they are are better than the proposed
 24 rules that would be --

25 BOARD MEMBER TWEETEN: That's a

0122

1 different argument than the one we're talking
 2 about. If the rules are okay now, that's one
 3 point; but the question we're facing today is

4 whether we ought to do rulemaking or not, and it
5 seems to me that since they have to formally
6 respond to your comments in writing, and all of
7 that is subject to review, not only by this Board,
8 by also by a Court on judicial review, your
9 concern, it seems to me, argues in favor of
10 rulemaking rather than against it.

11 MS. FRENCH: I would argue the opposite
12 point. I would say that if DEQ was going to
13 sincerely take into account the public's input,
14 there is a way to respond to that in a way that
15 satisfies legal standards, and there is a way to
16 incorporate that information and those comments
17 sincerely. What I'm saying is that thus far they
18 have not taken that information provided from
19 those on the ground sincerely into consideration.

20 BOARD MEMBER TWEETEN: I understand your
21 point.

22 MS. FRENCH: Thank you.

23 CHAIRMAN MILES: Is that all you had to
24 say?

25 MS. FRENCH: I had more.

0123
1 BOARD MEMBER TWEETEN: I didn't mean to
2 cut you off.

3 MS. FRENCH: My point is that the idea
4 that they are going to start taking this into
5 sincere consideration is just a platitude, and
6 that we need to be looking for a more robust data
7 set that incorporates all of the uses, the
8 historic uses and the current uses of agricultural
9 users in the area, and that I don't think that
10 rulemaking should be initiated under the
11 conditions right now. Thank you.

12 CHAIRMAN MILES: Thank you. I
13 appreciate that. Any other questions? Next
14 commenter, please.

15 MR. JENSEN: Good morning, members of
16 the Board. My name is Jim Jensen. I'm Executive
17 Director of the Montana Environmental Information
18 Center. And MEIC is here to simply endorse
19 certainly the testimony that's preceded me, but to
20 highlight -- and for Mr. Tweeten in particular --
21 in response to your question, Mr. Hayes I think
22 pointed out the fundamental problem on the river
23 is that the existing rules, though better than
24 what is proposed here, are not sufficient to
25 protect this river system, and the exceedences

0124
1 month after month after month, year after year,
2 that are occurring at Miles City, at the mouth of
3 the Tongue River, proves that that is the case.
4 It simply isn't working.

5 And the Department, rather than
6 proposing a rule, which its purpose is to allow
7 additional salts and pollutants into the river,
8 ought to be looking at how it can change the
9 standards and rules to prevent the increase in
10 contamination in the river system. And I think
11 that you all have -- though not everyone agrees
12 with this -- a constitutional obligation to take
13 that course, because the Supreme Court did rule in
14 the right to a clean and healthful environment

15 case that it is a right that is anticipatory and
16 preventative. It is meant to anticipate and
17 prevent pollution, not enact rules which will
18 increase pollution.

19 It is not that complicated a proposition
20 to understand. Our job, your job, all of us in
21 this together, is to have cleaner water. Thank
22 you.

23 CHAIRMAN MILES: Thank you. Any
24 questions for Mr. Jensen?
25 (No response)

0125
1 CHAIRMAN MILES: More commenters,
2 please.

3 MS. LINDLIEF-HALL: Madam Chair and
4 members of the committee, my name is Brenda
5 Lindlief-Hall. I'm the attorney for the Tongue
6 River Water Users Association. I've represented
7 them for about fifteen and a half years now.

8 Mr. Hayes handed out the front page and
9 then Page 11 of an economic study that was done in
10 2012. I just want to point out that there are
11 about 25,000 irrigated acres in the Tongue River
12 valley that depend on that high quality water.
13 The Tongue River valley, year after year for a
14 very long time, has contributed to the economy of
15 Montana, a very vital economy. According to that
16 study, when capitalized, the agricultural
17 production in the Tongue River valley provides
18 about \$250 million to the state of Montana.
19 That's every year, and that's growing.

20 And so we believe that, again, adding
21 just one more insult to the Tongue River could be
22 the nail in the coffin to what provides a lot of
23 economic stimulus to the state of Montana. Thank
24 you.

25 CHAIRMAN MILES: Thank you. Any
0126 questions?

1 (No response)

2 CHAIRMAN MILES: Is there anyone else
3 who would like to comment at this time?

4 MS. MARQUIS. Good afternoon, Madam
5 Chair and members of the Board of Environmental
6 Review. My name is Vicki Marquis. Thank you for
7 your time here today, and thanks for your
8 consideration, and thanks for the opportunity to
9 comment.

10 I'm an attorney with Crowley Fleck in
11 Billings, and I'm here today representing Otter
12 Creek Coal, LLC. As you know and as has been
13 talked about today, Otter Creek Coal has submitted
14 both a mine permit and an MPDES water discharge
15 permit application to DEQ for their consideration.
16 I'm not really here so much to talk about those
17 permits or applications, because this rulemaking
18 proposal really isn't about the mine, and it
19 shouldn't be.

20 This rulemaking should be about coming
21 up with water quality standards that make sense
22 for Otter Creek. Right now you have a standard
23 that is not enforceable, and DEQ has said that
24 they can't use it to come up with an effluent
25

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1 limit in a permit. So we urge you to use the
2 facts and the science to come up with a relevant
3 and enforceable standard for Otter Creek.

4 And again, this really isn't about the
5 mine. But to the extent that you have questions
6 about any of the current permitted discharges, or
7 about our permit applications, about the pond
8 system, or anticipated discharges, or how the
9 water will be managed, the DEQ has our permit
10 applications, they have analyzed them, and they
11 can provide you with neutral information and the
12 facts.

13 Of course, we're also happy to answer
14 any questions that you might have about the mine
15 and the water discharge permit applications.
16 We're not a coal bed methane operation. We don't
17 have to take the groundwater out and discharge
18 anywhere it in order to get the coal. But again,
19 this process that's in front of you today to
20 initiate rulemaking is more about a water quality
21 standard for Otter Creek.

22 DEQ has put a lot of effort into the
23 rule package, and we appreciate that. They've
24 gathered and studied a lot of data; they've
25 modeled conditions at Otter Creek; and they've

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1 drafted a proposed rule and implementation
2 guidance that sets a standard not only at the
3 compliance point that's referenced by the
4 longitude and latitude that's provided in the
5 rule, but also at the point of discharge, and
6 that's reflected in Section 3(a) of the proposed
7 rule.

8 DEQ has also held twelve outreach
9 meetings with interested stakeholders, and they've
10 gathered input. We've provided comments,
11 specific, line by line, to their draft rule and
12 their implementation guidance. We appreciate all
13 of that work, and we think it is time to move the
14 process forward to a more formal, broader public
15 process by initiating rulemaking.

16 One question we have is about the
17 rationale behind the statement on assimilative
18 capacity that's in the second paragraph of the
19 reason statement. We just had a question about
20 the basis for that. We understand that
21 assimilative capacity means that a water body is
22 capable of accepting discharges and still staying
23 within the standard. So our only comment would be
24 more of a question or concern about that statement
25 in the reason, and maybe that could be explained

0129

1 better or revised in some way.

2 I'm happy to answer whatever questions
3 you might have of me. We also have Dave Simpson.
4 He'll speak after me. He's a contractor who has
5 worked extensively on the mine permit application,
6 and he can handle any technical questions that you
7 might have of us. But again, we'd like this to be
8 a focus on what is appropriate, what facts and
9 science are appropriate to base the standard off
10 of for Otter Creek.

11 CHAIRMAN MILES: Thank you, Ms. Marquis.
12 Are there any comments or questions?

13 BOARD MEMBER CANTY: I do. What sort of
14 discharge are you proposing in your permit, both
15 volume and EC?

16 MS. MARQUIS: Can I direct that question
17 to Dave Simpson? He's handled the permit
18 application, and he can really provide better
19 information. Any other questions that I might be
20 able to answer?

21 BOARD MEMBER REINHART-LEVINE: Madam
22 Chair, Ms. Marquis. Can you elaborate on why the
23 current standards are not usable or enforceable?
24 Is that primarily because of Senate Bill 125?

25 MS. MARQUIS: No. My understanding is
0130
1 that the current standard is set at 500 for
2 electrical conductivity, and it is hard because
3 the stream is already beyond that. So by law, you
4 have to -- when that happens, you have to do a
5 TMDL, and the purpose of a TMDL is to come up with
6 a management plan that will bring the stream into
7 compliance with the standard. And I don't know
8 how that's possible on Otter Creek because it is
9 naturally occurring.

10 So without a TMDL, without the ability
11 to do a TMDL, I don't know where you go. And
12 that's more of a question for DEQ. I'm sure they
13 could give a better answer.

14 BOARD MEMBER REINHART-LEVINE: Madam
15 Chair, Ms. Marquis. Are the point sources for
16 Arch Coal primarily the ponds that would spill
17 over in rain events?

18 MS. MARQUIS: We do have a series of
19 ponds. There are internal ponds, and there are
20 exterior ponds. And Dave can really speak more to
21 this. But it's my understanding that any
22 groundwater that would be intercepted would be
23 managed internally. And there are not really
24 exterior ponds, because they're still within the
25 permit area, but they're outside of the active

0131
1 mining area. And those are to capture storm water
2 runoff, and they're designed to capture more than
3 they would need to. So those would be the points
4 of discharge, yes.

5 BOARD MEMBER REINHART-LEVINE: Madam
6 Chair, Ms. Marquis. The location of the ponds, can
7 you describe where that location is in reference
8 to the USGS gauge at Ashland, or would that be
9 deferred to --

10 MS. MARQUIS: Dave can answer that
11 better. We are upstream, and again our entire
12 permit application is available on DEQ's website,
13 and there are maps that show the exact locations
14 of those ponds. And I believe there are maps that
15 show the discharge points. So all of that is
16 available on DEQ's website.

17 BOARD MEMBER REINHART-LEVINE: Thank
18 you.

19 CHAIRMAN MILES: Thank you. Next
20 commenter, please.

21 MR. SIMPSON: Good afternoon, Madam

22 Chair, members of the Board. My name is Dave
 23 Simpson. I am here as part of the permitting team
 24 working on the application for the Otter Creek
 25 Mine.

0132

1 A little bit of background. First of
 2 all, I reside in Clancy, Montana. I've been
 3 working on coal mine permitting in Montana now for
 4 forty years. I spent 34 years in Hardin, Montana,
 5 working with Westmoreland Coal, and since I
 6 retired, I've been doing consulting part time. My
 7 role in this project is as technical coordinator.
 8 I'm working with Hydrometrics, Inc., which is the
 9 primary contractor, in preparing the permit
 10 applications.

11 The initial application was filed with
 12 DEQ in I believe October of 2012, and since that
 13 time we've been involved in a rigorous process of
 14 review and response to assure that the application
 15 ultimately will meet a very rigorous set of
 16 standards, the core of which is protection of the
 17 hydrological balance, both water quality and water
 18 quantity, and protection of agricultural uses on
 19 the Otter Creek flood plain, Otter Creek valley
 20 floor.

21 Again, I would just like to reiterate
 22 that this proposed rulemaking is not about the
 23 Otter Creek Mine, it is about management of water
 24 quality in the state of Montana. But it is being
 25 represented as being about the Otter Creek Mine

0133

1 because -- I don't think there is any question
 2 that one of the triggers for this process has been
 3 the application for a mining permit and also a
 4 discharge permit for the mine. I'd like to talk
 5 for a minute about the water management system at
 6 the mine. Again, this is a work in progress. We
 7 are involved in preparing responses to the last
 8 set of deficiency questions from the Department.

9 But the mine area is located on the east
 10 side of Otter Creek between Ten Mile Creek and
 11 Three Mile Creek. There are also facilities on
 12 the west side of Otter Creek -- the railroad, etc.
 13 -- is on the west side of Otter Creek. The entire
 14 area that would be occupied by the mine is
 15 approximately one percent of the Otter Creek
 16 drainage area, perhaps 2 percent. I don't have an
 17 exact acreage, but I'd be confident in saying that
 18 less than 2 percent of the drainage area would be
 19 controlled by the ponds at the mine.

20 The mine will handle two types of water.
 21 The first is runoff water. Under the mining rules
 22 and standard operating practice, surface water is
 23 to be controlled primarily for control of
 24 sediment, because when you disturb soil materials
 25 and you get rainfall or snow melt, certainly you

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1 get sediment produced. And so the standard of
 2 management practices is the use of sediment ponds.

3 There is a set of sediment ponds around
 4 the rim of the mine operation that would control
 5 surface runoff from all of the affected areas. I
 6 don't remember the exact number of ponds. I think

7 it is seventeen or eighteen ponds. These ponds
8 would handle runoff water. Runoff water, the same
9 runoff water that was discussed earlier --
10 rainfall, snow melt -- and we expect that water to
11 be of relatively high quality.

12 It will entrain sediment, so there will
13 be some minerals picked up. As far as what the
14 quality of that water would be going into the
15 ponds, it will be dependent on the amount of water
16 and also the sediment that's picked up.

17 But we don't expect that water to be
18 problematic from the standpoint of either salinity
19 or SAR, the reason being that with the exception
20 of an area within that watershed that would hold
21 those spoil storage area, this is mainly natural
22 soils that it's going to be contributing.

23 The second category of water is the
24 in-flow to the pits from the Knoblock, primarily
25 from the Knoblock coal, as was mentioned earlier.

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1 That water is fairly low in specific conductivity,
2 about 1,500, based on the wells in the area, but
3 it is very high in SAR, SAR being -- as was
4 pointed out -- a ratio, so what it has to do with
5 is the ratio of sodium to the other cations in the
6 water.

7 The mine is designed with an internal
8 drainage system to confine that water to the mine
9 area, that is that water is being kept separate
10 from the runoff water from the outlying parts of
11 the mine. Those ponds are -- let me back up a
12 little bit. The external ponds are designed under
13 the rules to contain the runoff from a ten year 24
14 hour precipitation event, so that means that
15 statistically we would expect a discharge from
16 those ponds about once every ten years.

17 The internal ponds are designed for a
18 100 year event, so our objective is to confine the
19 water to the mine and use that water for dust
20 control within the mine area proper. We do expect
21 that there will be significant groundwater
22 encountered during the early years of the mine.
23 The peak would probably be about, according to the
24 modeling we have now -- and again, this is a
25 preliminary number -- in the 600 gallons per

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1 minute range. That is over the whole mine. I
2 think the average, according to the model, over
3 time will be about 300, 350 gallons per minute.

4 To put that in perspective, that's less
5 than one cubic foot per second, and the flow of
6 Otter Creek, as was pointed out earlier, average
7 flow is about five to seven cubic feet per second.
8 So even if all of the water from the Otter Creek
9 mine would be channeled into the creek, even at
10 low flow, or normal flow conditions of five to
11 seven CFS, you're still looking at a relatively
12 small increase. That's not the case. There will
13 be no constant discharge from this mine, there
14 will be no processed water.

15 When we think of MPDES discharge, what
16 we think of typically is process water, where you
17 have water that's used in some industrial process

18 and then discharged after treatment. The only
 19 water we'll be dealing with here is runoff and the
 20 pit in-flow, as I said, with the pit inflow
 21 contained. We would expect to discharge to the
 22 creek very infrequently, that is unplanned
 23 discharge.

24 It is possible that there would be
 25 discharges from the outer ponds to Otter Creek, if
 0137

1 the water meets whatever standard is established
 2 by the MPDES permit, and that application also is
 3 in review right now. So until we know what the
 4 permit requirements are, there is no way we can
 5 predict to what extent there might be discharges
 6 to Otter Creek, and what the quality will end up
 7 being.

8 The most important thing to remember,
 9 though, is that, as I said, there is no process
 10 water involved, and the discharges are very
 11 infrequent, on the order of once every ten years
 12 or less. If we do have a major rainfall or major
 13 event, it will almost be certainly associated with
 14 snow melt, mainly because soil surfaces are
 15 frozen, and everything runs off. During a
 16 rainfall event, there is at least some
 17 infiltration, and so you wouldn't --

18 There are exceptions. There are such
 19 things as big rain storms. So we can't guarantee
 20 absolutely that there will never be a discharge
 21 from this mine. What we can do is engineer it so
 22 that those discharges are very infrequent, so that
 23 we can manage the water internally.

24 BOARD MEMBER CANTY: I have a question,
 25 Madam Chair. So if I heard that right then, the
 0138

1 external ponds that are collecting mostly the
 2 precipitation events that you expect to be clean,
 3 those ponds would discharge maybe once every ten
 4 years, but the internal ponds, that's a one in 100
 5 year, like a 100 year event?

6 MR. SIMPSON: They're being designed to
 7 contain a 100 year event, plus the water that we
 8 expect, based on the hydrologic models, to in-flow
 9 from the coal seam.

10 BOARD MEMBER CANTY: Thank you.

11 BOARD MEMBER SHROPSHIRE: Madam Chair.
 12 So when you're mining and you encounter
 13 groundwater, so you have to do dewatering during
 14 mining, where does that water go?

15 MR. SIMPSON: Initially we're going to
 16 put in a central containment pond within the
 17 footprint of the mine area, because we initially,
 18 with the initial pit, there is really no place for
 19 the water to go. So we're going to have to
 20 contain it internally temporarily using that water
 21 for, as I said, for dust control and haul roads.

22 But once the mine begins -- once the box
 23 cut is established, what the box cut will do is it
 24 will cut off the surface drainage from the upper
 25 reaches toward the Custer forest. It will cut off
 0139

1 that surface water runoff, and intercept it by the
 2 pit, so the actual amount of water that's runoff

3 water that's going to be going into the ponds in
4 the box cut is going to be pretty minimal once
5 that pit is established.

6 But the internal ponds will be
7 established within the footprint of the box cut,
8 which is the initial cut. So there will be a time
9 period of about a year when that water will have
10 to be managed internally entirely by going to a
11 central pond or internal sumps in order to prevent
12 the need to discharge.

13 BOARD MEMBER SHROPSHIRE: So if I
14 understand what you're saying is you have to
15 construct a big pond to discharge your mine
16 dewatering water.

17 MR. SIMPSON: That's correct.

18 BOARD MEMBER SHROPSHIRE: And that over
19 the course of -- starts off at around 600 gallons
20 a minute in the initial dewatering?

21 CHAIRMAN MILES: That's the preliminary
22 estimate, yes.

23 BOARD MEMBER SHROPSHIRE: And then
24 steady state around 300 gallons a minute into that
25 pond?

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1 MR. SIMPSON: Steady state would be in
2 the 300 gallon per minute range, keeping in mind
3 that we're talking about a pit that's over three
4 miles long. So you have a huge amount of surface
5 area and a lot of evaporation, so we don't expect
6 that we'll handle anywhere near that volume of
7 water once the mine becomes established.

8 BOARD MEMBER SHROPSHIRE: But that would
9 be a permanent pond that you would discharge into?

10 MR. SIMPSON: A permanent pond?

11 BOARD MEMBER SHROPSHIRE: You're always
12 going to have dewatering during mining.

13 MR. SIMPSON: We're going to have
14 dewatering during mining. We expect the amount of
15 dewatering to decrease as the pit advances. We do
16 anticipate that in the initial years those
17 internal ponds will handle primarily pit
18 dewatering; and as the mine advances, and the area
19 is reclaimed to its post-mining topography, of
20 course the drainage will be restored, and then the
21 preponderance of that water will be surface
22 runoff. And once the mine is closed up, then
23 there will be no more pit water. It will all be
24 surface runoff.

25 BOARD MEMBER SHROPSHIRE: What's the

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1 projected life of the mine?

2 MR. SIMPSON: This particular, the Tract
3 2 portion, about I think it's an 18 year
4 production life. We're projecting right now at 20
5 million tons a year. It could be more or less,
6 depending on actual production levels.

7 BOARD MEMBER TWEETEN: Mr. Simpson,
8 there is probably a simple answer to this that I
9 just am not smart enough to see. But I understood
10 you to say that discharges of water from the mine
11 to Otter Creek were going to be a rare, if ever,
12 event because of the development of these ponds
13 inside the mine boundary; is that correct?

14 MR. SIMPSON: That's correct.
 15 BOARD MEMBER TWEETEN: Then why does it
 16 matter to the mine what the standards are in Otter
 17 Creek? If you're not going to be discharging
 18 water to Otter Creek, why does it make any
 19 difference to the mine whether we go forward with
 20 this rulemaking or not?
 21 MR. SIMPSON: Ultimately there will need
 22 to be an MPDES permit, because there may -- As I
 23 said earlier, we can't guarantee that there will
 24 never be a discharge, because it does rain, and it
 25 does snow, and we do have runoff events.

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1 And we have designed this mine to be as
 2 close to zero discharge as is reasonably possible,
 3 and the reason for that is that early on, in doing
 4 the initial design work, we recognized, with the
 5 sensitivity of Otter Creek, and the Tongue River,
 6 and salt loading with respect to agriculture, that
 7 it's incumbent on the mine operation to be able to
 8 contain and manage its water and not, let's say,
 9 minimize the possibility of an unplanned
 10 discharge, and to be sure any discharges that do
 11 occur meet the requirements of the permit.

12 And since we don't know what those
 13 requirements are going to be, it's hard to say
 14 what the specific management plan will be in that
 15 instance, but the status of the management plan
 16 right now is as I've described it, but it is
 17 evolving in response to DEQ review.

18 BOARD MEMBER SHROPSHIRE: One last
 19 question. Have you modeled the impact of
 20 infiltration to groundwater from your evaporati on
 21 pond, or your pond where your dewatering water is
 22 going?

23 MR. SIMPSON: Where the dewatering water
 24 is going is inside the mining footprint. There
 25 will be infiltration. We don't expect a lot

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1 because of the nature of the soils. They're
 2 pretty high in clay.

3 One of the issues that would be
 4 addressed in the groundwater modeling process is
 5 what will happen when the mining is complete, and
 6 the spoils are resaturated by groundwater. It was
 7 alluded to by one of the earlier commenters, and
 8 we're aware of the study that he referred to.

9 We don't necessarily agree with the
 10 conclusions. We think there are some assumptions
 11 that are incorrect. But with the modeling
 12 capability that we have -- and I think we can
 13 project with pretty high confidence what the
 14 ultimate results are going to be, both short term
 15 and long term. In the short term, there are going
 16 to be some impacts because we're going to be
 17 taking water out of the system and moving it into
 18 the pit.

19 So what the extent of those impacts will
 20 be will depend on the specific management plans.
 21 Again, everything is -- The best way to describe
 22 it is that there are a lot of moving parts, and
 23 we're working with the Department right now,
 24 working through the process of modeling,

25 characterizing the water, characterizing both the
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1 flows, the subsurface and surface flows, and the
2 quantities to project what's going to happen after
3 mining, during and after mining.

4 I guess the one thing I would emphasize
5 is that's an entirely permitting process. That
6 will be an issue for a Department decision further
7 down the road, and there will be opportunity to
8 comment and review on the decision at that time.

9 BOARD MEMBER REINHART-LEVINE: Madam
10 Chair, Mr. Simpson. I did not see any proposal
11 for treating the water in the internal or external
12 ponds. Are there any proposals, as far as you
13 know, for treating the water?

14 MR. SIMPSON: We have no plans right now
15 to treat the water other than for sediment, and
16 the treatment for sediment is to impound the water
17 and allow the sediment to settle out. If the
18 water, after the sediment settles out, meets
19 requirement of the MPDES permit, it would be
20 discharged into the creek; if not, it will be
21 channeled back, pumped back to one of these
22 internal ponds, because we need to maintain
23 capacity in those external ponds to accommodate
24 rainfall events.

25 BOARD MEMBER O'CONNOR: Madam Chair, one
0145
1 quick question. In the settlement ponds,
2 generally you get evaporation as well as
3 settlement. Would that increase the EC and the
4 SAR values in those ponds?

5 MR. SIMPSON: Evaporation would increase
6 the SEC, yes.

7 CHAIRMAN MILES: Thank you.

8 BOARD MEMBER CANTY: I have one last
9 question, Madam Chair. So when you treat the
10 water, is that an occurrence you don't expect to
11 do very often, right? Going back to what you said
12 about the discharge once every ten years, once
13 every 100 years. So in order to discharge through
14 evaporation, that's not planned to be a regular
15 occurrence, or it is? Did that make sense? Any
16 water you discharge through your MPDES permit,
17 that's still part of what you said before, is that
18 it wouldn't be very often, this occurrence?

19 MR. SIMPSON: It would be very
20 infrequent, and in response to rainfall or snow
21 melt runoff events. There will be no constant
22 discharge. And as I said, that application is
23 under review. The review is in its early stages.
24 And I'm just speculating, but I would expect
25 considerations for water quality and quantity as

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1 well, based on the concern that's been expressed
2 about load of salt in the creek.

3 BOARD MEMBER CANTY: Thank you.

4 BOARD MEMBER REINHART-LEVINE: Madam
5 Chair, Mr. Simpson. Are the ponds lined?

6 MR. SIMPSON: We're not planning to line
7 them. There is an option to line them. It
8 depends on ultimately the way the water management
9 plan is designed.

10 The ponds that contain only runoff, we
 11 expect that water to be sediment laden, but fairly
 12 good quality with respect to salts. So
 13 infiltration, in my opinion, is the appropriate
 14 way to introduce that water back into the system.
 15 If there is a problem with the quality of the
 16 ponded water, the option exists to line the ponds.
 17 And Otter Creek Coal has made it clear that
 18 they're willing to do that.

19 CHAIRMAN MILES: Thank you. I don't
 20 want to get too deep into the actual mine
 21 operation. I want to stick to the topic at hand
 22 today. So I appreciate your focus on talking
 23 about the discharge.

24 MR. SIMPSON: Thank you very much, Madam
 25 Chair.

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1 CHAIRMAN MILES: Is there anyone else
 2 that wishes to comment?

3 MS. KAEDING: Thank you, Madam Chair and
 4 members of the Board of Environmental Review. My
 5 name is Beth Kaeding, and I live in Bozeman. I'm
 6 a long term Northern Plains member, and a past
 7 chair. I really appreciate the opportunity to
 8 speak today. I'm not going to say too much.

9 I spent many, many times before the BER
 10 back when rulemaking was done on the Tongue River
 11 and the tribs, and I know it is a long and lengthy
 12 process for rulemaking. I know there was a lot of
 13 science that was brought to bear on the original
 14 rulemaking. I don't think that science has
 15 changed.

16 I think what has changed is the fact --
 17 and it has been said specifically and alluded to
 18 -- that there is now a permit for a mine on Otter
 19 Creek that needs to get an MPDES permit. And I
 20 understand all that, and I realize it puts us all
 21 in a position of needing to deal with this.

22 Mr. Simpson just said that they're not
 23 anticipating any discharges from this mine, so why
 24 are we even considering rulemaking on changing the
 25 standards in Otter Creek? Why can't a permit be

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1 written that takes into account infrequent
 2 exceedences of the current standards?

3 As Ms. Dunning so eloquently showed you,
 4 this mine is down toward the mouth of Otter Creek
 5 where it enters the Tongue River. There is a huge
 6 watershed, and changing these standards affects
 7 everyone in that watershed. And we've been living
 8 -- and Northern Plains has spent a great deal of
 9 time fighting coal bed methane, trying to get
 10 those companies to do it right and not discharge
 11 all of this horribly salty water into the system.
 12 And by changing the standards on Otter Creek with
 13 this rulemaking package, you are potentially
 14 opening up people up higher in the watershed to
 15 problems with their way of life.

16 Now, I have been to many of these
 17 meetings, these twelve meetings that keep being
 18 talked about with the public that DEQ has done
 19 with us. I drove to Miles City from Bozeman to be
 20 in one of the first meetings. I've been here in

21 Helena for a number of meetings. We really
 22 appreciate DEQ trying to convince us -- which is
 23 the way I look at what they've done -- that what
 24 they are doing is going to work. But as Ms.
 25 French said, they haven't really been listening to

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1 what you have heard today from Ms. Dunning. A lot
 2 of the problems -- Mr. Hayes, Mr. Fix. They have
 3 good concerns that need to be considered by DEQ,
 4 and we haven't been having our concerns heard.

5 You're right, Mr. Tweeten. If we start
 6 rulemaking, then they have to officially answer
 7 these things, but we think rulemaking is not
 8 prime, not ripe at this point. For one, I don't
 9 know if it was clear to all of you when you looked
 10 at many of the graphs that were on DEQ's
 11 presentation, as well as Ms. Dunning's
 12 presentation on behalf of Northern Plains. Those
 13 USGS gauging station numbers, they only run from
 14 April to November. The gauges are turned off then
 15 because of freezing and all kinds of other
 16 problems.

17 So the prime time for getting those good
 18 numbers, that Ms. Dunning told you were so
 19 important to her operation, her family's
 20 operation, we don't really have anything more than
 21 grab samples when DEQ had a person in the area, or
 22 sent somebody out, but they might not have been
 23 there on a day that was a good day. So we don't
 24 have complete data, so I don't think we're ready
 25 for rulemaking.

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1 The other thing I'd like to say is that
 2 yes, we do need to see how DEQ thinks these rules,
 3 if they do go through rulemaking and are sustained
 4 and passed, would be implemented. That's a big
 5 hole in my mind as to how this is going to work.

6 So in answer to Mr. Tweeten's question
 7 to everyone, I don't think Northern Plains is
 8 necessarily opposed to rulemaking, but we spent a
 9 great deal of time, effort, and money, and many,
 10 many days out of many of our lives up here during
 11 the original rulemaking, and those standards were
 12 set to protect the people who use these waters.

13 Before we launch into a new rulemaking,
 14 we need to -- as Mr. Fix and Mr. Hayes have
 15 pointed out -- start going forward to protecting
 16 the Tongue River. There are not TMDL's on the
 17 Tongue River yet. Maybe you'll never be able to
 18 put a TMDL on Otter Creek, but we sure as heck can
 19 on the Tongue River.

20 So for many reasons, we just think this
 21 is not timely. It is pre-rulemaking. We think
 22 there is a lot more data and a lot more thinking
 23 that has to go into this before it happens. So
 24 thank you very much.

25 CHAIRMAN MILES: Thank you for your

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1 comments. Is there anyone else who wishes to
 2 comment?

3 (No response)

4 CHAIRMAN MILES: Thank you. Before we
 5 sort of start a discussion among the Board members

6 and maybe ask the Department or others some
7 questions, I do just want to thank everyone who is
8 here today. And Ms. French definitely reminded me
9 of the people who have come from a long distance.
10 Believe me, I know how far Otter Creek and Tongue
11 River are, and we really appreciate your coming
12 here in person today, and taking the time. I want
13 to apologize to the folks who are here for the
14 MEIC/Signal Peak hearing. We will be getting to
15 that, but I appreciate your patience.

16 One of the things I will ask George to
17 do at the very end -- and it did remind me when we
18 talked about the distance people have traveled.
19 If you wrap up with a few comments at the end,
20 George, I would appreciate your addressing the
21 issue of -- I know that there is requirements for
22 State agencies and this Board to at times conduct
23 a hearing in the geographic location that's
24 impacted, and whether that would become part of a
25 rulemaking procedure for us. So if you'd address

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1 that at the end.

2 And with that, who wants to start? Who
3 has questions for the Department? Are there
4 things that you heard in comments that you would
5 like the Department to respond to? George, do you
6 want to make a few comments, or shall we start
7 with Board comments?

8 BOARD MEMBER O'CONNOR: I have a
9 question, Madam Chair. George, we saw a slide up
10 there that showed that Tongue River having very
11 low EC and very low SAR, and it wasn't over a time
12 period or anything like that, but it seemed, in
13 comparison to Otter Creek, that it was very clean
14 water. And then we also saw a slide later on that
15 showed the first five months of the year it
16 exceeded, the Tongue River did exceed the limits,
17 which I believe -- are they 1,000? Whatever it is
18 on the Tongue -- that they exceed it for the first
19 five months. So those two don't seem to match
20 very well together. Can you explain for me,
21 please.

22 MR. MATHIEUS: Madam Chair, Roy, I'm not
23 the technical or subject matter expert on that
24 specifically, and I would ask that I could defer
25 to staff, please.

0153

1 CHAIRMAN MILES: Who would you like to?

2 MR. MATHIEUS: Eric Urban.

3 MR. URBAN: Madam Chair, members of the
4 Board, for the record, my name is Eric Urban, and
5 I'm the Bureau Chief of the Water Quality Planning
6 Bureau, and I have the privilege of overseeing the
7 TMDL and the Water Quality Standards Program.

8 Mr. O'Connor, your question is very
9 astute. The water quality standards for the
10 Tongue were driven by a use review, so that being
11 what does agriculture need to have full success.

12 What you see on the Tongue is empirical
13 data, data collected from the Tongue River. That
14 was not included directly in the development of
15 those standards. I believe in other testimony,
16 there was a question of the effectiveness and the

17 appropriateness of the standards on the Tongue,
18 and that the Department should take a look at
19 that. We're in the middle of that, and that is
20 being done through the TMDL process.

21 That simply is a review of the watershed
22 in its entirety. We look at all sources, point,
23 nonpoint source, and we ask that question: "How
24 do we reduce all those sources to meet that
25 standard on the Tongue?" There is potential that

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1 that's not possible. We haven't got to that point
2 yet. But we will be doing that review, and then
3 handing back out appropriate load reductions to
4 meet that number, or to verify the accuracy of
5 that number.

6 CHAIRMAN MILES: Thank you. Any further
7 questions, Board members?

8 BOARD MEMBER SHROPSHIRE: Have you come
9 up with a number for EC and SAR on the Tongue that
10 you would call natural? Are the standards higher
11 than natural, do you think, for the Tongue?

12 MR. URBAN: Madam Chair, Ms. Shropshire.
13 We have not looked at that question. That is the
14 process for the TMDL. And in order to do that, we
15 quite simply need to model it back to find all the
16 sources in the watershed, and then mathematically
17 remove them from the watershed to see what we
18 would be left with to identify the natural
19 condition. It's a much larger watershed, much
20 more complicated than Otter Creek. We are in the
21 middle of that. We anticipate model completion
22 early 2016.

23 BOARD MEMBER SHROPSHIRE: Thank you.

24 BOARD MEMBER O'CONNOR: Wouldn't it seem
25 logical for us to consider the rulemaking process

0155

1 after the whole drainage is looked at, the Tongue
2 River drainage? Just a thought.

3 CHAIRMAN MILES: Did you want to respond
4 to that?

5 MR. URBAN: Madam Chair, Mr. O'Connor.
6 Certainly at first blush, that seems like
7 appropriate. What the Department has presented
8 before you in this rulemaking by and large can be
9 considered a TMDL. We have characterized the
10 natural condition. We have taken what I regard
11 greater leaps than we ever have in any other
12 rulemaking to protect downstream. We have a point
13 on the watershed for cumulative impacts, a
14 compliance point. We have in the rule downstream
15 protection language that incorporates both
16 concentration and load. Quite frankly, a TMDL
17 cannot provide any more than we have in this rule
18 package.

19 BOARD MEMBER SHROPSHIRE: Is there
20 anything in this rule that would prevent an EC of
21 3,000 or an SAR of 6.5 during irrigation season?

22 MR. URBAN: Madam Chair, Ms. Shropshire.
23 This rule package is a water quality standard, and
24 I'll warn you I use this phrase as kind of an
25 attention getter, but I'll soften it a little bit.

0156

1 Water quality standards don't do anything, that

2 meaning they are not self-implementing. So what
3 you have is a water quality standards question.

4 Protection comes through permitting. So
5 protecting clean water first and foremost, when we
6 get a new application, we do a nondegradation
7 review process. That's a layer above and beyond a
8 water quality standard. Protection comes through
9 nondeg of water quality. Uses come through water
10 quality standards.

11 So to answer your question, yes, there
12 are scenarios that exist where a proposed
13 discharge would change water quality, and lower
14 than 3,100 concentrations would be required.

15 CHAIRMAN MILES: Board members, before
16 we get too much into real detail -- and George
17 looks like he wants to say something, but I'll get
18 to you in a minute. I think that we just want to
19 ponder for a second. We have a couple of options
20 today. And you'll notice on Page 64 of your Board
21 packet -- if anyone remembers the Board packet --
22 some of those options were laid out.

23 We can decide to initiate rulemaking and
24 issue the draft notice that was in our Board
25 packet; we could modify the notice and initiate

0157

1 the rulemaking -- I'm not sure that any of us are
2 in a position to actually recommend a specific
3 modification, but that's an option we have. We
4 could determine that the adoption of the rule is
5 not appropriate at this time and deny the
6 Department's request.

7 I would posit that we have another
8 option. If we feel that we have a lot of
9 questions -- we've had a lot of new information
10 given to us today, and a lot of information that
11 probably most of us were not aware of. I have a
12 lot of questions for the Department. I'm very
13 confused still how this fits together with Senate
14 Bill 325. I'm wondering if we proceed with this
15 proposal, have we set a precedent for how we would
16 define natural in future instances which would
17 relate to this 80th percentile, and we don't even
18 know if that's where we want to be. Lots of
19 questions. That's just the ones that are on top
20 of my mind.

21 We could just postpone action today, and
22 perhaps ask the Department to provide more detail,
23 and more response, and some more background
24 information to us at our next meeting before we
25 take this up. That just would be another

0158

1 alternative for this Board to consider.

2 George, did you have something you
3 wanted to add?

4 MR. MATHIEUS: Madam Chair, yes, I can
5 add a couple things, to just provide some
6 clarifications that might help as you ponder your
7 questions surrounding this subject.

8 The first thing I'll say echoes a little
9 bit what Eric just articulated, and that is this
10 is a unique rule, and why I say that is because in
11 concert with the development of the rule itself,
12 the 3,100 we're talking about, we have developed

13 an implementation strategy which is really the
 14 meat of how a water quality standard is going to
 15 look on the ground. We've also been engaged in a
 16 lot of discussion on protection of downstream uses
 17 at the national level with the Environmental
 18 Protection Agency.

19 So I really want folks to understand
 20 that that implementation plan or strategy
 21 specifically describes how this standard would in
 22 turn be implemented on the ground through like,
 23 let's say, a permit. And as Eric said, it is
 24 important to understand that 3,100 -- which is the
 25 number we're proposing -- would not necessarily

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1 equate to a discharge permit, because the point is
 2 the compliance point is at the end of the
 3 drainage. And so what does that number have to be
 4 as we back up the drainage, wherever a discharge
 5 is in the drainage, to ensure 3,100 is met at that
 6 compliance point at the end of the drainage.

7 CHAIRMAN MILES: So you're saying you
 8 have an implementation plan. Is that anything
 9 this Board has seen?

10 MR. MATHIEUS: Madam Chair, we have a
 11 plan. I'm not sure how that's been distributed or
 12 not. I could ask. I know it's been distributed
 13 to some of our informal -- as was mentioned in
 14 previous testimony today -- that we've distributed
 15 informally to the public.

16 CHAIRMAN MILES: I don't know that I've
 17 seen anything like that. I don't know if anyone
 18 else on the Board has.

19 MR. URBAN: Madam Chair, members of the
 20 Board. The Department, after one of our WPCAC
 21 meetings, felt very strongly that before
 22 proceeding, we needed to have that implementati on
 23 plan, we need comments on it. May 18th, we
 24 emailed that plan to in excess of 80 participants
 25 requesting their feedback on it. I'd have to

0160

1 double check if the plan made into your agenda
 2 packet, but I --

3 CHAIRMAN MILES: I don't have that.

4 MR. URBAN: I apologize.

5 CHAIRMAN MILES: That is all right. We
 6 had really, I think, about four or five pages of
 7 information in our Board packet relevant to this.
 8 There has been a lot of new information today.
 9 And that might be something that we'd like to
 10 review at some point. Robin.

11 BOARD MEMBER SHROPSHIRE: Madam Chair,
 12 if we chose to delay, would we just take no
 13 action?

14 CHAIRMAN MILES: Yes, and I think we
 15 would just say we want to postpone action and we
 16 would request -- I think the more specific we can
 17 be of the Department in terms of what information
 18 we would like to see, or discussion we wanted to
 19 have, would be helpful. So this is when I get to
 20 say: What's the Board's pleasure? I think
 21 Michele had her hand up.

22 BOARD MEMBER REINHART-LEVI NE: Madam
 23 Chair, George. You had mentioned that there would

24 be additional rulemaking proposed to implement
25 Senate Bill 325 this fall. Is that something that

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1 would be ready for our next meeting in October?

2 MR. MATHIEUS: Madam Chair, Ms.

3 Reinhart. I don't anticipate it will be ready by
4 the next meeting.

5 BOARD MEMBER TWEETEN: George, this is
6 not a proposal for an emergency rulemaking. Is
7 there a time exigency as far as the Department is
8 concerned?

9 MR. MATHIEUS: Madam Chair, Mr. Tweeten.
10 There is no sense in urgency, other than we're
11 simply here today to describe a situation that
12 we're in, which is we have a standard on the books
13 today that does not line up with a natural
14 condition, and then with the current regulatory
15 framework, that puts us in the conundrum of trying
16 to implement that standard on the ground, because
17 75.5.306 states that the Department cannot require
18 treatment purer than natural. So just from that
19 premise, how do we implement a standard that
20 doesn't exist on the ground?

21 And so I think it is important to
22 understand that there has been a lot of discussion
23 today on the rulemaking ten, eleven, twelve years
24 ago. At the time the discussion was surrounded
25 around 500, the number, the current number, and

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1 natural; but a definition of natural itself was
2 not determined, and so that's the juncture we're
3 at today, is determining natural.

4 And so the Department has, in our
5 analysis, provided a suggestion of what we think
6 that natural condition is, and we're asking the
7 Board to use their prerogative to determine if
8 that's an appropriate number or not.

9 BOARD MEMBER TWEETEN: So the answer is
10 no, there's no time exigency, as far as you know?

11 MR. MATHIEUS: Madam Chair, Mr. Tweeten,
12 yes. The answer is no.

13 BOARD MEMBER TWEETEN: I think the
14 Chair's suggestion regarding carrying this over
15 and giving it further consideration makes a lot of
16 sense, given all of the information that we've
17 received today. So that's the way I'm leaning
18 right now. I think some of the other Board
19 members may have different views, but that's kind
20 of what I see.

21 CHAIRMAN MILES: If we decide to go that
22 route, could we provide some specific sort of
23 issues and questions to the Department that we'd
24 like to explore or hear feedback on at the next
25 meeting?

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1 MR. MATHIEUS: Madam Chair, I think that
2 would be helpful.

3 CHAIRMAN MILES: So we can target. I'm
4 sure everybody -- I know I have some specific
5 questions I could write down and get to them. Is
6 that a motion, or would you just like to --

7 BOARD MEMBER TWEETEN: As Robin said, I
8 don't think we need a motion if we're not going to

9 take any action at all. So you could ask for a
10 motion to grant the Department's request, and if
11 it doesn't get an affirmative vote, then we move
12 on, I think.

13 MR. MATHIEUS: Madam Chair, just so that
14 I don't forget, you did specifically ask me about
15 a hearing, and the simple answer is yes, and we
16 have done that in the past where we've conducted
17 hearings geographically.

18 CHAIRMAN MILES: So when we go to the
19 point of actually hearing, not just initiation of
20 rulemaking, but actually conducting a hearing on a
21 proposed rule, I think we could anticipate that we
22 would probably be holding that in eastern Montana.

23 MR. MATHIEUS: Yes.

24 CHAIRMAN MILES: I don't know that we
25 need to have a motion that is defeated. I think

0164

1 we can -- if the Board is in consensus that we're
2 not ready to take action on this item today, and
3 please put together some questions or thoughts
4 that we would specifically like the Department to
5 address based on -- and I have a lot of notes and
6 questions here that I'd like to explore a little
7 bit further. If we could get those to George
8 after the meeting. Robin, do you have a question?

9 BOARD MEMBER SHROPSHIRE: Just in that
10 context. I wanted to comment that this is a
11 legislative process. It is not a contested case.
12 And so it has been my practice that in terms of --
13 I don't know if "lobbying" is the right word --
14 but in terms of educating ourselves, it is my
15 opinion that it is appropriate to talk to outside
16 parties on this matter to educate ourselves. And
17 there had been some communication prior to this,
18 and the way it was phrased in an email was we
19 aren't obligated to. And I understand that we're
20 not obligated to, but it is perfectly acceptable
21 for us to talk to outside parties to help educate
22 us on this matter.

23 CHAIRMAN MILES: I think that's correct
24 in this situation. I would encourage, if we do
25 get any information from other parties, that to

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1 the extent that that can be brought to the whole
2 Board would be equally as important.

3 BOARD MEMBER SHROPSHIRE: Thank you. I
4 just wanted to clarify that.

5 CHAIRMAN MILES: Is there any further
6 discussion on this matter before we go to the next
7 rulemaking?

8 (No response)

9 CHAIRMAN MILES: I think we're set. I
10 think we would prefer to get a little more
11 information, a little more education, and think
12 through some of these issues before we actually
13 entertain a motion to initiate rulemaking. I
14 think there is a lot of questions about the
15 content of that rule, if there might be some other
16 options for addressing the concerns about, you
17 know, does this remove the potential for
18 irrigators to use those waters at that time.

19 I think there are a lot of important

20 issues that were brought up today, and I think to
 21 the extent that we can jot those down so the
 22 Department can come prepared to address some of
 23 these, and I'm sure we will take other public
 24 comment at that time next month, too, because it's
 25 an open discussion. Thank you very much.

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1 Next is the topic of initiating
 2 rulemaking to meet the requirements of Section 128
 3 of the Federal Clean Air Act. I think that will
 4 very quick, and then we'll get into our afternoon
 5 hearing. I think the next rulemaking will be very
 6 quick, so let's take a half an hour for a lunch
 7 break.

8 (Lunch recess taken)

9 CHAIRMAN MILES: We're going to
 10 reconvene. Thank you all very much. The first
 11 order of business is to entertain a proposal for
 12 the Board to initiate rulemaking to meet the
 13 requirements of Section 128 of the Federal Clean
 14 Air Act regarding state boards and conflict of
 15 interest. So this is particularly relevant to
 16 this Board to understand what this new rule would
 17 do. I'll turn it over to John.

18 MR. MATHIEUS: Madam Chair, if I may.
 19 Thank you. Yes, John North is going to discuss
 20 today the next agenda item. I would just like to
 21 take a minute to thank John. As everyone knows,
 22 we had some down time between Tom being appointed
 23 Director and my hiring, and John graciously
 24 stepped up and participated and acted in the role
 25 as liaison. So I'd like to thank John for that.

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1 CHAIRMAN MILES: I took full advantage
 2 of that.

3 MR. NORTH: Madam Chair, members of the
 4 Board, John North, Chief Legal Counsel with the
 5 Department.

6 The Department has primacy to administer
 7 the Federal Clean Air Act in Montana through
 8 approval of a State Implementation Plan. We've
 9 been notified by EPA that our State Implementation
 10 Plan needs to be amended to incorporate the
 11 provisions of Section 128 of the Air Quality Act,
 12 Federal Air Quality Act, and that applies to
 13 boards that approve air quality permits or
 14 enforcement orders under the air quality statutes,
 15 and this Board does both through the contested
 16 case provisions. You hear appeals for permit
 17 issuances, and you also hear appeals of
 18 enforcement orders.

19 Therefore, we do need to be in
 20 compliance with Section 128 in order to maintain
 21 our primacy to administer the Clean Air Act. We
 22 took a look at what would be necessary if the
 23 current -- we looked at if the current code of
 24 ethics is sufficient to maintain that compliance,
 25 and we determined that there are a couple of areas

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1 where it isn't. So what you have is rulemaking
 2 here, proposed rulemaking, that would implement
 3 Section 128 as it's written in the Clean Air Act,
 4 and that's Rule No. 2, I believe it is.

5 The two areas that the Code of Ethics,
6 State Code of Ethics, is not astringent as the
7 federal code. And by the way, the State Code of
8 Ethics is overall much more stringent than this
9 provision. Nevertheless, we have to comply with
10 these provisions, too.

11 One is that under the State Code of
12 Ethics, you would only have a conflict if you had
13 an interest in one of the parties that was before
14 the Board or could be before the Board in Montana.
15 On the other hand, under the federal provision
16 128, we have to look to any place in the country.
17 So a person who did no air quality work, say,
18 consulting work for people, companies in Montana,
19 would not have a conflict under the Montana Code
20 of Ethics, but under the federal, if a person does
21 that type of work anywhere in the country, that
22 counts in terms of determining whether there is a
23 conflict.

24 The second thing is that while the State
25 Code of Ethics says if you've got a conflict of

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1 interest, you shouldn't act, it also has an
2 exception which says that however, if it's
3 necessary for you to act in order for the agency
4 to take, for the Board to take action, then you
5 can disclose your conflict to the Secretary of
6 State and take the action. This Section 128 says
7 if the Board has a majority of members who are
8 conflicted out, it can not act under the Clean Air
9 Act.

10 So this rulemaking is designed to fill
11 those gaps. As I said, New Rule 11 simply
12 incorporates the substantive provisions of Section
13 128, and then the definitions and the other
14 provisions are closely tailored after the EPA
15 guidance that was written for states to comply
16 with Section 128, and achieve approval of the SIP.
17 And we have been in contact with the EPA down in
18 Denver, we've been working with them, and they
19 have committed that adoption of these rules would
20 suffice under the Federal Clean Air Act.

21 We're recommending, because this is
22 simply a federal requirement, the Board has an
23 option of either having a hearing or just putting
24 it out for written public comment, and our feeling
25 is that this really shouldn't be that big of a

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1 deal, very controversial or anything. So we're
2 proposing that it be put out for public comment
3 without a hearing contemplated.

4 Under the APA, if a sufficient number of
5 people -- which would be 25 in this case -- or one
6 group who has at least 25 members asks for a
7 hearing, then we would need to schedule one, so it
8 is not as if the public would never have a right
9 to a hearing if the public wanted it.

10 With that, Madam Chair, we would
11 recommend that the Board initiate this rulemaking
12 without a public hearing contemplated.

13 CHAIRMAN MILES: That's what the draft
14 MAR notice contains?

15

MR. NORTH: Yes.

16 CHAIRMAN MILES: Is there any question
17 for John?

18 BOARD MEMBER TWEETEN: If someone works
19 for a consultant who is hired by a regulated
20 entity as it's defined in the rule and federal
21 statute, receives a salary from a consultant for
22 whom he works, does that person derive a
23 significant portion of income from a regulated
24 person for the purposes of Rule 11?

25 MR. NORTH: Does work for that company?
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1 BOARD MEMBER TWEETEN: Well, the person
2 works for a consultant. The consultant has a
3 contract with the company. Is there a
4 mathematical calculation you do in terms of, "This
5 is 4 percent of the consulting company's gross
6 income, and the Board member's salary from the
7 consulting company is, what, 10 percent of their
8 personnel costs," and work all those numbers out
9 and try to figure out whether that's a significant
10 portion of a person's income? How do you figure
11 that out, John?

12 MR. NORTH: Quite frankly I'm not sure,
13 Chris, because this is, again, the federal
14 requirement, and we haven't taken a look at that.
15 They've indicated this is a minimum that would be
16 necessary in order to achieve compliance. So
17 that's something we would probably just have to
18 work out.

19 BOARD MEMBER TWEETEN: So if my
20 consulting company employer has a contract with
21 Black Smoke Industries of Idaho, for example,
22 which is a regulated entity, am I allowed to vote
23 as a Board member or not?

24 MR. NORTH: This rule does not prohibit
25 you from voting. It only says that if there are
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1 four people who are conflicted out, then the Board
2 can't act. And so --

3 BOARD MEMBER TWEETEN: So am I
4 conflicted out then, I guess is my question.

5 MR. NORTH: Exactly. And my initial
6 reaction to that would be you would look at the
7 income of that individual and see how much of it
8 is attributable.

9 CHAIRMAN MILES: That is addressed in
10 the definitions. It's kind of a convoluted
11 definition. And if you're over 60 years of age,
12 your income can differ, but you attempt to get
13 that in there.

14 BOARD MEMBER SHROPSHIRE: If you are a
15 consultant that works for a company that manages,
16 say, Company ABC that has an air permit, but
17 company ABC is not a party -- so when you're doing
18 general rulemaking, they could impact any
19 regulated entity. I'm just not sure how broad it
20 is.

21 MR. NORTH: Madam Chair, Ms. Shropshire.
22 First of all, this does not apply to the
23 rulemaking function. This particular rule only
24 applies if you're deciding a contested case.

25 BOARD MEMBER SHROPSHIRE: Sorry. I
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1 missed that. Thanks. That's what I needed to
 2 understand.
 3 CHAIRMAN MILES: If we need more
 4 conversati on about potential conflict of interest,
 5 we can ask for that maybe at a future meeting, but
 6 this rule is for when we can take action on
 7 contested cases.
 8 BOARD MEMBER SHROPSHIRE: Thank you.
 9 CHAIRMAN MILES: Any other questions?
 10 (No response)
 11 CHAIRMAN MILES: For the record, anyone
 12 in the audience want to comment on this?
 13 (No response)
 14 CHAIRMAN MILES: Pleasure of the Board.
 15 BOARD MEMBER TWEETEN: I move we
 16 initiate rulemaking as requested by the
 17 Department.
 18 CHAIRMAN MILES: It's moved by Chris
 19 Tweeten. Is there a second?
 20 BOARD MEMBER DR. BYRON: Second.
 21 CHAIRMAN MILES: Second by Dr. Byron.
 22 Any discussi on?
 23 (No response)
 24 CHAIRMAN MILES: All those in favor,
 25 signify by saying aye.

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 1 (Response)
 2 CHAIRMAN MILES: Opposed?
 3 (No response)
 4 CHAIRMAN MILES: Hearing none, moti on
 5 passes unanimously. Thank you very much. We are
 6 finally going to open the hearing.
 7 MR. MATHIEUS: Madam Chair, you still
 8 need to call for general public comment on the
 9 last item.
 10 CHAIRMAN MILES: Does anyone want to
 11 comment on anything not covered this morni ng
 12 before we get into the contested case hearing?
 13 Any other topics that you want to bring to the
 14 Board?
 15 (No response)
 16 CHAIRMAN MILES: Seeing none, thank you
 17 for the reminder.
 18 MR. MATHIEUS: Madam Chair, just one
 19 thing I wanted to make the Board aware of. In the
 20 Department's continued effort to catch up with
 21 modern technology, we're looking at video
 22 live-streaming the Board meetings in the future.
 23 And we weren't quite prepared to do that at this
 24 point. I thought it would be more appropriate to
 25 let you know that we're headed into the correct

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 1 century to try to provide opportunity for those
 2 who can't always make it to the Board here that
 3 travel long distances. So look forward to that
 4 hopefully at the next Board meeting.
 5 CHAIRMAN MILES: That will be helpful.
 6 With that, we'll basically adjourn our regular
 7 business meeting, and open the contested case
 8 hearing, and I am going to turn it over to Ben.
 9 (The proceedings were concluded
 10 at 1:40 p.m.)
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C E R T I F I C A T E

1 STATE OF MONTANA)
2)
3 : SS.
4 COUNTY OF LEWIS & CLARK)

5 I, LAURIE CRUTCHER, RPR, Court Reporter,
6 Notary Public in and for the County of Lewis &
7 Clark, State of Montana, do hereby certify:

8 That the proceedings were taken before me at
9 the time and place herein named; that the
10 proceedings were reported by me in shorthand and
11 transcribed using computer-aided transcription,
12 and that the foregoing - 175 - pages contain a
13 true record of the proceedings to the best of my
14 ability.

15 IN WITNESS WHEREOF, I have hereunto set my
16 hand and affixed my notarial seal
17 this day of , 2015.

18
19 LAURIE CRUTCHER, RPR
20 Court Reporter - Notary Public
21 My commission expires
22 March 12, 2016.
23
24
25