



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

3                   \* \* \* \* \*

4                   (Mr. Tweeten not present)

5           CHAIRMAN SHROPSHIRE: It's 9:00 a.m.,  
6 and I'll call this regular meeting of the Board of  
7 Environmental Review to order.

8                   Before we start with the regular agenda,  
9 I'm going to turn it over to Tom to make a couple  
10 of announcements.

11           MR. LIVERS: Madam Chair, members of the  
12 Board, for the record, I'm Tom Livers, Deputy  
13 Director of the Department of Environmental  
14 Quality. A few introductions this morning, and  
15 I'd like to start out with the new Department  
16 Director, Tracy Stone Manning. I've had the  
17 privilege and pleasure of working with Tracy for  
18 seven months now.

19                   And I have to tell you I'm very proud of  
20 the direction the Department has been heading for  
21 the last several years in terms of how we do our  
22 job, our systems, our people, our service,  
23 transparency; and working with Tracy, I see that  
24 we're clearly going to be continuing that  
25 trajectory, and maybe even better than we were

1 before. So I'm really happy to see that direction  
2 continue. So Tracy.

3 MS. STONE-MANNING: I'll be formal and  
4 I'll come to the mike. Good morning, everyone.  
5 Thank you, Tom. That was lovely. I'm telling  
6 Richard. So Tom is right. Here I am seven months  
7 in, and am very proud to be here working with  
8 spectacular colleagues, and I very much look  
9 forward to working with the Board, and to our new  
10 members. Welcome. Thanks.

11 MR. LIVERS: We have also new Board  
12 members. Marietta Canty is taking the science  
13 position that Marv Miller had; Joan Miles has the  
14 local government expertise position that Joe  
15 Whalen filled previously; and Chris Tweeten is the  
16 attorney. Every quasi judicial board is required  
17 to have an attorney as a member, and Larry  
18 Anderson formerly filled that role, and Chris is  
19 filling it now.

20 If any of you want to say anything, or  
21 you don't have to. Then I'd like to congratulate  
22 Robing Shropshire as the new Chair of the Board of  
23 Environmental Review. And also want to take just  
24 a minute to thank Joe Russell for his previous  
25 service as chair. He was appointed to this Board

1 by Governor Racicot, reappointed and appointed  
2 Chair by Governor Martz, and reappointed and  
3 reappointed Chair by Governor Schweitzer, so  
4 that's a pretty amazing run really; and in that  
5 time, we've navigated some pretty tough issues --  
6 coal bed methane; mercury; fine particulates;  
7 outstanding resource waters; top down BACT, best  
8 available control technology. This Board has done  
9 some very good work with some very tough issues,  
10 and it's in no small part due to Joe's leadership.  
11 Thank you, Joe.

12 CHAIRMAN SHROPSHIRE: All right. I  
13 guess I just want to add to that. I've had the  
14 pleasure of working with Joe on this Board for  
15 almost nine years -- hard to believe -- and during  
16 that time, I think everybody can attest to his  
17 leadership, and treating all of the stakeholders  
18 with respect, and running the meetings very well.  
19 And I think through all those times, my experience  
20 has been that he's had a fierce resolve to get  
21 things right, and to follow the process, and led  
22 with humility and humor, and I have big shoes to  
23 fill. So thanks for your leadership, and I guess  
24 we'll move on.

25 (Mr. Tweeten present)

1                   CHAIRMAN SHROPSHIRE: We just made  
2                   introductions, Chris.

3                   MR. TWEETEN: I'm Chris. You all knew  
4                   that already.

5                   CHAIRMAN SHROPSHIRE: Moving along, the  
6                   first order of business on the agenda is to review  
7                   and approve the minutes of the May 17th, 2013  
8                   meeting.

9                   MR. MIRES: I have some corrections.  
10                  Page 2 of 5, on the group at the very beginning,  
11                  it says, "Review and approve May 17th Board  
12                  minutes," and then it said Mr. Mires moved to  
13                  approve the May 17th. I think those both need to  
14                  be March 22nd, don't they?

15                  MR. LIVERS: Yes, they do.

16                  MR. MIRES: Those are the only two  
17                  places, two corrections I had.

18                  MR. LIVERS: Madam Chair, we'll make  
19                  that correction.

20                  CHAIRMAN SHROPSHIRE: Any other  
21                  comments?

22                  (No response)

23                  CHAIRMAN SHROPSHIRE: As far as process,  
24                  maybe it makes more sense for the Board members  
25                  that were here at the time to move and second,

1 so --

2 MR. MIRES: I would move and second with  
3 the corrections.

4 MR. RUSSELL: I would second that.

5 CHAIRMAN SHROPSHIRE: Anything else?

6 (No response)

7 CHAIRMAN SHROPSHIRE: All those in  
8 favor, signify by saying aye.

9 (Response)

10 CHAIRMAN SHROPSHIRE: Motion carries  
11 unanimously.

12 The next item on the agenda are briefing  
13 items. Katherine, I don't know that you need an  
14 introduction, but if I could turn it over to you.

15 MS. ORR: Good morning, everybody.  
16 Madam Chair, members of the Board. You've had an  
17 opportunity to review this agenda, and so what  
18 I'll do is I'll just add to it regarding matters  
19 that have developed since the writing of the  
20 agenda.

21 On Item II(A)(1)(b), which is entitled  
22 "In the Matter of Violations of the Sanitation and  
23 Subdivisions Act by Levi Britton, 80th Street  
24 Estates Subdivision," my understanding is that the  
25 parties have reached settlement, and there'll be a

1 proposed stipulation for dismissal and order for  
2 the Board probably in the next hearing.

3 Then on Item II(A)(3)(a), William Smith  
4 on behalf of Mike Adkins. If you remember, this  
5 is a challenge to the issuance of a license to the  
6 Adkins, who are proposing to put in a waste tire  
7 monofill land disposal site in the Paradise  
8 Valley.

9 And I just received a report from the  
10 Department yesterday that indicated that the  
11 District Court has issued -- this case was stayed  
12 pending determination by the Court of pending  
13 matters before it, primarily regarding compliance  
14 with MEPA; and according to the report that the  
15 Department filed, the District Court has  
16 determined that MEPA was not followed correctly.  
17 And if you don't mind, I'll just read some of  
18 these entries that the Department submitted that  
19 are what the Court ruled.

20 It says, "It is the order and judgment  
21 of this Court that DEQ has failed to comply with  
22 the requirements of MEPA, there being clear and  
23 convincing evidence in the record that DEQ's  
24 failure to prepare an Environmental Impact  
25 Statement was an error in judgment based on the

1 criteria set forth in the various rules. This  
2 matter is remanded to DEQ with the directive that  
3 the Environmental Assessment be corrected to  
4 address all of the deficiencies.

5 "Upon correction of the deficiencies in  
6 the Environmental Assessment that are raised by  
7 the Court's decision, the DEQ shall then be  
8 required to perform an Environmental Impact  
9 Statement.

10 "The Solid Waste Management Act was  
11 violated by the DEQ for its failure to abide by  
12 the financial assurance requirements prior to the  
13 final agency decision.

14 "The Court declines to address the  
15 constitutional question raised by the Petitioner.  
16 The motion to strike filed by the DEQ is denied.  
17 The motion for a stay is moot, and is therefore  
18 denied as well."

19 So if you recall the order that the  
20 Board entered -- there was a hearing about a year  
21 and a half ago on this -- was to the effect that  
22 its proceeding would be stayed pending a judgment  
23 from the Court, and we have that now, and what I  
24 would propose -- this is not a case that you've  
25 assigned to me -- but what I would propose is you



1 authorize me to talk to all of the parties in this  
2 interim before the next Board hearing to see  
3 whether, one, the Department may appeal this  
4 decision, and sort of the next steps; and then I  
5 can report that to the Board; and then the Board  
6 can determine what it wants to do next. If that's  
7 to the Board's liking, I will do that.

8 CHAIRMAN SHROPSHIRE: Do we vote on  
9 anything like that or just acknowledge --

10 MS. ORR: I don't think you have to  
11 vote, but does that make good sense to you?

12 MR. RUSSELL: Robin, I wonder -- If we  
13 don't take any action, then Katherine will  
14 continue to do our bidding anyway. So you would  
15 do that as a matter of course anyway.

16 MS. ORR: Right. So just by way of  
17 bringing you up to date on that.

18 CHAIRMAN SHROPSHIRE: Okay.

19 MS. ORR: And I'll have a report for you  
20 in the next meeting.

21 CHAIRMAN SHROPSHIRE: Any other  
22 questions?

23 (No response)

24 CHAIRMAN SHROPSHIRE: All right.

25 MR. LIVERS: Just for the record, it

1 sounds like there is general consensus to proceed  
2 that way.

3 MS. ORR: Okay. The next item is "In  
4 the Matter of the Notice of Appeal and Request for  
5 Hearing by Western Energy." There has been a  
6 substantive motion for intervention, and briefing,  
7 and a hearing on that, and I'm just about to issue  
8 a decision on that for the intervention.

9 And also there was a motion for pro hoc  
10 vice filed to admit a Mr. Martin, out of state  
11 Counsel, and I granted that in early July.

12 And other than that, there have been no  
13 further developments on these agenda items.

14 CHAIRMAN SHROPSHIRE: All right.

15 MR. LIVERS: Madam Chair, one thing I  
16 might point out is the scheduling on (c) and (d),  
17 or the potential scheduling on (c) and (d). I  
18 think they're currently set so that -- they're two  
19 somewhat related cases, and it's currently set to  
20 hear Colstrip in December and Corette in January  
21 or February.

22 It is my understanding that there has  
23 been some discussion among the parties that it  
24 would be more efficient for all involved for both  
25 the parties and the Board to hear those

1 essentially at the same time, successively over  
2 the same number of days. So I think there is  
3 discussion that if the Board agrees, that might be  
4 moved to January.

5 So we would not hear Colstrip, the Board  
6 would not hear Colstrip in December. Instead we  
7 take three or four days over the course of a week  
8 in January to do that, and what the Department was  
9 considering proposing is I think the week of the  
10 13th possibly having the Board meeting on the  
11 front end, since there is some unpredictability on  
12 how long the hearing will last. We could do the  
13 Board meeting potentially on Tuesday the 13th in  
14 the morning, and then potentially start the  
15 hearing for the case that afternoon, Tuesday  
16 afternoon, and running then through Wednesday and  
17 Thursday, something like that.

18 So I don't know if folks have schedules  
19 with them at this point to see if that seems  
20 workable, or possibly work through Katherine on  
21 that and be in on the scheduling, and we can find  
22 a time that's going to be acceptable to the Board.

23 CHAIRMAN SHROPSHIRE: Anybody know of  
24 any potential conflicts with that week now?

25 MR. TWEETEN: Which week was that?

1 MR. LIVERS: We were looking at the 13th  
2 through the 15th probably.

3 MR. TWEETEN: January?

4 MR. LIVERS: Yes.

5 MS. WITTENBERG: 14th through the 17th;  
6 14th, 15th, 16th, and possibly the 17th if we  
7 needed it.

8 MR. LIVERS: Sorry. My mistake. 14th,  
9 15th, 16th, and possibly the 17th if we need to.

10 MR. RUSSELL: I would have a conflict on  
11 the 16th.

12 MR. TWEETEN: I may be gone that entire  
13 week. I may be. I'm not sure yet.

14 MR. LIVERS: You folks know at this time  
15 we can discuss this off line, and if it sounds  
16 like that week might be problematic, we could do  
17 it either way, either before or after. If there  
18 are no known conflicts at this point on the  
19 following week, we can shoot for that and try to  
20 get that scheduled.

21 MR. MIRES: That starts off with Martin  
22 Luther King Day on that Monday, so Tuesday is  
23 open.

24 MR. LIVERS: So --

25 CHAIRMAN SHROPSHIRE: The following

1 week, what's the --

2 MR. TWEETEN: The 20th is Monday.

3 MR. MIRES: 21st through the 24th.

4 MR. LIVERS: The only question I'd have  
5 is if it would be problematic for folks to travel  
6 that night, Martin Luther King Day. If it is, we  
7 can --

8 MR. RUSSELL: That's fine, Robin, and I  
9 would prefer traveling on the holiday. Since I  
10 think I'm the only one that's actually actively  
11 working for government, it would save me a day at  
12 the office.

13 CHAIRMAN SHROPSHIRE: Okay.

14 MR. LIVERS: We will shoot then for the  
15 Board meeting on Tuesday the 21st, assume the  
16 Board meeting will probably finish by noon, and  
17 start the hearing that afternoon, and it will run  
18 through Wednesday and Thursday, and if we need it,  
19 Friday.

20 CHAIRMAN SHROPSHIRE: That makes sense  
21 to me.

22 MS. KAISER: So did I hear right? Was  
23 that going to be in Colstrip?

24 MR. LIVERS: Madam Chair, Ms. Kaiser, it  
25 will be in Helena.

1 MS. KAISER: Okay. I couldn't hear you  
2 very well.

3 MR. LIVERS: I'm sorry about that. I  
4 apologize. The two cases involve Colstrip and  
5 Corette, but the hearing will be here in Helena.

6 CHAIRMAN SHROPSHIRE: If I recall,  
7 Heidi, you had recused yourself from one or both  
8 of those. Would you still attend? Am I  
9 remembering that correctly?

10 MS. KAISER: Yes, you are, and that was  
11 a question. Yes, I did recuse myself, and will.

12 CHAIRMAN SHROPSHIRE: As far as  
13 attending, I don't know if that's optional or not,  
14 but --

15 MS. ORR: If I can answer, I think it  
16 would be fine for her to attend.

17 CHAIRMAN SHROPSHIRE: Did you hear that,  
18 Heidi?

19 MS. KAISER: I did. Thanks.

20 CHAIRMAN SHROPSHIRE: Any questions for  
21 Katherine on the contested cases?

22 (No response)

23 CHAIRMAN SHROPSHIRE: All right. The  
24 next item on the agenda are some briefing items  
25 from the Department, and I think we're going to

1 need to move so that we can see this screen here.

2 MR. LIVERS: There is some additional  
3 chairs. I apologize for the disruption, but if  
4 you could position yourself. It is going to be a  
5 fairly lengthy briefing on the first item, and  
6 there will be a power point. The first item  
7 involves nutrients and several water quality  
8 issues. And it's just a briefing, so there can be  
9 give and take and questions.

10 This is in anticipation of some  
11 rulemaking that will come up either at the October  
12 or December meetings, and we wanted to spend some  
13 time just providing some background on several  
14 related issues, how they interrelate, in  
15 preparation for the rulemaking. I'm going to turn  
16 this over, so go ahead and get repositioned, and  
17 Mark Bostrom, who is Chief of our Water Quality  
18 Planning Bureau, is going to present for the  
19 Department.

20 MR. BOSTROM: Good morning, Madam Chair,  
21 members of the Board. My name is Mark Bostrom,  
22 Bureau Chief of the Water Quality Planning Bureau  
23 at Montana DEQ.

24 Before I get into this briefing, I'd  
25 like to take a moment to introduce the Science

1 Program Manager for Water Quality Standards, Mr.  
2 Eric Urban.

3 Eric received his bachelors of science  
4 from the University of Montana in 2000, and he's  
5 been with the Department for ten years. He's  
6 worked in the Industrial Energy Minerals Bureau,  
7 Public Water Supply, and started his career with  
8 DEQ at Water Quality Planning Bureau.

9 Eric leads a team of highly talented  
10 staff that is dedicated to achieving the  
11 Department's mission through objective common  
12 sense science. Eric and the staff in the Water  
13 Quality Standards Section are the professional  
14 scientists that will be presenting several water  
15 quality related rulemaking recommendations,  
16 including the numeric nutrient criteria, to the  
17 Board in the near future.

18 The Water Quality Standard Section's  
19 lead professional scientist is Dr. Michael Suplee.  
20 Dr. Suplee received his bachelors of science from  
21 Cal State Sacramento in 1986, and Ph.D. from Texas  
22 A&M in 2000. Dr. Suplee has been with the  
23 Department for 15 years, all with the Water  
24 Quality Standards Section.

25 Dr. Suplee received the Bureau Chief



1 Award in 2009 recognizing him as one of the  
2 Bureau's leading staff; and in 2010, the  
3 Governor's Award for Excellence on Team Projects  
4 for his work with Kyle Flynn, soon to be Dr.  
5 Flynn, for their work using models to develop  
6 large river nutrient criteria.

7 Along the way, the methods he's  
8 developed for determining numeric nutrient  
9 standards, along with the innovative  
10 implementation approaches he has come up with, are  
11 recognized nationally, and will help model the way  
12 for other states as they approach this. Dr.  
13 Suplee will speak of his work in just a moment.

14 The State's briefing item is the  
15 nutrient reduction strategy. The Department has  
16 been working on the development of numeric  
17 nutrient standards for over a decade. Fairly  
18 early in the development, it was recognized that  
19 the low numbers required to protect Montana's  
20 waters would present significant implementation  
21 issues. Knowing this, efforts were initiated to  
22 create a tool box of discharge alternatives and  
23 implementation approaches to achieve success in  
24 reducing nutrient pollution.

25 Over the past three legislative

1 sessions, the Department has either led or  
2 supported legislation to create this tool box.  
3 Bills related to the nutrient reduction strategy  
4 include Senate Bill 200, which I believe was three  
5 sessions ago, which is the phosphorus detergent  
6 ban. Essentially this is directed at the supply  
7 chain for high phosphate content detergents,  
8 advanced these in counties with waters that have  
9 both numeric nutrient criteria and impaired  
10 waters, which upon adoption of the rule package  
11 for numeric nutrient standards will pretty much  
12 include all counties.

13 Three sessions ago, Senate Bill 95.  
14 That was titled "Temporary Nutrient Criteria." It  
15 was really the first attempt at developing a  
16 phased implementation structure for the numeric  
17 nutrient criteria implementation.

18 Two sessions ago --

19 MS. KAISER: Excuse me. Mark, can you  
20 please speak up just a little bit. I'm having a  
21 little bit of difficulty hearing you.

22 MR. BOSTROM: Thank you. So two  
23 sessions ago, Senate Bill 367 basically took what  
24 Senate Bill 95 started and modified it, and that  
25 provides for nutrient standards variances on a

1 general and individual basis. And the variance  
2 allows a 20 year period for treatment systems to  
3 be capitalized and developed in a phased manner  
4 over that period, and also it helps -- over a 20  
5 year period, we expect that innovations in the  
6 technology of treatment will catch up to these low  
7 nutrient standards.

8           House Bill 52, which was a wastewater  
9 reuse bill, that legislation established the  
10 authority for the Department to authorize  
11 alternatives to discharge to surface water, such  
12 as land application and snow making. House Bill  
13 52 was a mixing zone limit. That statute requires  
14 that mixing zones for individual septic systems do not go  
15 across the property boundaries where they're  
16 located.

17           Outside of the statute, the Department  
18 recommended and the Board adopted a Nutrient  
19 Trading Policy to allow improvements in water  
20 quality that create assimilative capacity upstream  
21 to be used to other dischargers that are  
22 struggling, either economically or technology  
23 wise, to meet the low nutrient standards.

24           The Department is investing in numerous  
25 nonpoint source reduction projects through its

1 Clean Water Act 319 grant program, and is looking  
2 forward to increased coordination with NRCS, and  
3 their environmental quality incentives program.  
4 They've got a new facet to that called the  
5 National Water Quality Initiative, and the  
6 directive of both funding sources asked that these  
7 are coordinated, implemented in a coordinated  
8 manner in priority watersheds, so a focus of that  
9 is nonpoint source nutrient pollution.

10 Next up, Dr. Suplee is going to inform  
11 the Board of his science and work with the  
12 Nutrient Work Group in developing numeric nutrient  
13 standards and the variance process.

14 DR. SUPLEE: Madam Chair, members of the  
15 Board. Good morning. My name is Dr. Michael  
16 Suplee, and today I want to present to you an  
17 overview of our draft numeric nutrient criteria,  
18 and the implementation process that we've been  
19 working on and is still in development.

20 Just as an outline of what I'll be  
21 talking about today. First I'll spend a fair  
22 amount of time on the numeric nutrient criteria  
23 themselves, what we've done in Montana, what's  
24 going on nationally. I'll touch on the status of  
25 the Clark Fork River since this Board adopted

1 nutrient standards for that river some years ago.  
2 You may be curious to see what's been going on  
3 since.

4           These next two items on nutrients effect  
5 to beneficial uses, streams, large rivers, and  
6 lakes, and how those criteria are derived. I'll  
7 spend a fair amount of time on that, because  
8 that's the scientific basis of the criteria that  
9 we would present to you down the road for  
10 adoption.

11           I'm also going to briefly some topics  
12 pertaining to how numeric nutrient criteria would  
13 be permitted in our permitting program, what we  
14 propose. I'll discuss the variances that Mark  
15 Bostrom mentioned a little bit. I'll go into that  
16 in a little bit more detail. Then I'll elaborate  
17 on ongoing work with the Nutrient Work Group,  
18 which is an advisory group that we've been working  
19 with extensively on topics, and those will include  
20 nondegradation, steps in reducing nutrients for  
21 wastewater treatment plants, and some other things  
22 that we're working on.

23           I thought I'd start off, first of all,  
24 by just explaining or defining what nutrients are,  
25 because they mean a lot of different things to

1 different people. If you're in human health  
2 environment, you might think of nutrients as  
3 something -- eating properly, for example.

4 In a water quality context, what we're  
5 really referring to when we talk about nutrients  
6 are concentrations of nitrogen and phosphorus.  
7 Those are the two major nutrients that tend to  
8 have the largest effects in aquatic environments  
9 that we see. We're typically talking about total  
10 nitrogen and total phosphorus, but they also  
11 include the soluble fractions, such as nitrate,  
12 nitrite, ammonia, and soluble phosphate.

13 The thing I want to point out is the  
14 concentrations that we'll be talking about today  
15 are to prevent surface water over-enrichment by  
16 nutrients, and these are at much lower  
17 concentrations than the ones that are already  
18 adopted to protect human health. We already have,  
19 for example, a human health standard for nitrate,  
20 ten milligrams per liter. That's to protect human  
21 health for certain types of syndromes; and for  
22 that reason -- but these concentrations are at  
23 much lower levels than that, so I just wanted to  
24 make that distinction.

25 So the question often arises, "Why do we

1 want to develop numeric nutrient criteria?,"  
2 because we do have an existing standard that  
3 essentially gets at the types of issues that  
4 nutrients cause in the environment. Our existing  
5 standard, one of them, narrative standard, is  
6 waters must be free from substances which produce  
7 undesirable aquatic life. This is relatively  
8 straight forward to link that standard back to  
9 effects of nutrients.

10 And another thing that nitrogen and  
11 phosphorus over-enrichment do is that they affect  
12 other water quality standards that we already have  
13 adopted. They have a tendency to impact dissolved  
14 oxygen, pH, and also things like nuisance algal  
15 growth.

16 The main advantage for numeric nutrient  
17 standards is that they can provide more consistent  
18 permitting in TMDL application, and more  
19 transparency as to what is the ultimate goal, the  
20 end target for environmental protection.

21 So this is an overview of what our  
22 criteria development has looked like over the last  
23 decade here in the state.

24 In the 1990s -- and I'm sure many of you  
25 are familiar with this -- the Clark Fork River,

1 which has had extensive nutrient issues -- heavy  
2 growth of filamentous algae problems, dissolved  
3 oxygen issues, etc. -- they derived criteria for  
4 that river; and then a voluntary nutrient  
5 reduction program was put in place in the 1990s.  
6 In 1998, that document was signed by major  
7 dischargers along the river. So that was a big  
8 event at that time.

9 In 2001, we began here in the Department  
10 to work on nutrient criteria for all surface  
11 waters, to move beyond just the Clark Fork Basin.  
12 In 2002, the Clark Fork criteria were adopted as  
13 standards by the Board of Environmental Review.

14 Over the next six years, we worked on  
15 the details of developing the criteria for  
16 wadeable streams. We also developed a system for  
17 defining where different criteria would apply in  
18 different parts of the state, because they're not  
19 the same everywhere. And we also initiated our  
20 large river criteria.

21 And then that was about the point in  
22 time where it was pretty clear that the numbers we  
23 were coming up with were going to be low,  
24 difficult to meet, and there were going to be  
25 implementation issues, and we really began to



1 reach out to the affected public and discuss with  
2 them how this would get implemented.

3 As a result in 2009, Senate Bill 95 was  
4 adopted, and that allowed variances from nutrient  
5 standards on a case-by-case basis, and the  
6 Nutrient Work Group was created. In 2011 that was  
7 modified again by Senate Bill 367, and that  
8 allowed for general variances. I'll detail what  
9 those look like later in the presentation. Then  
10 since that time, we've really been working with  
11 the Nutrient Work Group extensively on refining  
12 the implementation process so that it will be  
13 functional once we adopt these criteria.

14 Nationally, what's going on? Nationally  
15 -- I'm just pulling up rivers and streams in this  
16 case -- there are a lot of states have individual  
17 lakes for which they've adopted nutrient  
18 standards. Rivers and streams are trickier,  
19 they're more difficult to adopt criteria for, and  
20 that's a lot of the emphasis of what we're talking  
21 about today.

22 There are a grand total of ten states  
23 that have site specific criteria, and four have  
24 statewide criteria for phosphorus for their  
25 rivers; and there are three states nationally that

1 have statewide criteria for nitrogen, and six have  
2 site specifics, and you can see Montana is  
3 included there as one of the states with site  
4 specific criteria. So implementation nationally  
5 is progressing slowly.

6 I want to take a step back a moment and  
7 just kind of give the Board an overview of what  
8 has been going on in the Clark Fork River, since  
9 that was the first place that standards were  
10 adopted for nutrients in the state.

11 Going back even further, back to 1989, a  
12 basin wide phosphorus laundry soap ban was put in  
13 place, and in retrospect -- we've done some  
14 analysis -- that was the single most effective  
15 phosphorus reduction action that has occurred  
16 since that time; and that's part of the reason why  
17 adopting nutrient standards which would tend to  
18 implement Senate Bill 200 and its nitrogen and its  
19 phosphorus reducing for laundry soaps would also  
20 be effective, because we know that that would be  
21 effective.

22 Ten years subsequent to that time, the  
23 voluntary nutrient reduction program was signed;  
24 and in 2002, the Board of Environmental Review  
25 adopted those nutrient and algae standards for

1 that river. Those are the concentrations, 20 to  
2 39 for total phosphorus, and 300 micrograms for  
3 total nitrogen, and a level of algae, which I'll  
4 get into the details of what that means in a  
5 moment.

6 In 2004, Missoula did a major wastewater  
7 treatment plant upgrade. There was a fair amount  
8 of nonpoint source work that occurred in the  
9 watershed. Incidentally, Butte is also looking at a  
10 major upgrade by July 2015.

11 We did some trends analysis to see how  
12 the river was improving, and that work is  
13 published. From 1998 to 2009, it was found that  
14 total phosphorus significantly declined basin wide  
15 as a result of the efforts that I briefly touched  
16 on.

17 Total nitrogen did not significantly  
18 decline basin wide. However, it was trending down  
19 stream of Missoula. The algal biomass, that was  
20 kind of the target of a lot of this work,  
21 significantly declined in all sites downstream of  
22 Missoula, so clearly that upgrade had a major  
23 effect. And they're being met consistently  
24 downstream of Missoula.

25 In contrast, algae problems are still a

1 significant issue upstream of Missoula, but we  
2 anticipate that some of the changes we may be  
3 seeing, like this very nice wastewater facility  
4 that's going to be going in in Butte, and hope to  
5 see the upper part of the river improve as well.

6 So that's just a quick overview of how  
7 things have gone since about the time and before  
8 the time that the Board adopted those standards.

9 So when we're talking about controlling  
10 something that nutrients do, this is one of the  
11 big ones that we typically see in Montana:

12 Nuisance algal growth in our rivers and streams,  
13 usually in summer. It can get quite dense, as you  
14 can see in some of these photos, like on the left.

15 We've done public perception surveys,  
16 and we've done other types of studies, and one of  
17 the things that we typically do is we characterize  
18 the amount of algal growth on the bottom as  
19 Chlorophyll A per square meter of stream bottom.

20 So for example, on the far left photo,  
21 you can see a stream, that is your typical western  
22 Montana trout stream, relatively clean bottom  
23 gravels; that has 40 milligrams of chlorophyll per  
24 meter squared. In the middle, 120, and you can  
25 see it's a little greener. That's actually

1 approaching what our public perception surveys  
2 have shown people consider to be kind of a limit  
3 for acceptable recreation. It also links to some  
4 DO issues, which I'll talk about in a moment.

5 And then when you start to get into the  
6 very nutrified systems, you start seeing high  
7 levels, like there on the right, where you get  
8 long stringers of pithophora, filamentous algae.

9 So I'm going to spend a moment on this  
10 slide. There is a lot going on here, but it's  
11 kind of important, because we have the ability to  
12 link nutrient concentrations to specific benthic  
13 algae levels, and it's really the benthic algae  
14 levels that we often see are then in turn what  
15 affect beneficial uses.

16 So starting from the top, we know from  
17 our work that recreation is largely or completely  
18 acceptable to the Montana public when algae levels  
19 in stream systems are 150 milligrams of  
20 chlorophyll per meter squared or less. Beyond  
21 that, it is considered unacceptable. So that kind  
22 of links to the recreational beneficial use.

23 When we look at macroinvertebrate  
24 population, at the very bottom there, on the far  
25 left you'll see kind of a classic trout fishing

1 scenario, where a stream is dominated by stone  
2 flies, may flies, and caddis flies. There's  
3 generally a shift in the biomass and community  
4 structure in the approximate area of that same  
5 algae level, around 150; and then when you get out  
6 to the far right, where we have very dense algae;  
7 midges, worms, scuds, tend to dominate, so you're  
8 moving into a very different type of system.

9 In terms of dissolved oxygen, we  
10 generally see no dissolved oxygen problems at low  
11 algae levels, and those midranges around 150, they  
12 tend to be sporadic or seasonal; and then out at  
13 the high ends, we'll see DO problems very likely,  
14 including every night as the sun goes down, during  
15 the night, the DO will drop below standards.

16 If you look at the way this affects  
17 salmonid fisheries -- this is just one of the  
18 fisheries groups, but it is an important -- it's  
19 kind of interesting how this works. At very, very  
20 low levels of algae and nutrients; as you increase  
21 that to some degree, you'll actually get an  
22 improvement in salmonid growth and survival,  
23 because there is more food to eat, there's more  
24 aquatic insects, and that sort of thing. They've  
25 done a lot of work on the Pacific coast with

1 salmon fisheries that work out some of the  
2 details.

3 In this middle zone where we are talking  
4 about algae levels that are harm to use for  
5 certain other uses, salmon growth and survival,  
6 depending on the literature you look at, is  
7 generally high; or you may start to see reductions  
8 as you move further out beyond this, so this is a  
9 little bit of a gray area in terms of salmonids.  
10 Once you get out to these high algae levels,  
11 because of the DO problems, the change in the food  
12 structure that they're accustomed to, etc., then  
13 you'll start to see impacts to the salmonids. So  
14 this is all relevant to our western Montana water  
15 systems.

16 Eastern Montana, of course, comprises  
17 from an aerial perspective nearly three quarters  
18 of the state. We also see DO problems, but we're  
19 using different assessment tools, and they also  
20 link to nutrients.

21 In the eastern part of the state, the  
22 streams tend to be turbid, they're warmer, they  
23 have different fishery structure, low gradient;  
24 and one of the tools that we found to be very  
25 useful is this thing called DO Delta, so I would

1 draw your attention to the graph in the upper left  
2 corner.

3 And what DO Delta is is if you go out  
4 and measure dissolved oxygen throughout the day  
5 and into the next day basically continuously,  
6 there is a daily minimum and a daily max; and what  
7 has been found by our own work and work in other  
8 states is that that Delta, that difference between  
9 the daily low and the daily high, links to other  
10 types of issues.

11 So for example, below about a DO Delta  
12 of five, we have not observed any dissolved oxygen  
13 problems in these stream types. In contrast, when  
14 you look at high DO Deltas of seven, eight, etc.,  
15 then we see our state dissolved oxygen standard  
16 violated at least seasonally when the algae tend  
17 to synness (phonetic) at the end of the season,  
18 and they're decomposing in the stream bottom,  
19 sometimes the DO will go down to nearly zero at  
20 the bottom.

21 In other states, they have found that at  
22 low DO Deltas below five, there is a diverse  
23 fishery -- warm water fish of course -- including  
24 a number of sensitive species. Those tend to wink  
25 out as you move to the right, and you lose those



1 species, and it becomes dominated by tolerant  
2 ones, such as carp. So this is the shifts in a  
3 aquatic life and fisheries that we see in  
4 association with this DO Delta in prairie streams.

5 So when we went to derive numeric  
6 nutrient criteria for wadeable streams, there were  
7 really three major pieces that we had to give  
8 consideration to. The first was we had to  
9 identify geographic zones for specific criteria.  
10 We had to have some understanding of the  
11 cause/effect relationship between nutrients and  
12 the beneficial uses -- we've looked at some of  
13 that. That requires an understanding of harm to  
14 use, and different expectations are set for  
15 different regions of the state. We've touched on  
16 some of them already in the previous two slides.

17 Thirdly, we've characterized the water  
18 quality from reference sites, and ultimately we  
19 have looked at two and three, the dose response or  
20 cause effect studies and reference sites data  
21 together, and I'll show you how we did that in a  
22 moment.

23 So first let's look at the geospatial  
24 frame, or the mapping system that you would use to  
25 make sure that correct nutrient standards are

1 applied in the correct parts of the state. So  
2 it's well known that nutrient concentrations vary  
3 naturally. Geology, soils, climate, vegetation,  
4 all these factor into what you might see going  
5 down streams at any given time.

6 So we tested three frameworks that were  
7 very likely to have been successful, based on  
8 extent of knowledge, to see which one would work  
9 best for us. We looked at something called  
10 ecoregions; we looked at surficial geology; and we  
11 looked at Strahlee stream order, which is a  
12 surrogate for watershed size.

13 When you look at these frameworks, what  
14 you're looking to see is the best frame, the one  
15 that will maximize the variability between the  
16 zone, and minimize the variability within a zone.  
17 So each zone should be relatively homogenous, but  
18 very different from the other ones.

19 And we focused on our reference stream  
20 data for these zones, so that we would make sure  
21 that the system we came up with was based on  
22 national system processes.

23 What we found was is that Level 3 and  
24 Level 4 ecoregions -- that's a coarse and a fine  
25 scale -- we'll get to that in a moment -- they

1 worked better than the other two. They could  
2 explain about 60 to 78 percent of the variation in  
3 our reference data, which for a surficial mapping  
4 system is pretty good; and also very important,  
5 they're practical to apply.

6           Surficial geology was actually not too  
7 much different than ecoregions, but the geology of  
8 Montana is so splintered that to try to turn that  
9 into a workable functioning system for people to  
10 apply in permits, etc., would be really, really  
11 complicated, so this was a more broad brush  
12 system, and it explained better in fact than the  
13 geology did.

14           So this map here shows what the  
15 different ecoregions look like, so the major  
16 colored zones -- For example, this dark green area  
17 here, this is the middle Rockies; we have the  
18 northern Rockies; Canadian Rockies; out here we  
19 have two different plains ecoregions.

20           We have basically three major zones:  
21 The mountainous stream systems to the left side of  
22 the state, and there is a photo of an example of  
23 that type of system; there is a transitional zone  
24 along the Rocky Mountain Front, which was unique,  
25 and which we have derived criteria for those

1 streams; and then in the prairie region, we have  
2 criteria as well.

3 As a general rule, we're developing  
4 criteria for each of the major colored areas, or  
5 the black area; and then within there you'll see  
6 these small lines that represent what they call  
7 the Level 4 ecoregions. They're a smaller scale  
8 piece of the larger ecoregions. In some cases we  
9 have recommended criteria for these smaller areas,  
10 one where they were appropriate, because the local  
11 geology or other effects made that area different  
12 from the larger ecoregion.

13 So I mentioned the effects that  
14 nutrients have on aquatic life and fisheries, and  
15 a lot of that came from these dose response  
16 studies that were carried out either in the state  
17 or in ecoregions which are in Montana. We also  
18 looked at a number of studies that were carried on  
19 outside of Montana to help us look at the full  
20 range of potential criteria.

21 Lastly our reference sites. So we have  
22 a network now of 185 reference streams across the  
23 state. We've been sampling these continuously  
24 since 2000; not every stream every year, but the  
25 network. There was some work done prior to that

1 as well.

2 And these stream sites, I should point  
3 out that we didn't use nutrients, or aquatic  
4 insects, or fisheries to define them as reference.  
5 Instead we looked at GIS, human impacts, logging,  
6 mining effects, etc., etc.; and those that did not  
7 have those other types of factors to any  
8 significant degree, or not at all, then we  
9 selected them as reference; and then whatever  
10 concentrations or aquatic life we found there went  
11 on to define the nutrient concentrations that we  
12 see in these systems.

13 So if we'd done it the other way, it  
14 would be circular. We'd be setting up our  
15 expectations in advance.

16 So this is just one thing that we do as  
17 a cross check. Our criteria are based essentially  
18 on the dose response relationship between  
19 dissolved oxygen and nutrients, or benthic algae  
20 and nutrients; but to make sure that those numbers  
21 are correct, we compare them to the reference  
22 sites from the ecoregions in question.

23 So if you look at a typical region  
24 reference stream distribution, what you'll see is  
25 something that looks like this. So the

1 concentration is running here along the "X" axis;  
2 and when you compare those concentrations to what  
3 we see in our dose response studies, they tend to  
4 fall to the high end. So that's the range of  
5 concentrations where you would expect beneficial  
6 uses to be impacted, out at the far end.

7           So as a general rule, most of our dose  
8 response studies and our criteria that we're  
9 studying are somewhere out here, and sometimes  
10 they're even beyond the highest concentrations  
11 that we have observed in the regional reference  
12 streams. And this makes sense to use, because by  
13 definition, reference streams are unimpacted; they  
14 don't have problems; they fully support their  
15 uses. So a concentration that we set as  
16 essentially at a harm to use threshold should be  
17 uncommon in these streams. If it were common in  
18 these streams, then they would manifest problems.  
19 So that is a way for us to cross check that the  
20 numbers we've come up with largely make sense.

21           MR. RUSSELL: What is frequency?

22           DR. SUPLEE: Frequency is how often any  
23 individual concentration was observed in the data  
24 set in question.

25           MR. RUSSELL: So it is not frequency of

1 testing, it's actually frequency of some  
2 numeric --

3 DR. SUPLEE: Correct. So for example,  
4 let's say this was a milligram per liter right  
5 here. That would be, from a frequency point, the  
6 one most commonly observed, because it's at the  
7 peak of the curve.

8 MS. CANTY: Your nutrients, you're  
9 talking about total nitrogen or total phosphorus  
10 of something?

11 DR. SUPLEE: Yes. This is could be  
12 either TN or TP. Those are the two that we've  
13 looked at.

14 CHAIRMAN SHROPSHIRE: If you break those  
15 apart, do you see one has a larger impact, or how  
16 did the distributions change for nitrogen versus  
17 phosphorus?

18 DR. SUPLEE: They operate on somewhat  
19 different scales. Phosphorus tends to be far  
20 lower in terms of its concentration range than  
21 nitrogen for sure. That is how they would break  
22 out. In one of the documents I'll show you later  
23 on, we actually have all that available for you to  
24 look at at the time that you would be considering  
25 adoption of the criteria.

1 MR. RUSSELL: I guess I have another  
2 question. So the reason why this doesn't look  
3 like standard distribution is the streams you're  
4 picking?

5 DR. SUPLEE: No. The reason it is  
6 skewed to the right is because that is the way  
7 nutrients are typically seen in natural systems.  
8 They're typically -- you'll get a peak, and then  
9 you'll have a long tail, and that's a common  
10 factor in the way --

11 MR. RUSSELL: So if you go 5,000, 6,000  
12 feet into the park, and look at some of the  
13 streams up there, you would see the same type of  
14 distribution.

15 DR. SUPLEE: Yes. You could take any  
16 one of our ecoregions, take all of the reference  
17 sites, and do the distributions, and most of the  
18 time they're going to come out skewed like this.  
19 That's why I show it that way.

20 MR. RUSSELL: So this shows that if you  
21 really generalize this, this is nitrification, and  
22 not like oligotrophic type environments?

23 DR. SUPLEE: No, these are definitely  
24 oligotrophic environments here.

25 MR. RUSSELL: Right, but it is not



1 standard anymore?

2 DR. SUPLEE: Right. But what I'm saying  
3 is that what you'll see is that as you get out to  
4 these higher concentrations, they do occur in  
5 reference streams occasionally -- high flow event  
6 during the summer, or rain event, some kind of  
7 factor -- but what we know relative to the dose  
8 response studies where we see harm to use is that  
9 they occur infrequently, so they're rare events.

10 What we see in streams that are  
11 manifesting nutrient problems, high algae, is that  
12 those kinds of concentrations that are rare in the  
13 reference sites, suddenly they are the common  
14 concentrations. So that would be shifting the  
15 whole distribution level.

16 MR. RUSSELL: So your top of your curve  
17 would be shifting to the right?

18 DR. SUPLEE: Yes, in the streams that  
19 impacted, yes.

20 MR. RUSSELL: So if I went to Ohio, this  
21 would look a lot different?

22 DR. SUPLEE: If I went to Ohio, the  
23 whole thing wouldn't be even on the screen.

24 MR. RUSSELL: I get it.

25 MS. CANTY: So did you correct for

1 temporal variation then, just because you'd expect  
2 the high nutrients with the spring runoff and  
3 surface water --

4 DR. SUPLEE: Yes. This is focused  
5 specifically on the summer growing season, and we  
6 have that defined for each ecoregion on our  
7 analysis that we did earlier, but basically it  
8 runs from July 1 to October 1. That's basically  
9 the same time period that the nutrient standards  
10 for the Clark Fork are established. So this would  
11 be strictly -- This would exclude spring runoff,  
12 winter, all that.

13 So that's kind of the basics on wadeable  
14 streams. So let's just take a moment and talk  
15 about large rivers. I can't give you a full  
16 presentation on what we do with these, but it's a  
17 presentation in and of itself. But we have a  
18 number of rivers in the state that we've  
19 identified as large, and it's pretty intuitive  
20 which ones they are -- Yellowstone, Missouri, etc.  
21 The issue with them relative to wadeable streams  
22 is the methods that we use for the wadable streams  
23 are not workable here.

24 First these large rivers traverse  
25 several ecoregions, so the question is which

1 ecoregional value do you use so you come up with a  
2 region criteria. There is no reference site  
3 population as a point of comparison. Each one of  
4 these rivers is essentially unique. And probably  
5 most importantly, they're deeper and faster than  
6 streams, which changes the light regimes and other  
7 factors, and so they just don't behave the same  
8 way as wadable streams, and so the way nutrients  
9 behave in them is different.

10           Instead we're using a steady state water  
11 quality model, and what these models, basically  
12 what you can do, is once you have a model  
13 calibrated and validated, you can input the  
14 nutrients in the model, and observe the effects on  
15 other water quality standards which we already  
16 have adopted. So you can look at how will  
17 increasing nutrients affect dissolved oxygen, or  
18 pH, or total dissolved gas, or nuisance benthic  
19 algae levels, or for total organic carbon  
20 concentrations, which gets into drinking water  
21 use.

22           We've already completed this work for  
23 the lower reach of the Yellowstone River; we're  
24 working on the middle reach, which includes  
25 Billings; and we are also working on the Missouri.

1 The other ones we'll get to down the road, but  
2 those are our first two that we targeted.

3 This table shows -- this is out of the  
4 draft circular that you would be seeing later on  
5 for adoption -- and it shows how the nutrient  
6 concentrations are set up. So first I'd draw your  
7 attention to the fact that they're not year around  
8 standards. They apply during the time of the year  
9 when nutrients tend to cause the biggest problems,  
10 which is when we have warm temperatures, and  
11 plenty of light to grow the algae and plants that  
12 cause the issues. So you can see it's seasonal.

13 Concentrations typically in western  
14 Montana range around 25 to 300 micrograms for TN  
15 and TP, as you can see. We have some individual  
16 broken out. For example this one here, 17-I, is a  
17 subset of the middle Rockies, and you can see that  
18 the total phosphorus concentration is much, much  
19 higher than the middle Rockies as a whole, almost  
20 three times higher. That's a fact of local  
21 volcanic geology, and so the reference streams  
22 have all high TP in them there as well.

23 You can also note that if you move into  
24 the plains region, the concentrations we're  
25 talking about are much higher, so we're talking

1 about one point -- 110 micrograms TP, and 1.3  
2 milligrams per liter nitrogen in this case, which  
3 is about five times lower than what you see in  
4 western Montana.

5 And we have also developed criteria via  
6 the model that I just mentioned for two reaches of  
7 the Yellowstone River, from the Big Horn to the  
8 Powder, and from the Powder to state line. That's  
9 these numbers down here.

10 One of the things I wanted to point out  
11 -- I think there is some confusion about this out  
12 there in general -- is that most streams actually  
13 already meet these criteria. We've done  
14 probabilistic stream surveys, and extrapolated  
15 those data out to the entire population of streams  
16 in the state, and what they show us is that about  
17 70 to 80 percent of stream miles statewide meet  
18 those total phosphorus criteria for those  
19 different regions; and about 85 percent to 90 of  
20 stream miles meet the TN criteria. The ones that  
21 are not meeting those criteria are usually the  
22 ones where we see the problems.

23 Lakes. Nutrient impacts to lakes are  
24 very similar to what we find in rivers and  
25 streams, just in a different way. We see loss of

1 water clarity, reduced recreation and esthetics,  
2 property value; we see more algae blooms; change  
3 in fish composition; more dense phyto plankton  
4 growth; taste and odor problems with drinking  
5 water reservoirs.

6 So where are we at with the criteria  
7 derivation for lakes and reservoirs? We're under  
8 development. We've collected a lot of field data,  
9 and we are working on it.

10 Large reservoirs, also under  
11 development. We plan to use a modeling approach  
12 for Canyon Ferry, since it's the one that has the  
13 most common complaints that we hear about, with  
14 frequent algae blooms every summer. We'll be  
15 looking at if that is a controllable issue or not.

16 We will be recommending criteria for the  
17 Flathead Lake, since those have been worked out  
18 already. And this was the draft, our draft  
19 recommended criteria for Flathead Lake. These  
20 numbers, there's some changes to some of them, but  
21 basically these numbers were worked out between  
22 the DEQ, stakeholders, and the Flathead Basin  
23 Commission throughout the 1990s, and came to an  
24 agreement. They are very similar to the numbers  
25 that are in the TMDL for the lake.

1           There is some differences I should point  
2 out to you. The lake criteria are year around.  
3 They are assessed at a single location called  
4 mid-lake deep, which is consistently monitored.  
5 Where these differ from the original criteria  
6 arrived at for the TMDL is that we've included  
7 secchi depth. That's water clarity measure. And  
8 the primary productivity is somewhat higher than  
9 was originally recommended because the lake has  
10 shifted its primary production as a result of the  
11 mysis shrimp, which have become established in the  
12 lake, and this reflects that change. Other than  
13 that, all the other numbers are consistent with  
14 the original TMDL targets. So that's sort of the  
15 basics on how we derive numeric nutrient criteria,  
16 where we're at, what we're working on.

17           It was important also to look at how we  
18 would permit these types of criteria. What we've  
19 come up with is that they would be largely based  
20 on the technical support document for water  
21 quality based toxics control, EPA 1999, and what  
22 we're proposing is that parts of that document  
23 that are specific to chronic criteria be used to  
24 permit numeric nutrient standards.

25           We're proposing that nutrient standards

1 be viewed as an average monthly limit only, no  
2 maximum daily, because effects of nutrients don't  
3 manifest in a single day. They take time, weeks,  
4 a couple of weeks before we start to see the  
5 effects in the stream, and so a monthly limit is  
6 much more appropriate, and in alignment with the  
7 time frame over which nutrients cause their  
8 problems.

9 We're using the 95th percentile tables.  
10 Those are a little bit more liberal than the 99th,  
11 which is often used for toxics; and when there is  
12 dilution available -- which is sometimes the case  
13 -- how that upstream water is characterized may be  
14 based on percentiles other than the 95th. It  
15 could be based on the 50th, or the 75th. We've  
16 left that open to the permitting shop.

17 The other change relative to what you  
18 may have seen or are used to seeing is that we're  
19 using a different low flow for permitting. We're  
20 proposing a seasonal 14Q5 as the critical design  
21 flow, so this is the low flow that the permitters  
22 would write the permits to. It is an assumption  
23 of how much water is available for dilution in the  
24 river. And it is the lowest average 14 days  
25 occurring from July through October, and it occurs



1 on average once every five years. This is more  
2 appropriate for nutrients than is the 7Q10, which  
3 an annual, and is a more restrictive water flow  
4 level, and that's the one that's used for toxics.

5 So now I'm going to move into the issue  
6 of implementation. So we've spent a lot of time  
7 over the last five plus years on implementation,  
8 and these graphs summarize in general what the  
9 issue is.

10 So if you are to look at one of our  
11 typical western Montana stream criteria in that  
12 upper graph -- a total peak concentration of 30  
13 micrograms per liter, for example -- and then you  
14 compare that to the wastewater technology limit  
15 that is typically reported by engineers, the error  
16 bar that I show there represents agreement or  
17 variability within the engineering community about  
18 what the limits of technology are, because it is  
19 not a single number. There is some disagreement  
20 depending on who you talk to. So this is an error  
21 bar.

22 The point is that with total phosphorus,  
23 a very high end wastewater facility can just about  
24 meet our total phosphorus criteria at the best.  
25 In contrast, when you look at nitrogen, a typical

1 western Montana stream criterion would be about  
2 300 micrograms per liter; and yet the  
3 concentration for the wastewater limits of  
4 technology are more around 3,000 or 4,000  
5 micrograms. There is an order of magnitude  
6 difference there.

7 This large difference here is what has  
8 led to so much of the discussions and the  
9 implementation component that we've been working  
10 on, because it is just not feasible to achieve  
11 this very easily right now if there is no dilution  
12 available in the stream. You just can't discharge  
13 300 micrograms end of pipe with any feasibility at  
14 this point in time.

15 CHAIRMAN SHROPSHIRE: Can I ask you a  
16 question. The data that support the technology  
17 limits, is that based on existing technology  
18 that's in place?

19 DR. SUPLEE: Yes.

20 CHAIRMAN SHROPSHIRE: So it is not --

21 DR. SUPLEE: It is not cutting edge  
22 stuff coming out of like beta test at a university  
23 or something like that.

24 CHAIRMAN SHROPSHIRE: So you're looking  
25 at actual data from wastewater treatment plants?

1 DR. SUPLEE: Yes, and actual functioning  
2 facilities that can achieve this routinely, and  
3 these sorts of things.

4 So because of that disparity, this is  
5 where the variances have come in. They really  
6 look at cost and other factors. So what they do  
7 is they allow options for communities to receive  
8 temporary relief from the criteria, based on  
9 either the limits of technology or the inability  
10 to pay for treatment, that is, essentially  
11 economics.

12 I should point out that they only apply  
13 to wastewater treatment beyond -- or they don't  
14 apply beyond the national secondary standards. So  
15 this is specific to nutrient standards, these  
16 variances.

17 I put a lot on this slide, but I tried  
18 to compress everything that happened in the two  
19 legislative sessions into a single place, so you  
20 can see how it works. The two bills, 95 and 367,  
21 which are now adopted in statute there, 75-5-313,  
22 what they did is they gave us the authority to  
23 grant variances from nutrient criteria, if and  
24 when those nutrient criteria are adopted. That  
25 would be based on economic harm that would have

1 resulted from immediate implementation of the  
2 standards.

3 If we had said, "Here are the standards  
4 that are adopted, and you have to meet them in  
5 your next permit cycle," that would have not been  
6 economically feasible for people.

7 These variances are good for up to  
8 twenty years. They are reviewed every three years  
9 by standards. And the most widespread one, the  
10 one that is going to get used by the vast majority  
11 of people in the state, would be the general  
12 variance. So if it results -- After they run the  
13 mixing calculations, and look at dilution in the  
14 stream, if the permittee cannot meet the standards  
15 end of mixing zone, but they can meet these  
16 concentrations, they can request a variance.

17 So for a facility that is greater than  
18 one million gallons per day, they would need to  
19 meet one milligram TP per liter and ten milligrams  
20 TN per liter. If they're a smaller facility, it  
21 becomes two, and 15; and for facultative lagoons,  
22 and the small lagoons you see around the state,  
23 they would at this stage in time simply need to  
24 maintain current performance.

25 Individual variances would also be

1 available. This would be for people who would  
2 find even meeting the general variances too  
3 expensive, or they may have special circumstances.  
4 So in Senate Bill 95, we only have individual  
5 variances. Having the general variances will make  
6 the entire permitting process much smoother.

7 We, the Department, have to adopt these  
8 rules into our -- or these numbers which are  
9 currently in statute need to be adopted into rule  
10 by May of 2016, so we're presuming that the  
11 nutrient standards are in place by that time.

12 So if I had to characterize it overall,  
13 what those laws basically did is they allowed us  
14 to implement our numeric nutrient standards in a  
15 staged manner over approximately twenty years, and  
16 that gives us time to address other sources of  
17 pollution, and for treatment technology to improve  
18 and to come down in cost. So that's a running  
19 assumption behind this approach.

20 So far EPA has been behind our approach,  
21 because as you know, if you adopt our criteria,  
22 and also implementation process -- which they have  
23 to review, that EPA reviews all of our standards  
24 changes. They appreciate our science based work.  
25 And they have concluded that the issuance of

1 variances would be consistent with the Clean Water  
2 Act, and that's implementing regulations. So so  
3 far we don't see any problems with the standards  
4 and the variance process that goes with them being  
5 hung up at the EPA end.

6 So the criteria we were looking at  
7 earlier, they will be in this circular that is in  
8 development. It is DEQ 12A and B. And Part A is  
9 the part most relevant to the Board. It contains  
10 the criteria and the permitting methods, and this  
11 would be the part that you would adopt, or adopt  
12 with changes, etc.

13 Part B contains the variance process,  
14 and that's a Department rulemaking. So they're  
15 both housed in the same document. They'll have  
16 separate dates, etc., but they're all in one place  
17 so that stakeholders can come and see both where  
18 are the criteria, and how does the variance  
19 process work.

20 Ongoing work. So we're working very  
21 closely with the Nutrient Work Group, which was  
22 established as part of those statutes. Twenty-one  
23 members; a good cross section of interests across  
24 the state; three non-voting DEQ members. Usually  
25 there is about 35 to 40 people at our meetings.

1 They have been advising us specifically --  
2 especially, I should say, on implementation  
3 policy. And we've met 21 times since May 2009,  
4 and we have another meeting this fall, and we may  
5 have -- there will be more to come because we have  
6 not resolved all the issues.

7 One of the outstanding issues that we're  
8 working on right now is nondegradation.

9 Nondegradation, as you know, is about changes  
10 allowed relative to an existing water quality  
11 standard. So here now we're talking about  
12 allowing fractions of changes, already small  
13 numbers, so that's a difficult issue. It affects  
14 new dischargers, and is a major concern for some  
15 stakeholders, and we're working closely with those  
16 stakeholders to resolve these issues as we move  
17 forward.

18 One of the things that we proposed early  
19 on in legislation, but it didn't go through at  
20 that time, but it recently resurfaced, and was  
21 proposed by the League of Cities and Towns, and we  
22 generally support the idea, is this idea of  
23 defining up front what the changes or the  
24 improvements at a wastewater facility are going to  
25 look like, at least for some time.

1           So under the assumption that the  
2 criteria were adopted, at some point somebody's  
3 permit will come up, and if they can't meet the  
4 standards, but they can meet the general  
5 variances, then they would be required to meet  
6 those -- for example, one milligram total  
7 phosphorus per liter.

8           At the first permit cycle they would  
9 have a predefined level -- and these are based on  
10 technologies that are already existing today, and  
11 they know they can do them. They would have a  
12 predefined level that they'd need to drop to, and  
13 then at the next permit cycle, they would have  
14 another predefined limit they would drop to.

15           At this point we're out ten, twelve,  
16 fifteen years into the variance period, and what  
17 I'm putting a question mark here is not to imply  
18 that they won't know what their permits is. They  
19 will always have a permit, and the permit will  
20 define what's in there.

21           But people will be in different places  
22 at this point in time. Some people may be  
23 positioned to meet the standards, perhaps by the  
24 time the variance ends. Some people may not be.  
25 Some people may have moved to individual variances



1 because of their special circumstances. Some may  
2 have worked with the Department to work out, reach  
3 specific nutrient standards -- which is another  
4 option I didn't really discuss -- because there is  
5 some wiggle room for refinement of our standards.

6 So what this provides, and what the  
7 League has -- the reason they proposed it, is it  
8 provides a fair amount of regulatory certainty for  
9 a fairly large distance into the future, which  
10 helps them for planning. So we anticipate that if  
11 we adopt the nutrient standards, some kind of a  
12 defined step reduction process for the major  
13 facilities would be included in our variance  
14 system.

15 MR. RUSSELL: So there is a model out  
16 there on the air quality side called the top down  
17 BACT. Would you apply something like that to  
18 this? You've got an economic standard, you've got  
19 a nutrient standard, and you're going to step the  
20 limit all the way down. So you're going to go to  
21 a POTW, and you're going that say, "You're  
22 discharging at 20 right now, and we think you can  
23 do 15," and the technology is readily available.  
24 So you'll put that into the permit, and you'll  
25 expect them to meet that?

1 DR. SUPLEE: Well, the way they said --  
2 because the League has brought this back to us,  
3 yes, they are actually proposing what those steps  
4 would look like. So for example, let's talk about  
5 nitrogen for a moment. For a major, one million  
6 gallons per day, they would initially meet in  
7 their general variance ten. The next step would  
8 be something like down to eight, then six. At  
9 that point, we are somewhere out here, and then it  
10 would be a reevaluation phase for them, from their  
11 perspective at that point, but where do we go from  
12 here.

13 MR. RUSSELL: So just to apply it to  
14 Flathead County, we have a pretty good plant in  
15 Kalispell, that has some really good discharge,  
16 and some limits that have been set based on the  
17 technology that was employed then. Maybe north of  
18 there, we have another plant that really doesn't  
19 do as well, about 12 miles north. So it is still  
20 in Flathead County, and it's still a POTW.

21 So how are you going to deal with those  
22 when they know there is a technology standard that  
23 could be met, but their plant, the way it has been  
24 constructed, clearly couldn't meet the standards  
25 that another POTW in Flathead County is meeting?

1 DR. SUPLEE: I don't know how that would  
2 all play out. One of the things that will happen  
3 is the League, we're waiting for the League to  
4 propose what these steps would look like. We will  
5 of course then go over what technologies are out  
6 there, and come to a discussion point or  
7 negotiation of what is a realistic or reasonable  
8 series of steps. We may propose something lower  
9 than what they initially propose.

10 But assuming we come to agreement on  
11 what that looks like, then those would go in  
12 place, and that expectation would be implemented  
13 on all the facilities once these standards were  
14 adopted. So that could mean that they may need to  
15 change their facility, they may need to optimize  
16 it, etc.

17 We have found, for example, that some of  
18 our engineers have been looking closely into the  
19 details of optimization of facilities, and  
20 optimization of existing facilities can really  
21 bring those nutrient levels way down without  
22 massive infrastructure change.

23 MR. RUSSELL: Would that parallel like  
24 turbidity limits?

25 DR. SUPLEE: I'm not sure.

1 MR. RUSSELL: Never mind.

2 DR. SUPLEE: So this is the concept, and  
3 that's the idea that we're entertaining as a means  
4 to get from where we are today to the standards  
5 over some fixed period of time.

6 Other planned work. We're looking at a  
7 streamlined process for site specific nutrient  
8 criteria. This would be cases where we've done an  
9 assessment; biological indicators show a healthy  
10 stream -- let's say within the middle Rockies  
11 ecoregion -- but the nutrient criteria are  
12 exceeded. We already have occasional cases like  
13 this.

14 Within a defined uncertainty range --  
15 because we do have a band of uncertainty around  
16 our criteria and the way we've established them --  
17 we could develop site specific criteria, and  
18 propose those for adoption on a stream by stream  
19 basis as they arise. That would be one thing that  
20 we're looking at.

21 We've also discussed an educational  
22 statewide series of meetings to inform dischargers  
23 about the criteria, the variance process, etc.  
24 The League has told us that there is -- although  
25 the people who come to the meeting are well

1 informed about what's going on, there is a lot of  
2 uncertainty, and some folks have never even heard  
3 of any of this. So there appears to be a pretty  
4 big educational gap about nutrient standards and  
5 the people this would affect in some cases.

6 MR. RUSSELL: So when you do your  
7 variances, which won't be anything to do with the  
8 Board, when you write your rules, will you  
9 consider like nutrient trading in the variance?

10 DR. SUPLEE: Yes. That was one of the  
11 things that was decided, is that a facility could  
12 trade to their variance. That was a policy  
13 decision that was made by the Department some time  
14 ago.

15 MR. RUSSELL: That's like septic system  
16 trading. You're pretty comfortable with the  
17 numeric standards for septic systems?

18 DR. SUPLEE: That would be like a load  
19 shift, is my understanding. So they would be  
20 taking the facilities off of individual septics.  
21 It's hard for me to answer that question. I'm not  
22 sure.

23 MR. RUSSELL: Then the last question I  
24 have is: If they don't meet the variance criteria  
25 that's set by this 21 member panel, would they be

1 able to contest that?

2 DR. SUPLEE: So they don't meet the  
3 general variance, for example?

4 MR. RUSSELL: Well, like right now,  
5 local Health Departments can not issue a permit  
6 for a septic system. If the aggrieved party  
7 doesn't like that, then they run a variance in  
8 front of the local Board of Health; and they don't  
9 get satisfaction there, then they can appeal that  
10 to the Department, which I think you have a few  
11 around running right now.

12 What's the process after the variance  
13 with the Department if they're still aggrieved?

14 DR. SUPLEE: Well --

15 MR. RUSSELL: Or is this more like a  
16 consensus building process?

17 DR. SUPLEE: Let me see if I can explain  
18 it. So the basic concept is that once the  
19 criteria are adopted and the variance process is  
20 in place, Permitting comes in, they write the  
21 permit to the nutrient standards, the low numbers.  
22 Perhaps they can meet those, perhaps they can't.  
23 If they can't, then they can apply for a general  
24 variance. If they can meet those one and ten  
25 numbers, then they will receive that. That's what

1 they have to meet.

2 Presumably we will also have this step  
3 reduction assumption built into the 20 year time  
4 frame, and then at some point out, they will  
5 probably reevaluate how they're going to get there  
6 as they approach the end of the variance period.

7 MR. RUSSELL: I guess my point is if all  
8 they do is shoot for ten, and you know they can  
9 meet eight in that first permitting process,  
10 wouldn't you make them do eight?

11 DR. SUPLEE: I don't know if we have the  
12 authority to do that. I know that -- and back  
13 sliding would suggest if they were already meeting  
14 eight, they're not going to allow them to go back  
15 to ten; but if they could do eight and they're  
16 doing ten, I think that they would be asked to do  
17 ten, at least for that first permit cycle.

18 MR. RUSSELL: Even though there's a  
19 technology right downstream that's doing three?

20 DR. SUPLEE: The presumption is that  
21 they're going to get there with a series of steps,  
22 and that's why us working through what those steps  
23 look like, and getting those about right for the  
24 large majority of facilities is important. You  
25 don't want them too tough or too lenient. We want

1 to try to hit that middle ground. That's the  
2 concept.

3 So just to wrap up, we believe that the  
4 criteria that we've put together are  
5 scientifically defensible; they're appropriate for  
6 different regions and water body types; and  
7 although they are low, and stringent, and they're  
8 going to be difficult for folks to meet, what they  
9 do provide is clarity as to what the water quality  
10 end point is going to look like. It is not going  
11 to change much.

12 We've heard about regulatory creep  
13 where, "First they asked us to do .5 milligrams  
14 TPN, and then four, and then three. When will it  
15 end?," and that's because the criteria in that  
16 case were based more on what people were trying  
17 push -- this is from back east -- facilities to,  
18 rather than what is really the ultimate level that  
19 will protect the stream. We spend a lot of time  
20 trying to figure out what that looks like, and  
21 that's why they provide clarity.

22 The statute, which will later be  
23 Department rules, allows criteria to be met over  
24 approximately a 20 year variance period, and we  
25 are assuming that we're going to have some kind of



1 stepped reductions in there, based on the way  
2 things have been going; and we're continuing to  
3 work on those remaining issues with the Nutrient  
4 Work Group.

5 And that's all I had. And if you have  
6 any additional questions, the Board has any  
7 additional questions for myself, or Eric, or  
8 anyone, I'd be happy to answer.

9 MS. MILES: Just a quick question. You  
10 talked about a very small percentage of streams  
11 that are in excess of the numbers you're  
12 considering. And if those have already  
13 experienced negative impacts, and maybe  
14 established a whole different biologic population,  
15 how reversible is that, or is that --

16 DR. SUPLEE: It's generally quite  
17 reversible, yes. Nutrients -- unlike toxics where  
18 you get lead or zinc or something in there, and  
19 they continue to knock down the fisheries, etc.,  
20 for as long as it is there -- Once you begin to  
21 bring nutrients down --

22 In systems that have been impacted for  
23 decades, it really depends on the form of where it  
24 came from. If it's from a wastewater facility, a  
25 single point source, you can see improvements

1 within a year or two. This is what we saw, for  
2 example, below Missoula when they went to the  
3 major upgrade. The algae levels, the total  
4 phosphorus, everything kind of dropped very quick.

5 In contrast, if it is a nonpoint source,  
6 where a lot of the high "N" and "P" may be in the  
7 soil, in the groundwater, and it is slowly working  
8 its way out to the river year after year, those  
9 things might take decades to clear up. So it  
10 really depends on the situation.

11 CHAIRMAN SHROPSHIRE: Joe alluded to  
12 this a couple questions ago when he was talking  
13 about the top down BACT process. In terms of the  
14 process that you guys are using, is it -- in  
15 eliminating what's feasible or not feasible, is it  
16 similar to a top down BACT process, where you have  
17 all technologies available, and you wait to assess  
18 the economics until the last step; or can you  
19 eliminate a technology in the first step because  
20 it is not economically feasible?

21 DR. SUPLEE: I'm not familiar with the  
22 top down BACT process, so it is a little bit hard  
23 for me to answer that. I kind of get the gist of  
24 it. We did those two things simultaneously. We  
25 looked at economics, and the cost of implementing

1 the criteria right away; and we also looked at the  
2 various technologies. So there are no  
3 technologies that are at this stage off the list.

4 I know the Department has tended to  
5 encourage movement towards biological nutrient  
6 removal, because that tends to knock down "N" and  
7 "P" together better, but I don't think I can  
8 fairly say that it is an exact parallel to this  
9 process that you've described.

10 MR. LIVERS: Madam Chair, just for the  
11 Board. In this presentation today, we didn't  
12 really focus on the permitting implications of  
13 this. That's not a major part of this  
14 presentation. Obviously that's closing the loop,  
15 and we're going to need to present some of that  
16 information to the Board. But I think to the  
17 extent we get too far into the permitting  
18 discussion, that might be a subsequent  
19 presentation.

20 CHAIRMAN SHROPSHIRE: The reason I bring  
21 it up is that if -- again, the example of one  
22 facility having more advanced technology and  
23 another one having less -- if that does go to an  
24 appeal process, making sure the process is well  
25 defined on the front end would be helpful. Any

1 other questions?

2 (No response)

3 CHAIRMAN SHROPSHIRE: We'll take a ten  
4 minute break.

5 (Recess taken)

6 CHAIRMAN SHROPSHIRE: I'm going to go  
7 ahead and get started here. The next thing on  
8 briefing items is a legislative briefing. Tom is  
9 going to give us an update on that.

10 MR. LIVERS: Madam Chair, thank you.  
11 Members of the Board. I'm actually going to turn  
12 it over now to our Chief Legal Counsel, John  
13 North.

14 MR. NORTH: Madam Chair, members of the  
15 Board, John North, Chief Legal counsel for the  
16 Department. And I just might add after the last  
17 presentation, that when and if the Board adopts  
18 numeric nutrient standards, if they're challenged  
19 in court, I'm really looking forward to the  
20 plaintiffs' attorney cross-examining Mike Suplee  
21 on this. It should be one of the highlights of my  
22 legal career.

23 I've handed out a handout of bills that  
24 affect the Board of Environmental Review from  
25 2013, and I have to say that there were not many

1 of them. It was a light session for the Board,  
2 and it was a light session for the Department.  
3 This was my 18th session, and I think this was the  
4 lightest one I've ever had.

5 The first bill that I want to discuss is  
6 Senate Bill 76. It modified the Water Quality  
7 Act, and it provided that the Board has a  
8 directive to basically adopt best technology  
9 currently available standards for cooling water  
10 intake structures.

11 The EPA has been in the process of doing  
12 that over the past decade, and have been sued  
13 several times, and the rules have been remanded or  
14 withdrawn by EPA; and EPA is under a consent order  
15 to have new standards in place for existing power  
16 plants by November 3rd of 2013.

17 This requirement in the Clean Water Act,  
18 the Federal Clean Water Act, is a separate  
19 requirement from anything else, and we did not  
20 have an equivalent provision in the Water Quality  
21 Act. So in order to ensure that we have  
22 authority, or the Board has authority to adopt  
23 these standards, we asked the Legislature to pass  
24 this bill. The Board may have anyway, but given  
25 the fact that it was a separate statute in the

1 Clean Water Act, and most of the Water Quality Act  
2 and Clean Water Act are directed directly towards  
3 dischargers, we felt it prudent to go to the  
4 Legislature to ensure that the Board actually does  
5 have those standards or that authority.

6 One of the things that the Legislature  
7 did is indicate in the bill that the Board is to  
8 adopt those standards for cooling intake  
9 structures that are necessary for the Department  
10 to retain primacy, so the idea being that the  
11 Legislature gave the Board very little discretion  
12 in this matter.

13 And so you will probably see a rule  
14 package on this one, I would guess the March  
15 meeting at the latest of next year, perhaps as  
16 early as December.

17 MR. LIVERS: John, it may be intuitive o  
18 all the Board members, but could you just touch on  
19 primacy?

20 MR. NORTH: Yes. Primacy is a concept  
21 that is across a number of the statutes  
22 administered by EPA, and it basically provides  
23 that if a state adopts a statute and rules that  
24 are the equivalent of the federal statute and  
25 rules, then the state can implement water, air,

1 whatever, in lieu of the EPA, and EPA falls back  
2 to simply an oversight role. And we have primacy  
3 for most of the EPA programs, including the water  
4 program.

5 MR. TWEETEN: So John, our rules have to  
6 await the adoption of the federal rules by  
7 November of 2013?

8 MR. NORTH: Right. Yes, sir.

9 The next one is Senate Bill 92, which  
10 was just a general bill to revise, make a number  
11 of revisions to the Strip Mine Act, and of course,  
12 the Board adopts Strip Mine Act Rules and holds  
13 hearings under the Strip Mine Act.

14 The changes that were made are fairly  
15 minor, and I don't think will require much in the  
16 way of rulemaking from the Board. A lot of the  
17 changes were just made in response to OSM  
18 comments, wanted clearer provisions in our act  
19 itself.

20 But there is one provision, and that is  
21 that it adds to the Strip Mine Act, and what it  
22 will do is provide that there is a contested case  
23 if someone is listed on what's known as the  
24 Applicant Violator System.

25 An Applicant Violator System is a

1 creature of the Federal Surface Mining Act, which  
2 is administered by the Office of Surface Mining,  
3 and the Office of Surface Mining maintains a data  
4 base in Washington which has a list of all  
5 permittees that are currently in violation of any  
6 Strip Mine Act adopted in any state or the federal  
7 act; and listing on that list has a permit  
8 blocking effect until the violation is taken care  
9 of. Every state that has an approved program --  
10 again, we have primacy and have an approved  
11 program -- has to report these violations back to  
12 the Office of Surface Mining, which then places it  
13 on the Applicant Violator System.

14 So this statute again was really  
15 mandated by OSM, and it will require that if we  
16 place somebody on the Applicant Violator System,  
17 and they contest that they should be placed there,  
18 that could come as a contested case to the Board.  
19 I doubt that that is going to happen, maybe during  
20 all of your careers on the Board. I don't know.

21 MR. TWEETEN: What's their remedy? If  
22 we place them on this Federal Registry, and they  
23 bring an important case in front of us, and we  
24 say, "Oops. We made a mistake," is there a  
25 process for withdrawing them from the National



1 Registry?

2 MR. NORTH: Yes. We simply submit that  
3 information to OSM, and it's withdrawn.

4 The next bill is Senate Bill 139, and  
5 applies to all agencies that adopt rules, and it  
6 requires small business impact statements for  
7 rulemaking. Basically it provides that any entity  
8 that adopts a rule that could have a significant  
9 and direct economic impact on a small business has  
10 to prepare a small business analysis, and the  
11 analysis has to identify the group that will be  
12 affected, include a statement of the probable  
13 economic effects; and then if it is an adverse  
14 economic effect, it has to also have a description  
15 of the alternatives available that could achieve  
16 the same purpose as the proposed rule but do it  
17 with less economic impact.

18 This bill went into effect July 1st, and  
19 Administration is sort of feeling our way along.  
20 The Department is facing this, and will have to  
21 face it before the Board does, because we have a  
22 rulemaking that we're instituting right now that's  
23 going to require a small business impact  
24 statement.

25 And the Governor's Office has issued

1 some guidance, and then we're going to apply that  
2 guidance to our specific statutes and our  
3 regulatory fields, and come up with our own  
4 guidance; and probably in October, the Board will  
5 see the first small business economic impact  
6 statement.

7 MS. MILES: How do they define a small  
8 business?

9 MR. NORTH: Small business is 50  
10 employees or fewer.

11 MR. TWEETEN: John, is it a small  
12 business, or small business as a group?

13 MR. NORTH: It could be either.

14 MR. TWEETEN: So a rule that impacts an  
15 individual small business could trigger this  
16 impact statement obligation?

17 MR. NORTH: I think so, yes. One key  
18 feature of the bill -- there is two key features.  
19 One is it sunsets in two years; and the second key  
20 feature of it is that it provides that an agency  
21 that adopts a rule without providing a small  
22 business economic analysis can be sued for failure  
23 to do that; but if an agency does prepare one,  
24 there is no suit for inadequate analysis. The  
25 level of analysis can't be challenged in court.

1 MR. RUSSELL: So is it a small business  
2 that's adversely impacted by an action of the  
3 Department?

4 MR. NORTH: By rulemaking.

5 MR. RUSSELL: It wouldn't be a small  
6 business that is adversely impacted by the  
7 Department, it would be the action of the  
8 Department by issuing a permit or other action  
9 that would affect some other small business that's  
10 out there, like an externality?

11 MR. NORTH: Madam Chair, Mr. Russell.  
12 This applies to rulemaking actions, so it would  
13 not apply to Department permitting actions. So  
14 when the Department or the Board adopts a rule  
15 that's going to result in some kind of economic  
16 impact on small business, it has to project what  
17 that impact will be.

18 MR. RUSSELL: As a potential permitted  
19 or regulated community?

20 MR. NORTH: Right.

21 Senate Bill 332, General Open Cut  
22 Revisions, I put that on there because it is going  
23 to require some slight changes to the open cut  
24 rules, but nothing major; just basically a few  
25 changes to conform the existing rules to this

1 statute. The Department is going to come in I  
2 think in October, maybe December, with general  
3 revisions to the open cut mining rules. Open cut  
4 mining, of course, is mainly sand and gravel. It  
5 includes other type minerals as well, but not the  
6 hard rock minerals, and not coal or uranium.

7 It has been a number of years since  
8 these rules have been updated, so the Department  
9 will come in and institute rulemaking for general  
10 revisions. There will be a few of those general  
11 revisions that will be necessitated by Senate Bill  
12 332.

13 And finally, on the back side of your  
14 handout is House Bill 110, and this basically  
15 provides that in formulating or implementing  
16 Administrative Rules that have direct tribal  
17 implications, a State agency has to document its  
18 considerations of the five principles that I have  
19 listed there.

20 This bill doesn't go into effect until  
21 October 1st, and probably at the next Chief Legal  
22 Counsel meeting, we're going to discuss with the  
23 Governor's Counsel what this means, what it means  
24 to have direct tribal implications. I suspect  
25 that most of the rules that the Board adopts would

1 have no tribal implications, simply because for  
2 many of the acts, the Board rules don't apply on  
3 Indian reservations.

4 And unless there are other questions,  
5 that concludes my presentation.

6 CHAIRMAN SHROPSHIRE: Any questions?

7 (No response)

8 CHAIRMAN SHROPSHIRE: Thanks, John.

9 MR. LIVERS: Madam Chair, I just had one  
10 point. It is not statutory, but it has to do with  
11 the legislative budget allocations. We're facing  
12 some budget pressures from the legislative action.  
13 They haven't funded the Board at the same level as  
14 they have in the past. The Department is going to  
15 try to manage that through our budget to try to  
16 minimize impacts on effectiveness of the Board's  
17 functioning, but just letting the Board know that  
18 it's out there.

19 We'll probably still continue to  
20 teleconference, for example, when it is a  
21 particularly light agenda, or at least reserve  
22 that option. It's also useful of the Board  
23 member's time as well. So we'll be looking at  
24 different options, and again, we'll try to do that  
25 in a manner that really doesn't impede, doesn't

1 impact the Board's function.

2 We have one more briefing item. At the  
3 new member orientation, the Department, we were  
4 asked to catch the Board up on rulemakings already  
5 in progress. So it turns out we have only  
6 initiated one rulemaking that this Board will be  
7 acting on, so we have one rulemaking on one of our  
8 circulars, DEQ4, and I'd like to have Barb  
9 Kingery, who is the head of our Plan Review  
10 Program for Subdivisions and Public Water, to just  
11 give an orientation to what's going on there.

12 MS. KINGERY: Madam Chair, members of  
13 the Board, I'm Barb Kingery, as Tom mentioned, and  
14 I'm with the Subdivision Section here at DEQ, and  
15 I'm coming before you to give you sort of an  
16 update of what the Department has been working on  
17 in revisions to Circular DEQ4.

18 This is a great rulemaking package we've  
19 been working on for a little bit now, and a great  
20 opportunity. It was last updated in 2009 with the  
21 addition of a small chapter on gray water systems,  
22 but the substantive nature of the document hasn't  
23 changed since 2004. So we've been working real  
24 hard to bring it up to date here. Before I begin,  
25 I'm going to talk a little bit, primarily for the

1 new Board members, about how a circular works in  
2 the whole framework of our statutes, rules, and  
3 design guidelines.

4 So the Legislature passes statutes which  
5 give us sort of our job, our work that we're  
6 supposed to do; and then we as a Department adopt  
7 rules to implement the statutes above us. The  
8 design circulars are a construction document that  
9 sort of work to help implement those rules. So  
10 we've got statutes, we've got rules, we've got  
11 these design guidelines for people out there.

12 And in the wastewater world at DEQ,  
13 we've got two circulars out there that work as  
14 design guidelines: DEQ2, which is titled "Design  
15 Standards for Public Sewage Systems;" and then we  
16 have DEQ4, which is Montana Standards for  
17 Subsurface Wastewater Treatment Systems. So if  
18 you think about DEQ4, what should come to mind  
19 primarily are things like septic fields,  
20 drainfields, those kinds of systems that rely on  
21 essentially soil for part of the treatment of  
22 effluent.

23 So this is DEQ4 that you're going to be  
24 seeing here, and this particular document, if we  
25 go back up above to the statute, is used by the

1 Sanitation and Subdivisions Act; it is used by the  
2 Water Quality Act; it is referenced in the Public  
3 Water Act; and then also the Title 50, which  
4 covers local health boards. So all four of those  
5 statutes trickle down and use DEQ4, so we're sort  
6 of across a broad spectrum here of people that  
7 would use this as a construction design model  
8 essentially.

9 And as such, the Subdivision Section is  
10 the group that is in charge of sort of keeping the  
11 reins on DEQ4, and making sure it is staying  
12 updated. Like I said, we began this process a few  
13 years ago, and the idea being that we thought that  
14 we would bring together a large group of people,  
15 because we are across a broad spectrum, and we  
16 established a work group that included local  
17 sanitarians, engineers, consultants from private  
18 industry, and members of our employees here at  
19 DEQ.

20 And what we did is we took each of these  
21 different chapters that are listed in DEQ4 -- and  
22 there are quite a few. It covers many different  
23 things -- and we assigned one of each of those  
24 four groups to a chapter, and we said, "All of you  
25 please work on that chapter, and come together,



1 what you think. If there is changes that you  
2 need, if you like this, and you don't like that,"  
3 and we came up with this sort of compilation.

4 Then we took that out to the public, and  
5 we had public hearings in Polson, we had one here  
6 in Helena, we had one in Billings, where we let  
7 the general public and those who weren't part of  
8 this small work group come and give us ideas, and  
9 we incorporated that into the document, their  
10 suggestions.

11 We met with special interest groups.  
12 Like we had a meeting here in Helena with all of  
13 the septic tank manufacturers in the state. A  
14 large group came together, and they worked  
15 specifically on the septic tank chapter. We then  
16 met with licensed septic pumpers, so that they  
17 could take a look, and see what we were doing, and  
18 make sure that they were on board with what  
19 changes we were proposing.

20 Then we took it even another step  
21 further, and we put it out on the web as a blog,  
22 and that allowed anybody else that we felt might  
23 have an interest in this topic, and might want to  
24 start a discussion with the Department or other  
25 members who had been part of this initial work

1 group; and that was a real fun and interesting  
2 experience, because it was my first sort of foray  
3 into technology. I'm sort of an old school kind  
4 of gal.

5 So we came up with a document, and we  
6 took this before other interest groups, including  
7 the Drinking Water Focus Group; the Joint  
8 Engineers Conference; we took it to MEHA, which is  
9 the Montana Environmental Health Association  
10 Program, and also solicited comments from them.  
11 Then came to a final consensus document, and last  
12 December, December 2012, we came before the Board  
13 to initiate rulemaking.

14 We had a comment period that went  
15 through December and into February. It was an  
16 extended comment period because we didn't want  
17 people to be constrained by the holiday season in  
18 there, and we wanted them to be able to comment on  
19 it.

20 And then one of the comments we received  
21 during that first period brought to light an  
22 issue.

23 In DEQ4, we adopt by reference other  
24 people's standards, like the ASTM standards, and  
25 the American Concrete Institute Standards. We

1 have adopted those by reference. And we learned  
2 through that process that those standards that we  
3 adopt by reference needed to be available to the  
4 public as part of this public hearing process  
5 here. And so what we did is we worked with the  
6 ASTM people and these others, American Concrete  
7 Institute, to put those standards on our website  
8 in case somebody had a specific question about  
9 those standards that we have incorporated into our  
10 document.

11 That comment period ended July 5th, and  
12 now we're in the process of responding to comments  
13 that we've received. And so like I said, this is  
14 kind of a new thing for me. I've not done this  
15 before. So I'm sort of learning how this all  
16 works. And so what we did in the beginning is we  
17 presented to the Board this consensus document,  
18 and that's the one you guys received in December.

19 We've had all of these comments come  
20 back, and then in response to these comments, we  
21 either make changes in response to that comment,  
22 or we tell why we're not making a change; and if  
23 we decide that we want to make a change, we take  
24 that first document that you received in December,  
25 and we strike out the things we're not going to

1 keep from that first December document, and we  
2 underline the new ones.

3 And so you will receive in your Board  
4 packet for the next October meeting a document  
5 that has been very underlined and struck through.  
6 And I'll tell you, one of the primary things that  
7 we did as part of our consensus December document  
8 -- that's what I'll call it -- is I told you in  
9 the beginning that there is two circulars that the  
10 Department uses for wastewater systems: One is  
11 DEQ4, and the other is Circular DEQ2.

12 Circular DEQ2 deals with public systems,  
13 and you can imagine that there are circumstances  
14 where you might have a septic system that might  
15 meet the public threshold. So there are  
16 components of DEQ2 that when you are, as an  
17 engineer, designing your drainfield or your septic  
18 system, you would incorporate into your design.  
19 And in that December document that we gave you, we  
20 took everything out of DEQ2 that we thought would  
21 be applicable to an onsite system, and we put it  
22 in DEQ4.

23 One of the comments we received through  
24 this formal comment period was that that made the  
25 document very large and cumbersome, and so what we

1 have decided to do -- and I'm giving you sort of a  
2 heads up on this -- what we decided to do was take  
3 those sections of two out that we had  
4 incorporated, and just make references to them, so  
5 that the engineers know, "Okay. I'm designing a  
6 gravity sewer main. For a gravity sewer main I go  
7 and look at DEQ2." And so you will see quite a  
8 few strikeouts and underlines in there. So when  
9 you're reading through it, I just wanted to let  
10 you know that that might happen.

11 Like I said, this has truly been a  
12 collaborative effort. I feel like we have reached  
13 out to many different groups. We've received lots  
14 of comment, which in my mind is a really positive  
15 thing, because I truly think that we're going to  
16 have a really great document at the end of it all.

17 You'll see there are going to be  
18 drawings in here that help explain the different  
19 types of subsurface wastewater treatment systems;  
20 you'll see there is schematics of septic tanks in  
21 there that have never been in there before; we  
22 have examples of how to do design calculations in  
23 the back, so that people can walk through, and see  
24 how you do it.

25 I'm real excited to come here next

1 session in October, and bring it before you, and  
2 answer questions, and sort of tell you what we've  
3 done as part of these comments. Madam Chair, any  
4 questions?

5 CHAIRMAN SHROPSHIRE: Questions?

6 MR. RUSSELL: I do have a question. How  
7 soon can we get that document? Will we see it  
8 when the Board packet goes out, or can we get it  
9 even earlier? Not that I would like to go through  
10 it or anything.

11 MS. KINGERY: Madam Chair, Mr. Russell.  
12 We're still working on the comments. Like I said,  
13 they just closed July 5th the last comment period.  
14 And as soon as we're ready, we'll get it out there  
15 as quickly as possible.

16 MR. RUSSELL: Another thing, Robin. Is  
17 there a way that you could -- if you've earmarked  
18 the parts that you have struck that are going to  
19 be referenced, have you thought about maybe having  
20 another document that actually takes those strikes  
21 out so it is a little easier to read? Because the  
22 first one had a lot of two in it, and it really  
23 made it cumbersome to read.

24 MR. MIRES: And confusing.

25 MS. KINGERY: Madam Chair. Yes. I

1 agree. It was very confusing, and John, could we  
2 do something like that, just for Board purposes?  
3 Just give a final clean document. Like I said,  
4 I'm a novice at this.

5 CHAIRMAN SHROPSHIRE: Or at least the  
6 references to two cleaned up.

7 MR. NORTH: Madam Chair, we can try to  
8 do that. When we get a final document, this is  
9 going to be a large notice, and we have one  
10 rulemaking paralegal, but we'll try and do that as  
11 soon as we possibly can.

12 MR. RUSSELL: There is another way  
13 maybe. Just if any of those, where it strikes, if  
14 you use interline and underline in Microsoft Word,  
15 so it actually shows -- if you put over it, it  
16 shows why it was struck.

17 MR. NORTH: Madam Chair, Mr. Russell.  
18 We do not track changes or anything like that for  
19 our rulemaking documents because of the errors  
20 that can creep in and so forth. So I don't know.  
21 Barb, do you have one of those, or is everything  
22 being maintained by the paralegal?

23 MS. KINGERY: No, everything is being  
24 maintained --

25 MR. NORTH: No, we can't do that. We

1 will try to get you a clean copy as soon as  
2 possible.

3 CHAIRMAN SHROPSHIRE: I think it is a  
4 good recommendation in terms of understanding the  
5 difference between something that's been struck  
6 and something that is a comment that has been  
7 deleted.

8 MS. KINGERY: What you guys will get as  
9 part of that packet -- and correct me if I'm  
10 wrong, please, John -- is a copy of all of the  
11 comments we received, and what our response to  
12 those comments are, and we're being fairly  
13 specific with the changes that we're making in  
14 response to those comments. And the reason I'm  
15 pointing to John is he's our rule reviewer, and as  
16 part of that, everything that we're working  
17 through eventually goes through him. So I believe  
18 they get a copy of all that.

19 MR. NORTH: Yes.

20 MS. KINGERY: That may also be sort of a  
21 reference for you if you get lost within --

22 CHAIRMAN SHROPSHIRE: Thank you, Barb.  
23 Katherine, the next item is new  
24 contested cases.

25 MS. ORR: Yes. This case came in. It



1 is an appeal from the issuance of an MPDES permit  
2 to the City of Whitefish, and the City is  
3 appealing the final effluent limit of NTU for  
4 turbidity, the maximum daily limit, and that is  
5 what it is narrowed down to. So there is not too  
6 much more to talk about on the appeal.

7 CHAIRMAN SHROPSHIRE: Any questions?

8 (No response)

9 MR. LIVERS: So Madam Chair, I think the  
10 decision before the Board is if you want to hear  
11 this yourself, or if you want to assign a Hearings  
12 Officer, which is I think what would typically  
13 happen in a case like this. You can also keep  
14 your options open by not taking action, in which  
15 case Katherine would do the preparatory work on  
16 this, and the Board could still choose to hear it  
17 at some point down the road. I think this may be  
18 better for Katherine to recommend, but I would say  
19 this is the kind of case that you would probably  
20 typically assign a Hearings Officer to.

21 CHAIRMAN SHROPSHIRE: Katherine, do you  
22 have time to take this on?

23 MS. ORR: Yes.

24 MR. RUSSELL: I would make a motion to  
25 assign this matter to Katherine.

1                   CHAIRMAN SHROPSHIRE: It's been moved by  
2 Joe. Is there a second?

3                   MS. MILES: Second.

4                   CHAIRMAN SHROPSHIRE: Any other  
5 discussion?

6                   (No response)

7                   CHAIRMAN SHROPSHIRE: All those in  
8 favor, signify by saying aye.

9                   (Response)

10                  CHAIRMAN SHROPSHIRE: All right. Motion  
11 carries unanimously. Thanks, Katherine.

12                  The last item is just reserved for any  
13 general public comment.

14                  MS. CANTY: Madam Chair, I might just  
15 add that I've had a number of people sort of ask  
16 about me, and I was thinking that perhaps the  
17 Board members, other Board members and interested  
18 people don't know too much about the new Board  
19 members. So not to volunteer Chris and Joan as  
20 well, but I'd be happy to give a couple minutes  
21 about myself, if that would be helpful for people  
22 to know.

23                  CHAIRMAN SHROPSHIRE: I think that is  
24 very appropriate. I know I'd appreciate it also.

25                  MS. CANTY: I apparently am filling the

1 environmental science position on the Board. I'm  
2 an environmental consultant. I've been doing that  
3 work for 23 years now. In my current position, I  
4 work for a large international firm. My title is  
5 both Senior Environmental Engineer and Senior  
6 Human Health Risk Assessor.

7 For the first half of my career, I did  
8 mostly work in Montana, primarily focused on  
9 remediation, CERCLA/CECRA sites; also did some  
10 innovative technology development work for  
11 abandoned mine sites at that time. The second  
12 half of my career, I now work in Montana and other  
13 states and international work as well, again also  
14 pretty much focused on remediation work. I've  
15 also done a fair amount of guidance writing for an  
16 environmental regulation book within the states  
17 and internationally.

18 Education wise, I have a Bachelors  
19 Degree from Montana State University, and I have a  
20 masters degree from Montana Tech in Environmental  
21 Engineering. So if anyone has any questions. I'd  
22 be happy to answer, but I'm thrilled to be serving  
23 on the Board.

24 CHAIRMAN SHROPSHIRE: Do we want to  
25 start with the new Board members? Chris.

1           MR. TWEETEN: I'm Chris Tweeten. I'm I  
2 guess the attorney member on the Board, and  
3 pleased to be here this morning. I've been  
4 practicing law in Montana for this will be my 37th  
5 year. I graduated from University of Montana Law  
6 School in 1977; spent most of my career working in  
7 the Attorney General's Office here in Helena; left  
8 that position at the end of 2010, beginning 2011.

9           Since then I've had a small sort of  
10 niche practice working with governmental agencies,  
11 state and local, in Montana. I also teach  
12 part-time at the University of Montana Law School.

13           I am a long term member of the Montana  
14 Reserve Water Rights Compact Commission, a Board  
15 that I started serving on in 1984, and I've been  
16 the Chairman since the early 1990s sometime. So  
17 I'm pleased to be here, happy to have another  
18 opportunity to serve. I look forward to learning  
19 lots of stuff, like I did this morning, the  
20 technical scientific side of it. This is a little  
21 different from the scientific work that I've done  
22 with water quantity issues with the Compact  
23 Commission, but I look forward to broadening my  
24 horizons, and to be of further service. So very  
25 happy to be here.

1 MS. MILES: Hi. Joan Miles. It is nice  
2 to see a lot of familiar faces here from the past.  
3 I guess I'm filling the local government seat, and  
4 I have a long history of working at the public  
5 health in local government, and then also in State  
6 government four years as Director of the  
7 Department of Public Health and Human Services.

8 I'm also, during the time period that I  
9 was a local Health Officer, prior to that, I  
10 worked as a sanitarian, so the whole discussion  
11 about onsite wastewater systems was reminiscent of  
12 when we would appoint new members to the local  
13 Board of Health, they'd come in and say, "I feel  
14 like this is a sewer board, not a health board."  
15 So I am prepared to start reading those  
16 regulations, have a strong background in that.

17 In terms of education, I have actually a  
18 degree in Medical Technology, and a Masters in  
19 Environmental Sciences from the University of  
20 Montana, and I'm also an attorney as well, so  
21 you'll have two of us piping up here. And it is  
22 great to be back in State government.

23 CHAIRMAN SHROPSHIRE: Thank you. I  
24 think it is worth all of us just giving a quick  
25 introduction. I know Tracy is newer to us as

1 well, and so why don't we just go around the  
2 table.

3 MR. RUSSELL: I'm Joe Russell. I run a  
4 Health Department in Flathead County. My  
5 background is in sanitarian, environmental health,  
6 and I've been a Health Officer for 15 plus years.  
7 Actually the second -- there is a public health  
8 person on the Board, and I fill that. And I think  
9 the first one was Dan Dennehy, and he served two  
10 years, and I've been in this seat since then. I  
11 fill the public health component, and my  
12 background is in environmental health, public  
13 health.

14 MR. MIRES: I'm Larry Mires. I am the  
15 peon of the group serving the public in general.  
16 I've had 30 some years of teaching vocational  
17 education pre-engineering in Glasgow. And a BS  
18 from Northern Montana College, and that's BS. And  
19 then the MS was also from Northern in vocational  
20 education, career guidance, and general guidance  
21 counselor.

22 In the last 12 to 13 years, I have spent  
23 a very enjoyable time learning about the pleasures  
24 and duties of water compacts, and working for the  
25 St. Mary Rehabilitation Working Group and working

1 with Congress, and the State Legislature, and many  
2 different departments in the State of Montana, and  
3 it has been very rewarding. And I am a product of  
4 probably all of the University of Montana,  
5 including the non-universities of Montana. I  
6 think I have credits from every one of them at  
7 this point in time, so allegiance goes everywhere.

8 CHAIRMAN SHROPSHIRE: Heidi, are you  
9 still with us?

10 MS. KAISER: I am. Heidi Kaiser. I'm  
11 also a public member of the Board. I guess I've  
12 been on the Board since 2005 or 2006, 2005. I am  
13 currently an environmental consultant, and have  
14 been for over twenty years. I work for a Montana  
15 based firm, Hydrometrics, and am involved with  
16 hydrologic investigations, permitting, RCRA/CECRA  
17 projects. I did have a brief hiatus from  
18 consulting and worked for the Wyoming DEQ for a  
19 brief time in their Water Quality Program.

20 My educational background, I have a  
21 Bachelors in Geology, partially from Montana  
22 State, but I graduated from Rocky Mountain  
23 College; and my masters is in land rehabilitation  
24 from Montana State. And I live in Park City.

25 CHAIRMAN SHROPSHIRE: Thank you. I'm

1 next. Finish off. And I guess have been working  
2 in the environmental arena for over twenty years.  
3 My educational background is I have an  
4 undergraduate in Geology from the University of  
5 Montana, and my graduate degree is in Contaminant  
6 Hydrology from the University of Waterloo.

7 I started my career in Canada working in  
8 consulting, and a lot of environmental remediation  
9 related projects in the oil and gas industry,  
10 water supply related projects for the oil and gas  
11 industry. And then moved to Montana in 2002,  
12 where I worked for DEQ for almost a couple of  
13 years in the Remediation Division, the Clark Fork  
14 River Super Fund site, priority soils, and then  
15 ended up teaching at U of M Helena for five or six  
16 years in different sciences -- water resources,  
17 chemistry, things like that.

18 And for the last five years I've been  
19 working for a private equity fund that invests in  
20 power plants, doing environmental health and  
21 safety. So we don't have any projects in Montana,  
22 they're all out of Montana, but I've been on the  
23 Board -- this is my ninth year I've been on the  
24 Board -- it's hard to believe -- and served with  
25 Joe that entire time, and honored to be serving in



1 this position.

2 Like I said, I've got big shoes to fill,  
3 but looking forward to it. I think we have a  
4 fantastic Board, and really looking forward to  
5 working with all you guys.

6 I didn't mean to overlook you,  
7 Katherine. Katherine is obviously our Counsel,  
8 and why don't you introduce yourself to us.

9 MS. ORR: I'm Katherine Orr. I work at  
10 the Attorney General's Office. There I wear many  
11 hats. I have a fairly heavy litigation load. I'm  
12 sort of a specialist in employment law. And then  
13 here with this hat I am, as you can tell, mainly  
14 the Hearing Officer, and I oversee cases that you  
15 assign to me. I also serve as Counsel to two  
16 other boards in State government, so I have a full  
17 plate.

18 I used to be in John North's shoes from  
19 1985 to 1995; and prior to that I worked in  
20 private practice in Livingston; then I worked  
21 before that for the Legislative Council; and  
22 before that, I worked in a US Supreme Court  
23 practice in Washington, D.C.

24 CHAIRMAN SHROPSHIRE: Thanks. Thanks,  
25 Marietta, for starting that off. I think that was

1 good. Any other comments on that? I think the  
2 last thing on the agenda is reserved for public  
3 comment. So anybody out there? It looks like  
4 we've got Mark.

5 MR. LAMBRECHT: My name is Mark  
6 Lambrecht, and I'm Executive Director of the  
7 Treasure State Resource Industry Association. We  
8 are one of Montana's oldest national resource  
9 industries associations, have been around 37  
10 years, and we represent about 100 different  
11 natural resource industries in Montana and unions.  
12 And our mission is to advocate for responsible  
13 natural resource development in the state and  
14 reasonable environmental regulation.

15 But Marietta, and Chris, and Joan,  
16 welcome to the Board. You'll be getting to know  
17 me a little bit more.

18 I just wanted to add one item to the  
19 legislative update that was important and will be  
20 coming your way. It is Senate Bill 364, which was  
21 passed unanimously this last session, and wouldn't  
22 have been possible without help from DEQ.

23 The issue is in regards to -- there was  
24 a group of nine organizations that brought suit a  
25 couple years ago in District Court in Washington,

1 D.C. to require the EPA to regulate coal ash as a  
2 hazardous waste. And as you know, coal ash is an  
3 important material in Montana. It is a byproduct  
4 of electricity generation with coal, and it is  
5 used for cement manufacturing around the state and  
6 the northwest, sheetrock manufacturing, and a  
7 number of other different important uses.

8 And if it were regulated as a hazardous  
9 waste, that would require construction and  
10 permitting of hazardous waste landfills in the  
11 state. I don't believe that would ever be a  
12 realistic possibility in the state, so really what  
13 it would do would be to prevent the burning of  
14 coal to generate electricity, which my members  
15 find unacceptable.

16 So in anticipation of the problems that  
17 this would create, we worked with the DEQ Director  
18 and also DEQ's Ed Thamke, who was really the one  
19 who saw this coming down in the future, and we  
20 knew that there was movement in US Senate and US  
21 House of Representatives to anticipate what are we  
22 going to do to deal with that situation if that's  
23 what EPA is required to do, and how would Montana  
24 react to that.

25 The problem that we had in Montana is

1 electricity generators had an exemption from the  
2 Solid Waste Management Act, and so in order for  
3 Montana to have a permitting system to provide for  
4 the continued beneficial reuse of coal ash, and  
5 management of ash ponds and other disposal  
6 systems, that exemption would have to be removed,  
7 so that the Department would have the authority to  
8 do that.

9           So we crafted Senate Bill 364, and with  
10 the Department's help and a lot of different  
11 industry input -- and as I mentioned, it came  
12 through unanimously, and just yesterday, the US  
13 House of Representatives passed House Bill 2218,  
14 the Coal Residuals Reuse and Management Act of  
15 2013, from Representative McKinley from West  
16 Virginia, and it passed 265 to 155, bipartisan  
17 support. So that's really now the first step. It  
18 will go to the Senate.

19           It establishes a permitting program in  
20 the states to provide for the beneficial reuse of  
21 coal ash, and also those disposal systems. So the  
22 ball is in motion now, and it will eventually come  
23 to you to adopt rules to make all of this work. I  
24 just wanted to give you a little bit of a heads up  
25 on that.

1           Going back to the numeric nutrient  
2 criteria, we've been involved in this process  
3 since the beginning. I've been in my position  
4 almost two years now, and this has been issue No.  
5 1. We've kind of moved at a glacial pace, but I  
6 wanted to underscore that we have moved very far  
7 from where we started. From our perspective,  
8 there are three primary issues that are left, and  
9 they're mostly related to permitting. So as  
10 Deputy Director Livers mentioned, that's a subject  
11 of a future presentation, so I won't get into too  
12 much detail, but I did want to mention a couple  
13 issues about that.

14           One of which was brought up in our last  
15 work group meeting by Plum Creek, where we see  
16 that a water body, such as one they have  
17 identified as West Fork of Ashby Creek, might  
18 exceed in a minor way a nutrient level, but there  
19 is no biologic response on the other side.  
20 There's no algae concentration, there is no  
21 impacts to aquatic insects, or otherwise.

22           So how do we deal with that issue where  
23 there may be inherent level of nitrates or  
24 something like that in a water body, but there is  
25 no response on the other side. How do we do deal

1 with that? Do we have site specific standards, or  
2 do we look at aggregate criteria? I know DEQ is  
3 looking into that solution right now.

4 The other one that was touched on was  
5 nondegradation. This is the primary issue for the  
6 mining industry, because the main work that  
7 they're doing is blasting in high quality water  
8 areas that are headwaters types of areas. How are  
9 we going to deal with that? Are we going to have  
10 temporary variances for work in those areas in  
11 order to allow mining activity to occur? That's a  
12 major issue that we don't have an answer for yet.

13 The third one is sort of related to the  
14 first one, but what do we do about natural  
15 occurring conditions that might not be taken into  
16 account on the permitting side? This has come up  
17 in a draft Exxon mobile discharge permit that  
18 we're working on right now. And right now what  
19 we're seeing is arsenic, temperature, total  
20 organic carbon standards being inserted into the  
21 draft permit, but not taking into account the  
22 natural conditions inherent in the Yellowstone  
23 River system.

24 So those are things that we're going to  
25 have to work out, and honestly believe that with

1 good faith effort from D.C., we'll arrive at those  
2 solutions, and we'll be reporting back on those to  
3 the Board at a future date. Thanks for your  
4 attention. Good luck with the Board.

5 CHAIRMAN SHROPSHIRE: Thanks, Mark. Any  
6 other members of the public wish to comment or say  
7 anything?

8 (No response)

9 CHAIRMAN SHROPSHIRE: I'll entertain a  
10 motion to adjourn.

11 MR. LIVERS: The next meeting is October  
12 4th.

13 CHAIRMAN SHROPSHIRE: Do we think that  
14 will be in person or teleconference?

15 MR. LIVERS: I don't know yet. I think  
16 there will be a good chance we'll be in person. I  
17 know we'll be doing DEQ4 final action, so there  
18 might be some questions on that. But I don't know  
19 yet for sure.

20 CHAIRMAN SHROPSHIRE: Do we have a  
21 motion to adjourn?

22 MR. MIRES: So moved.

23 CHAIRMAN SHROPSHIRE: It's been moved by  
24 Larry. Is there a second?

25 MR. TWEETEN: Second.

1                   CHAIRMAN SHROPSHIRE: All those in  
2 favor.

3                   (Response)

4                   CHAIRMAN SHROPSHIRE: We're adjourned.  
5 (The proceedings were concluded  
6 at 11:33 a.m. )

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