TESTIMONY - 2006 & 2007

PAW & Member Companies Environmental Quality Council Hearings CHAPTER 2 WATER QUALITY RULES AND REGULATIONS

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EQC Hearing Testimony
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THE CHAIR: I'm sorry. That's part of the evidence. MR. MOORE: Mark that as Exhibit 1. MS. FLITNER: Thank you. 15:45:07 5 While we invite Keith to come forward 6 and make his remarks, may those of you -- I think 7 there were about five of you in the back who were 8 going to speak at some point. Will you raise your 9 hands again, please? 15:45:23 10 So, I'm going to have Joe pass around a 11 different sheet, because I have about 20 names on 12 this one, and we're just going to do that in an 13 effort to keep this moving quickly so that we can 14 call you up right after Keith goes. Is anyone 15:45:42 15 prepared to speak longer than a couple of minutes? (Whereupon, no response was had.) 16 17 MS. FLITNER: Perfect. 18 Okay, we'll get to you next. Thanks. 19 Welcome. Thank you. 15:45:53 20 Go ahead. 21 STATEMENT ON BEHALF OF THE CONSORTIUM: MR. BURRON: Thank you, Madam Chair. 22

Members of the Council.

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- 1 For the Record, I'm Keith Burron. And
- 2 I'm appearing today on, as sort of a spokesperson
- 3 on behalf of the Consortium.
- 4 Some oil-and-gas players, too, who have
- 15:46:07 5 signed onto the opposition to this request for
 - 6 rulemaking. I'm going to address today the Motions
 - 7 to Dismiss, or Motion to Terminate that's been
 - 8 filed, and also, to an extent, address some of the
 - 9 new information in the Status Report, or Third
- 15:46:29 10 Petition that's been filed.
 - 11 And listening to Kate this morning, I
 - 12 didn't hear a lot about what is actually requested
 - 13 in the Petitions. What I heard is a, almost a, I
 - 14 guess, an argument that DEQ is not adequately
- 15:46:50 15 addressing effluent limits for impacts to
 - 16 agricultural use in permitting CBM discharges.
 - 17 And I think we need to be very careful,
 - 18 because that's not what these Petitions are asking
 - 19 for. What the Petitions are asking for is,
- 15:47:03 20 regardless of whether you look at the initial
 - 21 Petition or the second Petition, try to separate
 - 22 out CBM water, or the Third Petition, which is a,
 - 23 pollutions.

- 1 And the objective of those Petitions is
- 2 to stop the discharge of CBM water, not to regulate
- 3 the constituents in CBM water, which is what we've
- 4 heard about today. So, every iteration of the
- 15:47:25 5 Petition says the objective was trying to limit or
 - 6 shut down water production, surface discharge of
 - 7 water production from CBM water, and that is a, an
 - 8 agenda that is being put forth by a vocal minority
 - 9 of landowners, and by the Powder River Basin
- 15:47:45 10 Resource Council.
 - 11 And I would submit to you the vast
 - 12 majority of landowners do not agree with that
 - 13 position that CBM discharges ought to be shut down
 - 14 and ought to be limited in the fashion that PRBC is
- 15:47:59 15 asking for. In addition, PRBC is asking the DEQ to
 - 16 revoke the policy that's been longstanding in this
 - 17 area of the state for 120 years, and that is
 - 18 encouraging the maximum general efficient use, use
 - 19 of the waters throughout the state, and also
- 15:48:17 20 maximum use of drainages to carry that water,
 - 21 especially where that water meets effluent limits
 - 22 set by the DEQ, and Permit limits within these
 - 23 Permits.

- 1 If what the Petitioners were asking for
- 2 goes forward, we are going to see very, a very
- 3 adverse effect on CBM production. We're also going
- 4 to see a greater incrustation to those landowners
- 15:48:43 5 who are using CBM water to a great extent.
 - As the Council's well-aware, the
 - 7 information that we submitted agrees with the
 - 8 information that the Attorney General put forward
 - 9 in the AG's Opinion that was issued in this matter,
- 15:49:00 10 which essentially indicates that quantity
 - 11 regulation of CBM water is not something that's
 - 12 within the Council's jurisdiction.
 - 13 That's what the AG concluded. And the
 - 14 AG also concluded that water quantity can only be
- 15:49:15 15 regulated where it directly relates to water
 - 16 quality.
 - 17 And that occurs in the context of
 - 18 pollutant loading and some other capacity. Does
 - 19 not occur where the desire is just to limit the
- 15:49:26 20 amount of water that's flowing down the drainage.
 - 21 That Decision is in accordance with the
 - 22 law, and it's in accordance with the DEQ's
 - 23 longstanding interpretation of its own Regulations,

- 1 which have been in practice for over 30 years. And
- 2 I think in the Status Report, Petitioners have
- 3 argued that DEQ needs to revert back to the course
- 4 it deviated from 30 years ago, and stop allowing
- 15:49:49 5 discharges from oil and gas operations.
 - I would submit to you that that is not a
 - 7 de-, was no deviation 30 years ago. That's what
 - 8 was performed.
 - 9 That's what the policy of the state was
- 15:50:01 10 as policy of the effluent guideline, as well to
 - 11 allow beneficial use of this water in arid
 - 12 environments where it can be used. And that's
 - 13 what's occurring.
 - 14 It's been what's been occurring for 30
- 15:50:14 15 years under the current DEQ machine. Focusing on,
 - 16 on a couple of particulars within the Petition,
 - 17 various Petitions, and especially the Status
 - 18 Report, it appears that what the Petitioners are
 - 19 looking for is to regulate the quantity of water as
- 15:50:34 20 pollution, the quantity itself, as opposed to the
 - 21 constituents within the water discharge.
 - 22 Water quantity is not a pollutant. And
 - 23 if water meets standards and limitations, it can be

- 1 discharged.
- 2 The fact that -- What PRBRC is seeking
- 3 is that if water meets effluent limits and
- 4 standards, PRBRC would still have the EQC require
- 15:51:00 5 still an additional test and additional requirement
 - 6 that only a very limited amount of water could be
 - 7 discharged. And I believe a fair reading of
 - 8 PRBRC's response to our latest filing and the
 - 9 Wyoming Outdoor Council's position would be that
- 15:51:14 10 only that water that's been permitted for
 - 11 beneficial use by the State Engineer can be
 - 12 discharged, and all other water has to be dealt
 - 13 with in some other fashion.
 - 14 Petitioners have argued today that DEQ
- 15:51:28 15 is violating the Clean Water Act by not limiting
 - 16 the quantity of water. And it's important to note
 - 17 in that context, number one, that the AG clearly
 - 18 disagrees with that, and the DEQ clearly disagrees
 - 19 with that.
- 15:51:40 20 But furthermore, not a single Federal
 - 21 Court has ever held that a State is violating the
 - 22 Clean Water Act by not regulating the quantity of
 - 23 water discharge. Clearly this does not violate the

- 1 Clean Water Act, and there's nothing illegal about
- 2 the existing Appendix.
- 3 This is a program that EPA has delegated
- 4 to DEQ, and DEQ's in compliance with the program.
- 15:52:06 5 So, DEQ cannot regulate quantity just for
 - 6 quantity's sake alone.
 - 7 And getting back to this issue of the
 - 8 State Engineer, whether the State Engineer's issued
 - 9 a Permit or not, I think the thrust of what PRBRC
- 15:52:21 10 has argued is that if the State Engineer is not
 - 11 regulating the water that's discharged in CBM
 - 12 operations, then the DEQ must jump in and regulate
 - 13 the quantity of that water. And that is clearly
 - 14 not the case.
- 15:52:33 15 That's clearly not supportable under the
 - 16 law. And it's never been the policy of the state.
 - 17 That position ignores the fact that
 - 18 there is no affirmative authority under the DEQ
 - 19 Statutes and the Environmental Quality Act to allow
- 15:52:46 20 the DEQ to regulate water quantity. An
 - 21 administrative agency is limited to those powers
 - 22 that are vested in it by the Legislature.
 - 23 And the AG concluded that there is no

- 1 express or implied authority in the Environmental
- 2 Quality Act to regulate water quantity in the
- 3 absence of a direct tie to water quality. The
- 4 position that only that amount of water should be
- 15:53:07 5 discharged as is permitted by the State Engineer's
 - 6 Office also ignores the constitutional positions
 - 7 under Article 8 of the Constitution that provide a
 - 8 State Engineer and Board of Control have general
 - 9 supervision over waters of the state, and the State
- 15:53:21 10 Engineer is the agency charged with making those
 - 11 determinations on what is a beneficial use.
 - 12 And it also ignores the reality that
 - 13 many beneficial uses of water in this state are
 - 14 made without a State Engineer Permit. Several
- 15:53:36 15 which will bear mentioning specifically would be
 - 16 most of the in-stream uses that are made when it's
 - 17 for fisheries; whether it's for in-stream stock
 - 18 use, whether it's for wildlife enhancement are made
 - 19 without the benefit of a State Engineer Permit.
- 15:53:51 20 We don't have a Permit for every
 - 21 in-stream flow to allow fishing to occur. That
 - 22 doesn't mean fishing is not a beneficial use.
 - So, this idea that if the State Engineer

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1 is not limiting it, the DEQ needs to limit it, is
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- 2 simply -- there is no support for it under the law.
- 3 In addition to flow, that type of argument would
- 4 interfere with the State Engineer's regulation of
- 15:54:14 5 water quantity, because the State Engineer controls
 - 6 the withdrawal of groundwater incident to CBM.
 - 7 And the Bylaws address that water, once
 - 8 it's been discharged and it becomes to the extent
 - 9 it's, that it's been found as a beneficial thing in
- 15:54:31 10 State of Wyoming, not a detriment. Furthermore, if
 - 11 someone were to want to appropriate that water,
 - 12 they certainly would be able to.
 - 13 And if, if the Agency were constrained
 - 14 from allowing that discharge, that certainly would,
- 15:54:43 15 or allowing that appropriation, that certainly
 - 16 would interfere with the duties of the State
 - 17 Engineer's Office. Having unappropriated water and
 - 18 a source of supply has always been viewed as a
 - 19 benefit, not a detriment, in the state of Wyoming,
- 15:54:57 20 and I think we heard that from Harry Labonte
 - 21 (phonetic) when he presented in February on this
 - 22 Petition.
 - 23 And I want to address now the reality of

- 1 what PRBRC is seeking to do. They are seeking a
- 2 change to the policy, a longstanding policy of this
- 3 State.
- 4 And it's a change that, to policy that
- 15:55:14 5 the DEQ is not authorized to make. And that change
 - 6 is they are asking the Council to disallow the
 - 7 longstanding practice of using natural drainages
 - 8 and waterways and water courses to convey water,
 - 9 even foreign water in the development of a state as
- 15:55:31 10 agriculture and mineral resources.
 - 11 That has never been the policy of the
 - 12 state. Waterways and drainages have always been
 - 13 available for mineral and agricultural development
 - 14 since statehood.
- 15:55:41 15 And in this case, discharge water that
 - 16 meets effluent limits and standards is no
 - 17 different, and should be treated no differently.
 - 18 And just by way of example is this policy has stood
 - 19 so long in the state that nearly every irrigation
- 15:56:00 20 district in the State of Wyoming diverts water from
 - 21 one source and returns it to another source, either
 - 22 through return free or other obligations.
 - We have a lot of situations where water

- 1 is diverted from one tributary to another, one
- 2 tributary that may have a good water source, into
- 3 a, another tributary that may not, for the benefits
- 4 of wildlife or for the benefit of agriculture, for
- 15:56:19 5 the benefit of municipal sources. All of those
 - 6 change the hydrography of those drainages, change
 - 7 the hydrology; add water to the drainages that have
 - 8 historically been dried.
 - 9 And all of that has been deemed
- 15:56:34 10 beneficial to economic development. This is no
 - 11 different in this situation.
 - 12 If we were to go down this road, I think
 - 13 we need to take a look at what would the potential
 - 14 impacts on agriculture be? Does that mean if you
- 15:56:48 15 import water into a drainage, that somehow we're
 - 16 going to consider that quantity of water now as, as
 - 17 a pollutant, and we're going regulate that
 - 18 drainage, and the DEQ is going to have the ability
 - 19 to say, "You can't bring water into this drainage"?
- 15:57:01 20 Is that going to affect Stage II
 - 21 projects where we're depriving Little Snake
 - 22 irrigators of the, or Little Snake water, users of
 - 23 water that would also come to them because we're

- 1 bringing it over the hill and into the North Platte
- 2 drainage? Lots of implications along the lines of
- 3 what is being suggested by PRBRC.
- 4 Construction of reservoirs is another
- 15:57:24 5 longstanding alteration of a natural hydrology that
 - 6 adds water to systems during times that they
 - 7 typically would be dry or would not have the same
 - 8 water flow. So, there are -- The point being,
 - 9 there are many examples of where natural hydrology
- 15:57:41 10 is modified by activities: agriculture, mineral
 - 11 development, municipal development.
 - 12 And all of those are accepted as
 - 13 acceptable policies because of the longstanding use
 - 14 of the natural drainages to do that. Now PRBRC
- 15:57:58 15 wants to change this policy, essentially by saying
 - 16 a minority of landowners don't want to see
 - 17 increased flow within these drainages, that these
 - 18 discharges should be prohibited altogether, or
 - 19 somehow there ought to be a veto authority by
- 15:58:15 20 landowners to say, "No, we don't want water here
 - 21 because it may change the character of ephemeral or
 - 22 intermittent drainage by addition of water that may
 - 23 not be otherwise there or maybe at different times

- 1 of the year.
- 2 To make a decision on that basis, it's
- 3 landowners against other landowners within the same
- 4 drainage. And we've seen it within a drain, where
- 15:58:40 5 you have one who doesn't want it and several who
 - 6 do.
 - 7 If we say, "No," we deprive the
 - 8 landowners who want the water. If we say, "Yes,"
 - 9 we're injuring the landowner who may not want that
- 15:58:52 10 water.
 - And we submit the answer is, "No," under
 - 12 the policies of the State with respect to the use
 - 13 of natural drainages. Simply put, the EC does not
 - 14 have the authority to affect the policy change that
- 15:59:05 15 the PRBRC is seeking.
 - 16 The AG's opinion made that clear. But
 - 17 in addition, the policy of the State is preserved
 - 18 beyond the reach of the DEQ by two other principles
 - 19 of law, both of which have been recently reaffirmed
- 15:59:19 20 in the Maycock litigation.
 - Number one, there is an easement to flow
 - 22 water within natural water courses of the State of
 - 23 Wyoming. And if the DEQ were to limit the amount

- 1 of water, limit the quantity of discharge that
- 2 could be discharged into natural water courses of
- 3 the state, that would be impairing that easement,
- 4 which is a, which is vested in the, in the
- 15:59:45 5 Constitution.
 - 6 So, limiting quantity for quantity sake
 - 7 would reduce the scope of that easement which
 - 8 exists under the Constitution of the United States.
 - 9 Second, there is a right of condemnation to allow
- 15:59:57 10 the use of natural drainages to flow water for
 - 11 mineral production.
 - 12 And so, again, were the DEQ to limit the
 - 13 amount of water that could be discharged would
 - 14 deprive mineral development; if you take it in the
- 16:00:14 15 agricultural context, agricultural development.
 - 16 But, it would limit the rights of industry to
 - 17 exercise condemnation rights to allow for ways for
 - 18 water to be discharged into drainages.
 - 19 And essentially, by seeking to limit
- 16:00:34 20 these rights, those, PRBRC is running afoul of
 - 21 longstanding policy, reconfirmed very recently in
 - 22 judicial Decisions, under settled principles of
 - 23 constitutional law, and existing statutory

- 1 authorities. So, we would urge that the Council
- 2 not accept the invitation to limit the quantity of
- 3 water and discharge, limit the quantity of
- 4 discharge water without regard to the quality of
- 16:01:09 5 water.
 - Finally, if the EQC proceeds to
 - 7 rulemaking on this industry hazard, we believe
 - 8 correctly that the EQC must receive the
 - 9 recommendation of the DEQ on any proposed Rule.
- 16:01:27 10 And the fact that this is a Citizens' Petition, --
 - 11 Citizens are certainly allowed to bring a Petition
 - 12 forward.
 - 13 The fact that this is a Citizens'
 - 14 Petition does not negate the requirement under the
- 16:01:38 15 Environmental Quality Act that the EQC receive the
 - 16 advice of the Advisory Board, the Administrator,
 - 17 and the DEQ Director before proceeding to rule
 - 18 making. And in this context, the DEQ is already on
 - 19 record with basically agreeing that it did not have
- 16:01:56 20 the authority to proceed to regulate the quantity
 - 21 of water.
 - 22 And, it has taken a position that the
 - 23 Agency lacks that authority. That position is but

- 1 addressed by the Attorney General's, which is an
- 2 area within the DEQ's own interpretation of its own
- 3 Rules.
- And, in fact, on June thirtieth, the DEQ
- 16:02:17 5 reaffirmed its interpretation in response to
 - 6 comments received on the Agricultural Use
 - 7 Protection Policy to implement Chapter 11, Section
 - 8 20, of the Water Quality Regulations. As the
 - 9 Council's aware, that's the section that deals with
- 16:02:31 10 protecting agricultural use and setting effluent
 - 11 limits.
 - 12 And PRBRC made essentially the same
 - 13 comment that they are urging the Council to adopt
 - 14 into a Rule here, that the DEQ has the authority to
- 16:02:45 15 regulate water quantity and should regulate water,
 - 16 water quantity in implementing Section 20. And the
 - 17 DEQ response to comments on June thirtieth
 - 18 indicated that the DEQ's response was, "We believe
 - 19 the Agricultural Use Policy properly interprets
- 16:03:02 20 both the Statutory and Chapter 1 Regulations.
 - 21 It is true that water quantities and
 - 22 quality are related, and also true that the
 - 23 statutory definition of "pollution," "pollution" is

- 1 broad, very broad; so broad, in fact, as to
- 2 preclude every human activity. However, the
- 3 definition of "pollution" oversight with respect to
- 4 water quantity, it refers to it, but says nothing
- 16:03:25 5 of an alteration of the quantity or flow.
 - 6 The act of irrigation itself alters the
 - 7 flow of streams by diverting the water from the
 - 8 stream channel. Certainly this could be construed
 - 9 as detrimental or injurious to the water quality.
- 16:03:40 10 And, however, the DEQ has not attempted
 - 11 to regulate the quantity because a "lack of,"
 - 12 parenthetic, "or excess of," close parenthetic, is
 - 13 not defined as "pollution." In fact, the Wyoming
 - 14 Constitution and Wyoming Statutes clearly identify
- 16:03:53 15 the Wyoming State Engineer as being responsible for
 - 16 the management of water quantity.
 - So, the DEQ's position, as expressed in
 - 18 February to the Council, to this very Petition, has
 - 19 been reaffirmed in, on June thirtieth. That's
- 16:04:08 20 supported by what the Attorney General's Office has
 - 21 already said.
 - So, PRBRC doesn't agree with that
 - 23 interpretation from the administering agency,

- 1 doesn't agree with the Attorney General's Opinion,
- 2 and is asking the Council to ignore both. And we
- 3 are urging the Council not to accept that
- 4 invitation, because it would ignore the Agency's
- 16:04:31 5 only interpretation and the State's legal advisor
 - 6 for the State's legal opinion.
 - 7 So, we think you should decline that,
 - 8 and consider the Petitions, and terminate this
 - 9 procedure. On a final note, if, if the DEQ decides
- 16:04:46 10 to continue down this road, and adopt one of the
 - 11 proposals that's been recommended, we would
 - 12 certainly urge that whatever proceeds be clearly
 - 13 identified so that as the matter proceeds, all
 - 14 parties know exactly what proposal is being put
- 16:05:05 15 under, under, under discussion for ruling.
 - So, if there are questions, I'd be happy
 - 17 to address them. Otherwise, that's the --
 - 18 MS. FLITNER: Thank you.
 - 19 MR. BURRON: Thank you.
- 16:05:18 20 MS. FLITNER: Questions?
 - 21 (Whereupon, no response was had.)
 - 22 THE CHAIR: Actually, I have, I have
 - 23 one.

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1 Keith, thank you. That was really good.
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- 2 Thanks a lot. I'm struggling with this
- 3 idea that the only, the only way that you can deal
- 4 with Regulations is have the Government fix them
- 16:05:42 5 for you.
 - This seems anti-Constitutional to me.
 - 7 Somehow it seems the power is vested in the people,
 - 8 and, and there should be provisions somehow in, in,
 - 9 in our government and in our state's Constitution.
- 16:05:57 10 And the way we conduct our affairs is
 - 11 for citizens to be able to bring Petitions whatever
 - 12 way. And I just wanted some clarification on that.
 - 13 If I heard you correctly, the only thing
 - 14 that can bring forth any kind of remedy is, is the
- 16:06:14 15 Agency itself.
 - MR. BURRON: Here's the -- I appreciate
 - 17 the question. I think it's -- I understand what
 - 18 you're suggesting.
 - The, the Administrative Procedures Act
- 16:06:25 20 clearly provides a right on the part of a citizen
 - 21 to request rulemaking, to bring the Petition for
 - 22 rulemaking. That position exists within the EPA.
 - 23 However, within the Environmental

- 1 Quality Act, the rule-making provisions are also
- 2 very clear that before the Environmental Quality
- 3 Council adopts a Rule, they must receive the
- 4 recommendation of the Department. And there is not
- 16:06:51 5 an exception in the Act that I can read, or even
 - 6 that would appear implied in there, that the
 - 7 Council could proceed without that recommendation
 - 8 from the Director.
 - 9 And clearly under the, under the
- 16:07:02 10 regulatory scheme that's set up under the water
 - 11 quality provisions and under the provisions dealing
 - 12 with the Environmental Quality Council, it is
 - 13 contemplated that the Advisory Board will consider
 - 14 that, the Administrator will consider that, the
- 16:07:17 15 Director will consider that, and a recommendation
 - 16 will be made to the Council.
 - In this case, the recommendation has
 - 18 been fairly strongly telegraphed automatically,
 - 19 though. In this procedure, we would certainly urge
- 16:07:31 20 the Council to give it to the Department and let
 - 21 them do their analysis.
 - In addition, I think under the, the new
 - 23 Council Rules for Procedure that were discussed

- 1 this morning, I think there's a provision in those
- 2 Rules that also suggests that prior to rule-making,
- 3 or in the context of a citizen Petition, there will
- 4 be a request for, for the DEQ to do an analysis of
- 16:07:52 5 the citizen proposal before that.
 - 6 So, I think that's, that's at least how
 - 7 we would read the Statute.
 - 8 THE CHAIR: Okay. And I had another one
 - 9 that was kind of more technical.
- 16:08:04 10 I looked up "black water," and I'm not
 - 11 sure I can -- I just wanted -- If I understand this
 - 12 is correct, it's 41-3-903, "By-product water;
 - 13 definition.
 - 14 By-product water is water which has not
 - 15 been put to prior beneficial use[comma], and which
 - 16 is a by-product of some nonwater-related economic
 - 17 activity and has been developed only as a result of
 - 18 such activity [period]. By-product water includes
 - 19 [comma], but is not limited to [comma], water
 - 20 resulting from the operation of oil well separator
 - 21 systems or mining activities such as dewatering of
 - 22 mines."
 - 23 I'm trying to figure out where this

- 1 "byproduct" definition fits in the CBM testimony we
- 2 have.
- 3 MR. BURRON: The, the State Engineer
- 4 currently -- As you probably know from information
- 16:09:00 5 that's been submitted, the State Engineer currently
 - 6 permits CBM wells and the extractions of water
 - 7 incident to that as a beneficial use. That is a
 - 8 prior beneficial, which would, I suppose, calls
 - 9 into question whether it's like byproduct, unless
- 16:09:19 10 it is within the context of water which has been
 - 11 extracted under a dewater process, and in some
 - 12 cases has a subsequent beneficial use either in a
 - 13 reservoir or irrigation.
 - 14 But when it doesn't, it is
- 16:09:36 15 unappropriated water. Unappropriated water, under
 - 16 Code to State Engineer's Statutes, is water that's
 - 17 subject or available for appropriation for
 - 18 agricultural use.
 - 19 THE CHAIR: Okay. Thank you.
- 16:09:49 20 MS. FLITNER: Other questions?
 - 21 (Whereupon, no response was had.)
 - MS. FLITNER: No?
 - Okay, thank you.

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shut you off on those other things, but it's not the right time. I really don't have anything to comment specifically on; although, I do register what your concerns are.

MR. JONES: Our desert needs water. Thank you.

MR. GORDON: Thank you. I have Marvin Blakesly. I met you out in the lobby.

MR. BLAKESLY: First of all, Mark, I'd like to thank you for coming here to the Big Horn Basin and hearing the concerns the ranchers and the operators and the county government has here. We appreciate you coming here to listen to us.

I wish we had had a little more time, because there are a lot of people that are very concerned about the loss of water here in the Big Horn Basin. I think that was very evident at the meeting in Worland. There was well over 100 people there. There was a lot of concern expressed both with the ag protection policy and the petition. I think the message came out loud and clear that we need the produced water here in the Big Horn Basin. Agriculture and wildlife very heavily depend on the water.

I guess there's been some confusion as to exactly what is moving forward with the rule making. I

was at the hearing in Casper when the motion to dismiss was denied. I left that meeting and I was very unclear as to what was moving forward with rule making, whether it was the original petition, whether it was the amended petition, whether it was the status report. I think there was a lot of confusion as to just exactly what was moving forward.

I guess what I have noted in your public notice and with what Jill has said, that what is moving forward for rule making is the amended petition; is that correct, with the pending coal bed methane? Or, is everything still on the table, I guess is my question?

MR. GORDON: On November 13th in Buffalo, we're going to have a working session to precisely craft the language. There were a series of resolutions which were passed, which as you say are confusing. And so the point was to put it all in one place at one time.

It's important that under public meeting rules and so on and so forth that that be done in a Council meeting with a quarum and all of that. I would recommend that you come to that meeting.

We're not really taking testimony. It is to put the language specifically together. That language

will then be published with the Secretary of State, and that is the language we'll move forward for a hearing on. Does that make sense?

MR. BLAKESLY: It does. I would just further like to say that I'm a native of Thermopolis. I was born and raised in Thermopolis, so I had the pleasure to grow up here in the Basin and live around the oil fields and discharge water.

You know, I'm a very avid outdoorsman. I hunt along the discharge water, because that's where the wildlife is at. The wildlife is very dependent on the water here in the Basin, as is agriculture. And the irrigation that comes from the produced water here in the Big Horn Basin is also very important to the wildlife and sage grouse, particularly on the Cottonwood and the Gooseberry. It provides some very critical habitat for the sage grouse populations here in the Basin.

We're opposed to the petition. But I would like to say we are pleased with some of the language that has come forth in the amended petition and wanted to recognize that.

We live in a very arid area here. We're in the midst of a ten-year drought. And I think it became even more apparent when the DEQ came here, for their

tours, just how important the produced water is here for the folks in the Big Horn Basin.

You know, I think had we had more time there would be a lot more people here, certainly, to express their opinions on this. I just want to point out the fact that if the water goes away from the Big Horn Basin, I don't see any winners for this.

Wildlife and agriculture are the extreme stream big losers. It also hurts the industry. I just don't see any good thing to come of it. Agriculture and wildlife and industry have lived in a very good relationship here in the Big Horn Basin for 100 years almost in some cases.

I respect your comments, and I would tell you that's the first negatives comments that I've heard about produced water here in the Big Horn Basin. I appreciate your comments. If we ever hear comments, it's where is our water, and, geez, could we have more.

If for whatever reason the wells go down and the water is gone for a day or two, people are knocking at our door saying, where's the water? Where's the water? We really need it.

So I just hope that you'll take this away.

Please consider any negative impacts that would result in the loss of the water here in the Big Horn Basin.

Again, we appreciate you being here.

MR. GORDON: Thank you. I apologize for the short notice, again. What happened is, I didn't realize DEQ was having their thing. I got that notice actually from a cell phone call after it had happened. I wish I had been able to attend. Then Norma Lee Sanford, who probably you know --

MR. BLAKESLY: I do.

MR. GORDON: -- Norma Lee said, you've got to get up there and listen to those guys because it's a big issue.

MR. BLAKESLY: There was standing room only in Worland. People were very concerned both with the ag policy and the petition. You know, is it going to take away the water that we've got now, and how much -- you know, we certainly see an impact to the future opportunities to develop water, additional water sources here in Basin.

I mean here in the Big Horn Basin and the use of this produced water, it goes on all over Wyoming. That was one of the original reasons that the beneficial use was carved out in the Clean Water Act in the first place, with Wyoming in particular in a desert environment, and the beneficial uses of that water went on for many, many decades, and we certainly want to see

that continue. MR. GORDON: Thank you. 2 MR. BLAKESLY: Thank you. 3 MR. GORDON: Thank you very much. I have Keith Hamilton. 5 MR. HAMILTON: What I was going to talk about 6 tonight is the same thing you guys have already heard. 7 I'm the Northwest District Director of the Wyoming Farm 8 Bureau. I represent the Big Horn Basin. The comments 9 that I have tonight have been submitted. It has to do 10 whether you guys actually have the authority to 11 regulate the quantity of water. 12 So if you've already -- if this is an 13 inappropriate time to present these again, why then 14 maybe I should wait until we can deal with it in 15 Buffalo. That's why I posed the question. You know, I 16 can read these. I can present them again. 17 MR. GORDON: Are those the same comments that 1.8 Ken Hamilton presented? 19 MP. HAMILTON: Right. 20 MR. GORDON: I mean, duly noted. 21 response, I would say that that is absolutely part of 22 what we're wrestling with. They're very good points. 23 MR. HAMILTON: So what you've said just 24 lately is that you will be putting this stuff together 25

somewhere in that whole process there needs to be a place for agriculture, particularly, be able -- should be given the opportunity to use that water, to put it to beneficial use and they should have that choice.

If the contaminant or whatever is above the standard that we're looking that, that certainly should be in place as it is now so that they can take that responsibility and use that beneficially. And, certainly, along with that should be the notice of water -- some of the severe side effects of this water so they know fully well what they're getting themselves into. I think that needs to be disclosed as well. Whether it's produced in the future, that still needs to be there, not just shut it off and they can still use it.

 $\label{eq:main_main_section} \mbox{MR. GORDON: Thank you. That is terrific.}$ Those are exactly what I was hoping to hear.

MR. CORBERG: Thank you very much. Thanks for listening and having this meeting.

MR. GORDON: Thank you. That's the last person I have. Is there anyone else?

MR. SUTPHIN: I came in late, may ĭ?

MR. GORDON: You bet. And I guess because everybody else had a name --

MR. SUTPHIN: Isaac Sutphin, S-u-t-p-h-i-n.

I'm with the law firm of the Sundahl, Powers, Kapp & Martin in Cheyenne, Wyoming. We represent Merritt Energy. I apologize for being late. I didn't get out of Cheyenne as early as I wanted to.

But Merritt Energy is the operator of the Hamilton Dome. We are in the somewhat unique position of having a significant traditional oil and gas production facility. But we also have some discharges in the Powder River Basin and have an interest in the coal bed methane side of things as well.

I, like most people, here was somewhat confused about the nature of the meeting. That's fine, we understand that, and we still appreciate the opportunity to be here.

Mostly, what I wanted to reiterate today is the tremendous impact that produced water from Hamilton Dome has on agriculture, wildlife and, basically, on life in general in Hot Springs County. And Merrit has undertaken some significant economic analyses about their water. They're happy with the partnership that they have with the area ranchers. This was extremely evident on the tour that has been mentioned tonight when DEQ came and gave our facilities a visit.

But the fact remains that if any of these proposed rules, which seem to purport to impose some

more stringent standards on the water quality, if these are adopted, Merritt is going to be put in a very difficult position of considering whether to attempt to treat the water, possibly reinject the water. And the answer is, based on the analyses that have been done and comments that have actually been submitted to this effect, it's not economically viable. Plain and simple, those wells are going to be shut in and the water isn't going to be there anymore.

We have serious concerns with the various petitions that have been put forth by the Powder River Basin Resource Council. I understand you're not here tonight to discussion those petitions. But I did want to mentions Merritt's concerns.

Merritt is very concerned that any attempt to separate traditional oil and gas produced water from coal bed methane could not be a legally enforceable distinction for a number of reasons that don't need to be explained in detail at this forum.

point, the DEQ as it exists at the moment and the powers that is has are very clear. The definition of pollution is broad, but the DEQ has the ability through exceptions to dictate when and where and under what circumstances water can be discharged in this state.

It's a system that has worked well. It's protected the environment. It's resulted in a net environmental gain as evidenced by the discharges at Hamilton Dome and along the Cottonwood Creek. And we have serious concerns about the proposed changes.

I suppose it's it's not possible to make the request -- I mean, you don't seem to be giving any indication tonight what sort of petition, what sort of language will be set forth in the rule making. I take it you can't do that for us.

 $$\operatorname{MR}$.$ GORDON: I can't do that tonight because that's the whole point of November 13th, the day of November 13th.

MR. SUTPHIN: We do appreciate you being here. We'll certainly be making efforts to be in attendance at the meeting in Buffalo. And thank you for you time, your concern.

MR. GORDON: Thank you. Thank you. To honor Lorraine's -- is there anyone else that has any other comments to make?

MP. BLAKESLY: Can we talk twice?

MR. GORDON: Sure, what the heck.

MR. BLAKESLY: I guess one of the things you wanted to hear tonight is how this water is used in the Big Horn Basin for the ag and ranchers. It's used

extensively for irrigation, particularly in the Cottonwood drainage. Many other drainages use it for irrigation. We grow some wonderful alfalfa crops, totally with 100 percent produced water.

Extremely important to wildlife. The McCulloch Peaks wild horse herd uses the water produced from the Oregon Basin Field and discharged down Dry Creek. That is for 30 or 40 miles across the north end of the Big Horn Basin that is for most of the year the only water source present out there. Whole ecosystems have evolved around these produced water discharges.

I can say that the petition, as originally proposed, would cause Marathon to lose 100 percent of the discharges that we have today and probably, I'm guessing, well over 80 to 90 percent of the conventional oil discharges across Wyoming would go away as the original petition was presented.

Marathon's water, in itself, provides hundreds of acres of wetlands. Loc Katrine (ph) in the Oregon Basin is very dependent up the produced water from Oregon Basin Field. It provides an additional 3 to 500 acres of additional wetlands, and the BLM has verified that this, in itself, produces, you know, another 500 to 1,000 water foul and shore birds.

That produced water is the only water keeping

Loc Katrina alive today in the drought that we've got. So there are hundreds of miles of riparian zones and habitat. The water foul use it. The deer and antelope -- it was very evident on the tours that we did when DEQ was here. We didn't see a living creature outside of a half mile to a mile from where the produced water was used in irrigatation down the Cottonwood drainage.

And as we went down the Cottonwood drainage where the water was, there was deer, antelope and sage grouse and just a myriad of wildlife out there as well as productive ranches there. And it was very evident of folks that have water rights and the ones that didn't as you went down the drainage.

The folks that have water rights on the Cottonwood -- the discharge from Hamilton Dome, down the Cottonwood Field they have wonderful alfalfa fields and cattle and horses in their pastures. And those ranches that didn't were dust and desolate. It was a very good example of what you have and what you don't have with and without the water.

Just to reiterate how that water is used in the Big Horn Basin, in may ways with the wild horses, the wildlife, the agriculture all utilize the water very significantly.

MR. GORDON: Thank you. That's exactly what

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You know, this number is water that's raw water. It's not 2 treated. These are still drinking water supplies. And you

3 would have to add in, you know, the cost of that delivering

4 treatment to get to the value again in that drinking water. 5

So I still think that's covered under that \$40.43, roughly, 6 \$14,000 one-time charge in the present analysis.

We have another example, which is kind of a combination. We recently completed a reservoir that was mitigation for -- you know, it's kind of related to both agriculture and municipal use; and it was for -- to provide 11 mitigation for the City of Cheyenne, taking water out of 12 the Green River Basin, mainly the Little Snake River Basin.

And that reservoir was called the High Savery 14 Reservoir, and on a per-acre-foot basis the cost of 15 developing that -- again, we don't -- we had to add the 16 treatment and all those other costs if it would be 17 municipal water, but it's not being used for municipal 18 water -- but the price for that turns out to be something 19 like \$2250 an acre-foot.

20 So that's somewhere between ag use and municipal 21 use, and that water really is currently being used to 22 supplement seasonal agriculture in the basin. And those --23 primarily that's the -- the other major category I used, 24 which is not on here, is industrial use. And that's why some are in between.

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But I'm not going to have each of our landowners 2 stand up and make a statement. As I said to you,

3 Ms. Flitner, in the interest of time, many of them have

4 written letters, many of them have testified before. I 5 don't want to suggest in any way, though, that this isn't

important to them; and I want to -- I know that the Council 7 will pay attention to their concerns.

Also, where's Kenny Clabaugh? Well, you've heard from Kenny before. He's the guy on Wild Horse who has some 10 of the severe flooding which I showed you pictures of 11 today.

12 Marge West is here -- I think you'll be here 13 tomorrow also, Marge -- I showed pictures of some of the damage on her ranch as well, and she may testify if there's 15 time left over. As I said, there are a number of 16 landowners -- Eric -- hopefully Eric Barlow will be able to 17 talk tomorrow as well.

But at this time, we'd like to turn it over for Keith's people who need to get in and get out of town.

Also, I'd like to reserve 15 minutes at the end, 21 if I could. 22

MS. FLITNER: Of today or tomorrow? MS. FOX: The end end.

24 MS. FLITNER: Okay. I think that's just 25 fine, and we appreciate your moving along so that we can

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What you can pay for a drink and what you'd be 2 willing to pay for drinking water supply is the price for agriculture. And the only example that I have for that's a 3 4 reported example in conversations I've had with former 5 state engineers and the former guy that's going to be the 6 new guy, the director of the water development program.

In the late 1980s, PacifiCorp required water be irrigated at 3000 an acre-foot; and that's the industrials. Those are one-time charges.

So that's the best I can do as far as trying to 11 come up with a value for water.

MS. FLITNER: Thank you.

Are there questions?

Thank you.

15 MS. FOX: At this time -- and in the interest of time, Keith told me he has some people who need to testify today -- I'd just like to introduce a few of our 17 individual petitioners, particularly Tooter and Joe Rogers. 18 19

Would you stand up for a moment?

These are people who -- thank you -- are among 20 21 the petitioners. They ranch on Assay Creek, and we've made

22 Assay Creek a little bit of a case study. I can tell you

23 that the CBM water has been devastating to them and to 24 their operation. If you have any questions for them,

25 they're here.

get Keith underway.

And you'll both have the opportunity to follow up tomorrow.

So why don't we get started with your folks. I'm not certain if everyone who raised their hand is with your group, Keith.

MR. BURRON: I'm not either.

MS. FLITNER: Okay. Could I take a moment to get the names or maybe -- Doug, do you mind helping me 10 so that I don't have to take up time -- having a list of 11 those who want to testify starting now. There were about 12 eight hands that went up, and I'd like to make sure.

Joe is going to grab another signup sheet for 14 those of you who are going to start now; and if you don't mind getting underway while Joe helps with that, it would be great.

MR. BURRON: Thank you, Madam Hearing 18 Examiner.

The two consultants that we would like to put 20 on -- just keep her on for the record -- first is Penny 21 Hunter. She's a consultant with Geomega consulting in Boulder. She has a short presentation — I think about 23 15 minutes -- addressing the effluent limits that are 24 proposed in the petition.

In addition, she did a risk assessment based on

28 (Pages 106 to 109)

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the effluent limits using a few of the ranches in the state. And so Mr. McCarty and Mr. Flitner are also -- are landowners who were participants in that risk assessment, and I think it dovetails well with what she has to present.

So I'd like to ask if Penny could go and then if we could have Mr. McCarty and Mr. Flitner go.

After that, we've got one other consultant that kind of needs to hit the road tonight, and that's Dan Arthur with -- he's a DOE researcher, and he will 10 address some of the effects on production that could be 11 caused by some of these more stringent effluent limits.

12 MS. FLITNER: Okay. And I guess I should 13 say by way of transparency, you may have guessed that my --14 I share the last name with one of the ranchers who will 15 testify, Greg Flitner, who is my cousin; and I will be 16 hearing his testimony for the first time along with all of 17 you. So I think there is no conflict there whatsoever; but 18 if anybody has a concern, feel free to express it.

MR. BURRON: Thank you.

MS. HUNTER: Thank you. Joe has my

21 PowerPoint presentation, if it's available to put up. 22

MR. GIRARDIN: That's the computer down

23 there, and I don't run any of that.

24 MS. FLITNER: Keith, would you state for

25 the record who you are representing, please?

limit for barium.

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2 The petitioner's proposed limits are to change 3 those to 500 milligrams per liter per sulfates, 2,000 4 milligrams per liter for TDS and to add a limit for barium 5 at .2 milligrams per liter. 6

Also in note here, although sulfate is generally a component of TDS, it is addressed in the regulations as a separate -- by a separate limit. In addition, CBNG water is typically characterized as sodium chloride or sodium bicarbonate dominated; and therefore, for discussion purposes today, the TDS components will be exclusive of sulfates.

To review the petitioner's reason for changing the effluent limits, the claim is that the current effluent limits are not protective of stock and wildlife. We reviewed their references providing support for the changed limits.

For barium it's .2 milligrams per liter. Two web pages are cited. Both are extension bulletins. The Utah Extension Bulletin cites a .2 milligram per liter guideline per livestock, but the reference it provides for justification actually doesn't check out.

In addition, the Colorado State University Agricultural Extension, if we follow the web link to that 24 website, it's, in fact, revised its guidelines and

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MR. BURRON: Yes. My name is Keith Burron. I represent Petro-Canada Resources. Ms. Hunter's presentation is on behalf of a number of industry

interests -- CBM industry interests and conventional as 5 well.

And I will also pass out now the full Geomega report, which we also have for the record. We've got copies for everyone, which was actually produced for the Petroleum Association of Wyoming. And we're going to put 10 that into the record.

And so I'll pass that out, and you'll have 12 something to look at when Penny's talking.

MS. HUNTER: My name is Penny Hunter. I'm 14 a senior ecological risk assessor with Geomega. I have 15 several years experience dealing with water quality issues specific to wildlife and livestock. My company has ahold of risk assessments and oversight to risk assessments both 17 nationally and internationally.

I'm here today to present the findings of my 19 20 ecological risk assessment and beneficial use assessment for produced water surface discharges in Wyoming. 21

The issue, briefly, is whether current effluent 22 limits are protective of wildlife and livestock. The 23

24 current limits for sulfate and TDS are 3,000 and 5,000 25 milligrams per liter respectively, and there's currently no currently does not have a guideline for barium.

This curve for sulfate at 500 milligrams per 3 liter, again, comes from Utah Extension Bulletin, which in turn cites a Kober '93 guideline. However, when we read 4 fully through the guideline, it actually recommends a sulfate limit less than 4500 milligrams per liter.

Finally, the support for TDS at 2,000 milligrams per liter -- the extension service bulletin provided support of 5,000 milligrams per liter limit with the exception of a South Dakota agricultural extension 10 11 bulletin. However, this extension bulletin focuses on sulfate-dominated water, not the other components of TDS which we are dealing with today.

Interestingly, the recommendation for 15 sulfate-dominated water is disclosed to 3,000 milligrams per liter, which is generally considered safe, according to 17 their extension bulletin.

So the conclusion after reviewing the petitioner's supporting references is that the petitioner's statements are not supported by their references provided.

However, we pose the question what the potential 21 risk could be of TDS, sulfate and barium and we've reviewed 22

three lines of evidence; the first being other 23

24 peer-reviewed, published guidelines, the second is 25

literature-based toxicity studies that were, again, peer

29 (Pages 110 to 113)

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reviewed, and finally, ranchers and other Wyoming resident experiences, because they know better than anyone what goes 2 on -- what their uses of produced water are.

To quickly review the existing peer-reviewed guidelines, EPA does not have a current set of livestock-specific water quality benchmarks. Where we do get existing guidelines come from your Canada Environmental Ministry as well as a series of publications specific to livestock from the National Research Council or NRC.

10 For barium, these recommendations range from 5 to 11 300 milligrams per liter. For sulfate, again, the same 12 references recommend between 1,000 and 3,000 milligrams per liter. And for TDS, EPA, though it doesn't propose a 13 guideline specifically for livestock, does review toxicity 14 15 studies related to livestock and has text that says between 16 5,000 and 15,000 milligrams per liter is determined 17 adequate for livestock-drinking purposes. In addition, the 18 NRC recommends 5,000 milligrams per liter livestock.

19 So the conclusion from our review of existing 20 guidelines is that these guidelines are supportive of the current DEQ limits. However, they do not support the 22 proposed changes to those limits.

23 Our second line of evidence included a 24 literature-based review of toxicity studies. And just 25 briefly, toxicity studies generally include administering a Essentially, we derived specific water quality limits for specific receptors, both nonruminant and ruminant as well

3 as waterfowl. 4 For barium, these concentrations are between --5 came up between 313 and 360 milligrams per liter; and, in 6 fact, for barium, because there are not a lot of toxicity 7 studies out there, instead of taking a geometric mean, we

8 defaulted to the lowest LOAEL or lowest no adverse effects 9 level.

For sulfate, the range was between 3,010 and 5100 milligrams per liter, and for TDS the range was between 5680 milligrams per liter and 7800 milligrams per liter. So again, those benchmarks that we are deriving for our receptor-specific are in line with what the current WDEQ limits already are.

The final line of evidence was to look at ranchers' experiences. And as Dr. Raisbeck alluded to earlier, there are gross limitations of toxicity studies, including the fact that the Wyoming open-range conditions where wildlife and livestock are exposed to produced water sources will differ from the environment in toxicity studies, which generally include the allotted environments.

In fact, Johnson and Patterson recently did a study where they showed that cattle tolerance to sulfates 24 in the drinking water was much lower in a feedlot

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range of dosage to a test organism and some responses 1 measured. And this is a generic dose response curve; and, hopefully, in most toxicity studies a similar curve is identified.

In our risk assessment we identified two endpoints in the toxicity study; a no adverse effect level or NOAEL, which is the lowest dose at which an organism does not elicit any significant response. We also identified a low or LOAEL adverse effect level; and this is the lowest dose which does elicit a significant adverse 10 11 response.

These are interpreted in a risk assessment as --

13 if an organism is exposed to a concentration at or above the LOAEL, risk is be more likely to that organism; whereas 15 if that organism is exposed to a concentration at or below 16 the NOAEL, risk is unlikely to that organism. In between these two, risk is uncertain; and oftentimes this is 18 resolved by taking the geometric mean between the NOAEL and LOAEL and using this as a suggested benchmark. 19

This is a standard practice in risk assessment 20 21 and is often used by EPA as an EPA-accepted method. For 22 instance, they use it to derive their soil screening levels 23 for wildlife.

To summarize our data review, I won't go into 24 25 specifics because it involves a lot of details.

environment compared to open-range environment.

In addition, animals can exhibit increased adaptation and tolerance over time without adverse effects in the long term, which has been demonstrated in a number of studies. And this is not generally measured in toxicity study.

Finally, there are other study limitations of the publications themselves; for instance, gaps between the NOAEL and the LOAEL. So we interviewed a handful of ranchers in the Bighorn and Powder River Basin who use produced water sources with elevated sulfates and TDS compared to other water sources which are natural that they also use.

In general, the ranchers found that there is no adverse effects on the livestock -- their livestock, including cattle, sheep and horses, that drank water containing sulfates at or below 3100 milligrams per liter and TDS at or below 5390 milligrams per liter.

Where they did find adverse effects was apparent when the sulfates reached concentration at or above 4,000 milligrams per liter and TDS at or above 7,000 milligrams

Specifically, the Flitners, Greg and Dave, gave us some data on seven-year weaning rate averages, which were as good or better on the land with access to

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produced-water-only sources compared to their land with natural water sources.

Mr. McCarty also noticed that his ranches observed no adverse effects on their cattle that used produced water sources -- again, with the elevated sulfate and TDS -- compared to their natural water sources. Measures provided included body condition, mortality, weaning rates and weights and breeding rate.

Interviews with other ranchers, including 10 Mr. Meike, Mr. Schlaf and Mr. Shepperson, indicated no adverse effects on their cattle from drinking produced water sources compared to natural water bodies.

13 And finally, the beneficial use letters, which 14 are public record, indicated a number of times that their 15 livestock have benefited and have not experienced adverse effects using the produced water sources. 16

17 For wildlife effects, there have been a number of 18 studies by the U.S. Fish and Wildlife Service that have 19 shown no adverse effects on wildlife at the Loch Katrine, 20 which is a play lake enhanced by produced water discharges that receive contributions up to 5,000 milligrams per liter 21 22 TDS and over 2,000 milligrams per liter sulfates.

And finally, ranchers' observations indicate that 24 wildlife is often observed utilizing the produced water sources, sometimes in greater densities than the natural discharges support additional herds of cattle and crops in the areas.

3 Effects -- some effects of eliminating produced 4 water surface discharge included loss of herd size to a 5 number of ranchers in the counties affected. Some case examples are included below, and these are also -- can be 7 extrapolated countywide in terms of loss of total economic output and loss of jobs and labor income.

There's additional cost individually to ranchers to develop alternate water sources in the event that there are no more produced water surface discharges.

Finally, in some cases, the effects of lowering 13 the water quality limits are such that it would eliminate -- it would reduce exploration and development in certain counties, which affect county and statewide on lost tax and export revenue, lost jobs and contributions financially to social programs.

18 Our study conclusion shows that current WDEQ 19 effluent limits pose no measurable adverse effect to the 20 health and well-being of domestic livestock and wildlife; and furthermore, there would be no incremental reduction in 22 wildlife or livestock injury if the limits were changed to 23 Petitioner's requested limits. However, associated social 24 and economic impacts would be such that it would be harmful to the Wyoming residents.

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sources and without adverse affects observed.

The conclusion from this third line of evidence is that, again, the experiences of the ranchers and other folks in Wyoming in the field are supportive of the current limits, but they do not support the proposed changes to those limits.

From our three lines of evidence, we derive a set of recommended water quality benchmarks. These include 13 milligrams per liter for barium, 3,010 milligrams per liter for sulfates and 5600 milligrams per liter for TDS. 11 Compared to the current effluent limits, these are consistent; however, they're not consistent with

petition-proposed limits. 14 Our recommended benchmarks also show that the 15 current effluent limits are protective of wildlife and 16 livestock.

17 In the larger picture, briefly, there is other 18 additional social and economic values that produce water 19 surface discharges which should be taken into 20 consideration. I'm not going to go into the details here, 21 but a number of letters of beneficial use by Wyoming 22 residents show that their cattle and often their crops are 23 largely maintained by produced water sources.

24 A series of use attainability analyses that are 25 out in public record for Wyoming indicate also that the Thank you.

MS. FLITNER: Thank you.

Questions for Penny, keeping in mind that she is not going to be available to you tomorrow?

MS. HUNTER: And I also have an accompanying report which should be passed out to you. MS. FLITNER: Thank you. I have a couple of questions which I may have missed in the beginning.

Would you -- part of what we're grappling with, obviously, is the numeric standards. And so would you review for me the basis for your findings on the standards that you are recommending?

And you referenced your study a little bit, and I missed the methodology at the beginning -- if you wouldn't mind.

MS. HUNTER: Sure. It's a standard ecological risk assessment. We looked through the peer-reviewed literature on toxicity studies and identified concentrations which definitely do not cause an adverse effect and concentration which do show a low adverse effect.

We took the geometric mean between the two in a potential benchmark that could be used as a -- sort of a safe guideline for livestock and wildlife, and that was one line of evidence. We also looked at existing other

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published guidelines. I know there's none for EPA, but Canada has one specifically for livestock; and then the

3 National Research Council also has a set of guidelines. 4

And finally, we used the Wyoming ranchers' experiences to support what we're finding in the literature and the guidelines as far as the concentrations go.

And that, essentially, is how I came up with my recommended benchmarks.

9 MS. FLITNER: And how many landowners were 10 involved in your study?

MS. HUNTER: Individual interviews -- I 11 12 believe were six or seven. They're in the appendix there. 13 You can count. We also looked to letters of beneficial

14 use.

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15 MS. FLITNER: Thank you.

> CHAIRMAN GORDON: Can I follow up on that question?

Your selection of landowners -- and I think I saw 18 19 Mr. Meike --

MS. HUNTER: Meike. Sorry.

CHAIRMAN GORDON: That's okay.

22 But I was just curious how you selected your

23 landowners.

24 MS. HUNTER: On availability and -- as I'm 25 sure you're aware, my -- this report was supported by the

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Petroleum Association of Wyoming. They gave me some list 2 of ranchers. I also contacted the BLM, and the name 3 escapes me right now who gave us additional ranchers' names 4 and numbers.

Part of the limitation on the interviews was time. You know, I'm welcome -- I'm open to gathering more data, of course; and I think Mr. Raisbeck is of the same mindset that empirical data would be great.

CHAIRMAN GORDON: Uh-huh. Thank you. 9 10 MS. HUTCHINSON: My understanding of 11 toxicity is it's also related to time of exposure. So

certainly a person can be exposed to the same level for ten 12 minutes and be fine or a higher level for less amount of 13

time or a lower level for a long time. 14

So my question is how does your timed exposure 15 16 take into account the limits that you have proposed?

MS. HUNTER: We discarded acute -- some 17 very, very short-term studies. We looked at -- we tried to 18 gather as many chronic studies as possible. In some cases 19 there were no chronic studies, only subchronic. But we 21 tried to look at long-term effects.

22 MS. HUTCHINSON: What's the difference

between chronic and subchronic? 23

MS. HUNTER: It is almost operationally 24

25 defined; but for mammals, chronic includes a year or more,

generally, and subchronic is less than a year exposure.

For birds it can -- chronic is more than six weeks and 3

subchronic is less than six weeks.

MR. MORRIS: On your livestock report, was that just a visual observation or was there some scientific data?

MS. HUNTER: On the ranchers' experiences, there were some data provided to me, especially -- the Flitners provided numbers and the McCartys had general numbers for me. On others it was anecdotal or qualitative.

MR. MOORE: I'm trying to digest your 12 report here, and I haven't had enough time to really feel comfortable with it, but I'm curious -- I was looking to 14 try to find how many different toxicity studies for barium you were able to find and how you could draw conclusions based on the number of studies that you could find on 16 toxicity.

MS. HUNTER: Well, there are, obviously, study limitations to barium in particular. The number eludes me, but I believe it's between 5 and 10 per receptor. So the total per receptor is less than 20. 21

MR. MOORE: Well, on page 17 of your report 22 23 it says lethal dose studies on barium are nominal with 24 direct effects on cattle.

MS. HUNTER: That -- I'm reviewing general

toxicity information on barium, and I do go through acute studies; but none of those were used to derive water quality benchmarks.

If you look at table 1-6, I think, that will show you the number of studies that I used to look at water quality benchmarks.

MR. MOORE: 1-6?

MS. HUNTER: 1-8. I've lost count.

MR. MOORE: 1-7 is barium toxicity study

database.

MS. HUNTER: There you go.

MR. MOORE: But there were no -- according to your text -- no lethal dose studies on barium that sought ---

MS. HUNTER: Right. But we aren't really 16 looking at lethal dose. Death is the ultimate endpoint. For here -- for this study we're looking at more subtle endpoints such as growth defects, reproductive defects. Those occur long before death, obviously.

19 MR. MOORE: I guess -- okay. I haven't had 20 21 a chance to digest this, so -- and bear in mind the 22 petitioner asked to defer judgment on these until after 23 Dr. Raisbeck's study is completed, anyway; so we'll have

time to review it before we get to the meat of the issue, 24 25 anyway.

32 (Pages 122 to 125)

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CHAIRMAN GORDON: Could you just restate -there was a slide early in your presentation in which you talked about TDS and sulfates.

Could you just restate what you did there? I think it's probably your second or third slide.

MS. HUNTER: What was the subject? Do you remember?

CHAIRMAN GORDON: Well, I think you were talking about TDS and why you were not considering --

MS. HUNTER: Oh. It's this one.

11 TDS, of course, is the measure of a number of 12 different constituents. Sulfate is generally a part of 13 TDS; but because it addresses a separate regulatory issue here, it's redundant to talk about sulfate toxicity and 14 then TDS toxicity if we include sulfate in that TDS 15

measure. So we're talking about other constituents of TDS. 16

17 CHAIRMAN GORDON: Okay. 18 MS. FLITNER: Other questions? No. Okay.

19 Thank you, Penny. 20 Keith, if I understand your earlier comments, you

21 would like Dan Arthur?

22 MR. BURRON: Correct. If we could, I think 23 first Mr. Flitner and then Mr. McCarty.

24 MR. MCCARTY: Chairman Flitner and members 25 of the Council, good afternoon. Pardon me.

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My name is Mick McCarty. I'm from Cody, Wyoming. 1 2 I'm an attorney and a rancher. Don't hold the first part against me. Today I'm representing myself, and you know 3 what they say about lawyers that represent themselves. The 4 old saying is they have a fool for a client. 5

But be that as it may, I'm representing our family ranching operation, which is known as McCarty Ranching. We're a third-generation ranching operation, and we're like most people involved in agriculture anymore.

You own some land and you lease some land and you operate 10 11 some land.

Because of this, we have the ability to operate 12 different herds in different fashions and compare that 13 performance. On our own ranch, which is south of Cody, we operate what I call a range cow operation. In other words, 15 16 we try to operate so that our cows never eat any processed forage. They don't -- we try and operate so they

17 don't eat any hay. They eat mineral supplement, natural 19 grass and protein blocks -- protein supplements.

20 These cows are the cows that I gave an opinion to 21 to Penny. In the summer they run west of Highway 20 on the 22 face of Carter Mountain, and in the winter they run on BLM

23 permits in the Oregon Basin. And they're there from

24 November 1st to May 1st. Their sole source of water, with

25 very, very few exceptions, is oil field discharge water.

1 And I can tell you that that oil field discharge 2 water and sulfur -- and I'm not a scientist -- pushes the 3 upper limits of all that has been discussed here today. So 4 being able to compare that group of cows to other group of 5 cows that we operate, we were always curious about this 6 water.

7 And the fact is we were curious at the outset 8 about this water and hired a nutritionist to analyze it. 9 His name is Dr. Trey Patterson, who's head of the animal 10 science department at the University of South Dakota; and 11 his father and he have a company. And now he's comanager 12 of Padlock. So he's a Wyoming guy and familiar with these 13 issues.

So what measurements do we apply in ordinary operations? We don't apply very scientific type of measurements. But, you know, an easy one is what's your death loss? Well, on this herd our death loss is less than 1 percent a year.

19 What percent of your cows are bred in the fall 20 when you pregnant-test? And this year it exceeds 21 95 percent. What percent of these cows delivered a 22 live-weaned calf? And for six years it's been over 23 94 percent.

How do these cows do on a day-to-day basis? 25 Well, the animal scientists have a score system from one to

ten in the skinniest cow you ever saw to the fattest cow 1 2 you ever saw, and they say range cows should be right in 3 the middle at a body condition score of five. And it's a little mesenteric applying that on a herd, but we believe 4 5 that we maintain that body condition score of five 6 throughout the year. 7

These cows -- and I can't tell you why -operated in this group perform better than our other groups. And it may be the terrain, it may be the grass, I don't know; but there isn't anything adverse from their drinking this high water with -- high sulfur content water. 11 As far as I know, they're drinking it today; and that's all 12 13 they have to drink today.

There are some people that say that that warm discharge water -- cows like it. It reduces their caloric intake, and it may -- I know they prefer the warm discharge water.

You know, I'm not here talking about coalbed 18 methane discharge water, because I don't know about it; and 19 20 I'm not here arguing rancher against rancher. I have a 21 little problem with one group of ranchers wanting one thing and one another. 22

23 But I guess from my perspective -- I guess what 24 I'm saying to you as a council is that one size is not going to fit all. And one uniform rule imposed in a

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nuclear fashion -- that seems to be a popular word today -is going to cause a lot of dislocation. It's going to 2 3 cause a lot of harm to existing ranchers. It's going to 4 cause a lot of harm to wildlife that depend on it, and it's 5 going to cause a lot of harm to ranchers and business.

I think that you're going to have to make some definitions of how it's applied and when it's applied, and that's going to be a big job.

I thank you for the opportunity to be here today. 10 I've got to cut this short because I know your time schedule and I know my time schedule; but if you have some 11 questions, I'd be happy to answer them. 12

MS. FLITNER: Thank you.

Questions? Thank you.

15 I believe Greg is next on deck. Dan Arthur will 16 follow.

17 We have nine people slated to testify today, so 18 I'll remind you of a couple of things while Greg is making 19 his way to the podium, especially since this is probably 20 the only time anyone related to me might ever listen.

21 We would like to limit the testimony to 22 five minutes or under. My plan is get through these nine, 23 plus Greg and Dan Arthur. So we need your help and cooperation to do that. We have letters from your

25 past testimony -- we have letters that have been submitted

1 water out there. 2

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We've seen no evidence of water quality problems in our livestock from the produced water. Our calves seem to grade in the top 5 percent in the region for quality, according to ConAgra. And weaning weights from our calves on produced water as compared to other pastures throughout the ranch are as heavy or heavier than those calves. And in a lot of cases, they're heavier; and some of it may be attributed because the availability of the water is there.

And I guess in all my years of riding out there 11 I've never seen a wild horse that was adversely affected by the water. Maybe there's been, but I've not seen one. The 13 only problem I can see with the produced water out there is 14 if it ever quits. If it stops flowing, it would have a 15 tremendous economic impact on our ranch and, in turn, 16 rendering a large portion of our range unusable, resulting in a loss of jobs and possibly crippling our outfit to the point where it would no longer make sense to operate.

That's all I have.

MS. FLITNER: Thank you. Questions for Greg? Thank you.

Dan Arthur is on, and on deck is Jeremy

23 Butterfield, followed by Brad Basse or Basse. Pardon me if 24 I get the pronunciations wrong.

MR. ARTHUR: Madam Chairman, Council

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into the record, and we have revisited past testimony; so new information is helpful and redundant information is redundant.

Thank you.

MR. FLITNER: Mrs. Flitner and members of the committee, I want to thank you for giving me the opportunity to get up here. I'm not much of a speaker, but -- especially following Nick.

But we do run out there on some of this produced water. My wife Pam and I and my father and his wife -- we 10 11 have a horse, cattle, farming and recreation operation 12 which we run on private BLM state and Bighorn Park in 13 Johnson County.

We run a couple thousand head of cows and a 15 couple hundred head of horses, and we've been there for a 16 hundred years as of last summer -- the family. A large percentage of our herd runs on the produced water at 17 18 different times of the year; spring, fall and some in the summer. There's about 500 head out there now that -- like 20 Nick was talking a minute ago, that's the only water they

21 have and will have for another month. 22 So -- and the other thing -- there's about 500 23 head of wild horses on that same country out there that primarily use that as their water source, especially over 24 25 the past six, seven years where there hasn't been a lot of members, thank you for having me.

2 My name is Dan Arthur. I'm a registered 3 professional engineer in the state of Wyoming. I'm a 4 current researcher for the U.S. Department of Energy and 5 have been since 1990. I've been working in the area of coalbed natural gas and produced water since 1988, 7 beginning in the state of Alabama and have been working on 8 produced water, coalbed natural gas research for the 9 Department of Energy for about the last ten years.

10 For my presentation, looking at the rationale for 11 increasing stringency, I looked at a few different things. 12 First, why you would do that; and that would be, ideally, I 13 would assume, to alleviate perceived threats or 14 environmental risk to surface streams, livestock, wildlife, and then identifying have threats been technically defined. 15 16 That's one of the concerns that I have, is looking at the 17 evidence that's been presented. The various research out 18 there is that the threats do not appear to be very 19 technically defined.

20 And if there is a threat, is increased stringency 21 technically justified? And as a Department of Energy 22 researcher, my mission is to be looking at sound science, 23 very technically supported decisions and to attempt my best 24 to -- to consider things that are not specifically 25 technical in nature.

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So for instance, earlier hearing that it's pollution when somebody thinks it's pollution, it's not pollution when they don't think it's pollution, that would not be, in the way of my research, technically based.

Furthermore an ongoing, will increased stringency have a clear and resultant impact that is positive and balanced? So that's something you're looking at. And myself, as a former representative of the U.S. Environmental Protection Agency in a past life, that was something that we looked at -- and regulatory development -- on a national basis.

12 And lastly, have lost coalbed natural gas 13 reserves and associated impacts to the state and all involved been considered? All those things are very, very 14 15 important.

Within this I wanted to try my best to display or 17 present a very balanced set of analyses that's been done to give you an idea from that and not just from the U.S. 19 Department of Energy or consultants or whatnot. One of the 20 things that I chose was some work done by the Bureau of 21 Land Management in Miles City, Montana.

22 And that's of specific concern because many of 23 the watersheds in Wyoming that are receiving coalbed 24 natural gas water run into Montana, and that's significant.

And through some of the studies that were done by the BLM

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first started in the Powder River Basin comparing precoalbed natural gas flow data in these watersheds as well versus post is flows went down, and largely due to 4 drought, even with increased discharges. 5

Another example of this is sodium adsorption ratio versus flow in the Powder. In this case what you actually saw and what the BLM in Miles City concluded was that SAR actually improved in the Powder at the Arvada monitoring station and the other monitoring stations that they analyzed.

So some of the impacts to coalbed natural gas 12 development and in considering more stringent requirements is going to result in increased cost to operators for water 14 management -- something that all of them do in a very detailed and careful manner anymore to allow those projects 16 to move forward with review and detailed scrutiny by the Bureau of Land Management, the state engineer's office, the Wyoming DEQ and countless other agencies.

One of the experiences that I've been fortunate 20 enough to have as an engineer is I was able to manage for a 21 number of years the largest water reuse system on the 22 planet, and that's in Saint Petersburg, Florida. They have 23 an on-demand reuse system where treated wastewater's used 24 for irrigation throughout the city.

And one of the things we learned -- and it was

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in Miles City, what they found is that discharges from coalbed natural gas had no discernible impacts on any of the watersheds there, such as the Tongue and Powder.

This example that I have here -- and I have a couple of these -- this is specific conductance versus flow -- on the Powder River at Arvada. And what you see as the light blue color is specific conductance data collected at that monitoring location from 1946 to 1999; and then 1999 to 2004, the yellow; 2005 data, the red.

10 As you can see statistically looking at that 11 data, it's very difficult to see any discernible difference in the water quality data there either before coalbed 12 natural gas development or during. 13

MR. MOORE: Excuse me a minute. As far as 14 just to the rest of the Council, the slides are cut off on 15 16 that screen. The full slide's shown on this one, so you 17 might want to look over your shoulder.

18 MR. ARTHUR: Of further interest -- and 19 when you look at this -- is that in a lot of the research that we've done on many of these watersheds throughout the 20 Powder River Basin, what you see is the very oddities and 21 influences from things like drought. 22

You can actually look at some of the flow data 23 24 from the Powder, the Tongue or the Little Powder; and what you see is from the point that coalbed natural gas was

very evident of that project -- is that you needed a 2 toolbox of tools to manage the water, to allow the water 3 reuse system to be successful. And that meant at some point you had to dispose of water. 5 We used about a dozen 30-inch diameter injection

wells at that site to be able to manage water when irrigation was not needed. And what we did throughout that process is we had a lot of controversy on wasting water and the desire not to waste water. But the fact of the matter was that you had to have ability to dispose of some water to be able to make and maximize the benefits of reusing the water later on.

One of my concerns is that removal of surface discharge as an economic alternative to managing coalbed natural gas produced water could have a significant effect.

Increased emphasis on other management 17 alternatives also needs to be considered, just like you've heard some of the testimony so far today about looking downstream. That's a little bit more complicated issue 20 than I think has been given credit to date.

21 But as you perhaps reduce use of surface 22 discharge, there could be other things that may be utilized 23 to be able to compensate for that, if possible. Furthermore, overwhelming the capacity of class 1 disposal 24 wells to handle waste burrowing is of particular concern to

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In a conversation I had -- had and have had several times with Don Likwartz of the Wyoming Oil and Gas Conservation Commission -- I talked to him again yesterday in Casper -- one of the things with water treatment plants is whether it's RO or ion exchange, they have a concentrated waste byproduct that has to be disposed of.

That's disposed of in class 1 injection wells. Those are the most stringently regulated class 1 or type of injection wells in the United States. There's very few of 11 them. I believe in Wyoming there's three. Those wells are 12 at capacity.

Permitting types for new class 1 disposal wells 14 is one to two years, along with another probably one to two 15 years to drill and get the injection well ready to move 16 forward. So you're looking at a significant amount of time just to be able to have a waste-byproduct-handling method.

Further limiting how or if development can occur 19 is going to be, I think, a direct result of increasing and what I believe is increasing requirements without --21 certainly without being technically based; but irregardless of that, whether technically based or not, it will have an impact.

24 One of the other things I wanted to present is 25 the Department of Energy ARI report that was completed in Page 140

So -- that's technically supported with the current discharges that we've seen. We've seen -- you know, if you look at the numbers, the environmental impacts are undiscernible in the major watersheds.

If uneconomical due to treatment cost, continued production may no longer be economical or feasible for coalbed natural gas in the Powder River Basin. That's a big step, but I'll talk about that in a little bit.

One of the implications that I encourage you to consider on increased treatment is more treatment plants. And this goes back to a study that we did for the Montana Department of Environmental Quality as well as in some of our DOE research -- but more plants, more pipelines, more truck traffic, and then looking at where the waste brine

So if you assume -- somebody said earlier -about 1.4 million barrels per day of total water -- I assumed about 1.5. If 20 percent of that has to be treated down to a 500 milligram per liter limit and 10 percent of that would be waste brine, that's 300 truckloads a day of 21 trucks driving around the country hauling water.

That means more dust, more truck traffic, a 23 number of other impacts that would certainly have to be evaluated.

One of the things that I do a lot of is NEPA

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2006 looking at water disposal costs. I've heard some costs this morning on some things.

But what the Department of Energy did in this study is they looked specifically at the Powder River Basin. They made their cost analysis based on TDS and not the additional treatment that would be required to address barium and sulfate. That would increase these costs.

From my direct experience looking at water treatment plants, water treatment -- a study that we did with the Department of Energy and the Wyoming governor's 11 office working with Mary Flanderka is we saw costs in this range, but in some cases going up to as high as \$2, not to mention the issues and costs associated with delays and all 14 the things that go along with that -- very complex.

15 Some of the toolbox things that you'd want to 16 consider as an operator -- surface discharge, infiltration ponds, no-discharge ponds, irrigation injection, livestock, 17 18 wildlife watering, treatment discharge, evaporation, a number of different things -- all important, all 19 20 specifically customized to a particular area.

21 Incremental water management, if we look at -- at 22 this from a -- from a very core level, are we going to have more infiltration ponds, more sealed ponds, more irrigation 23 24 injection, livestock? The issue with surface discharge is this is one option with significant additional capacity.

Page 141 work, and I understand it's a federal program. But that

balance of looking at every decision you make and seeing what all the other repercussions of that are is certainly a challenge that you all have, and that's a big challenge.

Real effect, ending surface -- or end of surface discharge or untreated CBNG water -- I think that that's a reality. If we start getting to points where the idea of treatment starts becoming uneconomic, it has a big effect.

In the Powder River Basin this is a very different play than conventional oil and gas. We're working on other projects in other areas of the country and in Wyoming where it's feasible to go in and develop one well. If you talk to a lot of the coalbed natural gas developers, they have to develop of lot of wells.

These aren't high production wells, they're low production wells; and you have to have a lot of them to be able to support the infrastructure and all the other things that you have ongoing.

If, you know -- and we've already seen this to 20 date -- is having shut-in coalbed natural gas wells that don't have an area or a route to take their water to, reduced new development of coalbed natural gas, reduced revenue, reduced tax to counties, states and nation -- all of these are certainly a concern of the Department of Energy.

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Coalbed natural gas is about 11 percent of the natural gas production in the United States. Demand is certainly outpacing production. Seeing what we're seeing now, declining production in the Powder River Basin is of particular concern to DOE.

More water treatment plants -- feasible until impacts make development uneconomical. In a 2006 DOE study that was prepared with the Wyoming governor's office in response to some proposed Montana treatment requirements, 10 that study noted that the treatment requirements that were proposed in Montana could ultimately result in the 11 12 cessation -- complete cessation of coalbed natural gas 13 development in the Powder River Basin.

14 So in closing, are more water treatment plants 15 the answer? You know, there's certainly a lot more than there were. Siting and permitting costs combined with 17 limited proven treatment options are causing unexpected 18

19 One of the challenges you have -- my wife is an 20 engineer for the City of Tulsa -- I'm from Tulsa, Oklahoma. I spend a lot of my time here, but she works with the City 22 of Tulsa's planning -- has managed the water treatment plant. You count on water being a very consistent nature. 23 24 Water treatment plants for municipalities are generally

25 built to run on their own in the coalbed natural gas

associated with consumption.

I'm just wondering if -- this is a question I'm going to start asking a lot -- is there a way that you can aid us in our deliberations to try to move forward in a way that addresses the complexities we're looking at?

MR. ARTHUR: I would be happy to support you in that manner, and I could see doing that in couple of different alternatives that I would be willing to volunteer

The first thing that I can do is that -- we've done a number of research projects published by the Department of Energy, including on reports evaluating feasibility of produced water beneficial uses, produced water management, the study that we did for the Wyoming governor's office that we provided to the Montana DEQ in their BER that today I was thinking, Golly, I wish I would have brought those with me to provide to you, because they're really dealing with some of the same issues.

MS. FLITNER: Does the DEO have an awareness level of those reports?

MR. ARTHUR: They participated in the project that we did, so we could certainly provide you with those copies.

MS. FLITNER: If they have it, we sort of 25 have it. And I guess -- dang it. We're looking to -- to

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They're not -- the water quality's changing. New wells are coming on and off. Rates are changing, water quality's changing. We have a lot of different things to deal with, and that's part of the reason why you've had a lot of treatment research done specifically here in the Powder that has not been successful.

And again, looking at the potential for the cessation of development -- and, I think, that's serious 10 and supported -- in my opinion -- my technical opinion as a registered professional engineer and what I've seen, the research that I've been doing in Wyoming and Montana 12 specific to coalbed natural gas increased stringency does not appear justified on a strictly technical basis.

That's all I have. If you have any questions, I'd be happy to answer them or do my best to do so.

17 MS. FLITNER: I -- my question is -- is 18 that clearly as we get into layers of this it becomes more 19 complex in terms of related problems, which you referenced. 20

MR. ARTHUR: Absolutely.

MS. FLITNER: I did not hear a

22 recommendation from you with regard to solutions, which is 23 what we are particularly interested in; though I heard and

have no reason to dispute the testimony about the expense 24 25

associated with other options and the other problems

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solve some problems here, and it's hard to see our way to doing that.

MR. ARTHUR: And the other thing that I can 4 do as a researcher with the Department of Energy is I have 5 access to a number of experts, and if there are particular issues that -- that you're looking at that you're looking for assistance on specifically trying to find -- I'm quite confident that we could probably get help from, for instance, a national lab or something of that sort to weigh 10 in on the situation.

MS. FLITNER: Thank you.

CHAIRMAN GORDON: I had a question. I really appreciated your testimony. I'm curious -- as I remember, the price of gas was around \$15 last January, and it's about 6 now.

Is there -- do you have a comment on how a person should judge -- because clearly both price and then the cost of production have a bearing on the profitability -so do you have a way of sort of coming to some kind of recommendation for us on how we should judge that toolbox?

MR. ARTHUR: You know, that's probably something that -- that I would -- that I would be more than willing to talk more with you about.

What I will say is that within that and -- it gets complicated real quick, because one of the things that

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you note -- and it's very evident in the oil and gas industry right now especially -- is that as the price of 2 oil and gas have gone up, all of the other prices for 3 everything there have also gone up. 4

Through that period of time, especially in the Powder River Basin, you've had multiple environmental impact statements that have been done, updates to resource management plans on the federal side of things, a lot of new regulations -- really a moving target on regulations 10 for a number of different agencies and many times for the 11 right reasons, including the Wyoming DEQ, that has been 12 evolving their regulations to keep up with what's 13 happening, what they're dealing with with the coalbed 14 natural gas industry.

15 So we've seen and documented those. We're 16 actually participating right now with a DOE research 17 project where we have a memorandum of understanding signed with the Wyoming DEQ, and we're participating with you 19 looking at produced water impoundments.

20 But all of that the same, it's not -- it's not a 21 straightforward issue, because as prices go up or they go 22 down -- you know, what's happened most recently is prices went up, services went up, drilling rigs went up, all the 24 costs went up, price goes down -- those don't follow it 25 exactly.

just to make everything work, you may need, in some areas, to use every single tool available to you.

3 MS. FLITNER: I'm going to stop you there 4 and let Rick ask his question. 5

Go ahead.

MR. MOORE: I just wasn't clear. Are you testifying today on behalf of the Department of Energy?

8 MR. ARTHUR: I'm testifying today on the 9 behalf of myself as a Department of Energy researcher.

10 MR. MOORE: But not -- the things you gave 11 us are your opinions and not the position of the Department of Energy? 12

13 MR. ARTHUR: Correct. So what I have tried 14 to do within that, Rick, is -- that's why I pulled in 15 information from DOE studies, Bureau of Land Management 16 studies. And what I tried not to do, specifically as a 17 researcher, was just to show my research. So I tried to show a balance thing that are things that I'm looking at 19 that are as a technical researcher that are providing that 20 information in a balanced manner.

MR. MOORE: Would you provide a copy of 22 your PowerPoint presentation for the staff?

MR. ARTHUR: Sure. It's on this computer. 24 Is that enough or --

25 MR. MOORE: No.

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And within that a year ago, two years ago, 1 five years ago, if you're going to site a new plant or a 2 new discharge, it costs a lot less -- there was a lot less 3 4 that you had to do, a lot less scrutiny, a lot less time. 5 Now there's so much more coordination.

We worked on the siting of a water treatment plant in the Fence Creek area. We had to move it about 20 times coordinating with Fish and Game, DEQ requirements, BLM, the landowners, all these different things that now 10 are taking more time than ever before.

11 As well is that a lot of the water treatment 12 companies like EMIT and others that are working in that are 13 getting a better handle on what their costs are. So they're saying, Well, we're charging you for this but now 15 we've got to do waste disposal so we're going to charge 3 16 or 4 dollars a barrel to dispose of the waste.

So you look at all those. It's -- you know, I 18 realize you're looking for a -- you know, almost a graph that you can say when the price is this, the cost are these 19

and easily compare all the different alternatives. 20 Unfortunately, it's not that easy. Even within 21 22 that, in some of the areas that we deal in, we may have 23 options or alternatives like evaporation that may be a lot 24 less extensive in some areas than others, depending on the 25 tool that you're using in the toolbox. And furthermore,

1 MR. ARTHUR: Okay.

MS. FLITNER: Not unless you're going to give me that computer.

MR. ARTHUR: I don't know whose computer it 5 is.

6 MS. FLITNER: I misunderstood. So you were 7 not testifying with Keith's -- on behalf of Keith's group 8 and Petro-Canada?

MR. ARTHUR: No. I'm --

MR. MOORE: Who are you testifying on behalf of, yourself?

MR. ARTHUR: Uh-huh.

MS. FLITNER: We are going to start wading 14 through the testimony of those of you who are still 15 endeavoring to get out of here today.

We'll have to take a break at 5:00 because there's another meeting going on, and they're going to take some of those chairs. We'll deal with that. We will squeeze you in over here, and maybe they won't take all of them -- yet more inspiration to move along as efficiently

as you can. And Jeremy Butterfield, you can set the example. 22 23 On deck is Brad Basse.

24 And I am going to time you out of respect for 25 all. I have no better way of doing this. I will wave or

38 (Pages 146 to 149)

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MR. MORRIS: Would you advocate a rule instead of a policy?

DR. SHOGREN: Well, for just about everything in the state we do have a rule. I mean, we have a rule for all the different potential minerals and chemicals that are in our water in terms of safe minimum standards. De facto Montana has sent one for us, and that's why we're here.

People in Montana may have a different idea of the social value of coalbed methane. We don't have to go by what Montana does, but de facto -- they have set the 11 rule.

MS. FLITNER: Thanks, Jay. Appreciate it. 14 At this time we're going to start working through 15 the testimony from all of you. I assume that some who 16 signed up yesterday are not with us today, just looking at the faces in the crowd.

18 Again, it would be helpful if you would identify 19 yourself for the record and state whether or not you support the proposed language. We would benefit from 20 knowing your specific comments about Appendix H and 21 22 Appendix I.

23 Again, rest assured that we have, I think, a good 24 understanding of the complexities we're dealing with that 25 some benefit, some don't. We understand why that is. We

1 I don't support the petition. I'm here on behalf 2 of myself, people I work with and our families. I've been 3 a resident of Wyoming for the last 20, 25 years. I've 4 worked in the oil field for almost 12. Currently I pump 5 two fields in Big Horn Basin with discharges of 6 approximately 70,000 barrels of water per day.

We monitor our discharges daily to make sure we're in compliance with your limitations, which we take quite seriously. I know this petition doesn't affect me directly right now, but we're afraid it will move that way over time. Our waters benefit sheep and cattle as well as wildlife. The drainages we use would normally be dry if it weren't for our discharges.

Being forced to reinject our waters with additional cost would prohibit us from producing many of our wells that are now economical. Shutting those wells require less manpower, putting jobs at risk. Less production means less demand for more support industries, putting more jobs at risk.

I feel these effects would be felt throughout the 21 Big Horn Basin. I guess it would be similar consequences 22 throughout the state with other oil and gas companies and 23 their suppliers. I feel state water should be managed as 24 they have for years. They've done a good job.

I don't have any solutions for you today. I just

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are looking for your ideas about what's being proposed
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   specifically so that we can respond to that.
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That being said, we will begin with Doug Cooper, and I'll just go down the list as -- in the order that you signed up yesterday.

6 Doug Cooper, are you here? Next is Tim Barber 7 from Yates Petroleum.

Are you here?

MR. BARBER: I am, and I'm going to defer

10 my time.

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11 MS. FLITNER: Okay. Until later?

12 MR. BARBER: Yes.

MS. FLITNER: Understanding -- okay. You

went from 2 to maybe number 49. 14

MR. BARBER: I understand. Thank you.

MS. FLITNER: Joe Olson, whom I don't see.

17 Joe Olson?

UNIDENTIFIED MAN: He's in the hall, Madam

Chair. I'll just holler at him. Why don't you go to the 19

next one, and he'll be one behind. 20

MS. FLITNER: Leslie Petersen I don't see 21

22 here today.

Will Schumacher? Will Schumacher?

24 MR. SCHUMACHER: Madam Chair, members of

25 the Board, thank you for listening to me.

wanted my voice to be heard. 1

2 MS. FLITNER: Thank you, Will.

3 Any questions?

4 Joe Olson?

MR. OLSON: I'll yield.

MS. FLITNER: Okay. Thank you.

Isaac Sutphin? Hello, Isaac. And following

Isaac, Joanne Tweedy.

MR. SUTPHIN: Hello, and thank you. I

10 appreciate the opportunity to be here.

11 My name is Isaac Sutphin. I'm an attorney at

12 Sundahl, Powers, Kapp and Martin here in Cheyenne; and I am

13 here representing Merit Energy.

14 As we've heard already, Merit Energy operates the 15 Hamilton Dome oil field in Hot Springs County. They do have a very small presence in coalbed methane; but we're

17 mostly, at this point, concerned with the conventional oil

18 and gas production over there.

I'm not here today to rehash the legal arguments. We've made those arguments in our brief, and they have been

brought up in other briefs as well. I'm here to talk about 21

the practical effects of what's happening and what this

decision could mean to Merit Energy and to the people that

24 have based their livelihood on the water that we produce.

In particular, we're concerned with the -- with

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the proposed rules and the attempts to regulate pollution. Despite what we've heard, a careful reading of the proposed rules indicates that it's not regulating pollution but it's banning pollution.

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It talks -- we've heard the PRBRC's own experts that credible data is difficult, if not impossible, to obtain; and yet that's precisely what they're requiring producers to obtain in order to support their discharges.

Basically, the rule, as it's proposed, discusses pollution in a very broad sense as it's defined in the statutes; but then talks about how we -- a discharger will not be permitted to discharge their water if it affects or alters the natural state of the receiving stream in any way, including temperature.

And, you know, I've been thinking about that. 16 And I thought, Well, maybe I ought to bring a bottle of crystal clear, cold Evian water; and if I were to take that cold water and pour it into another identical bottle of crystal clear, room-temperature Evian water, I would be introducing pollution into that room-temperature water by changing its temperature. And that's absurd.

22 This water has been put to beneficial use for 23 years, and the livelihood of these people, especially --24 and I, of course, am speaking particularly about the 25 Hamilton Dome discharges -- they have based their

request for solutions is that those are built into the 2 current regime and the system as it exists today. You ask, 3 Well, what about this offsite landowner who doesn't have a way to leverage the industry into protecting them? They 5 have that.

The civil court system contemplates actions for nuisance, for trespass, for property damage; and it's -just because we're dealing with water, those rights don't go away. The system, as it exists today, is effective, as demonstrated by 70-plus years of beneficial use of the discharge water at Hamilton Dome; and it is unnecessary and imprudent to make the changes as proposed.

And I thank you.

MS. FLITNER: Thank you. Any questions? Yes, Mark.

16 CHAIRMAN GORDON: I'm really struck by the 17 testimony we've heard and how important all of this is, and 18 what I'm -- what I'm trying to understand a little bit --19 we struggle a lot with numbers of standards and so on, but one of the things that really seems to come through in this 20 testimony today is how important regulatory cost is to your 22 ability to function.

And I really had two questions. One was do you 24 have a sense of the incremental cost of regulation and when 25 it becomes uneconomic to produce?

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livelihood on that.

And we've heard that numerous times in the course of this hearing. We heard this morning from Jim Hillberry about how he and 35 other ranches that are dependent upon this water would be forced to go out of business.

And Merit recognizes that the PRBRC has made an attempt mid-petition to amend their proposed rules, to focus only on coalbed methane water. Merit is not -- you know, is not conceding the point that that -- that differentiation wouldn't stand up to a legal challenge.

I know that this Council is aware of the legal 12 opinions that have been generated and that call into question the legality and enforceability of a distinction like that. But again, Merit isn't conceding that point, but we are concerned that adopting these rules would pave the way and open the floodgates to more stringent standards on the traditional, conventional oil and gas produced water.

And thank you. If Merit Energy were forced to 20 meet these more stringent standards -- well, the fact remains they couldn't do it. It's economically impractical to either treat or reinject, and the field would be shut in. And you've heard what the effects would be if that were to happen.

You want solutions, and my response to that

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1 And the second one I had was could you kind of --2 I mean, I understand commodities. Cattle prices were at an 3 all-time high in August, and right now they're in the tank. 4 And unfortunately, we're in a drought; and I know how you 5 guys are having to deal with this kind of stuff.

So I guess I'm wondering, relative to commodity price fluctuation, how does it regulate cost and does it make sense -- I guess is the third comment -- for us to reduce so that you can operate at lower -- you know, lower margins? So I guess I had three questions.

MR. SUTPHIN: And unfortunately, I don't have an answer for any of those questions.

The information that we have provided -- and it's in the record -- is basically from a use attainability analysis that was undertaken on Hamilton Dome, and it speaks in terms of the amounts that would be required, sort of as a bright line -- Should reinjection or treatment be 18 required?

I am not aware of -- though I'm not trying to say that we don't have that data -- but I personally am not 20 21 aware of the type of data that you're asking me for. Certainly it makes sense that if we were to consider it, you know, on a scale, that there would be some -- some 24 evaluation that would have to take place.

I, unfortunately, don't have that information

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1 with me, and I apologize.

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CHAIRMAN GORDON: Okay. Thank you.

MS. FLITNER: Thank you.

Mrs. Tweedy? And Mrs. Tweedy will be followed by 4 5 Margo Sabec, Nicol Kramer and Dan Hengel from Devon. And 6 I'm not sure if each of you wanted to testify separately, 7 if you're still here.

Mrs. Tweedy, go ahead.

MS. TWEEDY: Good morning, Madam Chairman, 10 members of the Committee. Thank you for allowing me to testify before you again. I have been here before numerous 11 12 times, so I will not be redundant in the essence of time.

13 Yesterday Joel Ohman spoke on my behalf and our 14 behalf. We live about ten miles apart, so his testimony is 15 part -- would have been part of my testimony. Having said that, I rise in opposition to the citizens petition. We 16 17 ranch, my husband and I, in Campbell County, south of 18 Gillette; and we've had coalbed methane development on our 19 place for eight years.

20 We manage our water and have managed it well 21 working with industry in our private domain. We wish 22 government to stay out of our business. We want to 23 regulate and negotiate and work with our ranch, our water, our negotiations in private without any undue regulations.

24 25 In our personal case -- and many of my neighbors

of coalbed natural gas. We oppose the Environmental Quality Council's citizens petition and the unfounded adoption of this amendment to the Wyoming water quality rules as these changes are an infringement on private property rights.

They are also unrealistic, and they constitute a government intervention without just compensation. We respect the current reasonable water regulations, which include the wide variety of beneficial uses for coalbed methane water. We do not support changes to these regulations. We believe they would intrude upon private property rights and possibly our own well-being.

13 We understand the variation in water quality 14 across the Powder River Basin and Wyoming firsthand. We 15 can tell you that a blanket rule or one-size-fits-all 16 solution regulating coalbed methane water will not work. 17 We will, instead, call for the EQC and other Wyoming 18 regulatory bodies to utilize the wide variety of water 19 management techniques that exist and continue to grow. 20 This approach works best to meet the needs of landowners, 21 operators and the environment.

This had been signed by hundreds of citizens, landowners, ranchers; and I will give it to you for it to go on the record.

And thank you.

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were here yesterday, having to go home and take care of their ranches. Some still are with me -- are in the same boat. In our case, this petition, as I read it, would impact our ranch in the respect that we could no longer manage our water like we have been because the restrictions would be -- the standards would not stand up. They would be too restrictive, and we could not use the water.

Secondly, in our case, since we've had coalbed methane for eight years and it's on the decline, we would 10 have to have our revenue streams turned off, our coalbed 11 methane wells. That is a large -- a large amount of 12 taking.

13 So I stand in opposition to any -- anything that 14 gives a one size fits all. I recognize there is damages and people have been damaged. I certainly feel for them, 15 16 and I think the court system is probably the place to go. 17 I don't have all the answers either, but I do not think one size will fit all of us. We have good water, we use it, we 18 recognize how to use it, and everything is working well.

19 20 Having said that, I speak for the hundreds of 21 landowners, workers and citizens of Wyoming that are in 22 opposition to this particular petition, including employees 23 of oil and gas, ranchers, landowners and citizens and wish 24 to be entered -- this into record saying, We are the landowners and people affected every day by the development 25

1 MS. FLITNER: Wendy has a question or two. 2 MS. HUTCHINSON: Thank you for coming. I have some questions specific to your comments about how you feel that the rule, if we passed it, would impact you 5 personally in what you're trying to do with the water on 6 your ranch. 7

And I was wondering if you could give a specific example why you think that's going to be, and let me sort of lead you in and --

10 MS. TWEEDY: Okay. As I understand it --11 and, once again, I'm not a hydrologist or an engineer -- I 12 understand when the water quality standards, the ECs and the other things, start becoming more restrictive, my water, although it meets standards now, to be discharged into a streambed or into reservoir would no longer meet 16 that standard.

At that time, if I had coalbed methane in the 18 first year of our life or the second year of the coalbed methane's life, that would probably -- industry then would come in and say, Okay, we will fix that. We will -- we will inject it, we will do something else with it.

I would not expect industry, after eight years of production, when my wells are going on the decline to come in and fix a problem that would not help their bottom line. It doesn't make sense. We're all business people.

11 (Pages 38 to 41)

Page 50 Page 52

MS. FLITNER: Thank you.

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MR. MOORE: I concur with that. I think it would be prudent to defer a decision on the standards.

My only question -- and it's not prudent right now -- is whether we table it or just reject it and go through a normal rule-making based on the study. We can discuss that later, but I definitely agree that we should wait for the results before we take any action.

MS. FLITNER: Thank you.

Mark?

CHAIRMAN GORDON: Well, I'm encouraged that 13 enough stuff has happened this year, maybe because of this, after, you know, starting in 1999 -- I do think it makes 14 15 sense to wait. I don't think it make senses to wait 16 forever. So I think it's important to have the time 17 certain.

18 MS. FLITNER: Okay. And I support waiting 19 for the results of the UW study, for the record.

MR. BOAL: What you guys all said.

MS. HUTCHINSON: Yes, I would wait as well.

22 MS. FLITNER: John, we're taking sort of a

23 straw poll as to whether or not there's agreement on the 24 Council to wait on a decision on the numeric standards

until we have the results of the University of Wyoming

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MS. SABEC: Thank you, Madam Hearing Officer. I'm Margo Sabec. I am here today not to testify for Devon Energy, but speaking on my own behalf.

5 I grew up on a ranch west of Kaycee, and I own 6 land there. That's in the upper end of the Powder River 7 Basin. I have water rights, stock watering, irrigating and domestic use. I'm also an attorney; and over the years 8 9 I've represented many landowners on disputes associated 10 with water rights and water use, operational conflicts and 11 the lease and sale of agricultural property.

I also represent oil and gas companies on a number of issues, including produced water, and have provided services to the operators group in their preparation for this hearing today. But I am off the clock, and today I am offering my comments not on behalf of any client.

I would submit to the Council that the petition 19 before you is not about damaged property. In fact, I don't believe there's a shred of evidence that there is actual damage to property or even the threat of damage to property -- quite the contrary, in fact.

Anyone in the ranching business or anybody in the business of buying or selling agricultural property will tell you that having year-round flow of water, stock water

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1 study.

MR. MORRIS: Well, I think we could wait for a decision, but I'd hate to see it just shut down.

MS. FLITNER: Okay. Thank you.

I -- procedurally, I think we have to adjourn the hearing and make that formal motion, and we're not going to waste your time doing that. But I hope that helps you all understand that we think it makes sense to wait for the results of that study, and we're interested in the best data possible. And that seems to be the way we're moving 10 11 on the numeric standards.

12 MR. MORRIS: One other comment. That 13 doesn't mean that we have to accept that study and that 14 that's going to be gospel.

MS. FLITNER: That's correct.

MR. MORRIS: I don't want us to shut down.

17 I mean, that's just going to be one opinion.

MS. FLITNER: Thank you. And obviously there are other issues -- other elements of the petition that we have to address, and that is what we're going to do going forward.

21 22 So hopefully you now have one more piece of 23 clarity with regard to the petition, and we would benefit 24 from your comments specific to Appendix I(a). And we're 25 going to move into testimony from all of you, starting with

on ranch property, increases animal production as well as 2 the value of that property.

3 Animal unit carrying capacity, which is the 4 measure -- the unit of measure for value of agricultural 5 property, recognizes that value increases when there is live or flowing stock water available on an agricultural 7 property.

The State and County also recognize that there is value of water on agricultural land, and you'll see that in the tiered assessment system that we have for ag property taxes.

The petitioners in this matter have very skilled

attorneys. You've heard from a couple of them in the past 13 14 two days. And I submit that if there was credible 15 evidence, which is the word we are bantering about -- that 16 the flow of produced water has caused property damages or 17 was posing an imminent threat of causing damage to property 18 or losses to agricultural operations, the place that they 19 would go to seek redress for that harm is through the 20 court. The court is in the business of making sure that 21 the operations on one property do not affect and harm and 22 injure another neighboring property. That is where they 23 can go to make their clients whole. This is not the place. 24

If there was a threat -- a credible threat of 25 imminent harm or damage to property, the court would grant

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an injunction which would stop the flow of produced water to prevent that harm.

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So you can't file a claim for damages in court. However, when the evidence shows that the property owner is actually standing to benefit from the use of the water or having the water flow down the channel -- and you can't file a claim in court simply because you don't like what's going on on your neighbor's property or you feel that your bargaining or leverage power should be improved somehow.

10 So if this case isn't about property damage, then 11 what is it about? I think if you look at it closely you 12 will see one element of the petitioner's petition is an 13 attempt to reverse a hundred years of water law in the 14 state.

15 They claim in their petition that return flow is 16 waste or excess water, and they're asking this Council to 17 regulate it as pollution. So I will submit to you that the 18 real goal of this petition is to prohibit return flows from 19 water wells that are producing groundwater, that 20 groundwater is being applied to beneficial uses and then is returning back to the surface water and groundwater 22 suppliers. And they want that groundwater to be regulated 23 as pollution.

24 I'm not aware of any beneficial use of water in 25 the state that when it returns to the system, the water

recommend to you what you should do. I submit to you that 2 it is the job of the Council to review all of the potential 3 benefits of the proposed standards and of this request to 4 prohibit return flows, if there are any, and all of the 5 collateral damage or harm that that will cause and who is 6 going to be harmed.

When you're asked to change the leverage, the bargaining power of individuals -- I submit to you that authority lies only in elected officials of this state. It does not lie within the purview of this Council.

And I think that's really what you're being asked to do is prohibit landowners from using their water rights and being able to protect those property rights which are extremely valuable to them and they're also valuable to the operators.

Thank you.

25 return flows waste?

MS. FLITNER: Thank you.

Questions? Wendy.

MS. HUTCHINSON: Margo, on your comment about us calling return flow waste, that's what you feel this petition is doing -- if you eliminate item (iii), which is the one that says the produced water shall not cause pollution -- if you eliminate that, do you still believe that A(i) and A(ii) have the effect of calling

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system does not alter the physical and chemical 1 2 characteristics of that water. At the very least, the 3 temperature is changed.

In this case, landowners -- and you've heard from many of them -- have acquired water rights to use as water. They have water rights to produce from CBM wells 25 gallons per minute in over 14,000 wells in the Powder River Basin. They have water rights to irrigation upstream and downstream of where coalbed water is produced and discharged. They have a right to make a call for that 11 water to be delivered to their points of diversion through 12 that water course.

13 I submit to the Council today that those water 14 rights are extremely valuable. They're a valuable, 15 protected property right under the law of the State of 16 Wyoming.

17 And you're being asked to enter into an arena 18 where your decision would have the effect of taking 19 entirely or at least partially the right of landowners and 20 operators to produce this water. And that, I think, is a 21 significant consequence associated with this proposed 22 rule-making.

23 You indicated in your comments that you would 24 like landowners or commenters here today to focus on whether or not these standards are good or bad and

MS. SABEC: Madam Hearing Officer, I do, 2 because I think the overarching goal here of this petition 3 is to invite the DEQ to regulate return flows from 4 beneficial uses. And those beneficial uses, to a large 5 extent, are agricultural uses.

So when you begin to go into the arena where you are actually deciding whether water that has come out of a well has been put to stock watering use can go back into the system and you call that pollution or you say that that is a discharge that should be prohibited, I submit to you there's no difference between that water being discharged by a coalbed operator or by a landowner who has a water right in that well. It's the same water.

And what this does, in my opinion, is opens the 15 door for the DEQ to regulate the quality of water that can 16 be used in agriculture and discharged back down the stream and used in return flow.

So I do believe that when you begin to characterize this water as harmful -- and there are landowners with water rights in those wells and stock ponds that are storing water -- you have crossed over into an arena that is no longer regulating industry. It begins to regulate agriculture.

So as a policy matter, I think it's a significant 25 diversion from existing water law in this state, and I Page 58 Page 60

think that it's also an arena that you would find that -- I would say there are very few agriculture producers in this state that would really want you to go there.

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MS. FLITNER: Mark has a question, and then I've got a follow-up question to that.

CHAIRMAN GORDON: I had actually two questions. One was on that thing I asked about right before our break where in the revision in 2004 the State got in the business of saying this water's being used. Prior to that the landowner did.

Do you -- to me that seems to represent maybe a change in how the landowner participated in that process, and I just wanted to know if you have any comments.

Do you have any problems, I guess, of putting that back in that the landowner actually certifies it?

MS. SABEC: I think that there is a 16 17 mischaracterization of what the beneficial use statement 18 does; because I'm not aware in my experience in talking 19 with landowners, representing landowners or representing 20 industry, of a circumstance where an operator has wells 21 that are producing coalbed water on a landowner where that 22 landowner is not putting that water to beneficial use.

23 I think where we get into the gray area here is 24 how far downstream do landowners have a right to say, That water's not being beneficially used by me so I shouldn't

1 question. You're talking about beneficial use, and I think 2 you're using it in a lot of ways when you're talking about 3 what's recognized under the state engineer. And I think 4 you're talking about a use that's beneficial to the 5 property, which isn't recognized under the state engineer.

And I guess that is, to my thinking, some of the difficulty; because all the downstream users would have the beneficial use under that general concept, I guess, if we followed your logic. Because simply having flowing water is a beneficial use.

But that's not recognized by the state engineer, is it?

MS. SABEC: Madam Hearing Officer, it is. The only right that is not officially granted as a property right is a right to instream flow for livestock water.

And there are a number of groups who are advocating that there should be instream flow in a number of ephemeral drainages in the state. In fact, there's a bill in the legislature right now on that issue.

20 But downstream landowners who have stock 21 reservoir rights, reservoir rights for irrigation and 22 irrigation diversion points have vested property rights in 23 their water rights to have flow come to those points. And 24 the state engineer administers that based on seniority or priority of right.

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have to have it on my property.

This is a balancing of property rights, and a significant property right here is water. And I think that one of the reasons that -- that the beneficial use statements are no longer required is because these very groups have alleged that landowners are being paid to sign those things.

And I submit to you that if an operator is operating on a landowner's property, they have an agreement with that landowner and that landowner is involved in the use of the water and the decisions that are made in using the water on his property.

When you get to downstream landowners -- I don't 14 know, does that go to the state line? Does it go to Mexico? Where does that end, that downstream landowners 15 16 think that they should be at the table as stakeholders in 17 what happens with production of water on their upstream 18 neighbor? That, I think, is the crux of the problem.

19 So do I see that the beneficial use statement has 20 some impact of the bargaining power of landowners? I absolutely do not. 21

22 CHAIRMAN GORDON: I wasn't asking about 23 impacts of bargaining. I guess I was asking about the 24 change of relationship in how that was done.

But I also wanted to kind of ask a clarifying

So if you're a downstream landowner and you have spreader dams in the Powder River Basin or if you have a headgate or whatever the diversion structure is in the Big Horn Basin and you have a senior water right, you absolutely have the right to call water through that watershed to your headgate. And you have the right to use that water because it belongs to the State. It's return flow that's gone back into the surface water supply, and you have a right to use it. 10

So I do think that when you get into the business of saying whether there can and cannot be flows in the channel, you are directly interfering with vested property rights, and that, I think, is not -- it's a concern of mine as a property right owner, and I'm certain it's a concern of many people that you've heard here today.

And that's -- if they're not articulating that clearly, that really is a significant part of the argument that they're making.

CHAIRMAN GORDON: But for clarification -because I think we're off on a tangent, but -- you don't think there's any substance to the landowner part of that landowner agreement that they basically -- the state oughta just say that water's all being put to use?

MS. SABEC: I do, because we are in a state that invests billions of dollars in water development, and

16 (Pages 58 to 61)

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it's part of our overall policy.

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MS. FLITNER: I believe there are two more questions, and I'm encouraging you guys to refocus the discussion.

MR. MOORE: Thank you. I'm a little bit troubled by your comment that you don't think this body should be dealing with regulations that, as you imply, might affect the water right.

And just as a hypothetical example, I would say that the current regulations already do that, even if we don't do anything. For example, take a conventional oil and gas well that's producing right now and producing at, say, 4500 TDS, and somebody files for a water right on the water that's running down the drainage.

Then what happens if that produced water, as the 16 well is developed, suddenly jumps up to 5500 TDS and is no 17 longer allowed to be discharged?

Isn't that the same type of scenario?

19 MS. SABEC: Madam Hearing Officer, what I 20 am saying to you is before you consider changing an 21 effluent limit that you know and have reason to know is

going to take water rights or adversely affect water

23 rights, you should have clear, convincing, uncontroverted

24 evidence that that water is going to cause an actual 25

property damage harm to people downstream or to wildlife,

MR. MORRIS: This is just a comment I'm

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3 MS. SABEC: Could I respond, because I 4 couldn't agree more with you. I agree wholeheartedly that 5 that is your charge. And the question is what does this 6 petition see, and I think you need to look at that very 7 carefully. 8

MS. HUTCHINSON: I know I'm going to sound like I'm taking a tangent, but really I'm not.

You had comments -- and I agree with your concerns -- about the downstream concerns, where does it end. And I guess my impression of the ag protection policy is that it is trying to take a look at downstream concerns.

Is there precedence already being set for that and in that policy -- since I know you know it better than I do -- is there a limit on when that ends?

MS. SABEC: Madam Hearing Officer, I know 18 this is not the hearing on Section 20, but I will say that 19 for the very reasons I have tried to articulate here today, 20 I would be adamantly opposed to Section 20 because it -there is no end. There is no end to where a downstream 21 landowner can control whether or not there are flows of 23 water in the watershed. That's the net result of Section 24 20.

MS. FLITNER: Thank you very much.

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not speculative, not potential -- maybe there's a slight tiny risk. You --

MR. MOORE: So you would support, then, that the regulation should be based upon credible data for implementation of the regulation?

MS. SABEC: I do. And it has to be balanced with the socioeconomic effects of the taking of that water. And I think that is the job of this Council, and I'm suggesting to you that you're hearing from lots of people who are using this water successfully. So that evidence is missing.

MS. FLITNER: Thank you.

John and then Wendy, and then we'll move along.

MR. MORRIS: I think we're getting way off 15 the subject here. We're not here to regulate water rights 16 on beneficial use. We're here to talk about quality, and there are other agencies that regulate the water rights and 17 beneficial use and that type of thing. 18

Our job is to make sure that there's quality 20 water. So I think we're way off focus here. This is not a water right issue that we're addressing. This is not our assignment or beneficial use is not our assignment.

23 Primarily we're dealing with quality.

24 MS. FLITNER: Do you have a question that 25 you'd like Margo to address?

Next up is Nicol Kramer -- is Nicol here -followed by Dan Hengel.

If anybody's wondering how to behave, they should emulate the children in the fourth row. I'm impressed. My kids would never do that.

MS. KRAMER: Madam Hearing Examiner, my name is Nicol Kramer. I'm with Williams, Porter, Day and Neville in Casper, Wyoming; and I represent -- I'm here today on behalf of Devon Energy.

We have submitted most of our comments in a joint comment brief to the Council, and I did participate in the writing of some of those; so I won't go into detail on all of those.

To begin with, I'm going to apologize if my comments are a little bit disjointed; but because of some of the conversation and questions that have went on this morning, I've changed my comments.

During the entire proceeding, starting last February, I think, this has been a moving target. And the 20 landowners that are here today and were here yesterday, I think, are feeling that pain as well. And I know that you're tired of hearing repetitive testimony, but they did just find out; and I think we just figured out for sure a few moments ago that you're not going forward with the effluent limit changes.

17 (Pages 62 to 65)

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So I would ask that you still let each one say their piece, because they have taken valuable time.

MS. FLITNER: Just for the record, we absolutely intend to let everyone who wants to speak speak.

MS. KRAMER: And they have taken valuable time out of their schedules, which they may not be able to do once you go back to this issue to address effluent limits again.

Just one other issue about separate standards. 10 The policies that are being established through this rule 11 are not because there's coalbed methane companies producing 12 this water. It's because of environmental protection, and 13 it's because of how the water is used. It's because 14 livestock are drinking the water. That's what the effluent 15 limits are established for, and it's because of 16 environmental impacts. That's what Appendix I(a) is being 17 established for.

So I still feel that there's a great concern, and 19 the Big Horn Basin landowners are justified in getting up 20 here and expressing their concerns that these standards 21 have the potential to impact them.

22 To address Mr. Boal's statement of what does 23 Appendix I(a) do, first of all, I want to clarify that the current language does prevent all discharge. The current 25 language proposed by petitioner would prevent any

fact, the Council's charge is to actually protect the State's rights, and that would give the rights up.

3 The other issue is that there's been some discussion of treatment or piping this water to 4 5 municipalities or doing something with it; but in reality, 6 we're looking at a handful of landowners, and the vast 7 majority of landowners are using this water. Maybe their 8 cows aren't drinking it all; but they're using it for 9 irrigation, they're using it for fish ponds. You've heard 10 all kinds of information about that.

When I was in law school, I worked for someone 11 12 from Wright; and he said -- he came back from going home 13 one weekend and said, I hate coalbed methane. They're 14 putting those little boxes all over, and it's ugly. And 15 then a couple months later he came back from a duck hunting 16 trip and he goes, God, as much as I hate coalbed methane, I 17 love those ponds. There are ducks everywhere.

So the water is being used in the vast majority of circumstances, and to set up a treatment facility for ten properties that can't use the water is just not economically feasible.

And one last thing, I know that you want a solution. I don't feel that the Council is the person -or is the body that can make that solution. The coalbed 25 task force has been working on these issues for a year and

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discharges.

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The petitioners are saying that coalbed discharges are pollution, and the rule says you cannot discharge unless you can prove it is not pollution. So that is another reason that all of these landowners are coming up here so concerned, because they would lose all ability to discharge the water.

If you removed section C, the rule wouldn't do anything. The DEQ already regulates unacceptable effects on water quality, and I submit to you that there hasn't been anything here -- and as an attorney for industry, trust me, I would love to solve this problem. I would love 12 to. This is all I spend my time on, and I'm sick of it.

13 But I don't think there's anything we've heard here that can be put into these rules that would solve the 15 problems of the people who believe they have problems. 16 17 Maybe first and foremost among those reasons is -- and I won't belabor the point -- but the reasons that Margo was 18 bringing up, that the State has an easement in 19 20 watercourses.

And I understand that some landowners would 22 rather the water not be in the watercourse; but unfortunately, that is not their property right, and it 24 never has been for the last 125 years. So that is not a rule that this Council can write, unfortunately. And, in likely in response to this petition.

2 One of the things that's in front of them is 3 something called a produced water initiative that the 4 Petroleum Association of Wyoming, Wyoming Farm Bureau, 5 Wyoming Stock Growers -- and I hope I haven't left anyone 6 out -- are working on as an alternative dispute resolution 7 mechanism and as a mechanism to get technical data out so 8 landowners who are uncertain of how water will affect their 9 land -- and they need help in negotiations.

So I urge you to consider that. I think someone 11 else is going to talk a little bit more about that.

MS. FLITNER: Great. I'd like to hear more 13 about that. Thank you.

Are there questions?

MR. MORRIS: What would you recommend the task force do?

MS. KRAMER: Well, I think that the task 18 force has done a lot together on a lot of information. MR. MORRIS: Can the task force make a

20 solution?

MS. KRAMER: Yeah, I think they can, because I think that they're empowered with legislative powers that bridge the gap. Because, with all due respect, your jurisdiction is limited to environmental issues; and I think that the issues that have been brought up here by the

18 (Pages 66 to 69)

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1 petitioners are primarily property right disputes in 2 private property damage issues.

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MS. FLITNER: Wendy has a question.

MS. HUTCHINSON: Okay. You made a comment that if we eliminate the pollution clause, as I'll call it, that the rule does not help us. It's already happening now.

8 So one of the things that I thought was 9 different -- and I would like your take on this -- is that 10 this Appendix is asking for credible data to establish that 11 the water is actually going to be put to ag or wildlife use 12 and that -- and again, credible data will be required --13 but the quantity of produced water shall not cause or have 14 potential to cause unacceptable water quality.

Do you believe that is happening today?

16 MS. KRAMER: And I should have -- I should have mentioned that, too. I think that the credible data 17 requirement is overkill for the -- putting to beneficial 18 19 use. I think that's difficult to get.

I mean, if you want every rancher to document 21 where his cows go, document how many wildlife are using the riparian areas around the pond, that's very difficult to

24 I think that there is a lot of data being 25

gathered on these streams. The companies are not doing

about what we call regulatory creep is that -- what -- this is not going to stay in the Powder River Basin. And the perfect example is the groundwater policy that was developed, refined in the Powder River Basin and now has just gone statewide. And so I would ask that that also be considered. I don't think this is just an issue in the Powder River Basin.

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And then I think to address Mr. Gordon's comment about the beneficial use letters, my understanding on that was that it now is just assumed that that will be put to beneficial use, and that burden was taken away from the landowners so that they didn't have to come up with a letter and sign it. It had to be put in with it with this application.

That's all I have to add. Thank you. MS. FLITNER: Thank you. Questions? Thank you very much. Caroline.

MS. HAMILTON: Thank you for this opportunity, Madam Chairman and the Board.

I am here to read a letter -- I've been asked to read a letter from a fellow landowner in Sheridan County who could not be here, and his name is Tom Colpiska with the Hat Crew Taro Ranch.

MS. FLITNER: Would you state your name for

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nothing. They are studying the issues constantly. It's a consultant string, trust me.

MS. HUTCHINSON: My question is on the second item on the -- quantity should not cause unacceptable water quality.

Is that -- is that being addressed under the watershed permitting at this point?

And someone else can try and answer the question when they come up.

MS. KRAMER: Well, and I'm not very much involved in the watershed permitting process, but I do believe it is. They're looking -- they have effluent standards that they start with for every watershed.

> MS. HUTCHINSON: Thank you. MS. FLITNER: Thank you, Nicol.

16 Next up is Dan Hengel, followed by Caroline 17 Hamilton.

MR. HENGEL: Madam Hearing Examiner, Council members, thank you for this opportunity today. 19

20 I only have a couple points because I'm not near as eloquent as the two previous speakers, who, I think, 21 22 stated their cases very well.

23 Prior to coming to Devon, I spent three and a 24 half years with DEQ in the water quality division. I think the landowners in other parts of the state -- their concern

the record.

2 MS. HAMILTON: Caroline Hamilton.

3 Gentlemen and ladies, what works for a rancher or 4 farmer in Sheridan County may not work for a Campbell 5 County landowner. In the past six years I've had a lot of 6 experience with the coalbed natural development --

MR. MOORE: Would you slow down just a little bit for the reporter's sake?

MS. HAMILTON: Okay. In the past six years 10 I have had a lot of experience with coalbed natural gas development on my 3500 deeded acres, 500 of which is 11 irrigated; and I lease 1500 acres from the State of 13 Wyoming. All development is complete, and I am pleased to report that it was less disruptive than I had anticipated. 14

Three companies, Fidelity, J.M. Huber, 16 Pinnacle-Marathon, are now producing, transporting and selling CBNG from my land.

Because of the unknown effects of the water being produced and used on pasture and croplands, originally I had elected to have all the water removed from my property to my neighbors' property who were more than willing to put it to use growing hay for the cattle.

My lands have water rights that date back to 1884 and enough storage or high mountain water to survive almost any drought condition. My neighbors are now unfortunate

19 (Pages 70 to 73)

Page 90 Page 92

And I will read just the beginning of the second one, and then I will introduce them.

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Re: Petition for rule-making filed by the Powder River Basin Resource Council. Dear EQC, the Meeteetse Conservation District Board of Supervisors, MCD,

6 representing the citizens that elected it -- and then an 7 asterisk with the enabling legislation -- hereby further 8

registers its opposition to the cited petition. This petition is an unwise attempt to create a statewide, 9 10 one-size-fits-all rule in response to a local situation.

11 This petition should be killed immediately 12 following the January 2007 hearing. The MCD presents the following comments which are particularly relevant to your 13 14 action on this petition. These comments are similar to 15 some of those filed with the Wyoming DEQ, WDEQ and Wyoming

16 Water Quality Division -- sorry -- the Department of

Agriculture regarding the Chapter 1, Section 20

18 Agricultural Use Protection Policy.

19 These comments are derived from those which were 20 developed at a properly noticed public meeting convened by 21 the Hot Springs Conservation District.

22 The EQC must follow Wyoming Statute 35-11-302 23 requiring the State to consider and evaluate the economic 24 impacts of any proposed rule or regulation.

25 35-11-302, Administrator's Authority to Recommend

MS. FLITNER: I had you pegged for a polite 2 man.

3 Renae Valentine and extremely well-behaved 4 children.

5 MS. VALENTINE: I just have a couple 6 comments.

7 My name is Ranae Valentine. I'm here to 8 represent Lyman Ranch Company. We have four places 9 around -- outside Thermopolis around Black Mountain, and we 10 run -- can run over a thousand head there, but there's no 11 surface water without the surface water discharge. And so 12 our -- we wouldn't be able to run cows three out of four 13 seasons, at least.

So especially with the many, many, many years of drought that -- we're really dependent on it. And as far as quality, we've never had any problems. Our cows drink it, the antelope -- or the elk and deer drink it. And we just really rely upon that.

And that's all I came to say. So thank you.

20 MS. FLITNER: Thank you.

21 Questions? Thank you.

Marvin Blakesley. Thanks for your flexibility.

MR. BLAKESLEY: Madam Chairman and members 24 of the Council, thank you for the opportunity to comment.

My name is Marvin Blakesley, and I represent

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Standards, Rules, Regulations or Permits. The 1 2 administrator, after receiving public comments and after 3 consultation with the advisory board, shall recommend to 4 the directors rules, regulations, standards and permit 5 systems to promote the purposes of this act. 6

Such rules, regulations, standards and permit systems shall prescribe -- in recommending any standards, rules, regulations or permits. The administrator and the advisory board shall consider all the facts and circumstances bearing upon the reasonableness of the pollution involved, including --

MS. FLITNER: I'm going to ask you -- we're 13 over the time allotted. Do you mind finishing? You can 14 certainly enter those into the record.

15 Did you have anything else you wanted to add? 16 MS. YETTER: No, I will enter these in the 17 record, and that should be sufficient.

Thank you so much for the opportunity.

19 MS. FLITNER: Thank you so much for making 20 the trip. We appreciate it.

21 Ranae, would you -- would you like to go now or 22 after Mr. Blakesley?

23 MS. VALENTINE: I would like to go now, if 24 that's okay.

MR. BLAKESLEY: I would defer my comments.

Marathon Oil Company.

I won't take any of your time talking about all the beneficial uses of this water in the Big Horn Basin across Wyoming. You've heard it multiple times. We know it's very important.

I'm not an attorney, so I just want to express to you our concern as a company that, by some way, shape or form, the proposed changes to the effluent limits could end up on conventional discharges. And if the current proposed 10 limits were adopted, I can tell you it would take away 100 percent of Marathon's surface water discharges of 12 produced water.

I also want to submit that if there are any reduction in the current effluent limits across the board. be it coalbed methane or conventional, there will be a loss of water on the landscape.

It concerns me -- I appreciate the DEO's effort to hire Mr. Raisbeck and for him to do the study on the effects of the current effluent limits on stock water and quality. My concern is that this study will be ultraconservative. It will reflect feedlot conditions. It may not reflect actual on-the-ground circumstances in Wyoming.

As we heard yesterday during the Geomega testimony and Mr. McCarty and Mr. Flitner, they have used

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- 1 water at the current effluent limits very successfully, and
- 2 people have used these for decades. And I request that
- 3 should there be a lowering of the standards that both the
- 4 DEQ and the EQC look at current Appendix H and Appendix I,
- 5 which provides provision of Appendix (c)(i), which states
- 6 for existing permits for the original permit application --
- 7 was submitted prior to September 5, 1978, Modification of
- 8 the effluent limits described to paragraphs (b)(vii) of the
- 9 Appendix may be granted on a case-by-case basis if a signed
- 10 letter of beneficial use from the landowner was provided
- 11 specifically requesting the discharge in question be
- 12 allowed to continue or a signed statement of the Wyoming
- 13 Game and Fish Department was provided in which it was
- 14 stated that the discharge in question is of value to fish

15 and wildlife.

16 I won't go on and on. You can read the rest of 17 it. I think this is a very important provision to maintain 18 in both Appendix H and Appendix I because should there be a

19 lowering of the effluent limits, there's still a mechanism

20 here for those folks who want the water, have demonstrated

21 the beneficial use of this water for decades and continue

22 this use.

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23 And I think that's very important, and I'd like 24 to focus your attention on both of those provisions in the

25 Appendix. I think that does provide some solution.

Can you hold on a second? We have a question from Wendy.

3 MS. HUTCHINSON: What is your position with 4 Marathon?

MR. BLAKESLEY: I'm an HES professional. 6 MS. HUTCHINSON: So do you do some of this

7 program? 8 MR. BLAKESLEY: I do. I have been in

charge of the NPS program for Marathon Oil for ten years.

10 MS. HUTCHINSON: Can you tell me if these 11 rules are passed that are going to require you to provide 12 credible data that the water's actually put to agricultural 13 use -- can you make any comment about whether or not you 14 think you would be capable of trying to come up with that 15 sort of --

16 MR. BLAKESLEY: It depends on what that 17 credible data is. You know, we have decades of documented 18 and demonstrated beneficial use. If you go back many 19 years, we were always required to get a beneficial use 20 letter from the landowner. We've never had a problem with 21 that.

All the folks up there in the Big Horn Basin want 23 the water. The Game and Fish supports us very strongly. Both the Cody Bureau of Land Management and the Worland Bureau of Land Management strongly support this water on

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1 I also want to speak to you, not as an employee 2 of Marathon Oil Company, but as a sportsman of Wyoming. I was born and raised in Thermopolis, I grew up around the 4 discharges, I've hunted around them all my life; and that's 5 because that's where the wildlife was at, that's where the 6 game is at.

If this water's removed from the landscape, it would be an ecological disaster and an economic injustice to the citizens of Wyoming.

And I thank you for the opportunity to comment. 11 I know you're in a difficult situation. I sympathize with 12 the folks who have problems. I think those problems can and should be addressed on a case-by-case basis. I don't 14 think broad-sweeping, statewide rule changes are the avenue for this. 15

16 I submit and I challenge and I encourage those 17 landowners with problems and those operators who've operated on their properties to sit down at the table, talk 18 19 about the problems and see how they can be fixed on a 20 case-by-case basis.

21 And don't penalize the rest of the state of 22 Wyoming and all the benefits that come from this water for 23 some instances that surely there must be a resolution to.

24 Thank you. 25

MS. FLITNER: Thank you.

the landscape. It's very important for many public lands. 2 So it depends on what you mean by "credible data."

We would have no problem providing evidence of beneficial use. I do know that.

MS. HUTCHINSON: Well, the credible data requires that you use referenced lab and field methods from qualified personnel and that you have a quality assurance

> MR. BLAKESLEY: That causes us problems. MS. HUTCHINSON: That's what we need to

11 know.

Thank you.

MS. FLITNER: Thank you.

Anybody else? Thank you, Mr. Blakesley.

Fave Mackey, followed by Steve Jones.

MS. MACKEY: Madam Chairman, members of the committee, I'm Faye Mackey. I'm a rancher on the east fork of Wild Horse Creek in Campbell County. I'm going to submit some pictures into the record.

And having heard discussions for two days, I'm going to submit my speech into the record; but I'm just going to talk to you.

Is that okay? Thank you.

24 I've sat for a couple of days, as well as you 25 have, and listened to the testimony. And Mr. Boal says

25 (Pages 94 to 97)

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is taking anything away from me, because you've already got 1 2

This particular issue -- certainly if the industry was much smaller, we would have heard about it. But it's a big industry, and we do have areas where it's sort of causing us to look at a lot of our traditional rules and statutes a little bit differently. I've had to do some of that.

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So where it actually belongs on the quantity side 10 is going to be whether you characterize this as a use or a 11 discharge question. And John and I both scratched our 12 heads in a number of ways as to where does it most rightly 13 belong or does it belong as civil issue where it has been 14 up to this point?

15 Because in my opinion, the majority of the 16 coalbed natural gas production does not have this specific 17 problem. Much of it goes along, and we never -- we hear 18 very little out of Belle Fourche, for example. We hear 19 very little out of other drainages. And so the problem, 20 while it exists, is not -- it doesn't exist in every creek 21 and every drainage and every river basin up there.

22 I may be argued with on that point a little bit, 23 but we start to hear about it more in some areas than 24 others. In those areas where it's a problem, there's no 25 doubt that it's a legitimate problem.

Mr. Morris, if I had that silver bullet here today, I would love to actually leave it here, unshot, of course; but -- I need to mind myself here, we are being transcribed.

If I had that silver bullet -- and we scratch our heads routinely and regularly on is -- one of these days -and it may be tomorrow -- we'll find that one little piece of language somewhere that will -- Why haven't we thought about this two years ago or five years ago? Well, I'm not there vet.

We're certainly trying to make our part of this be as -- pose as much discipline as necessary in the industry while allowing the flexibility of that industry and use of the water to continue.

MR. MORRIS: Would you feel comfortable if we came back to you later and asked for a recommendation? MR. TYRRELL: I'd be happy to review whatever you came up with. Whether I would have a recommendation at that time would be prejudging my ability to think ahead.

I'm happy to be a part of your deliberations. MR. MORRIS: Very good answer. MS. FLITNER: I'm glad that one is being transcribed. We'll all need to use that.

Any other questions for Pat? Thanks so much for 25 your time.

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CHAIRMAN GORDON: Pat, I appreciate that. 2 I hate to ask this question, but it really is only -- so in your view, under Wyoming law, CBM water would be different from conventional oil and gas water?

MR. TYRRELL: It is to the -- Madam Hearing Officer, Mr. Gordon, it is to the extent that -- in two ways. Number one, the fact that we hold the permit on that gas well, that CBM well, is that first beneficial use.

That kicks it out of the byproduct statute, unless the 10 statute is tweaked if there's benefit to doing so.

The other thing is that this water is, as I 12 mentioned before -- we would essentially treat it as new 13 water to the watershed. And while it is certainly usable 14 and can flow down channel and can be put to use, it's not 15 the kind of water we would honor under a regulatory call 16 because that's natural flow.

17 In those two regards, it is somewhat different. 18 CHAIRMAN GORDON: Thank you.

19 MS. FLITNER: Is that it for Pat?

MR. MORRIS: I've got -- what would you

21 recommend for our solution?

22 MS. FLITNER: He's going to ask somebody 23 that comes in with a broom, so don't -- the person

24 vacuuming. Don't feel like he's putting you on the spot.

MR. TYRRELL: Madam Hearing Officer and

1 MR. TYRRELL: Thank you and good luck. 2 MS. FLITNER: We are going to continue with 3 testimony.

I will also let you know a couple of other things. Our plan is to take testimony until a few minutes before 3:00 and then take about an hour for some discussion among the Council.

I was kicked out of the family van on Monday morning along the interstate, and I have to catch a flight out tonight before my six-year-old is a seven-year-old in the morning. So I apologize to all of you, but that is as legitimate of a reason as I can come up with; and so I am going to do that.

We will not close the hearing without everyone 15 who wants to testify being afforded that opportunity, and I obviously commit to all of you that I will read the testimony, whatever testimony that you might have that I miss, in person.

It is our intention to get through all the testimony today and to close the hearing. And you will have an idea, along with us, when you hear the deliberations of the Council as to what progress we can make today at the conclusion of the hearing.

24 Are there questions about what we're aiming to 25 do?

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Clear to all of you as well? All right. That being said, I believe next up is David Gremel.

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Is David here? Following David is Delbert Jenkins.

MR. GREMEL: Madam Chair, members of the 6 Council, my name is David Gremel. I'm a land man with 7 Petro-Canada Resources, USA. I've been involved in the CBM 8 plain and Powder River Basin for -- well, since 1998 when 9 it pretty much first started. I've lived in Wyoming for 10 the past seven years.

Petro-Canada operates CBM wells in numerous areas 12 mainly in the Powder River Basin. One of the key elements 13 in Petro-Canada's environmental health and safety policies 14 is their stakeholder relations. And we value -- our 15 relations with our landowners is very key to our success, 16 and we've worked hard to address these concerns.

17 We've worked with our landowners both on our 18 leaseholds and also in areas -- the offsite areas that 19 downstream water is, and we continue to monitor and 20 mitigate concerns that are taking place there.

21 In our experience, we've been able to mitigate 22 these concerns almost on a whole, and we feel like the key 23 to being able to mitigate them is the relationship that we 24 have and the communication and cooperation that we have 25 with our landowners.

calls to the attorney, I wasn't able to make any contact with him; so we faxed a letter -- and I believe that letter 3 has also been submitted for the record here -- and to this 4 day we still have had no response from Mr. Clabaugh or his 5 attorney.

And I guess the reason I bring up this point is that it's unfortunate that we've, you know, had to come to a hearing like this in order to have our voice be heard, and that is the fact that we're willing to mitigate these concerns. But we are not able to do so unless there's some communication, first of all, and some cooperation with the landowners in trying to do that.

All up and down Wild Horse Creek we've been able to mitigate those concerns with other landowners, and so at this point we're -- at this point we're, you know -- we're willing to help there; but, like I said, there has to be some communication.

17 So basically, I just -- again, I invite 19 Mr. Clabaugh -- I invite anybody who has a concern with 20 downstream water in areas that we're working to come to the table, and we're willing to talk to them and address those 22 concerns.

> MS. FLITNER: Thank you. Questions for David?

MS. HUTCHINSON: If these rules go into

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1 I'd like to address -- or focus my comment on --2 in an area along Wild Horse Creek, an area I'm real familiar with. There's been a lot of comments, pictures 3 that have been shown here on the Clabaugh Ranch in Wild 4 5 Horse Creek. Wild Horse Creek is an area I'm very familiar 6 with.

We've been working -- actually, since 1996 we started drilling conventional wells in that area, and so I've been running up and down Cheetah Road for ten years now -- very familiar with the conditions.

11 We've been able to mitigate landowner concerns along Wild Horse Creek, you know, by placing low water 12 crossing, removing debris, just various mitigation methods 14 that have worked. And we continue to monitor and mitigate 15 those concerns.

16 We understand that there are issues on the 17 Clabaughs' Ranch. We've never been contacted by Mr. Clabaugh. We -- it wasn't until January of 2005 that 18 we were made aware of these concerns, and they were brought 19 20 to our attention through one of the regulatory agencies. 21 At that time, letters were written, and I believe those 22 letters have been submitted to you in previous hearings.

23 And as of earlier in 2006, I personally made some 24 calls to Mr. Clabaugh, all of which were -- in which I was basically told to contact his attorney. And after several 25

effect, do you believe your company is going to be able to provide credible data on ag and wildlife use or what kind 3 of difficulties are they going to cause you?

MR. GREMEL: You know, I am not prepared to answer questions on credible data. I'm going to defer that to others here that have that information. That is something I don't have expertise, so I would defer.

> MS. FLITNER: Thank you. Delbert Jenkins? Marge West?

MS. WEST: I'm Marge West. Thank you for letting me speak to you here today.

I am a downstream landowner and a mineral owner. 13 I truly believe that if credible data had been required to show no injury to my ranch, we would have not lost our best hay meadows and we would have not lost over 200 old-stand cottonwood trees.

I would like to issue the Council an invitation 18 to come see my ranch at your convenience. I would also like to issue an open invitation to anyone who believes 19 20 that damage does not occur from coalbed methane gas 21 discharge to come and tour my ranch at their convenience.

Thank you.

MS. FLITNER: Thank you, Marge. Could you -- besides the numeric standards, I'm 25 just wanting to make sure I understand if you have other

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large, if you will, and perhaps get to them closer to 3:00 before we have our -- some of our discussion.

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I hope -- can you tell it feels like hours and lots of syllables for me? I'm starting to lose track. But I believe I can read the next name, and that would be Eric Barlow, followed by Tim French.

MR. BARLOW: I appreciate the Council's tenacity and endurance, and I will forgo putting you through any more. So Mr. French can --

MS. FLITNER: Thank you.

MR. FRENCH: Ladies and gentlemen, Madam

12 Chairman. My name is Tim French. I'm a county

13 commissioner from Park County, Vice Chairman of Board; Park

14 County being Powell, Cody, Meeteetse area -- as far as you

15 can get from Cheyenne, that's where we're at.

16 In my real life I'm a farmer. We farm west of 17 Powell 15 miles. Our concern -- I know you wanted 18 specifics. I don't have that, so please bear with me. Our 19 concern as a board of county commissioners is that if you change the quality standards of the water over there at 20

21 that -- that will migrate over the mountain to Park County. 22 And you've heard from our citizens -- you know, 23 our concern if it's lower standards on that water quality,

that that water coming out of these oil fields will have an

25 effect on our oil fields. Our main oil fields are

centers in Powell, Cody and Meeteetse, Park County Mental 2 Health, Boys and Girls Club, drug court. There's a number 3 of things.

4 Anything that you may do as a group on lowering 5 these standards, that possibly may creep over the mountain 6 to us and have an effect on our revenues. If we have less 7 in revenues, we may have to cut; because by law we have to 8 have a balanced budget.

So -- and that's not easy to cut the senior citizens, Meals on Wheels, drug court, Park County Mental Health. We may have to cut sheriff's budget, jail -- we fully fund -- our landfills.

So I'm just here representing Park County commissioners, and they ask that I read one statement real quick. Let me get my cheaters on here.

MS. FLITNER: Get your cheaters and look at your watch. You have about a minute.

MR. FRENCH: Okay. I'll be done.

MS. FLITNER: But if you think I'm big

20 enough to stop you --

> MR. FRENCH: Well, thank you for the additional minute. I've been here for two days, and I'm going to have nightmares over this.

MS. FLITNER: I appreciate that. I'd hate 25 to cause that.

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100 years old. They're very old oil fields. They're very important to us.

If they have to reinject that water, some of your larger producers like Marathon, Anadarko, whoever they are, can probably do that. Some of the smaller producers may go out of business, costing jobs, et cetera. If that water's no longer available, it has an adverse impact on our ranchers.

9 Not only that, there's a lot of wildlife up 10 there. A lot of people come to Park County to either view wildlife or hunt wildlife. A lot of -- there's several 11 12 businesses in Cody that run tours to the wild horses east of Cody. That could be affected if that water runs down 13 14 there for those horses also.

As county commissioners, our concern is anything 16 that -- we're not just talking about some of our ranchers 17 who are very important to us and some oil field jobs. Anything that you may do that affects our revenues has a 18 19 direct impact on 28,000 people.

20 Now, why do I say that? As a board of county 21 commissioners, we set the budget for county clerk, treasurer, assessor, clerk of district court, county 22 attorney, sheriff, jail, road and bridge. We also fully 24 fund in Park County the library system, the fair, the

museums, the rec boards. We partially fund senior citizens

MR. FRENCH: The board of county commissioners of Park County recommends that the petition submitted by the Powder River Basin Resource Council be denied due to an anticipated negative impact on the social, economic structure of Park County.

So your actions may very well have a big impact on all 28,000 of our people; and as their elected representative, you know, I take that very serious.

MS. FLITNER: Thank you. As do we, and thank you.

Any questions for the commissioner? Okay. Thanks for making the trip.

MS. FLITNER: Duane Siler from Marathon, Steve Jones to follow. 14

MR. SILER: Madam Hearing Officer and members of council, I'll be real brief.

I simply wanted to make one point as you begin looking toward your deliberations at 3:00. And that is that Marathon would strongly council against this body attempting to rewrite in a very short period of time subsection A of this proposed petition.

During yesterday's proceedings, the Council for the petitioners essentially repudiated the text that has been before us in which we -- was of notice for this proceeding and on which all parties have commented,

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including the joint industry comments that we participated 2

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The rule that the Council decided to move forward beginning last summer and noticed per hearing has the language in Section (a)(iii) that would require a permit applicant for a CBM discharge permit to prove that it "shall not cause contamination or other alteration of the physical, chemical or biological properties of any waters of the State."

That's the proposed regulatory language, period, 11 no qualifiers and no caveats. And indeed the Department of 12 Environmental Quality in its comments has said that this is 13 an absolute bar on pollution and one which no permit writer -- no permit applicant could ever approve would not 15 be the case.

16 Council for petitioners yesterday said that this 17 is not really what petitioners intend, that they would allow DEQ to permit some pollution under some undefined 18 19 circumstances. Ms. Fox did not attempt at that time to 20 articulate any specific regulatory language, so we're wondering when petitioners are going to propose for the 22 public's benefit the exact language that they would like to 23 see here.

24 And in the absence of some language in black and 25 white, it's really futile for the Council to spend time and

in the very limited time that you're going to have. 1 2

MS. FLITNER: Thank you.

Questions? Wendy.

MS. HUTCHINSON: This is my standard question.

I recognize your concerns with item iii, which are mine as well. But I would like some better comments from you on Sections i and ii; in other words, having the companies provide credible data that the produced water is used for ag and wildlife usage.

11 MR. SILER: Well, I'm not a technical 12 person and I'm not an engineer and I don't apply or write 13 the permits; however, I would say that based upon the 14 statutory definition which was created for a different 15 purpose, the infrequent review and determination in setting 16 the water quality standards requirement for peer-reviewed 17 references and so forth, that this is -- would be very 18 burdensome to the applicant and may -- as DEQ has pointed out -- may be impossible to collect this kind of data, even 20 for the more limited purposes in subsections (a)(i) and 21 (ii).

And we've heard testimony today from industry 23 folks that this would be a heavy burden on them as they apply for permits. I would say I think the most 25 constructive thing that we've heard today was the

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proceed on this portion of the rule-making; because there will have been no notice or opportunity to comment on what the rule real is.

What petitioners apparently would like this Council to do, rather than proposing definite language themselves, is ask the Council to craft this afternoon some language for subsection A that meets the concerns that they've identified.

The problem is not just that this presents the 10 proverbial moving target for all of the rest of us who are concerned with this rule-making; but with all due respect 11 to the Council and its sincere wish to address the problem, 12 13 writing rules on-the-fly this afternoon is not this 14 Council's job, and it's not a good way to proceed with 15 rule-making.

16 If petitioners have been unable to craft a rule, bring it forward and then leave it alone so that the public 17 can comment on it and you can deliberate on it, then no 18 rule can be lawfully adopted, at least not with respect to 19 that portion of the language which petitioners have 21 repudiated as of yesterday.

So we believe that the Council should reject 23 subsection A in its entirety; but at a minimum, we do not 24 believe that it would be appropriate or lawful for you to proceed to try to rewrite Section (a)(iii) this afternoon

discussion about produced water initiative. And unfortunately, there's very little time available to you today; but I would commend that to your attention as a

4 dispute resolution process which would address what I think 5 we've all come to appreciate are some limited cases where

6 folks can't get together and reach agreement. 7 MS. FLITNER: Further questions? Thank

8 you. 9 Steve Jones? That will give Carlton a chance to

10 figure out if I'm talking about him or her. That's all I 11 have written down.

Is there a Carlton in the room? Good. I remember you. You will follow Steve.

MR. JONES: Thanks very much. My name is 14 15 Steve Jones, and I'm here representing Wyoming Outdoor 16 Council.

17 I wanted to try to provide you some thoughts 18 based on what I've heard here today as well as yesterday, 19 mostly from a legal perspective, I guess, because that's my 20 background.

21 First of all, I think the contention that the 22 Council doesn't have the jurisdiction to adopt this rule is 23 just not well-founded at all. If you don't want to adopt 24 the rule, that's one thing; but to say there's no 25 jurisdiction is completely mistaken.

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MS. FLITNER: Thank you very much. Thank you to both of you.

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here.

I'm getting some dirty looks, so I will allow for a five-minute break, but I'd like to get Eric's testimony first. I don't know how pressed you are, but let's go ahead and take your testimony; and then I'll leave with you, because they're really giving me dirty looks over here.

MR. HISER: The Council looks restless

My name's Eric Hiser. I'm with the firm Jorden, Bischoof and Hiser, council for Yates Petroleum, and was 12 asked to try to pull together a number of industry positions for you.

Madam Hearing Officer, members of the Council, you have a difficult job. The Environmental Quality Act requires you to both protect our resources and also to provide for their proper development. And it's important that we don't lose sight of that developmental aspect of your responsibility as we go through this situation.

21 Second, as several of you have said, you need to 22 do what is right; and what is right is not only what is right for the individual landowners who may be affected by 23 24 coalbed natural gas development, but also for the great 25 number of citizens of the state who depend upon the

data to come to us, because we may not be able to get it in any good way or else you may have to go through a very extensive process of looking at all sorts of soils up and down the drainage?

That's an issue, too, because it raises two additional problems. First, what we're doing is we're shifting even more burden onto the landowners in that area, because now they're going to have to open their ranches up to all sorts of survey crews poking holes everywhere trying to determine what that water quality data is for purpose of evaluating this and to personally redress this harm that we've heard in a couple of cases that have developed.

And many of those landowners may not want to share where is their best fishing hole or what is the status of my elk herd or something like that, because that is information that is valuable to them and which we know are going to put into the public record for all we know to see. That is a burden that you're placing on those other landowners.

What do we do about the landowner that elects not to participate in that burden? We now cannot fulfill that mandate for credible data. Does that mean, then, that a noncooperating downstream landowner has a veto by simply saying, We will not give you access to this land?

Well, that precludes perhaps getting credible

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industry or the water for other things that they do as well. So you do have a very tough balance that you must do.

And finally, just, you know, when you come to hear -- the petitioners have proposed this rule, and it's really up to them to carry to you that burden of proof to show that the rule that they're proposing will, in fact, address the harms that they have cited and not cause a disbenefit to the development of the state.

Let's turn, then, as a number of you have asked, 11 and look at the actual language that's being proposed by the petitioners.

First of all, we come across this issue of credible date. What is credible data and how will we do 14 that?

Well, this is a significant problem. As the petitioner's expert, Chris Lidstone, said, basically this is very hard data to get because you don't know when a rainstorm is going to occur that gives you the data that you're necessarily looking for. And that may be, as we've just come through seven or eight years of drought, a very long time indeed.

23 So what is industry to do or people that want to 24 use this water in the meantime? Do we sit and simply let the plague pass or what -- while we wait for the credible

data, and that really does shift the leverage. Veto is a very effective shift. But we have to evaluate, once again, in light of your mandate to provide for protection and development. Is that an appropriate resolution?

Let's go to the quantity issues. The big problem with this is that there's really no meaningful standard on quantity. What is good for one person on the drainage may be considered not good by another person on the drainage. And that leaves us with the problem of how do you administer that standard? Because if we are to be a government of law, that law or that rule has to mean the same thing for everyone. It can't mean one thing for one person, another thing for another person; because then we'd have the government of personal preference.

And that's not what you're here to do as a council. You're here to set forth rules and guidelines that will apply uniformly to everyone that's going to be applied. And that's a big concern to us. It also adds to the regulatory uncertainty, which is a significant concern of ours.

Finally, we come to the definition of pollution, which is being imported into this. This has a number of significant problems. First, as several have observed, no water exactly mirrors the water to which it is being discharged. So one level of this would simply prohibit the

47 (Pages 182 to 185)

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1 ability to do any discharge.

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For example, our best water quality that goes into the Powder River would clearly violate this standard because it alters the Powder River where it joins it. And so to that extent, it's a counterproductive rule.

Second, it is overbroad; and it really is, once again, coming back to this sort of nuisance issue. And here's where the Council has a problem: Unfortunately, the tools that you have to wield, which is a tool that's very broad and very blunt because it does have to apply across the state and does have to apply sort of equally to everyone.

And so this is a case where it may be better to do as best you can with the numeric standards that you can 14 15 and then to let the civil system, as someone suggested, 16 sort out those really what are nuisance issues where 17 there's too much water and it's causing a harm to a person 18 in a particularized instance and can come to the best 19 equitable judgment.

20 And we think that would be good thing for you to 21 look at. Because as you're looking here now and stepping 22 back, it's your overall balancing job. We have some cases 23 where there's instances of harm. I don't think anybody's 24 denying that. But we have a lot of benefits that you've 25 heard. You've heard from numbers in the Big Horn Basin, 1 They're not entitled to any compensation -- just 2 something for you to think about.

I have one last little procedural point, Madam Hearing Office, which I would like to bring to the Council.

5 This has to do with where we stand sort of from the 6

industry perspective. And that is that obviously we favor 7 you rejecting this, but you've discussed tabling or

whatever.

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Our real preference would be that if you take this up and decide to defer action that you postpone it to a definite time, such as after the receipt of the 12 University of Wyoming report. And the reason why we think that's more appropriate than tabling is that a table can come back up at any moment, and that really could mean that we would have to bring everybody here for every meeting of the Council between now and when the University of Wyoming

17 report were to come back, in case it came off of the table. 18 Whereas if you were to postpone it to a definite time, it

19 would be much less of an inconvenience for everybody. 20

MS. FLITNER: Thank you.

Questions?

CHAIRMAN GORDON: Thank you. And I like your procedural point.

I actually wanted to ask you about that landowner consent form, and I'm reading here from Chapter 7, which is

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you've heard a number of ranchers in the Powder River Basin who really rely and depend upon this.

We've heard from county commissioners who have talked about the budgetary impacts that this would have and the diminish in services that could result from it. And so here we have -- and the last thing I would say is that the petitioners really have not made the case that their numeric standards -- which they're sort of taking off the table today -- are going to give you much additional 10 benefit.

11 So as you look at this, we have no general 12 benefit on the standard side yet, understanding there's deferring that; and we have a couple particularized cases 13 14 of harm. And then we have on the other side -- we have a 15 lot of potential disruption to the industry, a lot of 16 disruption to landowners who use that water; and you have 17 to balance it. How are you going to come out of that?

18 You've got some few affected here, many on the 19 other side. The degree of harm may be different. But 20 remember this: Under the civil system, those few who are 21 harmed now are entitled to compensation if they show 22 damage. But if you were to disrupt the industry and to make it difficult, if not impossible, for this to continue, 24 who will compensate all of the others who depend upon that 25 water now and where that water will go away?

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that 1978 to 2004. And under the beneficial use 2

subcategory, it has, Through submission of signed letter of 3 beneficial use from the landowner specifically requesting

4 this discharge in question be allowed to continue, the user

5 must indicate the exact beneficial use of the water, stock

6 water and irrigation, et cetera, and the history of such 7 use.

No action taken by the Department under this section or any other section of the regulations is said to be interpreted as a valuable water right or any other water use authority.

Do you have any problem with that language?

13 MR. HISER: In general, it worked 14 reasonably well. Where you run into problems is sometimes you would have difficulties with landowners that may or may not be related to whether or not there was a beneficial 17 use. And so like everything in a negotiation, you use the 18 chips that you have available.

As it was pointed out, the practice of the agency 20 was that you also substitute a professional's opinion, and that was done. And as long as that was done as well, I think that's fine. It really goes for the question of, Is the water of a quality that would allow that use? If that's the question, we would be okay with that.

CHAIRMAN GORDON: Okay. Thanks. The

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second is -- and I wanted to ask you if you ever represented anybody who's bonded on. I guess one of the questions I have -- if somebody is bonded on, it may or may not be the practice to have surface use agreements.

And I guess what I'm wondering about -- if someone is bonded on and they have water discharge issues, are they entitled to the same kind of property protections that you might expect to have; and if so, what would their opportunities be to seek some sort of control?

MR. HISER: If a company were to bond on to a piece of property instead of coming on through the surface and damage agreement, the mineral estate owner, the developer of that property, still owes compensation for any damage that occurs to the surface estate.

And so if that damage would be related to a 16 discharge, that would be one of the things that should be 17 recoverable in those cases. The measure of damages may be a little bit different from what surface and damage 19 agreement might apply. And that's why we use surface and damage agreements because they're more easily liquidatable 20 21 and it's easier to administer in the use of the transaction 22 cost for both the landowner -- or the surface user and the 23 mineral developer.

24 But the general measure of damages should be the 25 same. They would be entitled to recover for damages done address credible data. It still seems our focus on credible data is on the scientific stream situation and that sort of thing and not use, which is what the rule -part of the rule requires.

Can you imagine what credible data would be for use?

MR. HISER: Well, Council member, you have arrived at a very real problem, and I think that one of the landowners spoke to this fairy eloquently, although it wasn't specifically in response to the question about credible data.

They were wondering how they would try to show how much water their cattle would use, and we can bandy around certain default numbers -- it's 20 percent of the weight of the cow or whatever, but all that really begs the question about transmission loss and having water available wherever the cattle may want to be.

And the cattle may -- you know, unless we're going to attach little drinking things to the cattle as they wander around on the range, we're going to have to put water on the land in order for the cattle to go to it.

And so there is no good way to really come up with a tight quantification of how much water the cattle are going to use and where it is on the land, how does it relate to the amount of discharge. And that problem is,

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to the surface estate.

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CHAIRMAN GORDON: Okay. And the last question -- I'm a little bit confused.

Did I understand that that language proposed in the rule on the definition of pollution comes from the statute? I thought you said it was overbroad. So is your position the statute's overly broad?

MR. HISER: No. That's a very good question, Mr. Gordon. The reason that is not overbroad in the statute is that in the statute what the definition of pollution does is it provides when you can't cause pollution. And as a matter of state policy, we want that 13 to be a very broad definition.

What the statute does, though, is it says that you may allow pollution if you obtain a permit from the 15 Department of Environmental Quality. And so pollution isn't permissible if it is done pursuant to the permit.

So you want a very broad, general definition of pollution to bring people into the permitting universe; and then the Department ensures, through the exercise of its rules and in its best professional judgment, that that damage, in fact, meets the criteria set forth in the EQA.

22 CHAIRMAN GORDON: Thank you. 23 24 MS. FLITNER: Other questions? Wendy. 25 MS. HUTCHINSON: Thank you for trying to

unfortunately, even much more compound an issue with the wildlife, which moves even more vagrantly around the 3 landscape than the cattle does or birds.

And for fish, I have no idea how you would do it except that feed enough obviously that they can swim around and live and not choke to death in the summer or freeze to death in the winter.

So, I mean, that's sort of what you're looking at.

MS. FLITNER: Other questions?

Thank you very much. We'll take a five-minute break and reconvene at

3:10 by that clock.

(Recess taken 3:02 p.m. to 3:12 p.m.) MS. FLITNER: As I said before, there are about six remaining testifiers, including the petitioners. We are going to have a little bit of conversation now, if that's all right with you all, and to try to give, again, some idea and get some idea of where we are coalescing.

In addition to the scheduling conflicts, we have received lots of new exhibits and stacks this high today of 21 things that have been entered on the record, but we have no idea what they are; so that's another reason that most of us, I think, feel comfortable waiting -- I know you're anxious to know about if we're going to make a decision

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today, and I have only one vote. So it's a little bit up to me, but I don't think we will vote today.

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We will -- we will do a little better than that giving you an idea of the schedule before this day is out. We are as anxious as you are to come to a decision and consider the next set of challenges. So with that being said, I'd like to open it up to the Council for some idea of your reactions to what we've heard while we are still in here.

10 MR. MORRIS: Why don't we just take a vote of the audience? 11

MS. FLITNER: I'm all for democracy, John. This could be a short discussion.

I guess I will -- I will begin just by saying 15 that it strikes me how -- in some ways, how far we have 16 come; and I think there are important studies being 17 conducted -- does someone mind closing the door, please -18 I think the conversation and debate has helped inform all 19 of us.

20 I am still grappling with exactly the same 21 conundrum that I was at the beginning of this; that is, the relationship between quantity and quality and the practical 22 23 ability to measure and quantify beneficial use.

So I -- I'm there -- right there with the same 25 set of questions, and it's clear to me that whatever part Anybody else?

2 CHAIRMAN GORDON: Well, I'm just sort of 3 struck by the conundrum that we're in, and I don't mean to 4 belabor this; but I guess I sort of feel that no matter 5 what we do people are going to go out of business here, 6 from what we've heard today in testimony.

MR. MORRIS: That may be us. CHAIRMAN GORDON: That's true, too.

And I think that's a terrible position to be in, 10 and I suddenly started thinking about sexual assault and 11 just the fact that sexual assault doesn't happen all that 12 often or that people that don't -- that has it happen to 13 them sometimes don't complain doesn't mean it's right.

So -- and maybe that's a very bad analogy, but I feel that, to some degree, that's kind of the issue that's in front of us and that we have a responsibility and we need to proceed.

But I don't necessarily think we can proceed to an end today.

MS. FLITNER: And Wendy, you did --MS. HUTCHINSON: I guess -- and you can all tell from my mode of questioning here is I do believe it's our responsibility as we look to these rules to see how are they -- how do you comply with it? If you're the person that's got to comply with this rule, how do you do it?

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of the city we get into with regard to this issue, it's just another slice of complexities. I am not hearing any sort of practical solutions to what is obviously a -- an attempt to look at some way to remedy the gap in the regulation.

I do think that we're still -- we're not where I could see a practical implementation. We have some different options for dealing with that, obviously, in our decision-making process; but, you know, the foundation that we're on is not as strong as it needs to be for every 11 single interest we've heard from.

12 MR. MORRIS: Maybe we can get a comment 13 from the attorney general staff now that they've had 14 two days of testimony.

MS. HILL: You know, our comment would be we responded to all your questions that we feel like -- in writing. I wouldn't, at this point, add anything to the 18 things that we've said. If you have specific questions for us, certainly we're always happy to look at those sort of things; but I wouldn't add anything to the things we've written to you already about these topics. And I would leave it at that.

MR. BOAL: Let's hear the rest of the 23 24 audience.

MS. FLITNER: Just like that.

And is it -- is it possible or incredibly onerous or is it not, and that's obviously something I'm getting little feedback on.

But in case you had any questions about why I'm asking for credible data, that's what I'm looking for. Every rule in my mind has to meet some sort of test as to whether or not it can be complied with. That's the -where I've been going with my questions.

MR. MORRIS: I think it's our duty and obligation to address this because of the quality issue, whether we approve the proposal or whether we don't. But we have a quality issue here, and it's our obligation to address that. How we go about, you know, that's --

MS. FLITNER: Well, I'm going to ask you what you've been asking everybody else, then.

What's your idea for a solution, Mr. Morris? MR. MORRIS: I said take a vote of the 18 audience.

MR. MOORE: I feel uncomfortable discussing 20 too much until we close the hearing, so I think we need to take the rest of the testimony and allow the petitioner their final statement and then we can discuss things. But it's premature.

24 MS. FLITNER: Let's proceed. I'm happy to 25 hear from everybody.

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something worked out.

kinks to work out.

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We have left to conclude today's proceedings Rob Garland, John Robitaille, Keith Burron and Kim Warberg and then Kate Fox.

Is there anybody I've missed? Okay.

Let's call Rob Garland.

How about John --

UNIDENTIFIED MAN: Rob's here.

MS. FLITNER: John, you're on deck.

MR. ROBITAILLE: If I can go in his place,

10 Madam Chair. Thank you.

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John Robitaille with Petroleum Association of 12 Wyoming. Here we go again.

13 We've got a few problems with this, as you may 14 suspect. I'm going to be fairly broad in my -- in my response to this petition in general, and then I'd like to 16 get into a little bit of a program that we've been working 17 on in an attempt to resolve some of these problems that are 18 going on out there.

19 First of all, I need to jump back to my original 20 objection to this entire process in that what we're dealing with is a regional problem. What you have before you is a statewide solution. I think we have areas in the state, 23 particularly in the southern portion of the state, where 24 people would very much like water to be on surface.

That water is being produced from a coal seam.

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Currently it is not available to them, and they are disappointed and trying to figure out ways to make it happen. If this petition goes forward, how will they be affected?

We've heard Powder River Basin, we've heard Big Horn Basin, haven't heard much outside of that; but this is not a basin-specific model. What you've done is limited it to a coalbed -- or tried to.

9 But again, I believe that it is broader than 10 that, and it -- as my friends from DEQ can tell you, I'm a 11 little paranoid about a thing I like to call regulatory 12 creep. It's items where you target something small and 13 over time it grows into something bigger. I think what you 14 have before you may fit that bill.

I also reiterate that the CBM task force is reviewing this type of thing; and I believe that is a makeup of legislators, landowners, agency people -- I think it's a good group of folks, and we ought to let them do their work and see what they can come up with.

19 20 It's been alluded to, but I'd like to touch on a 21 little bit more -- it's a program called the Wyoming Produced Water Initiative, and what this is a -- it's a 22 format in which my association and several other 23 agriculture associations have come together in an attempt to resolve these issues on our own in a manner that -- that 23 about in this program -- I believe you all have a copy of 24 this -- is a process that we've stolen from the Department of Agriculture called the technical review team. We're

we all that grew up in Wyoming believe and still believe, I

What this program does, plain and simple, is it's

from the headwater down to the ocean or anything like that,

an attempt to get those folks together. And it may not go

that in mind. It's very much a draft -- but what it would

people that maybe, you know, if they -- if a company man

came to the door, maybe they're not going to answer; but if

to open up. Maybe we can find some common ground and get

Bureau, Wyoming Stock Growers Association, Wyoming Wool

Growers Association, Wyoming Association of Conservation

Districts and my association, have worked on this program

for, oh, six or eight months or so. We've still got some

One of the things that we're kind of excited

believe, that these things can be solved sitting down at

the table rather than through governmental action.

but it is in place -- and it's still a draft. Let me keep

do is it would open the door for discussion for these

they sat down with somebody that they perceived as --

didn't really have a dog in the fight, maybe they'll start

The ag groups that I've spoken about, Farm

still working out details of that, but essentially what 2 that would be is you'll -- you all agree to what may be 3 necessary, what specialist may be necessary -- get them 4 out, get some idea of what's going on that would go into 5 what's essentially a mediation program.

Our hope is to complete this, get it to a place where we think that it's available for publication. We would then publish it. And notice also that this is the Powder River Basin region. This is specific to the Powder River Basin. If, in fact, we run into a situation similar in other areas of the state, they would tailor it -- we'd take this as a template and tailor it to those specific needs rather than trying to use an umbrella approach.

So with that, I'll leave this with you all and let you review that, but we are very positive about this. We believe that it's got some real Merit.

MS. FLITNER: Thank you.

Questions for John?

MR. MORRIS: Are you including the DEO in this group in these discussion or is this just industry and --

MR. ROBITAILLE: Madam Chair, at this point, no. I can tell you as far as the DEQ is a member of the coalbed task force, they have received a copy of this. We have been in front of the task force numerous

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times explaining what we're doing; and, in fact, in their 2 interim report, our little coalition, if you will, has 3 reported in there as to what we're doing. And it appears 4 as though they will endorse. 5

MR. MORRIS: I think it's great. I think that's good for stuff to come together.

MR. ROBITAILLE: Yes, sir, I hope it works. MS. FLITNER: Did you have a question,

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10 CHAIRMAN GORDON: Yeah. 11 John, thanks. You and I talked about that 12 process before. It's fabulous.

MR. ROBITAILLE: Yes, thank you.

CHAIRMAN GORDON: Do you have an opinion on 15 the way it needs to be done, the beneficial use statements done by the landowner or the Game and Fish and -- do you have any thoughts on that? I was thinking that your process could result in those kinds of statements.

MR. ROBITAILLE: Madam Chair, I'm not sure 19 20 I'm following you. I'm not sure -- maybe we'll need to sit down and visit some more, but I'm not sure how this is 22 going to evolve into that type of process.

23 I do recall that the Game and Fish just decided 24 that they were being asked too often and just made a 25 blanket statement.

barium, sulfate and TDS. I work for a company named CBM 2 Associates. We do water quality monitoring and compliance 3 reporting in the Powder River Basin and other basins in 4 Wyoming for energy production.

5 The objective of the study, which you have in 6 your hands there, is to contrast the current limits for 7 total recoverable barium, total dissolved sulfate, TDS, 8 against those PRBRC has proposed in their petition to 9 change.

We want to evaluate the potential effects on oil 11 and gas production and the availability of water due to the 12 more restrictive proposed standards. The data sources that were used came from the DEO's discharge monitoring reports 14 for coalbed methane production and for conventional oil and 15 gas. They were reviewed from a period of 1999 through 16 2006.

17 We looked at a number of different outfalls that 18 were across the Powder River Basin and other oil producing basins in the state of Wyoming. For barium we examined 19 20 produced water from the discharge permits. The outfalls 21 had mean concentrations of total recoverable barium that were used to average the samples from the same outfall 23 together over the period of record that we had for them in 24 order to get a mean value, which we feel is most

representative -- we hope the DEO would agree -- of what

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As an opinion, I don't have an opinion one way or the other.

CHAIRMAN GORDON: Okay. MR. ROBITAILLE: I do believe that if our process works the way we all envision it to work, I believe that we will use a rifle as opposed to shotgun.

CHAIRMAN GORDON: Okay.

MS. FLITNER: Thank you.

Rob Garland?

10 MR. GARLAND: Thank you. I'm not sure how 11 to plug in.

Is there a connection to your projector?

13 MS. FLITNER: I'm not sure how to proceed 14 with the -- if you -- it's up to you, but we'll follow along, considering. 15

MR. GARLAND: Okay. My name is Rob Garland. I appreciate the Council hearing testimony today.

18 This is on the water quality that we are dealing 19 with, the effluent limits as part of this discussion.

MS. FLITNER: We can use the slides on paper, if you'd rather. I just don't want to use up your 21 time with technological malfunctions. It's up to you.

23 MR. GARLAND: I'm testifying on behalf of the industry and the -- all right. This discussion is on 24

the effects from the PRBRC proposed effluent limits for 25

kind of water quality you see in there. It's fairly 2 consistent over the time of the period of record as well.

3 For the barium from the CBNG produced water, we 4 had 2,658 individual outfalls that we looked at; and 5 99 percent of those outfalls had mean barium concentrations 6 for total recoverable barium that would exceed the proposed 7 200 microgram per liter standard. Under current standards of 2000 microgram per liter, less than 1 percent exceed at 9 this point in time.

There's a map there that shows you the concentration of those exceedances. I will give the Council the PowerPoint presentation, and I will e-mail it or provide a CD, whatever you would like, so you can examine these in more detail. Again, I apologize for not being able to see the figures larger.

Again, these maps show the concentrations. They're contoured out there. The gray area around the blue is an area where we don't have any data because --

MS. FLITNER: You have one minute.

MR. GARLAND: Okay. The histogram that follows that shows the distribution of those concentrations 21 for that coalbed methane water. The produced water from conventional oil and gas is pretty sparse as far as containing barium concentrations; but if -- we had to treat for that -- excuse me, back up here -- we had to treat for

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this barium in the water for the coalbed.

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We are looking at a significant treatment cost of about 35 to 60 cents per barrel of water and that would roughly equate to about a 147 to \$252 million increase a year in treatment costs. These numbers are based on the current production that just elapsed over the period of 2006.

So those are all the statistics there. It would also increase the value of the -- or the cost of the gas to 10 produce at the wellhead from 63 cents to 1.08 because most water is produced per mcf of gas than a barrel of water. 11 12 It's about 1.8 right now.

13 The conventional oil and gas has very little 14 barium, and it doesn't appear that there would be much 15 problem with that. We probably have about -- well, I take 16 that back -- you'd have 38 percent of the conventional oil 17 and gas that also has to be discharged -- would have to be 18 treated if you lower the standards to 200 micrograms per 19 liter.

20 Sulfates -- coalbed water does not contain much 21 in the way of sulfates. You have about 2 percent. Out of 22 1383 less outfalls examined, you would have approximately 23 2 percent that would have to have treatment. Conventional 24 oil and gas, produced water sulfates, 71 percent would be seen in the proposed standards at 500 milligrams per liter

MR. GARLAND: Finally, loss of the produced 1 2 water to existing livestock and wildlife uses and the loss 3 of oil and gas reserves offset and justified by the 4 credible, measurable benefit from adopting new limits. 5 MS. FLITNER: Thank you. 6 MR. GARLAND: Any questions?

8 On the barium that you produced, you have a 9 conservative cost; but I didn't see those on the others. 10

Is there a reason?

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MR. GARLAND: I just did that because of 12 the brevity of this discussion here, and it would take some 13 time to do that. It is going to be very similar to the 14 cost you see for the barium or each one of the contaminants 15 it would have to be.

CHAIRMAN GORDON: What is that estimate based off of?

CHAIRMAN GORDON: I have two questions.

MR. GARLAND: The estimate is based off the 19 current cost to treat the water where it is being treated 20 on the Powder River, and it's being gathered and treated by 21 an ion exchange system and discharged to the river to meet 22 the current standards.

CHAIRMAN GORDON: Specifically for barium? MR. GARLAND: No, specifically for the 25 sodium adsorption ratio -- well, in sodium, actually, now

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of sulfate. 1

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And that data is mainly gathered from Salt Creek and Big Horn Basin where we had available data. Again, those aren't required effluent limits to be taken, those are from some other studies that have been done out there.

TDS from 1,942 outfalls, in the case that's 6 percent of the currently operated outfalls. That would not comply for coalbed natural gas with the proposed 2,000 limit. And then with conventional oil and gas, 89 percent would not comply with the TDS limits that have been proposed in petition.

Questions are -- I believe this Council should be addressing what is the risk of harm to the livestock and 13 the wildlife and the produced water under these existing 14 15 limits. Where is credible data that the existing limits 16 are not protective of wildlife or livestock. I haven't 17 seen it. I've done a lot of water management plans and worked in the field out there. 18

What is the risk of harm to the livestock and 20 wildlife? Produced water is removed from the state's water supply. We've heard plenty of discussion today on that question. Where's the credible evidence of measurable 22 benefits to livestock and wildlife from the proposed 24 limits? I think there is a study underway.

MS. FLITNER: Thank you.

and for EC.

CHAIRMAN GORDON: Okay. MS. FLITNER: Wendy has a question for you,

too.

MS. HUTCHINSON: Just a comment, really. Thank you for the statistics. I find it very

interesting. Since we think in some measure we're going to postpone the standards, I guess I would encourage you -after Dr. Raisbeck's study comes back to us that there 10 might be another opportunity that this presentation would 11 come to force again.

MR. GARLAND: I would appreciate it. MS. FLITNER: Thank you very much. Keith Burron and Tim Barber? Great. Keith is readv.

MR. BURRON: Thank you, Madam Chair, 17 members of the Council.

For the record, I'm Keith Burron. Just a little bit of background, first. I've been an attorney in this state for 15 years practicing in water law. Before there was coalbed methane development to any great degree, I represented a lot of agriculture interests, and I'm sensitive to those interests.

I'm here today speaking for Petro-Canada 25 Resources. You heard a little bit from David Gremel

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earlier today. Petro-Canada began operating in the Powder River Basin by taking over the assets of a company called Prima, and that happened in mid-2004. Petro-Canada was fortunate enough to pick up Mr. Gremel in that process of picking up Prima's assets. Petro-Canada is one of several operators in the Wild Horse Creek drainage.

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I guess I'd start with what Lorraine Quarberg said earlier today that -- maybe paraphrasing a little bit -- not all problems require a solution from the government. Petro-Canada, as you heard from Mr. Gremel, 11 has worked out cooperative solutions in every area in which 12 it works, including Wild Horse Creek, with one exception.

And that's the situation involving Mr. Clabaugh 14 on Wild Horse Creek. And I want to make clear that I'm not 15 here today to pick on Mr. Clabaugh, and I'm not here today 16 to debate that issue; but it is important, I believe, to 17 note that yesterday in our slide presentation you saw a 18 number of slides of water out of the banks on the land.

19 Every one of them, to my recollection, was Wild 20 Horse Creek on Mr. Clabaugh's land. Now, you've heard from Mr. Gremel that he's attempted to contact Mr. Clabaugh on a

number on occasions by telephone -- and he's spoken with 23 him twice, but got, basically, Talk to my attorney.

24 Now, again, it's the Powder River Basin Resource 25 Council's petition who has brought this here, and I'm sure limbs, things like that, in that state section; and the hydrologist that did the study concluded that the debris piles are the largest factor that impedes the natural hydraulic capacity at Wild Horse Creek.

There are solutions to fixing these problems, but 6 we need some cooperation to do it; and again, we'll extend 7 that cooperation and ask for that cooperation from 8 everybody involved. And I think we're going to get that 9 cooperation from the State of Wyoming; because after the 10 State reviewed this plan, they've essentially said we'd 11 like to see you proceed with it and send us a letter of 12 agreement.

So currently, the process is there are costs being developed to do this. Petro-Canada's talking with the other operators about sharing costs, but we'd like to go into Section 16. Obviously, we'd like to extend that and talk with Mr. Clabaugh about addressing that.

Madam Chair, I'm sorry. I do have a little bit more, and I hope you'll indulge me with that.

Let me move on about the EQC's decision for 21 today. The Council's sitting to evaluate the petition that is in front of you and not something else, recognizing that you've asked for what are solutions -- and to back up one step, what Mr. Robitaille and Ken Hamilton indicated about produced water initiative -- I've now reviewed the plan

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Mr. Clabaugh does not want to be the lightning rod for the 2 discussion that we're having. But nonetheless, the 3 situation is this is not a situation that has occurred 4 because of operator neglect. 5

Petro-Canada and the other operators in that drainage have attempted to rectify this situation and to date have been unable to do so. And that's not to say that they're not committed to continue to trying to do that; they are. And that's a solution that's going to require some cooperation.

11 I do want to touch on one more aspect of the 12 Clabaugh situation and give the Council a little bit of information about where that stands. Section 16 is a state 13 section within the Clabaugh Ranch. We, being Petro-Canada, 14 15 on behalf of operators in the drainage, have contacted 16 State Lands to ask if we could do mitigation within Wild Horse Creek on Section 16. 17

18 The State allowed Petro-Canada to send a 19 consultant out and do some assessment. The consultant came back and said there are many things that can be done to 20 address flooding concerns on the State's piece of property, which, by the way, is leased by Mr. Clabaugh, operated as 22 23 part of his ranch unit.

24 The primary finding that the consultant made was 25 that there are about 33 debris piles washed out, dead tree extensively. I'm aware it's in development.

2 That sounds like something that could have a lot 3 of promise, because it brings in someone else to facilitate these kind of conflicts. That's something my client would certainly support.

But for today, you've been tasked with something that really is impossible, because what I heard in the petitioner's presentation is a comment to the effect that if a landowner wants the water, it's not a nuisance; but if a landowner doesn't want the water, it is a nuisance. And 10 11 how can those two interests be accommodated within the same 12 drainage? I don't think that they can.

I believe -- and it's in our written materials --14 that the right to flow water in a natural waterway is established as a matter of law. It's not a nuisance to 16 flow water in a natural watercourse. Were that not the case, water development in this state would not have 18 occurred.

19 We would not have the ability for the City of 20 Chevenne to pump groundwater wells and discharge them in to 21 Crow Creek. We would not have the ability to bring water 22 from Little Snake over to Cheyenne and deposit it into Crow 23 Creek because it's artificial supply going into a different 24 drainage. 25

I understand that even within the Powder River

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Basin, Prairie Dog Creek -- one of the creeks up there. And I apologize for not knowing which one -- receives diversion from another creek up there, which augments its water; because it's typically water -- but that's not an uncommon situation. It happens all over the state in every irrigation project.

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So essentially, that is an issue that has been a matter of state policy for over a hundred years since prior to state government.

And Mr. Morris and Ms. Hutchinson asked the 11 question, What about downstream landowners who don't have 12 an opportunity to deal with the operators on these issues? 13 I think that's a hypothetical question, and maybe in some 14 context it's come up; but the reality is they do. And the 15 reality is a lot of operators are working with downstream 16 landowners to mitigate their concerns.

17 Again, Petro-Canada is one of those companies, 18 and Wild Horse Creek is a good example. There are a number 19 of landowners in drainage -- none of whom are here today, 20 except for one. So you're faced with a petition that, from 21 a practical standpoint, just doesn't work. In addition, the language of the petition, as has been pointed out, 23 arguably bans discharges altogether.

24 And I think it's interesting that Mr. Wagner, the 25 water quality administrator, is the one who concluded that were specific questions -- one of them from, I believe, Chairman Gordon -- and the question is what about the beneficial use waivers or statements that were signed?

The DEQ, it's my understanding, did away with that requirement because of the determination that if water meets discharge specs, if it meets livestock water quality, there will be a presumption that it's going to be used for livestock use.

And I think it's very difficult to dispute that in the arid regions we deal with, if that water is there and meets discharge specs, it's going to be used for stock and wildlife. So that was a logical decision, I believe, on the part of the Department.

One, that we would not necessarily want to see it revisited for the reasons that Mr. Hiser stated, because it really adds a layer of regulation that does nothing from a practical matter in terms of adding to the regulatory scheme.

The second issue that I want to talk briefly about is credible data, because I think Ms. Hutchinson has really focused on a huge pitfall in the proposed regulation and one that gives me a great deal of concern. Because credible data is a term of art defined in the Environmental Quality Act and under the clean water act as well, and it provides that credible data is valid means --

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reading the rule -- the proposed rule, and he is the one who would be charged with implementing that rule. So if that's his reading, I have some concern.

I would also say that I think the rule can be fairly read that way; and as I read the transcripts from Buffalo -- and again, we talked -- you folks talked yesterday about having some of your language and transcripts coming back at you. I believe that's how Ms. Hutchinson read that and Mr. Moore also, that you can't 10 have a rule that bans pollution and then have a discharge permit that allows it. So the current language simply doesn't work.

And you're now apparently being invited to revise that exhibit to say something that it doesn't say, to have an intent that we don't quite know what that is. And that will require another rule-making, and it's certainly not something that the Council is necessarily equipped to do -to craft that language. If there's an issue out there to address, then that ought to go to the Department to come up through the rule-making process.

21 But in context of what Petitioners have proposed, 22 if it fails on its own merits, the Council is not obliged to rescue it. And if it's not there, it's not something 23 24 that can be adopted.

Two issues that I would like to talk about that

scientifically valid chemical, physical and biological monitoring data collected under an accepted sampling and analysis plan, dah, dah, dah.

How do you apply that in a context where it has never, ever been applied before and in the context of the petitioner's proposed rule relating it to water quantity, which is something that it has not been related to in the past? If you're going to relate it to water quantity, you have to ask how does that affect -- again, to borrow Mr. Robitaille's term -- regulatory creep?

How does that affect when we deal with irrigation return flows or dewatering from irrigation? How does it deal with conventional production? How does it deal with municipal applications?

We're not requiring credible data in the context of flow or any of those contexts, nor does it fit. But probably more importantly, some of the things you heard today from the experts that were provided by the petitioners is that it's very difficult to come up with credible data on intermittent ephemeral streams.

And I would also point out -- and we pointed this out in one of our earlier responses in this proceeding -but the Environmental Quality Act in the water quality rules and regulations in Chapter 1 make an exception for the use of credible data and say, Credible data exceptions

55 (Pages 214 to 217)

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are "in instances of ephemeral or intermittent water values where chemical or biological sampling is not practical or feasible."

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So as petitioners well know, in the Powder River Basin or in coalbed methane areas where you're dealing with intermittent and ephemeral drainages, credible -- the credible data standard is very difficult, if not impossible or infeasible, to apply; so certainly it shouldn't apply in this instance.

One final point and I'll stop, and that is that 11 under Section 312 in the Environmental Quality Act it 12 provides the very limited purposes for which credible data was intended to be used; first of all, in designating uses of surface water and determining water bodies' attainment of designated uses.

Credible data was never intended to be used for 17 setting effluent limits nor was it intended to address whether or not the quantity of water is being put to beneficial use, which, I believe, is the reading that's attempted to be added in petitioner's Appendix I.

21 So with that, I'll stop, unless there are -- I'm 22 sorry. I do have one procedural question.

23 I would like to request that the Council leave 24 the record open for us to provide some information to the 25 record based on prior proceedings of the Council, of which

transcript. I'm just aware the testimony is there, and I

2 think it would supplement what has been put in.

3 MR. MOORE: So not an inordinate amount of 4 time?

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5 MR. BURRON: Oh, no.

6 MR. MOORE: Thanks. 7 MS. FOX: I'm sorry. I don't mean to butt

8 in, but I think I can help on this; because we had 9 requested that the Council take judicial notice of the 10 Maycock proceeding, so that's already in the record, I 11 believe.

12 MR. MOORE: Thank you.

MS. LORENZON: The entire record?

MS. FOX: Yes. And if Keith wants to designate particular parts, I would say let him file that designation but not keep the record open ten more days for any purpose. That's the part that scares me.

18 MR. MOORE: Ouestion, Mr. Gordon? 19 CHAIRMAN GORDON: I'm going to ask you a 20 question.

21 I think you were there, maybe, when we were 22 discussing those back in 2002 and 2003, and I remember the 23 logic. And I think you're right in the way you

24 characterized it. But I'm not sure that the presumption 25 necessarily meets the standard that we might need to have.

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the Council will be able to take administrative notice,

2 particularly some of the testimony I believe in the Maycock 3

contested case, which deals with the issue that

Mr. Lidstone and Mr. Munn commented on concerning the effects of the water quality changes in the stream and the

effects of water in an ephemeral drainage over a long period of time.

I think some of that data that was presented in the testimony there is relevant to this proceeding, and so we would ask that you keep the record open and allow us to provide some of that testimony for purposes of the record.

Thank you.

MS. FLITNER: Thank you. I'm -- there are likely questions, and at this point I'm going to turn the 15 hearing over to Rick with the note that the DEQ has the 16 ability to answer some of the questions on credible data, and in addition to, Kate and Mr. Barker, I belive it is, 17 18 would like a little time.

Any questions of Keith?

MR. MOORE: Thank you. I have one question and that's just due to your last comment.

22 How much time would you need if we do keep the 23 record open?

24 MR. BURRON: I imagine ten days would be 25 sufficient, sooner if we had to have it. I don't have that

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1 For instance, one might presume that cattle would 2 be running on all pastures in the Powder River Basin at the

time and have the presumption that there are several

people, I know, that are thinking, I gotta feed stock, I

5 got pieces of pasture, we're cutting down our stock, you

6 know -- so I guess -- I understand that introduces a buck, 7 but I guess my point is perhaps in this particular case it

8 makes some sense to have those statements. 9 And I guess two questions I have -- one is are

than they were in the past?

10 they really burdensome to get, and two, wouldn't they be 11 helpful in that they would help sort of categorize and 12 perhaps encapsulate what the water production plan would be 13 on an individual ranch and wouldn't they be more valuable 14

15 MR. BURRON: I guess I would say that it --16 in terms of the effort that has gone through to get those 17 statements to the satisfaction of the DEQ to satisfy a

18 requirement, which, I guess, maybe we disagree on whether

19 the presumption is appropriate or not; but I think the

20 burden imposed by that outweighs the benefit of what you 21

might get, because I don't believe the beneficial use 22 statements are necessarily utilized in terms of billing a

23 water management plan for a given project.

24 And, you know, recognizing that you've addressed 25 this question to a number of presenters, and I think from

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that I think maybe a perspective of how you view the issue -- maybe we just don't view it exactly the same way. CHAIRMAN GORDON: Okay. That's fair. I just wanted your opinion.

MR. MOORE: Any additional questions? Thank you very much.

Jim Barber.

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MR. BARBER: Good afternoon, Mr. Chairman and members of the Council.

My name is Tim Barber, and I'm a regulatory supervisor and I'm employed by Yates Petroleum. I hope today to talk about a few kind of bullet issues that maybe go to some of the questions and concerns maybe that have been expressed by the Council.

I wanted to, first of all, talk about the 16 petition as it exists, I think, in its most recent form where it proposed split effluent standards for traditional 18 oil and gas versus coalbed produced waters. I think there 19 are concerns about that, and I want to point out that this 20 is not a -- this is not a Big Horn Basin proposal and a Powder River Basin proposal. It's traditional oil and gas 22 and coalbed.

23 And though it's been discussed a little bit in 24 those terms, keep in mind it's tradition oil and gas and 25 coalbed. And there's traditional oil and gas development

1 I've heard discussion about, you know, beneficial 2 use before 2004, these statements; and I think -- and I've 3 not had the opportunity to go back and actually research 4 it -- but just based on the age of some of the permits that 5 I know to be the permits that have caused some problems and 6 concern and maybe resulted in the petition, I believe most, 7 if not all, of those permits were old enough that they were in the time frame when statements of beneficial use were 9 part of the deal. 10

And as someone, I think, talked about earlier, 11 there was also the opportunity if there was -- if a 12 landowner did not want to provide that statement of 13 beneficial use, then a qualified wildlife biologist or, I 14 think, sometimes the Fish and Game provided those. I don't 15 think the statement of beneficial use is a means to an end 16 that the Council's trying to solve.

To the question of credible data, the question 18 has been asked and attempted to be answered a number of 19 times. I have maybe a little different perspective on the 20 answer. We do, from time to time, attempt to do work --21 downstream work relating more to Chapter 1, Section 20, I 22 know that's a whole other discussion. I only bring it up 23 because it's a data-gathering effort.

And what we look at there is things like flows, 25 downstream soils, vegetation, stream morphology, water

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in the Powder River Basin, and there may be coalbed development in the Big Horn Basin.

I think it would be very difficult to defend and possibly may not even pass the laugh test if the petition went to rule-making, that rule was approved, and that rule said that if I discharge to a reservoir on a landowner's place that he and I agreed to work together to build this reservoir that on the eastern side of this reservoir I could have a coalbed discharge that met these very stringent standards and on the other side of the reservoir I could have an oil treater discharge that met less stringent standards -- that may be very difficult, legally. And I think that DEQ may have a tough time with a rule like that.

Second of all, if I may, Mr. Gordon, I wanted to speak, with your permission, towards the statement of the beneficial use question that's come up a number of times.

17 18 Most of my work and the folks that work with 19 me -- the work that we did do is getting permission two different ways: getting permission to conduct activities on landowners' lands and getting permission from folks like 21 the DEQ to get permits and discharge. And in the course of that work, for many years we got those statements of 24 beneficial use as part of that application process to go to Mr. Wagner and his folks over there. 25

quantity, water quality that's been in the stream, what does the stream sort of look like on the ground. And we 3 many times -- when we try to conduct that Chapter 1, Section 20, three-tiered work, we go to landowners and we 5 ask for permission, as is part of my job, to conduct those 6 studies.

And it could be soil studies. It could be a number of things. What we run into as an impediment most of the time is private property rights of downstream landowners that simply don't want that work conducted on their land. Three of the petitioners -- and it is their right -- three of the petitioners have denied us access to do that work. That's one impediment to that work.

Second of all, I think the quantification of 15 water use is going to be a real challenge. How much water is used by waterfowl? How much water is used to keep open water in winter? How much do invertebrates use? Those are questions that somebody's going to have to ask in order to answer the question that's maybe put out there.

I would wrap up with making a statement about a 21 final issue. I think that I've heard anecdotally, though I 22 have not researched this, that during the early times of produced water in the Big Horn Basin, which have been going for a lot of years, there were some issues. There were 25 issues out there.

57 (Pages 222 to 225)

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          That water discharge and that play has matured to
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    the point where it sounds like the issues, if they're out
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    there, are less. I think that that is what we will see in
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    the Powder River. I think that as time goes on, issues get
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    resolved. I think you've heard today operators who know
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    that there are issues out there are interested in resolving
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    those issues, and I submit that that's what will occur over
8
    time.
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Thank you.

MR. MOORE: Thank you.

11 Questions?

CHAIRMAN GORDON: Sorry. I had a question

13 for you. 14

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Thank you very much for addressing that question I have. In the course of your work, do you prepare water management plans with landowners?

MR. BARBER: Yes.

18 CHAIRMAN GORDON: And I guess I'm -- are 19 they part of normal surface use agreements and that sort of 20 thing?

21 MR. BARBER: Yes. Sometimes surface use 22 agreements are negotiated with water discharge agreements 23 as part and parcel, and sometimes they're negotiated as a 24 separate, distinct agreement. And I have, by the way,

25 never worked on a project where I was working -- or not

private owner's or just that landowner's land, someone 2 signed a beneficial use statement.

CHAIRMAN GORDON: Yeah. But I was talking about the water management plans. If you have a water management plan that you're preparing for somebody and let's say it's on federal minerals, private surface or on -- do you do the same sort of effort for state lands if

8 somebody leases or is that something you --9 MR. BARBER: They're different, but the 10 efforts are parallel.

> CHAIRMAN GORDON: Okay. Thank you. MR. MOORE: Ms. Hutchinson.

MS. HUTCHINSON: Thank you for being here.

14 You've already made a few comments, but I wondered if you could elaborate any further on -- as you 15 16 read the proposed rule, how you would go about preparing 17 the necessary documents that you would need to comply with 18

MR. BARBER: In a very broad sense, I think 20 it would be extremely difficult. The subjectivity in preparing what I think is being asked for -- though I've not actually seen a description of it, I've simply read the 23 petition portion -- could vary from landowner to landowner.

In other words, on one side of the fence the 25 landowner could say, Putting water in a 5-acre-foot

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there with the surface use agreement.

2 CHAIRMAN GORDON: I guess my -- what I'm 3 curious about is couldn't that be construed as being a statement of beneficial use if you have a water management plan?

6 MR. BARBER: I've actually seen the two not 7 be the same.

CHAIRMAN GORDON: Okay.

9 MR. BARBER: We had times when we had a 10 surface use agreement, but we had a landowner that maybe did not want to sign a statement of beneficial use. So 12 I've seen them kind of diverge a little bit. 13

CHAIRMAN GORDON: But I guess just using your professional judgment, if you had a water management 14 plan, it would be some attempt to put to beneficial use, 16 wouldn't it?

17 MR. BARBER: Yes, sir. 18 CHAIRMAN GORDON: And would those also then apply to state lands or BLM lands, leased lands that 19 20 landowners would have and then -- I'm assuming you're 21 talking about private land, but maybe I'm wrong. 22 MR. BARBER: Typically when there was a

23 water discharge under the old statement of beneficial use, 24 regardless of whether that discharge occurred on federal

25 lands, on state lands, on leased lands from a third party,

reservoir is absolutely a beneficial use to me. I'm going 2 to use it for stock water. I want to see waterfowl out 3 there. It's aesthetically pleasing to me. His list could 4 go on and on. 5

On the other side of the fence, that landowner's view of water management might be, The tire tank that overflows in the winter and keeps open water at 5 gallons a minute or something is extremely valuable to me. I don't care if I see any waterfowl. I don't really worry about 10 what's going on there. I don't want to put fish in there.

So unfortunately, we could have a situation where the same exact beneficial use -- and I think we would all agree that those are beneficial uses -- could be very easily changed by those perceptions.

MS. HUTCHINSON: Okay. Thank you. MR. BARBER: Thank you very much. MR. MOORE: Is there anyone in the audience that wanted to testify that has not had a chance?

Thank you very much.

I understand that Mr. Wagner and Mr. Corra, you might be wanting to provide some comments or some clarification on credible data that you can offer, so I'd ask you to come up and give us any of your observations that you've heard today or answer specific questions about credible data, if that's all you want to do.

58 (Pages 226 to 229)