In The Matter of the Designation of the Groundwater Management District No. 4 District-Wide Local Enhanced Management Area (LEMA) in Cheyenne, Decatur, Rawlins, Gove, Graham, Logan, Sheridan, Sherman, Thomas and Wallace Counties in Kansas.

PROCEEDINGS had before DAVID BARFIELD, Hearing Officer, Division of Water Resources, Kansas Department of Agriculture, at the City Limits Convention Center, 2227 South Range Avenue, Colby, Kansas on the 14th day of November, 2017 at 9:05 a.m. and reported by Elaine Shogren, CSR, Satanta, Kansas.

I N D E X

Public Comments 3
Testimony of RAY LUHMAN 18
Testimony of BROWNIE WILSON 210
Testimony of BRENT ROGERS 238
Testimony of LYNN GOOSSEN 241
Testimony of KELLY STEWART 244
Testimony of LANE LETOURNEAU 248
Testimony of BERT STRAMEL 267

PUBLIC COMMENTS

IRENE SIEBERT 107
SCOTT ROSS 114
AARON POPELKA 126
JERRY BINNING 136
JACE MOSBARGER 139/282
MIKE MCKENNA 142
BRIAN BAALMAN 146
KENT VOORHIES 148
STEVE ZIEGELMEIER 150
MIKE SCHULTZ 277

Closing Comments CHIEF ENGINEER BARFIELD 286
Certificate 289

HEARING OFFICER BARFIELD: All right.

Please come to order. We will now go on the record.

My name is David Barfield. I am Chief Engineer of the Division of Water Resources, Kansas Department of Agriculture, and I will be your Hearing Officer today. With me is Kenny Titus, Chief counsel for the Kansas Department of Agriculture, and he will be assisting me in this hearing.

Today is November 14th, 2017. The time is 9:05 a.m. and we are holding this hearing at the City Limits Convention Center in Colby, Kansas. If you have not already done so, I would ask that everyone present, please go and sign the attendance sheet located by the door. If you plan to give testimony, please indicate that on the sign-in sheet.

Thank you each for taking time today to attend this hearing related to this very significant matter of groundwater management within the boundaries of Northwest Kansas, Groundwater Management District No. 4.

This hearing is being held pursuant to K.S.A. 82a-741, which governs the establishment of local enhanced management areas, or LEMAs as we tend...
This is the second of two hearings to consider the management plan proposed by GMD No. 4, Groundwater Management District No. 4, otherwise known as GMD No. 4. In the plan, I will refer to it as the GMD4 District-Wide LEMA.

Pursuant to K.S.A. 82a-1041(b), timely notice of this public hearing was published in the Colby Free Press on October 13th, 2017; the Goodland Star News on October 13th, 2017; and the Kansas Register on October 12th, 2017. Each water right owner within the boundaries of the proposed LEMA was also mailed an individual notification of this hearing.

I would like to provide just a little bit of history on sort of what has transpired here, and particularly on sort of my role in the plan development. The GMD board, as I understand it, started its discussion and development of the district-wide plan, or LEMA, in 2015. My first knowledge of it was when I attended their 2016 annual meeting. I believe it was in February of 2016. I and several of the staff from Manhattan went and participated in the annual meeting. We attended a board meeting just before the annual meeting and were briefly briefed on their concepts for the plan at that point. It has evolved since then. And our basic involvement was to give them input, particularly to ensure that the plan that they would develop ultimately would be consistent with state law and its requirements more broadly.

From there, the GMD, after kicking off and making the public aware at that annual meeting in 2016 of the plan, had a significant public involvement process. Several of our staff attended some of the public meetings. I did not personally.

My next knowledge of really the plan was when they set it up early this year. They set up a plan that was, as I understand it, substantively the same as the plan we have today, that I am required to review the plan and make sure it complies with state law and a number of other requirements before we kick off the public process.

In reviewing it, I found a number of things that needed to be clarified, you know, just written in a more clear way. And so we did provide the GMD with some input in terms of how to make the plan just be written more clearly. They took that input and ultimately rewrote the plan, again to be more clear. I also directed staff to assist the GMD to make sure that the control provisions would accomplish the goal, and you will hear more about that as we go forward today.

So ultimately then the plan as it is before us today was sent to me for review and then we have the process since then.

So this hearing process then was formally initiated in June, when I found the proposed plan submitted by GMD4 was acceptable for consideration. As part of the hearing process, it was necessary to hold an initial hearing to resolve three factual matters to determine -- one, to determine if one or more of the circumstances identified in K.S.A. 82a-1036 existed; two, whether it was in the public interest to adopt one or more corrective controls; and, three, whether the geographic boundaries were reasonable.

I delegated the authority to preside over the initial hearing to Ms. Connie Owen. Ms. Owen held this initial hearing on August 23 in Colby and issued findings on September 23. Ms. Owen's findings were favorable on all three requirements and as required by K.S.A. 82a-1041(b) and (c), I am holding this second hearing on the proposed management plan.

I would note for the record, and to provide additional background on our hearing procedures today, that on October 10 we received a notice of intervention and a motion for continuance by attorney David Traster on behalf of the group of intervenors. The Liner [phon] motion sought to delay this hearing. Additional pleadings were filed on October 27.

On October 31, I conducted a prehearing conference to allow for discussion of the hearing procedures for today and on the motions filed. On November 6 -- I am sorry, on November 1 and November 6th, I issued orders of decisions related to these motions and November 6 I issued a prehearing order to outline the procedures we will use for today's hearing. All of these pleadings and orders have been posted on the department's website.

So let me discuss the procedures for today's hearing then. As outlined in my prehearing order, today's hearing will be divided into two phases. First, we will hold the formal phase of the hearing. The formal phase of the hearing will consist of testimony and questions presented by those parties that have requested to participate in this portion of the hearing. Those parties are...
Groundwater District No. 4, the Division of Water Resources and the Intervenors. And each of these parties is represented here by legal counsel.

The public will not participate in the formal portion of the hearing. Testimony in this formal portion will be presented by the parties in the following order. Number 1, GMD; Number 2, the Division of Water Resources; and Number 3, the Intervenors represented by David Traster.

During this formal phase of the hearing, the parties may present their testimony and call witnesses to present testimony. The other parties will be allowed to cross-examine or ask clarifying questions of all witnesses, once they complete their testimony. I may also ask questions of each of the witnesses at any time during the proceedings.

While I will not be allowing the public to participate in cross-examining witnesses, you are free to provide your comments or questions on that testimony or on any testimony provided here today in the informal phase or written comments provided after the hearing within the time period that we will allow.

Again, as noted in my prehearing order, I will not be strictly applying the rule of evidence in these proceedings, but I expect all cross-examination to bear some reasonable relationship to the testimony presented by each witness.

Overall, my purpose here is to ensure that each party has the fullest opportunity to be heard and to present evidence for the record.

So following the formal phase of the hearing, we will probably take a break at that point and then we will proceed to the informal phase of the hearing. During this phase, the public will be allowed to comment on the GMD’s proposal. Public comments may be made by any member of the public including water right holders, businesses, organizations or anyone that wishes to place a comment on the record.

Prior to starting the informal phase, I will again ask that anyone who wishes to comment would put their name and the organization they represent, if any, on the sign-in sheets located by the door. I will then call for those comments in the order they appear on the sign-in sheets.

Again, during the informal phase of the hearing, I may ask clarifying questions of anyone who provides comments to ensure that we have a complete record.

As outlined in my prehearing order the parties, after I have asked my clarifying questions, may also ask clarifying questions. However, such questions shall not constitute formal cross-examination or an attempt to undermine someone’s comments.

So while you may not be a party here represented by legal counsel, I want you each to know that your comments will be carefully considered as I seek to decide this matter pursuant to statute.

If anyone wishes to respond to a question in writing following the hearing, they will be allowed to do so. You may also provide your testimony or comment in a written form. These may include rebuttal testimony based on anything you heard today. I will accept written comments here today or you can mail that testimony to Ronda Hutton at the Kansas Department of Agriculture, 1320 Research Park Drive, Manhattan, Kansas 66502.

The deadline for submitting the testimony is Tuesday, December 12, 2017. It must be postmarked by this date. There is also an information sheet with further instructions located by the door. So the dates and the address for the...
Occurred to me today. It is up to you. Thank you.

HEARING OFFICER BARFIELD: All right.

Thank you. So again, as I outlined, we are going to have a formal phase that probably will last -- it is hard to know at this juncture, but it certainly could last through the morning, easily. I guess if there is a member of the public who wishes to make a statement, an oral statement, I guess -- you know, we could go to an informal stage at any point, pause the formal phase and go to the informal stage if somebody needs to make a comment. So if you wish to make an oral statement, please -- I tell you what, Chris Beightel, raise your hand. If you wish to make a formal statement on the record today, an oral statement on the record, and you have to leave, let Chris know and he will let me know and we will find a way to accommodate you, okay, at any point.

All right?

MR. BEIGHTEL: I will stand back there.

HEARING OFFICER BARFIELD: Well, this could happen later in the morning. Okay, that is good. Of course, again, everyone is free to provide a written statement before December 12th as well.

Any other questions before we get started?

All right. Seeing none, we will go ahead and then start the formal phase of this hearing.

As a preliminary matter, I have pre-filed testimony that I received from GMD4 and from the Division of Water Resources, which we again have posted on our website. To the extent they are not presented here today, they are incorporated into the record of these proceedings. These have already been marked by the court reporter as Exhibits A and B.

(Marked Exhibit A, Exhibit B.)

Since this hearing may only be held following an initial hearing, I am incorporating the record from the initial hearing conducted on August 23, 2017 into this record, the complete record from that hearing into this hearing. These have already been marked by the court reporter as Exhibit C.

(Marked Exhibit C.)

I would also like to remind everyone for this hearing that it is being transcribed by a court reporter, Ms. Elaine Shogren. If you are giving oral testimony today, we will ask you to come forward, the witnesses will come forward to this because here during the formal stage, just to my left.

When we are in the informal stage, the public will come to the podium just in front of me.

We would ask that you speak clearly enough so she hears you. If she cannot understand your comments, she will interrupt and ask you to repeat those so they can be accurately recorded.

Before you make your comments or give testimony, Ms. Bailey (sic) will place you under oath. You will be asked to state your name and address before testifying. And please remember that, you know, we need obviously only one person speaking at a time.

Finally, please remember that the primary purpose of this hearing is to determine whether the local enhanced management plan with the corrective control provisions proposed by GMD4 should be adopted.

If the district-wide LEMAs adopt it, it will result in additional restrictions to use currently authorized from the underlying base rights within the proposed LEMA boundary. And these restrictions will vary according to the rate of decline by township within GMD4.

This decision must be supported by the record of these proceedings. It is appropriate to provide testimony regarding groundwater conditions, the management plan's sufficiency to deal with these conditions or any other topics you believe are relevant to the criteria set forth in K.S.A. 82a-1041 and to my ultimate decision whether or not to approve the district-wide LEMA.

All right. With these preliminaries completed, before I commence with the formal phase I would again ask if anyone has questions on our proceedings today? Okay.

With that, I would now call upon Adam Dees, attorney for GMD4, to come forward and to call his witnesses.

MR. DEES: Chief Engineer, I am Adam Dees.

I represent the Northwest Kansas Groundwater District -- Management District No. 4. And in the spirit of having a more informal hearing, we are going to have Ray Luhman testify. He is going to give his presentation and then I believe Mr. Traster will have an opportunity to ask him questions.

HEARING OFFICER BARFIELD: All right.

Very good. Ray, if you could come to the because.

For those testifying, these mics apparently -- I tried to put it on my lapel, but it did not work. You really pretty much have to have
got to get my glasses here. As we go through the testimony -- I have
will go through it briefly.
approved by the board of directors of GMD4, and I
am going to present this testimony that has been
submitted -- or GMD has submitted written testimony
that I believe has already been recorded on the
website. But we have copies for the intervenors,
for DWR, for the Chief Engineer and counsel, for the
court reporter. These copies also include the
various citations and articles that support the
written testimony. If I can approach?
HEARING OFFICER BARFIELD: Certainly.
MR. TRASTER: What exhibit is this? How
is it marked, is this A?
UNKNOWN SPEAKER: D, as in dog.
MR. TRASTER: Okay.
HEARING OFFICER BARFIELD: Just a second
here. Adam, is this Exhibit A then, the pre-filed
testimony that we have already marked as Exhibit A,
or is this something different?
MR. DEES: It is Exhibit A, although it --
in Exhibit A, we had referenced varying articles and
publications and those types of things. This
includes all of those references that are not
submitted but are in testimony.
HEARING OFFICER BARFIELD: So do you want
us to replace Exhibit A or make it Exhibit D?
MR. DEES: It is whatever is most
convenient for you guys.
HEARING OFFICER BARFIELD: All right. If
it is okay with you, I would like to replace it as
Exhibit A. It is just a more complete version; is
that correct?
MR. DEES: That is correct. We can
replace it or we can --
MR. TRASTER: However you want to do it is
fine with me.
HEARING OFFICER BARFIELD: All right. We
will call this Exhibit A then, this fuller version.
MR. DEES: Thank you.
TESTIMONY OF RAY LUHMAN
My name is Ray Luhman. I am the manager
at Northwest Kansas Groundwater District No. 4. I
am going to present this testimony that has been
approved by the board of directors of GMD4, and I
will go through it briefly. I am definitely not
going to read the whole thing.
As we go through the testimony -- I have
got to get my glasses here. Basically, you know, we
started out that -- we said we are submitting this
testimony in support of the Chief Engineer finding
that our proposed local enhanced management area
with one modification will conserve water and
educate water users on further conservation methods
to extend the life of the Ogallala Aquifer in
Northwest Kansas.
GMD4 provides a short history of the Water
Appropriation Act, Groundwater District Act, the
LEMA Act and previous actions taken in this
proceeding, then we restate our goal. Lastly, GMD4
shows how our corrective control measures should
reach the goal in this case.
Basically then we go through a brief
history of the Kansas Water Appropriation Act. We
go through additionally some history on the
formation of the Groundwater Management District
Act. And then -- so I am not really going to go
through that. I think that is fairly common
knowledge.
One thing I do want to bring out then was
in 2012, the Kansas Legislature passed a local
enhanced management area statute, K.S.A. 82a-1041.
Any LEMA is a creature of that statute. This
statute allows the GMDs to address groundwater

declines and other conditions of concern through
management plans that include specific goals and
corrective control procedures while being consistent
with state law.
This local autonomy over the management
plan distinguishes LEMAs from (inaudible). It needs
to be stated that, you know, a LEMA is basically --
we present our plan, the Chief Engineer can review
and look at that plan, but he cannot change that
plan in any way that is more restrictive than what
we propose.
The history of these proceedings. On
June 7th, Jim Defore [phon] submitted a revised LEMA
proposal to the Chief Engineer. Before submitting
that proposed LEMA, GMD4 held four public meetings
in Colby, Goodland, Hoxie and St. Francis and had
multiple board meetings with many interested people
attending over a two-and-a-half-year period between
January of 2015 and June of 2017 to discuss the
proposal. This represents significant public
involvement in the process that resulted in a
locally-developed and locally-requested plan.
Additionally, GMD4 had previously
presented a more restrictive program, had an
additional four meetings. Public acceptance of that
program was less positive and, therefore, the board rejected that program.

On June 27th, the DWR and Chief Engineer found that on its face, the proposal met the threshold requirements of 1041 and initiated these proceedings.

The determination on whether the proposal met the K.S.A. 1041 threshold was not a final determination, but an initial determination that the proposal warranted further review, input, investigation, testimony and consideration.

To begin that review, the Chief Engineer delegated his authority on the first hearing to Independent Hearing Officer Constance C. Owen to conduct that initial hearing. Notice of that hearing was given as required by K.S.A. 82a-1041.

On August 23rd, Ms. Owen, the Hearing Officer, conducted the initial hearing. As David previously stated, that could cover just three main questions. Those were whether or not the boundaries were reasonable, whether or not it was in the public interest to institute corrective control measures and -- let's see, what is the other one? Well, I have lost it. The third one is -- well, I will look. But, anyway, it is in the testimony. I got it, but I forgot it.

Anyway, based on that hearing she found that that -- that the proposal met the initial hearing bar. And on September 23rd of 2017, she issued her initial order concluding that the proposal satisfied those three initial requirements.

Basically we go through some additional information on Ms. Owen's findings on that, which I won't go through here now.

When the LEMA process comes from the local board of directors and the corrective control provisions have been requested from that process are consistent with state law, then the public interest of the K.S.A. 82a-1020 has been satisfied.

In any event, GMD4 provided the water users information very early in the discussions on the district-wide LEMA. The evidence provided the water users showed that adopting any corrective control provisions of water use would also extend the life of the regional aquifer.

A web page was created to keep the process available to the public and was updated regularly by GMD4's staff. Beginning in January of 2015, the process was covered by at least 28 board meetings, many of which were attended by members of the public, and the board did listen to comments that were given at those meetings.

Basically we go through that corrective control measures should reach the LEMA goal. One of the goals of the LEMA is improved management of water and not to exceed irrigating 1.7 million acre-foot over a five-year period of time.

Through that process, you know, we feel that the proposals that we have made will reach this goal and, therefore, we should go forward with those.

Some basic information on the corrective control measures is basically we went in and it was kind of a two-tiered process. We, first of all, went in and used Kansas Geological Survey section level data, which I think Brownie will cover here in a little bit. But basically that section level data establishes a bedrock elevation and a water table elevation for the center of every section in the district.

We looked at that data for the period of 2004 through 2015 and established an annual decline rate for each section in the district. Then at that time, we coalesced the sections into the legal townships, six-by-six sections, and came up with an average annual decline rate for every township within the district.

Those townships were then ranked from no decline, zero to .5 percent decline, .5 percent to one percent decline, one to two percent decline, and then greater than two percent decline. Those townships then were set in these categories.

Then we went into the Natural Resources Conservation Service irrigation requirements for corn for our area, and we zoned out our district from east to west, basically setting two zones per county. I interpolated the net irrigation requirement figures to the western edge of each one of the boundaries that are in the district.

Then at that time, depending on which zone they fell in and what the decline status of the townships were, we then assigned an amount of water on an acre-inch-per-acre basis. The acreage was determined from the Division of Water Resources WRIS system, Water Rights Information System, of reported acres. And I believe we used 2009 through 2015.

The reason that we started with 2009 was the fact that that is the first year that all water use in Groundwater District 4 was metered and we ended at '15 because that was the last data.
The GMD board will still encourage livestock and poultry operations to only use 90 percent of the amount they are allocated. The proposed modifications read, in Part 2(a), livestock and poultry use will be encouraged to maintain their use at 90 percent of the said amount provided by K.A.R. 5-3-22 based on the maximum amounts reportable by the number of animals authorized by current facility permit. Again, at no time will a stock water right be authorized to pump more than its authorized quantity.

Part 2(d), we would request that that be converted [sic] to read, "When converting from irrigation to non-irrigation use, the base water right will be converted under the procedures in K.A.R. 5-5-9, 5-10, or any Groundwater Management District regulation. And the appropriate non-irrigation, the locally enhanced management area allocation will apply as found in Section 2 for the remainder of the LEMA. Parts 2(b), 2(c) and 2(e) of the proposal would remain the same."

Again, let me restate our thoughts that there really doesn't need to be any additional restrictions and we don't think we want to restrict water use to our animal feeding and dairies.

As we get further into this, we have proposed an appeal process whereby people who believe that their acre allocations have been not figured correctly will be able to meet with GMD staff to see if the situation can be rectified. And then if they cannot come to an agreement with the staff, they can bring their appeal to the entire Groundwater District 4 board.

We did this just to make sure that there weren't any discrepancies in the irrigated acres. And this appeals process is an effort by GMD4 to make sure that the allocations are correctly set.

Okay. We go into violations. In our proposal this time, we just note that they will be consistent with the violations section of the Sheridan 6 LEMA. Also as an attachment to today's testimony, we do have the entire proposal attached to that, so there is more detail as far as the violations in our proposal.

One thing that we have added was that -- it concerns meter tampering. And we say if a preponderance of evidence suggests that actions have been taken to remove or alter the meter's ability to accurately measure flow, the offending water right will be suspended for a period of five years and any

available at the time we were putting together this plan. Based on that, then we assigned an amount for each water right in the district and then converted that into an acre-foot amount for each water holder. It needs to -- also one thing we did was for some of the more heavy users, we said that we will not decrease anyone more than 25 percent except for those that are going to be decreased down to a maximum of 18 inches. In the areas of the district that will have corrective control measures provided, there will be no pumpage over an average of 18 inches per acre.

So we will -- it is our contention that this LEMA proposal does have the effect of establishing or identifying aquifer subunits. Although it is district-wide, by using the decline status for each township it does differentiate between areas that have little or no decline and areas that have high decline. And from that standpoint, I believe that we do look at local aquifer subunits.

Each allocation for irrigation will be a total five-year amount. There is not any annual inches-per-acre requirement or anything. It is just a total five-year quantity of water that the individuals can use as they see fit, as long as they do not over-pump their water right.

If, in fact, an individual wants to possibly over-pump that water right, we have a multi-year flex account available or those water rights can negotiate with the Division of Water Resources on a water conservation area.

After completing this calculation, about 65 percent of the wells or well groups slated for LEMA allocations will have a LEMA allocation that is less than their combined diversions from 2009 through 2015.

Now, this is an area that we do want to request that a modification be made in our regional proposal. For the non-irrigation use type, the GMD board requests that the following language modify the stock water portion of the proposed LEMA modification for two reasons.

First, the total acres allocated for stock water usage in GMD4 is less than 0.5 percent of the total appropriations. Secondly, the animal feeding and dairies represent a significant market for our local crops and the GMD board reasoned that animal feeding and dairies should not be unduly restricted.
remaining LEMA allocation will be lost. And that is probably about all the detail I was going to give on that.

Economic viability. We have had several studies done, mainly by Dr. Bill Golden at Kansas State University. Most of his studies have focused on the Sheridan 6 LEMA, where he has found, at least in the first four years that he has studied, that cash flow and profitability within that LEMA, which by the way has a significantly lower allocation than what we are proposing in the district-wide, have remained pretty much the same as their peer group around the outside of that.

A previous study done by Dr. Golden and then Peterson and O'Brien, which was the potential economic impact of water use changes in Northwest Kansas was done in 2008. It was a very large study. But one of the main issues that was brought out in that is that if you are going to reduce water use in an area, the absolute worst thing you can do is dried-up acres, which use of a reverse order of priority system would do.

He maintains and shows that keeping the most acres wet is the best way to institute corrective control measures, and that was one of the

overriding plans or overriding things that the board found out when we were doing this proposal.

I guess about the end of this is, furthermore, this proposal does not contain any restrictions that are below the average water needs for corn. And most of the wells or groups of wells have allocations at or above the 80-percent chance NIR for corn.

Lastly, the greatest restriction, 25 percent, is well within the zero reduction to 30-percent reduction language as contemplated by the Golden reports. And we feel that we can maintain economic viability in the area with this proposal.

In conclusion, we contend that the Chief Engineer should adopt Hearing Officer Owen's order on initial requirements on the Groundwater Management District-Wide LEMA and incorporate it into the Chief Engineer's order. Two, that the Chief Engineer should issue an order of decision accepting the proposal with the modifications and, in turn, the proposal with modifications to GMD4 for approval. And on approval by GMD4, the Chief Engineer should issue an order of designation designating all of GMD4 as a LEMA and implementing the modified corrective controls within the proposal and as described above.

With that, I will stand for questions.

HEARING OFFICER BARFIELD: Mr. Dees, do you have any questions for Mr. Luhman?

MR. DEES: If you have got questions, Chief Engineer, you can go first.

HEARING OFFICER BARFIELD: Well, I tell you what, I would like the parties to go. And if the parties don't clarify things, I can ask my questions.

DIRECT EXAMINATION OF MR. LUHMAN
BY MR. DEES:
Q Really quickly, Ray, just to refresh your recollection a little bit. On Ms. Owen's order, was the third finding that there was a need for corrective controls?
A We had declining water tables.
Q Okay.
A Yeah, we had declining tables. That was the third one.
Q Okay.
A Good catch.
Q And it appears that you and the Division of Water Resources have worked fairly extensively on creating this plan and, for lack of a better term, massaging it and getting it into shape; is that correct?
A Well, you know, I wouldn't necessarily put it that way in the fact that the plan has been pretty much entirely developed by the Groundwater Management District board. We have had some conversations with the Division of Water Resources about legalities and that type of thing, but the proposal itself has been done by staff and the board.
Q Okay. But you believe that the GMD4 and the Division of Water Resources can effectively monitor and enforce this plan to meet the corrective control provisions?
A Yeah, I do. And that is maybe one thing I left out is the fact that, you know, through this proposal we will turn over the enforcement to the Division of Water Resources. We have sent our initial spreadsheet to them that has the allocations. And it is kind of a dynamic sheet, but it is now in the hands of the Division of Water Resources. There is a site where you can plug in your water right number and get your allocation. It is on their website.
Q Okay. And that relationship, you assume, is going to continue?
A I would hope so.
Q That is good. Really quickly. By using the decline
rate at the township level to determine the LEMA allocations, does that reward water users that have
conserved water in the past? A You know, that was kind of an issue -- you know, I
don’t know if it is really germane, but one of the
earlier plans that we had looked at actually was
looking at each individual water right in the
district, saying how much have you pumped and how
much of a restriction should you take.
I don’t remember the year, but the Kansas
Legislature has put language in several places in
state law that says if you are looking at doing some
sort of conservation cutbacks, that you have to take
into account previous conservation requirements.
So from that standpoint, we could see
early on that each individual that might have a
allocation given to them was probably going to claim
that they were conserving, whether they were or not.
But, you know, you could see with 3,600 wells, that
was going to be quite an extensive process.
So we did go back and we just decided to
go across the board with an allocation based on
their irrigated acres and we did not take into
account cropping type or anything like that. It was
just based on acres.

I maintain that people in those areas
probably have a large incentive to maintain their
status in that blue or green township so that if, in
fact, in five years they decide to go through with
another LEMA process that they are not targeted.
As far as meeting the 1.7 million
acre-foot over five years, what I did on that was I
just did a calculation of all of the water users and
said, okay, if you pumped -- the average amount you
have pumped or the LEMA quantity, whichever is
more -- or whichever is less, what will that total
come up to.
Q Okay. And that total is under the 1.7 million
acre-feet?
A Yes, it was.
Q Okay. And then -- I know that, you know, there is a
limited ability for us to project in the future what
could happen in subsequent LEMA iterations of this
site.
A Uh-huh.
Q But is there a provision in this LEMA that would --
that encourages future groundwater management boards
to reward or --
A There is -- you know, and I need to make that clear
is the fact that this LEMA as proposed is not one
that can be extended or anything like that. It is
proposed for a flat five-year period. If, in fact,
in that sixth year or during that time that the
people in charge at that time want to do it again,
we have to go through this whole process.
One thing in our proposal was that if this
would happen, that the board of directors at that
time would consider up to a 10 percent carryover of
anything left in the existing LEMA accounts.
MR. DEES: Thank you, Chief Engineer.
HEARING OFFICER BARFIELD: All right.
Mr. Traster, I will go ahead and take your questions
next.
MR. TRASTER: I thought the Division was
going first.
HEARING OFFICER BARFIELD: All right.
That is fine. We can do that.
MR. TRASTER: I am happy to do whatever.
HEARING OFFICER BARFIELD: Either way.
Mr. Oleen, do you have any questions?
MR. OLEEN: No questions for the DWR.
HEARING OFFICER BARFIELD: All right.
Mr. Traster.
MR. TRASTER: Thank you.
BY MR. TRASTER:

Q. Will you give us a little background? And, by the way, my name is David Traster. We have met before.
A. Right.
Q. I am a lawyer from Wichita.
A. Right.
Q. How long have you been at GMD? How long have you been employed there?
A. Since 1979. Which is, what, 37, 38 years, something like that.
Q. 1979?
A. Right.
Q. And what has your role been at the GMD?
A. I was originally hired as the assistant manager field coordinator on February 1st, 1979, and I remained in that position up until 2015 when I was promoted to manager.
Q. When Wayne retired?
A. No. Actually when Wayne retired, we had an interim man -- or not an interim manager, but we had another manager hired at that time. And then she moved away and I took that position.
Q. Okay. So when did Wayne retire, if you recall? I mean, how long was she [sic] there?

Q. All right.
A. That is fine.
Q. Would you agree that conservation -- everybody wants to conserve water?
A. Right.
Q. I mean that is a given, right?
A. Uh-huh.
Q. I mean there isn't any controversy about that, right?
A. Right.
Q. You testified that you submitted this plan to the Chief Engineer for approval on June 8th and then that you made a minor modification, correct?
A. We have not made that minor modification. We are requesting that through this hearing.
Q. I see. So the minor modification, when was that -- you submitted that to the DWR for review and approval; is that --
A. No. We thought we would do this through this hearing process.
Q. Okay. So the minor modification has not been reviewed according to the three steps that take place in the LEMA process where the Chief Engineer --
A. Oh, are you talking about the first hearing? No.

Q. No. I am talking about the initial review that he makes to cover those five or six points.
A. No, it would not have been.
Q. Okay. But it is being submitted. Is the plan that you are asking him to approve --
A. Uh-huh.
Q. -- is it -- has the board formally amended it?
A. I don't know if they have formally amended it. Now, they have formally adopted the proposed change in the stock water use. And so they have not modified the plan per -- you know, to-date. Again, we are requesting that through this process.
Q. Sure. I am trying to get to technically, you know, whether it has been -- the plan has been amended. I mean, the Chief Engineer has four options under the statute: He can approve it as written; he can send it back and disprove it; he can send it back with a few comments; or he can say, hey, start over. He has four options.
A. Yeah. But through the hearing process, there is a provision in there that the Groundwater Management District can or may -- or can request revisions through the hearing process. He can consider those and return them to the district. Either he accepts them or doesn't.

Q. Sure.
A. But if he does, he can return them to the district.
Q. Well, I am not suggesting that he can or can't. All I am just trying to make sure is I understand what the Chief Engineer can do with this order --
A. Right.
Q. -- and, you know, sort of what that amendment is for and what it does and how it works so that I -- I mean, which one of those four options is going to be -- I mean -- I guess what I am asking you to say definitively is the plan as submitted, has it been amended or not? I mean, they have adopted this --
A. No, it has not.
Q. So he could adopt it without the amendment --
A. Yes.
Q. -- and we would be done?
A. Supposedly, yes.
Q. Okay. Under that first option, right?
A. Uh-huh.
Q. But you want him to amend it, correct?
A. Yes.
Q. And the board has approved the amendment?
A. Yes.
Q. Okay. And can you explain in a little more detail what that amendment does, what it is for?
Q A basically the -- I think the proposal as submitted
stated that stock water used would be restricted to
a given amount -- let me see if I can find that.

The plan as proposed said that livestock
and poultry use will be restricted to 76 percent of
the quantity of water deemed to be reasonable for
livestock and poultry provided by K.A.R. 5-3-22 in
townships with greater than two percent average
annual decline and 85 percent of that said amount in
townships with average annual declines between one
and two percent based on the maximum head
supportable by a feedlot per head in effect on
December 1st, 2015.

Q So the plan as it was submitted cut back --
A Well, it will put restrictions on -- it would put
restrictions on stock water, yeah.

Q Right. And it would put restrictions on stock water
that were different than the restrictions on
irrigation rights, correct?
A Yes, yeah.

Q And so that was the plan as submitted. But what is
the amendment you are asking for today?
A Okay. What we are asking for now is that that be
modified to the Part 2A, which we would say
livestock and poultry use will be encouraged to

maintain their use of 90 percent of the said amount
provided by 5-3-22 based on the maximum amount
supportable by the number of animals authorized by a
current facility permit.

And then, again, there was -- a
modification was proposed in Part 2(d), whereby we
would say that the conversions from that -- if you
are going to convert irrigation over stock water,
that we use the current state regulations rather
than -- I think our original proposal said that it
would have to be held back to the LEMA quantity was
the maximum that could be converted.

Q So under the original proposal which the Chief
Engineer could adopt --
A Uh-huh.

Q -- a water right that is for stock water --
A Uh-huh.

Q So a water right that is for irrigation, that is
changed to a water right for stock water during this
process -- during the LEMA --
A Uh-huh.

Q -- would be -- would be permanently set at this
lower level, at the lower level in the --
A Through that conversion process, yes.

Q Right. And so would you say that this doesn't
really affect these water rights, existing water
rights, it would affect water rights that were
changed from irrigation to stock water during the
LEMA?
A Yeah. That is as proposed, yes.

Q That is what?
A That is as proposed, yes.

Q As proposed. But you are asking that that be --
A Be done away with.

Q Okay. So I guess what I am -- what you are asking
the Chief Engineer to do or what you are asking him
not to do is approve it as submitted; you are asking
him to submit it back to you for --
A Yeah --

Q -- because the plan -- let me finish.
A Okay.

Q The plan has not been amended?
A Right.

Q We can agree?
A Right.

Q And so if he is going to make this adoption, he
doesn't get to do -- approve it as written, he has
to come back under the third or fourth option set
out in the statute, resubmit it back to the GMD for
the plan to be amended, correct?
A Right, yeah. And if he adopts --
Q That is all right. I got it.
A Okay. You got it?
Q I got it. Thanks.
A Okay.

Q You indicated that you had not had any -- that you
developed the plan. And by "you", I mean the GMD,
the board and staff working together. And I have
been able to review very briefly your minutes over
the last couple of years and see that there has been
quite a bit of discussion about it, so I understand
what you are saying.

What was the genesis of this plan? Why
did you start? I mean --
A Basically back -- let's see, in -- I don't know if I
have got that note with me. I think it was back in
early 2015, the board of directors have -- really at
the urging of some of the general public that was at
one of our board meetings stated, you guys need to
have a goal statement. And so basically we started
to work on a goal statement.

And at that time -- and I am probably not
going to get it all right, but at that time we
adopted a goal statement that said by 2016, I think,
that we would have in place a district-wide -- some
sort of program that would decrease water use and
would increase the conservation of the area. I
don't have --
Q I understand.
A But that is kind of where the process started at
that time.
Q Well, you testified, though, that there was a
previous plan --
A Yes.
Q -- that was rejected? Was that before or after
2015?
A That was after that.
Q That was after --
A -- after the goal statement.
Q I see.
A And -- basically I do have a map on that, but it is
not that one. But anyway, we had taken that first
out to a series of public meetings also in Hoxie,
Colby, Goodland and St. Francis. And although there
was some support for that, it was not as strong as
we would have hoped and we went back to the drawing
board.
Q So when were those meetings, roughly? I mean, what
month in 2015, if you recall?
A It seemed like they were -- I am thinking they were
in December, but I don't know for sure. I would
have to look.
Q That is fine. And when were the public meetings,
those four public meetings on this plan, when were
they held?
A They were held about this time last year, I believe.
Q So August?
A Well, no, it would have been, I believe, later in
the year.
Q All right. Well -- so was it during harvest?
A No. No, it was not.
Q Okay. So you had those public meetings a year ago,
roughly?
A Roughly. Right, uh-huh.
Q Was the plan formulated at that time?
A The plan had been formulated or had been put
together by the board and was presented to the
public at that time.
Q I see. So the complete plan with all terms and all
of its conditions -- I mean, I guess there were some
minor modifications clarifying amendments that were
along -- after that. So the public had access and
had copies of the plan that is in the draft form at
that time?
A Not really, in the fact that the plan that we took
to the public on that second round of public
meetings probably was slightly more restrictive than
the final plan. And the reason for that was we went
back in and did some additional -- looked at the
data, whereby we took out the sections that had 15
foot or less of saturated thickness out of the
calculations, re-ran the calculations and came up
with a map that was less restrictive, especially
around the fringes of the district.
Q Okay. But my question is whether or not there was a
draft plan that was actually submitted and available
to the public during those meetings or did you
simply describe it to the public in the meetings?
A I probably just described it, although the plan did
exist and was a public record, so it was available.
Q But was it readily available? Was it on the
website?
A I don't -- I don't know if it was at that time. It
may have not gone on the website until we made the
proposal to the Division.
Q Okay. So when you say "it may not have been", I
mean, it wasn't -- is it fair to say it was not on
the --
A I don't know.
Q Let me finish. It was not on the website until it
was submitted to the district -- to the DWR?
A I can't tell you that for sure. I truly don't know.
If I was over at the office, I could tell you.
Q And that is absolutely a perfectly good answer. "I
don't know" is fine.
A Okay.
Q I will accept that every day.
A Okay.
Q I don't want you to tell me anything you don't know.
Okay?
A Okay.
Q I don't want you to guess. So would it be fair -- I
am asking you, would it be fair to say that the plan
as drafted, the written detailed step-by-step plan,
was placed on the website at about the time it was
submitted to -- in the time frame, within weeks of
the time it was submitted to the Chief Engineer?
A Yes. Yes, I would say that.
Q And so it was available to the public if they had
filed an open records request?
A Yes.
Q But it wasn't readily accessible without doing that
before sometime around in June, maybe late May
of 2017?
A Yes.
Q: Okay. In your testimony you spend some time talking about the -- your written testimony, this idea that it meets the public interest. And I was confused by that section because I didn't understand what point you were making.
MR. TRASTER: Can you tell me what point you were trying to make with your -- the section of your -- I am looking at Exhibit A, I think.
HEARING OFFICER BARFIELD: Yes, Exhibit A.
Q: And what page of the testimony?
MR. TRASTER: I am looking here.
Q (BY MR. TRASTER) Page 4 of 45 has a section here where it talks about the public interest. And I think you testified -- well, on Page 5 of 45 it talks about the public interest as set out in 82a-1020.
A: Uh-huh.
Q: What was your point in this --
A: Basically we at least referenced in this testimony the follow-up testimony that we gave in conjunction with the first hearing. And in that process, I had a rather large excerpt from the Groundwater Management District management plan that deals with the public interest. And I think, you know, through the preparation of this, maybe that got left out.

But basically what we maintain is by our management program, this -- you know, this proposal will meet the public interest as defined by our management plan.
Q: Okay. But you are also testifying here that it meets the public interest as defined by 82a-1020, correct?
A: Yes, sir.
Q: And 82a-1020, what is that? What does that say?
A: Yes.
Q: And just for your -- your recollection. I don't -- I have got it here, I know what it says, so I am -- but what is your --
A: I don't really even find it.
Q: That is all right. So the public -- 82a-1020, you would agree with me, is the first section in the Groundwater Management District plan?
A: Oh, okay. Right.
Q: And it sets out the basic Kansas public policy with respect to the establishment of a groundwater management district; does it not?
A: Right.
Q: And we would all agree that basic Kansas public policy -- let me back up. Strike that.
A: It is in the public interest, we agreed at the beginning of my cross-examination, that conserving water is in the public interest?
Q: Right.
A: Right.
Q: All right. But there are other things that are in the public interest too, right?
A: Yeah. I would assume so, yes.
Q: So, for instance, 82a-1020 says it is the policy of this act to preserve the basic water use doctrine; does it not?
A: Yes, it does.
Q: And it says that groundwater management districts are to -- that local water users get to determine their own destiny insofar as it does not conflict with the basic laws and policies of the state of Kansas, correct?
A: Right.
Q: So there are other -- are you -- you have been at the GMD since 1979 --
A: Yes, sir.
Q: -- and you have read the Water Appropriation Act?
A: Right.
Q: Several times, I bet, in that time?
A: Right.
Q: You know that the Water Appropriation Act is referred to in the Groundwater Management District Act several times, right?
A: Yes.
Q: And for instance, the district powers include the ability to propose regulations that the Chief Engineer then adopts that are applied only within the Groundwater Management District, correct?
A: Yes, sir.
Q: And that provision, K.S.A. 82a-1028 Subsection O requires that the regulations implement the provisions of the groundwater -- or of the Water Appropriation Act, correct? Subsection O clear at the bottom.
A: Yeah, I have got it. So, yeah, I agree.
Q: Okay. And in addition, the statute -- the Groundwater Management District Act in 82a-1029 says that before you can undertake a management program you have to -- before you can undertake active management you have to propose a management program and the Chief Engineer has to review and approve it, right?
A: That is correct.
Q: And in 1977, the GMD proposed a management plan and it was approved, correct?
A: Yeah. I think they even proposed one before that, but I don't know that for a fact because I know --
Q Okay. Well, the ones that were produced, the earliest one you have produced so far is the 1977 one.
A Okay.
Q So that is the one I am going with.
A Okay.
Q At least by 1977, you had -- the district had -- and this was before you were there, obviously.
A Right.
Q But there was a management program that had been approved by the Chief Engineer in place at that time, right?
A Yes, sir.
Q And that provision, 82a-1029, says that the management program can only be approved if the Chief Engineer finds that it is compatible with the Water Appropriation Act, correct?
A Yes. It has got to be consistent with state law.
Q Right. So in 1978, the legislature enacted the IGUCA statute, right?
A I think that is when it was, yes, sir.
Q And this is sort of -- the LEMA is sort of the baby brother of an IGUCA, wouldn't you say? I mean, it is --
A Well, it may be the other way around. But, yeah,

Page 54

they are definitely related.
Q Okay. Well, what do you mean by "the other way around"?
A Because the IGUCA statute existed for many years before the LEMA statute was passed.
Q Okay. Well, you are supposed to listen to what I meant, not what I said.
A Oh, okay.
Q So the LEMA statute is the baby brother --
A Right.
Q -- of IGUCA?
A I would agree with that.
Q All right. And the LEMA statute has many of the provisions of the IGUCA statute copyrighted, doesn't it?
A Yes, sir, it does.
Q And the LEMA statute is -- the legislature said this amends the Groundwater Management District Act; in other words, it gets included in the overall Groundwater Management District Act?
A Uh-huh.
Q So the control provisions that are authorized by both the LEMA statute and the IGUCA statute include, among other things -- close to the district's new appropriations?

Page 55

A Uh-huh.
Q That has already virtually been done, right?
A Right. Yes, that has been done.
Q So one of the options is to determine the permissible withdrawal of groundwater within the LEMA. And you are suggesting 1.7 million acre-feet be the total?
A That is the goal statement, yes, sir.
Q Okay. But it also says that it is supposed to be apportioned, insofar as possible -- I want to get this right -- insofar as may reasonably be done, apportion the permissible withdrawal in the area in accordance with relative dates of priority, correct?
A Yes, that is what it says.
Q And that is not what you did here, is it?
A No. But Paragraph 3 right after that, because it does not say that the Chief Engineer has to do those things. It says it should include that.
Q Paragraph 3 right after that says reducing the permissible withdrawal of groundwater by anyone or more appropriators thereof or by the wells in the Local Enhanced Management Area.
Q So you are relying on this third option?
A Yes.
Q Reducing the permissible withdrawal of groundwater by anyone or more appropriators thereof or by wells.
A Uh-huh.
Q And that would be pretty devastating really to have the prior appropriation doctrine apply strictly in the district; would it not?
A Yes, it would.
Q Now, let's just take off as a little bit of aside on that. You said something about a study that was done that you need to keep everything wet?
A Yes.
Q Tell me about that.
A Okay. Just a brief overview on that is basically Dr. Bill Golden and others back in -- it was sometime back in -- before we came up with the Sheridan 6 LEMA had done a study that said what is the impact to the local value-added economy due to reduced -- or water right reductions or water use reductions in Northwest Kansas.
And he -- it is a thick study. But, anyway, he went through -- he had several different
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A I would contend -- and this is just me personally,
but I but content that any certificate of
appropriation issued after safe yield was reached
in -- in any part of the High Plains Aquifer is not
an actual water right because it is not sustainable.

Q Okay. So you know how water appropriation rights
are created, right?

A Yes.

Q Somebody files an application?

A Uh-huh.

Q And if it is in the GMD, then the GMD reviews and
approves -- reviews that water right and makes a
recommendation to the Chief Engineer?

A Yes.

Q It is submitted to the Chief Engineer. The Chief
Engineer then submits it for review to the board and
they make the recommendation back to the Chief
Engineer?

A Right.

Q And the Chief Engineer then either issues the permit
or he does not?

A Correct.

Q And when he issues that permit, he has to make
certain findings; does he not?

A Yes, he does.

Q He has to make a finding that it is in the public
interest, right?

A Yes.

Q He has to make a finding that the quantity is
reasonable, right?

A Yes.

Q He has to make a finding that it is not going to
impair existing rights, right?

A He is supposed to.

Q So are you saying that he issues permits without
making that finding?

A He could.

Q How could he do that?

A I don't know.

Q Can you give me a specific instance where he issued
a permit in GMD4 without making a determination that
didn't impair?

A Not -- not a specific one. But there are plenty of
them out there, you know, especially back when we
had the quarter-mile well spacing days. I will
guarantee you, there is a lot of those wells that
cannot sit in there and exist a quarter mile apart
and not impact one other. But that was a different
administration, a different time, a different
philosophy.

A Yes.

Q Okay. Okay. All right. I think I understand that.

A Yes.

A Yeah. That was basically an economic study, yes,
sir.

Q Sure. Okay. All right. I think I understand that.

A You would agree with me that the prior appropriation
doctrine is a key element of the Kansas Water
Appropriation Act, right?

A Yes.

Q It also says that -- are you familiar with K.S.A.
82a-707(b) that says that the priority of every
water right and not the purpose of use determines
the right to divert user water?

A Yes.

Q And so what this is is that -- that you don't get to
decide -- you don't get to allocate water based on
the idea that it is either stock watering or
municipal or irrigation, but you have to follow the
prior appropriation doctrine?

A Yeah.

Q And you are not doing that here?

A No, we are not.

Q And the reason you are not doing that here is
because of that third option that you mentioned?

A Yes.

Q Okay. But you come back to the public interest
being -- implementing -- you are trying to implement
the public policy statement in 82a-1029, which says
preserve the basic water use doctrine, which
includes the prior appropriation act, right?

A Yes.

Q Okay. It is also true, is it not, that water
right -- the water appropriation right is a real
property right, correct?

A Well, to a certain extent, yes.

Q It either is or it is not.

A Then it is not.

Q It is not a real property right?
Q Sure. But that -- I mean, the Chief Engineer has established policies and procedures for how he is going to make those determinations, right?
A Yeah. And they have evolved and they are much better today than when they were in the old days, you know, I will tell you that. Because we used to -- even locally, we had regulations that we thought covered impairment, but it was just more or less a blanket regulation. I think now in today's day, TICE [phon] equations are used, all kinds of calculations are used to make those possible impairment determinations. So I am not really saying that they are doing that today, but it has been done.
Q Sure. So those determinations that it is not going to impair is a perspective of looking into the future --
A Right --
Q -- of we don't think this is going to impair someone, correct?
A Uh-huh, right.
Q When the aquifer was full, early in its development, did quarter-mile spacings cause impairment?
A Probably not.
Q So it was after the aquifer started to be drawn down that you started to see the possibility that a quarter-mile spacing for a new appropriation right could possibly impair another one?
A Right.
Q And there could be impairment based on -- from older water rights that had been issued previously because the spacing was too narrow, correct?
A Correct.
Q But at the time, there was no -- the Chief Engineer had to have found that impairment is not likely to occur, right?
A I think you are right.
Q In any event, the Chief Engineer, when he issues a permit, makes a determination about the potential impairment, right?
A Yes.
Q And one way he makes that determination is to make sure that the well spacing is adequate?
A Right.
Q I am going to come back to what I think you said; and that is, that the Chief -- were you suggesting that the Chief Engineer has issued permits in the GMD in the past where -- that he didn't make a finding that it would not impair other water rights?
A I don't know. You know, that is hard to say. I
don't think that that is the case today. But I do believe that in the past there were water right applications that were approved that -- at least given today's way of thinking, that are causing impairment.
Q That is really not the question though, is it, Ray?
A Well, I don't know. What did you ask me?
Q And maybe that's my fault. I am perfectly willing to accept the idea that I didn't ask a very good question.
Q The act requires him to make that finding, does it not, the finding that there is not -- that it won't impair existing rights? I mean, that is one of the findings he has to make?
A Yes, it does.
Q All right. And it is a prospective -- it is a finding based on what he knows that day; is that right?
A Yeah, I agree with that.
Q Circumstances change and maybe there is impairment now, but at the time he didn't believe there to be --
A Given the knowledge that we had in those days, you are probably right, yes.
Q Okay. I am probably right or I am right?
Q And it is in Exhibit A, correct?
A I think that is what they labeled it.
Q So it is Attachment 1 on Page 24 of 45 of
Exhibit A; is that a fair statement?
A I think so, yes.
Q All right. Now, you testified that these
percentages or these reductions were based on an
analysis of each township, right?
A Yes, sir.
Q And you also testified, if I heard correctly, that
you looked at the net irrigation requirement for
corn in each township and based the yellow townships
on the 50 percent net irrigation requirement and the
red townships on the -- excuse me, yellow on 80
percent net irrigation requirement, red on the
50 percent?
A Yeah. Now, I didn't do that for each -- because you
misunderstood. I didn't do that for each township.
I set the zones that you can see -- they don't show
up too good on that map. But basically each county
was split from north to south into two zones. And
so that net irrigation requirement applied to every
township that was in that portion of the county. Do
you see what I am saying?
Q I think I do, but I want to make sure.

A Through the use of the water.
Q It is a permit to use the water; it is not -- you
don't own the water?
A Right.
Q But you own a water appropriation right, which
itself is a real property right, right?
A To the use of the water, yes.
Q Okay. So when we look back at 82a-1020, the opening
section of the Groundwater Management District Act,
and we look at what the public policy in Kansas is,
we are looking at water rights as real property
rights and the whole of the GMD Act requires that it
be -- that we preserve the basic water use doctrine
and it doesn't conflict -- and nothing in the GMD
Act conflicts with the basic laws and policies of the
state of Kansas, correct?
A Yes.
Q I need to see if I can get this fired back up.
         Mr. Luhman, I am going to direct your
attention to the screen here. Is that document that
is on the screen familiar to you?
A Yes, it is. That would be the map that went in with
the LEMA proposal.
Q Went in what?
A Went in with the LEMA proposal.
I centered that on the center of that county. And then based on distances between each one, I interpolated an amount for the western edge of each zone.

Q: Is the net irrigation requirement in the irrigation guide different than the net irrigation requirement in DWR regs?
A: No. No, it is not. But what I did was I was setting two zones per county. Basically I was interpolating figures as we went onto the west. I don't think you will find anything in there that is less than the value for that county.

Q: All right. Well -- so the western county is basically Zone 1 -- or Zone 2 on that map, right?
A: Right.

Q: And that is Sherman County?
A: Yes, sir. 1 and 2 would be Sherman. 3 and 4, Thomas. 5 and 6, Sheridan and the associated counties north and south and then --

Q: Sure. So Zone 2 says that the net irrigation requirement -- or the yellow townships in Zone 2 use the net irrigation requirement 50 percent chance rainfall of 15.7, right?
A: That would be the 80 percent, not the -- that would be the 80 percent.

Q: Thank you. I am having trouble with this, keeping this straight. But it is 15.7 percent --
A: Right.

Q: -- in Sherman County?
A: Right.

Q: And so you basically used the net irrigation requirement for the eastern zone in each county and increased it a little bit for the western --

Q: I wanted to understand what you did here.
A: Yeah.

Q: I am not challenging you. I just -- when I look at the net irrigation requirements in the regs, it is the eastern zone in each county that you used?
A: Right, yeah. Because what I did would have been, through that interpolated value, set it for the maximum value at the western boundary of that zone.

Q: I got you.
A: So if in a county -- the county average would have been that for the eastern zone in each county.

Q: You kind of confused me when you said something about western and I wanted to get that cleared up. One of the things I don't understand about this map is why you want a district-wide LEMA when you are not imposing any requirements or limitations on anything in the green or blue areas.
A: Basically our philosophy on that is there will be the additional monitoring requirements as far as what you have to do if your meter goes down, that type of thing.

And then, of course, the meter tampering policy would apply to every -- everywhere in the district. I agree that there are no cutbacks in allotments, but the other provisions of the LEMA request would apply to those areas.

Q: But doesn't DWR have a pretty robust meter --
A: I think this is more robust than DWR's.

Q: Is it? Okay. Thank you. That helps me understand what you are doing here.
A: Okay.

Q: All right. Back to the net irrigation requirement. What did you say -- you were telling us that the net irrigation requirement is going to allow, what? I mean, why -- I mean, the reasonable quantity -- regulations for reasonable quantity of water that can be used for irrigation in this district is one and a half acre-feet per acre, right?
A: That is correct.

Q: And these are generally -- 18 inches is --
A: 18 inches is --
over and above rainfall, correct?
A Yes. Yeah, that would be the combination of rainfall and irrigation water.
Q So if there is a net irrigation requirement, there is also a gross irrigation requirement?
A Yes, there is.
Q And the gross irrigation requirement takes into account irrigation efficiency, does it not?
A Irrigation application efficiency, yes.
Q So in order to actually be able to grow the same amount of corn on the same tract of land, you would have to have at least normal rainfall, and the two drought years, you wouldn't be able to grow corn?
A Right.
Q You apply in Zone 1, 16.1 or 14.5 inches, but you would have to apply it at a hundred percent of efficiency to get the same result, wouldn't you?
A That is correct, yeah.
Q So it doesn't -- I mean, is irrigation a --
A No, it is probably -- a lot of the newer systems are probably at least approaching 95 percent.
Q Okay. So --
A And that is irrigation application efficiency.
Q So if I am a farmer and I want to grow corn, I am going to be -- that five percent --
A You are going to be five percent short.
Q Well, not necessarily. I am going to have some rainfall, so it is a little less than five. But if I don't have a brand new system --
A It doesn't have to be a new system. It is just basically if you have got a good nozzle package and are applying -- which, frankly, most of our folks up here do.
Q All right. And so --
A You know, I think I can jump forward on this. Basically we are saying that the producer has to eat the irrigation application efficiency loss.
Q Okay. But that is not what you testified to when you were giving your main testimony, is it?
A I think -- let's see, what did I say? I don't know. I will have to go back and look, but probably not.
Q Okay.
A Okay.
Q What did you tell them at the public meetings?
A At the public meetings? Basically that there would be -- you know, that --
Q Did you tell them that they are going to have to upgrade their systems and they are going to have to -- and if they can't get a hundred percent efficiency, they are going to have to use less water?
A I don't --
Q Did you tell them that, Mr. Luhman?
A I don't remember, sir.
Q Okay. That is fine. I just need to know. And so were those meetings recorded?
A No, they weren't recorded. You know, the comments and -- you know, basically what we did was kind of a question and answer setup and basically we took down questions and that type of thing from them.
Q Well, you probably made a presentation; you told them what was going to happen, right?
A Right.
Q So you outlined the procedure, even though they didn't have a copy of it or have access to a copy of it, you told them what was going to happen, the basics?
A Basically, yes.
Q Sure. All right. One of the factors that was considered in the first hearing is -- one or more of the circumstances that was present in that was whether or not groundwater tables are declining?
A Yes.
Q And the Hearing Officer found that water tables are declining?
1 are talking at the same time. I am not trying to be
2 rude or difficult, but -- it is her, not me.
3 A Oh, okay.
4 Q Anyway, in 1983 the GMD asked the DWR to issue a
5 regulation calling for a plan depletion of the
6 aquifer at the rate of two percent per year, right?
7 A Yes.
8 Q And that regulation was adopted?
9 A Yes.
10 Q And in 1987 or so, they reduced that to one percent,
11 right?
12 A Yes.
13 Q And in 1991, they reduced it to safe yield or
14 sustainable yield, however -- whatever language you
15 want to use?
16 A Yes.
17 Q It is the calculated amount of recharge. So since
18 1991, all new permits have been based on the
19 calculated recharge available in a two-mile radius
20 circle around the proposed point of diversion?
21 A Yes.
22 Q So prior to 1983 there wasn't a plan depletion
23 policy, right?
24 A No. It was just well spacing at that time.
25 Q Right. And so -- but the Water Appropriation Act

Page 79

1 public policy in the state of Kansas, right?
2 A It was at that time, yes, sir.
3 Q Well, it still is because 7-11 and 7-11(a) haven't
4 been amended, have they?
5 A No, but the -- I guess what I am saying is the
6 development criteria have changed over time.
7 Q Sure. And will likely settle. I mean, as we have
8 grown more, the regulations have tightened down. We
9 have just been through that from two percent to one
10 percent to a calculated recharge and now you can't
11 get a new water right in GMD4 unless you can meet
12 some very specific requirements, right?
13 A Yes.
14 Q You mentioned that the district -- that the --
15 A Can we --
16 Q We can take a break. It is the Chief Engineer's
17 prerogative. But if you need to take a break, tell
18 him and depending on whether he likes you or not, he
19 might let you have a break.
20 HEARING OFFICER BARFIELD: Mr. Traster, do
21 you have any sense of how much longer your questions
22 are going to go?
23 MR. TRASTER: Yeah. It is going to be a
24 while.
25 HEARING OFFICER BARFIELD: It is going to

Page 78

1 specifically says that new water rights can be
2 granted even though they might deplete the aquifer, correct?
3 A I think it does.
4 Q Okay. If that is 82a-711 and 711(a), is that --
5 A It sounds good to me.
6 Q Okay. So any water right with a priority date
7 before 1991, there has been a finding that it is in the
8 public interest to allow that water right to be
9 granted at either two percent or more, or after '83
10 two percent, and after '86 or '87, one percent,
11 correct?
12 A Yes.
13 Q So it is not surprising that Ms. Owen would find
14 that there has been a decline in the water table
15 because that was the policy for many years, right?
16 A Yes.
17 Q And if allowed -- I mean, most of the water rights
18 were granted under that two percent per year or
19 earlier, '83 or earlier. I mean, the vast majority
20 were already granted when the Groundwater Management
21 District was formed in the first place?
22 A Yeah, you are right.
23 Q And so of course it has declined because there is a
24 plan depletion policy in place and that is the
And I guess there is "up to" in that provision in there to say that up to 10 percent of the LEMA allocation could be carried over if they propose a second district-wide LEMA that they could consider up to a 10 percent carryover.

"Mr. Goossen moved to include a carryover amount of up to 10 percent of the LEMA allocation in purple, yellow and red areas. The motion was seconded and passed."

So I guess there is "up to" in that motion, but there is no idea about the board being able to either grant or not grant that 10 percent in a second LEMA? I mean, what I guess I am trying to get to is do you get the 10 percent or not? I mean,
is it up to the board's discretion? What does "up
to" mean?
A Basically it would be up to the discretion of the
board of directors, you know, five years from now.
Q I see.
A Ostensibly that they could consider up to 10
percent, but they are not required to.
Q Okay. So if one farmer conserves and uses 72
acre-feet instead of 80, he might get that moved
over into the next LEMA, but he might not?
A That is correct.
Q But that is not what the motion was back in March
of 2017, is it?
A I thought you said that it read that they could
consider up to a 10 percent --
Q No. It just says that they could -- to include a
carryover amount of up to 10 percent. So, I mean,
it either includes -- the board says it is included.
The plan says that it is to be considered. There is
no consideration in the motion approved in the
minutes?
A But the motion says up to 10 percent.
Q Right. So --
A So zero to zero is up to 10 percent.
Q Okay. I just wondered how that worked, because it
through this whole process again. Not me, but
someone could.
Q Why wouldn't you want to? I mean, it is so much
fun.
A Yeah, right, but -- I hate to miss it, but --
Q Yeah. We are having fun.
A There you go.
Q All right. I am going to represent to you that what
I did is to take the data that Brownie Wilson
provided to you and that you based your information
on and I took that data and put it in a spreadsheet
and did this section by section instead of township
by township.

Then I used your colors. They are a
little bit different. I didn't use the bright red
because it covered up the text that you can't see
anyway. But essentially this is a district map
with -- the best job I could do, and I will tell you
that I am not sure that I did it just perfectly.
But, generally speaking, this is section by section
rather than township by township.
Q Does that -- I mean, just looking at it
generally, I am not asking you to verify that I did
it right, but generally is that -- does that look
close to you?

wasn't clear. So is there no guarantee -- somebody
could conserve and still not be able to carry that
over?
A That is correct. If, in fact, a new LEMA was
proposed.
Q And there is quite a bit of discussion in the
documents about the idea that in a new LEMA, then --
I mean, while this is a LEMA that ends in five
years, the consideration or the belief at this point
is that it probably is going to go forward; wouldn't
you say?
A You know, that is really hard to say because you
don't know what the circumstances are going to be
five years from now. The board could consider going
into a new LEMA but, you know, they don't -- you
know, that is just going to be a decision for down
the road.
Q I see. So you think maybe there is not going to be
any more depletion in five years?
A No, I don't think that. But I don't know what every
board of directors we have five years from now, what
their decision will be.
Q Sure. But the door is wide open for a new LEMA
after that, right?
A It definitely could be proposed and we would go
A Well, yeah. Yes, sir.
Q All right. So this is inaccurate from the standpoint of your map to the extent that you have got an area that has got a saturated thickness less than 15 acre-feet -- or 15 linear-feet, correct?
A Yeah. Especially down along -- primarily along the southern border of the district, down -- yeah, down through there.

Q So this is a map that shows the saturated thickness and it is one of those -- it is just by section.
A Again, if I did the math right, which I was careful, but I am not a mathematician by any means.

So in the blue, if it is dark -- the darker blue is less saturated thickness, the orange is more. And so when we see percentages in these -- in the -- I used a formula that if it was -- if it increased, if there was an increase, there was just no color. So those are areas that are either no data -- and some of them there is just no data. In others, there is an increase. So it is -- I mean, I am trying to make sure you understand the map here.

So the areas down in the southeast corner is an area where there is very limited saturated thickness and across the bottom border, in that area, in the southeast quarter of Sherman County, we have got the map up --

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HEARING OFFICER BARFIELD: Right. Okay.
MR. TRASTER: And I will provide copies to counsel and to --
HEARING OFFICER BARFIELD: Right.
MR. TRASTER: -- the Hearing Officer so that you have it.
HEARING OFFICER BARFIELD: Without any of the additional corrections made; it is just the pure section-level data?
MR. TRASTER: I used the information that was available to me and I didn't know that -- that was a big question I had is if we were going to take 20 minutes to figure out about the percentages. But he has already taken that out. So, no, I didn't --
HEARING OFFICER BARFIELD: Okay. That is fine. Thanks.

MR. TRASTER: But you are right. It is not corrected to reduce -- to take out the sections that are 15 feet of saturated thickness or less.
But they show up in either green or blue on this map, I think.
HEARING OFFICER BARFIELD: Right. I was going to wait to ask my questions later, but since we have got the map up --

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Q So back to the map --
MR. TRASTER: And I have got copies of -- single copies of these maps. I am going to talk to Mr. Titus ahead of time and we will mark the copy. I didn't make multiple copies of these, but I can provide them to you.
MR. DEES: I appreciate it.
Q (BY MR. TRASTER) So this map that -- in fact, let's mark it so we get the record straight.
HEARING OFFICER BARFIELD: That would be good.
(Marked Exhibit D, Exhibit E.)
Q (BY MR. TRASTER) For the record, the map that I am going to show on the screen is going to be Exhibit D and it is the map that has the percentages based on section by section versus township by township. And Exhibit D -- no, E is the saturated thickness map that I showed you a moment ago.

HEARING OFFICER BARFIELD: Mr. Traster, so the first one is for the same period they considered. This is just your attempt to replicate it using the KGF section-level data?
MR. TRASTER: It is my attempt, yes.

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MR. TRASTER: Sure, that is fine.
HEARING OFFICER BARFIELD: When you say, Ray, that you removed them, what does that mean?
MR. LUHMAN: Basically what I did is any section that showed 15 foot of saturated thickness or less, I removed from the database and then redid my calculations -- let's say I pulled 10 sections out of one township, then my average went back down to dividing that by 26, that type of thing. So I removed it completely from the database.

HEARING OFFICER BARFIELD: So there weren't any of these townships -- the whole township was less than 15 feet, that didn't exist?
MR. LUHMAN: I don't believe so, no.
HEARING OFFICER BARFIELD: All right.

Thanks.
Q (BY MR. TRASTER) Now, that township on the south end about the middle, that is mostly green but it has a little bit of blue, would mostly be less than 15, right? Or not? I may be --
A Yeah, I think it would be. I really do.
Q But it is --
A Yeah.
Q There are some townships, particularly down in the southeast corner, where you have got -- in the same

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MR. TRASTER: saturated thickness map? 

HEARING OFFICER BARFIELD: that so that it is all in the record at the same

MR. TRASTER: asking is I was just going to clarify what it was.

HEARING OFFICER BARFIELD: to use Exhibit E anymore?

MR. TRASTER: new one?

HEARING OFFICER BARFIELD: Mr. Traster, the map you have here is our Exhibit E

MR. TRASTER: 11 and 12 south and 27 and 28 west.

HEARING OFFICER BARFIELD: of the wells in that area could pump that anyway.

MR. TRASTER: (BY MR. TRASTER) down in that area.

HEARING OFFICER BARFIELD: saturated thickness in that area is pretty light?

A A saturated thickness out, that is one area that

got some red sections in there too. But the

HEARING OFFICER BARFIELD: saturated thickness out, that is one area that

care for -- I mean to be able to divert the water, is it

MR. TRASTER: aquifer doesn't that self-limit their ability

to -- I mean to be able to divert the water, is it

A Really in that area -- again, there is a lot of

variability. And I would agree that, you know, the

thin aquifer does limit just basically diversion
Q And, generally, this map shows where the decline is section by section. And, again, there is a variation. Some of the townships have very little variation. I mean, it is -- the decline is roughly the same.

In other sections, in other townships there is variation. And, again, you have got more or less. In some cases, increases in -- I guess what I am trying to get to here, Mr. Luhman. When you look at Exhibit F and compare back to Exhibit D, which is my section-by-section map, compare back to your Attachment 1. In some cases, this appears to be equitable as far as the amount of decline and the percentage of decline across the entire township is roughly or similar.

But in other townships you have got areas that are -- you have got no -- a lot of variation. And I am trying to understand how that is fair. And let me go back to Exhibit D and to particularly point out Township 9 South-Range 34 West. And I am going to see if I can approach here. I believe it is this township that I am pointing to right here.

A Okay.

Q In that township you have got a couple of red sections. In other words, there is more than two percent decline. But within just a mile or two or three, you have got areas with half a percent or less decline. Because the two sections in the corners of that particular township are in blue and then purple and then the rest of it is yellow. I mean, how is it fair to take the person who has those two blue townships in the southern part of that -- the two blue sections in the southern part of that township and treat them differently than the people who have water rights in the section immediately below it that is almost entirely blue and don't have any restrictions?

A Well, first of all, I wish -- and I don't know that you have it. I wish we had an overlay on that that shows the actual points of diversion for the wells. I don't know what that -- I don't know what the level of development down there is. I suspect that there is not much development there whatsoever.

So, again, I guess, you know, to answer your question, where we did the designation by townships, there is some variability that is in there. So I don't know. I really don't know. Because I know a lot of the areas down in that
southwestern part of Thomas County, there are no wells whatsoever. As a matter of fact, there is not much water there at all.

Q Okay.

HEARING OFFICER BARFIELD: So, Ray, you are saying they are blue because there is probably not wells there; is that what you are saying?

RAY LUHMAN: That is what I think. I don't have that map with me. I have got it at the office, but I don't have it here.

HEARING OFFICER BARFIELD: Let's mark this.

THE REPORTER: This is Exhibit G.

(Marked Exhibit G.)

HEARING OFFICER BARFIELD: Can you describe Exhibit G?

Q (BY MR. TRASTER) I am going to hand you what has been marked Exhibit G. Can you tell me what that is? I mean, it is something, I think, that you produced.

A Basically what this is is a copy of a map. It is an earlier map of the first proposal, but it does have the wells plotted on here.

Q Right. So --

A And I can go to --

Q Hang on just a minute. Let's make sure the record is clear first.

A Okay.

Q I mean, it is a map of the GMD. It is an earlier proposal with different colors on it that aren't relevant here, so we are not paying attention to the colors on the map, but it is a map of the district and it has the points of diversion shown, meaning the wells, correct?

A Yes.

Q All right. And when you look at that particular township that we have been talking about, and let me get my bearings again, it the 9 South-34 West, there are wells in the -- at least there were wells in the southeast corner of that township, right?

A Yes. There are wells clear along the east half of that township and up in the northwest quarter of that township, but basically no wells whatsoever in the southwest quarter of that township.

Q All right.

HEARING OFFICER BARFIELD: In the southwest is where the blue was; is that right?

MR. TRASTER: Let's zoom in here.

RAY LUHMAN: Yes.

Q (BY MR. TRASTER) So I zoomed into the township that directly across the road, assuming there was a road and a township line, is in a section -- in a township that is blue and gets no reduction?

A I think that is just the nature of the data and the way that it was chosen for this project.

Q So the idea is that by going township by township instead of section by section or some other designation, the owner of the wells in the southeast corner of that township, 9 South-34 West, gets treated differently than the owner of the wells in the township directly south?

A Yeah. Unfortunately -- and you understand this. But when you do water policy or whatever, there are lines.

Q Right.

A And you just can't get around that, you know. If, in fact, you chose different boundaries, there is going to be a line.

Q Right.

A So it was our board's determination on this to go on the township basis, knowing full well that as you get more of a coarse look at that, there will be some --

Q Unfairness.

A Well, if that is what you want to call it.
Q: That is what I want to call it.
A: Okay. Well, you can call her that.
Q: I mean, it is not fair. It is not -- I mean, to have -- to treat one water right owner who -- and I don't know why his percentage is lower. Maybe it is because of saturated thickness, maybe because it is because he is the one that conserved.
A: Or couldn't pump it.
Q: Well, any number of things that could happen, right?
A: Right.
Q: But one of the possibilities is that it was because he and his neighbors conserved and the others didn't, right?
A: That is one possibility.
Q: And you are familiar with the tragedy of the commons concept about who -- you know, take all you can get while you can get it, right?
A: All right. Well, you moved one township to the east and you have -- in Section 1 you have got greater than two percent. In Section 31 you have got less than half a percent. So you have got this variability across a number of townships. I mean, more than just one or two townships here, right?
A: Yes, sir.

Q: Now, when we zoom back out on the map that is Exhibit D, you could draw up -- I mean, I agree you have to have lines and those lines don't necessarily -- I mean, the water doesn't know that we have a section line here or a property line. But there are -- township designation has some rationality in some cases. In other cases it is just not fair, right?
A: I don't know that I would agree with that. But, you know, you do run into some variability in a subsection of a township.
Q: Now, one of the things about doing townships in terms of draft of the plan is it makes it a lot easier, doesn't it?
A: It does to a certain extent. Although, you know, given today's computers and stuff, you can take it to about any level that you want to. It doesn't take that much --
Q: Right. Even a lawyer can figure out how to do it if he just --
A: That is what I was thinking.
Q: -- misses church, you know. I hate to miss church. So -- I mean, you would agree with me then that it would -- there is a way to do this that would be more equitable?
A: Yes, sir.

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A: Yes, sir.
During lunch we visited about sort of the
on the record.
12:53 p.m.)
(Recess taken at 11:46 a.m.
to reconvene at 10 minutes to 1:00.
take a break.
Thank you, sir.
morning said, "Let's just be sure that everybody has
how we have to live.
So anyway, that is my concern, our
concern, that we have water for the needs of the
people in their homes. You know, God only made so
much water and it circulates the world. So that is
how we have to live. And the lady next to me this
morning said, "Let's just be sure that everybody has
a fair chance at having the water they need."
Thank you, sir.
HEARING OFFICER BARFIELD: All right.
Thank you for your comments. Very good.
It is 11:50. Why don't we go ahead and
take a break. Let's take an hour break. Let's seek
to reconvene at 10 minutes to 1:00.
(Recess taken at 11:46 a.m. Resumed at
12:53 p.m.)
HEARING OFFICER BARFIELD: We are now back
on the record.
During lunch we visited about sort of the
will be profitable and grow crops. And he can
determine from that which crop he will grow. Corn
is, of course, the most appropriate, most wished
for.
Also I want to say that my husband spent
very much time leveling land here in the state and
in the county for the wells to be put down. And I
appreciate the work that they have done. I just
think sometimes -- I have a feeling today that there
are so many regulations that are proposed. And I
can appreciate what Mr. Traster has said, and he is
very scientific and I appreciate that. But I think
you are asking for a lot of regs and maybe he is
going to help us decline some of those. It would be
helpful.
So anyway, the next thing I wanted to say
is I live in Colorado. And as you may know, people
are flocking to our state by the hundreds every
month. They are going to be having housing that
supplies them with water. They are going to be
having lawns. And we have people in the eastern
part of the state that have irrigation wells for
crops, and they are looking for -- they run their
wells -- you can tell they run their wells a lot.
So my question is, what kind of liaison do
you have with Colorado agriculture to provide -- to
kind of limit -- you know, we are all getting our
water from the same aquifer. Colorado, Nebraska,
Kansas, what -- how are we going to see that
everybody has a fair chance. That word "fairness"
has been brought out a lot in the last hour or two.
And I think -- I appreciate that.
So anyway, that is my concern, our
concern, that we have water for the needs of the
people in their homes. You know, God only made so
much water and it circulates the world. So that is
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HEARING OFFICER BARFIELD: We are now back
on the record.
During lunch we visited about sort of the
HEARING OFFICER BARFIELD: All right. Thank you. Yes, I guess we were anticipating having finished that and knowing the difference. So, yeah, he can make his testimony as part of the formal process later then.

Scott Ross is next on the list. Mr. Ross, are you here?

SCOTT ROSS: Right here.

HEARING OFFICER BARFIELD: If you would come forward. Are you ready to make your statement now.

SCOTT ROSS: Yes.

HEARING OFFICER BARFIELD: All right.

THE REPORTER: Sir, your name is Scott Ross?


HEARING OFFICER BARFIELD: Will you swear that you will speak the truth, the whole truth, and nothing but the truth.

THE REPORTER: Yes.

(Mr. Ross was sworn.)

SCOTT ROSS: I understand this is an administrative hearing and it provides only limited opportunities for any cross-examination. But I have put a portion of my testimony in the form of questions. I am not expecting a response, but I know that as a truth-seeking individual, the Hearing Officer will see that the appropriate answers are acquired and incorporate them in the decision.

So, first, additional property of the district. Jim Defore has, since its beginning, the district-wide recharge value of one-half inch per acre. This has prevailed through several different -- you really did break it.

HEARING OFFICER BARFIELD: Try it again.

SCOTT ROSS: In any other calculation for --

HEARING OFFICER BARFIELD: Just a second.

There must be a connection issue here. Why don’t you try mounting the mic so it doesn’t go in and out. Thank you.

SCOTT ROSS: The half-inch recharge has prevailed throughout their computations of allowable depletions through safe yield.

And in 1987, the US Geological Survey adopted their numbers for recharge across the state of Kansas. And those numbers were later, in 1992, adopted by the Division of Water Resources as part of their safe yield calculations.

Those numbers indicate that the far western counties are receiving something on the order of a quarter of an inch, while the eastern counties of the district are receiving a bit over an inch -- excuse me. The western counties are receiving a quarter of an inch; the eastern counties are over one inch.

So my question is, if those water rights established under safe yield and allowable depletion were afforded excessive recharge in the west, but deprived of the additional recharge in the east, how can the entire district have a declining water table? Either the USGS is wrong in their determinations of recharge or the district has been wrong in their assessment of decline. I am assuming you will determine which that is.

The other point is the equitable and uniform distribution of measurement points that are included in the determination of drawdown or declines.

In 1980, the Division of Water Resources required that water level measurement tubes be installed on all new points of diversion and have continued that process since then.

My question is, what effort has been made to compile a list of wells in the district that are required to have water level measurement tubes, has that list been used to improve the water level measurement network? Has current water level database been compared to the High Plains basal map that was developed during the initial high priority move by the district to provide section level data on the basement of the Ogallala. And have any efforts been made to incorporate all of this additional data into the water level management network?

What efforts have been made by the district to collect or monitor wells independently of the KGS and the Division of Water Resources?

Is the current water level data network consistent and uniform enough to make decisions regarding the district on a section level basis?

I am concerned about the physical impacts.

I understand from testimony this morning that some
minimal efforts have been made, but I am concerned that if land values are based on productivity and productivity is based on a degree of irrigation versus dryland, doesn’t it stand to reason that more water availability will result in lower land values? If such is the case, will lower land values lead to a lower tax base, ultimately resulting in a lower tax and changes in the tax base, which will adversely impact schools, cities, hospitals, counties and eventually perhaps even the state of Kansas?

And would these lower appraised values, along with lower revenue streams, impact those citizens, and how will they impact those citizens who don’t even get to vote in a district election?

Next is the equity of those water rights being protected under K.S.A. 82a-718 Subsections D and E. They seem to be left out in the cold. They don’t receive an allocation if they haven’t been used since 2009. Under this proposal, only the irrigation rights are subject to limitations.

What consideration is afforded to those that have been engaged in water conservation under these programs of water conservation plans, WRCP contracts and even changes that have been made to it to ensure it.

82a-718 under Subsection E, protecting those water rights from abandonment?

And finally in this area, what opportunity do those have who are not irrigators to speak as regards to their impact or the impacts of LEMA on their way of life?

Whose problem is being solved with this LEMA? We have seen from this morning’s testimony that there have been declines. We agree -- most of us agree there have been declines. Those declines are subject to review in terms of their actual accuracy. But we don’t seem to be setting out to solve the problem; we just -- this is like putting a Band-Aid on a busted leg.

How will those in Sherman and Graham County, who have no declining static water levels, benefit from being placed under the shadow of the LEMA? Will their bankers and county appraisers take that into consideration?

And, finally, what analysis of the established high priority areas illustrates that the proposed LEMAs will address their problems?

And finally, and perhaps most important of all, I would ask you to recall the LEMA process was originally designed to allow a group of courageous individuals to put their -- put in place their own restrictions with the goal of preserving their own way of life. When did that happen with this LEMA?

Thank you.

HEARING OFFICER BARFIELD: All right. I guess, Scott, just before you leave, the parties don’t have cross-examine [sic] but, you know, I and they have the opportunity to maybe ask clarifying questions, if the testimony is not fully understood just, again, to make sure we --

SCOTT ROSS: At your service.

HEARING OFFICER BARFIELD: -- understand your testimony.

I guess I have actually got a written copy of this. Do you want this entered in the record or not?

SCOTT ROSS: You have my written testimony that I want entered into the record. These are just my verbal comments.

HEARING OFFICER BARFIELD: Right, okay. So we will make sure that is made a part of the record.

I guess for my part, I don’t think I have any specific questions for you. You raised a number of questions. I guess, are you for or against it.

maybe is the question?

SCOTT ROSS: As a general matter, I am in favor of LEMAs. I am in favor of the way LEMAs were originally designed, as a ground-up opportunity for locals to have impact on their situation.

I am not in favor of district-wide LEMAs. I think they are too broad based. I don’t think they adequately represent individuals or their individual situations. Candidly, I don’t think they solve too many problems.

HEARING OFFICER BARFIELD: All right. That helps. Mr. Traster, do you have any clarifying questions about Mr. Ross’s testimony?

MR. TRASTER: Yeah.

Just generally, I am interested in this idea that you said how it was originally designed, because I have heard that too.

Can you give us -- fill in some blanks there? What was the -- how was it originally intended, if you know, if you were involved in that process? I would like to flesh that out a little bit.

SCOTT ROSS: Okay. Well, it has been a while ago and, you know, us elderly folks may struggle a bit.
After the original Mack and Tack [phon] priority areas, those that attended, and they were generally well attended, agreed something needed to be done. They just -- in Sherman County, they actually proposed that they cut everybody's use by 50 percent, which I think shocked all of us. But ultimately, they really lacked sort of the local leadership to move those things forward.

In that process of discussing that, Mitchell Baalman and Brent Rogers rose to the occasion and, from my perspective at least, rather loudly and perhaps forcefully challenged the board to bring together those people in the Sheridan 6 area and begin a dialogue to discuss how they would solve the problem. Mitchell simply wasn't going to led it ride. This continued for several board meetings. They formulated a plan. They notified all of the landowners and tenants in the area. I wasn't involved in the early meetings, but I was advised that some of those were relatively spirited discussions regarding how to move forward.

Ultimately, after 25 or 30 meetings, that group came together with a consensus, it certainly wasn't unanimous, but a consensus of how they would like to move forward with those 11-inch designations over the five-year period of time. They wanted an umbrella. They wanted the flexibility to move water rights around if they got into trouble.

And after all of that work, they found themselves in a position where there was no legal remedy to implement the process. At that point, they came to the Division of Water Resources and made the proposal. And in through the Division of Water Resources and their legal staff, the LEMA statutes were drafted and ultimately shepherd through the legislative process and put in place so that the very first allocation period, I believe, was in 2012. That has certainly demonstrated in my view great success, and it was all due to those local gentlemen who were willing to stand up and, you know, put their family fortune and sacred honor on the line to get it done. And I just don't see that happening in this process.

Did that answer your question?

MR. TRASTER: Well, for the record, we need to know what your role was.

SCOTT ROSS: I was the water commissioner for the Division of Water Resources. So I was basically sitting on the sideline cheering them on.

MR. TRASTER: And when did you leave that position?

SCOTT ROSS: I retired September 13th of 2013.

MR. TRASTER: So you were there during the development of all this and the passage of the LEMA, so you have some background information?

SCOTT ROSS: Yes.

MR. TRASTER: No further questions.

HEARING OFFICER BARFIELD: Mr. Dees, do you have any clarifying questions?

MR. DEES: Just a couple real quick.

Can you hear me okay?

THE REPORTER: Yes, sir.

MR. DEES: Mr. Ross, are you here as an individual or are you here representing other folks?

SCOTT ROSS: I am here as an individual. I don't represent anyone else.

MR. DEES: Okay. Great. And are you familiar with the LEMA statute? I think you are; is that correct?

SCOTT ROSS: Yeah, generally.

MR. DEES: Okay. And so the recommendation in the LEMA statute needs to come from the groundwater management district; is that correct?

SCOTT ROSS: That is correct.

MR. DEES: Okay. And in your written testimony you note that the total economic impact has not been evaluated in talking about the
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<th>1</th>
<th>Sheridan 6 high priority area, correct?</th>
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<td>2</td>
<td>SCOTT ROSS: That is my perception, yes.</td>
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<td>3</td>
<td>MR. DEES: But it appears that the water</td>
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<td>4</td>
<td>levels in that area have stabilized; is that</td>
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<td>5</td>
<td>correct?</td>
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<td>6</td>
<td>SCOTT ROSS: That is my understanding,</td>
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<td>7</td>
<td>yes.</td>
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<td>8</td>
<td>MR. DEES: Okay. And no immediate</td>
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<td>evidence suggests anything but good economic news,</td>
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<td>10</td>
<td>correct?</td>
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<td>11</td>
<td>SCOTT ROSS: Nothing that I heard.</td>
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<td>12</td>
<td>MR. DEES: Okay. So the economic news at</td>
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<td>this point is at least -- it is either positive or</td>
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<td>at least maintaining; is that correct?</td>
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<td>15</td>
<td>SCOTT ROSS: It's policies were neutral.</td>
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<td>16</td>
<td>MR. DEES: Okay. I don't think I have any</td>
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<td>more questions at this time.</td>
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<td>18</td>
<td>HEARING OFFICER BARFIELD: All right.</td>
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<td>19</td>
<td>Thank you, Mr. Oleen?</td>
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<td>20</td>
<td>MR. OLEEN: No questions.</td>
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<td>21</td>
<td>HEARING OFFICER BARFIELD: Thank you,</td>
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<td>22</td>
<td>Mr. Ross, for your comments.</td>
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<td>23</td>
<td>SCOTT ROSS: Thank you.</td>
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<td>24</td>
<td>HEARING OFFICER BARFIELD: Next on the</td>
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<td>25</td>
<td>list I have is Brent Rogers of Hoxie. Are you here?</td>
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<th>1</th>
<th>MR. DEES: He is part of our formal phase.</th>
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<td>2</td>
<td>He is the president of the GMD.</td>
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<td>3</td>
<td>HEARING OFFICER BARFIELD: I should</td>
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<td>4</td>
<td>probably know that. Irene Siebert. Is that the</td>
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<td>5</td>
<td>lady that made the comments?</td>
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<td>Then Aaron Popelka is next.</td>
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<td>7</td>
<td>THE REPORTER: Can you spell your last</td>
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<td>8</td>
<td>name?</td>
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<td>9</td>
<td>AARON POPELKA: Sure. It is Aaron,</td>
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<td>11</td>
<td>I am the vice president of Legal and</td>
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<td>12</td>
<td>Governmental Affairs for the Kansas Livestock</td>
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<td>13</td>
<td>Association.</td>
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<td>14</td>
<td>(Mr. Popelka was sworn.)</td>
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<td>15</td>
<td>MR. POPELKA: I think to start off, just</td>
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<td>16</td>
<td>to clarify, I am here representing our members who</td>
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<td>17</td>
<td>live within the GMD boundaries and would own water</td>
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<td>rights, both irrigation and stock water.</td>
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<td>I think I would like to start off by --</td>
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<td>and I think this was pointed out by the GMD manager</td>
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<td>that less than one percent, he used the number</td>
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<td>.05 percent, depending on the year it could be a</td>
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<td>little more or a little less, but the point is it is</td>
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<td>a very small fraction of water use where the</td>
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<td>irrigation is closer to over 97, approaching 98</td>
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<th>Corporation, has since engaged and began and now</th>
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<td>should be nearing completion, if it is not done</td>
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<td>already, an expansion. That expansion was based on</td>
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<td>available water that was under their authorized</td>
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<td>permit. And if the original proposal as in the</td>
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<td>document that went out with the notice for the</td>
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<td>hearing were to be finalized, they would be -- not</td>
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<td>have sufficient water to water the cattle involved</td>
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<td>in that expansion.</td>
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<td>And I think that is -- and really what we</td>
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<td>are looking at with any LEMA, allocation for stock</td>
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<td>water. When you look at an acre of irrigated corn,</td>
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<td>I can apply less water to a certain extent and,</td>
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<td>using better management techniques, still raise</td>
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<td>something from that acre of corn. If you apply less</td>
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<td>water to a steer, that steer will die.</td>
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<td>So our only remedy is to then cut the</td>
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<td>number of head that populate that feedyard. So in a</td>
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<td>situation where someone has expanded since the</td>
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<td>December 31st, 2015 date, they have now lost a</td>
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<td>significant amount of their investment or are faced</td>
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<td>with buying a water right in a captive market.</td>
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<td>In addition, I think it is also important</td>
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<td>to point out that even though, for instance,</td>
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<td>25</td>
<td>Timmerman Feeding Corp. is in the 85 percent</td>
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reduction -- or 83 percent of their beneficial use
calculation, that is actually not a cut to the water
right. If you look at the documents put out by the
GMD, their total authorized quantity is
336 acre-feet. But under the LEMA account
calculation, which again is based on a head count
from December 2015, they get 257 acre-feet. That is
actually -- it is not a 15 percent reduction, as the
document might suggest, it is actually 23. It is
hard to tell exactly why that might happen, but
it -- I would surmise that it would have to do with
head count being reduced potentially from
environmental regulations from the time the water
right was perfected. So December 2015, there were
less head than when it was perfected.

The second problem with the language is
that it just says based on the operating permit.
For those who may not be familiar, if you operate a
feedyard you actually have two permits from the
state of Kansas. One is from the Kansas Department
of Health and Environment for water pollution
control and the other is from the Department of Ag,
Division of Animal Health. Typically these permits
have different numbers.

The KDHE permit, they are going to want to
push to as high as you can get for the amount of
pens that you have, and the health permit is annual
and you are going to want to push it as low as you
can get it based on the number of cattle you think
you will have because it is more expensive. So the
language on its face leaves us wondering which
permit is meant.

The other thing I would like to raise is
stock water is considered a non-irrigation use when
you look at the document. And the other
non-irrigation uses, municipal and industrial, are
essentially relegated in this document to
utilization of best management practices; whereas,
in the original document, stock water is given a
hard allocation that reduces available water.

It would be our contention that if we are
going to have differences based on irrigation and
non-irrigation, that all rights use -- utilize best
management practices.

I am aware that the GMD has proposed some
language that suggests feedyards being -- or stock
water uses being encouraged to maintain their use at
90 percent of the K.A.R. 5-3-22. While that, I
think, would work because it is not a mandatory
reduction, we would suggest the better way, the
cleaner way to do this is to make it consistent with
the other non-irrigation rights is to simply delete
Section 2, Paragraph A, which is a reference to
stock water, and then rely on the previous portion
of that paragraph that simply says non-irrigation
rights are to utilize the best management practices.

The next portion I would like to bring up,
and it was also brought up by Mr. Luhman, deals with
the conversion formula from irrigation to
non-irrigation use.

Currently, the LEMA document put out for
notice says when converting irrigation to
non-irrigation, the most restrictive of the LEMA
allocations and GMD regulations were converted and
outlined in K.A.R. 5-5-9, were used to determine
conversion allocation amount.

That alone is confusing as to how exactly
that might be applied. But more concerningly, it
violates the Water Appropriation Act for changes in
use. Changes in use of a type are governed under
82a -- K.S.A. 82a-708 (b). And that has some very
specific requirements. But mostly the change is you
have to file an application with the Chief, and it
is for any owner of a water right may change a place
of use for the point of diversion over the use of
native [phon] water without losing priority of
right.

And it also goes on to limit the authority
of the Chief in accordance with the procedures,
provisions and procedures prescribed from processing
original applications or permission of [inaudible]
water.

By putting in the LEMA document the
paragraph that is in there now, it essentially tries
to apply a non-temporary change to what the statute
requires be a permanent change in the water right
status.

And if you look at the LEMA document
itself, it says the basic water right will not be
altered by an order and that the LEMA shall exist
only for a five-year period. And so while the LEMA
may apply some allocation to a type of use, if a
water right owner applies for a change in the base
water right, that is governed under the Water
Appropriation's Act, 708(b) in the accompanying
regulations.

So -- and I believe the GMD, for the most
part, has adopted or is suggesting the same
language. We are suggesting one difference. Our
language says when converting irrigation and
<table>
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<th>Page 133</th>
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| non-irrigation, the base water right will be converted under the procedures in 5-5-9 and 5-5-10 and then the appropriate non-irrigation LEMA allocation in Paragraph 2 will apply for the remainder of the LEMA period. I think the only difference between our suggestion and GMD's suggestion is they suggest that -- unless they have their own regs. We think the DWR statewide regs that were just recently adopted should be applied statewide, and so our suggestion is it is not put in, or any other reg the GMD may have. The final point I would want to raise at this point is on the irrigation allocations themselves. If you look at the document, it bases the irrigation water rights according to the maximum reported and/or verified acres for years 2009 through 2015. As that is written, this will unfairly penalize some producers who chose to conserve water by not irrigating a certain amount of their authorized acres. By not recognizing this situation where this occurs, the GMD is not giving due consideration to water management or conservation measures previously implemented. And that is required in two places in the law; K.S.A. 82a-744 and in the LEMA statute itself, K.S.A. 82a-1041(a)(4). For instance, I am aware of a landowner in the district who has three quarters authorized under one water right; one has a pivot, two flood irrigated. Due to the situation with some labor shortages, only the pivot was run. And under this formula, only enough water to water one of those circles would go forward, despite the well testing well over 900 gallons a minute. This clearly is an inequitable situation that is not addressed by the current formula. There is no consideration given to the amount of water saved voluntarily and would maintain that unless it is corrected, that it would violate state statute. Our suggestion is that whether the Chief recommends this himself or the GMD, or recommends that the GMD re-look at it and have another hearing, is that rather than the system we have now based on verified acres, that we look at the actual percent reduction for the authorized quantity of water. Because at the end of the day, that is the actual property right that is being considered and that is the best way, I think, to look at dealing with property rights and also some of these issues with conservation of water. So with that, I think I will stop and simply ask at this point -- again, I want to reiterate the GMD's suggestions on the stock water allocation and conversion; we are willing to live with it, but we would -- and this is in written testimony I also submitted. We would prefer our language. We think it is more technically accurate and a little cleaner. And on the irrigation component, I think some changes need to be made in order to fully comply with the statutes. So I will stand for any questions you might have. HEARING OFFICER BARFIELD: And I just have one. I think your testimony is pretty clear. On that last example, you know, the irrigation, you know, the LEMA process has an appeal process where they could sort of bring that issue to the GMD for dealing with that; isn't that correct? AARON POPELKA: That is true. However, in conversations with Mr. Luhman, he said that he didn't think this board would be inclined to help this gentleman out. HEARING OFFICER BARFIELD: All right. Okay. Well, that is the only question I have. Mr. Traster? MR. TRASTER: No questions. HEARING OFFICER BARFIELD: Mr. Dees? MR. DEES: None. HEARING OFFICER BARFIELD: Mr. Oleen? MR. OLEEN: No. HEARING OFFICER BARFIELD: All right. Thank you very much. Okay. Jerry Binning of McDonald. I may have the name wrong. JERRY BINNING: You got it right. HEARING OFFICER BARFIELD: Okay. THE REPORTER: Can you spell your name for me, sir? JERRY BINNING: J-E-R-R-Y, B-I-N-N-I-N-G, B-I-N-N-I-N-G. (Mr. Binning was sworn.) JERRY BINNING: I live in McDonald in Rawlins County. I just have a problem. I won't take up near the time these other gentlemen did. I hope. But anyway, I have just got a problem with where the lines are drawn in Rawlins County on the east side of the GMD. They have got a little sliver there going right down our road. And my neighbor has water wells on the east side and I have them on their property rights. This definitely is an inequitable situation that is not addressed by the current formula. So my recommendation is that it be again relooked and that the Chief take it up near the time these other gentlemen did, I hope.
<table>
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<tr>
<th>Page 137</th>
<th>Page 139</th>
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<td>the west side. And I had the state come in there</td>
<td>HEARING OFFICER BARFIELD: Okay. So he is</td>
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<td>and analyze the water there for depletion -- for</td>
<td>not here. All right. Larry Schaefer? Oh, Shulzle.</td>
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<td>hampering my water right impairment. And the state</td>
<td>Are you present? Apparently not. Well, that is all</td>
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<td>has told me that he is hampering my water rights</td>
<td>I have.</td>
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<td>from five to 12 percent. And I was just wondering</td>
<td>Is there anyone else who -- maybe I have</td>
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<td>why I am going to -- the GMD is going to nail me for</td>
<td>missed that would like to make any public comments?</td>
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<td>more impairment on the -- on their deal and my</td>
<td>JACE MOSBARGER: I think I would.</td>
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<td>neighbor is not going to be in there. That was just</td>
<td>HEARING OFFICER BARFIELD: Please come</td>
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<td>my opinion why that little sliver there, he wasn't</td>
<td>forward. Your name, sir?</td>
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<td>included in there with the rest of us. Because</td>
<td>JACE MOSBARGER: Jace Mosbarger.</td>
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<td>there is no other wells on east of where we are at,</td>
<td>(Mr. Mosbarger was sworn.)</td>
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<td>and south of us there is no wells for quite a ways.</td>
<td>JACE MOSBARGER: My address is 331</td>
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<td>So I thank you for your time.</td>
<td>Cottonwood Road, Goodland, Kansas 67735. So I am</td>
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<td>just going to read a little bit here of what I wrote</td>
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<td>after some questions by Mr. Dees about the economic</td>
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<td>issues.</td>
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<td>Pertaining to Sheridan 6 as being stable</td>
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<td>and then implying that the trend would be carried</td>
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<td>over to the entire district, I believe, is a</td>
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<td>stretch. As a farmer and a rancher in the district,</td>
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<td>I can speak with much confidence that our economic</td>
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<td>engine has a very different set of factors from</td>
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<td>Sheridan 6. So far those worth mentioning are crop</td>
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<td>options and viable planting dates.</td>
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<td>Weather patterns force us to drill our</td>
</tr>
<tr>
<td>JERRY BINNING: Right, yes.</td>
<td>wheat in the west before harvesting corn. This</td>
</tr>
<tr>
<td>HEARING OFFICER BARFIELD: But you are</td>
<td>hampers our ability to rotate insurgent crops that</td>
</tr>
<tr>
<td>restricted and he is not?</td>
<td>would allow us to achieve the profitability levels</td>
</tr>
<tr>
<td>JERRY BINNING: Right.</td>
<td>they can just 60 miles east of us.</td>
</tr>
<tr>
<td>HEARING OFFICER BARFIELD: Okay. Thank you. Does anybody have any further questions?</td>
<td>Forty-five miles to our east, it has been</td>
</tr>
<tr>
<td>MR. TRASTER: No questions.</td>
<td>common practice for many generations to harvest corn</td>
</tr>
<tr>
<td>MR. DEES: No.</td>
<td>and then drill our wheat, like I said, allowing them</td>
</tr>
<tr>
<td>MR. OLEEN: No.</td>
<td>crop options.</td>
</tr>
<tr>
<td>HEARING OFFICER BARFIELD: All right. Thank you very much.</td>
<td>We are unable to effectively reach the</td>
</tr>
<tr>
<td>Nathan Emig from Goodland? Sorry if I --</td>
<td>dairy and feeder cattle market located 90 miles to</td>
</tr>
<tr>
<td>NATHAN EMIG: I just have written testimony.</td>
<td>our east that sits right out their back door. This</td>
</tr>
<tr>
<td>HEARING OFFICER BARFIELD: Oh, I am sorry.</td>
<td>limits our possibility of certain crop options</td>
</tr>
<tr>
<td>That is correct. Thank you</td>
<td>drastically.</td>
</tr>
<tr>
<td>Mr. Friesen. Mr. Traster, is he going to</td>
<td>Furthermore, rainfall intensity is not</td>
</tr>
<tr>
<td>be part of your --</td>
<td>considered on the allocation map that we have seen</td>
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<tr>
<td>MR. TRASTER: Yes, sir.</td>
<td>throughout this whole deal. The variance from</td>
</tr>
<tr>
<td>HEARING OFFICER BARFIELD: Very good. Brent Meeden [sic] from Quinter?</td>
<td>county to county is rather small on the allocations</td>
</tr>
<tr>
<td>UNKNOWN SPEAKER: Meranda.</td>
<td>because the yearly precipitation does not vary as</td>
</tr>
<tr>
<td>HEARING OFFICER BARFIELD: That is</td>
<td>much as we would think.</td>
</tr>
<tr>
<td>probably right.</td>
<td>However, in the west we historically</td>
</tr>
<tr>
<td>UNKNOWN SPEAKER: He had to go.</td>
<td>receive a larger portion of the annual precipitation</td>
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<td>snow, which favors winter wheat farming, which at</td>
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<td>the moment, once you reach the negative cause of</td>
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<td>production. Or each of our neighbors receives a</td>
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<td></td>
<td>larger amount of their moisture as summer rainfall.</td>
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This allows corn, milo and other feed soft production. It also lines in with the market that they share.

So I guess briefly, my biggest concern with this whole idea is that the study is over 10 years old [inaudible] many times as encompassing the entire district as a whole, but I feel that it was a very micro-climate study that is now outdated and pushing 10 years old.

As a concerned citizen, I would like a renewed interest and a new current study encompassing the entire district as a whole before we enact legislation to -- that will affect all of us. That was all.

HEARING OFFICER BARFIELD: Okay. Thank you. I don’t have any questions.

MR. TRASTER: No questions.

MR. DEES: No.

MR. OLEEN: No.

HEARING OFFICER BARFIELD: All right.

Thank you for your testimony.

So is there anyone else who would like to make a public comment? Come on forward, please.

THE REPORTER: Your name, sir?

MIKE MCKENNA: Mike McKenna.

(Mr. McKenna was sworn.)

HEARING OFFICER BARFIELD: If you could tell us your address and a little bit about yourself.

MIKE MCKENNA: You bet. Good afternoon. My name is Mike McKenna. I live at Jennings, Kansas in Decatur County, which neighbors Sheridan County.

And, by the way, I came here with full intentions of listening through the entire day and coming back tomorrow to make my comments. But I understand that this hearing is a project in motion, and so I appreciate having the opportunity to address you. And, please, I apologize if I am not very well organized.

My wife and I own ground that is in the GMD4, but I am not an irrigator. I have dryland ground and pasture. But I do represent today a client that is a landowner in GMD4, which is irrigated, and I am here to express our concerns about the proposed LEMA.

Many of the concerns are similar concerns that you have already heard. A lack of data. Scott Ross gave a perfect example of where we could obtain additional data. Because I have helped a client re-drill a well and we had to put in a measure tube.

You know, all it required is some additional labor work, measuring a couple of more wells. And we are in an area where -- I don’t believe any of the measurement wells are in our township.

I became interested and involved in watching the development of the LEMA at the encouragement of my client. I attended informational meetings in Hoxie and I have attended some of the GMD4 board meetings held in Colby.

In 1990, I prepared a map of Sheridan County noting where the water rights were at. And it has been my contention all along, based on that data, that a lot of the problems were due to concentration; concentration of water rights, concentration of wells.

If you look at the Sheridan 6 out west of Hoxie, a lot of those sections have four wells on it. So it is a matter of concentration. And I still believe that if you have got more straws drinking out of the same cup, you are going to use more water.

Probably the most important issue that I feel that you are going to have to deal with today is what is happening to this property right. And the KOA -- excuse me, the KLA representative gave a perfect example, and I thank him for that. His customer has a water right that entitled him to water 480 acres. That property had one center pivot and two quarters of flood irrigation. He chose, for whatever reason -- I believe he probably chose to conserve water, he was only running water through the sprinkler. Under the current guidelines of the proposed LEMA, that is all the water that he is going to get.

So what have we got to do? We are going to farm -- that man is probably going to farm those two quarters of flood irrigation dryland. And so -- oh, and by the way, I forgot to tell you that I am a licensed appraiser working for customers throughout Western Kansas, and it is my job to estimate land values. Some would say I am still practicing, but that is the way it is.

But if that man is no longer -- does no longer have that property right, which is the irrigation water plan, then some in my profession would say the sprinkler irrigated quarter is probably irrigated ground, the two quarters that can no longer have water applied to it are something less than irrigated property.

And so basically you have taken the real...
property from that individual. And it has always
been my understanding if you take a right from a
person, they are entitled to just compensation. And
I think that is a perfect example of taking without
just compensation.

With that, I would close and address any
questions that you may have.

HEARING OFFICER BARFIELD: All right.

Thank you very much. I don't have any questions.

MR. TRASTER: No questions.

MR. DEES: Really quick, Mr. McKenna, if
you are comfortable.

You say that you are here representing
someone; is that correct?

MIKE MCKENNA: Yes.

MR. DEES: Who is that?

MIKE MCKENNA: I -- I represent the A.L.
Abercrombie Marital Trust out of Wichita, Kansas.

MR. DEES: Thank you.

HEARING OFFICER BARFIELD: All right.

Anything else? All right. Very good. Thank you
very much.

Would anyone else like to make a public
comment at this point?

BRIAN BAALMAN: Yes.

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HEARING OFFICER BARFIELD: Yes. Come
forward, please. If you could start with your name
and address.

BRIAN BAALMAN: I am in Menlo, Kansas. I
am a farmer --

HEARING OFFICER BARFIELD: I would like
the court reporter to swear you in.

(Mr. Baalman was sworn.)

HEARING OFFICER BARFIELD: Thank you, sir.

BRIAN BAALMAN: I would like to speak
maybe in opposition to Mike's testimony there.

I have three quarters also with one well.

But, you know, I put -- I got three pivots there. I
only run one pivot. I can't -- I don't have enough
water to run three pivots and I am -- I would almost
probably say that that fellow does too, or he has
just elected not to pump.

But I know I have taken full depreciation
from pivots, wire, pipe. I have built my home on
this section. And it is just the way it is; we have
lost the water. So there is them scenarios out
there.

And I am not in the Sheridan 6. I border
it. I have basically learned to practice -- or
learned to live without water. I have an example

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HEARING OFFICER BARFIELD: All right. Any
clarifying questions?

MR. TRASTER: No questions.

MR. DEES: No.

MR. OLEEN: No.

HEARING OFFICER BARFIELD: All right.

Thank you for your comment.

Would anyone else like to make a public
comment? Yes, sir.

THE REPORTER: Your name, sir?

KENT VOORHIES: Kent Voorhies.

THE REPORTER: Can you spell your last
name?

KENT VOORHIES: V, as in Victor,
O-O-R-H-I-E-S.

(Mr. Voorhies was sworn.)

KENT VOORHIES: My concern is -- or the
concern of this whole deal is the sustainability of
the Ogallala. And basically the LEMA is put in
place for this very thing.

I think at the latest brochure or pamphlet
put out by District Management No. 4 [sic], there
was a plan to reduce pumping by a 95 percent factor,
if that is correct, to help sustain across the board
as far as commercial irrigation goes. Is there any
I want to start with -- I went to a funeral yesterday of a World War II veteran.

I believe that is correct.

I have a couple of questions I will ask.

And one is: Does this LEMA do away with the current law, which is basically senior water right first in time, first in right? Does it do away with that?

If so, is it only for five years and at the end of this five years is it back to the way it was? That is just a question I might have.

Because if we don't have a LEMA, the current law, as I understand it, is that if someone files an impairment claim, then the Chief officer, Chief water officer, has the right to take action.

And it is not with input from the board necessarily, it is what needs to be done to correct that problem.

That is the law, if I understand it, currently and anyone in this room who feels that they have an impaired water right could do that. Right or wrong, I believe that is correct.

So there is a process already in place.

Sucking it dry is not an option, in my opinion, but I believe this is what concerns me. As I listened earlier to testimony and the question was asked by, I believe, Mr. Traster. He said I believe we all are in agreement that we need to conserve.

Conservation is where we need to head.

I am disturbed by that in a couple of ways because I have had people personally tell me, let's just suck it dry. Maybe you know some folks. To me that is not an option. My kids are the sixth generation to be raised on this land. Sucking it dry is not an option. But I believe to make a blanket statement saying that we all are in this together is incorrect. Whatever reason, whether it is an outside landlord who is in it just for some money and realizes just -- let's just suck it dry and see what happens in the next 20 years, whether it is someone who has no connection to the land and won't be here, maybe because they don't have kids that will stay in this area, I don't know. But it scares me to death that that is some people's thoughts. And I know that exists. I have had people tell me that. And it might surprise you those people who had that opinion.
MR. TRASTER: I would move for the admission of Exhibits D through G.

HEARING OFFICER BARFIELD: Yes. Exhibits D through G are admitted. I assume there is no objection of the parties to D through G?

MR. DEES: I am sorry?

HEARING OFFICER BARFIELD: Mr. Traster wants to include D through G in the record. I guess I am just affirming that there is no objection.

MR. DEES: Yes. No, there is no objection.

MR. OLEEN: So long as it is clear that he created them, no.

HEARING OFFICER BARFIELD: Right. That is recorded in the record.

CONTINUED CROSS EXAMINATION

BY MR. TRASTER:

Q Mr. Luhman, I will remind you you are under still under oath.

Where did the 1.7 million acre-feet come from and how was that treated?

A That was a calculation that I ran. Basically I took the reported average from the wells or groups of wells, and then I also took what their allocation would be. And I said, okay, what is the amount of water that would be pumped if they pumped either their LEMA allocation or their average use from '09 through '15, whichever was less, and totaled up that column.

Q Okay. So by "the allocation", you are talking about the allocation --

A Uh-huh, the proposed LEMA allocation.

Q Okay. So the 1.7 came after the allocation?

A Yes. Yeah.

Q Is that fair?

A Yeah. We did the process and then came up with the number.

Q Okay. So -- and how did you break down the percentages, or what basis did you use to break down zero to a half percent, half to one, one to two and above two?

A There again, that was on the -- using the KGS section level data and combining that data for a township.

Q But how did you choose those breaking points?

A Oh, as far as those actual points?

Q Yes.

A Originally we had had it zero and then zero to one and then one to two. And our board of directors just felt that there needed to be some break between...
MR. TRASTER: Okay. That is helpful. Thank you. I am going to hand you several exhibits. And I have got that formula from -- this is Exhibit H, I think. Yeah, Exhibit H. And the formula is on the screen.

But is that -- I mean, that is the formula I used. In fact, again we established the allocation amount based on the zones, as we discussed this morning, and then established that for each township depending on its color and which zone it resided in. And then that was just an amount, as you can see -- or could see from the old -- from our folded map. And then we just took that amount times the reported acres, maximum reported acres, 2009 through 2015.

Q Well, what this -- I am going to switch gears on you a little bit here. I am asking about how you calculated the annual rate of decline starting --

A Oh, okay. I am sorry --

THE REPORTER: Y'all are talking over each other.

A Okay. I get you. I know what you are talking about now. Yeah. I think that would be a fairly accurate formula on how I determined annual decline rate.

Q Okay. So --

A You know, for clarification, basically what I did was I took the saturated thickness in 2015, I took saturated thickness in 2004. I determined what that difference was, then I divided that by the saturated thickness in 2004 and that came up with a gross decline over that period of time. And then I divided that by 11 years to come up with an annual decline.

Q Okay. So it was a little bit different formula.

A Right. Yeah. I took the 11-year decline and then I come up with the annual decline and just divided it by 11. I think your formula would come up with the same thing, I think.

Q It comes up close, but it didn't -- you know, it depends on how many decimal points you want to go out. Okay.

So, for the record, Exhibit H contains the formula I used, for what it is worth, right or wrong.

HEARING OFFICER BARFIELD: Okay. And it is Mr. Luhman's testimony it is not what he used precisely?

MR. TRASTER: Yeah, that is what I am hearing.

HEARING OFFICER BARFIELD: Right. (Marked Exhibit I, Exhibit J, Exhibit K and Exhibit L.)

Q Okay. So also handed you Exhibits I, J, K and L and I will represent to you that those are from the spreadsheet that I prepared that is the basis for the maps. And what I did is in each section that I put the color in the -- on that far last column to say -- you know, I just would point out all I am showing is that there are at least those four representative townships that have variations, and it is back to this whole question of fairness that I raised before lunch; the idea that it is not fair for water rights in townships with highly variable percentages of depletion being lumped together. And I am just -- that is what they are worth. I am explaining what they are and would ask that they be admitted.

HEARING OFFICER BARFIELD: I guess I need a little help.

MR. TRASTER: Sure.

HEARING OFFICER BARFIELD: I understand Exhibit I is the formula you used -- I am sorry, not I. Exhibit H is the formula you used to determine the rate of decline, right?

MR. TRASTER: The percentage rate, yes.

HEARING OFFICER BARFIELD: The percentage rate of decline, which is not exactly the same, but similar. So then these spreadsheets, these are each for a different township; is that right?

MR. TRASTER: Right.

HEARING OFFICER BARFIELD: Okay. Representing your calculations then using the data that Brownie Wilson provided, I presume?

MR. TRASTER: Correct.

HEARING OFFICER BARFIELD: And using the formula to determine the rate of change and what type of township then it would fall in?

MR. TRASTER: Each of those townships on the GMD map are yellow. But I am showing you in the
Q And it specifically says that Mr. Wilson provided
you with an Excel spreadsheet and GIS files with all
the sections coded and the bedrock in 2004, 2009
and 2015 water table elevations. And he says,
"Because the water table elevations are based on
interpolated surfaces from wells measured during
each time period, the change in water table between
those years and the saturated thickness can be
readily computed at the PLSS section level." You
recall that testimony?
A Right, yeah.
Q So the data is validated at the section level?
A It is calculated at the section level, yes.
Q And his -- okay. The water table between those
years and the saturated thickness can be readily
computed at the section level, and that is what
you -- that is the data you used?
A Yeah.
Q Very good. Thank you.
A Yeah, that is correct.
Q Now, if you do a -- if you have a section or a well
and you have got 10 feet of saturated thickness at
the beginning of a period and eight at the end, you
come up with a percent decline. And that is what
you did and what I did using maybe slightly
different areas -- but if you have a well that has a
hundred foot of saturated thickness and 80 at -- a
hundred at the beginning and 80 at the end, it is
the same percentage as 10 to eight, correct?
A That is correct.
Q And if you have a thousand foot of saturated
thickness, wouldn't we love that, reduced to 800
[sic], it is still the same percentage?
A The same percentage.
Q So in areas where you have got greater saturated
thickness, you have got a much longer life?
A Yeah, that is correct. That is one reason that we
used the percentage value versus just feet of
decline or something like that.
Q And you took the 15 -- the saturated thickness that
was 15 feet or less out of the equation because at
that point it is -- it is not helpful? I mean, when
you have got less than that, it is -- because I
think I said self-limiting. I don't know if you
agree with me or not, but --
A Yeah.
Q -- it is self-limiting, isn't it?
A Yes, it is. And, again, it is like I said before.
You know, it doesn't take very much of a decline in
a 15-foot or less saturated thickness area to become
a heck of a percentage.
Q Agreed.
MR. TRASTER: Let's mark this.
THE REPORTER: This is Exhibit M.
MR. TRASTER: And let's just mark this as
M1 because they go together.
(Marked Exhibit M, Exhibit M1.)
Q (BY MR. TRASTER) I am going to hand you what has
been marked Exhibits M and M1. Have you seen that
map or maps like that before?
A I have seen something similar to this, yes, sir.
Q Okay. And can you tell us -- I mean, I am handing
that to you out of the blue here, but can you tell
us what it is?
A Basically this is -- it is a little bit dated, but
it is based on groundwater trends from 2000 to 2005
and a minimum saturated thickness required to
support a 400-gallon-a-minute well. It gives the
estimated usable lifetime until 400 gallons per
minute over the district.
Q Right. And the legend that you have in your hand, I
mean it goes from already depleted to, what,
250 years?
A Over 250 years.
Q And there are areas in GMD4 that you have got over
250 years of saturated thickness available before you get to the point -- I agree it is dated. This is over 10 years old already. But at that time, you had over 250 years in some cases. And what is the next category down? A 101 to 250 is the -- kind of the light green. There are some big areas on that also.

Q Okay. And so you have got water rights that were granted to people based on the factors that we discussed this morning in areas where there is a very long period of water availability and you have got areas that are already depleted --
A Yes.

Q -- for practical purposes within the district? But they are all treated, except for those areas that have 15 feet or less of saturated thickness, excluding those, but all the other water rights are treated exactly the same under this plan.
A They are to the extent that they are in the same decline category. Let's put it that way. So, you know -- yeah, if you have got -- I think we have got some areas up there that has got 200 feet of saturated thickness, yeah, that was a good one. But if their decline rate -- now, that could take a two-foot decline in that area to equal a six-inch decline in some others. But from that standpoint, yes, they are all treated equally.

Q Okay. So you have got areas that are going to be -- that under your program they are going to be depleted much faster than other areas, correct?
A Yeah, that is right.

Q But your view and the board's view here is that everybody needs to take the same reductions across the whole district, even though there is plenty of water for uses in portions of the district?
A Well, to a certain extent. Although the allocation amounts are the same in different areas. You have also got to realize that -- again, like I said, a two-foot decline up there where I have got 150 foot of water is not near what two foot is in an area where I have got 50. So, you know, those decline categories do change.

But if you are -- if, in fact, you are declining at two foot a year even though you have got, what, maybe over a hundred years left on that, you still got that decline. And so that would -- we would suppose that that would continue for quite some time until you start to see reductions in well use.
Q Right. But isn't the whole point of this to stop --

I mean to preserve this for -- preserve the area of the district for a long period of time?
A Well, it is not -- it is not an effort to put the district at a sustainable level. It is an effort to reduce the decline rate and extend the life of the aquifer. But there is a lot of difference between reaching sustainability and doing what we are proposing to do.

Q Well, you heard some testimony earlier about -- and I am not sure what it means, but I heard the guy say, well, it takes 90 percent. And the way I interpreted that is you would have a 90-percent reduction to get to sustainable. Is that -- I mean, I don't know. I am guessing. Is that right?
A I don't -- I don't think it is that high. And I don't know for sure what article he was referencing.
Q I am not either. I am --
A I just -- I know basically from the newest calculated data we have got up here, we probably recharge about 165,000 acre-foot a year on average and we will pump anywhere from 3 to 500,000 acre-foot a year, you know, pumpage.
Q Okay. Well --

HEARING OFFICER BARFIELD: Mr. Traster, are you going to move onto a new subject? Because there is a little bit of that last discussion I didn't follow.

MR. TRASTER: All right.

HEARING OFFICER BARFIELD: You two seem to understand each other, but I didn't. And I might reading the transcript, but -- so obviously there is different saturated thicknesses in different areas, but they treat a rate of decline the same no matter if it is 40 feet of saturated thickness remaining or a hundred feet, right? We are looking at the rate of decline to determine the allocation?

MR. TRASTER: Right. That is my understanding.

RAY LUHMAN: That is correct.

HEARING OFFICER BARFIELD: So I guess, what was the point I was supposed to get from the questioning that you made to Mr. Luhman?

MR. TRASTER: That if you are trying to preserve this aquifer for the long term, there is no indication whether we are trying to preserve it for 20 years or 50 years or a hundred years or 200. That if you have got a minimum amount of saturated thickness, you are treating that area -- you know, it makes sense to me to conserve. And I am not suggesting that I agree with the approach. But it
makes sense to me to conserve in that -- the drive
to conserve in those areas ought to be -- is more
important or more compelling than where you have got
250 years of saturated thickness. I mean, why is it
that we have a district-wide LEMA back -- so as
Scott Ross was saying, this is designed -- the LEMA
process was never designed for a district-wide
approach.

RAY LUHMAN: I disagree with Mr. Scott
Ross on that in the fact that I think the
development of each township based on its own
depletion criteria or depletion rate in there does,
in effect, establish local aquifer subunits. So he
and I disagree on that.

MR. TRASTER: Well, I understand that it
develops those. But it develops those based on
lines that are more artificial than the lines he
described for the high -- the high -- whatever the
term --

RAY LUHMAN: Oh, the high priority areas?
MR. TRASTER: High priority areas. But, I
mean, I am not here to debate it. I was trying
to -- well, I guess I am. But I was trying to
explain. My point is that the district-wide LEMA
treats different situations the same, rather than

allocating or looking at the specifics of a
particular area.

HEARING OFFICER BARFIELD: All right.
Thank you.

MR. TRASTER: Did I answer your question?

HEARING OFFICER BARFIELD: Yes, I think
so. What is the date of that map?

MR. LUHMAN: It is based on groundwater
trends from 2000 to 2005. Let's see. I don't see a
date on that. It is a fairly old map, but it is --
you know, it still brings across the point, I think.
Q (BY MR. TRASTER) Let me just -- it is just an
excerpt of a map, of a bigger map. I didn't want to
produce the whole thing because it -- anyway, that
is -- I will provided the larger map to counsel.

MR. TRASTER: So I think I moved for the
admission of H through L, and I am -- but I don't --
did you admit those or not admit them?

HEARING OFFICER BARFIELD: I don't think
we have dealt with them, so let's deal with them.

MR. DEES: Have we gone -- maybe I missed
it, but I don't think we have gone over any of the
information in L through K [sic] at this point.

MR. TRASTER: Well, I just explained that
they are representative. They are just
request until later and --

HEARING OFFICER BARFIELD: Okay.

MR. LUHMAN: And he is right in the fact that there was a map provided at those meetings, but the -- "X" number of pages of the proposal itself was not available.

MR. TRASTER: Sure. I just wanted to make sure we were clear about that.

HEARING OFFICER BARFIELD: Now, Mr. Traster -- and actually I was going to let you finish your cross examination before I got my questions. But I was going to ask the GMD to provide in the comment period that follows, I guess I would like to know, you know, what was presented at each -- at the annual meeting I referenced as well as their public outreach meetings. I think it would be helpful to see what was presented. But, again, my recollection is you did present the previous version of that map.

MR. LUHMAN: Right.

HEARING OFFICER BARFIELD: But I will ask the GMD to provide --

MR. TRASTER: Yeah. I have asked for that too, but it is just -- the timing has been bad and --

HEARING OFFICER BARFIELD: Okay. -- I am sure it is on its way.

HEARING OFFICER BARFIELD: Right. Okay.

FURTHER CROSS EXAMINATION OF RAY LUHMAN

BY MR. TRASTER:

Q In some earlier testimony you -- maybe in your original testimony -- you indicated that the Sheridan 6 LEMA, that preliminary indications are that income or production or whatever it is, is sustainable or on par. I mean, I don't want to mischaracterize what you said.

A Yeah. What Dr. Golden has found, and he has gone through now I believe four years of data -- of course, 2017 is just finishing up. But his preliminary assessment at the end of 2016 shows the profitability within Sheridan 6 remaining basically the same as that on the area -- just the fringe area surrounding Sheridan 6.

Q Right. But you have also said publicly that during -- that you have had quite a lot more precipitation over the last two or three years?

A I know we have had -- at least two of those four years, I would say, were at or above normal precip.

Q And we know that the drought is coming again, right?
A Yeah.
Q And that the data could change based on the fact that we had a climate change -- climate cycles? I didn't say that -- strike "climate change". But we had cyclical drought?
A I would agree.
Q So the jury is still out on the question of whether the Sheridan 6 LEMA is going to -- will be at long-term profitability --
A I don't know if the jury is still out, but that is a fairly short period of time to be doing a study like that.
Q Okay. So there was some discussion about water use between 2009 and 2015, and that is what you are basing this -- I mean, you are looking at acres from 2009 to 2015 and then multiplying that times the number of inches you got?
A Right. We selected the maximum number of acres reported irrigated in that 2009 through 2015 period.
Q And there was an example mentioned of three quarter sections, but only one of them had been watered during that period. And so you would only get the 130, or whatever acres, that were under that center pivot system that would be -- that allocation would be based on that 130 --
A If --
Q So what about CRP or other programs? Where do you --
A Basically there is a provision, I don't know how well it is written in there, but through that appeal process someone that has either been in CRP, Equip [phon], you know, there is several programs out there where they idle land, we can go back in -- if they are going to put that land back into production through all or part of that LEMA period, we can assign them an amount based upon probably their last reported acreage before they went into that program.
Q That are reduced by the number of years. I mean, it would be the inches per acre times three years or four years --
A Right.
Q -- or one year depending on when they brought it back in, correct?
A Yes, sir, I agree with you.
Q So the situation where it wasn't in a program but just wasn't irrigated, is that subject to that?
A You know, I personally know about the individual that Aaron is talking about.
Q Okay.
A That land has changed hands. He failed to tell you that the individual that was doing all of this conservation -- which he wasn't, he was just old and didn't irrigate anymore -- but that land has sold.
And I think under that set of the circumstances, I don't know that we would go back and say, okay, back in 1974 you irrigated all this other land.
Q He didn't fail to tell me that. He did tell me that, just not here.
A Okay.
Q Okay. So for whatever reason -- so putting it in a CRP program is conservation, but just being old isn't conservation?
A Correct.
Q Now, that is -- you are discriminating against, you know, guys like you and me.
A (Witness indicated.)
Q So --
A And I do need to say on that, too. I think -- you know, on that appeal process, I think where he met with the staff first, I don't think I would give him those extra acres. But that still gives him the ability to meet with my board of directors. And if they can make a compelling argument there, then we can change those acres.

Q All right. So if -- but what about CRP? If I have got CRP, am I automatically back in or is that still subject to the board's decision?
A I think on any type of a government program to set aside whatever you have got, if it is an official government program, I think you are automatically back in, or you would be under my estimation.
Q Well, does the plan say that or does it not? I mean, I --
A It doesn't really -- it doesn't really speak to that, I don't think.
Q So it is not clear?
A I have got to check, but it may not be.
Q Well, you have given me -- sorry.

HEARING OFFICER BARFIELD: Well, if you are looking at the plan allocations, Number 1, for water rights and royalty, Equip [phon] or AWEP [phon], that will be coming out, the allocation quantity shall be set by the annual allocation for only the remaining years. It seems to be pretty --
Q (BY MR. TRASTER) So it is straightforward; it shall come back in?
A Right.
Q All right. Back to the map that is in Attachment 1 to the GMD LEMA plan. And I want you
HEARING OFFICER BARFIELD: Okay. So the folks in 941 who had, for instance, two or two and a half acre-foot water rights are going to get reduced to 18 inches? A Right. And that is not water rights; that is what they have actually pumped. And what I did under those is I went in and said, okay, what is your average -- I don't remember what -- average or maximum pumpage through that year. I took 25 percent of that. That was the value. Then I got 14.2 or the 14.5 inch and set that as a value. And we took whichever one would have been the greater of those two, provided -- but a max of 18.

Q All right. So the 14.5 is the low end, but it can go up to 18? A Yes.

Q All right. I am just trying to make sure I understood how that worked.

HEARING OFFICER BARFIELD: And now I want to make sure I understand how it works. All right.

So in the purple townships we have got the 18-inch max, right?

RAY LUHMAN: Right.

HEARING OFFICER BARFIELD: So in those townships, there could be some water right holders that will experience a reduction of more than 25 percent?

RAY LUHMAN: Yes. They are going back to the 18-inch max on that and they pumped whatever, you know, 20.4, whatever that figure would be.

HEARING OFFICER BARFIELD: Okay. But in the red townships that they started -- Mr. Traster started with, they are going to get this allocation, but you are going to do a check, you are going to compare the historic use -- well, I assume the average of 2009 to 2015, right? You are going to come up with a value and make sure their allocation is not reduced -- you are going to make sure they are not cut more than 25 percent in setting their allocation?

RAY LUHMAN: Except if they are going to get reduced to a maximum of 18 inches. And in some cases, that will result in a higher than 25 percent reduction.

HEARING OFFICER BARFIELD: Right. But those are only the purple townships?

MR. LUHMAN: No. Every township -- no township will pump more than 18 inches per acre. In some cases, in 941, although that is only a 14.5-inch township, I have actual usage in the 26, 27-inch range. I am going to reduce those back to
HEARING OFFICER BARFIELD: So 941 is which township? What color is it?
RAY LUHMAN: It is the red township in Sherman County. It is the one over here on the left.
HEARING OFFICER BARFIELD: Okay. So that is a red township. They should get an allocation of the 50 percent NIR -- well, actually 14.5?
RAY LUHMAN: 14.5, yeah.
HEARING OFFICER BARFIELD: Right. So aren't you -- where does the 18-inch come into that red township?
RAY LUHMAN: Well, normally what would let's say that we have this individual that is pumping 25 or 26 inches. He would have got reduced to 14.5. But we said we are not going to reduce him more than 25 percent except in the case when that reduction takes you down to 18 inches. And from 25 inches down to 18 inches is bigger than a 25 percent reduction.
HEARING OFFICER BARFIELD: Okay. Thank you.
Q (BY MR. TRASTER) So a water user in township 941 or in township 830 who conserved, who spent -- who didn't pump 25, 26, 27 inches, gets reduced to 13.2 and 14.5?
A Yes.
Q But a producer who didn't try to conserve gets reduced just to 18?
A Yes, sir.
Q And you heard Mr. Pop -- Popelka, a good friend of mine, cite 82a-1041(a) that says that you have to give consideration to people who have conserved, right?
A Yes.
Q So when you submitted your plan to the Chief Engineer -- the process is you submit your plan to the Chief Engineer and he looks at it and makes a determination about those factors 1 through 6, right? And once he says, yeah, that all compiles, then you have your first hearing, which we have heard that Connie was the -- Ms. Owen was the Hearing Officer.
What evidence did you provide to the Chief Engineer to support the -- he has made a finding that this treats people who conserved, gives them favorable consideration? What evidence did you provide to support that when that example, at least, is not -- doesn't appear to be the case?
A I don't recall.
Q Did you provide any evidence?
A I think we did, but it would be in -- it would be in the record of that first hearing, but I don't remember for sure what that was.
Q All right. Very good. You would agree with me, though, that people who, in those two townships that we have been discussing, the red ones on your map --
A mean, if they produced -- or pumped less water table they were attempting to conserve are being treated worse than people who pumped the heck out of their wells?
Q I think there is that possibility.
Q Thank you. Again, Mr. Popelka pointed out that -- or suggested that the quantities -- the reductions be based on a percentage of the authorized quantity rather than looking back at acreage.
A But you have looked at acreage irrigated during this period of 2009 to 2015 and you have based that -- you have based the reductions on those acres. What analysis did you do to determine that that was the important approach? I mean, why -- did you look at allocations based purely on authorized quantities and determine that that wasn't going to work some way?
A Yeah. I think through the process we had looked at, you know, what both were the authorized quantity of water rights and what were the authorized place of use.
Q Right.
A The acreage for a water right. And it was the board's determination on that that we were better off using recent past historic usage as we were going back to the base water right.
Q All right. And I am just asking you, you know, what difference that made. I mean, did you look at the quantity that --
A Actually we did -- I did not go back and do a big analysis on what would have happened if we would have gone against authorized acres. It would -- you know, it is just intuitive that we would have had to go a little bit less on our allocations if, in fact, we were going to use entire places of use.
Q Well --
A And one example of that would be, I would say a majority of the water rights up here at least cover the full quarter section, 160 acres. And we are -- you know, everybody is irrigating with a pivot now, so that is going to run 120 to 125 acres. So right there, you are figuring your allocation then based
Q So your concern is that you have got a quarter section that was -- that was flood irrigated and the authorized quantities based on flood, but they are now center pivots and you want to multiply by 130 or whatever acres rather than 160 and -- but what percentage of those water rights -- I mean, I have seen a lot of water rights that were authorized for 160 acres, but they were only perfected for 130. And so because of the acre-feet per acre limitations, the quantities were reduced when the certificate was issued based on acre-feet per acre during the perfection period. I mean, is that not what is going on here?

A I don't know that as far as the place of use being reduced through the certificate that we have that many of those -- is that what you are getting at?

Q No. The place of use isn't reduced; they will still issue a certificate for --

A Not anymore. They will only issue it for the land that was actually irrigated.

Q Well, okay. But I have looked at a hundred water rights --

A Well, I have looked at thousands of them. So --

Q What is that?

A I said I have looked at a thousand of them and --

Q I bet you have. All I am saying is that often the place of use is 160 acres. The quantity is based on 130 acres. And I don't -- the water rights I have looked at are not -- very many of them in this district.

And so I am asking you whether those perfected quantities, certified quantities, are based on 160 acres or 130, generally, in this area?

A Boy, you know, that is all over the place. You know, a lot of the area water rights would have been based on full quarters and -- you know, we have got a lot of 320 acre-foot water rights out there for 160 acres which, you know, hasn't been pumped for years. So -- and, you know, looking at the authorized quantity of water rights, you know, an example I could give you there is we have got probably 845,000 acre-foot appropriated out to irrigate right now. And we probably in 2012, which was an extremely dry year, pumped about 500,000. So you can see that we are not coming anywhere close to pumping our appropriated amounts anymore.

Q Sure.

A So that is another reason that we decided to go on recent past pumping.

Q These questions are going to try to track a little bit with the pathway that Mr. Traster laid out, although that path has been quite long so it may deviate somewhat.

Just really quickly, Mr. Luhman, can you explain the difference between an appropriated right and a vested right?

A Yeah. Basically a vested right, by Kansas law, was a water right that was in existence in, I believe, 1945 when the Kansas Water Appropriation Act was passed, and so they were given preferential treatment at that time.

An appropriated right is anything that was done through the current Water Appropriation Act.

Q And the appropriated right can be subject to additional regulation; is that correct?

A As we understand it, yes.

MR. TRASTER: Objection. It misstates the law.

HEARING OFFICER BARFIELD: I am sorry?

MR. TRASTER: It is a misstatement of the law, for the record.

HEARING OFFICER BARFIELD: Okay. Thank you.

Q (BY MR. DEES) Okay. Just real quick to clean up
the request for the modification. It seems to me
like Mr. Popelka also had some suggestion
modifications as well. Mr. Popelka had come to the
GMD4 board with a proposed modification; is that
correct?
A I don't recall if he came with proposed
modifications, but he did come to the board with his
concerns about the way that stock water was being
handled under the current proposal.
Q Okay. And based on that, the GMD4 board requested
that this modification occur, correct?
A Yes.
Q And not that the plan be resubmitted to the Chief
Engineer in its entirety, but that the Chief
Engineer simply consider that in making an order of
decision?
A Yes.
Q Okay. And so looking at the statute, that would
have been a modification proposed under
82a-1041(d)(4), which allows the Chief Engineer to
change the plan but not impose reductions in
groundwater withdrawal, but exceed those contained
in the plan, correct?
A Yes.
Q Okay. And the proposal, does it impose reductions
in the groundwater withdrawal that exceed those
contained in the actual proposed plan?
A No. Actually it is more lenient.
Q Okay. And so it is under that section that the
board is asking that that modification be made?
A Yes.
Q Okay. And then that would be resubmitted to the
board where we can, you know, presume that that
would be accepted?
A Yes.
Q Okay. And if that was presumptuous of me, I
apologize to my board members. And, again, this is
just to kind of clear up the record early on.
Mr. Luhman, is it your belief -- and I
have a memorandum here from November 7th, 2016 I am
reading from -- that the informational meetings
about this LEMA were held on November 29th, 2016
actually here in the Colby City Limits Convention
Center; on November 30th, 2016 at the Northwest Tech
Community Hall [sic] in Goodland, Kansas; on
December 1st, 2016 at the Cheyenne County 4H
Building in St. Francis, Kansas; and on December
5th, 2016 at the Hoxie Elks Lodge in Hoxie, Kansas?
A That is right.
Q Okay. Kind of moving on. Is the LEMA statute under
K.S.A. 82a-1041 also a public policy of the state of
Kansas at this time?
A Yes. You know, it was passed by the legislature, so
it also is Kansas state law.
Q And I believe -- I may get my section number wrong,
but I also believe 82a-702, that designates the use
of the water to all the people in the state of
Kansas and gives the Chief Engineer the authority to
regulate and control that use; is that also part of
the public policy of the state of Kansas?
A Well, yes, it would be. I mean, that is part of the
Water Appropriation Act.
Q Okay. And under 82a-1020, is it also the policy of
the state of Kansas that the creation of groundwater
management districts occur because they recognized a
need existed for the creation of special districts
for the proper management of groundwater resources
for the state, for the conservation of groundwater
resources for the prevention of economic
deterioration, for associated endeavors with the
state of Kansas through the stabilization of
agriculture, and to secure of Kansas -- to secure
for Kansas the benefit of its fertile soil and
favorable location?
A Yes.
Q Okay. So in your opinion, it is the public policy
of the state of Kansas to allow a LEMA to come into
existence, correct?
A It is in my opinion, yes, sir.
MR. TRASTER: Calls for a legal
conclusion.
Q HEARING OFFICER BARFIELD: I am sorry?
MR. TRASTER: It calls for a legal
conclusion that he is not qualified to give.
HEARING OFFICER BARFIELD: Objection
noted.
Q (BY MR. DEES) And just for the record, Ms. Owen did
find it was in the public interest to adopt a
conservation plan, correct?
A Yes.
Q Okay. And, Ray, quickly. This goes back to the
discussion about the NIR amounts. You have stated
that you had used the western edge of the zones in
determining -- in setting those allocations; is that
correct?
A Yes.
Q In those western edges, are they drier or wetter
than the eastern edge?
A The NIR -- or the interpolated NIR for the western
deck of the zone would be the driest amount for that
<table>
<thead>
<tr>
<th>Page 197</th>
<th>Page 198</th>
<th>Page 199</th>
<th>Page 200</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. zone.</td>
<td>Q Okay. And so by using that, I guess -- and</td>
<td>1. Q Okay. And really quickly, moving onto the motion to</td>
<td>1. believe, June 8th of 2017 when the board approved</td>
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<td>2. Q Okay. And so by using that, I guess -- and</td>
<td>generally speaking, as we go west it gets drier,</td>
<td>require a 10 percent carryover that was heard on</td>
<td>the proposal as presented that day?</td>
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<td>3. correct?</td>
<td>require a 10 percent carryover that was heard on</td>
<td>3. March 28th, 2017 and apparently approved by the</td>
<td>3. A As recall, yes.</td>
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<td>4. A Yes.</td>
<td>and not be subject to any substantial regulations.</td>
<td>board and then the June 8th, 2017 proposal that</td>
<td>4. Q Okay. And the approval of that plan, there was a</td>
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<td>5. Q Okay. And by using that number, that gives us --</td>
<td>5. Mr. Traster and you had about what he would call</td>
<td>basically says that the board shall consider whether</td>
<td>motion and a second to approve the proposal?</td>
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<td>6. that builds in, I guess, a cushion or a buffer in</td>
<td>plan depletion, where in 1983 they said a two</td>
<td>6. A Yes.</td>
<td>6. A Yes.</td>
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<td>7. that amount. Is that correct, or am I off there?</td>
<td>percent reduction in 1987, a one percent in 1991,</td>
<td>Q Okay. Real quickly. Mr. Traster had presented you</td>
<td>7. Q And it passed -- it passed by at least a majority?</td>
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<td>8. A Well, to a certain extent, yes. The -- you know,</td>
<td>safe yield or sustainable yield at that point,</td>
<td>with a map that showed the number of years remaining</td>
<td>8. A Yes.</td>
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<td>9. the net irrigation requirements, as I -- as I took</td>
<td>obviously during those years there was a change in</td>
<td>in the aquifer. It hasn't yet been admitted into</td>
<td>9. Q Okay. Real quickly. Mr. Traster had presented you</td>
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<td>10. them, were established for the center of that</td>
<td>what was believed to be a reasonable amount of</td>
<td>evidence, but I imagine it will be,</td>
<td>with a map that showed the number of years remaining</td>
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<td>11. county. So, you know, given just the climate out</td>
<td>depletion to be set at the GMD level; is that</td>
<td>Do you remember what date was used -- what</td>
<td>in the aquifer. It hasn't yet been admitted into</td>
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<td>12. here, the further west you get, the drier it gets.</td>
<td>correct?</td>
<td>data and dates were used?</td>
<td>evidence, but I imagine it will be,</td>
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<td>13. So that is why I interpolated those moving west to</td>
<td>A Yes.</td>
<td>10. A According to the title on the map, it is based on</td>
<td>Do you remember what date was used -- what</td>
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<td>14. the higher value.</td>
<td></td>
<td>groundwater trends from 2000 to 2005.</td>
<td>data and dates were used?</td>
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<td>15. Q And Mr. Traster asked about those, kind of moving</td>
<td></td>
<td>Q Okay. And what date has been used as far as a time</td>
<td>11. Q Okay. And what date has been used as far as a time</td>
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<td>16. on, and I just wanted to make sure.</td>
<td>that would be subsequent to that.</td>
<td>period goes for the LEMA proposal for the map?</td>
<td>period goes for the LEMA proposal for the map?</td>
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<td>17. In regulating individuals in the green and</td>
<td>17. Q Okay. And so over time, things have a tendency to</td>
<td>12. A Well, the decline data is from 2004 through 2015.</td>
<td>12. A Well, the decline data is from 2004 through 2015.</td>
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<td>18. blue townships, is there any incentive for them to</td>
<td>change, correct?</td>
<td>Q Okay. So the decline data is after that map that</td>
<td>Q Okay. So the decline data is after that map that</td>
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<td>19. continue conserving water under this plan?</td>
<td></td>
<td>Mr. Traster presented to you from 2004 -- or from</td>
<td>Mr. Traster presented to you from 2004 -- or from</td>
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<td>20. A Well, I would think so. You know, you would have to</td>
<td>not be subject to any substantial regulations.</td>
<td>2000 to 2004; is that correct?</td>
<td>2000 to 2004; is that correct?</td>
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<td>21. ask the individuals that are in those areas. But I</td>
<td>21. Q And so this is kind of another step in that</td>
<td>21. A Yeah, that would be subsequent to that.</td>
<td>21. A Yeah, that would be subsequent to that.</td>
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<td>22. think that it would be in their mindset to make sure</td>
<td>succession of change; is that correct?</td>
<td>22. Q Okay. And lastly, really quickly. I want to clear</td>
<td>22. Q Okay. And lastly, really quickly. I want to clear</td>
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<td>23. that they keep their decline rates at a level that,</td>
<td>23. A Yes, sir.</td>
<td>up some of the confusion on the 25 percent reduction</td>
<td></td>
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<td>24. if a new LEMA were proposed, that they would still</td>
<td>24. Q As approved by the Kansas legislature?</td>
<td>24. Q As approved by the Kansas legislature?</td>
<td>24. Q As approved by the Kansas legislature?</td>
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<td>25. not be subject to any substantial regulations.</td>
<td>25. A Yes.</td>
<td>25. A Yes.</td>
<td>25. A Yes.</td>
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<tr>
<td>Page 201</td>
<td>Page 202</td>
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<td>Page 204</td>
</tr>
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<td>---</td>
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| 1. versus the 18-inch reduction.  
2. Mr. Luhan, has this proposal been a balancing act from the beginning?  
3. A I would almost say yes. You know, we have tried to -- we have had several issues that we have discussed and re-discussed and looked at other maps and different ideas. So, yeah, I would say it has been kind of a balancing act, yes.  
4. Q And one of the balancing considerations was that you wanted to make a cap of 18 inches for everybody across the board; is that correct?  
5. A For everything other than the blue and green townships.  
6. Q Right. But did the board feel like someone taking more than a 25 percent reduction would -- could excessively harm their irrigation rates -- where did that 25 percent come from?  
7. A I think you are exactly right in the fact that the board did feel like, except in the case for those being reduced from a higher number down to 18, that anything in excess of the 25 percent reduction could have the possibility of being more restrictive than what they want it to be.  
8. Q Okay. And so the balancing act that you talked about ended up with an 18 percent cap with --  
11. MR. DEES: Have I been saying percent for three or four questions?  
12. HEARING OFFICER BARFIELD: Hah-sh.  
13. MR. Dees: Okay.  
14. Q (By MR. Dees) An 18-inch cap and a -- but if you are under 18, it is only going to be 25 percent; is that correct?  
15. A Yes.  
16. Q Okay. And that is a policy choice that the board made?  
17. A Yes.  
18. Q Okay. The last thing, and I promise we are not going to get too much into this, but let's talk a little bit about township level data versus section level data.  
19. First of all, just to make sure. When he did his calculations, he did not remove any part of the GMD that had less than 15 feet of saturated thickness; is that correct?  
20. A I believe so.  
21. Q Okay. But when you are making -- when the board was making decisions about this proposal, did they take a look at the township level data or -- excuse me,  
22. the section level data?  
23. A Oh, yeah. That is -- basically the section level data -- which I think Brownie will explain far better than I can here in a little while. The section level data is the foundation of the information that we used.  
24. Q However, trying to, you know, use political boundaries to make -- you know, to draw lines, is it your understanding that, you know, the township level would be an easier way to make decisions than the section level?  
25. A Oh, yes. And, you know, you have got -- I understand where you are coming from in the fact that political boundaries seldom, if ever, match hydrologic boundaries. But, you know, it was just a choice made that for the ease both of administration and calculation, that the townships would be used.  
26. Q Okay. And those were decisions the board of directors made, correct?  
27. A Yes.  
28. Q Okay.  
29. MR. DEES: At this time, I don't have any more questions; although, I may have further questions if Mr. Traster asks a few more.  
30. HEARING OFFICER BARFIELD: All right.  
31. Mr. Traster, do you have any questions to follow up on -- or Aaron?  
32. MR. OLEEN: The DWR doesn't have any at this time.  
33. HEARING OFFICER BARFIELD: All right. Any follow-up --  
34. MR. TRASTER: A couple.  
35. HEARING OFFICER BARFIELD: -- based on the questions that Mr. Dees asked? If you would like a couple of minutes to get organized, I could ask my questions.  
36. MR. TRASTER: Go ahead.  
37. HEARING OFFICER BARFIELD: All right. Let me just do that. A couple of -- they may just be typos.  
38. On Page 6 of your testimony and Page 8, both of those have a number of .05 percent. Were those supposed to be 0.5 percent?  
39. RAY LUHMAN: What page?  
40. HEARING OFFICER BARFIELD: On Page 6 near the top there is a reference to -- in the second -- well, the first full paragraph.  
41. RAY LUHMAN: Yes. That should be 0.5.  
42. HEARING OFFICER BARFIELD: Right. Okay.  
43. And then also on Page 8, kind of in the middle there
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Q In 1991 they changed the title to "Allowable Withdrawal"?
A Yes. And I think the reason for that was at that
time we no longer were under a depletion formula.
I It was just a safe yield.
Q Right. So Mr. Dees also asked you about the map.
And we acknowledged and we talked about this when I
presented it, and we are talking about Exhibit M,
that it was 2001 to 2005 data, right?
A 2000 to 2005, yeah.
Q Okay. Thank you. And the idea is that that
predated -- I think it overlaps one year, but
basically predated -- I mean, the 2004 data that was
used was a combination of 2003, 2004 and 2005?
A Uh-huh.
Q So it is at the end of that, the tail end of the
data that was used for the map, Exhibit M, right?
A Yeah, correct.
Q And that -- but the 2004 to 2015 time frame that you
are using here to come up with these reductions
doesn't -- I mean, the point of that map was that it
was a hundred-year discussion and it doesn't overlap
that, does it?
A No. No, it doesn't.
MR. TRASTER: Thank you. No further
a directive from the state water plan to assist the GMDs and the Division of Water Resources in their management, especially except for the Ogallala.

And in May 2016, we had a request from GMD4 to look at the water level changes for those years that were given; 2004, 2009, 2015.

So we basically pulled the data on what we call our Wizard database and we focused on the wells in and around -- within 20 miles of the GMD4 boundary. And we threw out the wells that we have -- we have status [inaudible] in all our measurements, on the ones that we know are abnormal. Like if somebody measured the well and it was -- one nearby was pumping, we will flag that if we know about it. We threw all those kinds of wells out.

And so we then interpolate surfaces because across the -- the Ogallala is based on these -- on this network of wells that we have. And so our interpolated grids are actually down to 250 by 250 meters. And then just for the sake of convenience, we store that information on averages for each POSS section. And then that is how we get that data a lot of times that way.

And so the process, we kind of went under a couple of iterations. The first time we used all the data we had, all the wells and all those well measurements that met that criteria. We went through that iteration where we had some questions about a well in the southeast portion of the district in 11 south 27 west, 13 that has been showing a little more accelerated groundwater declines than his neighbors has. So we decided that -- in consultation with GMD4, to remove that. And then we had some questions about what influence alluvial wells had on the process, and so we went through and flagged the ones that we knew and then reviewed some others and we threw out some more wells and repeated that whole process. And then we provided them that data. So it is in the GIS format and then a spreadsheet that shows the elevation of the land surface, the elevation of the bedrock, and then the water table elevation in 2004, 2009 and 2015 based on the wells that met that flexible criteria.

And, again, that is all further outlined more in the written testimony. I don't know, do I need to resubmit that or is that part of the record?

BROWNIE WILSON: Okay. Then I will stand
<table>
<thead>
<tr>
<th>Page 213</th>
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<th>Page 215</th>
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<tr>
<td>1 Q And, in fact, you have supplied Mr. Traster with his raw data that he created those maps from, correct?</td>
<td>1 A It was the same. I had a focus on the physical geography and in the geographic information systems, the mapping.</td>
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<td>3 Q Okay. Real briefly, before we get into that conversation, can you tell me, how long have you been a hydrologist?</td>
<td>3 You can map things at a township level or a section level; is that correct?</td>
<td>3 A Okay. And I know Mr. Traster is probably going to bring this up, so I might as well at this point.</td>
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<td>4 A I started with the Division of Water Resources in '93 and I worked there until about 1999. I went to the water office for a couple of years, and then I had been with the Kansas Geological Service since 2001.</td>
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<td>6 A I have always been an analyst of some sort, especially with GIS. So the geographic information, the spatial mapping and data side is my forte, if you will.</td>
<td>6 And you heard the discussion about section level data versus township level data; is that correct?</td>
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<td>7 Q So making maps is what you do?</td>
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<td>8 A Yeah. I really don't like making maps, but I like dealing with spatial data. Actually making production maps gets a little tedious. So I don't do it unless I have to. But I definitely like spatial data and map forms, I will put it that way.</td>
<td>8 A Okay. And you heard the discussion about section level data versus township level data; is that correct?</td>
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<td>12 A It is the groundwater used -- and we -- we had a couple of recent studies we put out that show real high correlations between water level change and water use -- groundwater use. And that is especially true up here in Northwest Kansas. We get really strong correlations that we don't get elsewhere necessarily. That depends on the data and the time periods.</td>
<td>12 Q You have been here for all of the testimony that has been presented today, right?</td>
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Q. Okay.
A. On the GMD1 -- or a GMD4 scale, for sure.
Q. And I have heard of bunch of your presentation before. So based on your experience, generally if there are conservation measures taken in the Northwest Kansas Groundwater Management District, will the Northwest Kansas GMD benefit from those conservation efforts as it relates to the water table?
A. Yeah, definitely. In a place where conservation efforts take place, the people in that direct immediate area get the benefit of that, for sure.
Q. Okay. So to steal a shorthand phrase, what happens in the Northwest Kansas Groundwater Management District stays in the Northwest Kansas Groundwater Management District?
A. That is right.
Q. Okay. So based on this, the conservation efforts that are proposed by this plan, the water users in GMD should reap those benefits as far as conservation goes?
A. Okay.
Q. Okay. Going back to township level/section level data, you could actually go down clear to lots; is that correct?
A. Yeah. I mean, we do a lot of groundwater models, for example. And the one we are working on now is 400 feet by 400 feet. We interpolate that down to that level.
Q. Okay. But what is the difficulty -- and I think you kind of explained this a little bit. What is the difficulty as you kind of drill down further and further?
A. Well, it is not so much drilling down; it is that the confidence you have in making a decision in this cell versus this cell, whether that is a section or that is a township -- because, again, the value that is in those sub areas is based on input data that was interpolated. And the more you have those input points around or even in that area, the greater confidence you have in there.
Q. I got you.
A. The farther away they are or the less dense they are, you have less confidence into them. But, again, the more homogeneous your aquifer is, then that helps, versus where there is a lot of heterogeneity to it.
Q. (BY MR. DEES) Can you spell that?
A. No, I can't.
THE REPORTER: I can't either, but I will find it.
A. I was always the first one out of the Spelling Bee.
Q (BY MR. DEES) Okay. And so when you look at the GMD, and I appreciate Mr. Traster keeping that picture up on the screen for us --
MR. DEES: Thank you.
MR. TRASTER: Do you want it --
MR. DEES: Yes, I do. That is great.
Q (BY MR. DEES) In order to have good data, you need to have multiple data points, correct?
A. Yes. I would like so.
Q. Okay. And based on the sectional level data and the measuring -- or the points that you have within the GMD that you are taking measurements from, you are most comfortable using that section level data to make decisions; is that correct?
A. Yeah. Township scale in terms of making comparisons of what the water levels are doing directly in that township, I am more comfortable with that scale than I would be at the individual section level scale.
Q. I am not saying either one is right or wrong. It is just that confidence that you have in

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Q. I am not saying either one is right or wrong. It is just that confidence that you have in

the value that is being represented by that sub area accurately represents the input points that are around it.
Q. So you are more comfortable with the section level rather than the township level or --
A. It all depends on how many input points I have around there. I may have a township that has no points in there; I got no confidence, or I have little -- I have litter confidence in that than if I had a lot of input points I would rather measured wells. And the same goes for sections. The more -- the better -- you know, the interpolation process is just using those input points to spread that value across space. And, again, the more you have and the denser they are, then the better your decision is going to be.
Q. And you are a scientist, right, Brownie?
A. I guess, yeah.
Q. Okay. And so looking at political subdivisions is not necessarily something that you enjoy doing; is that correct?
A. Say that again.
Q. Looking at -- trying to carve this GMD up using political subdivisions like townships or sections, you would much prefer that we just look at the
HYDROLOGICAL TERMS

Q: In hydrological terms?
A: Sure, yeah.

Q: Okay. And does it make it easier then for you to know, DWR or a GMD or some other political body to regulate those subunits or is that kind of --
A: I guess. I mean, with those agencies, everybody has got staff and computing power and the knowledge so that it results with the subunit, yeah.

Q: Okay. So based on your expertise, if we had to choose to -- or if the Chief Engineer has to choose to make a determination of a section level or a township level, where would you -- which one of those would you prefer?
A: If I had to pick between those two, the political boundaries, I would -- with water levels, I would be more comfortable with a township scale.

Q: Okay. Because you -- then using those numbers, you know that you have the data points that you need?
A: Right. Our network was designed to look for regional variations in the water table, and that is the appropriate scale for that.

Q: Okay. Sounds good.
A: MR. DEES: I don't have any other questions. Thanks, Brownie.

HEARING OFFICER BARFIELD: All right.

MR. TRASTER?

MR. OLEEN: No questions from the DWR.

HEARING OFFICER BARFIELD: Thank you, Mr. Oleen.

CROSS EXAMINATION OF BROWNIE WILSON

BY MR. TRASTER:

Q: I guess I am a little confused, which is kind of normal. Don't shake your head.
A: No, I am not.

Q: All right. So I understand your testimony about the more data points you have, the more confidence you have in the data. And would you -- you have got a copy of your testimony from the previous --
A: I do.

Q: Would you turn to the map on the fourth page or so.
A: Okay.

Q: Are those crosses on the map the data points that you used?
A: Yes.

Q: And so when you say interpolating the data, what you are doing is you are taking two -- any two of those points that are adjacent to one another and looking at the value there and whatever else you know about that area and trying to come up with the water level in between them, in essence?
A: Right. That is a general characterization of the interpolation process. And there is nuances, depending on what you pick, but it is -- that is exactly it, yeah.

Q: Okay. So what are -- I mean, can you give -- I don't want you to go into all the nuances, but what do you mean by "nuances"?
A: Well, like in the simplest case, like there are some areas that are just purely mathematically based. So I have got a value here; I have got a value there.

Let's divide it by the distance. Just pure math.

And then there is others that say, okay, I want to try to fit a surface over all my data points so that it is -- everybody is a little bit happy and then there has not been -- I want to make sure I honor the points and this and that. Those are the nuances.

Q: So you have got a data point with an elevation at some -- you have got two data points with an elevation that are the same, but in the middle you have got a higher one. It is not a straight line up and a straight line down; it is a curved line. Is that kind of what you are saying?
A: Well, it could be. It depends on -- again, there is different processes. The one I use was developed by the ESRI Corporation that makes the ArcMap Software.

Q: Right.

A: They developed a routine that is designed for elevations.

Q: And that is a routine that is commonly used by lots of people --
A: Yeah.

Q: -- across the county --
A: Yes.

Q: -- for any number of things, including DWR staff that you interact with?
A: I am sure I don't know [inaudible] used. But, yeah, that comes up, yeah.

Q: Okay. And that is -- the KBS, that is the standard you use?
1 A It is one of them. We have a lot of statisticians.
2 They like Kriging.
3 Q They like what?
4 A Kriging. It is another interpolation method that is
5 out there. There are dozens of them.
6 Q Okay. But you have already told us that you are
7 like me on -- I was in the third percentile in
8 spelling.
9 A Okay.
10 Q Can you spell --
11 A Kriging is -- I think I can get that one. That is
12 K-R-I-G-I-N-G.
13 Q Okay. But the data that you used to provide to the
14 GMD is the kind of data you normally rely on?
15 A Yes.
16 Q And in your testimony you specifically -- you heard
17 me probably read, if you were paying attention, your
18 testimony?
19 A I was.
20 Q You were? Okay. So -- I mean, at the bottom of the
21 second page and onto the third page, you say that it
22 can be readily computed at the section level. Are
23 you now saying that you don't have confidence in
24 that data?
25 A No. What I meant by that statement was not so much

1 a validation of the data, but that it was set up at
2 the section level. And the selection of the wells
3 that I chose, it was then set up so that you can
4 make water level changes appropriately between 2004,
5 2009 and 2015.
6 A lot of times people do interpolated
7 surfaces of one year and they have got wells for
8 that set. And then they do another year and they
9 have got wells for that set. And sometimes you have
10 wells that may come in one year and they are not
11 there the next. You can generate artificial highs
12 and lows by doing that.
13 And so my point by that is it was readily
14 set up so that they can do those computations of
15 water level changes for that time frame.
16 Q And the data that you provided to the GMD, and then
17 subsequently to me, has -- there were three versions
18 of it. And you testified that you started and then
19 you took out some wells and then you took out some
20 more wells. And so there was a version one, version
21 two and version three for each of the three levels
22 that you took?
23 A Yes.
24 Q And as I understand it, the level for 2004 was based
25 on readings during December of 2003, 2004 and 2005?

1 A Yeah. We were -- I guess -- let me back up to that
2 first one.
3 Q Sure.
4 A Version one, version two, version three was --
5 version one, I used all the wells that we had in our
6 system.
7 Q Okay.
8 A And then my criteria.
9 Q Right.
10 A Version two was we had to have one well in 27 -- we
11 had the one well that was in 11 south, 27 west,
12 Section 13 that showed a significant water level
13 decline that we didn't really see in any other wells
14 around it. So I took that well out and repeated all
15 of the same interpolation process.
16 Q Okay. You took that out in consultation with the
17 GMD?
18 A Yeah, right.
19 Q So they agreed with that?
20 A Yeah. They were the one that brought it to my
21 attention, that area. And then -- either then or it
22 was later brought to my attention that they wanted
23 to see what it looked like without any alluvial
24 wells in there and try to focus solely on the
25 Ogallala. And so that was -- I went through --

1 most of our wells have a geologic code that
2 describes what material they are pulling it from;
3 the Ogallala, or in this case the much younger,
4 shallower alluvial sediments.
5 So I -- those ones that I knew were
6 alluvial, we took those out. And some of those, I
7 had to review by hand based on the well data and
8 whatnot. And we ended up taking those out and
9 repeating the entire interpolation process. And
10 that is version three.
11 Q Okay. And so version three is the data that is the
12 most conservative in the sense of the most accurate,
13 but taking out the data that might not really help
14 us figure out what the groundwater contours are?
15 A It would be a lot more focused solely on the
16 Ogallala.
17 Q All right.
18 A And it ignores the -- you know, there is some
19 connection with the alluvial systems, but it is felt
20 to be pretty small, pretty light layers in between.
21 So we take those out of consideration. And most of
22 those, honestly, were outside the district anyway.
23 Q And so -- you and I had a conversation about this at
24 the Governor's Conference --
25 A Uh-huh.
Q -- and I asked you which set of data to use and you suggested to use version three?

A Yes.

MR. TRASTER: And for the record, that is the version I used.

HEARING OFFICER BARFIELD: Okay.

Q (BY MR. TRASTER) So I am going to show you what is marked as Exhibit -- and I can't remember --

HEARING OFFICER BARFIELD: I think it was D.

Q (BY MR. TRASTER) So I am going to show you what has been marked as Exhibit D, and I have that up on the screen.

That, again -- you were here this morning and I am sure you were enthralled by my direct examination and so you know what I am -- that it is that I am showing you here. It is the section level data using the values that -- or the colors that the GMD used.

Mr. Dees asked you several questions about the confidence level at the township level. But is it your -- I mean, isn't it your understanding that that is the data they actually used to come up with their allocation?

A Yeah. Yeah, and I am confident at the section level, too. Again, it is more -- it is more -- is there -- whatever that subunit area is, how does that relate to my input points.

Q Okay.

A And it doesn't matter if it is a section or a township; if I don't have as much wells in there that interpolated surface is trying to come up with values for, then I have less confidence in that.

Q All right. So looking back at your testimony and the map on the back in your testimony, there is an area that is in green in the center part of Sherman County, if you get --

A Yes.

Q That is on Exhibit D. And that area on the maps in your -- on your testimony, it doesn't have very many wells in it?

A No wells, yeah.

Q And so that area, you are not very confident about, if I am understanding. I don't want to put you -- I want to -- let me ask you.

A That is right.

Q You don't have a lot of confidence in that area, but you have more confidence in the area where there is a higher density of wells?
MR. TRASTER: I am going to object. It assumes facts not in evidence. And that is not the way they did it. They didn't do it by township; they did it by section.

HEARING OFFICER BARFIELD: Let me -- you are the one that sort of brought up the section levels. That is what your data is.

MR. TRASTER: Well, but I am just -- I am recording my objection that it assumes facts that aren't in evidence.

HEARING OFFICER BARFIELD: Okay. I will go ahead and let the question be answered, but --

MR. TRASTER: Sure.

HEARING OFFICER BARFIELD: -- with that objection.

MR. TRASTER: Absolutely.

A: Can you ask that question again?

Q: (BY MR. DEES) Sure. So -- and maybe I can do it better than I did the last time.

So by using townships -- and townships are bigger than the sections, right?

A: Yeah.

Q: Okay. By using townships as your geographical boundary that encourages additional points of data, because you have additional test wells and because that allows for those additional data points, it increases the accuracy of the information that you would have on a large scale?

A: I don't know if I would say it increases the accuracy. It increases my confidence level.

Q: Okay.

A: Because it is just -- again, you are dealing with an interpolated continuous surface, and so you are only going to be accurate in terms of how you aggregate that up or down. And I don't think it necessarily -- it gives it maybe a bigger -- a better representation -- a greater probability of representing what is actually accruing within that sub area at a township level.

Q: I am glad you answered the question I wanted to ask.

REDIRECT EXAMINATION OF BROWNIE WILSON

BY MR. DEES:

Q: By using the township levels, does that ensure that you have enough data points that you need to make accurate determinations?

A: It doesn't ensure it; it just helps. It is a bigger area, so it covers more points. Q: So it increases your probability that you are going to have a more accurate picture because of the greater distance?

A: I am going to object. It assumes facts not in evidence. And that is not the way they did it. They didn't do it by township; they did it by section.

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FURTHER REDIRECT EXAMINATION OF BROWNIE WILSON

BY MR. DEES:

Q. Mr. Wilson, are you the one that created that map?
A. Yes.
Q. Okay. And it is a true and accurate representation of what -- that map is a true and accurate representation of what you created?
A. Right.
Q. Okay.

MR. DEES: Those are all the questions that I have on that. And I think at this point we can just enter it into evidence, unless Mr. Traster has other questions about it.

FURTHER CROSS EXAMINATION OF BROWNIE WILSON

BY MR. TRASTER:

Q. It is old data. I mean, it is data from the time frame and -- right.
A. I think I made two of them. I think I made that one in conjunction with the one from the 90s when the decline rates are different.
Q. Sure.
A. Yeah.
Q. But it shows that there are areas that have a large saturated thickness a long time, whether it is 250 years or a hundred; it is a long time?

A. Relative to the decline rate for that period, yes.
Q. Exactly. Thank you.

MR. TRASTER: I move for the admission of Exhibit M.

HEARING OFFICER BARFIELD: All right. So admitted.
MR. TRASTER: Thank you.

HEARING OFFICER BARFIELD: Thank you. You may step down, Mr. Dees?

MR. DEES: We just have a couple of board members that have been gracious enough to come and make some comments. Who wants to go first? Brent Rogers, President of the Groundwater Management District Board. He will go first.

(Mr. Rogers was sworn.)

TESTIMONY OF BRENT ROGERS

I am Brent Rogers, GMD board president, and I represent Sheridan County. I live at 322 North Road 30 N. I farm and irrigate in the Northeast part of the county as well as western Graham County, so I am in that finger that sticks out clear on the eastern side.

I have no restrictions with this proposed LEMA. Although I am not directly restricted, I want to do all I can in this LEMA to conserve because it

MR. DEES: I don't have any questions. I don't know if Mr. Traster has any.

MR. TRASTER: Just briefly.

DIRECT EXAMINATION OF BRENT ROGERS

BY MR. TRASTER:

Q. Were you here for Ray's testimony?
A. Yes, I was.
Q. And you heard it all?
A. Uh-huh.
Q. I mean, is -- do you have anything to add to that or take away? Is there anything that I am not suggesting that he got it wrong, but I am just wondering if there is anything that you want to supplement or add to or --
A. No. I -- can I make a comment?
Q. Yeah.
A. I think something that just struck me, finally, in the last several hours sitting here, looking out across this audience.

If you take all the lawyers and all the representation by DWR and all the organizations that are here, the Kansas Corn Commission, and you take them out of this scenario, how many people are actually here as water users? We have 3,600 water rights. And we see this at a lot of our meetings.
MR. TRASTER: No further questions.

HEARING OFFICER BARFIELD: All right.

MR. TRASTER: No further questions.

HEARING OFFICER BARFIELD: All right.

Thank you very much. I would like to take just a five-minute break so we can sort of come up with our plan from here. So we will reconvene at 4:20.

(REcess taken at 4:11 p.m. Resumed at 4:24 p.m.)

HEARING OFFICER BARFIELD: We will go back on the record.

Mr. Dees, you are done; is that correct?

MR. DEES: Yes.

HEARING OFFICER BARFIELD: Very good. So, Mr. Oleen, if you would like to go ahead and call your witnesses.

MR. OLEEN: Again, my name is Aaron Oleen, attorney for the Division of Water Resources. And at this time, we call Mr. Kelly Stewart to the stand.

(Mr. Stewart was sworn.)

Mr. Stewart, can you explain a little bit about your office's involvement -- to...
what extent your office was involved with the LEMA
that we are here discussing today?
A  Okay.  Well, over the course of the last two years,
my office -- either myself or another staff,
we attend every board meeting.  We like to go to
every board meeting to stay abreast of what the
board and staff are discussing.  We are often in a
position where we answer questions.  You know, we
have a lot of interaction with staff and board on a
regular basis.  And, you know, we have attended
basically every meeting leading up to this LEMA
proposal.
Q  Did your office instruct or recommend that the GMD4
initiate the LEMA proceeding?
A  No, we did not.  That was a board of directors'
decision to move forward on that proposal.
Q  You said that as part of you or your staff attending
the GMD4 meetings on this LEMA issue that -- did you
say you provided some support in connection with
their formulation of this proposed LEMA?
A  Well, from the aspect of looking at the data that
they had come up with, analyzing their spreadsheet
to see if we agreed with the numbers, and just a
little bit of cross-checking.
Q  You said some -- or you just now mentioned some
analysis.  Were you referring to -- well, one
moment.
MR. OLEEN:  Chief Engineer, which exhibit
designation is the actual proposed LEMA?
HEARING OFFICER BARFIELD:  It is included
within A.
MR. OLEEN:  Okay.
Q  (BY MR. OLEEN)  The proposed LEMA's goal of saving a
certain amount of gallons over a period, are you
aware of that stated goal, Mr. Stewart?
A  Yes.
Q  And what is that stated goal, to your knowledge?
A  Well, basically their goal is to limit the total
amount of pumping in the townships that are being
restricted to 1.2 million acre-feet of water over a
five-year period.
Q  And did you say that your staff did some analysis of
whether the proposed LEMA's corrective controls will
meet that goal or not?
A  Yes, we did review that data, or my staff did review
the data, and we agree, it does appear that that
goal can be met under the proposal.
Q  Did your staff assist with any informational website
tools that the public could consult as part of their
being informed about this LEMA process?
A  Right.  Yes, our staff did work with GMD4 and
developed a tool where you could plug in your water
right number and look up your potential allocation
under the LEMA.
Q  If the Chief Engineer chooses to designate this
proposed LEMA as it is currently proposed, or even
in any form really, will your office provide any
assistance to the GMD with respect to insuring that
the LEMA collective controls are followed?
A  Yes.  We are prepared to work together with GMD4
and, you know, manage the LEMA, oversee the
allocations, work with the public, compliance and
enforcement.  You know, we are prepared -- we are
staffed to do that.  In fact, we even added a
special position in Stockton whose primary duties
are to work with GMDs and also folks interested in
water conservation areas.  So we are prepared to do
that.
Q  Is it the opinion of the Division of Water Resources
that this LEMA will be successful in meeting its
stated goal?
A  Yes.
MR. OLEEN:  No further questions.
HEARING OFFICER BARFIELD:  Okay.
Mr. Dees, anything?
Q. Mr. Letourneau, have you been here in the audience throughout today's hearing?
A. Yes.
Q. Did you hear some testimony or mention given of the prior appropriation doctrine?
A. Yes.
Q. Sometimes it has maybe been referred to today as "first in time, first in right"?
A. (Witness indicated.)
Q. Is that a yes?
A. Yes.
Q. I can't recall whether one of the witnesses said this, I think so, but I won't -- so I won't phrase the question this way.
A. If this LEMA is designated as currently proposed, will that be the end of the prior appropriation doctrine?
Q. Can you explain what you mean by that?
A. Absolutely. Water rights in Kansas have a priority based on the time the application was filed. And this proposed LEMA is a management plan that establishes allocations. Those allocations were going to be across the board, not based on priority.
Q. But you heard priority first in time, if any. And we would make a determination of what percentage then that junior was impacting the senior's water right and we would curtail pumping based on that percentage.
Q. So this LEMA as proposed, with its different allocations based on different townships, that will not prevent a junior -- a senior water right from claiming -- from being able to claim to your agency that an impairment exists? They will still be able to make that claim and you will still analyze that claim?
A. Absolutely.
Q. And if you find that impairment has occurred by the junior, you will perform some sort of action to honor the priority of the senior; is that correct?
A. Correct.
Q. If someone is issued a certificate of appropriation, does that guarantee that they -- well, let me back up. Strike that.
A. If someone is issued a certificate of appropriation, they are given an authorized quantity; is that correct?
Q. Is that a guarantee that they will always be able to withdraw that quantity of water from the aquifer?
A. No. Just because you have a water right, it doesn't guarantee you have water.

1. first in right and things. This LEMA does not touch the first in time, first in right for priority if impairment would occur. If there was interaction between two water rights, then the junior water right will still be curtailed to meet the senior water right's needs.
2. Q. Okay. So looking -- currently on the projection, we have Attachment 1 to the GMD's proposed LEMA. And this is their map that shows the different colored townships, correct?
A. Correct.
Q. So I am going to ask you to -- for example, look at any two townships where there are two different colors that are adjacent to each other. Okay?
A. Okay.
Q. If a senior water right is in the more restrictive of the two townships and the junior is across the township line on the less restrictive of the two colored townships, if the junior claims to DWR that -- I am sorry. If the senior claims to DWR that the junior across the township line is impairing the senior's water rights, what action will the Division take?
A. Actually in that case, we would conduct a pump test to see how much interaction between the two wells, if any.
coordinator, was that title. Then as -- because
that had a civil penalty attached to it, when our
laws were changed then for civil penalty authority,
I got handed that also. So I was in compliance,
enforcement and water use for a number of years.
Q So reviewing new appropriations, compliance and
enforcement, and then in charge of the whole
program, generally?
A Yeah. Then, David, I got added -- while I was
working on new applications, I also worked on change
applications. So --
Q Okay.
A I worked on everything but the certificate.
Q All right. So the Division of Water Resources has
had a number of -- very briefly, there was -- in
1999, there was a statute change and DWR took its
policy and procedure manual and put it into
regulations; you were familiar with that process and
how that came about?
A Yes.
Q Generally speaking, tell me about the policy and
procedure manual versus the regulations.
A Okay. And I will just state it based on how I
understand it.
Q Yeah, absolutely.
A We -- when I first started, we had two large books,
still have and I still maintain. Denise Rolfs
[phon] was David Pope, the previous Chief Engineer's
secretary. She maintained what was called policies
and procedures established from the Chief Engineer.
And those were policies that we used then
to, you know, process new applications, change
applications, certificates, on how we did things.
Well, then in 1999 the law changed from when we were
the Board of Agriculture and became the Department
of Agriculture. And we -- our secretary then got
some administrative authority. It is my
understanding then our policies and procedures did
not have the force and effect of law, so we had to
put those in rules and regs.
Q Okay. I think that is enough. It is kind of fun to
go into the details, but let's not.
A Okay.
(Marked Exhibit N, Exhibit O, Exhibit P,
Exhibit R.)
Q (BY MR. TRASTER) So I have handed you a series
of -- this stack of documents. The top document is
Exhibit N, as in Nathan. Is that an example of a
policy of -- the kind of policies that were in place
that were in this -- in these two notebooks?
A Correct.
Q And so if you compare that map to the last
paragraph, the last indented paragraph in Exhibit N,
all of GMD4 is west of the Township 20-21 line,
correct?
A Correct.
Q So at the time this policy was in effect, every
water right that is certified got reduced if it was
higher to two and a half -- two and a quarter
acre-feet per acre, correct?
A Yes, if it was higher.
Q And if it was perfected at a lower quantity, then it
was perfected, that was the limit. Okay. Can you
take a look at Exhibit O, which is the next document
in the series?
A Yes.
Q And that is, again, the same policy, 83.3 [sic], but
it supercedes the undated version that is in
Exhibit N, correct?
A Correct.
Q And it reduced the quantity in GMD4 and other areas
to two and a quarter to two acre-feet per acre,
right?
A Correct.
Q And take a look at Exhibit P. And this is dated in
<table>
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<th>Page 257</th>
<th>Page 258</th>
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<td>Q -- when you first came? So it was a two-mile radius circle and it was two percent?</td>
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<td>A Yeah. Then we were very fortunate in the new applications unit because we actually would make sure that that application was in proper form and we sent it out to the Groundwater Management District for their recommendation.</td>
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<td>Q Sure. And so all these permits that were issued either up until '91 would have been for two acre-feet per acre, and then later it was -- when the regulation was amended, it went to 1.5, right?</td>
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<td>Q The statute requires him to make findings of fact?</td>
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<td>Q And in each one of those cases, he issues a cover letter; does it not?</td>
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<td>A Yes.</td>
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<td>Q And the cover letter will say something to the effect that we find that the quantity is reasonable and if you -- let me make sure I -- in looking at Exhibit R in that stack -- and I will represent to you that these came out of my files. They are not necessarily in GMD4, but they are typical letters -- well, they are letters that came out of my file.</td>
<td>Q And the cover letter will say something to the effect that we find that the quantity is reasonable and if you -- let me make sure I -- in looking at Exhibit R in that stack -- and I will represent to you that these came out of my files. They are not necessarily in GMD4, but they are typical letters -- well, they are letters that came out of my file.</td>
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<td>Q Sure. But you are aware that there was a plan depletion policy in GMD4?</td>
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<td>Q And those findings include good faith, proper form, beneficial purpose, within reasonable limitations, one [inaudible] use and doesn't create [inaudible] or unduly affect the public interest, right?</td>
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<td>Q Those are the findings that he has to make before he can issue a permit by statute, right?</td>
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<td>A Right.</td>
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<td>Q And so when he does that and somebody perfects the water right, that water right has characteristics, doesn't it? It has a priority date, it has a file number, it has a rate, it has a quantity, it has a place of use, it has a point of diversion, it has like eight or nine characteristics --</td>
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<td>MR. DEES: I concur in that objection.</td>
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<td>HEARING OFFICER BARFIELD: All right.</td>
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<td>Very good.</td>
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<td>Q (BY MR. TRASTER) You have read the Clawson case?</td>
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Q. If you got a position to coordinate and help with this LEMA, but it hasn’t been approved yet, can’t one conclude that it is complete?

A. No. I can -- to explain our plans on staffing. I was on the Governor’s Water Vision Team. And we went out, I don’t know, 500 meetings, I think, is the number of meetings we had with thousands of people. And what we heard was we need to do something and we need to do it locally. And so what we -- then knowing that the LEMA process would require additional staff time from us and then also the water conservation areas was going to require additional staff time from us, so it wasn’t just thinking that this LEMA is going to go through; we have got multiple conservation plans that we needed additional staff for.

Q. And that was pretty much what Kelly testified to as well, right, that -- well, it was more than that. But in your written testimony that you submitted, you say it is a dedicated staff person with the primary responsibility of assisting within the field office area, including GMD4 stakeholders, in developing and administering LEMAs and water conservation hearings. I mean, really it looks like you hired somebody to administer this LEMA, even though it hasn’t been approved yet? I am just telling you how it looks. I am not -- I mean, I am just saying. Do you see what I am saying?

A. Yeah. We do, but we also know that we will have water conservation areas also that -- where we needed help.

Q. All right.

A. Well, and I don’t know if we are -- we are not actually reducing the water right with this LEMA.

Q. Right. I understand that.

A. It is a management plan that sets an allocation.

Q. You know, there is -- I do know that we can’t retain jurisdiction, but I don’t know about reductions. I will be honest about that.

Q. All right. That is fine. So --

A. Well, and I don’t know if we are -- we are not actually reducing the water right with this LEMA.

Q. Right. I understand that.

A. It is a management plan that sets an allocation.

Q. You can within one or two years probably, but not every year for five years.

Q. Right. Okay. But -- and without this, this water right gives you the use -- the ability to divert the full quantity every year, not only for five years, but until there is no more water available, right?

A. Right.

Q. If you want to do that. If that is -- and that is the tragedy of the comments that we are dealing with in Western Kansas?

A. That is correct.

Q. In your written testimony, according to -- well, how many LEMAs are there now; do you know?

A. One.

Q. Just one?

A. Correct.

Q. And that is in the Sheridan 6?

A. Yes.

Q. Okay. And there are a lot of others under consideration?

A. Not LEMAs. We have got a number of water conservation areas under consideration, but this is the only -- oh, there is another one that is being considered in GMD5.

Q. There are some on the horizon?

A. Correct.

Q. People are discussing this?

A. Yes.

Q. And in your written testimony, you say that you have hired staff to coordinate this, this LEMA, if it is -- is that position filled?

A. Yes.

MR. TRASTER: I don’t have any further questions.

HEARING OFFICER BARFIELD: Very good.

Thank you. Any follow-up? Mr. Oleen?

DIRECT EXAMINATION OF LANE LETOURNEAU BY MR. OLEEN:

Q. Mr. Letourneau, do you know when the LEMA statute was passed?

A. I can look it up. 2011, maybe.

HEARING OFFICER BARFIELD: ’12.

A. ’12? Okay.

Q. (BY MR. OLEEN) Was it passed after all these -- I think it was Exhibits N through R that Mr. Traster referred to, some old policies and old letters. Was the LEMA statute passed after those exhibits were created?

A. Yes.

MR. OLEEN: No further questions.
HEARING OFFICER BARFIELD: Very well.

Mr. Dees, anything?

MR. DEES: No.

HEARING OFFICER BARFIELD: Okay.

MR. TRASTER: No further questions.

HEARING OFFICER BARFIELD: Very good. I just found one correction in your testimony. I don’t know when you became program manager, but it was 2007. You were in place when I became Chief Engineer. Maybe it was during 2007. I am not sure.

All right. Anything else from the DWR?

MR. OLEEN: No further witnesses from DWR.

MR. TRASTER: We call Bert Stramel.

HEARING OFFICER BARFIELD: All right.

Bert Stramel.

THE REPORTER: Did you have an Exhibit Q?

Was there a Q?

HEARING OFFICER BARFIELD: Yeah. So I guess we didn’t deal with the exhibits. Do you want all the exhibits entered?

MR. TRASTER: I move for the admission of the exhibits.

THE REPORTER: I don’t remember Exhibit Q.

HEARING OFFICER BARFIELD: Okay. So your name and address.

BERT STRAMEL: Bert Stramel, 1267 K25, Colby, Kansas. I live and farm here in Colby.

DIRECT EXAMINATION OF BERT STRAMEL

BY MR. TRASTER:

Q And you are --

THE REPORTER: Hold on. I haven’t sworn him in yet.

(Mr. Stramel was sworn.)

Q (BY MR. TRASTER) You are one of the intervenors in this case?

A I am.

Q And did you give us an address? You might have.

A Yeah. 1267 K25, Colby.

Q And just like we have done elsewhere, go ahead and say what you need to say.

A I would like to put just a little bit of a personal aspect to this.

This has probably been the most informational meeting we have had on this whole process the whole time. I don’t know if that is because you are in charge or what the case is.

But as a farmer, we start everything with a process and we try and know everything we can about that process going forward when we pick out hybrids, when we pick out machinery that we use. We try and get as much knowledge and as much data about everything and we try and max it out to the absolute max that we can in order to be profitable and efficient.

And in this case, many of the things we asked for at the very beginning, like increased measuring points or increased data points so that we can actually find out where we can do the most good and do the most good, and to back up some of these maps have been ignored from the beginning.

Many of us today have talked about this being a real property right, and I believe it is. It has value. I have had the City of Colby offer to buy some of mine. And they didn’t want the land, they wanted the water and access to it. And that shows that it has a cash value.

And I have five kids at home and I want them to be able to have all the types of enjoyment and use of the water that we have now. But I also want them to have other rights that have been granted to them. And I don’t foresee, just because it is for the greater good, to take away a right or restrict it. I feel that is a slippery slope.
It is like today, this was the first time the 25 -- no more than 25 percent reduction was actually explained to an extent that it could be understood.

We have never had a full explanation of how this appeals process is going to work. I have several of my personal water rights that I know are going to need to go through this appeal, and I am not sure how well I am going be served by it without knowing the process, without knowing who is going to be in charge of it, if it is going to be this current, if it is going to be the current staff. I mean, who knows what future staff or future boards are going to look like. And to just walk into this without having some of these questions answered is reckless. We wouldn’t go into our fields and plant something without having some idea of what to expect.

I am closely related to two of the board members. And I don’t know how that affects it, but there could be some family issues there and I am not sure how that is going to work out.

Also, some of the board members were competitors. We have bid on the same property. We work in the same neighborhoods. We bid on the same contracts or same leases. And there is going to be some dynamics in that. And only being able to appeal to staff -- and then how much further you can take it past that, there is no -- there is no third party. There is no jury of your peers. It is just too much to give up without knowing in the beginning what we are getting into.

A lot of the people aren’t here today, and it is because a lot of people -- this is a big year. We have had two years of declining farm incomes, and there is a lot of people just hanging on. And if you didn’t fully understand it, which I think there is a lot of people that don’t fully understand, you are going to go home and you are going to take care of your home.

So in those regards, that is most of my -- my deal. I just -- today was -- I would almost ask you to hold another one of these hearings because of so much information that has come out that never came out in the informational hearings we had before this.

MR. TRASTER: Can you mark that as Q?

THE REPORTER: Yes.

(Marked Exhibit Q)

Q (BY MR. TRASTER) I am going to hand you what has been marked as Exhibit Q. Can you identify that?

A I believe this is the handout we were given at the informational meeting here in Colby.

Q And so when you turn it over and look at the front page down in the lower corner, there is a -- if you will turn it over, there are some dates for meetings. Do you see those?

A Yes.

Q And those are the same dates that were announced earlier today, when the public meetings were, correct?

A That is correct.

Q And so what is on the back of that document?

A It is just a few highlights. It has a couple of bullet points here of the plan.

Q Let me take a look here real quick. So you were here for Mr. Luhman’s testimony, right?

A I was.

Q And he testified that the plan itself with all the detail was published on their website about the time or in the time frame when it was submitted to the DWR for review. Your heard that?

A I believe so.

Q Okay. And so this document that you are seeing now, is that -- did you receive or were you aware of other documents between the Colby meeting and that -- published on the website that gave you the specific details that are in the plan now?

A I may have been given a handout at a GMD4 monthly meeting. Other than that, no, there was no handout of the actual LEMA plan --

Q Okay.

A -- prior to that.

Q The plan was explained at the these public meetings?

A In pretty big generalities.

Q Okay. Tell me about that.

A Well, after reading the plan now and looking back, there was no discussion as to the meter logging, where you would need to, I believe, keep an accurate log of your -- of all water meters every two weeks. And there was no mention that if that log was incomplete or inaccurate and you have a meter failing, that you could possibly lose an entire year's allocation because of it.

Q Okay. And this -- you mentioned the appeal process.

I mean, it is to the staff and then the board. But if the board votes against you, there is no further process that you are aware of?

A Not to my knowledge. Even reading the LEMA document now, I believe that it is an appeal to staff and
then an appeal to the board.

Q. And that is it?

A. And that is it. I don't know where else you would go after that.

Q. All right. Very good.

MR. TRASTER: No further questions. Is there anything else you need to add? Okay. No further questions.

HEARING OFFICER BARFIELD: All right.

Mr. Dees?

MR. DEES: Real briefly.

BY MR. DEES:

Q. So is it your testimony that you did attend the Colby public meeting where -- is it Exhibit S --

A. Q.

Q. Q. Where Exhibit Q was handed out?

A. Yes.

Q. Okay. And is it your testimony today that you have attended multiple board meetings over the last, I don't know, two years?

A. Yes.

Q. Okay. And at those board meetings, have there been discussions about the LEMA?

A. Yes.

Q. Okay. Have there been open forum sessions where you could make personal comments?

A. Yes, you can make comments.

Q. Have you made comments?

A. I have.

Q. Okay. Have they been about the LEMA?

A. I have.

Q. Okay. As well as, I believe -- did you attend the initial hearing in front of Hearing Officer Owen?

A. I did.

Q. Okay. And did you make -- did you submit testimony there?

A. I did. I did oral and written testimony.

Q. Okay. And then you have come today and you have presented oral testimony in -- I am not sure if you have presented written testimony. Have you --

A. Not today, I haven't.

Q. Okay. But you may do that or you may not, depending on what you want to do?

A. Correct.

Q. Okay. And you did say that you had thought you had been given a handout at the GMD4 board meeting that had more specifics of the plan; is that correct?

A. It is -- when -- I think at the meeting that they -- the motion was presented to forward it onto the

Chief Engineer. I believe there was a handout then --

Q. Okay.

A -- that we were able to take a look at.

Q. Were you at the annual -- excuse me, the 2017 annual GMD4 meeting?

A. Was that in Goodland at the water -- yeah, I was there.

Q. Okay. And was the LEMA discussed there, that you know of?

A. Yeah, I believe it was.

Q. Okay. Have you ever asked for the plan, outside of being handed the plan at that GMD4 board meeting where it was then approved?

A. I am not sure what you would have asked for at the time. I think it was still under -- under construction or under --

Q. Okay. So --

A. I don't know -- I never had a rough draft or anything, that I know of.

Q. Okay. Did you ever ask for a rough draft?

A. No, I didn't.

Q. Okay.

MR. DEES: Thank you.

HEARING OFFICER BARFIELD: Mr. Oleen, anything?

MR. TRASTER: No.

MR. TRASTER: Mr. Traster, anything further?

MR. TRASTER: No further questions.

HEARING OFFICER BARFIELD: All right.

Thank you very much.

BERT STRAMEL: Thank you.

HEARING OFFICER BARFIELD: All right. Do you have anymore witnesses?

MR. TRASTER: We are done.

HEARING OFFICER BARFIELD: You are done?

Okay.

I guess we didn't talk about closing remarks. Do you-all want to make any closing remarks? You obviously have the opportunity to provide some written comments.

MR. DEES: We have a --

HEARING OFFICER BARFIELD: Yeah, I was going to see if anybody else wanted to make any public comments, if that is what you are getting to there.

So that concludes our formal process. I will, before we sort of move to conclusion, ask if there is any public that would like to make any
I have been a past irrigator, a task yet. I have got a neighbor that I seriously think about doing that with. But to drill a well is 6 to $8,000. I have been through that. So we have spent some money dealing with those things.

The one thing I want to do is ask the question to people about water quality versus water quantity. The reason I bring that up is I am also a city administrator for a city superintendent for the City of Brewster. We are getting ready to spend $1.5 million, possibly, on a water treatment plant, if we can't find an alternative source. And that comes into the issue of agriculture, because it is a nitrate contamination problem.

So I would tell some of you that less than three percent of the world's water is potable, is good to use, and that the Ogallala Aquifer is some of the best in the world. We found out that in the 1940s, I believe it was, there was an article that came out when they kind of discovered the Ogallala Aquifer and they thought it was an inexhaustible supply of water. It was designed for people to put back and maybe go home tonight and just Google a search "Kansas" and then scroll up and look at the pivots. And Nebraska is a unique place. They

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MIKE SCHULTZ: My name is Mike Schultz. I live in Brewster, Kansas, 118 6th Street, S-C-H-U-L-Z-T.

(Mr. Schultz was sworn.)

MICHAEL SCHULTZ: I thank you for having me here today. I want to thank GMD4 for this work. I have been serving on the [inaudible] River Basin Advisory Board for the governor of Kansas, I guess, or the Groundwater Management District. So I have been involved in the water industry for years and years. I have been a past irrigator, a farmer/rancher. I own land here in Thomas County. My family homesteaded in the 1890s. By the way, we have never had an irrigation well on our own land. We have rented irrigation land before. I have done that.

I would ask that, anybody here ever not had water? Go turn the spigot on some day and find out. I am a stock guy. I own a cattle operation. And I am really concerned about the impairment clause in the water law because I have been impaired by irrigation. I have not taken it to task yet. I have got a neighbor that I seriously think about doing that with. But to drill a well is 6 to $8,000. I have been through that. So we have spent some money dealing with those things.

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actual increased the water there versus us -- declining usage here in the United -- in Kansas. So that is a big concern to me of what’s going on.

But if you look at the problem, it is overproduction. We have people that have abused the water rights. I know in the ’70s, we had ditch irrigation and we wasted tons of water. Everybody thought it was never going to end. Well, guess what? The days are here. We have got to pay attention.

I think, too, also back in the early days irrigation was developed to help with the livestock needs in these counties out here in Northwest Kansas. One of the biggest reasons the irrigation took off was for livestock. It wasn’t so much it produced $2.90 corn, but that is what we have got to deal with. Border [inaudible] does that.

You know, I see the biggest problem in the water deal -- and, you know, I have made the statement several times. We are getting into a position of trying to curb water use when we have got people that think they are going to farm every acre in the county and they are going to feed the world. And 80 percent of the world’s population makes less than $1,200, and we are not going to do that.

So my deal with the water concern is -- and I know because I -- but at $8 a thousand for -- even Eastern Kansas towards the Hays/Wilson area, you do the math on a simple 120-acre pivot. At $8 a thousand -- and come tell me what your corn is worth at $8 a thousand. And it takes up to 3,000 gallons of water to produce a bushel of corn today. And at $8, you do the math.

So I guess that we are all coming at it with a little different deal and a pretty conservative deal. And I think the LEMA even needs to be more strict. If we don’t see a decline stopping, we have got to go to the next level. And so I want to lay that out there.

I heard a comment made today that, you know, maybe people are being treated worse. And I would like to say this. You think about treated worse. What happens when the public runs out of water? And, you know, a public vote on this issue -- right now, we can control our own destiny. I don’t think people realize what is going to happen if it goes to a vote.

I deal with the city municipal side and I talk to people every day about it. It is a big
concern and you want to be careful what you wish for.

We have about -- I think they said the people in the world, you know -- water abuse and that is what you get into when you [inaudible] quality water versus non-potable water. And I can't stress enough the importance of taking care of what we have got here.

I hope we continue. My kids -- I would like to have people come back. I have people that work for me. I am just like everybody else. I know that these rents are going to get us in trouble. We have got $2.90 corn and people have got to pay their bills. I know what they are fighting. It is not a big deal. It is financially. I know. I have been in the deal. I have been in the stock market in the '80s. We lost a lot of money. You make decisions that sometimes don't work out.

So if you are going to over-produce and waste the good water, I just can try to warn people, pay attention. It is worth more than the oil or anything underground, what you produce on top. But I think water is very important.

So with that, I just wanted to make sure people understood how important water is.

HEARING OFFICER BARFIELD: Thank you very much. Any questions from either side?

MR. TRASTER: No questions.

MR. DEES: No.

HEARING OFFICER BARFIELD: All right.

Thank you. Last call. Any public comments out there? Yes.

JACE MOSBARGER: Jace Mosbarger again. Do you need --

THE REPORTER: You have been sworn.

HEARING OFFICER BARFIELD: Yeah. I will just remind you, you are under oath.

JACE MOSBARGER: Okay. So a lot of people are really struggling with when some of this information came out to the public. I still state my recollection of the information and actual language of the LEMA.

So the first time I had open access to the actual language of what the fleshed-out LEMA plan was going to appear to be was the day of the annual meeting -- the morning of the day of the annual meeting in a back room behind closed doors with some coffee and donuts at the Northwest Kansas Technical College Union.

This was also the day of -- after handing it out, 15 minutes later we had a public session and then went back behind the doors and approved it to be sent off to the Chief Engineer. So that is my public knowledge of how -- what I was exposed to to actually see the language and protest the -- the public meetings just were not very detailed. Like everybody said, they were so vague. Nobody really even knew how to find it or how to approach it because we didn't understand it.

Today, like Bert said, was the first day we have ever understood that 25 percent and how that plays into our water right. And for a lot of these water rights, that is a very important issue of the issue.

HEARING OFFICER BARFIELD: And what was the date of that annual meeting; do you know?

JACE MOSBARGER: Ray would -- somebody else would know the actual date.

RAY LUHMAN: It was in February, but I couldn't tell you the date without looking at it.

MR. TRASTER: If it was the day it was approved, it was June 8th.

HEARING OFFICER BARFIELD: Well, there were two -- there was a version sent -- they sent a version in February, and so it was approved to send.

So that is probably the version.

JACE MOSBARGER: I think it was in February of 2017, the day of the annual meeting.

HEARING OFFICER BARFIELD: Right.

JACE MOSBARGER: It was predate -- or the top of the page said June 8th, or it was, you know, forward-dated to when it was going to kind of be sent off.

HEARING OFFICER BARFIELD: Okay. Sure.

UNKNOWN SPEAKER: When you said "behind closed doors", did you mean like in executive session or just --

JACE MOSBARGER: No. The door was open to the public, but it wasn't easily accessible? As a person -- the public, you kind of needed to know where you were heading; you didn't stumble upon it.

HEARING OFFICER BARFIELD: Right.

JACE MOSBARGER: And I just wanted to go on record lastly to say that I am a third generation farmer in Sherman County with two young boys that have already expressed a high interest in farming and that there are many people like me that would oppose this current LEMA, but have a long-vested interest in this community and this water.

HEARING OFFICER BARFIELD: Thank you. Any
HEARING OFFICER BARFIELD: Yeah. I will get to the record in a minute. That is correct.

MR. DEES: Thanks.

HEARING OFFICER BARFIELD: Very good.

Well, I appreciate everybody attending today. It has been a long day and I appreciate the group here that has participated in the hearing. So let me go ahead and move us toward conclusion.

Again, as we just alluded to, you will be free to provide written testimony, whether you provided oral testimony here or not. Again, back on the back table there is a little card that sort of indicates how you can go about providing that testimony.

Written comments must be submitted or postmarked by December 12th. Anyone may submit written testimony before that date and your comments will be made part of the record of this hearing.

Information is available -- well, those instructions are back there. I already referred to that.

As we receive written testimony, it will be posted on our website. We will also post a transcript of this hearing on our website as soon as it becomes available. The record will close on December 12th, 2017.
STATE OF KANSAS,
THOMAS COUNTY, SS

CERTIFICATE

I, Elaine Shogren, a Certified Court
Reporter of Kansas, certify that the foregoing is a
full and correct transcript of all the oral
proceedings had in this matter at the aforementioned
time and place.

IN WITNESS WHEREOF I have hereunto set my
hand and official seal at Holcomb, Kansas this 11th
day of December, 2017.

ELAINE SHOGREN, CCR