OFFICE OF CONSERVATION STATE OF LOUISIANA

IN RE: GROUND WATER RESOURCES COMMISSION MEETING

REPORT OF MEETING HELD AT MINDEN, LOUISIANA MARCH 5, 2009

Michelle S. Abadie, CCR (225) 261-5109

1	OFFICE OF CONSERVATION
2	STATE OF LOUISIANA
3	
4	IN RE: GROUND WATER RESOURCES
5	COMMISSION MEETING
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8	Report of the Commission meeting held by the
9	Ground Water Resources Commission, on March 5, 2009, in
10	Minden, Louisiana.
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12	IN ATTENDANCE:
13	REPRESENTING THE OFFICE OF CONSERVATION:
14	Scott Angelle, Secretary, Natural Resources
15	James Welsh, Commissioner of Conservation
16	James Burland, Various Trade Assoc. for Industry
17	Eugene Owen, Louisiana Rural Water Association
18	Paul Frey, Louisiana Landowners Association
19	Kyle Balkum, Dept. of Wildlife and Fisheries
20	Bradley Spicer, Dept. of Agriculture and Forestry
21	Bo Bolourchi, Dept. of Transportation & Development
22	Gene Coleman, Sparta Ground Water Conservation
23	Mayor Dan Hollingsworth, Louisiana Municipal Assoc.
24	Mickey Mays, Police Jury Association of Louisiana
25	Jimmy Johnston, LA Wildlife Federation
26	Elliot Colvin, Louisiana Farm Bureau
27	Blake Canfield, Staff Attorney, Conservation
28	Gary Snellgrove, Ground Water Resources Div.
29	Tony Duplechin, Ground Water Resources Division
30	Monique Edwards, Executive Counsel, DNR
	Michelle S. Abadie, CCR

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- 1 GROUND WATER RESOURCES COMMISSION MEETING
- 2 MARCH 5, 2009
- 3 * * * * *
- 4 MR. ANGELLE:
- 5 Good morning. We'll go ahead and call the Ground
- 6 Water Resources Committee meeting to order, and it is a
- 7 pleasure to be in north Louisiana. For those of you
- 8 who haven't figured it out by hearing me speak, I am
- 9 not from Webster Parish, nor Caddo. You've got to go
- 10 real far south to find somebody that talks like me.
- I think it is appropriate for us to take the
- 12 Ground Water Resources Commission meeting on the road
- 13 and to travel around the state, as we've done here
- 14 today.
- Before I recognize members of legislature that are
- 16 here with us, I thought it would be appropriate for us
- 17 to ask -- perhaps get a few words, from Mayor Robinson,
- 18 and thank him for hosting us here at the City of
- 19 Minden, as well as the Webster Parish Police Jury
- 20 President, Mr. Charles Walker.
- 21 What would be the appropriate microphone for
- 22 Mr. Robinson to address us?
- 23 MR. ROBINSON:
- 24 We appreciate you choosing Minden to come and
- 25 visit and have this meeting. I'm impressed with the
- 26 crowd. This is great. One of the best crowds that I
- 27 have seen for something like this, so we all know
- 28 there's a definite need to take care of our water.
- We appreciate the Commission for coming here. We
- 30 thank all of you very much, and you're certainly

- 1 welcome to Minden.
- If I can help in any way, please, let me know, but
- 3 the head man is back in the back, and that is Charlie.
- 4 I'll ask Charles Walker to come forward, and he'll take
- 5 care of anything that I can't take care of, because
- 6 he's the big boss.
- 7 MR. ANGELLE:
- 8 Thank you, Mr. Mayor.
- 9 MR. WALKER:
- 10 On behalf of the Webster Parish Police Jury, I
- 11 certainly want to welcome all of you here, and I
- 12 certainly want to welcome all of you here. This is
- 13 quite an honor.
- 14 When you talk about water, we can all talk about
- 15 water, but just remember one thing, without water, we
- 16 can't live. We can do without food for a few days, but
- 17 water, we've got to have. So whatever you bring to the
- 18 table, we appreciate it. Thank you, gentlemen.
- 19 MR. ANGELLE:
- Thank you, Mr. Walker. I appreciate you.
- 21 And I do want to recognize, from Senator Vitter's
- 22 office, Leslie Quinn is with us. Where are you at,
- 23 Leslie?
- 24 Thank you so much for being here. We appreciate
- 25 the good senator's hard work, and helping us with the
- 26 natural resource issues. Please send that word back to
- 27 him. Thank you so much.
- 28 And Rhonda Carnahan, with Parish of Webster, was
- 29 out there greeting us where you had coffee and cookies
- 30 and everything else. The hospitality was great, and we

- 1 certainly appreciate you making us feel welcome here.
- 2 We do have three distinguished members of the
- 3 House of Representatives with us here today, State
- 4 Representative Jim Morris, Sam Little, and Jean Doerge,
- 5 and I would offer the opportunity for all three of you
- 6 to give us a comment or two. I appreciate the
- 7 opportunity to work with all three of you.
- 8 I was with Representative Morris and
- 9 Representative Doerge yesterday in Baton Rouge. I'm
- 10 with them here today, and I asked Representative
- 11 Doerge, "What are we going to do tomorrow," and she
- 12 said, "I don't know, but I'm sure we're going to find
- 13 something that we need to take care of in north
- 14 Louisiana," so right --
- So, Representative Morris, you might want to --
- 16 any one of you want to make a comment or two?
- 17 MR. MORRIS:
- 18 You want to go first? I'm going to let the lady
- 19 go first.
- 20 MR. ANGELLE:
- 21 Absolutely, absolutely.
- 22 MR. MORRIS:
- But I might just say "ditto."
- MS. DOERGE:
- 25 Thank you all so much, and as representative of
- 26 this area, for Webster Parish, I want to welcome all of
- 27 you here, and are so glad to have you all here. We are
- 28 honored that you all would choose Minden and Webster
- 29 Parish to come have your meeting, and I think it's a
- 30 compliment to us, and so thank you very much for being

- 1 here.
- 2 And, of course, we know how important the Sparta
- 3 is in this area, as well all the Spartas across the --
- 4 Sparta and all the ground water across the state.
- 5 And so we appreciate you all being here. Thank
- 6 you so much.
- 7 MR. ANGELLE:
- 8 Thank you, thank you so much.
- 9 MR. MORRIS:
- 10 I too appreciate the opportunity of being here
- 11 today and visiting this wonderful town. I see that you
- 12 all have a lot of things going on outside, with the new
- 13 sidewalk or sewer or whatever it is you're working on.
- 14 However, water is something that is very vital to
- 15 each and every one of us, and it's something we have to
- 16 take seriously, and continuously work very diligently
- 17 and vigilantly on making sure it is protected, not only
- 18 by us, as individuals, but also by industry. And it's
- 19 something that I do take seriously, and something that
- 20 I promise that I will work as hard as I can as a
- 21 legislator to try help you.
- 22 And, again, I thank you for your hospitality.
- 23 MR. ANGELLE:
- 24 Thank you so much.
- 25 MR. LITTLE:
- 26 My colleague did not talk as long as I figured he
- 27 would. He usually talks longer than that.
- I'm Sam Little from District 14, northeast
- 29 Louisiana. We too have part of the Sparta. I have had
- 30 the opportunity for the last about four years to serve

- 1 on the Sparta Commission. I've been a farmer all my
- 2 life, so water is a big part of my life.
- 3 I'm honored to be over here today. I take our
- 4 natural resources very serious. It is a serious issue
- 5 with us across the state.
- 6 I'd like to introduce, if I could, Jonathon
- 7 Johnson. He's with Representative Rodney Alexander's
- 8 office. Glad to see you here today.
- 9 Thank you all very much.
- 10 MR. ANGELLE:
- 11 Thank you so much.
- 12 And, Jonathan, I apologize for not recognizing
- 13 you. Certainly, Louisiana has a great friend with
- 14 Representative Alexander when it comes to these issues,
- 15 and he's been there for us time and time again, so,
- 16 please, send greetings to him from the Louisiana Ground
- 17 Water Commission.
- And, finally, before we get into our business, we
- 19 do have members of the Sparta Commission that are here
- 20 with us. If you would stand, members, and we will
- 21 allow you to introduce yourselves, members of the
- 22 Sparta.
- MS. BENNETT:
- I'm Wanda Bennett from Bossier Parish. I'm a
- 25 member of the Bossier Parish Police Jury, also, so I am
- 26 representing two elements today, the Sparta Aquifer
- 27 Commission, as well.
- 28 MR. ANGELLE:
- Thank you so much.
- 30 Go ahead.

- 1 I'm Steve Lemmons. I'm with the Sparta and
- 2 Webster Parish Police Jury.
- 3 MS. MCDONALD:
- 4 I'm Olevia McDonald. I represent wood products on
- 5 the Sparta Commission, and I'm also part of the
- 6 Louisiana Ground Water Task Force.
- 7 MR. ANGELLE:
- 8 Thank you so much.
- 9 Next.
- 10 MR. MCKINNEY:
- 11 Ted McKinney, representing Ruston.
- 12 MR. ANGELLE:
- 13 Thank you, Ted, good to see you.
- 14 MR. WOODWARD:
- 15 I'm Dennis Woodward, I represent Lincoln Parish.
- 16 MR. LITTLE:
- 17 Sam Little.
- 18 MR. MORGAN:
- 19 Dan Morgan, I am with the Sparta, and I'm
- 20 representing Union Parish Police Jury as the
- 21 secretary-treasurer.
- 22 MR. COLEMAN:
- Gene Coleman, and I represent Claiborne Parish.
- 24 MR. ANGELLE:
- Thank you all for your public service. I know
- 26 that the pay to be on the Sparta Commission is really,
- 27 really great, and I'm sure the retirement benefit
- 28 programs are even better. We do appreciate public
- 29 service.
- I bring greetings to you from the men and women of

- 1 the Department of Natural Resources today. I bring
- 2 greetings to you from Governor Jindal, who is working
- 3 hard every day to make our state a better place to
- 4 live, work, raise a family.
- 5 And today, we have serious business in front of
- 6 us, and that is the business of learning more about the
- 7 State's management of our ground water resources. I am
- 8 confident that we are moving in the right direction by,
- 9 again, having a group of folks who share the passion to
- 10 understand what it is that we need to understand about
- 11 this resource, to bring about the right type of
- 12 management, to make sure that this resource is
- 13 available, not only for us and the uses that we have,
- 14 but, obviously, the generations that follow.
- 15 Well, having said that, what I'd like to do is go
- 16 ahead and get into the agenda. There are a couple of
- 17 things that I would like to do.
- On Item No. 2, with regards to the adoption of the
- 19 minutes, I realize that the minutes from the meeting --
- 20 or most of those minutes, were finally delivered to you
- 21 today. It would not be appropriate, in my mind, to ask
- 22 you to adopt the minutes, not having had the
- 23 opportunity to review them in detail. And I understand
- 24 it would take us about 15 minutes to actually read all
- 25 those minutes, which Robert's Rules of Order would
- 26 require us to do if we haven't given you sufficient
- 27 time. There is nothing in those minutes that require
- 28 approval before us to move forward on another item, so
- 29 I would suggest that what we would do is, we would
- 30 defer action on Item No. 2, and go ahead and place that

- 1 on our July agenda.
- 2 MR. COLEMAN:
- 3 I make a motion.
- 4 MR. ANGELLE:
- 5 Motion.
- 6 MR. COLVIN:
- 7 Second.
- 8 MR. ANGELLE:
- 9 Motion by Mr. Coleman, and a second by Mr. Colvin.
- 10 Any objections to that motion?
- 11 (No response.)
- 12 MR. ANGELLE:
- 13 Hearing none, the motion is adopted.
- On Item No. 3, with regards to the election of the
- 15 vice-chair, at the last meeting, you recall, we elected
- 16 a vice-chair who was the representative from the
- 17 Louisiana Department of Ag and Forestry. I have been
- 18 notified that that representative, because of other
- 19 conflicts, can no longer continue to serve on the
- 20 committee, and Mr. Brad Spicer, who many of you know,
- 21 with the Department of Ag, is here in a permanent
- 22 replacement role. Inasmuch as Ms. Castille is not able
- 23 to serve, it would be appropriate for us now to go
- 24 ahead and open up the floor for nominations and the
- 25 election of a vice-chair.
- It is not automatic that Mr. Spicer would assume
- 27 that role. I have spoken to him, and he's willing to
- 28 do so, but it would take an election of the Commission
- 29 to do so.
- 30 MR. COLEMAN:

- 1 I nominate Brad Spicer.
- 2 MR. ANGELLE:
- We've got a motion by Mr. Coleman to nominate.
- 4 MR. COLVIN:
- 5 Second.
- 6 MR. ANGELLE:
- 7 A second.
- 8 Any objections to that motion?
- 9 (No response.)
- 10 Any other nominees?
- 11 (No response.)
- 12 Any other nominations?
- 13 (No response.)
- 14 All those in favor of Mr. Spicer, please, indicate
- 15 by saying "aye."
- 16 ALL MEMBERS:
- 17 Aye.
- 18 MR. ANGELLE:
- 19 Any opposed?
- 20 (No response.)
- 21 MR. ANGELLE:
- 22 Hearing none, that motion is adopted, and,
- 23 Mr. Spicer, congratulations.
- Okay. Now we get into the meat of the
- 25 presentation. I'd like to recognize Mr. Ben McGee with
- 26 the U.S.G.S., and welcome, Ben, to our meeting, and ask
- 27 Ben to give us a presentation on the major north
- 28 Louisiana aquifers.
- Thank you, Ben.
- 30 MR. MCGEE:

- 1 Thank you.
- 2 Can everybody hear me okay?
- 3 (All affirmative.)
- 4 MR. MCGEE:
- I'm honored to be here, and I was asked to give an
- 6 overview of north Louisiana resources. And I don't
- 7 know if you can really condense that into a small talk,
- $8\,$ but I'm going to try, that's a large area and a lot of
- 9 resources.
- 10 And I guess what I would want to say, at the
- 11 outset is, there is detailed stories behind each one of
- 12 these aguifers and our ground water resources in north
- 13 Louisiana. This presentation is not going to cover
- 14 those in detail, but if anyone has any questions about
- 15 any of this, certainly, call me or my office, and we'll
- 16 be more than happy to provide that information and
- 17 answer any individual questions that anyone might have.
- 18 So, with that, I'm going to try to cover a brief
- 19 overview of our ground water resources in north
- 20 Louisiana.
- 21 As you can see from the picture, there are 11
- 22 aquifers listed in Louisiana, and of those, we're going
- 23 to talk about some of the primary aquifers here in
- 24 north Louisiana, which are the Carrizo-Wilcox, for
- 25 those living in northwest Louisiana, you may recognize
- 26 that; the Sparta Aquifer, of course, I think everyone
- 27 here is probably aware of the Sparta Aquifer, at least
- 28 the name, the Sparta; the Mississippi River Alluvial
- 29 Aquifer, that's not just in south Louisiana, it's also
- 30 here in north Louisiana and a major resource for ground

- 1 water; and then secondary aquifers in our state include
- 2 the Red River Alluvial, the Upland Terrace Aquifer, and
- 3 then finally the Cockfield Aquifer, occurring
- 4 throughout north Louisiana.
- 5 In association with each of these aguifers, I'm
- 6 going to talk a little bit about water use, and that's
- 7 data that were compiled in 2005, by Aquifer, and I'm
- 8 going to flash a few hydrographs, or water level
- 9 graphs, of each of these aguifers on the board to try
- 10 to give you a sense of what the aquifers look like as
- 11 far as their water levels, and how they behave, and how
- 12 they're different.
- 13 This presentation largely relies on two
- 14 publications that the U.S.G.S. cooperated with the
- 15 State on producing, and that was The Guide to
- 16 Louisiana's Ground Water Resources, of which I was
- 17 privileged to be one of the co-authors back in '94, I
- 18 think. And then Our Water Use in Louisiana Report
- 19 which was compiled in 2005, lastly, and is compiled
- 20 every five years for the State, that details the water
- 21 usage that we use both, from ground water and from
- 22 surface water.
- 23 So the first aquifer we're going to talk about is
- 24 Carrizo-Wilcox, and first of all, I just want to point
- 25 out where it occurs. And you'll see a common theme in
- 26 this presentation, in that, I want everyone to kind of
- 27 get an idea about where these aquifers are occurring.
- 28 So you can kind of locate yourself and say, okay, well,
- 29 that's in my area.
- 30 Well, this aquifer, the Carrizo-Wilcox, is located

- 1 here in northwest Louisiana. And people who live in
- 2 Caddo and Bossier and DeSoto Parish, Red River Parish,
- 3 are very aware of the Carrizo-Wilcox, that is the
- 4 aquifer, the ground water resource, from which people
- 5 get much of their drinking water in that area, if
- 6 they're not on a surface water system, such as Cross
- 7 Lake in Shreveport.
- 8 There's also the ground water system that is being
- 9 used for tap to generate water for the Haynesville
- 10 Shale activity, that we're all aware of in northwest
- 11 Louisiana.
- 12 The thing I want to point out on these graphs
- 13 here -- and there's a lot of information. I'm not
- 14 going to go through all of that, but I do highlight
- 15 some information that I'd like to bring out in the
- 16 presentation.
- 17 One is, the Carrizo-Wilcox is low-yielding
- 18 aguifer, because the sand units tend to be thin and
- 19 fine grained, and that really serves to answer a lot of
- 20 the questions about some of the behaviors that we're
- 21 seeing in the Carrizo-Wilcox in relation to this
- 22 pumpage from industry and public supply.
- Okay. Let's go to the next one. I'll tell you
- 24 what, go back one, if you will. All right.
- 25 One other thing I wanted to point out, this report
- 26 was, as I said before, produced in '94. Obviously,
- 27 things have changed since '94, and so I've updated some
- 28 of these numbers.
- 29 Back in '94, there was 2,000 registered wells in
- 30 the Carrizo-Wilcox, excluding domestic supply wells.

- 1 Now, current pull from last week, there are 12,000
- 2 wells registered with the State in this aquifer.
- 3 Go ahead.
- 4 Also, with the Carrizo-Wilcox, water levels from
- 5 this point to -- '94 to now, no long-term change is
- 6 really being seen in the Carrizo-Wilcox. And I know
- 7 when I say that, there are people that are saying,
- $8\,$ well, listen, I know water levels have changed in the
- 9 Carrizo-Wilcox. And they have, but they've been very
- 10 localized changes, for the most part, not regional
- 11 changes. The low-yielding wells, 30 to 150 gallons per
- 12 minute, people may not be familiar with those numbers,
- 13 but that's not a lot of water coming out of a well, but
- 14 those are typical well yields from the aquifer.
- 15 Typically, the quality of the water here is
- 16 typically suitable for drinking without treatment or
- 17 with very little treatment. Of course, locally, it can
- 18 have high iron and also high sodium, so it's not really
- 19 good for irrigation and things of that nature, okay.
- 20 Some updated numbers here. The use, back in '94,
- 21 was 13 million gallons a day. It's up to, per 2005
- 22 numbers, 18 million gallons a day. And most of the
- 23 water is withdrawn from the Carrizo-Wilcox for domestic
- 24 supply, so small well users, mom and pop who have a
- 25 well in the back yard, and that's a domestic supply
- 26 well.
- This is the water use page for the Carrizo-Wilcox
- 28 from the 2005 report, and you can see -- you can't see,
- 29 but the largest user of water in the Carrizo-Wilcox is
- 30 public supply, at about 7.5 million gallons a day, and

- 1 that's closely followed by rural domestic, so the
- 2 little, small, individually, privately-owed wells. And
- 3 the largest user is Caddo Parish, at 5.2 million
- 4 gallons per day, followed by Bossier Parish, and
- 5 DeSoto.
- 6 And these -- the next two slides are really just
- 7 some hydrographs of the typical water level behaviors
- 8 in the Carrizo-Wilcox in various areas. Here, where --
- 9 in Sabine Parish, in the Carrizo-Wilcox, and you see
- 10 quite a bit of fluctuation in the water levels, that is
- 11 primarily because the Carrizo-Wilcox is recharged or
- 12 getting its water from rain falling in the area. So
- 13 when rains fall, it helps to recharge the aquifers, so
- 14 its very driven by the rainfall occurring in these
- 15 areas. So you typically see this jump of several feet,
- 16 possibly, in the Carrizo-Wilcox, and water levels
- 17 fluctuating up and down, but you don't see a trend
- 18 necessarily over time of water levels going down or up,
- 19 okay, and this from, you know, the late '70s to
- 20 current.
- 21 This is another hydrograph here in DeSoto Parish
- 22 from the Carrizo-Wilcox. Here, we start to see less
- 23 seasonal variation, more of a regional trend up and
- 24 down, but that's fairly common to see an undulation of
- 25 water levels in these aguifers.
- 26 And then here's another one from Red River Parish
- 27 in the Carrizo-Wilcox, water levels trending up, to
- 28 about 2,000, now they're trending down, very little
- 29 seasonal variation there.
- Now we go on to the Sparta Aquifer, and as I said

- 1 before, it is, I guess, the aquifer in north Louisiana
- 2 that's garnered the most attention because of the
- 3 situation we have with the Sparta Aquifer. And while
- 4 we're going through the Sparta I'd like for you to kind
- 5 of, if you can, remember what we saw about the
- 6 Carrizo-Wilcox and some of these other aquifers, and
- 7 you might see a little difference in some of the data
- 8 that are presented.
- 9 Okay. The Sparta Aquifer, obviously, is a very
- 10 important source of ground water for north-central
- 11 Louisiana, okay. And unlike the Carrizo-Wilcox, the
- 12 Sparta primarily is used for public supply, large
- 13 public supply, municipalities, and industry. Those are
- 14 the two largest users of the Sparta Aquifer, okay.
- Back in '94, there were 1,800 wells registered.
- 16 Now there's 5,200, in round numbers, registered with
- 17 the State.
- 18 All right. Water levels here, we'll see some
- 19 hydrographs of that in just a minute, but basically,
- 20 some things to point out. Regional declines in the
- 21 Sparta Aquifer, anywhere from one to three feet per
- 22 year, okay. Recent rises, back in '94, we had recent
- 23 rises in Morehouse Parish, and that was primarily
- 24 because the industry located in Morehouse Parish
- 25 decided to go to surface water. And so they got off
- 26 the Sparta, went to surface water, and the water levels
- 27 in and around Morehouse Parish rose probably 40 or 50
- 28 feet over that year, that following year.
- 29 Since then, we're experiencing some rises in
- 30 Claiborne Parish and in Union Parish, in north

- 1 Louisiana, primarily because of the water conservation
- 2 measures that were enacted by Arkansas. So we're sort
- 3 of the beneficiaries of their conservation. They have
- 4 cut back on their use of the Sparta, because they had a
- 5 critical situation with the El Dorado and southern
- 6 Arkansas, and when they did that, that helped us out.
- 7 And so we're starting to see some water levels
- 8 recovering in these areas, and we'll see some of that
- 9 in just a minute.
- 10 The Sparta, basically, has some locally high iron
- 11 concentrations, so, in some places, that has to be
- 12 treated before it can be used. Some areas have some
- 13 problems with salinity, or saltwater, encroaching into
- 14 what was previously fresh water areas, okay, and we'll
- 15 look at some of that in just a minute, too.
- The use, back in '94, it was 64 million gallons.
- 17 Now it's up to 68 million gallons, okay.
- 18 MR. MAYS:
- 19 And that was in 2005, right?
- 20 MR. MCGEE:
- 21 That was 2005, that is right. Thank you. That
- 22 was 2005.
- 23 All right. And here's the water use page from the
- 24 2005 Water Use Report. You can see, as I said before,
- 25 that the two major users of water are public supply and
- 26 industry, basically just about evenly split, 35, 36
- 27 million gallons and 30 million gallons a day. The
- 28 largest user, here in Bienville -- well, the largest
- 29 user is Ouachita, followed closely by Bienville Parish,
- 30 and then in Lincoln Parish.

- 1 Again, we've got some hydrographs from the Sparta
- 2 Aquifer, and we're going to show some of these water
- 3 level behaviors.
- 4 Here, in Webster Parish, the water level looks
- 5 much like it does in the Carrizo-Wilcox. You see the
- 6 seasonal fluctuation, and not really a declining or a
- 7 decreasing trend over time, okay. What I want to point
- $8\,$ out about this is that this well is in the outcrop area
- 9 of the Sparta Aquifer. And we don't want to get into a
- 10 lot of detail here, but, basically, when you're at this
- 11 well, and you're standing at this well, you're standing
- 12 on the Sparta Aquifer, okay. When I spill my water,
- 13 I'm spilling it into the Sparta Aquifer, because it's
- 14 at land surface right there. The trees are growing in
- 15 the Sparta Aquifer right here.
- Now, where I live, in Ruston, I had to dig down
- 17 200 or 300 feet to get to the top of the Sparta
- 18 Aquifer, so it's occurring at a tilt. So rain falling
- 19 at this location directly recharges the Sparta Aquifer,
- 20 is what I want to get at.
- 21 Now if you move a little bit to the east here, in
- 22 Lincoln Parish, this should stand out as a stark
- 23 contrast to the hydrographs that we have seen so far,
- 24 okay. There's no seasonal variation here, okay.
- 25 There's not a lot of evidence of recharge, seasonal
- 26 recharge, going on, but what you see is a distinct
- 27 declining trend. And if you put linear progression on
- 28 this line, you would see that it's declining at about
- 29 two feet a year at this location, and has done so since
- 30 the '60s, or it was before then, but that's when we

- 1 started collecting data at this site.
- 2 Here, in Ouachita Parish, much of the same trend.
- 3 You don't see a lot of the direct seasonal recharge,
- 4 although it is being recharged. You see more of a
- 5 direct, declining trend here at this location, in the
- 6 western part of Ouachita Parish, at that's a little
- 7 more than two feet a year decline for several decades.
- 8 And so to make the map easy for everybody, in
- 9 Ouachita Parish, we've been declining at over two feet
- 10 a year for decades, and that equates to a couple
- 11 hundred feet of water level loss since we've been using
- 12 the Sparta Aquifer in the early 1900s, so it amounts to
- 13 quite a bit. Two feet a year doesn't sound like a
- 14 whole lot to some people, you know. It's just two
- 15 feet, yeah, but it's been going on since 1900, so...
- 16 MR. ANGELLE:
- Ben, excuse me.
- 18 Do we know when that two feet reduction began?
- 19 MR. MCGEE:
- I don't know offhand when that two feet began.
- 21 And depending on where you are, it is less. It's -- in
- 22 general, as you move to the west, it's less of a
- 23 reduction, and as you go to the east, it's more of a
- 24 reduction in rate.
- 25 MR. ANGELLE:
- 26 Do we know when the Sparta, first of all, went
- 27 into a deficit?
- 28 MR. MCGEE:
- Well, models tell us that the Sparta can handle
- 30 about 56 million gallons per day usage. We're about 70

- 1 right now. And so we could go back and look at that
- 2 and find out when we were using more water than what
- 3 was naturally coming into the system, but I would
- 4 venture to guess that that probably occurred in the
- 5 '50s, possibly before the '50s.
- 6 MR. ANGELLE:
- 7 All right.
- 8 MR. MCGEE:
- 9 Now, this well, in Claiborne Parish, is just south
- 10 of Junction City, Arkansas. And, of course, it looks
- 11 much different than the other Sparta hydrographs that
- 12 we've seen before, in the fact that, in 2000, it took a
- 13 radically different turn and water levels began to
- 14 increase at this well for the first time since we've
- 15 been recording data at this location. And the reason
- 16 for that is the conservation measures that were
- 17 implemented by the State of Arkansas, okay. So when
- 18 they did that, when they cut their pumps off and
- 19 stopped using as much water from the Sparta as they had
- 20 before, this well and others like it associated with
- 21 the state line in Arkansas responded by increasing
- 22 their water levels.
- 23 UNIDENTIFIED AUDIENCE SPEAKER:
- 24 Where did they start to get their water?
- 25 MR. MCGEE:
- 26 They turned to the Ouachita River to get their
- 27 water, yes, sir.
- 28 UNIDENTIFIED AUDIENCE SPEAKER:
- 29 And they have determined this a cone-of-depression
- 30 effect, where maybe this well is within the cone of

- 1 depression?
- 2 MR. MCGEE:
- 3 No. This represents a regional water level in the
- 4 Sparta Aquifer, so it's not -- it's actually between
- 5 cones of depression, between the El Dorado cone of
- 6 depression and between the Lincoln Parish and Ouachita
- 7 Parish cone of depression.
- 8 MR. ANGELLE:
- 9 Yes, Ben, when you were talking about the --
- 10 between 56 and 70, is that a Louisiana number, or is
- 11 that Sparta number that includes Arkansas?
- 12 MR. MCGEE:
- 13 That does not include Arkansas, that is Louisiana
- 14 number.
- 15 Arkansas uses on the order of about 200 to 250
- 16 million gallons a day from the Sparta. But the Sparta
- 17 reaches from the state line in Arkansas, all the way to
- 18 Memphis, and so it cuts through most of Arkansas, and
- 19 so they have a larger area of the Sparta to use. But
- 20 that water use number is for Louisiana.
- 21 MR. ANGELLE:
- Okay.
- 23 MR. COLEMAN:
- 24 Ben, you did emphasize that's right on the state
- 25 line?
- MR. MCGEE:
- 27 That's right. It's just south of Junction City.
- 28 All right. The next couple slides are addressing
- 29 the saltwater encroaching issue that we have in the
- 30 Sparta Aquifer. And I'll say, at the outset, that

- 1 every aquifer we have in the state has an area of
- 2 saltwater. I don't care where you are in our state,
- 3 there is naturally occurring saltwater in every
- 4 aquifer.
- Now, the difference is that, in some areas, most
- 6 areas in Louisiana, that saltwater has reached
- 7 equilibrium with the aguifer and it's not moving. It's
- 8 at bay. It's where it is at rest. That's not the case
- 9 in portions of the Sparta.
- 10 What causes the saltwater to move is a decline or
- 11 a decrease in pressure in the aguifer, okay, and so the
- 12 way that we decrease the pressure in the aguifer is to
- 13 pump it. When we pump water from the aquifer, it
- 14 decreases the pressure, and that's what keeps that
- 15 saltwater at bay, okay. So, when we reduce the
- 16 pressure in the aquifer, the aquifer responds by that
- 17 saltwater moving into areas that were previously fresh,
- 18 okay. And that's what's going along the saltwater
- 19 interface in the Sparta Aquifer, primarily in Union
- 20 Parish, Morehouse Parish, Winn Parish, Caldwell Parish,
- 21 Ouachita Parish, basically, along that boundary, okay.
- 22 This particular well is in northern Union Parish, and I
- 23 don't know if you can see this or not, but the chloride
- 24 values here are -- this is 300, 330, 350, 300, all the
- 25 way up to 400. And you can see that, over time, we
- 26 have an increasing trend in the amount of chloride, or
- 27 salt, at this well, okay. This happens to be a public
- 28 supply well, okay, so there are residents drinking this
- 29 water, okay.
- Now, the EPA issues a secondary maximum

- 1 contaminate level for sodium in wells, chloride, and it
- 2 cannot exceed -- or is not supposed to exceed 250
- 3 milligrams per liter. Well, 250 is somewhere down
- 4 here. So this well is much more than that, and so the
- 5 salt issue is an issue, from the standpoint that, you
- 6 know -- and, obviously, if you go to your doctor and he
- 7 says, you know, you've got high pressure, he cuts the
- 8 salt out first thing, right, so that exacerbates that
- 9 issue. Not only that, but in this particular location,
- 10 I've been told that you can't get a warranty on your
- 11 hot water tanks and whatnot because of the corrosive
- 12 nature of the water. It tends to void those
- 13 warranties.
- But, basically, we're seeing an average rate of
- 15 increase of about 5 milligrams per liter per year at
- 16 this particular location.
- 17 MR. ANGELLE:
- 18 So that is measured at that location?
- 19 MR. MCGEE:
- 20 That is measured at that location, yes, sir.
- 21 MR. ANGELLE:
- 22 Do you have any other information for other
- 23 locations?
- 24 MR. MCGEE:
- 25 Yes, sir, I do, and we're going to go through some
- 26 of that.
- 27 MR. ANGELLE:
- Go ahead.
- 29 MR. MCGEE:
- Here's another chlorograph from Winn Parish at

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- 1 Observation Well W-144-B. It's increasing at about
- 2 almost 6 milligrams per liter. Now, you'll notice that
- 3 it has not reached the 250 milligrams per liter
- 4 threshold identified by the EPA yet, but I would
- 5 venture to say that, in the next few years, it will, at
- 6 this rate.
- 7 And so just to say that this is occurring,
- 8 saltwater is increasing along some portions of the
- 9 Sparta Aquifer, and it's a direct result of us pulling
- 10 more water from the aguifer than it can naturally
- 11 replenish itself, water declining and decreasing the
- 12 pressure in the aquifer.
- 13 MS. HOWARD:
- How can we get our water tested? We cannot find
- 15 any place that will test water anywhere.
- 16 MR. MCGEE:
- Is that right? I'll talk to you after the
- 18 presentation.
- 19 Yes, sir?
- 20 MR. BOLOURCHI:
- 21 How deep is that well?
- 22 MR. MCGEE:
- It's probably about 500 feet deep, 500, 600 feet
- 24 deep.
- 25 MR. BOLOURCHI:
- Is that the deepest --
- MR. MCGEE:
- 28 It represents the lower portion of the Sparta.
- 29 UNIDENTIFIED AUDIENCE SPEAKER:
- 30 Does that represent the bottom of the aquifer,

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- 1 or is it --
- 2 MR. MCGEE:
- 3 No, that represents the bottom, that represents
- 4 the bottom. And that's where you're likely to find
- 5 saltwater, because it is denser than fresh water, and
- 6 so the saltwater will occur at the bottom of the
- 7 aquifer.
- 8 Like I said, there's a lot of details that we're
- 9 not covering in these presentations, but I'll be glad
- 10 to answer anything afterwards.
- 11 This well was in Ouachita Parish. I sample this
- 12 well twice a year through our program with the
- 13 Department of Natural Resources. And you can see that
- 14 there's a very steep increase in chloride here, from
- 15 2000 to the present, it's basically a 36 milligrams per
- 16 liter increase. What this represents in Ouachita
- 17 Parish is basically the perfect storm for saltwater
- 18 encroachment. You've got the largest withdrawal, the
- 19 largest single withdrawal, of water from the Sparta
- 20 Aquifer here in Ouachita Parish, and it is very close
- 21 to the interface with that saltwater. And so that very
- 22 large, single-point withdrawal, in association with it
- 23 being very close to the saltwater, encourages that
- 24 saltwater -- or creates a situation that is very
- 25 favorable for saltwater encroachment to occur at this
- 26 location. And I've highlighted the 250 milligram per
- 27 liter line that EPA uses to identify what is saltwater
- 28 and what is fresh water, as far as drinking water
- 29 standards go.
- 30 MR. ANGELLE:

- 1 And it looks like that was about 92 -- I'm trying
- 2 to read it. Is that about 92 on that graph?
- 3 MR. MCGEE:
- 4 That's right; that is right.
- 5 MR. ANGELLE:
- 6 Right. And are you aware of anything -- because
- 7 as I appreciate it, the legislation that set up the
- 8 Ground Water Commission was more a response to a
- 9 drought, than it was to -- a couple of drought years,
- 10 than it was to salinity, but that certainly could have
- 11 been part of it.
- 12 MR. MCGEE:
- Right.
- 14 MR. ANGELLE:
- 15 Can you just briefly discuss any actions, either
- 16 Federal and/or State, that may have happened since 1992
- 17 to, say, 2001 -- because it looks like, you know, it's
- 18 been 20 years since we've crossed this chart.
- 19 Are you aware of any actions that either the U.S.G.S.
- 20 or the State has taken to reverse this?
- 21 MR. MCGEE:
- No, I am not aware of any actions, other than the
- 23 fact that.
- 24 And I'll say -- and it is site specific to this
- 25 location, that the City of West Monroe, facing this
- 26 issue and also facing a shortage of water from the
- 27 Sparta Aquifer in West Monroe, have instituted a
- 28 program of their own to conserve water in the Sparta
- 29 Aquifer, and the fact that they're turning to
- 30 alternative water sources to supply their needed water

- 1 and trying to move off of the Sparta.
- 2 Because, when we start to increase the pressure in
- 3 this location by cutting back on our pumpage, that
- 4 saltwater should go down, that saltwater concentration
- 5 should go down. And so, other than the program that
- 6 the City of West Monroe has instituted, I am not aware
- 7 of any other actions.
- 8 MR. ANGELLE:
- 9 I think perhaps funded by State government, as
- 10 well?
- 11 MR. MCGEE:
- 12 That's right.
- 13 MR. COLEMAN:
- 14 As well as the local government there and the
- 15 industry there. And also the City of Sterling was on
- 16 the Sparta, and because of the salt content had to be
- 17 -- quit using the Sparta water and went to buying their
- 18 water, I believe, from the City of Monroe, which is
- 19 getting it from the Ouachita River.
- 20 MR. MCGEE:
- 21 The next aquifer is the Mississippi River Alluvial
- 22 Aquifer, and that's a very heavily used aquifer in
- 23 Representative Little's part of the country. And what
- 24 I point out about it is that it's the single largest
- 25 source of fresh ground water in northeast Louisiana,
- 26 and as such, it's commonly turned to in that area.
- 27 Unfortunately, or maybe fortunately, I don't know, the
- 28 Sparta does not extend all the way into northeast
- 29 Louisiana, and so this aquifer is heavily relied on.
- 30 You'll notice the numbers here. In '94, there

- 1 were 2,800 wells listed, registered. Now it's 16,500
- 2 wells registered with the State in the -- and that's
- 3 the whole Mississippi Alluvial Aquifer.
- 4 MR. ANGELLE:
- 5 Ben, when you say that part of the region, that
- 6 number has -- those numbers have grown, or is that --
- 7 is that that -- there's a better job being done to
- 8 register wells, or are you -- do you really believe
- 9 that it has been that much of an increase in actually
- 10 wells?
- 11 MR. MCGEE:
- No. There's definitely been a better job of
- 13 registering the wells. You know, at one time, it
- 14 was -- obviously, it was not required to register the
- 15 wells, and so we really don't know how many wells were
- 16 pre-existing these numbers. But since '94, and even
- 17 before then -- I think, since '86, Bo?
- 18 MR. BOLOURCHI:
- 19 Eighty-five.
- 20 MR. MCGEE:
- 21 Eighty-five, the State has required that wells be
- 22 registered, and I think we're doing a lot better job of
- 23 that, there's no doubt.
- 24 MR. COLEMAN:
- 25 Do you have some idea as to what percent you
- 26 think -- your best guess would be that -- of the
- 27 percent of increase in wells?
- 28 MR. MCGEE:
- No, not off the top of my head. I wouldn't
- 30 venture a quess.

- 1 MR. BOLOURCHI:
- 2 Ben?
- 3 MR. MCGEE:
- 4 Yes, sir?
- 5 MR. BOLOURCHI:
- I really think that the drought of the 1990s had a
- 7 lot to do with it, because the surface water was
- $8\,$ probably moving northeast, so they were getting dry, so
- 9 they started drilling a lot of irrigation wells.
- 10 MR. MCGEE:
- 11 Yes. Well, the thing to point out about the
- 12 Mississippi Alluvial Aquifer is that, it's is a very
- 13 shallow aquifer, and it's very easy to drill wells that
- 14 have a very high capacity.
- 15 MR. BOLOURCHI:
- And it's connected to the river, so it very
- 17 quickly gets recharged. It's a very good source of
- 18 water.
- 19 MR. MCGEE:
- We'll talk about it.
- 21 Some things to point out about the aquifer is
- 22 that, a couple of things stand out. Water levels in
- 23 the Mississippi River Alluvial Aquifer are typically
- 24 very shallow, and they fluctuate. Basically, the
- 25 closer you get to the Mississippi River, the more
- 26 closely it is tied to the river, so as the river rises
- 27 and falls, so does the levels in the aquifer. As you
- 28 move away from the river, it's not -- that connection
- 29 is not as close.
- This aguifer is directly recharged from rainfall,

- 1 so that's really great, that it gets so much recharge.
- 2 However, being in a largely agricultural area, it's
- 3 also very susceptible to contamination. Because if you
- 4 spill any contaminate on the ground in this area,
- 5 there's a high probability that it will make its way
- 6 into the Mississippi River Alluvial Aquifer.
- 7 This aguifer can produce very large amounts of
- 8 water. The largest capacity wells are 7,000 gallons
- 9 per minute, and if you compare that to the
- 10 Carrizo-Wilcox, at 50 gallons a minute, you see the
- 11 difference between those two aguifers. There's a
- 12 tremendous difference.
- 13 It's not all good. It's got a lot of quantity to
- 14 the water, and you can pump a lot and supply a lot, but
- 15 the quality is -- generally leaves a lot to be desired,
- 16 typically very high in iron, needs to be treated for
- 17 that before it can be used for drinking water purposes.
- 18 We do have some local areas of saltwater.
- 19 Anybody here from Franklin Parish knows that.
- 20 Franklin Parish relies on the Mississippi River
- 21 Alluvial Aquifer for their water, and so they have a
- 22 series of very shallow wells in the Mississippi River
- 23 Alluvial Aquifer, maybe 30 or 40 feet deep, that skim
- 24 the fresh water off the top of the saltwater that is
- 25 existing at depth in the Alluvial Aquifer there in
- 26 Franklin Parish.
- 27 The usage here, 402 million gallons per day, per
- 28 the 2005 numbers, so that's a tremendous amount of
- 29 water that's being used, and it's primarily used for
- 30 agriculture, and that's what this slide shows. Here's

- 1 irrigation for rice, in general, the combination of
- 2 these two is almost 290 million gallons a day; and then
- 3 that's followed up aquaculture, which you might lump in
- 4 with the irrigations; and industry here at 34 million
- 5 gallons a day. And then if we took the time to go
- 6 through this, we could see who the major users are, but
- 7 Richland Parish is 24 million gallons a day, and then
- 8 West Carroll is 23, Franklin Parish here is 46. So,
- 9 you see, this really represents northeast Louisiana and
- 10 the usage of water that's occurring from the
- 11 Mississippi Alluvial in that area.
- 12 MR. COLEMAN:
- Morehouse was 83?
- 14 MR. MCGEE:
- 15 Right, yes.
- 16 All right. So here we are in Concordia Parish,
- 17 the Mississippi River Alluvial Aquifer. Again, you'll
- 18 see a very seasonal fluctuation in water levels,
- 19 indicating that it is being recharged by rainfall
- 20 throughout the year, but you don't see -- hopefully,
- 21 don't see the trends that you saw, like we saw in the
- 22 Sparta, where we have a definite declining trend here.
- 23 These levels fluctuate. They fluctuate on the order
- 24 of, you know, one to maybe even eight or ten feet,
- 25 depending on where you are and how close you are to the
- 26 Mississippi River.
- 27 Franklin Parish, again, very seasonal fluctuations
- 28 here. You also notice that the water levels are very
- 29 shallow. This is ten feet below land surface, okay,
- 30 and that's generally the case for the Mississippi River

- 1 Alluvial Aquifer. You don't have dig down very far to
- 2 hit water when you're in the Mississippi River Alluvial
- 3 Aquifer. But then, again, that goes back to that point
- 4 of it being easily contaminated in those areas, okay.
- 5 And then, finally, in East Carroll Parish, again,
- 6 we see the same sort of situation, very shallow water
- 7 levels, even coming up to almost land surface,
- 8 seasonally fluctuating.
- 9 All right. Coming in to the home stretch here,
- 10 the Red River Alluvial Aguifer, okay, a very important
- 11 source of water. I call it a secondary aguifer, just
- 12 from the standpoint that it doesn't pump as much water
- 13 as the other aquifers do. It's still a major source of
- 14 water for the areas that it underlies, okay. Wells
- 15 here, 970 in 1994, 4,400 registered wells in the Red
- 16 River Alluvial Aquifer, primarily used for irrigations
- 17 and agricultural uses.
- 18 Usage of about nine million gallons a day from the
- 19 Red River Alluvial Aguifer, and you see, it occurs as
- 20 thin strip, basically associated with the Red river, so
- 21 it borders -- or fills the Red River Valley that
- 22 extends from our state line, basically, in Louisiana,
- 23 down to just south of Alexandria.
- Some of the water levels here, you'll notice, they
- 25 have a very similar appearance to the Mississippi River
- 26 Alluvial Aquifer, in the fact that they are seasonally
- 27 recharged.
- 28 But what happened -- anybody know what happened
- 29 here in 1995? That's when the lock and dams went in,
- 30 okay. That's when the lock and dams went in Red River

- 1 Parish, and the lock and dams have an effect on the
- 2 ground water, and the fact that it stops that seasonal
- 3 fluctuation and dammed the water up. And the
- 4 interaction with the river and the aquifer cause the
- 5 water levels not to fluctuate so much and to remain at
- 6 a higher level.
- Okay. This is in Caddo Parish, okay, and so we
- 8 see that seasonal fluctuation, but, again, no
- 9 disturbing trends, one way or the other.
- 10 And then, finally, in Natchitoches Parish, we see
- 11 basically the same deal that we've had.
- 12 Upland Terrace -- I'll go through these last two
- 13 fairly quickly. The Upland Terrace Aquifer is fairly
- 14 small aguifer that occurs at land surface, associated
- 15 with the Red River in central Louisiana. There are a
- 16 lot of people in Louisiana that rely on Upland Terrace
- 17 aquifers for their water, okay. But they have some of
- 18 the similar problems that ground level, surface
- 19 aquifers, have in the fact that they're easily
- 20 contaminated. They are recharged directly from
- 21 rainfall, but they are easily contaminated. Water
- 22 levels are fairly shallow, below land surface, okay.
- 23 And you'll see an increase in the number of wells
- 24 here, from 1,100 wells to 3,800 wells registered
- 25 currently in the Upland Terrace. Usage, up to -- well,
- 26 down to 13 million gallons a day in 2005. All right.
- 27 And this just shows where this occurs here. Here's the
- 28 Upland Terrace here in northwest Louisiana, central
- 29 Louisiana, and also into Morehouse Parish there in
- 30 northeast Louisiana.

- 1 And I know, when I go and sample a well in
- 2 Collinston in Morehouse Parish, and they -- I sample a
- 3 Sparta Well that they have there and it has high
- 4 chloride, and they use it as a backup only. But
- 5 they'll tell me real quick that their primary well is
- 6 the one on the hill. And if you've ever been there,
- 7 you might look around and say, I don't see any hills in
- 8 Morehouse Parish. It's pretty flat. But there is a
- 9 terrace, and there's a slight hill, and their well is
- 10 on that -- their well is on that little hill, and they
- 11 get a lot of their water from that hill well.
- 12 UNIDENTIFIED AUDIENCE SPEAKER:
- What about DeSoto Parish?
- 14 MR. MCGEE:
- What?
- 16 UNIDENTIFIED AUDIENCE SPEAKER:
- 17 What about the aguifer in DeSoto Parish?
- 18 MR. MCGEE:
- 19 That was the Carrizo-Wilcox, that was --
- 20 UNIDENTIFIED AUDIENCE SPEAKER:
- No. That covers the whole Caddo and this. I'm
- 22 talking about the one covering Clear Lake and Smithport
- 23 Lake.
- 24 MR. MCGEE:
- Well, we can go back and look at that, but the
- 26 Carrizo-Wilcox occurs in DeSoto Parish also, and
- 27 there's wells located there.
- 28 UNIDENTIFIED AUDIENCE SPEAKER:
- Well, there's one place in DeSoto Parish that
- 30 don't have no water, and that's --

- 1 MR. MCGEE:
- There's several places in Louisiana that don't
- 3 have any ground water.
- 4 UNIDENTIFIED AUDIENCE SPEAKER:
- 5 Well, in DeSoto Parish, where I live, the water is
- 6 only 50 foot deep, and it covers that aquifer, and the
- 7 aguifer covers Clear Lake and Smithport Lake.
- 8 MR. MCGEE:
- 9 We'll talk about it.
- Here's some hydrographs here, Morehouse Parish
- 11 from Upland Terrace, fairly shallow water level,
- 12 regional declines and increases. Again, it's directly
- 13 tied to rainfall. So, as we go through periods of
- 14 drought, water levels in the Upland Terrace can fall,
- 15 and in times when there's not a drought, they come up.
- Same sort of deal, no disturbing trends here in
- 17 Webster Parish in the Upland Terrace.
- 18 UNIDENTIFIED AUDIENCE SPEAKER:
- 19 Those wells are current; I mean, they're up to
- 20 date?
- 21 MR. MCGEE:
- Right. Some of these wells are up to current,
- 23 some of these are not, depending on when programs came
- 24 and went.
- 25 Yes. This an Upland Terrace well in Bossier
- 26 Parish, okay, fairly shallow water level, 14 feet below
- 27 land surface here, seasonally fluctuating here with
- 28 rainfall, but no real trends.
- Okay. The last aquifer we'll talk about is the
- 30 Cockfield Aquifer, and that occurs through this area of

- 1 central Louisiana, northeast Louisiana. Again,
- 2 northeast Louisiana probably is the largest user of the
- 3 Cockfield Aquifer in the state of Louisiana, primarily
- 4 because the other aquifer that is available to
- 5 northeast Louisiana, being the Mississippi River
- 6 Alluvial Aquifer, has a poor water quality. It's great
- 7 for irrigation and agricultural uses, but people don't
- 8 necessarily like to drink it. The Cockfield Aquifer
- 9 has much better water quality, from a drinking water
- 10 standpoint, and so there are a lot of uses -- a lot of
- 11 users of the Cockfield Aguifer in northeast Louisiana.
- 12 The thing I'll point out is that it does have some
- 13 overlap with the Sparta, and so some people say, well,
- 14 why don't we just turn to the Cockfield Aquifer. You
- 15 know, if the Sparta is having problems, let's go to
- 16 another aquifer. This aquifer does have some overlap
- 17 with the Sparta, but like the Carrizo-Wilcox, this
- 18 aguifer has fairly thin sand beds and cannot produce
- 19 the quantity of water that we can get from the Sparta
- 20 Aquifer.
- 21 So, if the City of Ruston or Hodge wanted to turn
- 22 to it, and here you are in Jackson Parish, this aquifer
- 23 could not supply the quantity of water that would be
- 24 needed to replace what we're pulling from the Sparta
- 25 Aquifer. So, in a lot of senses, the Sparta Aquifer is
- 26 the sole source aquifer for north-central Louisiana.
- 27 The registered wells here increased from 500 to 1,900
- 28 in 2005.
- Okay. Several things on here, but I'll just say
- 30 real quick that the water level has not changed very

- 1 much over time in this aguifer, and it's a reflection
- 2 of the amount of water that's being used from this
- 3 aquifer. It's not heavily used as a resource in
- 4 Louisiana.
- 5 Locally, it's high in color and hardness. And
- 6 anybody here from a water system knows that, when you
- 7 say it's high in color, that means it high in THMs,
- 8 trihalomethanes, and that's something that has to be
- 9 treated, and that all costs money, and so water systems
- 10 that tap this aguifer for use have higher associated
- 11 costs for using this aguifer because the quality is not
- 12 quite there.
- And this is just the water use, and we're talking
- 14 about nine million gallons a day, compared to 70 for
- 15 the Sparta, or 406 from the Mississippi River Alluvial
- 16 Aquifer, and so it's not as heavily used. But you'll
- 17 see that the major users here of this aquifer, here's
- 18 East Carroll at about 1.5 million gallons a day,
- 19 Richland Parish, West Carroll Parish, so that northeast
- 20 part of Louisiana really does rely on this aquifer
- 21 quite a bit.
- 22 MR. COLVIN:
- 23 How big did you say that aquifer is?
- 24 MR. MCGEE:
- 25 I didn't. That aquifer varies, but it's on the
- 26 order of about 200 to 300 feet, depending on where you
- 27 are. At some places, it's at land surface, okay, and
- 28 then it extends down to about 200 to 300 feet deep.
- 29 MR. COLVIN:
- 30 Okay.

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- 1 MR. MCGEE:
- 2 Here's a typical hydrograph of the Cockfield
- 3 Aquifer in Sabine Parish.
- 4 Okay. You can go ahead and go to the next one.
- 5 And here's one from West Carroll here, okay. You
- 6 notice, the water level here is on the order of 20 to
- 7 30 feet below land surface at this location.
- 8 And then, finally, in Morehouse Parish, here's a
- 9 Cockfield Aquifer in use. You see the direct rainfall
- 10 recharge for this aguifer, also.
- And so that's as fast as I maybe could do that, so
- 12 if there's any questions either now or before, I'll be
- 13 glad to try to answer those. I'll be here.
- I'm told, if you want to ask any questions, you
- 15 have to come up.
- 16 UNIDENTIFIED AUDIENCE SPEAKER:
- I have a question. Do I have to come up?
- 18 MR. MCGEE:
- 19 That's what they said.
- 20 MR. HOLT:
- 21 My name is Rick Holt. I'm with the Ruston Daily
- 22 Leader.
- I just simply want to know, if a volume percentage
- 24 of loss exists with U.S.G.S., as far as the Sparta
- 25 Aquifer goes? I don't know if that makes sense. Is
- 26 there -- but you talked about the drop in the level,
- 27 but that really doesn't put things in perspective,
- 28 until you know how deep it is and how much actual water
- 29 we've lost.
- 30 MR. MCGEE:

- I think I know what you're asking, Rick. And
- 2 correct me if I'm wrong, but what I'm hearing is that,
- 3 instead of relating the water loss in our aquifers to
- 4 the water level and how much they've declined, you'd
- 5 like to have that expressed as a volume?
- 6 MR. HOLT:
- 7 A percentage drop in volume.
- 8 MR. MCGEE:
- 9 A percentage drop in volume.
- 10 MR. HOLT:
- 11 And you don't have that.
- 12 MR. MCGEE:
- 13 That number does not exist for the Sparta Aquifer
- 14 in Louisiana. I'm sorry, Rick.
- 15 MR. HOLLINGSWORTH:
- Ben, it is akin to a lake, that the lower the
- 17 level gets, the less volume there is in the --
- 18 MR. MCGEE:
- 19 There is a finite amount of water in our aquifers,
- 20 and so, yes, the lower that level gets, the lower the
- 21 volume exists in the aquifer.
- 22 MR. COLEMAN:
- Ben, would you explain to them also that, as you
- 24 draw it down, the quality of the water perhaps
- 25 declines?
- MR. MCGEE:
- 27 It is very common that, as the water levels
- 28 decline in our aquifers, the water quality also
- 29 declines. Basically, you're concentrating the water
- 30 that's left in the aquifer, and those constituents that

- 1 naturally exist in the aquifer are concentrated, and so
- 2 that could be iron, it could be sodium, it could be
- 3 salt, what have you, those are concentrated, and so the
- 4 water quality typically does decline as the water
- 5 levels drop in these aguifers. And I think that's what
- 6 you were talking about.
- 7 MR. HOLLINGSWORTH:
- 8 Yes, sir.
- 9 UNIDENTIFIED AUDIENCE SPEAKER:
- 10 I think you can hear me.
- 11 Is there a point in time to where it will not
- 12 recharge, and I'm speaking of the Sparta?
- 13 MR. MCGEE:
- 14 The Sparta will always take recharge. Because the
- 15 recharge to the Sparta is occurring here in the western
- 16 part of Webster Parish and in Bossier Parish, Caddo
- 17 Parish, Bienville Parish, portions of Natchitoches
- 18 Parish, wherever the outcrop area is of the Sparta,
- 19 anytime rain falls in this area -- we go out to Bayou
- 20 Dorcheat out here, Bayou Dorcheat, a part of that water
- 21 seeps into the ground and becomes ground water. It
- 22 becomes a recharge for the Sparta Aquifer. So I don't
- 23 think there'll ever be a point where the Sparta will
- 24 not take recharge or accept recharge. It will always
- 25 accept that recharge.
- 26 But the issue that we have is that we know about
- 27 how much it is recharging naturally. About 58 million
- 28 gallons a day is what is naturally coming into the
- 29 Sparta Aquifer. The problem we have is, we're writing
- 30 checks for more than 56 million gallons a day, and so

- 1 we have a net decline in the Sparta Aquifer.
- 2 MR. COLEMAN:
- 3 Ben, can I ask a question?
- 4 Is it not true that the amount -- in other words,
- 5 as you pull it down below, that you get compaction
- 6 stratification, and that every year that we are
- 7 allowing it to be below its normal state reduces the
- 8 ability of the aquifer to be able to recharge to some
- 9 extent, maybe that's what you're referencing to?
- 10 MR. MCGEE:
- I know -- maybe that what's you were alluding to.
- 12 And that has to do with actual volume that can be
- 13 held in the Sparta Aquifer, or any aquifer, for that
- 14 matter.
- 15 Basically, to put it in a nutshell, aquifers are
- 16 composed primarily of coarse-grained materials, in the
- 17 Sparta's case, sand. But it also has layers of clay
- 18 within that, so it's a mixture. It's primarily sand,
- 19 but it has got clay, also.
- What's holding up the weight of this building and
- 21 all of us in it, okay -- we're sitting on top of the
- 22 Sparta, and we're exerting a lot of pressure on that.
- 23 What's bearing the weight of everything above the
- 24 Sparta is the Sparta itself, the sand, the gravels, the
- 25 clays, everything that's in the Sparta, but also the
- 26 water, also the water, that's contained in the Sparta
- 27 Aquifer. And if you take that water out of the Sparta,
- 28 or any aquifer, for that matter, that's bearing so much
- 29 weight, okay -- and keeping in mind, it's several
- 30 hundred feet below where we're sitting, that's a lot of

- 1 weight. When you take the water out of that, then that
- 2 water can no longer bear that weight, because it's not
- 3 there to bear it. And so what happens is, commonly,
- 4 compaction occurs, and, basically, you've reduced the
- 5 volume of your aquifer by however much compaction
- 6 occurs.
- 7 People from Baton Rouge know this very well.
- 8 There's subsidence going on in Baton Rouge as a result
- 9 of water being withdrawn from Baton Rouge, and so that
- 10 occurs. That occurs -- Houston is very concerned with
- 11 that, and that occurs in Houston directly as a result
- 12 of water being withdrawn from their aguifers, which is
- 13 basically the Chicot Aquifer in Houston, and so we have
- 14 that same situation here.
- And so we go back to our hydrographs, our water
- 16 levels, we know when the water level has been depressed
- 17 below the top of the aquifer. We know when the
- 18 compaction of the aquifer has generally started. Now,
- 19 how much, you know -- will we see that at land surface
- 20 here? Probably not, not to the extent that we do in
- 21 Houston, and maybe to a lesser degree, in Baton Rouge
- 22 and those areas, but nevertheless, that is occurring,
- 23 and we are reducing the volume of water that the Sparta
- 24 can hold.
- 25 MR. COLEMAN:
- In other words, that is permanent, irreversible
- 27 damage?
- 28 MR. MCGEE:
- 29 Part of that is irreversible. I don't want to get
- 30 into a hydrogeology lesson here, but part of that is

- 1 irreversible, and so, once you compact the aquifer, a
- 2 certain percentage of that is never regained.
- 3 MR. MAYS:
- Ben, your numbers are 2005 numbers. When will you
- 5 have -- or when will you be able to update those
- 6 numbers?
- 7 MR. MCGEE:
- 8 The Water Use Report is compiled every five years,
- 9 so 2010 will be the next publication of the Water Use
- 10 Report for Louisiana.
- 11 UNIDENTIFIED AUDIENCE SPEAKER:
- Ben, would you say that the Carrizo-Wilcox would
- 13 be -- that the recharge of that aquifer is more
- 14 difficult and the compaction more serious there than in
- 15 the Sparta?
- 16 MR. MCGEE:
- 17 What you asked was, was the recharge and
- 18 compaction more of an -- more difficult -- or more of
- 19 an issue in the Carrizo-Wilcox than in the Sparta.
- 20 The Carrizo-Wilcox is a very unique aquifer in
- 21 Louisiana, in the fact that it is highly faulted. It's
- 22 on Sabine uplift. There's a lot of things,
- 23 geologically, going on in that aquifer.
- I would say that portions -- generally, I would
- 25 say, no. Generally, I would say, no, for the
- 26 Carrizo-Wilcox. In large part, because we're not
- 27 seeing the amount of water withdrawn from the
- 28 Carrizo-Wilcox that we are with the Sparta, okay,
- 29 because -- partly, because it can't produce the
- 30 quantity of water, okay.

- 1 Now, locally -- locally, there's, obviously, some
- 2 issues in the Carrizo-Wilcox, but regionally, overall,
- 3 I would say no. I don't know if that answers your
- 4 question or not.
- 5 MR. DUBOIS:
- 6 William Dubois of Keithville.
- 7 MR. MCGEE:
- 8 Yes, sir.
- 9 MR. DUBOIS:
- 10 Why aren't you utilizing the 3-D and 4-D imagery?
- 11 And also why aren't you sharing -- or why isn't the oil
- 12 and gas industry sharing information with you? I mean,
- 13 it seems that they can see the water, like they can the
- 14 oil and gas, because the one common component is
- 15 hydrogen.
- 16 MR. MCGEE:
- 17 Well, first of all, I guess that goes back to
- 18 exactly how we work as an agency.
- 19 U.S.G.S. is strictly a science agency, and so
- 20 we're called to investigate and to monitor -- in my
- 21 office's case, we're called to monitor water resources
- 22 in north Louisiana. The way that we do that is that --
- 23 and for those that are not familiar with U.S.G.S., the
- 24 U.S.G.S. is kind of an unique animal in the Federal
- 25 government, in that fact that we're not fully funded by
- 26 the Federal government.
- 27 We partner with, in our case, the State of
- 28 Louisiana. We partner with DNR. We partner with the
- 29 City of Ruston or City of Shreveport or Lincoln Parish
- 30 or Caddo Parish. We partner with these entities to do

- 1 things that they -- that we mutually want to see
- 2 happen. And so the State says, look, we think we have
- 3 some problems with the Carrizo-Wilcox, and we'd like to
- 4 instigate a program investigation on that to get some
- 5 current information and find out if what we're hearing
- 6 is true or not.
- We don't have a dog in any fight, which, like I
- 8 said, we're strictly a science organization, and so
- 9 we're called to collect data and then report our
- 10 findings and then distribute that to the public, at
- 11 large.
- 12 So we don't -- we cannot work with private
- 13 industry, for one thing, okay. We can't partner with
- 14 private industry.
- Now, if oil industries want to send us some
- 16 information, that's great, you know, but we can't
- 17 partner with them.
- 18 MR. DUBOIS:
- 19 They have open-source software. Anyone can use
- 20 them and adapt it to their needs.
- 21 MR. MCGEE:
- That's right. But I can't act unless I have a
- 23 project to act through, okay. So I get a lot of
- 24 requests from people who say, why don't do this, or why
- 25 can't you do that. Well, the reason I can't is because
- 26 I'm not being paid to do that, basically. It's not
- 27 that I don't want to do it, but I've got projects that
- 28 I have to work on, and if it's not one of my projects,
- 29 then I have to squeeze it in or not do it.
- 30 MR. DUBOIS:

- 1 So you're just basically not utilizing the
- 2 technology that's available to better understand it?
- 3 MR. MCGEE:
- Well, we're utilizing the technology that's
- 5 available, but we're doing it for project work that
- 6 we're currently involved with.
- Now, like I said, if an entity comes to me or
- 8 comes to the U.S.G.S. and says, we have an issue here.
- 9 We'd like you to focus your attention on this area and
- 10 this issue, we'll bring all of our tools to bear on
- 11 that issue, but until that happens, we can't do it.
- 12 MS. HOWARD:
- How can we do that?
- 14 MR. MCGEE:
- 15 Well, we can do that through basically just a
- 16 cooperative program with U.S.G.S., so some entity, some
- 17 public entity, has to come to the U.S.G.S. and say --
- 18 MS. HOWARD:
- 19 It can't be a private person?
- 20 MR. MCGEE:
- No, it cannot be.
- MS. HOWARD:
- 23 Can it be a group?
- 24 MR. MCGEE:
- 25 Well, it can be things like the police jury,
- 26 municipality, the State --
- 27 MR. BOLOURCHI:
- The Sparta Commission.
- MR. MCGEE:
- 30 -- the Sparta Commission, things of that nature,

(225) 261-5109

- 1 so...
- 2 Any other questions?
- 3 UNIDENTIFIED AUDIENCE SPEAKER:
- 4 Ben?
- 5 MR. MCGEE:
- 6 Yes, sir.
- 7 UNIDENTIFIED AUDIENCE SPEAKER:
- 8 Are there any models -- these trends over the last
- 9 ten years, are there any models showing where we're
- 10 going to possibly be?
- 11 MR. MCGEE:
- 12 The Sparta has been fairly heavily modeled, and,
- 13 you know, of course, the whole purpose of creating a
- 14 model for an aquifer is to play those what-if games.
- 15 What if our pumpage increases? What if our
- 16 demographics change in the next 20 years, and we need
- 17 more water? And so that information is out there, and
- 18 so we do have some guidance on, you know, what we can
- 19 expect from the Sparta and some other ground water
- 20 resources in Louisiana, if things change with regards
- 21 to pumpage. And there's a lot of different scenarios
- 22 in those, and I could go into any of those with you at
- 23 some point.
- 24 But suffice it to say that, obviously, if we're
- 25 overpumping the Sparta now and more people come in,
- 26 more industries come in, whatever, which that's great,
- 27 but we're just going to continue to overpump some of
- 28 these resources, and we're going to have to, I think,
- 29 become more creative in using our ground water and
- 30 surface water resources that we have in the state.

- 1 MR. MAYS:
- 2 Does the Commission have access to the models that
- 3 you referred to?
- 4 MR. ANGELLE:
- I just made a note to ask him that same question.
- 6 MR. MAYS:
- 7 You ask him, then.
- 8 MR. ANGELLE:
- 9 No. Well, it was a great question, and Ben did a
- $10\,$ good job. One of the things that I think would be a
- 11 really good idea for the Commission to do is perhaps to
- 12 have kind of a workshop-type deal, where Ben can come
- 13 in, and in a public format, kind of really drill
- 14 down -- we wouldn't have anything on the agenda, and
- 15 perhaps it wouldn't be a committee as a whole, and
- 16 let's look at the things that are driving the mouth
- 17 (phonetic).
- 18 Because I think, as we all try to get our arms
- 19 around the issues to provide the right type of
- 20 management concepts, knowing where we're going is kind
- 21 of like, you know, starting a trip, and having a map
- 22 would be a really good idea for us. So I -- it
- 23 certainly caught my attention, and it did yours, as
- 24 well.
- 25 MR. MCGEE:
- I would answer that just really quickly and say
- 27 that any product produced by the U.S.G.S. is available
- 28 to anybody.
- 29 MR. ANGELLE:
- Right. But more so, not for just you, but for us

(225) 261-5109

- 1 to have a robust discussion with you as we, you know,
- 2 again, try to provide the leadership necessary.
- 3 MR. MCGEE:
- 4 Anytime.
- 5 MR. MAYS:
- I think it's a great idea if we could, you know,
- 7 have a workshop like that.
- 8 MR. ANGELLE:
- 9 Yes.
- 10 MR. MAYS:
- I know the members of our community and the Sparta
- 12 people will participate 100 percent.
- 13 MR. ANGELLE:
- 14 Good, good. Let's probably schedule that during
- 15 our new business.
- 16 Any other question from the audience for
- 17 Mr. McGee?
- 18 MR. OWEN:
- 19 There's one other thing, Mr. Chairman, that Ben
- 20 had touch on that I'd like to ask about.
- Is there a point at which when these ground water
- 22 levels continue to decline, when it reaches the top of
- 23 the aquifer, what happens then?
- 24 MR. MCGEE:
- In most cases, when the water level declines and
- 26 it reaches the top of the aquifer, the aquifer begins
- 27 to exhibit characteristics of an unconfined aquifer, in
- 28 the case of the Sparta, instead of a confined aquifer.
- 29 Basically, when water levels are above the top of the
- 30 aquifer, the water that you're pulling from that

- 1 aquifer comes from what we call storage. And that
- 2 storage is comprised of the compaction of the
- 3 aquifer -- water is slightly compressible, and so that
- 4 water that you're pulling from the aquifer comes from
- 5 what we call storage.
- 6 When the water levels are declined or are drawn
- 7 down below the top of the aquifer, you no longer have
- $8\,$ what we call storage in the aquifer. Then you begin to
- 9 dewater the aguifer, which means you're actually taking
- 10 the water from the aguifer, from that physical zone,
- 11 and water is declined -- if it continues, water levels
- 12 decline into the aquifer, in which case, you remove the
- 13 water from bearing the weight above it and that
- 14 compaction begins to happen, and so you start to see
- 15 characteristics of an unconfined aquifer.
- 16 MR. COLEMAN:
- We're actually having that happen in the Sparta,
- 18 aren't we?
- 19 MR. MCGEE:
- 20 Yes, most of the central parts of the Sparta, in
- 21 about eight parishes of the Sparta.
- 22 MR. OWEN:
- 23 But the aguifer, as an unconfined aguifer, would
- 24 exhibit differences in yields in wells?
- 25 MR. MCGEE:
- Yes, sir.
- MR. OWEN:
- 28 My point in bringing this up is to emphasize that
- 29 we've talked about this inexorable two feet per year
- 30 decline, but there is a point at which, in many of

- 1 these cases, you are reaching the top of the aquifer,
- 2 then the aquifer begins to act entirely different; is
- 3 that not correct?
- 4 MR. MCGEE:
- 5 In general, that is correct.
- 6 But in the Sparta's case, because it is several
- 7 hundred feet below land surface -- when an aquifer
- 8 begins to exhibit unconfined characteristics, it has a
- 9 connection with the atmosphere, and the Sparta is not
- 10 that way. And so we have water levels that have been
- 11 depressed below the top of the aguifer, but the aguifer
- 12 is continuing to act as a confined aquifer, even in
- 13 those instances, primarily, I believe, because it does
- 14 not have a connection to the atmosphere.
- 15 MR. BOLOURCHI:
- Ben, in unconfined conditions --
- 17 MR. MCGEE:
- 18 Yes.
- 19 MR. BOLOURCHI:
- 20 -- when the water levels get below the top of the
- 21 aquifer with the same amount of pumpage, the decreasing
- 22 water level is less --
- 23 MR. MCGEE:
- 24 Dramatically, dramatically, less.
- 25 MR. BOLOURCHI:
- 26 Can you tell me how much less?
- MR. MCGEE:
- 28 On the order of probably tenfold less, or even
- 29 more. Because there's so much water contained in the
- 30 aquifer, compared to the storage contained in a

- 1 confined aquifer.
- 2 MR. BOLOURCHI:
- 3 The storage is almost like surcharging --
- 4 MR. MCGEE:
- 5 Almost, yes.
- 6 Jimmy, what did you have?
- 7 MR. JOHNSTON:
- First, it was a great presentation. I love the
- 9 U.S.G.S., because I retired from them.
- 10 So the question I have is, the data you're
- 11 collecting now, are you collecting the necessary data,
- 12 to your knowledge, of what this will become in the
- 13 future, and what are the things that you've got?
- 14 MR. MCGEE:
- Well, it's hard for a data person like me to say
- 16 we have enough data, but --
- 17 MR. BOLOURCHI:
- Never enough.
- 19 MR. MCGEE:
- 20 -- never enough data, but I do believe that we are
- 21 -- we have the resources in place to predict what's
- 22 coming on in a regional scale.
- Now, what's happening on the corner of Elm and
- 24 Maple, no. But what's happening on a regional scale in
- 25 the Sparta Aquifer, yes, I do believe we do have the
- 26 resources on hand.
- 27 MR. JOHNSTON:
- I'm talking about monitoring saltwater, too.
- 29 MR. MCGEE:
- 30 That's right, yes.

- 1 We have a network in place that monitors saltwater
- 2 in Louisiana, through DOTD and also through DNR, for
- 3 the Sparta and other aquifers in the state that are
- 4 experiencing saltwater issues. And we have a network
- 5 of observation wells throughout the state covering all
- 6 of our major aquifers that we collect water levels on,
- 7 on at least a quarterly basis. And then we have a
- 8 program, as I mentioned before, of water use
- 9 accountability in the state. And those are the primary
- 10 items that are needed to compile and to run a model.
- 11 MR. JOHNSTON:
- Ben, have we done any modeling on the Sparta, that
- 13 you know of?
- 14 MR. MCGEE:
- We've done several models on the Sparta.
- 16 MR. JOHNSTON:
- 17 Can you tell me what they are?
- 18 MR. MCGEE:
- 19 I think the first model was done in '85, and that
- 20 was done by the U.S.G.S. and the State of Louisiana, in
- 21 conjunction with Louisiana --
- 22 MR. JOHNSTON:
- I'm glad you mentioned that. I am personally
- 24 involved with the district chief of U.S. Geological
- 25 Survey. For the first time, we went to Arkansas, and
- 26 we convinced Arkansas to come up with \$300,000 to match
- 27 our \$300,000, to match with your money, to get it
- 28 modeled. So it's been done. Technology is changing,
- 29 but the modeling was done almost 25 years ago.
- 30 MR. MCGEE:

- 1 We've had an update in the Sparta model, I
- 2 believe, in '91, if I'm not mistaken, and that was done
- 3 primarily through the Arkansas U.S.G.S., with
- 4 Louisiana's help.
- 5 Since then, we've also had some upgrades and
- 6 updates to the model. I know Arkansas U.S.G.S. has
- 7 been very heavily involved with modeling the Sparta
- 8 Aquifer.
- 9 MR. JOHNSTON:
- Just from the information of the audience, that
- 11 modeling was related to water level fluctuations. Now,
- 12 if you're interested in chloride, saltwater modeling,
- 13 that would disclose the new trends here, we haven't
- 14 done that?
- 15 MR. MCGEE:
- 16 That's right; that's correct.
- 17 MR. COLEMAN:
- Ben, you've had some wells that you're doing daily
- 19 monitoring on. It's real time. You can go up on the
- 20 computer and look at them, right?
- 21 MR. MCGEE:
- 22 That's right. We have a program with DNR to look
- 23 at five wells in the Sparta Aquifer that are equipped
- 24 with real-time equipment, basically meaning that you
- 25 can go onto the internet and look at a hydrograph of
- 26 those water levels over time. And that data -- those
- 27 data are being transmitted hourly to monitor that
- 28 situation.
- 29 Yes, sir.
- 30 MR. BALKUM:

- 1 Kyle Balkum from Wildlife and Fisheries.
- 2 Have we clearly delineated or mapped the recharge
- 3 areas for each of these aquifers?
- 4 MR. MCGEE:
- 5 Yes, yes, we have, and those exist in the GIS
- 6 format and in publications.
- 7 MR. DUBOIS:
- 8 How does the Wilcox recharge again?
- 9 MR. MCGEE:
- 10 Directly through rainfall, primarily; some surface
- 11 water; rivers, streams, lakes will cut through;
- 12 sufficient deposits of the Carrizo-Wilcox also directly
- 13 recharge.
- 14 MR. DUBOIS:
- 15 Yes. A lot of us are losing water. Last year, I
- 16 was without water three months and four days. This
- 17 year, two weeks and one day. Today, I did not have no
- 18 water.
- 19 MR. MCGEE:
- 20 Well, I think -- we may be seeing -- I have seen
- 21 this occur in other parts of the state where -- case in
- 22 point, in Ouachita Parish, some very shallow aquifers,
- 23 much like what you have in the Carrizo-Wilcox,
- 24 were reamed (phonetic) by some deeper irrigation wells.
- 25 And during the growing season, they didn't have water
- 26 either, and National Guard came in and had to supply
- 27 water from water trucks.
- 28 Eventually, the people have moved out of the area,
- 29 because, in the wintertime, they flooded from Bayou
- 30 Lafourche, and in the summertime, they didn't have any

- 1 water, so the solution was to move people out of those
- 2 areas.
- In the case of the Carrizo-Wilcox now, you've got
- 4 an aquifer, one, that yields very little water, to
- 5 begin with, you know, the number is 50 to 150 feet,
- 6 yes, that's the nature of the aquifer. The nature of
- 7 that aguifer is that it is very tight and very thin
- 8 sands, not a lot of coarse-grain materials. So it
- 9 cannot produce water in quantity naturally, okay. So
- 10 that's one strike right there.
- 11 Two, the sands are very thin, and so you don't
- 12 have wells tapping very massive sands in that aquifer.
- 13 The potential to produce a lot of water, even from
- 14 large wells, is not there. Strike two.
- 15 Strike three, if you get a user of water in the
- 16 Carrizo-Wilcox that's using a good bit of water for
- 17 whatever purpose, and your well happens to be close to
- 18 that well, yes, you can incur some negative impacts
- 19 from that.
- 20 The good news is that the aquifer is continuing to
- 21 recharge, okay. That's the nature of our aquifers is
- 22 they continue to recharge, either through rainfall,
- 23 leakage from other aquifers, or surface water recharge.
- 24 And so, once that pumpage subsides or abates, then the
- 25 water levels should begin to recover in your area.
- 26 But what we're seeing in the Carrizo-Wilcox is
- 27 that its effects are fairly localized based on the
- 28 pumpage that is occurring in those areas. In other
- 29 words, if you live in Keithville, you may be
- 30 experiencing some problems along the lines of what I

- 1 have just described, but if you go to Stonewall or you
- 2 go to Keatchie or some other areas, they're not having
- 3 some of those same problems. But there is a lot of
- 4 water usage going on in the Carrizo-Wilcox right now.
- 5 MR. DUBOIS:
- 6 Why are we allowing the oil and gas industry to
- 7 access it anyway, if it's a low-yield aquifer?
- 8 MR. MCGEE:
- 9 Well --
- 10 MR. DUBOIS:
- 11 They're taking two to ten million gallons, but no
- 12 one --
- 13 MR. FLAXTER:
- 14 Earl Flaxter (phonetic).
- I don't represent the oil and gas industry, and I
- 16 guess, first, what I would probably say is, you know,
- 17 according to State law, and correct me if I'm wrong
- 18 here, but water that is used for beneficial purposes is
- 19 fair game. And so we don't have -- our water law
- 20 system -- and I'm on a little shaky ground here, but
- 21 our water law system is not correlative-wise, and,
- 22 basically, the State owns that water until it is pumped
- 23 out and someone uses it for beneficial purposes.
- 24 MR. DUBOIS:
- 25 So who directly owns the water, the State?
- 26 MR. FLAXTER:
- 27 When it's in the ground, I believe the State does
- 28 own the water.
- 29 MR. HOLT:
- 30 I just want to comment. The U.S.G.S. has done a

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- 1 great job supplying this information. But I would like
- 2 to encourage you to help the public understand, and to
- 3 help the Commission understand, we keep hearing that it
- 4 falls two feet per year. We've seen places where it's
- 5 fallen 190 feet over a 30- or 40-year span, but there
- 6 is still no perspective to -- are we're talking about
- 7 it 100 feet in a 400-foot level, so we've literally
- 8 lost 25 percent of the Sparta over a four-year period?
- 9 That's where it's kind of headed.
- 10 And I know the whole situation is different, but
- 11 in presentations, it would be very beneficial -- like
- 12 on the Lincoln Parish Well, we knew it dropped
- 13 100-and-whatever-90 feet over a 40- to 50-year period.
- 14 We don't know -- where's the bottom? It dropped 190 in
- 15 a 600 feet depth --
- 16 MR. MCGEE:
- 17 The bottom of the Sparta is about 600 feet below
- 18 land surface in Lincoln Parish, in general, okay. So
- 19 if you want to figure it that way, in very general
- 20 terms, about a third, we've lost about a third in
- 21 Lincoln Parish.
- 22 MR. HOLT:
- 23 And that puts it in perspective.
- 24 MR. MCGEE:
- 25 The thing that I'll point out, though, is that
- 26 it's not just about the quantity of water, because
- 27 things happen when water levels decline in aquifers.
- 28 One, if I'm a driller, if I'm in charge of running the
- 29 wells, I've got to drill deeper to get to the water,
- 30 that costs me more energy, that costs me more for a

- 1 well, and also the yields are going to be decreased if
- 2 that happens. So there's a lot -- and the quality is
- 3 generally going to decline, also. So there's a lot of
- 4 things that can go on. It's not just the quantity.
- 5 So, when you focus on the one-third, people might
- 6 say, well, great, we've got two-thirds left, that's not
- 7 the case. You've got compaction going on. You've got
- 8 quality decreases. You've got energy costs increasing,
- 9 and have more expensive wells going in, and more
- 10 frequent wells going in the area to supply the amount
- 11 of water that you're going to need.
- 12 MR. ANGELLE:
- 13 All right.
- 14 MR. BOLOURCHI:
- Mr. Chairman?
- 16 MR. ANGELLE:
- 17 One more question.
- 18 MR. BOLOURCHI:
- 19 There's a lot of studies have been done in the
- 20 past 25 years, and I think -- there is some questions
- 21 that I hear from the audience. I think we need to know
- 22 what they are, where they are, so we can have access.
- I would like to recommend that Ben will discuss
- 24 this, and we'll try to get a summary of all the
- 25 available studies, with a brief, one paragraph excerpt,
- 26 what this study found out, and bring that to the
- 27 Commission for the members to review, number one.
- 28 Number two, all of those reports that have been
- 29 published -- there are 14 different State libraries
- 30 throughout the state, so whenever you need something,

- 1 you can get all of it. Visit your State library, under
- 2 a U.S.G.S. co-op or DOTD or DNR, and you can get those
- 3 reports.
- 4 Number two -- or three, we're putting all the
- 5 reports on the U.S.G.S. web site, and those of you that
- 6 don't know the use of the computer, you can probably
- 7 talk to your grandchildren, they will take you there so
- 8 you can get those reports.
- 9 Thank, you.
- 10 You did a great job, Ben.
- 11 MR. ANGELLE:
- 12 Any other questions for the Commission, or the
- 13 Commission members to Mr. McGee?
- 14 (No response.)
- 15 MR. ANGELLE:
- 16 Thank you. Ben, let me -- before I release you
- 17 from your post there, let me, again, on behalf of the
- 18 State, thank you, and thank the Federal government. We
- 19 believe that we're in this thing together, that it's
- 20 not the local government and the local people against
- 21 the State government, and State government against the
- 22 Federal government. This is a resource for all of us,
- 23 and the only way we can do the job that we think we can
- 24 do is working in a partnership. So, again, thank you,
- 25 and we would hope that we would be able to increase our
- 26 relationship or to develop that relationship even more
- 27 fully.
- 28 A couple questions. We are going -- for the
- 29 Commission members, one of the things that you'll see
- 30 today is a kind of a report card, if you will, a status

- 1 report, of the selected aquifers for today. You will
- 2 continue to see, over the coming year, presentations
- 3 like this on all of the aquifers.
- And how many do we have in the state?
- 5 MR. MCGEE:
- 6 Eleven.
- 7 MR. ANGELLE:
- 8 We have eleven aquifers, and we heard on maybe
- 9 about five or six today, so we will continue to expose
- 10 you all to the vital statistics of each aguifer, and I
- 11 think it's important that we do that.
- 12 I agree with Bo. I want to direct the staff to
- 13 make certain that, on our web page, we -- on our web
- 14 site, we put as much information, as many reports as
- 15 possible, both, obviously, to U.S.G.S. links or to DOT,
- 16 whoever it is, so that people, from the comfort of
- 17 home, can do the kind of research that they need to be
- 18 able to do.
- 19 Does the U.S.G.S. issue a report card -- I will
- 20 call it a report card -- on the quality or the
- 21 sustainability, is there -- while there's information
- 22 that was presented today, and it is, you know, again, a
- 23 lot of it scientific. And I, for one, not being a
- 24 scientist, liked the questions Mr. Holt had.
- 25 When I hear -- I understand what 25 percent is,
- 26 you know. I'm not sure I understand some of the
- 27 technical things.
- 28 Is there a summary report card that says, for
- 29 instance, you know, the Sparta quality is an "A," but
- 30 its sustainability is a "C minus;" is there anything

- 1 like that?
- 2 MR. MCGEE:
- 3 The short answer is, no.
- 4 But I would point to one of the publications that
- 5 it was highlighted in this presentation called The
- 6 Guide to Louisiana's Ground Water Resources. If people
- 7 take the time to go through that, it did, in fact, give
- 8 essentially a report card for the various aquifers,
- 9 talking about quality, the quantity of water, and
- 10 basically establishing that situation at the time that
- 11 that report was written. So that's probably as close
- 12 as I can call a report card for Louisiana's aquifers.
- 13 MR. ANGELLE:
- 14 Let's make sure we get a copy of that to every
- 15 Commission member in the next couple of weeks, so they
- 16 can begin to chew on that. And also, I'm sure it's on
- 17 our web site, as well. If not, let's make sure it is.
- 18 The second thing is, of the six that we heard
- 19 about today, if you happen to wake up tomorrow morning
- 20 and you were a member of this Commission, would it be
- 21 appropriate for us to spend most of our time on the
- 22 management of the Sparta and the Wilcox?
- 23 MR. MCGEE:
- Yes. I would prioritize the aquifers in terms of
- 25 where our attention would be drawn, and primarily, it
- 26 would be the Sparta. Secondarily, just based on recent
- 27 events and situations, the Carrizo-Wilcox would
- 28 definitely be secondary.
- 29 MR. ANGELLE:
- Okay. Good, very good. Thank you very much.

- 1 Thank you very much for being here. We appreciate you,
- 2 sir.
- 3 MR. MCGEE:
- 4 Thank you.
- 5 MR. ANGELLE:
- 6 I need to -- I failed to call roll, so I'd ask
- 7 Mr. Canfield to go ahead and get it on the record.
- 8 MR. DUBOIS:
- 9 Mr. Scott, I don't mean to interrupt you. The
- 10 geologist was blocking me. I have one final question.
- 11 Why wasn't the citizens of the state of Louisiana
- 12 informed of the changes in the Clean Water Act?
- 13 MR. ANGELLE:
- What act?
- 15 MR. DUBOIS:
- -- that were made in 2005.
- We're being told that the oil and gas industry is
- 18 completely exempt and deregulated from use of --
- 19 MR. ANGELLE:
- 20 You're talking about the Federal Clean Water Act?
- 21 MR. DUBOIS:
- Yes. Which I'm being told it's left up to the
- 23 State, and they are completely exempt and deregulated.
- 24 We've talked with various people. I mean, we're
- 25 scared. We've got people who are scared to death. We
- 26 cannot make it another summer without water. There's
- 27 no way.
- 28 MR. ANGELLE:
- Mr. Welsh?
- 30 MR. WELSH:

- 1 I was saying that Louisiana Department of
- 2 Environmental Quality administers the Clean Water Act,
- 3 so those kind of questions would be -- should be
- 4 addressed to the DEQ.
- 5 MR. ANGELLE:
- 6 Bo?
- 7 MR. BOLOURCHI:
- 8 Also, the Department of Health has -- of the Safe
- 9 Drinking Water Act.
- 10 MR. ANGELLE:
- 11 Certainly, whether or not the citizens were -- I
- 12 think your question was, why the citizens were not
- 13 informed?
- 14 MR. DUBOIS:
- 15 Yes.
- 16 MR. ANGELLE:
- 17 And I can't answer that question. Because, in my
- 18 role, I don't have the statutory responsibility to do
- 19 that, but I will work with you after this meeting.
- 20 You all seem to have a very, very extraordinary
- 21 problem with regards to being out of water for a period
- 22 of time, that is, you know -- is, I'm sure, very
- 23 difficult. So I would certainly want to visit with you
- 24 after the meeting to get as many details as we could
- 25 about that, and perhaps maybe get some of the folks at
- 26 the -- out of the Department of Health and Hospitals or
- 27 the Department of Environmental Quality to work with
- 28 you on the communication piece. I really can't address
- 29 that, but I'm not trying to skirt your question.
- 30 MR. DUBOIS:

- 1 Okay.
- 2 MR. ANGELLE:
- 3 Okay.
- 4 MR. DUBOIS:
- 5 Is that -- I mean, where -- as far as I can see
- 6 it, and the other people that's, you know, losing
- 7 water, it looks like that only God, and we, the people,
- 8 can do anything about it. I mean, it's scary. I mean,
- 9 it's really scary.
- 10 MR. ANGELLE:
- I hear that, and certainly, I'll visit with you.
- 12 Thank you.
- Okay. Mr. Canfield?
- 14 UNIDENTIFIED AUDIENCE SPEAKER:
- Mr. Chairman?
- 16 MR. ANGELLE:
- 17 Yes, sir.
- 18 UNIDENTIFIED AUDIENCE SPEAKER:
- 19 He's pointed out one fact about this situation.
- 20 There are so many organizations at the State level that
- 21 you don't know who to talk to about the problem.
- 22 Somewhere, there needs to be somebody -- someone step
- 23 up and say, this is where the problems get solved, not
- 24 point to another organization and say, you've got to go
- 25 ask them, or go ask them.
- Now, I'm assuming, you're the Water Commission,
- 27 and, really, that's where I think the questions and the
- 28 answers should come from, and to point it off on
- 29 somebody else is not the right response.
- 30 MR. ANGELLE:

- 1 Well, I appreciate that, sir. Let me say that I
- 2 think you are absolutely right.
- 3 And the legislature, when they set this Commission
- 4 up, set this Commission up from the folks who have a
- 5 responsibility in certain areas. For instance, the
- 6 Department of Health, Department of Environmental
- 7 Quality, Department of Wildlife and Fisheries, all have
- 8 members on this Board. I don't think the Department of
- 9 Environmental Quality representative is here today,
- 10 okay, so I would have asked them to answer that
- 11 question.
- But you're absolutely right. In 2001, when the
- 13 legislature saw fit to begin to put together ground
- 14 water resource management, it was to take some of the
- 15 folks from the various agencies and bring them into one
- 16 group to be able to address a management, to have an
- 17 overall plan, and to be able to execute that plan,
- 18 okay.
- 19 Thank you very much.
- 20 Mr. Canfield?
- 21 MR. CANFIELD:
- 22 All right. We'll begin roll call.
- Chairman Angelle?
- 24 MR. ANGELLE:
- Here.
- 26 MR. CANFIELD:
- 27 Commissioner Balkum?
- 28 MR. BALKUM:
- Here.
- 30 MR. CANFIELD:

- 1 Commissioner Bolourchi?
- 2 MR. BOLOURCHI:
- Here.
- 4 MR. CANFIELD:
- 5 Commissioner Burland?
- 6 MR. BURLAND:
- 7 Here.
- 8 MR. CANFIELD:
- 9 Commissioner Coleman?
- 10 MR. COLEMAN:
- Here.
- 12 MR. CANFIELD:
- 13 Commissioner Colvin?
- 14 MR. COLVIN:
- Here.
- 16 MR. CANFIELD:
- 17 Commissioner Downs?
- 18 (No response.)
- 19 MR. CANFIELD:
- 20 Commissioner Frey?
- 21 MR. FREY:
- Here.
- 23 MR. CANFIELD:
- 24 Commissioner Graves?
- 25 (No response.)
- 26 MR. CANFIELD:
- 27 Commissioner Hollingsworth?
- 28 MR. HOLLINGSWORTH:
- Here.
- 30 MR. CANFIELD:

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- 1 Commissioner Johnston?
- 2 MR. JOHNSTON:
- Here.
- 4 MR. CANFIELD:
- 5 Commissioner Leggett?
- 6 (No response.)
- 7 MR. CANFIELD:
- 8 Commissioner Loewer?
- 9 (No response.)
- 10 MR. CANFIELD:
- 11 Commissioner Leggett?
- 12 (No response.)
- 13 MR. CANFIELD:
- 14 Commissioner Mays?
- MR. MAYS:
- Here.
- 17 MR. CANFIELD:
- 18 Commissioner Owen?
- 19 MR. OWEN:
- Here.
- 21 MR. CANFIELD:
- 22 Commissioner Short?
- 23 (No response.)
- 24 MR. CANFIELD:
- 25 Commissioner Spicer?
- 26 MR. SPICER:
- Here.
- 28 MR. CANFIELD:
- 29 And Commissioner Welsh?
- 30 MR. WELSH:

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- 1 Here.
- 2 MR. ANGELLE:
- 3 Thank you.
- 4 Okay. Mr. Snellgrove, go on to Item No. 5.
- 5 MR. SNELLGROVE:
- 6 Thank you, Secretary.
- 7 I'm going to begin the report here by the
- 8 Commissioner on the activities of the staff. I'm going
- 9 to start off here. We're just going to go through the
- 10 duties of the Commission.
- 11 We've received calls, some inquiries from the
- 12 last --
- 13 (Off-the-record discussion.)
- 14 MR. SNELLGROVE:
- 15 So duties of the Commission, as it's spelled out
- 16 in the statute. First of all, it's to review and
- 17 approve or reject challenged orders placing
- 18 restrictions on water wells issued by the Commissioner
- 19 of Conservation. To date, there have been no orders
- 20 challenged.
- 21 Secondly, the Commission's duty is to review and
- 22 comment on rules and regulations proposed by the
- 23 Commissioner of Conservation. They have been provided,
- 24 here to -- the opportunity for review and comment.
- 25 Thirdly, they are to develop a statewide ground
- 26 water resources management program. The Commission --
- 27 as I stated, in the statute, the Commission must also
- 28 hold public hearings and consult with local
- 29 governmental entities in the development of the
- 30 program. This is ongoing.

- 1 Fourth, review the contingency plan developed by
- 2 the Commissioner of Conservation to respond to a ground
- 3 water emergency. Currently and in past, emergencies
- 4 have been managed through rules and orders.
- 5 Number five, direct the Commissioner of
- 6 Conservation to promulgate rules and regulations for
- 7 the appointment or designation of up to five regional
- 8 bodies based on the general location of major aquifer
- 9 systems and water sources of the state to be composed
- 10 of local stakeholders who are representative of current
- 11 users. That is in development by direction of the
- 12 Commission.
- 13 Attend all public meetings called by the
- 14 Commissioner of Conservation. This is ongoing.
- 15 The duties of the Commissioner, as provided for in
- 16 the statute, is to provide registration of all new
- 17 water wells by the water well owners. It is currently
- 18 ongoing.
- 19 Review the well information submitted by --
- 20 submitted with the notices of intent, which are the
- 21 forms that are provided to us for registration, within
- 22 30 days of their receipt and upon review by the
- 23 Commissioner. And upon review, the Commissioner may
- 24 either issue an order to an owner placing restrictions
- 25 on a well or request additional information or allow
- 26 the well to be drilled as proposed. That activity is
- 27 ongoing.
- The Commissioner is to determine areas of ground
- 29 water concern and designate critical areas of ground
- 30 water concern, in accordance with Revised

- 1 Statute 38:3097.6, the areas of ground water concern
- 2 that have been established are through Conservation
- 3 Order No. AGC-1-05 and issued and in effect since
- 4 August 2005.
- 5 The Commissioner is to collect data with respect
- 6 to water wells and water resources. That is ongoing.
- 7 Continue to develop -- continue development of a
- 8 statewide ground water resources management program.
- 9 It's ongoing.
- 10 Develop a contingency plan to respond to a ground
- 11 water emergency that gives ground water needed for
- 12 human consumption the highest priority. Again,
- 13 emergencies are currently managed through rules and
- 14 orders.
- 15 Authorize the use of drought relief wells for
- 16 agricultural use in times of drought upon a
- 17 determination that sufficient water resources are
- 18 otherwise not available. It has been authorized.
- 19 Enter into an interagency agreement or agreements with
- 20 interstate -- and interstate compacts in order to
- 21 manage ground water resources. Agreements with
- 22 multiple agencies for data sharing are in effect.
- 23 Enforce the Louisiana Ground Water Management Law
- 24 through issuance of compliance orders and civil
- 25 penalties. It is ongoing.
- Okay. At this point, we -- in the last meeting
- 27 that had, we introduced the Commissioner's report and
- 28 the idea that we were going to develop and continue to
- 29 put out a report on a semi-annual basis for picking out
- 30 contents, such as ground water resources program

- 1 performance indicators, water well registration
- 2 statistics, Sparta areas of ground water concern water
- 3 use statistics. Since this -- as I mentioned, back
- 4 then, this is kind of work in progress. I thought it
- 5 would be prudent for us now to include a section on
- 6 enforcement activities, and I've also focused in on the
- 7 report objective. Where last time, I think it
- 8 misrepresented what I wanted it to really say, which
- 9 was to provide the Office of Conservation's oversight
- 10 of ground water use in Louisiana. So, if you go back,
- 11 then to now, there's a subtle difference there between
- 12 the report objective. The status of this report, it is
- 13 in development, and we anticipate completion to be in
- 14 April of 2009.
- 15 MR. ANGELLE:
- Mr. Snellgrove, is that report entitled to
- 17 basically give members of the Commission, again, some
- 18 of the vital statistics of what's going on in the
- 19 Program and how you all are managing it?
- 20 MR. SNELLGROVE:
- 21 That is correct. It's to give to this Commission
- 22 an idea of -- or just a report on the data, the facts,
- 23 of what we are doing day to day and how we go about
- 24 doing it and where we are at.
- 25 MR. ANGELLE:
- Okay. Has such a report ever been put together?
- 27 MR. SNELLGROVE:
- Not to my knowledge.
- 29 MR. ANGELLE:
- 30 Okay. Thank you.

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- 1 MR. SNELLGROVE:
- 2 So with the passage of Act 581 of 2008, and
- 3 effective August 15, 2008, the Commissioner has been
- 4 granted authority to issue compliance orders and assess
- 5 civil penalties. In doing so, the staff has
- 6 implemented this new tool of managing ground water
- 7 through compliance audits, well water notification
- 8 review, and complaint investigations.
- And to date, with the compliance orders that we've
- 10 initiated, we are currently at 157 compliance orders
- 11 and 36 notices of violations that have been issued to
- 12 various water well owners for failure to comply with
- 13 Office of Conservation regulations or order of the
- 14 Commissioner.
- 15 MR. ANGELLE:
- 16 Excuse me. That was done as a result of
- 17 legislation that was adopted this year that gave
- 18 enforcement authority?
- 19 MR. SNELLGROVE:
- 20 This effort, at this point, has been -- what was
- 21 implemented due to the legislative amendment that was
- 22 passed, that is correct.
- 23 MR. ANGELLE:
- 24 So go back to the previous slide.
- 25 Prior to that legislation being adopted, are you
- 26 -- would it be a fact that the Commissioner had no
- 27 enforcement authority?
- 28 MR. SNELLGROVE:
- 29 He did not have the authority to issue compliance
- 30 orders and assess civil penalties. However, we, you

- 1 know -- we have -- we did initiate notices to those who
- 2 were in violation to let them know that they have not
- 3 complied.
- 4 MR. ANGELLE:
- 5 You could pull over a speeder and you can give
- 6 them a warning ticket, but you couldn't give them a
- 7 ticket that would actually go on their speeding record,
- 8 if you would, or collect a fine. This legislation now
- 9 gives you the authority to put a little more teeth into
- 10 what it is that you all do?
- 11 MR. SNELLGROVE:
- 12 That is correct.
- Okay. The compliance audits that we've initiated,
- 14 in a matter of a priority, based on information that
- 15 has been provided to our Agency over time, and very
- 16 much recently, we've initiated three areas.
- 17 And the first being the Sparta Aquifer areas of
- 18 ground water concern, first and foremost, that was our
- 19 prioritized effort. And in that effort, we've reviewed
- 20 the three areas of ground water concern. We've
- 21 compared what we had in registration and what DOTD has
- 22 registered for water wells in those three areas, and as
- 23 a result, we have issued 24 notices of violation for
- 24 water wells that were found not to have been registered
- 25 with our Agency, as the law requires, which is July of
- 26 2001, in an aquifer. So, if a well was registered at
- 27 DOTD, we searched the data base and we showed that that
- 28 well was not -- was installed following July 2001, then
- 29 we issued a notice of violation to inform that well
- 30 owner that that well was not registered with our

- 1 Agency.
- 2 And as a result -- well, secondly, the Sparta
- 3 areas of ground water concern, as a result of the order
- 4 that was issued by the Commissioner, requires that our
- 5 Agency be provided by all water well owners, that are
- 6 not domestic, to provide to our Agency, on a monthly
- 7 basis, water use reports. And going back and reviewing
- 8 our records, we established that there were 120 water
- 9 wells that were not domestic, that were in these three
- 10 areas of ground water concern, that were not reporting
- 11 monthly usage. So we issued 65 compliance orders in
- 12 that effort. Multiple -- the reason why there's a
- 13 difference there is because one water well owner may
- 14 have had multiple wells under their ownership.
- 15 The second effort that we put forth is the
- 16 Haynesville Shale natural gas producers compliance
- 17 audit that we initiated. And sometime back, I don't
- 18 know exactly when, but the Office of Conservation began
- 19 tracking weekly, on a weekly basis, and providing
- 20 updates to Haynesville Shale oil and gas activity. So
- 21 we took that information that was being produced
- 22 internally, and then now is made available through our
- 23 data base -- through our internet, and filter that,
- 24 sort through that information, and determine, you know,
- 25 who's in production. We know that, if you produce,
- 26 there's been time enough that has passed that we expect
- 27 that, if they did use ground water, that they would
- 28 have drilled a water well, and that it would have been
- 29 delivered to DOTD. And due to the timing of when a
- 30 permit is issued and a well is drilled and actually

- 1 goes into production, it is reasonable for us to expect
- 2 that that water well notification -- registration that
- 3 went to DOTD would have been put into their data base.
- 4 So we went and we audited that information based
- 5 on who we know who is in production, and out of that
- 6 effort, we determined before -- before we started
- 7 issuing compliance orders, we were issuing notices of
- 8 violations. And some of those were issued for
- 9 operators who were bound to have wells that were not
- 10 registered to our Agency, that were registered with
- 11 DOTD. And then, subsequent to the notices of
- 12 violation, we turned it into -- we increased our
- 13 effort, if you will, through our orders, to issue a
- 14 compliance order.
- 15 And since then, we have, to date, issued 15
- 16 compliance orders, and we will continue to do this
- 17 effort until such time we will hopefully have reached
- 18 out and touched each of the producers out there and,
- 19 you know, obtained compliance. And we will hopefully
- 20 find that our orders are showing 100 percent.
- 21 So the third effort that we've initiated is the
- 22 Carrizo-Wilcox/Haynesville Shale area compliance
- 23 orders. And in doing this, we looked at the parishes
- 24 that are predominately Haynesville Shale oil and gas
- 25 activities were being conducted, and that being Caddo,
- 26 Bossier, DeSoto, and the Red River parishes, and began
- 27 a very intense compliance audit parishwide, parishwide,
- 28 not exclusive to the oil and gas industry, but for all
- 29 non-domestic water well owners in those four parishes.
- 30 And what we have concluded, at this point, is the

- 1 Caddo Parish effort. And in doing so, what we have
- 2 found were 362 unregistered water wells with the
- 3 Department of Natural Resources that were on the DOTD
- 4 registration, and we found that that equated to 77 well
- 5 owners, and issued those 77 compliance orders here
- 6 recently.
- Well, some parishes will be completed, hopefully,
- 8 here within the next month. We've already know -- we
- 9 know who we need to look at internally from those other
- 10 three parishes. We now need to compare what the ones
- 11 that we have established should have registered with
- 12 what we have on our record to see who's out.
- 13 MR. HOLLINGSWORTH:
- Mr. Chairman, could I ask a question?
- 15 MR. ANGELLE:
- 16 Yes, sir.
- 17 MR. HOLLINGSWORTH:
- 18 Did the legislature give us authority to have a
- 19 plan of enough substance that is a real enforcement
- 20 tool, or is it just a nuisance?
- 21 MR. ANGELLE:
- 22 Well, I was going to -- it's a great question.
- 23 And I think it's -- again, it's one thing to have the
- 24 authority to write the speeding ticket. It's another
- 25 thing to make sure that you can actually, you know,
- 26 change behavior.
- 27 So I'm particularly interested in seeing if we
- 28 have a report yet whether or not the compliance orders
- 29 that were issued and the notices of violation have led
- 30 to a change in behavior for those offenders?

- 1 MR. SNELLGROVE:
- Well, when you imagine -- when you've put forth an
- 3 effort as we have, in a short period of time, you
- 4 know -- first of all, you have to give the offender an
- 5 opportunity to comply, so we have compliance deadlines.
- 6 And in doing so, we need some information on it. We're
- 7 going to have to review that information and sort it
- 8 out and find out if it meets the orders -- order.
- 9 MR. ANGELLE:
- 10 Let me just kind to -- that's the correct answer,
- 11 but what I'm -- are you seeing folks tending be -- just
- 12 following up to the question, you know.
- 13 I'm assuming what's happening is, these --
- 14 inasmuch as we now have a very active Ground Water
- 15 Commission and we're standing up our efforts in the
- 16 state of Louisiana, that folks are getting these orders
- 17 for the first time. I am assuming that they're calling
- 18 to find out, hey, what is this, and we're educating
- 19 them. Do you tend to get the general sense -- I
- 20 realize that, you know, some of this just kind of went
- 21 out.
- Do you get the general sense that folks want to
- 23 comply and understand that we're serious about this,
- 24 and that we're going to get our arms around it?
- 25 MR. SNELLGROVE:
- 26 I can speak with confidence in the areas of ground
- 27 water concern, that -- since that was the first effort
- 28 that we initiated and have gotten notices out, and
- 29 we've had time to assess that, absolutely. We've had
- 30 overwhelming response. We've had folks, you know --

- 1 well owners, calling in and wanting to understand where
- 2 did we go wrong; what do we need to do to repair this,
- 3 how can we get in compliance. So, you know, there will
- 4 be some who we might have to knock on the door again,
- 5 and in doing so, we will utilize our tool to perhaps,
- 6 if necessary, as deemed necessary by the Commissioner,
- 7 assess a civil penalty.
- 8 MR. ANGELLE:
- 9 Okay. And if you can perhaps -- at our next
- 10 meeting, perhaps a report that shows the number issued
- 11 compliance, you know, we have it at 70 percent or we
- 12 have it at 80 percent or we have it at 10 percent, kind
- 13 of report.
- 14 MR. SNELLGROVE:
- 15 That's why, on the Commissioner's report, the
- 16 enforcement activities section on there to really have
- 17 some really good statistics on that, yes.
- 18 MR. ANGELLE:
- 19 Mr. Mayor, did that address your question, or do
- 20 you have a different one?
- 21 MR. HOLLINGSWORTH:
- I thought perhaps he might have an example of what
- 23 amount of money we're talking about?
- 24 MR. SNELLGROVE:
- 25 Oh, yes, sure, absolutely. The actual Act itself
- 26 has the range -- has ranges for the each of the types
- 27 of violations, so we're bound by the statutory
- 28 requirement to stay within range, as far as the amount
- 29 of civil penalties that could be assessed.
- 30 Now, it's not necessary, and the Act doesn't say,

- 1 thou shall access a civil penalty. It just says that,
- 2 if one is issued, it must stay within this range.
- 3 MR. HOLLINGSWORTH:
- 4 Where does it start?
- 5 MR. SNELLGROVE:
- 6 They are varied.
- 7 Blake?
- 8 MR. HOLLINGSWORTH:
- 9 You don't have to read them all, but just --
- 10 MR. CANFIELD:
- 11 Yes. Well, I think the two major types of
- 12 violations we would be talking about here would either
- 13 be -- as you know, there's a time component for
- 14 registration of wells, 60 days prior to, for most
- 15 wells. If they fail to register a well at all prior to
- 16 them drilling a well, then it starts off with a
- 17 maximum, for your first offense, of \$500. It then goes
- 18 up to \$1,000 on second offense, and third is \$2,500.
- 19 If they do give us prior notification, but it
- 20 isn't 60 days before, like is required by law, then
- 21 your first offense is going to be \$200, is the max;
- 22 second offense is \$200 to \$400; and your third is maxed
- 23 out at \$1,000.
- 24 MR. HOLLINGSWORTH:
- I think that is substantive, and that ought to do
- 26 the trick.
- 27 MR. WELSH:
- I'd just like to make a comment.
- 29 During the passage of that legislation last year,
- 30 it was the specific requirement of the legislature for

- 1 us to develop a penalty matrix system. In fact, we had
- 2 to build stock, and we did that and it was continued
- 3 through the process with others then. The amounts of
- 4 the penalties were discussed in very great detail.
- 5 MR. CANFIELD:
- 6 Okay. The next one.
- 7 Okay. As the next part of it, we had compliance
- $8\,$ and we had enforcement activities, compliance orders
- 9 being the first, the second being -- and third being
- 10 water well application review, which is what we do on a
- 11 day-to-day basis, and complaint investigations.
- 12 So, of those efforts, under the review process,
- 13 DNR has issued 14 notices of violations and one
- 14 compliance order. And the complaint investigation,
- 15 we've issued two notices of violation as a result of
- 16 our field investigations and review of the complaints.
- 17 This portion of the presentation here is going to
- 18 focus in an update on the Haynesville Shale area. The
- 19 last time, we showed this map. I'll bring it back and
- 20 show it again, primarily to focus on the areas of
- 21 Keithville, Keatchie, Grand Cane, and Longstreet.
- 22 These are the areas where we have received complaints
- 23 of water level drawdowns and problems mostly.
- 24 Since the summer of last year, 2008, the
- 25 Haynesville Shale activity for our office began. We,
- 26 both, from an oil and gas perspective and water --
- 27 ground water usage perspective, began to get phone
- 28 calls, began to get complaints or concerns that came
- 29 out.
- 30 So recognizing the need, at that time, to address

- 1 the situation, we issued, first of all, the red item
- 2 there at the top, on August 6, 2008, which was slightly
- 3 revised on the 21st of August, a drilling rig supply
- 4 and frac water supply well memo. This memo is -- this
- 5 memo is going out to each and every oil and gas
- 6 operator who is in this -- who has requested and has
- 7 been issued a permit to drill and oil and gas well
- 8 in -- statewide. So we're sending this out as a public
- 9 education and a public awareness effort to educate, to
- 10 provide information that they can have contact. They
- 11 know who to call, where to call, you know, where to
- 12 look for information. So this effort is ongoing.
- 13 We've sent out thousands of these, as we've sent out
- 14 permits to drill, since that time.
- 15 The next item that I wanted to highlight here -- I
- 16 know this is a busy slide, but it's busy for a reason,
- 17 because we've been busy. Ever since the summer of
- 18 2008, we have initiated all of these actions to address
- 19 the information that has come to our Agency about
- 20 activity in the Haynesville Shale as it relates to
- 21 ground water.
- 22 So, back in October of 2008, the Commissioner
- 23 issued a ground water use advisory, and this was posted
- 24 our web site for the Carrizo-Wilcox Aquifer. And in
- 25 there, the advisory brought to the attention the fact
- 26 that the Carrizo-Wilcox is somewhat limited in what it
- 27 can produce, and it also reported, as Ben did earlier,
- 28 who are the primary users. And in the that advisory,
- 29 it went on to report and suggest or recommend, advise,
- 30 if you will, for all oil and gas operators, when at all

- 1 practical, to seek alternatives to the Carrizo-Wilcox
- 2 Aquifer, i.e., the Red River, the Red River Alluvial,
- 3 you know, other surface features, ponds, lakes, Toledo
- 4 Bend, whatever it could to try to reduce the use of the
- 5 Carrizo-Wilcox.
- 6 In January 2009, this year, we also issued another
- 7 education and awareness effort, ground water use public
- 8 awareness notification, in response to information that
- 9 our agency had received that some domestic water wells
- 10 may be used to supply or sale ground water from the
- 11 Carrizo-Wilcox to oil and gas operators for industrial
- 12 purposes. So this public awareness notification was
- 13 sent out to make -- to bring to the public's attention
- 14 and make aware of the fact that, if this is being done,
- 15 it may be a situation that is not within the
- 16 regulations of either DOTD or DNR.
- 17 And we provided this -- the major intent of this
- 18 is, of course, to bring this to the public's, you
- 19 know -- to bring it to their awareness, bring it to the
- 20 local governing authority's attention, and it provides
- 21 them a tool that they can provide to any callers that
- 22 may have come before them or any persons that are
- 23 seeking information on this to contact us.
- Because, as I showed on an earlier slide, you
- 25 know, we do track where we get our complaints from and
- 26 look at those areas. We want to know if, you know --
- 27 if we get, you know, a lot of complaints in a certain
- 28 area, then it becomes something that we need to pay
- 29 attention to, of course, obviously, and so we're
- 30 tracking these complaints and these inquiries that we

- 1 receive. And I'm going to get on that a little bit
- 2 farther down here, but -- so it's very important for us
- 3 to know what's going on out there, so that we can -- we
- 4 can put it on our radar and further assess and evaluate
- 5 water wells that are proposed to be drilled in these
- 6 areas.
- 7 And then, fourthly here, January 19th is when we
- 8 initiated the compliance audit to go to the parishes of
- 9 Bossier, Caddo, DeSoto, and Red River to review the DNR
- 10 and DOTD registration audits to find out -- to get
- 11 those wells registered in compliance with our Agency.
- Next, please.
- Okay. As I was discussing earlier, this tracks,
- 14 in the Haynesville Shale area, the number of complaints
- 15 that we've received by month, and number of inquiries.
- 16 And this is -- what the data is showing us what we see
- 17 coming into our office is that there is a definite
- 18 declining trend of the number of complaints of water
- 19 level drawdown in the Carrizo-Wilcox, and also, to some
- 20 degree, a flat line of the number of inquires.
- 21 The difference between a complaint, obviously, and
- 22 an inquiry is, a complaint is, I have an effect, and
- 23 here's the cause or the alleged cause. The inquiry is
- 24 more along the lines of, how do I go about, you know,
- 25 pursuing sell of domestic water if I have a domestic
- 26 well, or if I drill a domestic well, can I sell it? So
- 27 these are the things that this data here is tracking.
- 28 It's looking at what we've gotten. No complaints have
- 29 been received in 2009, in the Haynesville Shale area
- 30 that has come through our office.

- 1 Haynesville Shale water use, okay. Here, what we
- 2 did, in response to inquiries that we had, supplemental
- 3 to the advisory that was put forth, we wanted to know,
- 4 at the direction of the Commissioner, who is doing what
- 5 in the oil and gas industry, where is the water
- 6 resources being drilled from? So, with not a lot of
- 7 time, and we wanted to put out an answer quickly, we
- $8\,$ had a phone survey of those operators that we knew were
- 9 in the Haynesville Shale operating based on the weekly
- 10 report that we put out. So what we found at the time
- 11 that the survey was completed was that 26 operators out
- 12 there, of which ten reported that ground water
- 13 resources were solely being used; three were reporting
- 14 that solely surface water was being used; nine
- 15 operators reported multiple water resources; and three
- 16 either were not at a stage yet in their drilling
- 17 operations where they have the determined that or we
- 18 just didn't get an answer. So this is the information
- 19 that came to us via a phone survey at that time, which
- 20 would have been probably concluded in January, or maybe
- 21 sometime mid-February. That's what we've got right
- 22 now.
- 23 Secondly, it's my understanding the Louisiana Oil
- 24 and Gas Association has also initiated a water use
- 25 assessment survey, water evaluation, in the
- 26 Carrizo-Wilcox Haynesville Shale area, similar to what
- 27 was done in Texas with the Barnett Shale. And it's my
- 28 understanding in discussions with the Louisiana Oil and
- 29 Gas Association that this report is scheduled to be due
- 30 sometime in March, in this month. Once we get that

- 1 information, we will certainly, with the permission of
- 2 the Louisiana Oil and Gas Association and the
- 3 Commissioner, put that -- put a link out to the
- 4 Louisiana Oil and Gas Association's web site, so that
- 5 this report can be made available to through our web
- 6 page.
- 7 As I discussed earlier, as part of our effort to
- 8 address information coming into our office on the
- 9 Haynesville Shale area on the domestic sale or the sale
- 10 reports from domestic reports to industrial water
- 11 users, this is the public awareness notification that
- 12 was issued on January 12th. In here, this information
- 13 was put out as a response to the concerns out there
- 14 that there may be some folks that are doing some things
- 15 that are not proper, according to State law. So we
- 16 discussed with DOTD their rules and regulations, before
- 17 this was issued. We met and we discussed and we
- 18 determined that we really needed to review these
- 19 situations on a case-by-case basis, because it depends
- 20 on when the well was drilled. It's somewhat
- 21 complicated. So we decided the best tool that we could
- 22 provide to address this concern is to provide to the
- 23 local authorities the ability to -- a contact person,
- 24 somebody who they could call, and then we could put our
- 25 legal staff on it and address these on a case-by-case
- 26 basis.
- 27 Fall and winter 2008 is whenever we began our
- 28 effort here. This kind of goes back to the previous
- 29 slide on the complaints and inquiries on there. In
- 30 receiving those complaints that we have received, we've

- 1 conducted two field investigations. And in doing so, I
- 2 had mentioned earlier that notices of violation were
- 3 issued as a result of our findings.
- 4 And in January, of course, we issued this public
- 5 awareness notice. We received -- since we've issued
- 6 this public awareness notice, this notification, we've
- 7 received two inquires, to date, on the sale of water
- 8 from a domestic well for industrial purposes.
- 9 Okay. In summary, in the Haynesville Shale, the
- 10 Office of Conservation's plan of action is to continue
- 11 to complete area water well registration compliance
- 12 audits; to issue enforcement actions as deemed
- 13 necessary; to provide prompt responses to complaints
- 14 and inquiries; to track complaints and inquiries and
- 15 assess trends; conduct field investigations as deemed
- 16 necessary; and work with other local, State, and
- 17 Federal authorities.
- 18 Part of the agenda included a Task Force update,
- 19 and the last time we met, at the previous meeting, we
- 20 had informed that we were going to go out and get
- 21 confirmation of memberships, since we needed to kind of
- 22 refresh the Task Force. We did so. We issued letters
- 23 to all members that we had of record at the time, and
- 24 in response to that effort, we've gotten 44 responses
- 25 to affirm membership on the Task Force out of 49
- 26 members. And from the remaining that we had, we've
- 27 recently made phone contact, and it's my understanding,
- 28 that we've actually gotten some responses to our phone
- 29 efforts, so we hope to soon have affirmation of all 49
- 30 members of the Task Force.

- 1 Okay. Another agenda item was to provide an
- 2 update to the rule amendment that Conservation had put
- 3 out on the regulations for ground water management. On
- 4 December 29, 2008, a public hearing was held. We had a
- 5 comment period that lasted until January 5, 2009.
- 6 Based on the comments that we had received, we issued a
- 7 final rule notice to all interested parties and the
- 8 legislature. And on February 20, 2009, the final rule
- 9 was published in the Louisiana State Register.
- 10 An update on -- well, to follow that, the rule,
- 11 that was promulgated. And based on the comments that
- 12 we did receive, we followed with a drought relief water
- 13 well notification guidance statement to address drought
- 14 relief on water well notification policy.
- In doing so, this is -- this was to address
- 16 drought relief for agricultural water well owners, and
- 17 the date effective of the order that was issued is
- 18 February 20, 2009, coinciding with the date of the rule
- 19 proposed and then passed.
- 20 The Commissioner's order, basically, conditionally
- 21 and temporarily exempts prior notification during
- 22 drought conditions for agricultural water well owners.
- 23 It requires notification within 60 days after these
- 24 types of wells are installed. It requires that,
- 25 following a drought of the well status, the well owner
- 26 provide our Agency an update to the well status to
- 27 notify us of their intent to either plug and abandon
- 28 the well or use it for other purposes. They have to
- 29 provide to us a line of what they anticipate to use the
- 30 well for in 90 days, basically, to complete a form,

- 1 which would allow us to evaluate that well location
- 2 following the drought and to, of course, respond to
- 3 that evaluation to the water well owner.
- 4 Next, please.
- 5 This is another agenda item that came up at the
- 6 last meeting that the Commissioner asked that there be
- 7 an effort to provide more education-outreach efforts by
- $8\,$ the department staff and the Department of Natural
- 9 Resources. And as a result, the Secretary issued 375
- 10 memos to -- requesting their assistance to provide
- 11 water well registration notifications to our Agency
- 12 issued to the DOTD certified water well drillers. That
- 13 effort went out February of 2009. And subsequent to
- 14 that, we know on some of our statistics that we had run
- 15 in the past that we were running into public supply
- 16 water well owners who may have been providing
- 17 notifications to our Agency versus what has been
- 18 provided to DOTD. So an outreach effort was provided
- 19 to the Louisiana Municipal Association, the Rural Water
- 20 Association, and the Police Jury Association asking
- 21 that they respectfully reach out to their members and
- 22 provide to them the information to contact our Agency
- 23 for understanding of what it is that their members need
- 24 to do to comply with our rules and regs for water well
- 25 registrations.
- 26 MR. ANGELLE:
- 27 So in the organization outreach, you reached out
- 28 to the organizations that are listed there and asked
- 29 that they, in turn, reach out to their member companies
- 30 to let them know about that --

- 1 MR. SNELLGROVE:
- 2 Yes, sir.
- 3 MR. ANGELLE:
- 4 All right.
- 5 MR. SNELLGROVE:
- 6 That concludes the items on the agenda and the
- 7 staff report. I'll take any questions.
- 8 MR. ANGELLE:
- 9 I have a couple of questions.
- 10 One of the things that Mayor Hollingsworth had
- 11 brought up at the last meeting was for us to go ahead
- 12 and send out letters to producers, oil and gas
- 13 producers.
- 14 MR. SNELLGROVE:
- 15 Right.
- 16 MR. ANGELLE:
- 17 That was not mentioned. Where are we on that?
- 18 MR. SNELLGROVE:
- 19 We are, at this point -- what we did was, we went
- 20 into our SONRIS data base. Some of the comments that
- 21 were made is, well, you all have a data base, you know,
- 22 and you should utilize that. And so what we did was,
- 23 we went in and we filled in the information from the
- 24 data base to extract the appropriate contact persons in
- 25 each organization that is shown as being a producer or
- 26 operator in our records and harness their e-mail
- 27 information for the correct contact person, like their
- 28 compliance auditor, environmental person. I don't know
- 29 the exact numbers, but it was close to 1,000 e-mails
- 30 that were sent out. It was approximately 1,000 e-mails

- 1 that were sent out to all of the oil and gas industry
- 2 statewide through this e-mail effort. I would report
- 3 then that we did receive back -- anytime we send out
- 4 e-mails, we get some back, and we had some on there.
- 5 Of course, we are going to take an effort to assess who
- 6 those are, and it is our intentions to follow up with
- 7 those who we could not reach through the e-mail to send
- 8 out a mail-out to reach them.
- 9 MR. ANGELLE:
- 10 Okay. That was a good recommendation, Mayor, and
- 11 I appreciate that.
- 12 So it would seem like, with regards to the fact
- 13 that you now have legislative authority to enforce --
- 14 you all are taking actions to enforce, you will give us
- 15 a summary at our next month's meeting -- our next
- 16 quarterly meeting on the impact of that.
- 17 We have notified the well drillers. All 375
- 18 registered well drillers in the state have received a
- 19 letter or were forwarded a letter asking them to help
- 20 us when they have a well owner -- because, as I
- 21 appreciate it, the law says, the well owner shall
- 22 register the well, but we are using our relationship
- 23 with the water well drillers, and they are cooperating,
- 24 to help educate their customers to make sure that we
- 25 are getting things registered, correct?
- 26 MR. SNELLGROVE:
- 27 Yes.
- 28 MR. ANGELLE:
- 29 All right. You've got nearly all of the Task
- 30 Force members, the roster is almost completely filled

- 1 out, you said 44 of 49. You've got a couple calls in
- 2 the meantime?
- 3 MR. SNELLGROVE:
- 4 Right.
- 5 MR. ANGELLE:
- 6 Okay. And you've reached out to the associations
- 7 that were recommended in the last quarterly meeting,
- 8 the Police Jury Association, Rural Water Association,
- 9 and the Municipal Association, right?
- 10 MR. SNELLGROVE:
- 11 Louisiana Municipal --
- 12 MR. ANGELLE:
- 13 LMA, Police Jury Association, and Rural Water
- 14 Association?
- 15 MR. SNELLGROVE:
- 16 Yes.
- 17 MR. ANGELLE:
- 18 I'm particularly interested in seeing where the
- 19 compliance orders, where the notice of violations, or
- 20 what -- you know, I'm going to be particularly
- 21 interested in seeing -- having asked for the authority
- 22 by the legislature, having been granted the authority,
- 23 that you are now doing something with that authority in
- 24 a right, proactive way, how is it working? So that
- 25 would be, to me, a very, very key follow up as we set
- 26 the agenda for the next quarter.
- 27 MR. SNELLGROVE:
- Yes, sir.
- 29 MR. ANGELLE:
- 30 Thank you.

- 1 Any other questions?
- 2 Yes, sir?
- 3 MR. MAYS:
- 4 I have several questions.
- 5 One, Gary, your last presentation when we were
- 6 talking about reporting, I am having a little trouble
- 7 reconciling the well reports. I think you had said
- 8 there were 213 wells and that -- in that area, and 72
- 9 have -- of the 213 were large users. I can't get to
- 10 those numbers.
- 11 Can you explain that on your Page 7, the one under
- 12 Sparta Aquifer, and it goes down "monthly water use
- 13 reporting violations." Is that number 65 plus 120, is
- 14 that -- I'm not --
- 15 MR. SNELLGROVE:
- Okay. 65 compliance orders were issued to water
- 17 well owners, which equates to 120 water wells that were
- 18 not registered with DNR, post-July of 2001. So there
- 19 are multiple -- you know, one water well owner may own
- 20 more than one well. Obviously, that's what's going on
- 21 here. We asked, you know -- the oil and gas industry,
- 22 an operator may have a couple of drilling rig supply
- 23 wells that were drilled within the area, and yet, no --
- 24 so that's what that number represents.
- MR. MAYS:
- Okay. It's not a change in the number of wells;
- 27 it's still 213 in that area of concern?
- 28 MR. SNELLGROVE:
- 29 Correct. Whatever was registered at DOTD,
- 30 whatever the total number of water wells -- whatever

- 1 the total number of water wells that were out there
- 2 haven't changed. We used the DOTD data base as the
- 3 resource for us to compare. So, unless they've put
- 4 some in from the time that we last met until now, then
- 5 the number would have increased, you know, but...
- 6 MR. MAYS:
- 7 Okay. Well, I guess maybe I need to rephrase the
- 8 question.
- 9 How many more are reported since the last time we
- 10 met? Maybe that's a better way to ask the question.
- 11 MR. SNELLGROVE:
- 12 I don't know if I am really following that, the
- 13 question. But I do know that what we have reported is,
- 14 is that there were 120 that were not registered with
- 15 us, so...
- 16 MR. MAYS:
- 17 Okay.
- 18 MR. SNELLGROVE:
- 19 No, wait, wait, hold on. No. It was -- back up,
- 20 back up.
- 21 Monthly use -- let's read what it says. 65
- 22 compliance orders that were issued for 120 water wells
- 23 that those well owners of those 120 water wells were
- 24 not giving us monthly reports. They may or may not
- 25 have been required to be registered with us, but that
- 26 wasn't the focus of that item.
- 27 I'm sorry. I misled, and I don't mean to at all.
- 28 But, the 65 -- again, the 65 compliance orders
- 29 that were issued were for the monthly reports -- the
- 30 lack of monthly reporting, and of that, what we found

- 1 in our records, there were 120 wells where we were not
- 2 getting monthly water use reports, as required by the
- 3 Commissioner's order.
- 4 On the DNR water well registration, we had 24
- 5 wells that were found in all three areas of ground
- 6 water concern that were not registered with us, that
- 7 were required to be registered with us.
- 8 MR. MAYS:
- 9 Okay. I'll ask you about that after the meeting.
- 10 MR. SNELLGROVE:
- 11 Yes, sir.
- 12 MR. MAYS:
- 13 If you can explain how -- I can't get to that 213,
- 14 that's where I'm having a problem.
- 15 MR. SNELLGROVE:
- 16 Yes. The 213, I'm going to have to go back and
- 17 look and remember where we got that number from. That
- 18 may have been the total number of wells that were
- 19 actually registered at DOTD in the -- that's not what
- 20 -- the 213, if that's what that number represented,
- 21 then what I am reporting here is that there were 24
- 22 wells that we discovered that should have been
- 23 registered with us that were not, and that's why we
- 24 issued the violations.
- 25 MR. MAYS:
- I have another question about the Title 43, that I
- 27 don't understand, under the definitions, Page 127, area
- 28 of ground water concern and critical ground water area,
- 29 all verbatim.
- 30 MR. CANFIELD:

- 1 Yes. We actually got this copy from the Division
- 2 of Administration this past week, so we haven't had a
- 3 chance to review it and get back with them, but I want
- 4 to give you all the final copy that was published.
- 5 Either through a typo or some type error, the
- 6 critical ground water area was meant to be deleted from
- 7 the definitions and be replaced by the area of ground
- 8 water concern and the critical area of ground water
- 9 concern. So I'll be in contact with DOA to see what we
- 10 need to do to get that deleted.
- But, essentially, as you know, the legislation
- 12 changed when they changed the name from area --
- 13 critical ground water area, they changed the name of
- 14 that to area of ground water concern. So the rule
- 15 amendment was -- at least on this part, was through the
- 16 update rules to match pending legislation.
- 17 So, to answer your question, the reasons verbatim
- 18 is because that should have been deleted, and for
- 19 whatever reason, it was not on the copy that we -- was
- 20 returned to us by the DOA. So I just need to check
- 21 into it to kind of the cross-reference and see where it
- 22 went wrong and how we need to fix it.
- But a very sharp eye there catching that. We
- 24 caught it the second we got it, but I have to check and
- 25 see what procedures tell us we need to go through.
- 26 MR. HOLLINGSWORTH:
- 27 Mr. Chairman, could I ask a question relative to
- 28 the enforcement side, one other additional question?
- 29 Are the violations cumulative on the specific
- 30 well, or are they cumulative on a well driller?

- 1 Because there's a great deal of difference in how that
- 2 would effect something like this.
- 3 MR. SNELLGROVE:
- 4 That's a good question, and one of which we will
- 5 have to put some thought into.
- 6 With the way that we kind of equate -- well, I
- 7 think the way I will relate to that question with other
- 8 things that I've enforced under the commercial
- 9 facilities that we regulate on E&P waste, is that we
- 10 look at it as a site-by-site situation. In other
- 11 words, if we follow that same rationale, it would be a
- 12 well-by-well compliance order, in other words, the same
- 13 offense from one well, not the well owner.
- 14 MR. HOLLINGSWORTH:
- 15 So then you wonder if whether the fine is less
- 16 than what it would take to comply. I mean, I could see
- 17 where if it's a driller --
- 18 MR. ANGELLE:
- 19 I would interject that it would be our hope that
- 20 it would be cumulative on the owner or on the driller.
- 21 If it's not cumulative -- how will you be able to get
- 22 cumulative if it's by well?
- 23 MR. SNELLGROVE:
- 24 Well, it would be by well, if the well is
- 25 continuing to, you know, have a second offense within a
- 26 certain time period, then, you know --
- 27 MR. ANGELLE:
- 28 The reality of it all is that, if you -- the well
- 29 is more likely not to have a second offense as opposed
- 30 to perhaps an owner or driller.

- 1 MR. HOLLINGSWORTH:
- 2 And how would you discourage multiple offenses --
- 3 MR. ANGELLE:
- 4 Right.
- 5 MR. HOLLINGSWORTH:
- 6 -- if it doesn't matter to anybody?
- 7 MR. ANGELLE:
- 8 Let's address that. It's -- I certainly believe
- 9 that it -- the spirit of the law was intended to allow
- 10 you to accumulate, and I'm not certain that if you do
- 11 it by well that you actually get an accumulation,
- 12 therefore, not being punitive and saying that it's
- 13 cheaper for me to send in my \$500 because I'll never
- 14 get the \$1,000 or I'll never get the \$2,500 bump.
- 15 MR. SNELLGROVE:
- 16 Sure.
- 17 MR. ANGELLE:
- 18 Yes. Certainly, the Commissioner --
- 19 MR. WELSH:
- 20 Yes. I think that the intent is to -- well, we
- 21 have to regulate the owner of the well. So the driller
- 22 may drill a number of wells for different owners, and
- 23 so you almost have to restrict it to a well, the way
- 24 I'm seeing it. Now, if the owner, who's responsible
- 25 for making these reports and periodic this and that, he
- 26 would accumulate a history, the owner would, and not
- 27 the driller. The driller would probably be out of the
- 28 picture.
- 29 MR. ANGELLE:
- 30 But if an owner had a -- if an owner had a well

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- 1 here and had another well here and did the same thing
- 2 twice, what I'm hearing is, it's two different wells so
- 3 you don't accumulate the penalty. The well owner does
- 4 something here and then he does something here --
- 5 MR. WELSH:
- 6 The same owner, okay.
- 7 MR. ANGELLE:
- 8 The same owner, I want -- I think it's good public
- 9 policy to pay more for the second speeding ticket than
- 10 the first one.
- 11 MR. SNELLGROVE:
- 12 Okay.
- 13 MR. ANGELLE:
- 14 I have five kids, four of them are driving, and
- 15 that's what's happening at my house right now.
- 16 MR. SNELLGROVE:
- 17 So, yes, we certainly can have discussions on that
- 18 internally, but -- we do have the added --
- 19 MR. HOLLINGSWORTH:
- 20 Yes, and I may have used the wrong semantics.
- 21 MR. ANGELLE:
- 22 Yes, sir?
- 23 UNIDENTIFIED AUDIENCE SPEAKER:
- 24 How are you going to determine who owns the well?
- 25 Now, if an oil company drills a well on my place,
- 26 they have to get my permission to drill that well, and
- 27 they can't destroy that well without my permission.
- 28 They have to leave it. So, do I own the well, or does
- 29 the oil company that drills it, or does the company
- 30 that drills -- actually drills the well own it?

- 1 MR. ANGELLE:
- 2 Whoever applies as the well owner is the well
- 3 owner.
- 4 UNIDENTIFIED AUDIENCE SPEAKER:
- 5 Well, I don't apply, that's all done through the
- 6 lease.
- 7 MR. ANGELLE:
- 8 Well -- but they have your permission to do that.
- 9 UNIDENTIFIED AUDIENCE SPEAKER:
- 10 What if there were six wells at one time that are
- 11 owned by one owner?
- 12 MR. COLEMAN:
- 13 Maybe that law could be tweaked to make it clearer
- 14 for everybody.
- 15 MR. ANGELLE:
- Maybe it would be that you're allowed to 16
- 17 accumulate -- whatever matrix allows you to get to the
- 18 highest penalty would maybe be the way to go.
- 19 You have six wells and one owner, then going after
- 20 the wells would be a bigger penalty. Because you have
- 21 one -- if you have the opposite, you're going to want
- 22 the law to allow you to reverse it to make the penalty
- 23 as substantial, as well.
- 24 MR. SNELLGROVE:
- 25 What I'm hearing is, discussing with the
- 26 Commissioner on this and talking to the Secretary, we
- 27 may be able to develop some type of policy on that,
- like we did with the oil and gas industries with 28
- 29 commercial facilities. And we have a structure that's
- 30 fair to all. It's fair to -- we have internal guidance

- 1 on it, and we'll have that next time.
- 2 MR. WELSH:
- I think we'll have to get a clearer reading, you
- 4 know, from our attorney, and, you know, we'll work out
- 5 a procedure. But the law is what the law is, and
- 6 that's what we're going to follow, and I just can't
- 7 give you an exact answer.
- 8 MR. ANGELLE:
- 9 It's a great question, and the reason that we're
- 10 here is to get those great questions and get the robust
- 11 discussion going. And in six months, we'll know more
- 12 than we know now, and in a year, we'll know more than
- 13 we know in six months, so keep those good questions
- 14 coming.
- 15 MR. MAYS:
- Mr. Secretary, I had one --
- 17 MR. ANGELLE:
- 18 Yes, sir.
- 19 MR. MAYS:
- 20 -- on the definitions. I don't know where we are
- 21 with the corrections, but you heard Mr. McGee tell us
- 22 this evening that the Sparta is a sole-source aquifer.
- 23 It's not recognized in any definitions here, but I
- 24 would beg that you all identify that, add it to the
- 25 definitions and somehow or another incorporate it with
- 26 whatever is area of concern, critical area of concern.
- 27 MR. ANGELLE:
- 28 Blake, you understand his concerns?
- 29 MR. CANFIELD:
- 30 Yes. And I may give you a call to discuss it more

(225) 261-5109

- 1 further. But, essentially, what you're asking is try
- 2 to incorporate "sole source" into some type of
- 3 determination or action that we do, as far as critical
- 4 areas of ground water concern? I mean --
- 5 MR. MAYS:
- 6 Well, I doubt if you put it into the definition as
- 7 -- in case you do "aquifer" here, but add that to the
- $8\,$ part where it's a critical part, where it's an area of
- 9 concern.
- Because, you know, he said ours is the worse
- 11 problem we have, and our alternatives are what really
- 12 limit us. We don't have a river running through
- 13 Lincoln Parish, and we don't have -- you know, and it's
- 14 going to be an expensive process to come up with an
- 15 alternative, and I'd just like to recognize it as a
- 16 sole-source aquifer. In our case, in Lincoln Parish,
- 17 it's going to be very expensive to come up with an
- 18 alternative water source.
- 19 MR. ANGELLE:
- Okay. And are you going to work with them and
- 21 report to us on that research?
- 22 MR. CANFIELD:
- Yes. I'll definitely contact you to get more
- 24 specifics. I will tell you that it may be something
- 25 that is already contemplated in the law. I just need
- 26 to check and make sure before I give an answer here.
- 27 As far as the area of ground water concern and
- 28 critical areas designations, I know the determination
- 29 made by the Commissioner is supposed to based upon
- 30 other available water sources, so that may be where it

- 1 could fit in, but I need to look into it and give you a
- 2 call back. And I can absolutely report at the next
- Commission meeting, if you don't know before then, 3
- 4 whatever it is on that.
- 5 And like I said, I probably would like to get in
- touch with you personally so we can maybe get a little 6
- 7 more in depth as to what it is that your thoughts are.
- 8 MR. BURLAND:
- 9 Mr. Chairman?
- 10 MR. ANGELLE:
- 11 Yes, sir.
- 12 MR. BURLAND:
- 13 Point of clarification, wasn't the designation of
- 14 the area of ground water concern a function of your
- 15 authority by that memo dated in August of '05? Are we
- asking -- is he asking to codify the three areas that 16
- 17 have been designated into the regulations -- into the
- 18 definition?
- 19 MR. CANFIELD:
- No. I think it is -- I think what he's interested 20
- in is actually a change in the rules that would make a 21
- sole-source aquifer one of the considerations involved 22
- 23 with determining areas of ground water concern or
- 24 critical areas.
- 25 The order that set up the three areas of ground
- 26 water concern that currently exist that, you know, were
- 27 based upon statutory law, I think it's Title 38:39.7.6,
- 28 and then the rules that were established thereafter.
- 29 But those rules remain the same. They would not be
- 30 codified, at least to my understanding, into law. They

- 1 will just remain under the order and be treated as it
- 2 was intended with the law. But I believe he's
- 3 requesting looking into a change in the rules as far as
- 4 what's considered a definition for sole source, if
- 5 that's correct, Mr. Mays?
- 6 MR. MAYS:
- 7 Right. Well, it doesn't even take into account
- 8 the sole-source aguifer like we have.
- 9 MR. CANFIELD:
- 10 Yes, absolutely. Okay. I think we're on the same
- 11 page, so I'll get back with you just to make positive.
- 12 MR. WELSH:
- 13 Commissioner Mays, I think the term "sole-source
- 14 aquifer," am I right, is that a Federal designation of
- 15 an aquifer? I believe it is.
- 16 MR. MAYS:
- 17 You'd have to ask Ben about that. I don't know.
- 18 MR. WELSH:
- 19 Is Ben still here?
- MR. BOLOURCHI: 20
- 21 Commissioner, in fact, Federal funding is
- 22 involved --
- 23 MR. WELSH:
- Yes. I understand that. But the actual 24
- 25 designation, I think, is a Federal designation, and I
- 26 wonder if the Sparta has gone through that process?
- 27 MR. MAYS:
- 28 I can't answer that question.
- 29 MR. COLEMAN:
- 30 Well, let me ask you this. In other words, you're

(225) 261-5109

- 1 asking if the Sparta gone through that. My question
- 2 is, have you gone through it?
- 3 MR. WELSH:
- 4 Gone through --
- 5 MR. COLEMAN:
- 6 -- that procedure to establish that? You have
- 7 the authority.
- 8 MR. WELSH:
- 9 I think the sole-source aguifer -- I believe, my
- 10 question was, is that not a Federal process? I think
- 11 it is. I may be wrong.
- 12 I know the Chicot Aquifer in south Louisiana has
- 13 been designated a sole-source aquifer. That
- 14 designation comes into play when a project is -- a
- 15 project that needs any kind of Federal funding proposes
- 16 to operate in that area. It's important, that comes
- 17 into play at that time.
- 18 UNIDENTIFIED AUDIENCE SPEAKER:
- 19 Mr. Chairman --
- 20 MR. COLEMAN:
- 21 Could you -- were you answering that question; are
- 22 you familiar with that?
- MS. JOHNSON:
- 24 "Familiar" is the word, not -- not
- 25 "knowledgeable."
- I believe the answer to your question is, yes, it
- 27 is a Federal designation, Mr. Bolourchi, that is a
- 28 federal designation, and it does have to do with
- 29 funding.
- 30 And all of the Sparta Aquifer would not be a

(225) 261-5109

- 1 sole-source aquifer. We ran into that in Union County
- 2 because we do have adjacent water -- nearby surface
- 3 water sources from which to draw, so it wouldn't be
- 4 a -- I don't want to change any plans you have, in this
- 5 case, on behalf of the Sparta, but the entire Sparta
- 6 Aquifer would not be a sole source, but if -- I don't
- 7 even know if it is available federally for a specific
- 8 parish.
- 9 But anyway, I'm speaking only from my limited
- 10 attempts to get Federal funding for Arkansas.
- 11 I'm -- whoever needs to know who I am, my name is
- 12 Cheryl Johnson, and I'm from Arkansas.
- 13 MR. WELSH:
- I think you're right, Cheryl. I believe you're
- 15 right.
- 16 MR. ANGELLE:
- 17 Is it fair to then say -- I think it is fair to
- 18 say, from the State of Louisiana's standpoint, that no
- 19 conclusive effort has been made to determine whether or
- 20 not a sole-source classification could be put in the
- 21 Sparta; is that -- would it --
- 22 MR. WELSH:
- 23 That's right.
- 24 MR. ANGELLE:
- 25 Is it also fair to say that, from the Sparta
- 26 Commission's standpoint, that process has not happened,
- 27 and maybe what we need to do is see if we can work
- 28 together to see what we need to do to make that happen?
- 29 MR. COLEMAN:
- 30 Yes.

- 1 UNIDENTIFIED AUDIENCE SPEAKER:
- 2 Could you also look at the Carrizo-Wilcox while
- 3 you're doing that?
- 4 MR. ANGELLE:
- 5 Okay. That's fine.
- 6 MR. HOLLINGSWORTH:
- 7 Mr. Chairman, if Federal funds being involved is a
- 8 prerequisite, we've already had some Federal funds used
- 9 on our Darbonne project already.
- 10 MR. ANGELLE:
- 11 Right.
- 12 MR. HOLLINGSWORTH:
- 13 And we have some others pending, so if that helps.
- 14 I don't know what the prerequisites are.
- 15 MR. ANGELLE:
- I think what the Commissioner was saying is, when
- 17 a Federal project, the United States government
- 18 conducts -- spends their money on a project, in -- for
- 19 instance, in the Chicot Aquifer area --
- 20 MR. WELSH:
- 21 Even backs a loan, uses Federal money.
- 22 MR. ANGELLE:
- SBA loan or something like that?
- 24 MR. WELSH:
- 25 Yes, yes.
- 26 MR. ANGELLE:
- 27 One of the things that must be checked off on the
- 28 box is, is -- or "have you done the necessary things to
- 29 be in compliance to" -- the Federal government
- 30 obviously does not want to incentivize (sic) people to

- 1 build or do things or to use water in a certain area
- 2 that may have a negative impact on their resources so
- 3 they have set up a system, I'm appearing -- it would
- 4 appear to me, to make sure that is checked.
- 5 Perhaps, again, this discussion is leading to
- 6 maybe looking at that for -- in fact, I think it's
- 7 appropriate that we look at it for all 11 aquifers and
- 8 see which ones need to have that designation.
- 9 MR. COLEMAN:
- 10 It might be that certain areas of certain aquifers
- 11 would be designated as such, even though the entire
- 12 area wouldn't be.
- 13 MR. ANGELLE:
- Right. And I realize that, you know, it's okay
- 15 for us to say this, and that you all get back to the
- 16 office tomorrow and that's a really, really big task,
- 17 and you know that I'm going to call and say, "Can we
- 18 have this done -- can you get this done tomorrow?"
- 19 MR. WELSH:
- Ben is here.
- 21 MR. ANGELLE:
- 22 I'm sorry.
- 23 MR. WELSH:
- 24 Ben is back in. He just walked back in, and he
- 25 might have an answer.
- 26 MR. CANFIELD:
- Ben?
- 28 MR. ANGELLE:
- Okay. The question, Ben, is whether or not there
- 30 is a -- sole-source designation is a designation that

- 1 is established by the Federal government, and has there
- 2 been a process, to your knowledge, on any of the
- 3 aquifers -- the Commissioner has indicated the Chicot
- 4 Aquifer has a sole-source designation -- any others
- 5 have that, and what would be the process to go about
- 6 getting that order, researching it?
- 7 MR. MCGEE:
- 8 To my knowledge, only the Chicot Aquifer is
- 9 officially designated by the EPA as a sole-source
- 10 aquifer. So there is a process in place to make
- 11 application, I guess, for an aquifer to become -- or to
- 12 be designated as a sole-source aguifer. I'm not
- 13 familiar with that process, but I do know that it
- 14 exists, and, to my knowledge, only the Chicot is.
- 15 MR. ANGELLE:
- Okay. Let's take a look at that process, and
- 17 let's report back to the Commission on that process.
- 18 MR. OWEN:
- 19 Do you know if the Chicot is designated in its
- 20 entirety as a sole-source aquifer?
- 21 MR. MCGEE:
- I do not know that, but I believe that aquifers,
- 23 as a whole, are designated as a sole source, not
- 24 portions or parts of aquifers.
- 25 MR. ANGELLE:
- Very good. Good suggestion. Absolutely. Great
- 27 discussion, and we'll get that one off the list, and
- 28 we'll either get it done or we'll know we can't get it
- 29 done.
- 30 MR. WELSH:

- 1 Right.
- 2 MR. ANGELLE:
- 3 We don't qualify or we do qualify. Good question.
- 4 Okay. Very well. And I think that brings us to
- 5 Item No. 9, which is Mr. Snellgrove, sale of domestic
- 6 water wells for industrial use -- well water for
- 7 industrial use; is that correct?
- 8 MR. SNELLGROVE:
- 9 I believe we covered that pretty well, as far as
- 10 what we discussed earlier with the public awareness
- 11 notification that was sent out.
- If there's any follow up to that, that's what I
- 13 would say. If there's any further questions on that
- 14 effort, any discussion that needs to be had on -- maybe
- 15 a few of the regulations that relate to construction
- 16 requirements for domestic wells and any limitations
- 17 that may exist at DOTD for a domestic well owner to use
- 18 that well. That's the questions that we're getting.
- 19 We're getting these questions, and we don't -- you
- 20 know, of course, our legal staff has reviewed the
- 21 situation, and they are doing their best to try to
- 22 provide as straightforward as an answer that we can.
- 23 MR. ANGELLE:
- 24 I'm not sure I understand what the issue is. Can
- 25 you give it another look?
- 26 MR. SNELLGROVE:
- Yes, I'll recap that.
- 28 The issue is, domestic well owner has a well for
- 29 domestic purposes that he may choose -- he may
- 30 determine or maybe he may decide that he wants to sell

- 1 his water to somebody.
- 2 MR. ANGELLE:
- 3 And by regulation, that domestic well user is not
- 4 regulated?
- 5 MR. SNELLGROVE:
- 6 He is -- he is a well owner, so he has a
- 7 responsibility to our Agencies, but, you know, if the
- 8 well -- from what we understand is, if the well is
- 9 constructed in a certain manner, that there may be
- 10 limitations as to what its uses could be.
- 11 MR. ANGELLE:
- 12 Okay.
- 13 MR. SNELLGROVE:
- And so that's where we need to consult with DOTD,
- 15 and we have, and that's why, you know, this advisory --
- 16 this awareness notification went out there that we
- 17 provide a contact, and we treat them on case-by-case
- 18 basis. Because each well may have different scenarios,
- 19 different dates when they were drilled, you know, maybe
- 20 it was constructed in a manner that does meet the
- 21 industrial well construction requirements. Probably,
- 22 they didn't, but we still don't know, so...
- 23 MR. ANGELLE:
- 24 Would it fall into -- wouldn't they have some
- 25 reporting requirements if it went from domestic use to
- 26 industrial use, if it was in the area of concern?
- 27 MR. SNELLGROVE:
- 28 Well, even if it's not in an area of concern.
- 29 I'll let Blake field that. But we believe that there
- 30 may be a factor in this process that we may need to be

- 1 involved in. But if it changes non-exempt status to --
- 2 I mean, an exempt status, i.e. a domestic well, to a
- 3 non-exempt, which would be industrial.
- 4 MR. CANFIELD:
- 5 From a DNR standpoint, essentially, the crux of
- 6 the matter, the thing that causes us any trouble is,
- 7 you know, interpreting what our own rules say is going
- 8 to be when the well was drilled, because of
- 9 retroactivity issues with our statutory authority for
- 10 registering of wells, which didn't actually start with
- 11 the current Act until 2003, and the enforcement -- the
- 12 enforceability, you know, didn't begin until 2008.
- 13 So, from our standpoint, there is a requirement
- 14 that you drill a well as a domestic well. When you
- 15 change that -- I guess, the intended use of the water,
- 16 then you have give us a change of information, an
- 17 update, for our records, just so we can track it, at
- 18 the very least, they know how much water is going to be
- 19 used, to assist us in our calculations.
- We strongly advise people, if they have questions
- 21 about DOTD to contact DOTD, because I don't want to
- 22 misstate what DOTD's policy is.
- 23 MR. ANGELLE:
- 24 Well, I'll focus is -- well, we need that
- 25 information. Because, obviously, if somebody filled
- 26 out an application for domestic use, whether it was
- 27 last year, two years ago, or ten years ago, whether it
- 28 was before we had the modern laws we have or it was
- 29 after we had the modern laws, for us to be able to make
- 30 the kind of decisions that we need to make here, it's

- 1 -- to have a system that, when a domestic well user who
- 2 is exempt finds a way to get that turned into an
- 3 industrial use, because there's money to be made,
- 4 understandably, we have to have a way to capture that
- 5 information so that we can manage 100 percent of the
- 6 problem.
- 7 MR. CANFIELD:
- 8 And we have no doubt that we can enforce, you
- 9 know, that change of information when the well has been
- 10 drilled, after our statutory authority was created.
- 11 MR. ANGELLE:
- 12 Well, you have the ability to enforce it, but
- 13 there's -- the requirement for the landowner -- or the
- 14 well owner, I should say, to -- you're really depending
- 15 on a complying well owner, right?
- 16 MR. CANFIELD:
- 17 Right. Well, especially when it's prior to 2003,
- 18 or maybe 2001, depending on legal interpretations, but
- 19 my point --
- 20 MR. ANGELLE:
- 21 Why is it -- I disagree. If a -- if a well owner
- 22 went in there and got a permit for domestic use last
- 23 week, okay, and drilled a well and got it done, while
- 24 you have the ability to enforce, how are you going to
- 25 find out -- aren't you really exclusively dependent
- 26 upon either somebody reporting a potential problem, or
- 27 the well owner coming forth and saying, listen, I
- 28 applied for A, but now I want to use it for B?
- 29 MR. CANFIELD:
- 30 Yes. No, I mean, that is exactly -- and, in fact,

(225) 261-5109

- 1 the public awareness was -- because people had been
- 2 complaining about neighbors or people they knew that
- 3 were doing this, that we were getting these phone
- 4 calls, and I think some local governing authorities
- 5 were, as well, and so they -- you know, we asked them
- 6 to send it to us, so that we could actually assist the
- 7 individual and maybe do an investigation, depending on
- 8 what was out there.
- 9 I think requesting the information is definitely
- 10 important in trying to do our -- what our task is
- 11 assigned. The only thing we have to be aware of is
- 12 that, if a person drills a well prior to 2003 or 2001,
- 13 for sure, they did not have to register the well to
- 14 begin with, with our office, and so it's just that our
- 15 office can't force them, so...
- 16 MR. ANGELLE:
- Okay. But you -- from a legal standpoint, and
- 18 perhaps change in law, regardless of when the well was
- 19 drilled, would it be good public policy to have
- 20 something that says, any well that was drilled for the
- 21 purpose of domestic use that is converted, that is --
- 22 that you made one general requirement for the well
- 23 owner to come back and get that cleared, and it holds,
- 24 again, a penalty of substance to regulate that?
- 25 MR. CANFIELD:
- Absolutely.
- 27 MR. WELSH:
- 28 I think the bottom line is, the domestic wells can
- 29 go through a -- they can -- an owner or a driller can
- 30 go ahead and drill those without notification, without

- 1 evaluation by the staff, whereas a proposed industrial
- 2 well has to give us 60 days in order for us to make
- 3 that evaluation on the front end, and we can determine
- 4 if it's going to have an effect on the aquifer and we
- 5 can set restrictions or whatever, so that's the
- 6 difference.
- 7 MR. CANFIELD:
- 8 Right.
- 9 MR. WELSH:
- 10 And by changing, from a domestic well to an
- 11 industrial well, just arbitrarily, that well has not
- 12 gone through the review process, and that's what gets
- 13 us into trouble.
- 14 MR. ANGELLE:
- 15 And it's a tough -- it's a tough enforcement.
- 16 MR. WELSH:
- 17 Yes.
- 18 MR. BALKUM:
- 19 I might just add, one man called Channel 3 News
- 20 about a month ago. They were interviewing a landowner
- 21 that had drilled a well -- and they sold the water for
- 22 \$16,000. And I guess that's where some neighbor would
- 23 be complaining, probably some result of the resolution
- 24 that was delivered to us at our last meeting from the
- 25 DeSoto Parish Police Jury.
- 26 MR. ANGELLE:
- 27 And then perhaps reaching out more aggressively,
- 28 I'd just put out for suggestion with local governments,
- 29 perhaps again to try to get the word out as much as
- 30 possible. You know, I don't want to put the Sheriff's

- 1 Department in the position to go out and be the water
- 2 police, but it's better for us to be the water police
- 3 before we have a problem than to be reacting when it's
- 4 too late. I'm not sure we have a solution for that,
- 5 but that's one that we need to drill down on.
- 6 Okay. Any other questions?
- 7 All right. And then you all -- Blake, you wanted
- 8 to talk about the Task Force?
- 9 MR. CANFIELD:
- 10 Yes, sir. Thank you, Secretary.
- 11 Just briefly, I do think I've seen a couple people
- 12 who I know are going to be on the Task Force. As Gary
- 13 said, 44 of the 49 entities or individuals have
- 14 contacted us back and affirmed that they would like to
- 15 serve on the Task Force.
- 16 We are currently trying to set up a date, a time,
- 17 place. We are tentatively shooting for next month, and
- 18 all the information as to location, time, and maybe a
- 19 brief outline of the proposed agenda will be sent to
- 20 Task Force members through the contact information that
- we have available at DNR. 21
- 22 And that was really all I had to present on that
- 23 topic.
- 24 MR. ANGELLE:
- 25 Any other questions for Blake on that?
- 26 (No response.)
- 27 MR. ANGELLE:
- 28 Okay. Under new business, I know, Mayor
- 29 Hollingsworth, you had a conversation with me. You
- 30 wanted to bring something up there?

- 1 MR. HOLLINGSWORTH:
- Yes, sir, Mr. Secretary. I want to, on behalf of
- 3 our delegation here and part of this Commission here in
- 4 north Louisiana, I want to say how much we appreciate
- 5 your having these meetings here in north Louisiana.
- 6 And, frankly, I think moving about the state is a
- 7 really good idea, because I think maybe we get a better
- 8 insight for the different aguifers and what the special
- 9 problems are in different parts of our state.
- 10 And I appreciate so much the work that the
- 11 Commission has done in a short period of time, and our
- 12 focus on the fresh water needs of all our communities.
- 13 And I think it's particularly enlightening that you
- 14 were able to get to that enforcement schedule and
- 15 beginning to do that. I think that's a really good
- 16 sign. And you haven't had the ability to do that in
- 17 the past, and that's certainly limited your ability to
- 18 do a lot of the things that probably might have been
- 19 expected when people didn't know any better.
- 20 But I would -- it seems to me the next step before
- 21 the Commission, or this organization, is kind of along
- 22 the lines of a motion I'd like to introduce at this
- 23 time, if it's appropriate. And that's to make a motion
- 24 that this Commission go on record to request funding to
- 25 move forward with developing a concrete plan to begin
- 26 addressing our water needs in all of our aquifers
- 27 throughout the state, whether that means funding
- 28 through the legislature or through -- probably, if we
- 29 could do this in a short period of time, there may be
- 30 stimulus money out there, as one-time money available

- 1 to us, to try to fulfill our mission. I'd like to make
- 2 that motion at this time, if that's appropriate.
- 3 MR. ANGELLE:
- 4 Yes, it is appropriate.
- 5 MR. OWEN:
- 6 Mr. Chairman, I'd like to second it.
- 7 MR. ANGELLE:
- 8 Okay. Motion by Mr. Hollingsworth, who requests a
- 9 unanimous second from the members.
- 10 Any objection to a unanimous second?
- 11 (No response.)
- 12 MR. ANGELLE:
- 13 Unanimous second from the membership.
- 14 And if we could get Ms. Edwards to draft that for
- 15 us and -- off the record.
- And I think it would be a good idea for us to
- 17 visit with DEQ right away. DEQ, I think, is the holder
- 18 of some of the stimulus money relative to water issues,
- 19 and perhaps -- that's a great idea. I had not thought
- 20 about stimulus. And perhaps we'll work with the
- 21 Division of Administration to see if there is the kind
- 22 of money that would again put us in the game of
- 23 beginning to develop a robust, comprehensive,
- 24 management program.
- 25 So, hearing any objections to the motion?
- 26 (No response.)
- 27 MR. ANGELLE:
- 28 Hearing none, that motion is adopted.
- 29 Thank you very much, Mayor Hollingsworth. I
- 30 appreciate that.

- 1 Any other new business?
- 2 (No response.)
- 3 MR. ANGELLE:
- 4 Okay. We need to set the next meeting date.
- 5 Looking at -- we meet, what, once a quarter, is that
- correct, and we need to do that by July? 6
- 7 MR. CANFIELD:
- 8 We meet twice a year, but we can meet more often.
- 9 MR. ANGELLE:
- 10 Okay. We meet twice a year. We've already met,
- 11 how many times this year?
- 12 MR. CANFIELD:
- 13 This will be the first time this calendar year.
- 14 MR. ANGELLE:
- 15 Okay. Now, we met in --
- MR. CANFIELD: 16
- 17 December.
- 18 MR. ANGELLE:
- 19 I thought we met in --
- 20 MR. WELSH:
- 21 December.
- 22 MR. COLEMAN:
- 23 Certainly, with the urgency of the tasks that
- 24 we've got, we ought to at least meet quarterly.
- 25 MR. ANGELLE:
- 26 Absolutely, absolutely. I thought we had actually
- 27 -- so the last time we met was prior to January 1?
- 28 MR. CANFIELD:
- 29 Yes, sir.
- MR. ANGELLE: 30

- 1 Okay. We're looking at July.
- 2 The legislative session runs through --
- 3 MS. EDWARDS:
- 4 June 26th.
- 5 MR. ANGELLE:
- 6 -- June 26th, so perhaps -- there's usually a lull
- 7 in activity right after 4th of July, so maybe towards
- 8 the middle or late July.
- 9 Although I think the staff had perhaps looked at
- 10 maybe Lafayette, I think it's appropriate for us to
- 11 come back to north Louisiana to do this again. I'd
- 12 like to suggest perhaps, and put it out there, for
- 13 maybe in the Ruston or Monroe area.
- 14 MR. HOLLINGSWORTH:
- 15 I volunteer Ruston.
- 16 MR. ANGELLE:
- Okay. So -- did I give you a softball, huh?
- 18 Let's look at Ruston and work with the mayor to
- 19 get -- go ahead and get adequate space there.
- In the meantime, one of the things, again, we
- 21 talked about was a workshop where we could begin to
- 22 address some of the issues. If you all could work with
- 23 Ben on that, and we can kind of go from there?
- 24 MR. BURLAND:
- 25 Mr. Chairman, if I could further suggest that we
- 26 do this every year, that it be an annual visit to the
- 27 north part of the state?
- 28 MR. ANGELLE:
- 29 Absolutely, absolutely, yes. I think it's
- 30 obvious --

- 1 MR. BURLAND:
- 2 You know, at a minimum.
- 3 MR. ANGELLE:
- 4 Right. It's obvious that the majority of the
- 5 ground water issues in Louisiana are in north
- 6 Louisiana, and it's important to us to get out of Baton
- 7 Rouge and come and visit with people who are having
- 8 these issues, so I agree. Thank you, good job.
- 9 MR. HOLLINGSWORTH:
- 10 Mr. Chairman, I might also mention that -- I know
- 11 that I can speak for three or four guys, we haven't
- 12 spoken to everyone, but if there is anything we can do,
- 13 as Commission members, like with letters or support or
- 14 any requests the Commission makes, I know all of us
- 15 would be happy to join in and do what we can, perhaps
- 16 even get them from our communities, as well.
- 17 MR. ANGELLE:
- Right. And as we visit on perhaps where we might
- 19 seek funding, I may need you to help on that.
- Okay. Public comments, we'll go ahead and open
- 21 the floor for public comments. I think we need you to
- 22 come up and identify your name for the record and give
- 23 us your comment. This is not intended to be a debate.
- 24 This is intended for us to receive public comments.
- 25 MR. NEILSON:
- Thank you, gentlemen. My name is John Neilson.
- 27 I'm from the DeSoto Parish Water Works District No. 1.
- 28 I appeared before you in December, and I appreciate the
- 29 opportunity to appear before you again. And again, I
- 30 appreciate you coming to northwest Louisiana -- north

- 1 Louisiana to see some of our issues here.
- I have a prepared statement, but I've just got a
- 3 few notes that I was making along during the
- 4 presentation. One answer (sic) was, who owns the
- 5 water? The State law says, therefore, the State has
- 6 explicit jurisdiction over the management of ground
- 7 water, and this chapter shall precede and preempt any
- 8 rule, blah, blah, of any public subdivision. So
- 9 the State definitely owns the water.
- 10 Act 581, I'm sure many of you have read it. I
- 11 don't know if any of you have it here or not. There
- 12 are some fines in there, and I think it should be noted
- 13 that those fines are -- and even though it don't seem
- 14 like they're a whole lot, they are a per day fine,
- 15 okay. So that's, if someone drills a well on the 18th
- 16 of the month and they don't register them until the
- 17 28th, if that's a first offense, that's \$50 per day,
- 18 and so I think that's real important.
- 19 But my question is, I wonder, have there actually
- 20 been any fines imposed? I know we have a law, and I
- 21 know we've had some administrative orders issued, but
- 22 what was the dollar amount of fines that have been
- 23 collected, because these illegal -- these wells have
- 24 not been registered? And I'll just leave that question
- 25 kind of hanging out there in the open.
- 26 The other thing, if you take a domestic well and
- 27 you change it into an industrial well, there are a lot
- 28 different regulations of the Department of Health and
- 29 Hospitals that are certainly not under your
- 30 jurisdiction, but that well would be illegal through

- 1 the Department of Health and Hospitals, because there's
- 2 much more stringent regulations on an
- 3 industrial/commercial well than there is a homeowner
- 4 well. So there are other options that that homeowner
- 5 has to face.
- 6 And then the number of complaints, I am one of the
- 7 complainers, back in '09, and the reason -- back
- 8 in '08. And the reason I haven't complained in '09 is
- 9 because I've been waiting for the complaints in '08 to
- 10 have some results done of them, and we've not seen any
- 11 result as that time.
- 12 And my one complaint is the result of probably 40
- 13 or 50 complaints that have been registered to me. I am
- 14 the administrator of the DeSoto Parish Water District
- 15 No. 1, and as such, by statutory authority, we have --
- 16 we are the controlling authority for water in DeSoto
- 17 Parish, so the parish, as a whole, is looking at me, at
- 18 our organization, which we're brought about by action
- 19 of our local police jury.
- We have not received any notification of any
- 21 drilling that's gone on in DeSoto Parish, as far as
- 22 water well drilling, as the Police Jury asked you by a
- 23 resolution to send also to the Jury and to our
- 24 organization, we have not received any of that
- 25 notification. I know that there has been a good bit of
- 26 drilling going on.
- 27 And then, you know, of course, I want to talk
- 28 about the water situation in DeSoto Parish and the
- 29 apparent lack of enforcement of the existing laws. We
- 30 do have some pretty good laws on the books, but we just

- 1 haven't seen a whole lot of enforcement on that.
- 2 We had an investigator come into DeSoto Parish in
- 3 December, and he spent a couple of days with me, and
- 4 we, you know, pointed some things that were definitely
- 5 not according to the law, and I called back in January
- 6 and was told that the report was not complete. I
- 7 called back in February, and he said that I would get a
- 8 copy of the report when it was finalized. I have not
- 9 seen a copy of the report yet.
- 10 So I've done a little bit more investigative work
- 11 on my own, and I just want to tell you a couple of
- 12 things that I've found. I believe that our oil and gas
- 13 exploration companies, the major companies, in DeSoto
- 14 Parish, the major players, I believe that they want to
- 15 be good corporate citizens, and I believe that they
- 16 want to do everything they can to be that way in our
- 17 parishes. But I also know that they are not the ones
- 18 doing the actual work. They get a lot of the drilling
- 19 companies from wherever to go and do that. So, when I
- 20 say some things, I'm not talking about the major
- 21 players. I believe they're doing everything they can
- 22 to be good corporate citizens, but when it gets down to
- 23 the nitty-gritty, the digging of the dirt, sometimes
- 24 they don't have exact control.
- One company said in the presence of the public
- 26 meetings that they had drilled only one water well in
- 27 DeSoto Parish. I pressed the company for a little bit
- 28 more information, and after about three week's time, I
- 29 got the information back that, "well, no, what we meant
- 30 to say was we had drilled ten wells." And, of course,

- 1 all of these are just for rig supply and none for
- 2 stimulation and production and fracing operations.
- I checked the DOTD web site, and of the ten wells
- 4 that they admitted that they had drilled in DeSoto
- 5 Parish, only six were registered to the company.
- 6 So another company had told me that they used only
- 7 surface water, and on a visit to their site, I found a
- 8 6-inch well casing that was being run by a generator
- 9 with the name of a local water well drilling company
- 10 plainly on the generator.
- I took your investigator to several ponds that
- 12 were being replenished by domestic water wells, or by
- 13 regular water wells drilled by the owners, and these
- 14 wells had pumping -- these ponds had pumping units. At
- 15 the time, they were pumping water out of the ponds to
- 16 the drilling rigs, and then the pond was being
- 17 replenished by the ground water. So they were using
- 18 surface water, but it was being replenished by ground
- 19 water. That is a great area of concern for us in
- 20 DeSoto Parish.
- 21 There's even more of those -- you can see more of
- 22 those now, and people are selling their water and
- 23 making money on it. I'm not trying to inhibit free
- 24 trade or anything, but what I'm trying to do, as this
- 25 Commission is, is preserve the ground waters of
- 26 Louisiana. We even have one water transfer company in
- 27 DeSoto Parish urging landowners to do this very thing.
- 28 We tried public awareness. The memo that you all
- 29 sent out on the water use advisory -- people get tired
- 30 of me talking about ground water sometimes. I put that

- 1 notice in the paper. I talk about it at every public
- 2 meeting we get to. So, you know, public education is a
- 3 part of it, but until you put some teeth in your
- 4 enforcement issue, I don't think we're going to get
- 5 that message through.
- I believe one solution may be to do an audit. And
- 7 I don't know if you all have any authority to do this
- 8 or not, but an audit needs to be done of the water well
- 9 drillers themselves to find out, "well, where all did
- 10 you drill water wells last month," and then let's look
- 11 and see if all those people registered those wells.
- 12 Whatever we do, by the nature of the Wilcox
- 13 Aquifer, it will not allow us study this issue for five
- 14 to ten years before we do something about it.
- I urge this Commission to look at the facts, to
- 16 look what's going on, to put some teeth in the
- 17 enforcement issue, before the -- and I loved that
- 18 presentation from Ben, I believe his name was, that was
- 19 a great line of information. But I just urge you to
- 20 take some action before the Wilcox Aquifer graph, which
- 21 is kind of floating up there, looks like the Sparta
- 22 Aquifer graph. Let's do something before it's too
- 23 late.
- 24 And thank you again for coming to north Louisiana
- 25 for us.
- 26 MR. ANGELLE:
- 27 Thank you. We'll have the staff get back with you
- 28 on those issues.
- 29 Two things that I just want, staff, I recall a
- 30 letter from the DeSoto Parish Police Jury asking that

- 1 they be put on notice when wells or applications -- is
- 2 that happening?
- 3 MR. SNELLGROVE:
- 4 Yes. We have faxed over, to date, 20 notices that
- 5 have were received, 20 notification forms that were
- 6 received, since that date of resolution.
- 7 MR. ANGELLE:
- 8 So we either have -- we're either going to the
- 9 wrong area. I mean, we've got to -- we need to --
- 10 they're, obviously, not being received. I think it was
- 11 his testimony that you didn't, to date, receive any of
- 12 those notices?
- 13 MR. NEILSON:
- 14 Yes.
- 15 MR. SNELLGROVE:
- 16 They have been faxed.
- 17 MR. ANGELLE:
- Okay. So let's go ahead and visit with the staff.
- 19 It seems like there's been an attempt to comply, but we
- 20 either got the wrong fax number or it's going
- 21 somewhere, I mean, so let's make sure we visit with him
- 22 again.
- Thank you very much. I appreciate it.
- 24 Yes, sir.
- 25 MR. LANE:
- 26 I'm Phil Lane (phonetic) from Keithville, Caddo
- 27 Parish. One of the things I'd like to comment on
- 28 Mr. Snellgrove's presentation is the complaints and
- 29 inquires are very understated. It's not his fault.
- 30 It's just that no one in Caddo Parish has known to call

- 1 him and tell him about the fact that their well is
- 2 drying up or what have you.
- 3 Mine -- this started three years ago, and the
- 4 Caddo Parish Commission, to their credit, started an
- 5 investigation at that time, which it's still ongoing,
- 6 and it started from a landowner that is out in the
- 7 general area where I live. I was even unaware of that,
- 8 until I called my -- I was talking to my Caddo Parish
- 9 Commissioner and found out about it.
- 10 But I had two wells that went dry. I have two
- 11 pieces of property in southern Caddo Parish, and both
- 12 of them basically dropped -- well, one was an Artesian
- 13 well that was drilled in 1954, and I had to drop the
- 14 pump down to 130 feet. The water table at that time
- 15 was 90. And the place where I currently live, I
- 16 drilled a well in 1974, and it has dropped 60 feet, and
- 17 it went from 30 feet to 90 feet.
- 18 So under the -- the point I'm trying to make by
- 19 giving you that information is that, under normal
- 20 conditions in Caddo Parish, prior to oil and gas coming
- 21 to Shreveport and Caddo and DeSoto, the aquifer was
- 22 already dropping, and it is dropping at a larger rate
- 23 of one-and-a-half to two feet.
- Now, Ben seems to think that it may be localized
- 25 in certain areas, and it may be, but I know I'm
- 26 involved in it, and I know that a lot of the people --
- 27 I can probably list 10 or 12 people that have had to
- 28 drop their wells just in the last year, and some of
- 29 them are close to horizontal wells that have been
- 30 drilled. But I think he's just touched the tip of the

- 1 iceberg. A local water well driller told a friend of
- 2 mine that he had spent a lot of time in southern Caddo
- 3 and the Keithville area dropping people's pumps, so
- 4 this is an ongoing thing.
- 5 One other thing I'd like for the Water Commission
- 6 to consider in their -- maybe in their quest for
- 7 legislation, I think the people in Louisiana are just
- 8 as astute and intelligent as the people in Texas, and I
- 9 don't see why local authority can't be given to the
- 10 parishes to regulate their water situation.
- 11 Thank you.
- 12 MR. GRUBB:
- Mr. Secretary, gentlemen, I'm Charles Grubb,
- 14 parish attorney for Caddo, and I just want to make a
- 15 quick comment, if I can.
- Mr. Snellgrove's presentation makes it clear that
- 17 Commissioner Welsh and your staff have been very busy
- 18 trying to get on top of the situation in Caddo Parish,
- 19 and we appreciate that. We can kind of relate to it,
- 20 because we had a similar issue trying to get ahead of
- 21 the curve, for example, on the use of our public roads
- 22 by industry up there to make sure they don't get torn
- 23 up.
- I've learned several things today that cause me to
- 25 want, I guess, to make a point of. The first thing is
- 26 that the Wilcox Aquifer yield is measurable, from a
- 27 scientific standpoint, as the gentleman from the
- 28 U.S.G.S. indicated. And then I noticed that, if you
- 29 use -- if you draw down the aquifer too much, you get
- 30 permanent damage, and what we're concerned about is

- 1 what may happen in the future. I mean, I think we all
- 2 know that when the price of gas doubles or triples, it
- 3 gets back to be more economic and viable level and
- 4 we're seeing probably an exponential rise in the
- 5 drilling activities in northwest Louisiana, and that's
- 6 what we're trying to get ahead of the anticipation for.
- 7 I think, from what I'm hearing, Commissioner Welsh
- 8 and your staff are doing a good job of getting in the
- 9 enforcement business now. But what -- I quess what my
- 10 observation is, is whether any planning is going into
- 11 what may happen to protect this aguifer, if the demand
- 12 -- or when the demand, because it going to happen, gets
- 13 to be clearly more than the aquifer can safely do?
- I agree with what the gentleman from DeSoto Parish
- 15 said that the principal operators that have come into
- 16 Caddo Parish and northwest Louisiana are responsible,
- 17 corporate citizens, but we also know that there's
- 18 probably going to be some renegades in the situation
- 19 too.
- 20 And I think what my comment is, is I would hope
- 21 that the Department is looking at what might you be
- 22 able to do to ensure that the Sparta Aquifer does not
- 23 become an area of ground water concern ever, that we
- 24 can be on top of the situation and know how to react
- 25 ahead of time when we see the demand for water up there
- 26 increasing. That's the point I wanted to make.
- 27 MR. HOLT:
- 28 It looks like I may be the last. My name is Rick
- 29 Holt. I reside in Ruston, Louisiana. I wanted to
- 30 cover a couple of things. It will just take a minute

- 1 or two.
- 2 First, I wanted to commend Secretary Angelle and
- 3 Commissioner Welsh, and several people in this group,
- 4 for coming up to north Louisiana in January, that's not
- 5 a fact that is well known. We had a great two-day
- 6 meeting, I believe. I believe it was constructive. I
- 7 believe that you all better understand the feelings of
- 8 the populations of north-central Louisiana and
- 9 northeast Louisiana. I hope you learned something from
- 10 that meeting, because we took a lot out -- we took a
- 11 lot from it, so I appreciate you doing that.
- 12 I appreciate you, I guess, overlooking procedural
- 13 -- whenever people have comments from the crowd, and
- 14 you address them and you don't cut them off. I think
- 15 it's important to get that information, that's happened
- 16 many times today. I know procedure, you're supposed to
- 17 wait until the public comment session, but it's --
- 18 you're commendable for doing that, because all of our
- 19 concerns are important.
- 20 My main -- this is a question, and I probably
- 21 won't have an answer tonight, but hope that you all
- 22 will think about it. In 2005, when the area of concern
- 23 was designated -- there is a law that -- the statute is
- 24 very specific. Once the designation is made, there
- 25 needs to be a plan, a management plan. By law, there
- 26 needs to be a management plan. My question, and
- 27 something we ought to think about, does every
- 28 Commissioner here have a copy of that plan? And,
- 29 obviously, the plan is to specifically address getting
- 30 the Sparta back to a sustainable level, that's what

- 1 this is all about. So we're 15 to 18 million gallons a
- 2 day more than that sustainable level. So, as a
- 3 manager, the way I would look at it is simply, what is
- 4 the plan to offset that 15 to 18 million gallons a day?
- 5 Does every Commissioner have a copy of that plan?
- 6 Where is the plan? What -- where -- we need access to
- 7 the plan, so we know where we're heading so we can help
- 8 you get there. That's my main concern.
- 9 This was in 2005. It's 2009. A decree is not a
- 10 plan. I know that Commissioner Welsh had several
- 11 decrees about conservation, other measures, that's not
- 12 a plan. We want, as the population sits in north
- 13 Louisiana, uses the water on a regular basis, we are
- 14 the main stakeholders here, we want to know what the
- 15 plan is. It's that simple. So I hope that you all --
- 16 that plan is refined. I hope it's developed to a point
- 17 to where there's specific answers, specific solutions.
- 18 Are you all involved in the Union-Lincoln
- 19 Initiative? Are you all involved in the West Monroe
- 20 Gray Water Project? Are you all pushing that? Are you
- 21 all twisting arms? Are you all twisting legislators'
- 22 arms to make them understand this is critically
- 23 important?
- 24 The governor supports the West Monroe Project.
- 25 We've talked on several occasions. He asked area
- 26 legislators, "What is the main issue?" The main issue
- 27 in north Louisiana, according to our area legislators,
- 28 the Sparta Aquifer and the depletion of the Sparta
- 29 Aquifer. It's critically important for us. We're
- 30 going to keep working as private individuals.

- 1 The video project, the education project, was a
- 2 statewide project, had a huge impact on conservation.
- 3 But I disagree with Hollis Downs, Representative Downs,
- 4 about conservation being the answer. Conservation will
- 5 never be the answer. It is important. There is no
- 6 question. It is part of the solution, but we have to
- 7 have these projects continued.
- 8 And I remind, to this day, right now, we have
- 9 still had zero impact on that depletion. Is there
- 10 projects -- are there projects on the board? Yes. The
- 11 West Monroe Project will save, hopefully, ten million
- 12 gallons a day, that is half of the deficit. The
- 13 Union-Lincoln Initiative Project has -- can save
- 14 between six and ten million gallons a day, if it works
- 15 out.
- But we're talking about \$60 to \$80 million to fund
- 17 a pipeline project from Lake Darbonne. Is that likely
- 18 that will be -- happen in the last -- next 10 to 20
- 19 years? I don't think. I doubt it. I doubt funding
- 20 will be readily available for a project like that.
- 21 We've had meetings with all legislators, from
- 22 Congressman Alexander to David Vitter to all of our
- 23 State representatives. We are actively pursuing
- 24 solutions.
- 25 I want to see -- just personally, I would like to
- 26 see -- it would be satisfying for me to see you all
- 27 more involved in these projects. You all know they are
- 28 going on, but what is the true plan? By law, you have
- 29 to have the plan. The Commissioners need to know
- 30 what's going on. I don't know if that plan exists, but

- 1 I encourage you to come up with that plan.
- 2 I appreciate it.
- 3 MR. ANGELLE:
- 4 All right.
- 5 MR. HANSON:
- 6 Gary Hanson with LSU Shreveport, Red River
- 7 Watershed Institute, and also president of the Water
- 8 Resources Committee of Northwest Louisiana, and an
- 9 original member on the governor's Ground Water Task
- 10 Force, here in northwest Louisiana.
- I want to thank you for coming up to north
- 12 Louisiana, so we can look at these issues, have
- 13 comments. Many of the comments you've heard are from
- 14 our members of that group that we have in northwest
- 15 Louisiana. We had various administrators from Caddo
- 16 and Bossier. I believe they've left at this time to go
- 17 to the next meeting, but we had a lot of people coming
- 18 over here and a lot of concerns. And don't forget
- 19 Shreveport. We've talked about -- I grew up near
- 20 Ruston, and that's a great city too, but we need to be
- 21 talking about, up close and personal, on the Wilcox
- 22 Aquifer.
- 23 And one other question, Gary, when you did your
- 24 survey, I noticed you had ground water and surface
- 25 water. You did not break out alluvial aquifers, such
- 26 as the Carrizo, and that's really our problem. We're
- 27 working very well with the oil and gas companies, I
- 28 think, to move to the surface water aquifers. We're
- 29 having some issues with the Corps and some other issues
- 30 that we'll get to, but we're getting very close to

- 1 getting in agreement with -- they can't right now, just
- 2 put a hose over in the river, by the way, and we're
- 3 getting close to getting that resolved, I think, in the
- 4 next few weeks. There is water coming from Sabine,
- 5 Toledo Bend, and there is surface water in DeSoto that
- 6 they're using through their -- as John mentioned, in
- 7 their system there, too. But it doesn't help us up
- 8 here if it's just surface water and ground water. If
- 9 they're going to that alluvial aguifer, we need to know
- 10 that, so that's an important point, too.
- 11 Again, one more time, I appreciate your coming
- 12 here. I appreciate Commissioner Welsh coming on over
- 13 to meet us in Caddo Parish in an hour or so.
- 14 Thank you.
- 15 MS. STEWART:
- 16 Yes, very briefly. And I ditto all that's been
- 17 said today about the need for a plan. And I just
- 18 wanted to point out that one of the reasons for that
- 19 is, you all don't hear -- and I'm suggesting that you
- 20 start a data base for Sparta complaints, they've been
- 21 going on for 30 years or more, but, please, do consider
- 22 that, if you would. And tell us how, you know, through
- 23 our municipal associations, police jury, all those
- 24 contacts you have, how we can get the message out to
- 25 people to tell you our complaints. There's people like
- 26 us on the Sparta Commission, and I'm on the Watershed
- 27 District in Claiborne Parish. I hear these complaints
- 28 all the time, and they're almost sick of us, so,
- 29 please, start that data base for us.
- 30 The one reason that -- one reason, anyway, that

- 1 this plan is needed is because it is hard for us to
- 2 explain to the public why they should be careful about
- 3 how they brush their teeth and how much water they use
- 4 for brushing their teeth, when the Commissioner's
- 5 approving permitting a million gallons a day for water
- 6 in Arcadia, at the same time, we're trying to tell them
- 7 this. And I'm not saying that's a bad decision. I'm
- 8 just saying, in terms of a plan, we could understand it
- 9 and explain it better, and it would help the whole
- 10 public become more engaged, I think, in the process of
- 11 doing something to save our Sparta.
- 12 Thank you.
- 13 UNIDENTIFIED AUDIENCE SPEAKER:
- 14 Commissioners, it's been very interesting and
- 15 encouraging to see you take an interest in this
- 16 problem, and I, somehow, have confidence that you're
- 17 going to do something about it. It's better than I
- 18 have felt in the last several years.
- I wanted to point out just a couple of three
- 20 things that I have gained in the study of the
- 21 topography and rainfall and other -- and the Sparta
- 22 depletion. Upon here on the timber ridge, between the
- 23 Red and Ouachita Rivers, for the last 15 -- well, Gene,
- 24 when did you first tell me the Sparta was in trouble
- 25 and I got curious about it?
- 26 MR. COLEMAN:
- The Sparta Commission has been active for over ten
- 28 years.
- 29 UNIDENTIFIED AUDIENCE SPEAKER:
- 30 Yes, and you were sharing that information with

- $1 \quad \text{me.}$
- 2 But, as a matter of information, just as an
- 3 amateur geologist and engineer, if you look at a
- 4 topographical map, the ridge, between these two rivers
- 5 and hypothesize a dam in the apparently most likely
- 6 place, and calculate the surface area of the watershed
- 7 that would feed such a dam, you come up with the idea
- 8 that there's about -- a potential of about 11 lakes
- 9 between -- in Bienville and Webster and Claiborne
- 10 Parishes. And the total overflow from those 11 lakes
- 11 would be 185 million gallons a day, which is well over
- 12 three times the current withdrawal from the Sparta
- 13 Aquifer. And even though that sounds like more water
- 14 than we need right now, the way the world water
- 15 conditions and consumption curves are moving and the
- 16 horror stories we hear out of western states where the
- 17 tremendous water shortages are developing, the \$80
- 18 million that the previous gentleman mentioned for
- 19 that -- taking the surface water out of Lake Darbonne
- 20 to relieve the Sparta Aquifer is going to look like a
- 21 really, really small investment compared to what it
- 22 would cost if we wait until that problem crawls upon
- 23 our back a little farther.
- 24 Thank you very much.
- 25 MS. JOHNSON:
- 26 My name is Cheryl Johnson. I'm from Union County,
- 27 Arkansas, and I came here today, not to make a
- 28 presentation, but to listen and learn, and I did learn
- 29 some things.
- 30 Also, I came to help strengthen our relationship

- 1 in Union County with the Louisiana Sparta Commission,
- 2 many of whom I -- we met in October in 2007, when they
- 3 came to south Arkansas to see what we had done about
- 4 our project that Ben has already talked to you about.
- 5 We're seeing well levels rising in south Arkansas and
- 6 north Louisiana. We've got 28 monitoring wells, seven
- 7 of which -- some for water quality, some for water
- 8 levels, in south Arkansas and north Louisiana. Seven
- 9 are in north Louisiana.
- 10 A couple of comments. I'd like to ask for an
- 11 invitation, if you all do conduct a workshop to better
- 12 understand what Ben McGee and others have said to you
- 13 today, I can speak on behalf of Arkansas, we would love
- 14 to be here with you if you do that between now and your
- 15 next meeting, and bring our counterparts. I feel sure,
- 16 Ben, that U.S.G.S.-Arkansas water scientists would want
- 17 to come; Secretary Angelle, your counterparts at the
- 18 Arkansas Natural Resources Commission; certainly our
- 19 Water Conservation Board; and our industrial customers
- 20 who are now using surface-clarified river water,
- 21 instead of Sparta water. So we would be happy to do
- 22 that. We would be pleased for you to issue that
- 23 invitation to us. We'd be happy to do that.
- 24 Secondly, in terms of Federal funding, that's what
- 25 I do mostly for the Union County Water Conservation
- 26 Board now, although I first met Mr. Bolourchi when I
- 27 was the president and CEO of the El Dorado Chamber of
- 28 Commerce in 1997, and we decided that water, and
- 29 particularly ground water, was our priority economic
- 30 development issue, that also happens to be an

- 1 environmental and public health issue. But without
- 2 water, we had no industry. Without industry, we had no
- 3 jobs. Without jobs, we had no people. Without people,
- 4 we had no town. And it was an attorney, Mr. Cobb
- 5 (phonetic), I believe your name is, that kind of closed
- 6 that case for us in a meeting.
- 7 Anyway, but in terms of Federal funding, the
- 8 critical designation that the State of Arkansas applied
- 9 to our counties in south Arkansas is different from the
- 10 area of great concern of the Sparta in north Louisiana.
- 11 The Sparta, of course, knows no geographic boundaries,
- 12 so when we begin to, as we hope to do, try to seek your
- 13 Federal funding for the Sparta, perhaps in north
- 14 Louisiana and in south Arkansas as a Sparta, and not
- 15 one state or the other, when we communicate that to our
- 16 congressional folks, or anybody else, for that matter,
- 17 and we call what we -- our designation "critical" and
- 18 your designation is "an area of great concern," it is a
- 19 barrier to communication. Because the first question
- 20 they ask is, well, what's the difference? And the
- 21 answer really is very simple. There really is no
- 22 difference in the nature of the problem. So just a
- 23 suggestion, as we proceed with strengthening our
- 24 relationship and in terms of -- I think we have a good
- 25 shot at some -- I hope, some additional Federal
- 26 funding.
- 27 Also, we are -- I am happy to say, and I think
- 28 Gene Coleman will -- and Ted McKinney may still be
- 29 here -- we are working on, in south Arkansas, a
- 30 cooperative agreement so that Arkansas and Louisiana

- 1 can work closely together to address the same issue.
- Thank you very much. This has been wonderful. I
- 3 can talk water and listen about water all day long.
- 4 Thank you.
- 5 MR. ANGELLE:
- 6 Cheryl, we appreciate you so much, and we've
- 7 learned a lot from you. And we would ask that you
- 8 bring greetings back to the great state of Arkansas
- 9 from your neighbors down here. We weren't particularly
- 10 excited when we were ranked No. 1 in football two years
- 11 ago and the Razorbacks came to Baton Rouge, we still
- 12 haven't got over that, so...
- 13 MS. JOHNSON:
- Neither has one of my best friends.
- 15 MR. ANGELLE:
- 16 If you find that your vehicle is marked up in the
- 17 parking lot, it's because they found out you had that
- 18 Arkansas license plate.
- 19 MS. WILSON:
- 20 Hi. My name is Becky Wilson, and I'm Congressman
- 21 John Fleming's district director, and I just want to
- 22 tell you guys, thank you very much for coming up here
- 23 and being concerned with this issue, as we are, and we
- 24 just wanted to say thank you for that. And we want to
- 25 work with you guys in any way possible to help resolve
- 26 some of these issues.
- 27 MR. ANGELLE:
- Thank you so much.
- 29 MS. WILSON:
- 30 Thank you.

- 1 MR. ANGELLE:
- 2 Tell the Congressman congratulations on his recent
- 3 election.
- 4 MS. WILSON:
- 5 Thank you.
- 6 MR. ANGELLE:
- 7 Thank you very much.
- 8 All right. Just in kind of a general summary,
- 9 again, from a historical standpoint, Louisiana first
- 10 got into ground water management as a result of the
- 11 legislation that was adopted in 2001, yes, 2001, and
- 12 it's been a very slow process to get to where we are
- 13 today. We've been now -- since 2001, we've had three
- 14 different governors. This governor has made it very
- 15 clear to me to make sure that we focus on this issue.
- I am confident that the kind of meetings we are
- 17 having, and the comments that we are receiving, are
- 18 going to lead us to a solution. We didn't get into
- 19 this overnight, we won't get out of it overnight, but
- 20 it is important that we begin to work tonight. We
- 21 can't wait. We shouldn't wait.
- The last several years have been not enough
- 23 activity. I am confident that things are taking place
- 24 now to make sure that we have the kind of activity, and
- 25 we will define success, in my mind, when we reach a
- 26 point where we have quality and sustainability that
- 27 can't be questioned. That might take five years to get
- 28 there, it might take ten. I don't know when we'll
- 29 reach that, but we'll only reach it, as Rick said, when
- 30 we have a plan and we can execute that plan on a daily

- 1 basis. We are not here today -- and we don't have
- 2 anything to celebrate today. What we do have to
- 3 celebrate, I think, is effort.
- And, again, as I mentioned to several of you, I
- 5 sought out the chairmanship of this from the governor,
- 6 and I think we're going to work real hard. I will be
- 7 visiting with our staff tomorrow. I will be visiting
- 8 with the Commissioner to look at, you know, how we need
- 9 to get resources, what is it that we need to do to
- 10 continue to go along this line.
- 11 So I'm excited about our opportunity. I thank you
- 12 all for your efforts, and I think we need to be judged
- 13 on activity and some goals that we can establish by
- 14 ourselves and keep pushing the envelope.
- 15 And I would tell the folks in the audience who
- 16 came up here and gave the comments to keep giving us
- 17 your comments. Nobody up here gets paid to be on this
- 18 committee. They do it for the right reasons, so just
- 19 keep those ideas coming and, hopefully, in a period of
- 20 time, we'll all be proud, and we will have something
- 21 to, in fact, celebrate.
- Having said that, anybody else has any comments?
- 23 MR. COLEMAN:
- Well, I tell you I really be -- we're thrilled
- 25 with the fact that Arkansas is having a recharge in
- 26 their area up there and it's spilling over, and we
- 27 appreciate what's coming to Louisiana, you know. And
- 28 they have a management plan in. They had to have a
- 29 plan and executed the plan, and they had resources that
- 30 were made available for them to do that.

- 1 The same situation exists down in the Capital
- 2 Area. I think they're to be highly commended for
- 3 managing the situation in the Capital Area and having a
- 4 result. It is commendable.
- 5 And I think that we're have to come up --
- 6 hopefully, we do what the governor has said for us to
- 7 do. It would be great if the Sparta was recharging
- itself by the end of his term, wouldn't it, instead of 8
- declining? And so I think, if the Commissioner could 9
- 10 come up with a plan, and we could all get behind him on
- 11 that plan.
- 12 MR. ANGELLE:
- 13 Very good. We'll entertain a motion to adjourn.
- MR. BOLOURCHI: 14
- 15 Motion.
- 16 MR. JOHNSTON:
- 17 Second.
- 18 MR. ANGELLE:
- 19 Motion by Bolourchi; seconded by Johnston.
- 20 Any objections?
- 21 (No response.)
- 22 MR. ANGELLE:
- 23 Hearing none, we're adjourned.
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CERTIFICATE

I, MICHELLE S. ABADIE, Certified Court Reporter, do hereby certify that the foregoing meeting of the Ground Water Resources Commission was heard before the Honorable Scott Angelle, Secretary, Department of Natural Resources, on March 5, 2009, in the Minden, Louisiana; that I did report the proceedings thereof; that the foregoing pages, numbered 1 through 144, inclusive, constitute a true and correct transcript of the proceedings thereof.

MICHELLE S. ABADIE, CCR #24032

CERTIFIED COURT REPORTER

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