104 12 MR. CARLIN: Dwayne Miller, Missouri 13 Stream Teams. 14 MR. MILLER: Yes. I was told I could 15 bring these to you. Hi, I'm Dwayne Miller and I 16 represent numerous Stream Teams in southwest 17 Missouri and a lot of concerned citizens in the 18 area of the large corporate farms and the impact 19 itÆs had on our environment. 20 Growth in the CAFO industry according to 21 the Missouri Department of Conservation from 22 1982 to 1998 has increased 4,400 percent. That's 23 an exponential growth beyond belief for many 24 industries. Continued growth right now in the state of Missouri is unchecked because animal 25 105 1 unit farms less than a thousand animal units get a 2 permit -- or they do not get permitted. They just 3 are allowed to start up. 4 It's known that as of 2004 there were 160 5 million poultry in the Elk River and the Spring 6 River watersheds of Southwest Missouri and they 7 created 400,000 tons of manure to be placed on 8 the land or has to be deposited somewhere. This 9 number of poultry used at least 4.8 billion gallons 10 of water, the majority of that coming from the 11 aquifer in the Southwest Missouri area. 12 An ongoing study by the Tri-State Water 13 Coalition points to that the aquifer will be 14 depleted by 2025, possibly sooner depending on 15 how much is being withdrawn. These are best 16 guess estimates because the state of Missouri does 17 not really regulate withdraw and monitor how 18 much is withdrawn from their aguifer. They 19 pointedly said we're a riparian state and you're 20 allowed to do just about whatever you want to and 21 so much for any neighboring state and their use of 22 the underground aquifer system. 23 If this aguifer is depleted, we're looking 24 at not only -- we've heard about a corn problem or 25 a feed problem, we're also talking about a water 106 1 problem. This industry is going to collapse or 2 implode upon itself because of their demand 3 placed upon a certain area and its ability to 4 perform and service this industry. It's not 5 regulated by the DNR, as I said, except for the 6 very major largest -- the most large CAFO's. 7 The state of Missouri regulates

approximately 400 CAFO's. Newton County Health

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Department has identified 174 exist in one county and that's all sizes, whether it's an AFO, CAFO, any kind of thing. It's still something that does create a source of nutriment problem and water withdrawal.

The USGS has repeatedly stated that they cannot give a good estimate on this water withdrawal for these agencies. Anything over 100,000 gallons a day is to be reported to the USGS or the DNR, but it's all strictly on a voluntary basis and is not done for the most part. They are the first ones to admit that.

Direct application of this manure, 400,000 tons of it and the increase in the cattle production, and this is strictly the 400,000 tons comes from the poultry industry and the cattle production has caused all the waters to be

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eutrophic. The EPA lists the .1 part per million of phosphorous in the water in some testing that has been done. It's routine for this to be exceeded three to five to ten times as stated by Oklahoma. It's causing algae problems, which will degrade the water making an odor problem or a taste problem for any commercial -- or I should say municipal users.

The heave application of manure has been shown to cause infiltration of some of the nutriments into the groundwater because of the carst geology that exists in this area. Carst geology is a fractured limestone type structure that has numerous voids and fractures in it. Anything applied to the surface if it doesn't run off into the creeks, it will probably infiltrate and goes rapidly down into the upper aquifer. There is an impermeable layer, but it's at four to 500 feet. So people using wells down to two to 300 feet are seeing increased nutriments in their well and fecal contamination.

A study funded by the EPA and the Shoal Creek Watershed, the upper Shoal Creek Watershed in Barry County, shows that fecal foreign levels average 5,000 colonies per 100 milliliters over a

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seven year study. This report details that 87 percent of these bacteria were attributed to cattle and poultry.

A study completed in Newton County this last summer revealed that six major streams of that county exceeded the level of E. coli

considered safe for whole body contact at 70 percent of the time during the recreational season. So essentially the county is off limit for safe use of the streams.

If you're familiar with this area, it's gravel bottom. It's clear water. I spent a lot of time in Kansas and I've had some students from Emporia State University come over to my place and they just didn't understand how come you could see the bottom at eight feet of water. As a student at Emporia State University, I also was witness to one of the largest fish kills in the world because of Iowa beef producers. That's not a pretty sight when you see that and Mr. Carlin is probably quite aware of that. And, of course, because of that the beef industry has moved out to western Kansas where it probably causes a problem but a much lesser one.

As a result of the study we did in Newton

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County for the Newton County Health Department, four of the six major streams in the county have been proposed for the 303D listing impaired for bacterial contamination. TMDL, of course, will have to be arrived at before they can be removed, but I believe right now that the chances of them being removed is very slight because TMDL will not correct the litter application. During heavy rainfall, the litter application, of course, will run off and then the resulting bacteria contamination levels is zooming skyward.

Some estimates of CAFO's, like I said, are four to 500. We have a lot of it and I can say probably we expect that they have over 2,000 of these industries in Missouri unregulated. A 2004 report by the Missouri Department of Natural Resource states that 50 percent of the surface miles of river and 30 percent of the surface acres of lakes are not supported for beneficial use. This is unacceptable from anybody's standpoint.

I feel that these numbers are probably low because they ignore some of the testing. Newton County was never tested so obviously we have a lot of miles in Newton County that were not on this report.

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I realize our culture -- our production is important, but at what cost to our health and citizens and the environment. I kind of equate some of the rise in poultry production in this area

5 is we were typically a heavily forested area down 6 in Southwest Missouri. The chip mill industry 7 came in, bought land, clear-cut it, took all the 8 trees off of it, therefore, the watershed now is 9 being lost. We have these bare acres so what 10 better thing to do then plant grass and we put cattle on them. 11 12 Now all of a sudden, this is kind of like 13 an army coming in and cutting the trees. 14 Reconstruction came in during the Civil War and 15 said, hey, we can take care of this. We'll put some cattle on here and you'll be able to raise cattle. 16 17 Now the carpetbaggers came in, pardon me, but the 18 poultry industry said we have little to enhance 19 your fields of grass and it's not working. There's 20 way too much coming down the pipe. 21 The Newton County Health Department 22 will be posting the six streams in the county as 23 hazardous and not supported for recreation. 24 Legislation backed by the Corporate Farming and 25 Farm Bureau in the state of Missouri was to 111 1 prevent county health departments from regulating 2 this industry, a very blatant misuse of their power 3 to use the state legislature to override things. 4 And there is evidence, I've heard, they haven't 5 mentioned it, but there is evidence that litter is 6 moved from Arkansas to Missouri without oversight 7 by the DNR. 8 And lastly, I'd like to say we are talking 9 about food production for the United States, but 10 what amount of this poultry production is leading 11 the country along with our crops and our water. 12 Thank you. 13 MR. CARLIN: Thank you. Mike? 14 MR. BLACKWELL: Thank you for your 15 presentation. My question is regarding the wells. 16 MR. MILLER: Yes. 17 MR. BLACKWELL: You mentioned 18 contaminated wells. 19 MR. MILLER: Pardon me? 20 MR. BLACKWELL: Contamination. 21 MR. MILLER: Yes. 22 MR. BLACKWELL: You're speaking of 23 bacterial contamination? 24 MR. MILLER: Yes. 25 MR. BLACKWELL: And my question has 112 1

- to do with what the county and state health
- 2 departments are doing about that. I thought I

heard you say nobody is doing anything and I just --

MR. MILLER: They aren't. It's just like -- some of that contamination can be probably attributed to bad septic systems, et cetera. Some of them can be attributed to surface contamination. 33 percent of the wells in Newton County have been found contaminated with fecal coliform or E. coli.

The process to identify some of these bacterium is a very lengthy -- you have to get a DNA workup and the present cost, MUL workup, they can identify the DNA in water from E. coli and trace it back to the source, but it's \$12,000 for each test, for each animal. In other words, if you want cattle DNA identified, \$12,000 and will test it for you and if you want poultry, they have to do 200 replicates at \$60 a sample. So wells, the shallow wells, are the ones getting contaminated and they're also going dry because of the draw down.

MR. CARLIN: Mary?

MS. WILSON: What two or three

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measures do you think would be the most effective and where would you start?

MR. MILLER: Probably a moratorium. I don't think we need any more right there. I think we need to sit back. The state of Kansas has done that, a moratorium, no new wells, and that's one aspect of it, a moratorium on any more poultry producers, a better look at their processes, a very strict control of litter placement and removal. Everybody has to be accounted for.

I mean, the producer, the way it stands right now in the state of Missouri if you produce litter, once it leaves your property, you're not responsible. It's whoever took it, but we don't know who took it. And they may say, okay, we sold it to so-and-so. Well, then he'll give it to somebody else and maybe turn it over to somebody else.

There is -- I mean, it's a tremendous effort has to be placed because his stuff is being spread over hundreds of thousands of acres and nobody can be there when they're spreading it, so you don't know how close they're getting to the streams, you don't know if they're over applying it. And suggestions are by the DNR that it's being

1 over applied just to get rid of it because it is a 2 problem. It stacks up. 3 That's about it, just water reuse, 4 instigate things and make mandatory monitoring of 5 how much water they're using. The whole state 6 needs to do this. The state of Missouri needs to 7 come into compliance with a good neighbor policy 8 and that is basically as we all know what that's 9 going to -- how much you're going to get 10 accomplished on that. It's also been suggested to dam up all 11 12 water in the state of Missouri to make sure that we 13 have enough. Don't let it cross the state line. 14 MR. CARLIN: That could create some 15 interest. 16 MR. MILLER: That could. 17 MR. CARLIN: Other questions? Thank 18 you, sir, very much. 19 MR. MILLER: Thank you. I appreciate it.