

**MINUTES—Missouri Nutrient Reduction Strategy Committee Meeting**

October 15, 2013



**Missouri Department of Natural Resources**  
**Missouri Nutrient Reduction Strategy Committee Meeting**

**Tuesday, October 15, 2013, 9:00 a.m. – 12:30 p.m.**

**Bennett Springs and Roaring River Conference Rooms**

**Missouri Department of Natural Resources, 1730 E. Elm Street, Jefferson City, MO 65101**

**A. CALL TO ORDER**

The meeting began shortly after 9:00 a.m. on October 15, 2013, in the Bennett Springs/Roaring River conference rooms at the Missouri Department of Natural Resources Elm Street State Office Building located at 1730 E. Elm Street, Jefferson City, MO 65101. Meet Me Call-In Numbers were available from 9:00am – 12:30pm. The bridge & toll free numbers of 526-5402 and 866-630-9347 were provided for committee members who were unable to attend the meeting in person. Live streaming was also available from 9:00 a.m. – 12:30 p.m., at [www.dnr.mo.gov/videos/live.htm](http://www.dnr.mo.gov/videos/live.htm) by clicking on the Nutrient Reduction Strategy Committee link. The meeting was announced in accordance with the Missouri public meetings law. Joe Engeln welcomed everyone to the meeting and stated that today the committee was going to move onto the next phase of getting the nutrient loss reduction strategy done.

**B. ATTENDEES**

The following committee members were in attendance:

<b>Alan Freeman</b>	Missouri Department of Natural Resources
<b>Chris Klenklen</b>	Missouri Department of Agriculture
<b>Colleen Meredith</b>	Missouri Department of Natural Resources
<b>Cory Lindeman</b>	University of Missouri – Extension
<b>Darrick Steen</b>	Barr Engineering, Inc./Missouri Corn Growers Association
<b>David Carani</b>	Geosyntec, Inc
<b>Doris Bender</b>	City of Independence
<b>Gopala Borchelt</b>	Table Rock Lake Water Quality, Inc.
<b>Graham Freeman</b>	Missouri Department of Natural Resources
<b>Jim Gaughan</b>	Missouri Department of Health and Senior Services
<b>Joe Engeln</b>	Missouri Department of Natural Resources
<b>John Lodderhose</b>	St. Louis Municipal Sewer District
<b>John Lory</b>	University of Missouri
<b>Joseph Slater</b>	University of Missouri - Fertilizer/Ag Lime Control Services
<b>Judy Grundler</b>	Missouri Department of Agriculture
<b>Kat Logan Smith</b>	Missouri Coalition for the Environment
<b>Kurt Boeckmann</b>	Missouri Department of Natural Resources
<b>Ken Struempf</b>	Missouri Department of Natural Resources
<b>Lorin Crandall</b>	Missouri Coalition for the Environment
<b>Nora Estopare</b>	St. Louis Municipal Sewer District
<b>Peter Scharf</b>	University of Missouri

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**Robert Brundage**  
**Steve Walker**  
**Todd Blanc**

North Central Regional Planning Commission  
Missouri Department of Natural Resources  
Missouri Department of Natural Resources

### **C. MEETING AGENDA**

9:00 a.m.	Greetings/Introductions – Joe Engeln (MDNR)
9:10 a.m.	Review of Agenda and Goals for the Day
9:25 a.m.	National View – September Hypoxia Task Force Meeting Report, Goals, State Strategies
9:45 a.m.	Progress to Date
9:55 a.m.	Proposed Path for Moving Forward
10:25 p.m.	Major Action/Practice Groupings
10:40 a.m.	Break
10:55 a.m.	Questions
11:10 a.m.	Group Decisions on Path Forward
11:15 a.m.	Proposed Action Elements
11:45 a.m.	Strategies – Signing up to Contribute (Lead and Teams)
11:55 a.m.	Discussion of Next Steps/Comfort with Process and Direction

### **D. NATIONAL VIEW & PROGRESS TO DATE**

Joe Engeln then brought committee members up to date on a couple of meetings stating that the most important one was the Mississippi River Gulf Hypoxia task Force meeting in Minneapolis in September. Mr. Engeln said the second goal is to get the committee to understand the approach proposed to finish this strategy. He said that they've been talking to a lot of people and trying to pull together some of the things discussed in the last 2 or 3 meetings to hopefully get approval from the group on this approach to move forward. Mr. Engeln explained that it has been talked about to group the practices or actions and then have teams work on those actions by group. For example, there is the agriculture side, the point source side, and even the urban non-point source side, but even within those, there may be some divisions. Joe stated that he'd like to

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get folks to step up and volunteer to lead some of those groups explaining that the department may probably lead some, but would like to split that leadership. He lastly said the next steps would be looking at the calendar to see what it looks like in terms of finishing this strategy.

He then asked if there were any questions from committee members.

Q: Do you plan to bring this strategy to the Clean Water Commission for a public comment period?

A: We will have a public comment period. We haven't figured out how or what commission this would go through, if any, because it would also involve the soil and water commission as well. So, we're still thinking through a few of those steps and you'll see we have a time in there for public comment, but we haven't quite fixed how we're going to work on that.

Mr. Engeln reiterated that there was a task force committee meeting in Minneapolis in September, which was a good meeting for a number of reasons. He said first of all, together with other states, Missouri participated in a joint group to look at the goals, which were three-fold; 1) the Gulf, 2) inland areas, and 3) quality of life. Mr. Engeln said to some extent there's been some humility enforced in the group partly because this has turned out to be far more complex than was thought back in 2001 when they started to write strategies. He stated it was also learned that some of the lags in the system;- the time lags between when you stop applying nutrients and when nutrients get removed from the system are longer and so there seems to be now a uniform agreement that there has to be a more practical approach for the goals. He explained that what has been proposed and accepted by the task force was to take a tiered approach; therefore, keeping the high level goals (e.g. reduce the hypoxic zone in the Gulf of Mexico to less than 5,000 sq. km. on a 5 year running average). He explained that the time frames may be taken out of that and beneath that we may have shorter term goals and also add things that are more tied to what actions are actually taking place. Mr. Engeln said that one of the recognitions to really be controlled are the actions and the natural system results response to those things that is very complex which depends on storms and other things the committee doesn't control which leads to sort of a practical push back. It is recognized that this truly is a system where adaptive management should be used. Mr. Engeln stated that the committee should recognize that we have to make progress in terms of actions, trusting that if we do the right actions and we get the science to understand the impacts of those actions, that eventually we'll reach those long term goals.

Mr. Engeln then went on to say the other thing that was very good was they talked a lot about intermediate goals which was probably because states are now doing their strategies and there is no uniform way to do strategies. He said that some strategies took a short timeframe, some took longer timeframes, some specifically targeted a 45% reduction and others did not, which was good news for Missouri because Missouri is not talking about trying to figure out exactly what it was going to take now to get the 45% reduction as there are too many unknowns and uncertainties.

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Joe explained that there were reports from states that said they will have their nutrient reduction strategies done by EPA's deadline December 2013. He reminded committee members that we are not the last state as there are some states that have not started the process yet and are claiming they will be done in 6-9 months. He said that Missouri is in somewhat better shape because we've had folks engaged and have some idea of where we want to go.

Mr. Engeln stated that the folks from USDA and some Dept. of Agriculture representative on that task force reported that the uncertainties of the farm bill hurts progress on this and almost everything in agriculture as producers are having difficulty figuring out what the plan should be for the next few years. Mr. Engeln said that he met with a group of Upper Midwest Research Universities of the Land Grant colleges where they talked about energy crops and they focused on perennial grasses for the upper Midwest. He explained that what that may mean in terms of potential energy crops is as CRP is reduced, this a good transition for some of those lands that have been in CRP that would be protective of the environment to provide farmers with an income stream. He said the third big topic was cover crops. Missouri has been quite successful in getting MRBI funding through NRCS. He said the grant that was applied for with the Missouri Corn Growers Association did not get funded this year and they announced which ones did get funded (they all included a significant amount of cover crops). Mr. Engeln stated that the committee is also starting to get some analysis from USGS and from data that the US EPA is producing. The EPA presented some information that was really good. He said that Missouri's always made the case that we may not be typical of some of the states further north where there is a lot of tile drainage. Mr. Engeln stated that where Missouri may have a lot of other sources that may be a bit different in terms of distribution. He said EPA reported data from the discharge monitoring and these are the reports filed by wastewater treatment plants. Joe explained that it is good data in that you don't have people grossly over reporting what you're putting into the water. EPA reported that by their models from the reporting communities themselves they have reported that about 25% of the phosphorus from Missouri is coming from those point sources reiterating that this is a nice number to have as it gives some kind of ballpark in terms of what the committee may be doing. Joe said that it's best for the committee not to plan for 25 years, but to plan for 5 years, learn from those 5 years, and then successively plan based on what we learn rather than trying to speculate on what it's going to take to do something with such great uncertainties in the system.

Mr. Engeln then asked the committee if there were questions.

Q: Was there anyone from the GAO at that meeting?

A: No. We tend to get USDA and EPA well represented. EPA has always been the co-chair together with one of the states and Iowa is the co-chair right now. The USGS was also well represented because they are the folks who do a lot of the studies. One of the things they revealed is that they are now looking at places where they've got long term records, the most important one to us is Hermann, Theobes, Illinois, and start to tease out some of that data because they think they've got long enough time period where they can

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look at nutrient flows and both high and low flows and that's going to be important moving forward because different sources should contribute at different conditions.

Q: Was there any discussion of the Missouri River sediment?

A: Not at any of the public meetings.

Joe explained that what's been going on is there has been a lot of conversations with stakeholders trying to get folks engaged and make sure that what we produce is truly a Missouri Nutrient Reduction Strategy not a MDNR nutrient reduction strategy. He said they have also been trying to reconstruct the approach on how to do this which will be the main topic today; - to get folks in this room comfortable with the approach we want to take to finish this strategy in a reasonable time frame. Mr. Engeln said that as data is available, it is also examined and at the next meeting the committee will probably sit through some data presented that may provide some hints in terms of distribution, sources and approaches. He explained that the department has also been trying to re-engage some past participants. He said that he's also focused on proposing on a 5 year period rather than trying to figure where we'd want to be in 30 years as it is best to take an approach on what we know now, what we've learned over the last 10-15 years, and come up with some short term goals and the idea that they will build towards long term goals. He explained that this will also allow us to learn more so we're making the right decisions and also gets the folks most knowledgeable about the actions we're proposing engaged. He said it's one thing for MDNR to write and say this is what we should do and how much we should do which is quite different from getting the folks who are experts in that area to say this is what we should do and that this is a reasonable amount to accomplish in the next 5 years. Mr. Engeln said if we can get folks to settle on this then we'll have a plan that's credible because the folks who know the most will be the ones who made those commitments. He explained that we'll then have a practical plan where people are proposing things that they really think will work.

Q: Do you see water quality trading being a part of our first 5 year framework?

A: We've been working on that the grant that we didn't get from NRCS this year and we need to try to polish that, but it is a topic that may be part of the strategy, it's a way to look for cost-effective approaches so it is on the table and will be in the strategy, it may not be ready to be done a year from now, but certainly 5 years from now.

### **E. PROPOSED PATH FORWARD**

Joe stated that moving forward is built on promises and would include the folks knowing the most, contributing to these individual actions so that they are practical so we're not saying we're going to do 90% of something when 10% is most realistic over the next few years. He said it's also based on the prospect of what we want to do first in 5 years. Joe explained that what is proposed is rather than go through this long list of actions, turn those actions over to groups of experts and those experts would then take those actions and put them into the right form for the strategy (e.g an action based on cover crops we'd have that group sit down describe that practice and we'll go through that one in particular as an example and decide what to implement over the

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next 5 years, maybe talk about where there may be targets to do that, who are the partners, where might the funding sources be and come up with an action that describes the action, how much of it can be reasonably done in 5 years and eventually quantify those expected nutrient reductions that would result from our actions with the help of our contractor).

These group will focus on whether it be will be 4 or 6 or 8 practices that they think are most valuable in that particular area and get strategies for those done. Mr. Engeln reminded committee members that many of these actions are already written up and it's only a matter of expanding the scale, targeting those resources better to the areas where we may be able to get a bigger response. He said that this also means that the tax payer's dollars will be spent from our soil and water program, from the state revolving fund, from the NRCS and other sources that we're spending the taxpayers' dollars most wisely by targeting those opportunities.

Joe reiterated that the list of practices will be given to groups of experts and they will take the lead in writing those groups of actions so that when those things come forward, the folks that are going to implement the practices will be onboard and there will be credibility because the people who know the most will have written them and written the right scale in terms of what is doable over the next five years. Joe stated that if the community helps to write those actions, they're going to have more credibility not only with those folks, but also they will have more credibility with those community folks that are not at the table. He explained that if agricultural groups are writing some of the agricultural actions and they are the ones scoping them, they'll know what's more realistic to do. He said the department will lead some of the groups such as nutrient trading, watershed planning etc. which the department is probably in the best position to write, but the department doesn't want to write all of these because we don't know this stuff as well as some of you do.

Q: When the sections are written will there be a review period for comments?

A: Once these are done, the groups will get to do an internal review and after that internal review everything will then come to this group so this group would have a second shot at editing before we go out on public comment. So, when we go to public comment, there aren't surprises and everyone on the committee knows what's in the strategy and everyone is comfortable in terms of what that strategy means and stands for.

Q: So if we wanted to bring a scientist that we worked with in to present comments on sections drafted would they be able to do that? This would be a nutrient expert that's not in town so we'd want to submit the written drafts to them for review and then get their comments on it?

A: I think that's something the group will have to decide.

Q: Are you going to have a template or guideline on how you want us to structure the different topics?

A: Yes. We have shared with you in email an outline of what each action item would look like.

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Q: Who's the nutrient expert that is being worked with?

A: Sometimes we work with Joann Birkemper through the Mississippi collaborative.

Mr. Engeln then asked the committee how comfortable they were with the proposed approach on a scale of 1 to 5. There were a couple of 2s and 3s. What's your level of discomfort and where does the committee think the weaknesses are and what is needed to get comfortable with this approach?

Q: It makes sense to have experts write their own areas of expertise, my level of concern is do these individual groups have enough spare time to donate their time or is there money available to pay groups to write these individual sections?

A: I think a lot of this material is written. We've been doing a lot of these things over a decade now so I don't think the writing is as overpowering as we think it is. Secondly, we've had talked with some groups and getting folks to have time to do this is a major concern, but if it falls on our staff that problem just gets amplified because you're limiting the folks that can contribute and I don't know if we can meet any reasonable timeline if it falls only on our staff. The question about money is one we're trying to address and I can't make promises.

Q: Wasn't there some grant that this group got a year ago or so to help write the strategy Is all of the money all gone? What's the status of that?

A: We got a \$118,000 grant from EPA and that allowed us to hire Corey Lindeman from University of Missouri and Nikita Mullings from Lincoln University and they've been helping us do the research, compiling articles and doing some drafting of different strategies for us and they will be available to help with drafting strategies if we're able to get their contracts extended through about the end of February 2014.

Q: In July 2013, we developed a table of contents. Is this a part of the table of contents and after we develop these actions, who peer reviews those? What kind of review do they go through?

A: The second question goes back to my answer earlier. If you have a bunch of the agricultural groups like the Corn Growers and Soybean Association, etc., and they have a chance to review those things, they're going to know whether or not it's doable for crops. John, Doris and folks from the communities will look at the community ones will know whether or not those are reasonable for their communities. The way this fits in the outline is this will be the section that talks about strategies and what we're talking about right now is that each action or some summary will be in the main report, but we will have an appendix that will have all the strategies sorted by group. That would allow the public to go to that report and say that's what I'm interested in and go straight to that appendix and see the full information. One of the things on there is who are the partners, what are the possible funding sources; so it gives people not in Jefferson City really easy access to this information so if someone wants to take an action it's easier for them to find out what the

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possibilities would be and how they might get help implementing that particular possibility.

Q: So the remainder of the document in the table of contents has been written already?

A: No, we're still very early in the writing. This work will fall dominantly on our staff which is why I didn't want them to have to write all of the actions. Particularly those who go to the clean water forums and clean water omission meetings. What would you not want us to do while we are doing this?

Q: I think the path forward is reasonable and the best course of action here is to get work done quickly. I agree with the concerns as well as what kind of group or person might have the time to lead a group ultimately to keep it organized and on schedule. I agree that we don't need to over complicate this because from the agriculture point of view here, when it comes to BMPs or practices, most of them are already memorialized by the agencies (NRCS, Soil and Water, Dept. of Conservation) and those conservation practices are already pretty formally recorded in those agencies. I just wonder whether or not it's a matter of referencing them or putting them in the document as an appendix? There's probably a number of emerging practices or technologies, that there may need to be some actually work done on to follow the format that you've provided that may require some resources on the part of the agencies and the University that may have more knowledge on those. But it seems that it may be a fairly simple task to pull those together.

A: I'm thinking the same thing, we have these technical bulletins, we did send out the last reminder for example for cover crops and you'll see it refers back to the technical bulletins and that's why I think a lot of what is going on is not new. If you look at what's going on in St. Louis and Kansas City and a lot of communities they already know what they're doing to try to deal with storm water and waste water treatment plants, they don't need to reinvent the wheel. There are some new things out there, but we'd probably take the lead on writing some of those. We've funded for the first time a community to use a drip irrigation system as the end point for the waste water treatment stream if that proves out it is a very inexpensive way for our small communities that are really struggling to do a good job with their waste water right now. That's one of those new things that we would put into the strategy, but most of these strategies are strategies we've been doing for 5 years or more, cover crops is a good example and it's a documented practice.

Comment: The BMPs are known, we understand what we need to do. I think the hardest point would be (and this is where the stakeholders are important) trying to understand where to implement these BMPs so we have the impact that we want to have. Are those better off if we target them in the Missouri river flood plain farmers or Mississippi flood plain farmers? Are there certain watersheds that we need to focus on getting those on the ground because just because they exist out there as conservation practices doesn't mean

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that they are widely being adopted where they're most needed and that's probably the biggest part of our challenge.

Comment: I think the practices aren't the plan, it's a nutrient reduction strategy not a nutrient BMP listing. We're trying to come up with a strategy to reduce nutrients not just an encyclopedia of practices, so I think that's a lot more to do with the implementation than just writing a great list of things we could do and I think the bigger challenge is how do we get the practices on the ground because they've been known about for a long time, but we still have a nutrient loading problem. And if we're going to maintain the voluntary compliance status quo, then what are we changing that will make a difference. How do we define what's different between what's currently being done and what the strategy actually achieves.

Comment: Targeting is a critical point and it's not necessarily at the 8 digit HUC because to say one 8 digit HUC is the problem or needs to be focused is so broad what you really need to look at is a smaller scales and the good news is there is more and more data coming out that where we're understanding where do we have highly erodible soils can we target some practices specifically in those areas through the Soil and Water Program those are the sorts of questions that we're talking about internally;- How do we do a better job at targeting? If we can show which things are most likely to have the biggest effect under these conditions that's where we're going to make progress and that's also where a lot of the big question are The USDA by law does not share individual farmers' records and that makes it harder to know which practices work best under certain conditions, but there's a growing amount of literature that's coming out from pure review sciences that says we know more about when these things work and under what conditions and that's what we've got to put to work. That's what an adaptive management approach is because we're going to learn a great deal over 5 years.

Comment: I think it's reasonable to assume that in a high priority area, you're going to be able to identify broad areas of the state that need additional attention in this area or that area, but to think in the next 6 months that we're going to be able to determine what practices need to go in what area and fine tune that is probably not a reasonable expectation. Also I'd point out that the last thing we probably want is two parallel agency or statewide plans or strategies that are doing the same thing such as the DNR through the Our Missouri Waters Initiative will be going watershed by watershed and one of the goals of that is to tease out those very things and so it seems like that would be the avenue you would take in order to identify what kind of practices would go in a given watershed through an actual locally organized effort because we can write these things down all day long, but if the landowners and citizens of that watershed aren't willing to implement them, I'm not sure what good it's going to do. It seems like there's a framework already in another program that probably needs to be merged together in some shape or form. We've got a six-month timeframe to get this done and I think we should only do what we can handle.

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Q: How do you feel about broad-scale statewide practices (e.g. not applying ammonia in the fall or requiring cover cropping)? It's good to have targeted watershed stuff, but it's good to also have practices that apply broadly, right?

A: Right. As I said there were some broad high level issues that could be worked out, but not applying fall fertilizer is not something that's going to get worked out in 6 months. There could be some general thoughts put down on that, but to put that as a focused practice may be unreasonable.

Engeln: I did talk to Nancy Stoner from EPA and point out that Missouri does have a watershed approach and before we'd have finished this strategy we would have determined the calendar for the Our Missouri Waters Initiative and that we're going to follow that. We're not going to separate this effort from that and I think she understands that. So, EPA has been told that we're not going to reinvent the wheel in terms of watershed strategies. This is going to be wrapped and incorporated into Our Missouri Waters which is the statewide approach this department is taking to address all watershed issues.

Comment: I think NRCS and the Soil and Water Program both have done resource assessments throughout the state. They know the areas suffering from sedimentation, erosion and nutrient enrichment etc. I think those things at a high level are already known and can be included. There can be some goal setting through those existing assessments.

Comment: We need to get a document written in the next 4-5 months and we need to figure out a way to get some stuff taken off the shelf so that we can fill that role and use it as a stepping stone to something that'd you'd like to see further develop down the road when we have more time and resources and have more people in the room to have some of the more detailed discussions to address some of the questions and concerns asked earlier. The biggest challenge with moving forward is I don't see who's going sit down and run this group and write this on each of these things. You can spend a lot of time doing an excellent and extensive project putting together the possibilities. Or we can take the things that are already in place and take things that are written up and highlight those as the basis of where we are and understand that we have to put off the larger scale discussion until later.

Response: The basis of this is going to be things we know work in addition to other topics added such as nutrient trading. Our Missouri Waters Initiative this onsite-drip irrigation, which is what the department will write because these are newer things that are not necessarily in practice, we don't have a lot of experience with them outside of the department. That's one of our responsibilities to maybe look for things that are not yet in the mainstream that we may want to bring to the table.

Comment: In reference to using NRCS and SWCS existing materials, a lot of stuff that one of their agronomists didn't approve, or was not in favor of, got passed into their

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standard, so there's a lot of stuff in there that he wouldn't support so you have to be careful taking their suite of practices and saying that everything's sound.

Response: I don't disagree with you, but regardless they've been vetted and formalized and memorialized. I think that would have to be the starting place. Those practices can be changed as they go through review cycles just like things do at DNR. I don't disagree with you, but I don't know if the strategy can reference practices that have been modified for the sake of this group.

Joe asked if anyone from the community side wanted to voice concerns.

Comment: I think as far as the drip irrigation for small communities, I think that would be a really good strategy especially around the lakes when we found that drip irrigation is the only thing that works in imported soil. This would be something I'd be interested in seeing in the strategies for those areas.

Q: Can you determine what's practical for the next 5 years?

Comment: I think part of our strategy needs to include some thoughts and discussion about how we know some of the existing strategies work and for strategies not in place what can we do to get them in place?

Response: If you look our last section, it's titled challenges and solutions and it's based on the fact that some of these practices aren't widespread and it may be an education effort, it may be a financial need, it may be all sorts of these, but these are some of the things we owe the people a realistic approach to.

Q: It seems like if we identify some of the issues that we we've identified as the biggest sources in Missouri, that we should have practice-based initiatives as a significant part of our strategy because if they're not being implemented, we need some kind of initiative to tackle that and it needs to be a strategic approach.

Joe explained that adaptive management is a quite useful concept applied here, which is based on the approach that we've got a very complex system with a significant amount of unknowns, so the way to move forward is to essentially sometimes allow small-scale failure in the interest of learning, but that means that one of the things that's missing is there are a lot of practices out there, and there's a lot of rumor and innuendo as to how good they are, but we don't have the best data to say how effective they are. We don't have a lot of information about the conditions under which different practices are effective. We know that it works here, but we don't have a good understanding of whether we can take it to another area with different soils, different hydrology, if it's going to work there. So that's why I favor shorter term actions, because it gets us up that learning curve, and if we're going to spend the money wisely, you have to know what works and under what conditions it works.

Q: Where do we draw the line on investigating things like that?

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A: Most of what will be in here is what we know works and also what we think is worth trying. So it's not blanket statements about what we know and don't know. There are certain things we know work very well and maybe we should do more of them. There are other things that we think may have very good returns, but we don't know enough about them yet, so it's not a never ending research project. That's not what adaptive management is.

Q: How much of the nutrient issue is due to the current status quo and how much of it can be linked to bad actors? I think the status quo is really problematic right now.

A: I think if you look at the results from NRCS and soil and water programs you've got documented reductions in nutrient loss and soil loss. However, there are places that still have high soil loss and it's not bad actors, it's that folks have not yet implemented practices. Maybe they don't have the knowledge or money, but they haven't gotten there yet. But the fact that we put probably \$300 million dollars of practices on the ground in the last decade just with the soil and water program, it's kind of hard to argue that they haven't had major water quality impacts for the good.

Comments: I don't think that status quo is an accurate description of the landscape. Fertilizer use by the whole state has been stable or decreasing, while yield and productivity have gone up, so that doesn't sound status quo to me. In addition, the practices have improved over the years across the landscape. Going back to the prior comment about what's working and what's not working, a year ago, we had a presentation on the CEAP program that tackled some of the issues and questions. So, we've got a short time frame and we have a certain amount of work we have to get done and we're going to have to capitalize on what's already been done and I know that CEAP is out there, it's done. There's a lot of information out there that's probably useful that we can capture from that and use towards addressing those questions and issues. This is probably ultimately going to be a first step in a nutrient reduction strategy this won't be a final document but a living document.

Comment: I agree we have to get a document out there that's accepted by everyone involved and we can update that information better as information becomes known, but we got to get user acceptance out there at the very beginning. We may start with a smaller goal and work towards that. I think the scientific data is out there, the hard part is figuring out what user acceptance is.

Comment: I agree, but I'm not sure the data is there on how effective the practices are.

Joe asked the committee what specific suggestion they have that would strengthen or improve the approach that we're proposing to take or do they want to go back to the old approach which is the department will write something and throw it up on public notice.

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Q: Should the department take a leadership role in each group and work with those groups and take responsibility for coalescing those ideas or should those groups be expected to find someone who's going to write the document.

A: The only problem with that is they would have to accept that option and then if we go that route it may not get done as quickly.

Comment: I think that most people in this room are comfortable with the format of the department writing something and we comment on it.

Comment: I like the process, but I don't think the time frame is reasonable.

Q: You talked about this approach today and you mentioned there are people that are not here. Should the department take the next month and go and reach out to every targeted group on every targeted issue and just poll those people and come back and report which % of the people say they do it?

A: We've actually spent the last 2 months doing that. That's what we were trying to do in anticipation of this meeting because there are groups here that have actually sued the department over missing timelines. EPA is not happy about us missing this one, but I explained that there was a very good reason for us doing so and the process we're using is actually the one that EPA wants people to use. A lot of states went ahead and wrote plans and sent them out for public comment and that's not the approach EPA wants. They want public involvement. We're actually following their model. That said, if we need to have the groups coordinated by people in the department we'll have that talk.

Q: Do you want to send out a report card and list every group and put down their commitment or no commitment?

A: We're going to send out SurveyMonkey, asking people, "Do you want to be a part of a specific group and what role did you want to play?" and get signups over the next couple of weeks.

Comment: I think the issue is more about the leadership role. I can tell you that Missouri Corn Growers is committed to engaging on the issues, that's important to them, and they will participate in helping review and provide input on those sections that would pertain to them, but they're not in a position to lead a group and the leader of that group is the one that's going to have the resource issues. You can assign people from the department to lead the groups, but they'd have to leave other work behind to do that given the time table. So, it comes down to how much of a priority is this for the state, department, and stakeholders because if it's a priority it will get done.

Q: If the plan is required under an EPA timeline, why not ask EPA to provide facilitators to help draft these sections and maybe pair them with someone from the NRCS or USDA if they want us to do it and the resources aren't there. If we come up with an approach that would work, why not have them help facilitate?

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A: I will not be in favor of that for the record. EPA has no real fingerprint on the state or the issues much less at a local level, so you're asking for all sorts of complications and the fact that they may not have anyone available anyways.

Joe responded by pointing out that two federal agencies we're talking about are not working right now, if they pass a budget, they're going to come back to all sorts of things on their plates. They lost two weeks of work and it's going to take them months to recover from that. We have spoken to NRCS about their willingness to partner with us on this. They are very much willing to do so, but I didn't want to define their role before I had this discussion with everyone else.

Comment: But the EPA's the one who wants it done on this timeframe and if they want to facilitate, bring the information together, and send it out to stakeholders to get a review, that's not drafting the section per se, that is facilitating and putting together input from others. It sounded like the facilitator is the person who was going to make sure things get done.

A: That person would have to be an expert in this field, this is not a simple facilitation process, if that person is going to take the workload off of others, they're going to do the editing, looking through comments, see what gets put in a lot of communication with the partners to make sure that it's accurate and represents what they want. So that's a coordinator role. Those are very different by design and definition. EPA Region 7 has two people who do facilitation.

Q: Well how many experts do you think have a ton of free time and would be willing to work on this for free?

A: That's going to be the question, "Who's going to step up and who's going to sit back and say we don't have time to do it?"

Q: Is there any federal or state funding available that we could hire a facilitator to help lead these different groups?

A: We're going to have to look at that. Our preferred approach is to be able to turn this over to folks who know this information. Folks in the agriculture field, folks from your side, if that's not going to work, we're going to have to see how we're going to get this done, and yes that's going to be a question of resources, yes it's going to be a question of what's not going to get done, and yes it's going to be a question of who's going to file a lawsuit because we don't get something done when they want it done.

Comment: I think a lot of people here are willing to participate in the stakeholder group and I think everyone is a little fearful of the time that will be needed to lead it, get it all together, and write it, so if we can pay for that, that may be a way to get it done.

Joe said the other option is if the committee breaks it down by actions, is there someone in that individual group willing to take the lead on an individual action and then we can coordinate how that gets done. We're just going to have to look through this and see what we can do.

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Q: Were you thinking of going through the suggested strategies that we voted on and just weeding out to eliminate the ones that were not acceptable to this group and to maybe reduce what the load is?

A: We went through about 50; there's another 40 out there, but I don't want to spend the time going through another 40, as it's not a worthwhile exercise in terms of getting things done. We're going to turn those lists over to each group and they'd be able to decide which one is the best bang for your buck; therefore, shrinking it down from the 90 we have right now.

These are not 10 pages, but two to three pages written up because the fact is, if you're looking at the farmer whose going to be looking at that appendix for things to do, they don't want to be reading 10 pages and 10 pages is not what we need because one of the key things is who are the key partners. If they know who to talk to, if they're interested they know who to go to, they can talk to the folks who know it best.

Any other questions comments or suggestions.

The committee then took a break.

After the break, Joe continued on by talking about specific things. He explained that the list is called actions or practices and the whole thing is a strategy. He said that the department just got into this thing of using "strategy" and I like to use practices because on the Agricultural side, that's what they're use to, but we understand that on the point source side, that's not a commonly used phrase, so actions and practices are the same thing and strategy is the big overall thing.

Mr. Walker then provided committee members with an example nutrient reduction strategy to give them an idea of the format and how much time it would take to put these together. Mr. Walker stated it took him about two full days to do the example strategy and fill out all the information. The recommended strategy was a combination of conservation tillage and cover crops and preferably no till with the conservation tillage. Mr. Walker stated that the first thing he looked at was identifying the areas of the state where this strategy is applicable and the highest priority watersheds for implementing this strategy. This strategy was applicable to the entire state and the highest priority would be identified using a spreadsheet that was developed using the help of Tetra Tech. As you go through, you just add all the layers that you're aware of or that you know about, and this will be easier to do with some of the groups through our discussions. We are then going to target the short-term 5 year strategies as those are going to be the most important and we also have a category for the longer term or 15 year strategies so we can identify how many acres we wanted to treat with which practices and then figure out what the costs would be.

Next we defined the measures of success and progress and this is something that is tracked through the state cost share program and NRCS, so this is something that we would have a good handle on in looking at the past practices that have been implemented and if we were successful in getting, through our education and outreach programs, more landowners interested, we could

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show that there were more practices being implemented and what the costs of those practices were. We then listed the specific BMPS that were involved with those strategies which were residue and tillage management and cover crops. The next category was to define the effectiveness, cost, economic benefits of each individual BMP and if applicable the combinations of those BMPs. We don't have a lot of data on combination BMPs, but that's something that Cory Lindeman and Nikita Mullings have been doing over the last year, is finding all the peer-reviewed articles they could and putting those articles into different folders, and hopefully that information will be made available to all these groups that are formed. Mr. Walker then gave an example of percent reductions with the practices.

Q: So that practice reduced total phosphorus loading by 100%?

A: No, we broke it out into nitrogen and phosphorus and the effectiveness for each of those.

Q: Are they added?

A: No they're never added, we don't have that information. I would assume it's going to be greater than at least the smallest one, but we really don't know that.

Mr. Walker then went on to look at information, education, technical assistance and outreach and listed some basic things that are generally done. He then talked about defining the existing funding and funding needs. He stated that once the goals are set, then some idea of how many acres or what percentage of cropland you may want to treat in the state is listed here, and then you can determine how much that will cost compared to your existing funding and see what your funding needs are. Then, you can determine if there's a need to recommend additional funding. Mr. Walker said the next thing was to identify any legislation, regulation, policy or program change that would be needed and this could be a change in statutes, if needed, or maybe changing the constitution in some cases, depending on what the recommendations are, and changing how you implement your practices to make them more efficient and then identifying challenges and solutions for obtaining the acceptance of these strategies so if the landowners aren't implementing these now, try to find out why and what changes you can make to get them interested. One of the things we'd be looking at is to show that some of these practices increase yields, soil health, reduce input costs and those types of things that affect their bottom line. He said that in addition, potential unintended consequences of doing some of these, like with no till, you tend to get more runoff over the surface of dissolved constituents such as nitrogen. Overall I think the practice is still very valuable, but that's one area where it causes a little bit more runoff.

Q: If you do the right cover crop, can't you fix nitrogen so you'd have less nitrogen?

A: Yes, you'll have a net gain overall with the two practices, but we don't really know how much. It would take more studies to determine that.

Mr. Walker lastly touched on identifying the potential financial, technical and outreach partners for these strategies. He stated that this is where the committee would try to get commitments

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from different organizations as to what their role would be in implementing any strategies that we agree upon.

Mr. Engeln then explained that they were envisioning to set up SurveyMonkey where people would sign up for specific groups which we'd define here today and then we'd send out the list of strategies and then the groups would decide on the strategies they wanted to focus on. He said the question is how do you get to the next step, which can be done in a couple of ways. One is, people can say I've got stuff on this practice and then just send all of it to one person and they do all the writing and editing, or it could be people in the group do individual actions and then it goes back to the group. Joe said when it comes back the people in that group, they want those people to be comfortable with what's there which takes us 90% through to the core of the strategy because something has been defined and explained in a way that it's understandable to the public and is comparable to the way we've explained everything else.

Q: So you want us to have the 15-year goals even though we're focusing on 5 years?

A: Where appropriate, and 15 is not a magic number. It's just having a 5-year goal that gets you something where there's truly accountability. It says we'll make a commitment over the next 5 years to do this. This is a reasonable amount of work to do. If there's a longer term strategy, that's great. This hasn't been vetted, so those percentages may change. They may not want the 15-year goal, but in some cases, we know that we want to do something more over a longer timeframe. With wastewater treatment plants, there may be some requirements that are going to be out there that have to be implemented over some specific time frames and we can say we know this is out there as well and it's a way to acknowledge that. If we go this way, 5 years is required, longer term is optional.

Comment: I think on that example that Steve has up there, if your Group 1 revised nutrient reduction strategy actually looked at and re-worked and re-wrote that strategy, that's kind of what we would expect from all the groups is to look at all these strategies and re-write that strategy to make it more compatible, and, of course, this would go to the Agriculture groups, but we just re-wrote it to make it more palatable.

Comment: That's the other advantages of groups, they can decide which of these things can really be a focus and how you want to do them.

Q: I'd just like to hear what everybody is thinking about some of the cross-cutting efforts that would cut across all stakeholder work groups, and right now I'm thinking of eliminating phosphorus and fertilizer without a soil test because that affects suburban and landscapers and farmers and everyone else, so if we were going to do something like that, who'd want to be involved in that?

A: That would probably fall into miscellaneous, but that means that a broader range of people have to be able to weigh in on it because they are impacting more people. Is that what people would suggest, or does someone have a better idea?

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Q: Would that be one we'd put on the industry and agriculture side? Maybe it'd be best to put that in both parts of the strategy.

A: Correct, if you think of the way I said we were going to have the Appendix, that would have all of the practices that may appear in the Appendix in two or three places. I'm willing to make the report longer by listing these practices multiple times because that's how it's going to be found by the public most easily and that's the other group we have to serve here, the folks that aren't in the room.

Comment: I think one interesting concept here that may be worth considering is part of an adaptive management process that would be polling affected parties. So polling wastewater facilities and asking them how do you feel about this now or what your perception is, things is like that. I'm sure representative groups have a really good idea of how people feel, but I don't know if everyone around the table does.

Response: Well one of the nice things is you don't have to come to the meetings to be involved. We've been talking to other groups and associations, but that's where to get these things out. Sharing this information with peers through newsletters and groups to get a broader range of people involved that way. It's not limited only to folks who can spare a day to come to Jefferson City, which is a limiting factor for a lot of groups.

Q: So for the SurveyMonkey, could we forward it to somebody to respond, or how would that work?

A: Yes, you can forward the links. What you'd do is sign up with your name, your group and email because those are going to be the critical ways to keep the conversation going.

Comment: I just got a link for a different organization and the link didn't work, but I was able to copy and paste the link into the browser.

Mr. Engeln told committee members that work gets done by those who show up. If you want to be part of this, you need to step up. He explained that he'd probably have less appreciation for the folks who show up at the public comment saying we don't agree to this at all. He said that the department is trying to give you influence on this process. We're trying to get the folks who know the most, to have a role without having to come to these meetings.

Q: Do you envision sort of identifying the adaptive management element of this in terms of the sequence of evaluation, revision and identifying resource needs and then passing that on to EPA on a regular schedule and saying it would be really great if you guys could give us this much more money to do these things that we specifically identified?

A: Ideally what would happen, and we have to report this progress to EPA every 2 years or something like that, but if this is a part of the Our Missouri Waters watershed strategy, part of the reason for that strategy is to be able to steer resources where they're most needed. The other thing is time spent back and forth between our land grant university, talking about what might be their role in going forward because some of what we may

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need them to do is look at some of these things and do these valuations because they have the technical expertise, capabilities and can make money available and it's something for which they will get credit on campus, which is a part of their jobs. It also allows us, if something is going on, to propose a new strategy that someone may want so that we have a living document.

Q: Do you think that we should identify vulnerabilities in practices, like how CRP is a great thing, but it's vulnerable to high commodity prices?

A: I think in the last section they went through, some of these things can be listed in the unintended consequences. We can talk about what we know and what we can control.

Joe Engeln pointed out a few highlights. He said that you'll notice it says it's applicable across the state, but it talks about how we're going to target. He said that what the committee wants to do now is use the nutrient potential spreadsheet and look at areas of high erosion potential as that's where we want to try to emphasize implementing this practice. He said that members need to know in terms of tracking, we've got a reference to the technical guides, we've got some reasonable estimates, and there are uncertainties with all of those, and we have a plan for outreach. He said that we can see whether this is the best format or not. All of the partners are listed here with their contact information to provide more information for the general public.

Comment: I think this is a practical, doable example. I think that nothing in here is going beyond what could be done in a reasonable amount of time. I think it's fairly straight forward.

Response: And this would go to whatever group is involved (crop group) and they'd be able to hammer out whether it is 15, 20 or 25% over the next 5 years; whatever's reasonable, and whether there is additional targeting we can do that we know about. It really gives those groups a chance to practice something which looks doable.

Q: The headings that are not bolded, you've bolded the input so the headings wouldn't change from format to format or practice to practice?

A: Right. And when we gave you that six-part outline, it was to try to make these things more standardized because "we" in the room may understand what all these mean, but if you're a person that hasn't been in all these discussions and you want to look at this, it allow you to say I know what I'm going to do for all these things, I know what this format is, and what information is needed for each practice. Now the titles may change a little, some of the titles may not fit as well, but these are the key bits of information we thought were necessary and critical. We want to be honest about what the limitations are, what are the things we need to think about, why don't we have cover crops over 100% of Missouri already, and there's good reason for that.

Q: This native languages thing, translating it to native languages for socially-disadvantaged farmers and ranchers, "Is that a required category or something that NRCS requires?"

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A: No, that was just an example of minute detail and how you might do some outreach programs. There are no requirements to do that.

Q: With these different areas, do we need to brainstorm who should be at the table for those areas because I think there's a lot of potential for something like area F to be dominated by certain parties, but lack representation from other parties, so you know a good stakeholder to bring in for that one might be the Missouri rural crisis center or at least get them to review the practices? Maybe they haven't been involved in this process, but they have a relevant perspective and a lot of expertise on that particular topic.

Mr. Engeln stated that he'd first want to get the group involved and his hope is to get groups out there that are willing to help to make sure these things get done right.

Mr. Engeln then went on to discuss the grouping actions. He said that onsite systems have been split from the list and so are wastewater systems from onsite systems as it has been realized that they're probably from completely different groups that would be involved. He stated the other groups were urban nonpoint source/storm water and then industrial, crops, pastures, animal agriculture, forests and miscellaneous bringing it to 9 sources. Mr. Engeln stated that one of the discussions was is there really a need for forests here and is that a big enough source?

Q: What's the industrial category? What are the nutrients sources from the industrial category?

A: We put it in there because it's one of the ones EPA suggested. I'm not convinced it's a major source of nutrients in Missouri.

Comment: One idea on that is where we see barges being loaded up with nutrients and big clouds of dust blowing into the Mississippi River. There are industrial nutrient producers.

Response: I think what we owe is the department needs to take a look at that through the permit database and determine whether we think it's an issue or not. I'm not convinced one way or the other at this point.

Comment: It could go under Miscellaneous if it's small.

Q: For wastewater vs. onsite systems, where do the smaller subdivision wastewater treatment plants fall you can call that decentralized or onsite systems I guess?

A: I'd sort of leave it to the group, but I think of wastewater as being the larger systems because their approaches are different from individual subdivisions, but I'm completely open to suggestions as to where we draw the line.

The minimalist approach allows us to get this down to 7 groups.

Comment: I'd recommend deleting industrial and forest.

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Mr. Engeln said that there was some data reviewed that was provided from Tetra Tech and according to them in terms of forestry, the Current River watershed was the highest priority watershed in Missouri, which makes you think forestry probably isn't a major deal.

Our knowledge of sources is not ideal.

Q: Back on the industrial category, the wastewater operations that are privately-owned or that are industrially-owned, would that fall under wastewater or industrial?

A: I would put all wastewater treatment plants together regardless of ownership. One of the reasons I wonder about industrial is because a lot of our industries are in areas where they're doing pretreatment and then going through a wastewater treatment plant and that's something that would be approached through that approach where they can talk about pre-treatment options for certain industries if they choose.

Q: Is industrial air emissions and their deposition included? Why don't we have a category for that?

A: The problem with air emissions is they're controlled by an entirely different set of rules and regulations and if we go that way then we really should bring in other things as well and that makes it very complex and difficult and we'd need a lot of folks that aren't at the table here. When air emissions come from such diffuse sources, how do you separate out what they're doing vs. other sources?

Joe stated that as of right now we have wastewater, onsite systems, urban non-point source, industrial, crops, pasture, animal agriculture, forests and miscellaneous. If we have some things on forest and industrial, we can put them under miscellaneous. He said that pets in his opinion are a part of the urban non-point source.

Q: So these action groups are developed with the objective of looking at all sources?

A: What we're looking at are the major sources.

Q: So you don't think natural sources are major sources? What action are we going to take?

A: Remember these are specifically tied to actions. These are groups of actions that are going to be proposed. The whole idea of this strategy is built upon actions rather than targeting this or that or the other thing because if we start taking the actions necessary, we'll start moving towards those targets.

Q: Would you say natural sources are a part of the source of an unnatural problem like the dead zone?

A: Well, I'd point out that historically, a dead zone did occur for those who don't know. A dead zone occurred just about annually in Mobile bay. And it was because it was a closed bay with poor circulation, and nutrient loading has exacerbated that. That's why

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the goal is not “no hypoxia in the Gulf of Mexico,” but a reduction to a smaller size because there are natural reasons these things happen.

Mr. Engeln then said what the committee would do is have people sign up for each group. By group, the practices that have been developed which might apply to them would be sent out. It does not mean you have to write an action for each of those strategies. The groups will decide which are the most important actions and the ones the groups think need to be implemented, and the ones that will have a meaningful impact on nutrient loss to our rivers.

Q: What’s the next step?

A: The next step will be to sign up on SurveyMonkey if you want to coordinate one of these groups. Then if we don’t get sign ups, then it’s probable that we’re going to have to find somebody from our department or one of our partner agencies to do it. Then it will be a matter of working through these strategies and trying to get these things worked out. A lot of this language already exists so it may be a matter of sending in information that’s already been written (e.g. from MSD) for our wastewater treatment plants or nonpoint sources and then we’ll try to incorporate that information.

Mr. Engeln then displayed the proposed calendar for the committee

- Groups established in two weeks
- December progress reports from each of the seven groups.
  - Actions selected
  - Science presentation and discussion
- End January – first draft actions
  - review period for groups
- Late January – Meeting
  - Progress
  - Work needed
  - Major hurdles
- Late February- First good draft strategy
- Team Review of Strategy (March)
- Public comment period (April/May)
- Completion in May/June
- Publication at DNR website
- Continued engagement on implementation

Mr. Engeln reiterated that the SurveyMonkey will go out quickly and it will be sent out to all of those on the email list.

Mr. Engeln stated that by December, he would hope that groups would have at least defined which actions the groups will use and he’d like for the groups to actually have the verbiage started. He stated that this time will also be a time for questions. In December he also stated that

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he will share some information received from Tetra Tech which is data on nutrient loads based on 8-digit HUC watersheds.

He said that by the end of January, he'd like the groups to have completed the first draft of all actions for a review period so the group can review all of the actions in that particular set. In late January, there will be a meeting to go through progress and at this point Mr. Engeln is hoping these actions are about done or close to being done and that we can determine what additional work is needed. Mr. Engeln told committee members that there is a section for measures and effectiveness, costs, and economic benefits of strategies, and informed committee members to not let this section stop groups from working on these as Tetra Tech will be providing much of this information. He stated that the committee would also go over major hurdles and by late February, the committee will try to get a good first draft of the strategy and then do a committee review.

In April and May, we may have a public comment period if the draft review is complete. Mr. Engeln stated that whether or not that is tied to a commission meeting is something committee members can talk about will have to be decided.

Q: The grant that was given to two people. "How much of the money is left and can they be assigned to groups to do the writing?"

A: I think we're going to have them help us with some things whether they will be able to do all of this we really don't know. What I was hoping for was that if in fact a lot of this exists then maybe we can get them the pieces to edit and get a first draft of some of these options and that's something we're working with Lincoln and MU to figure out, what that workload maybe, that's why we chose to extend their contracts as there is still some work they can help us with.

Q: When you say extend the contract does that mean the contract money has been used up and you've got new contract money?

A: No, we did not spend all the money.

Mr. Engeln asked the group if this sounded doable. He stated that signups will be done in two weeks and in the interim, he will find about staff workloads and money to get this stuff done. He stated that if there is some money available, he will be calling folks to offer some money to do some work.

Mr. Engeln asked how the public comment process should be handled.

Comment: We have already asked Joe if he'd speak with our soil and water districts commission in December just to alert them of the process to make sure they know of the public process and everyone working on it and to get any direction or input they'd like to the groups. We do think the commissions really want to know about it and that they need to be involved and later on they'd definitely want the soil and water districts to know about the public comment period and have them involved at that point.

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Comment: It seems the Clean Water Commission will be kind of in the forefront of any sort of nutrient criteria that may come in the future, so it may be a good idea to have them educated on this. It may be an informational presentation or two and I think that public comments might be something we'd want to do as a part of an adaptive management process and maybe we don't have a public comment at the front end of this, but maybe we have a public comment that can occur overtime for people to provide input. Maybe if this is an open adaptive plan, the public comment isn't important as long as they understand that it's a living document, but if you make changes then you have to make sure the group is aware and approve of those changes.

Joe agreed that we're going to have to do periodic reports which would be good times to revisit and call this group back together. Mr. Engeln said that this would allow whoever wants to come up and say here's where we think we, here's we're maybe we're lagging behind, and discuss those things and do a checkup on what we're doing, what we need to do differently or better or maybe there's a new practice that someone may have that can be added to the strategy, and we can advertise that it's been added to the strategy.

Comment: I don't think you need Clean Water Commission approval of this document, but I wouldn't oppose them having a 15 minute informational presentation.

Response: I think there's a difference between saying we're going to have a Clean Water Commission hearing where people give public comments on this, and informing them and the Soil and Water Districts Commission to see if it fits their schedule and if they want to hear about it or send representatives who might be present to hear it. There are a lot of options that we will discuss with the commission and I wanted to run that idea past you.

The group agreed that we did not need to have a public hearing at our Commission meetings. Mr. Engeln informed committee members that he would continue to inform the soil and water districts commission since they are involved in a number of practices on the Agricultural side. He stated that he would voluntarily brief the Clean Water Commission when they wish to hear about the Strategy, whether it be now or closer to the end of the process or when the draft is done.

Comment: There's a lot involved in this strategy and some parts of Missouri may be more interested in some parts of it versus others. One way we may get the word out to the public is during some of our newsletters and especially point out the septic and onsite systems and some of the practices that would apply to the Table Rock Lake area and the Ozarks.

Response: One of the nice things about putting this on a website is that it means any group that wants to read about it and needs their members to look at it can. That's why I like the idea of the Appendix with the individual actions out there by these 7 topics so that if you're interested in crops you know where to look.

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Any other comments or suggestions?

There were no other comments or suggestions. Mr. Engeln told committee members that the example strategy and the power point would be put up on the website. Mr. Engeln thanked everyone for their time and involvement and reminded the members to feel free to send the SurveyMonkey link to other groups, members, or individuals, as needed.