

**Stormwater Advisory Board**  
Unofficial Meeting Minutes  
January 09, 2015

I. Welcome and Call to Order the regular meeting of the Stormwater Advisory Board. The meeting was called to order at 8:04 am on January 9th, 2015 in the W.A.T.E.R. Center by Chris Bohm (Chair).

**Present**

**Board Members**

Greg Allison  
Rich Basore  
Chris Bohm  
Hoyt Hillman  
David Leyh  
Gary Oborny

**Absent**

**Board Members**

Mitch Mitchell  
Don Kirkland  
Joseph Pajor  
Jim Weber

**City of Wichita Staff**

Jim Hardesty  
Mark Hall  
Joe Hickle

**City of Wichita Staff**

Dale Goter (CMO)  
Don Henry  
Scott Lindebak

**Visitors**

Trisha Moore  
Josh Golka  
Rachel Enns  
Tom Stiles  
Ron Graber

**II. Approval of Minutes**

Bohm opened the meeting by asking that everyone introduce themselves since it is the start of the new year. Bohm then opened up the floor to the new public comment period for anyone from the public wishing to speak. No one from the public motioned, Bohm closed the comment period and parked the minutes until a quorum was met. He turned over the floor to Trisha Moore for review of her preliminary report.

**III. Preliminary Report Trisha Moore Kansas State University**

Moore started out by saying that an email was sent out including the report or there were printed versions at the front table if anyone needed them. She said that everyone could watch the slides that she had or follow along with the packet but if anyone had questions to please ask. (See handout) Moore indicated that she would be going over tasks one and two and then would give updates on tasks three and four that are not in the report. In task one, there could be more thought put into this but the take home is that there needs to be something more additional. Either BMPs implemented by the developer or something off site as opposed to expanding an existing program. Task two the goal was to look at the economic efficiencies a little more closely than they have been in the past. Moore said they looked at onsite, commercial and residential basis and then they looked at offsite like rural or WRAPS type of mediated plan. They looked at the number and life cycle costs as well as sediment reduction benefits. (See handout) They calculated on an annual basis dollars to remove a ton of sediment. There is quite a

big difference even more than the preliminary that Josh Rowe put together, on average there are three orders of magnitude greater in terms of the cost of what it takes to remove a ton of sediment in an urban landscape vs rural. The difference that is driving that is a lot more sediment in the rural even if the land values were the same it would still be more efficient in terms of sediment. Some urban BMPs are more on the engineered side so there are costs associated, these are occurring in the rural but not as great of a cost. Moving forward they need to start looking at crediting ratios. Moore said the urban numbers came out very high so she looked at another study done by the Center of Watershed Protection and they are pretty much in line with those numbers as well and she doesn't think that the urban numbers are inflated. Bohm asked Moore to go to the last slide, he said that this is a greater order of magnitude than they had originally thought. He said that it is just stunning, he went on to ask a question about the on-site BMPs and asked if the cost for inspection was added into those costs and Moore said yes as maintenance. Moore said that in the rural the mechanical maintenance is included but she needs to talk to Ron more about the personnel aspect and that has not been built into those figures yet. Moore went on to say that there is a significant cost benefit difference between rural vs urban, primarily because in the rural there is more sediment. Bohm said that WRAPS has luxury of finding the worst areas and finding those land owners, Leyh said it is targeting the problems. Moore said that not just anyone can come and do a BMP, there are incentives for the most erodible lands to get enrolled in the conservation programs. It targets the highest sediment loading areas. Leyh said that this is the solution and Bohm said yes but the question is how we implement it. How does the City of Wichita create this program to make this happen? Bohm then asked if there were comments, Greg Allison asked if there was any way to correlate properties that can do a certain amount or all of the BMPs without any additional costs, he said that some people are going to need this but not everyone will need it but a lot of people will need it. Moore said that the larger developments will still need to provide some rate control and there will be some cost difference minimum for rate control vs making extended detention or whatever is needed to get the water quality piece. Maybe they could look at those economics and that would not be difficult. Discussion went on about what is going to be cheaper. Allison then asked how stream channel volume fits into all of this, Bohm said that is a good question because that is part of the manual. Bohm said that you may meet water quality standards by virtue of doing that part of it and you wouldn't need this program. Bohm said that he knows that Moore has not gotten to the funding part of this program but asked if Moore could give some guidance on how would a property get enrolled and how would they annually meet the commitment on an annual basis. Bohm then asked if there were other questions or comments. Hillman said that he thought that the State should give some input on this, Tom Stiles said that it is but there needs to be some side bars on this. Stiles said that Trisha's numbers lay out two things that they thought were happening and they are confirmed. One is that land in the city is more expensive than land in the rural area and two sediment generated from parcel land in the city is so much less than one generated in the rural area. To the state a table of unit of sediment reduction for these practices, now can start a tradeoff. In Moore's example, there was never an envision of a 10/1 ratio, but a 3/5 is good and you can break that into three parts. 1/1 exchange of particle of urban sediment vs exchange for a particle of rural sediment, the second is to borrow over and above, and the third is mental thresholds no one is going to want to enroll a partial acre you are going to want one acre or two acres, that is the city's banking credit. You can hold on to that and use that as more development comes in and you continue to build that bank account of credits. The notion of the credit ratios is important, this invokes some of the states "what's in it for us" and it sweeps away some the uncertainty of "do we really have a firm fix on an acre here is going to someone out there." This becomes a bankable commodity that the management of the program and development within the city can use to facilitate the permitting without having to wait. Use the bank and reimburse over time and refill and rebuild the bank. Stiles went on to say that selfishly the state viewed it as another revenue stream for WRAPS. WRAPS has been operating five plus years of their

watershed plan, they know where the critical areas are. That is where you start focusing, you help them implement their plan so that linkage has to be there. Everything that Moore has generated is the right way to do it. Because of the NPDES permit something has to be done, hydraulically still not absolved of taking care of downstream resources and neighbors. The little add on of water quality and finding the most cost effective way to do that and recognizing that putting this in place you have added the value of time. You can go ahead and proceed with the development, the City and WRAPS will run the inventory. Use the sediment reduction table to assign bankable credits. Bohm asked if WRAPS files an annual report to KDHE, Stiles said yes. Stiles went on to say that report back to get credit. Basore said that WRAPS would continue to do over and above what the program would generate for their activities, this would be one more piece for their puzzle and they would get another credit. Basore asked Graber how long the plan is and Graber said that it is for 40 years but he is not sure if they can meet that timeline. Bohm asked Moore to add in the report the order of magnitude, one grain of sediment in the city is the recommendation would be....3, 4, or 5 that would help frame it up. Bohm asked Stiles if EPA would like a WRAPS connection. Stiles said that certainly, their end game is water quality. Some crediting ratios, thresholds, and linking into WRAPS and documenting how much sediment offset is used as a credit. Discussion went on about the banking system and how it would work. Bohm asked Stiles if the discussion about the way the banking system would work, start out with a reserve and then replace per year. Initially there is some operating capital for the WRAPS to get going. Stiles said that a front end investment to get going would be preferable. Oborny asked Graber what the time period for 6,000 acres would be, Graber replied two years. He said that he bases that off the project that he did in the Black Kettle two years ago, they enrolled a little over 5,000 acres. Bohm said that doing quick numbers at a 1/1 the bank would need \$31,000 if you tripled it that would be \$90,000/\$100,000 for the bank that would get about ten years' worth. Basore asked where the money would come from and Bohm said that is a very important question, what kicks off the bank. Oborny said that it depends on what position is taken, offer incentive to companies that want to come here by reducing development costs. Those are things that businesses look at when they go to other cities, Oborny went on to say, we can reduce costs and still raise the tax base. Bohm asked if there were any questions, there was none so he recapped the banking system. Moore said that part of the project team is Vireo and her take home from discussions with them is that with projects of this nature are most successful when there is diversified funding, both public and private, so showing that everyone is sharing the burden. Leyh replied that the trigger is new development but the entire community benefits from it. He said that there is a system already in place from monies collected from the water department, he said that this is a logical place for this to be implemented. Bohm said that the hardest part is finding out where the funding is coming from, he went on to say that ultimately it is up to the City Council but it would be nice to give them some solid recommendations. Bohm went on to say that KDHE likes the premise, looks like there may be a bank that takes inventory for ten years, perhaps a mathematical calculation on what the bank would be, 50/50 for sediment load, assign an order of magnitude, and then a cost and in that scenario he bank would be X dollars to kick off the program. Then the guidance would be how you pay for property that comes on during the course of the year. If a property doesn't need it, they are out and it is on them and the city would have to monitor their facilities over time and they have to maintenance it over time. Bohm said that this would be a tremendous program even for those that can get the water quality on their own site. Bohm asked if there were other comments. Stiles mentioned that sooner or later land is going to run out and after some of these practices are going to need to be rehab-ed and KDHE probably wouldn't have a problem using some of the money on the rehabs. Stiles said that this not in the near future but this conversation may loop back. Bohm again asked for other comments, then thanked Moore and Stiles. Hillman asked when the final report will be ready, Moore said that she would have a draft in February. Bohm asked if Moore could have a draft of financials in February and then

Alan King could come to the meeting in March. Since there was not a quorum met there was not official adjournment.