

Lower Kansas Wraps meeting summary for 9/23/09.  
Leavenworth County Fairgrounds, 405 W. 4th Street, Tonganoxie, KS

Present: Coordinator Rick Davis, SLT Chair Mark Johnson, Matt Unruh, Trevor Flynn, Amanda Reed, Jim Weaver, Mike Epler, Jerry Wooley, Rodney Parsons, Ryan Hamel, Heather Schmidt, Dave Bruton, Susan Iversen

The meeting came to order at 9:10 a.m. Everyone introduced themselves.

● Lower Kansas WRAPS Load Reduction Discussion

Reducing bacterial levels is a top priority for the Lower Kansas WRAPS; however, there are difficulties in establishing criteria for determining load reduction of bacteria achieved by BMPs. KDHE has been working to solve this problem. Trevor Flynn gave a slide presentation on Bacteria TMDLs and Load Reduction in the Lower Kansas Watershed.

► Main Points:

- 5 streams in the Lower Kansas Watershed have high priority bacteria TMDLs. Reduction of bacteria levels in the main stem of the Lower Kansas will primarily be achieved by managing these streams. Our lake TMDLs are mainly for eutrophication.
- In 2003, the EPA made E. coli levels (ECB) the new standard for bacteria because these levels correlate better with disease problems than the previous standard of total fecal coliform bacteria (FCB). Not all bacteria living in the intestines of warm-blooded animals are pathogenic. The unit of measurement of ECB is the colony forming unit (CFU).
- Kansas statute 82a-2001 states that classified stream segments are only considered impaired for a defined recreational use if the calculated geometric mean of at least five samples collected in separate 24-hour periods within a 30-day period exceeds the corresponding water quality criterion. Primary recreation takes place between April 1 and October 31 and includes activities such as swimming which are likely to lead to inadvertent ingestion of water.
- During the 2004-2006 primary recreation seasons, there was only one spike exceeding standards. During the 2008 season, Kansas City spiked in April, June and August and other stations had excessive levels in August as well.
- There are important differences between bacterial load and concentration. Bacterial load is the amount of bacteria entering a water body while bacterial concentration is the amount actually present in the water body. Bacterial concentration has more implications for health.
- TMDLs are about the frequency of high levels, not about the magnitude of any single event.

► Implications:

- Bacterial Load Reduction (BLR) will not be calculated by assigning a load reduction value to individual BMPs.
- BLR will be calculated as reduced frequency and magnitude of elevated bacteria levels monitored by KDHE sampling. The numerical goal in the new system is 1.0 or less for the majority of samples.

- More BMPs in place should result in a drop in the occurrence of high outlier samples.
- BLR in targeted areas should show significant results that correlate to the types, proximity and number of BMPs installed.

► **Discussion of KDHE Presentation:**

- Eventually, KDHE hopes to be able to measure and predict how the exclusion of 'X' number of head of livestock will affect bacteria levels.
- We are focusing our money on Stranger Creek and not on the combined totals measured at the end of the watershed in Kansas City. Is it possible to make a direct correlation between levels taken at at the base of Stranger Creek at the Linwood station and levels taken at Kansas City?
- All TMDLs in the Lower Kansas are scheduled to be revisited in 2010.
- Several creeks are close to the desired level of 1.0. When will geomean sampling of these creeks be done again? Since there are only 2 people doing this sampling for the entire state, scheduling is difficult and can be delayed.

● **Matt Unruh – KDHE Watershed Mgt. Section: How KDHE Uses BMP information reported by WRAPS:**

The EPA has identified the Region 5 model, an Excel based program, as a tool for NPS programs to develop load reduction estimates. It is an algorithm-based workbook, developed from experience in Michigan and Illinois, that can evaluate agricultural production areas, feed lots and urban areas for nitrogen, phosphorus and sediment loads. The program is available free from EPA.

KDHE uses installed BMPs as reported in the Kansas Clean Water system quarterly status reports for inputs in the program. Other data used in the program comes from KSU extension data on soils, STEPL models, the nearest weather station (rainfall and runoff), and appropriate USLE values for the land use.

► To determine which proposed projects would provide the biggest load reduction bang for our limited bucks, we could give Matt the list of BMPs under consideration for actual projects, and he would rank them by efficiency and amount of load reduction using the Region 5 model. Matt will send the program out so we can all download it if we want to work with it.

➤ **Questions and discussion:**

- Does KDHE keep track of load reduction from non-WRAPS funded projects such as those funded by SCC or NRCS?

No, that is not currently done. KDHE staff would like to be able to credit load reductions from such projects back to each WRAPS group and is currently talking to SCC about getting the necessary information. The problem could be getting information from NRCS. They do have a data set online but it only goes up to 2007 at this time.

Another problem is that conservation district boundaries do not match watershed boundaries. You can get a rough estimate of how much load reduction from an SCC project to credit to a watershed by using the percent of land in a county that is in that watershed. There are a lot of counties in the Lower Kansas watershed so the amount of information available will vary.

● **Stranger Creek Aerial Photo Assessment**

Jerry Wooley, Leavenworth County Conservation District

Jerry Wooley gave a very informative presentation detailing the entire length of Stranger Creek using aerial photographs from an FSA mapping program. Areas with erosion problems were clear as were some well-timbered riparian areas. There has been a lot of buffer strip installation in recent years. There are several operations where livestock are using the creek, sometimes on a year-round basis. All this information needs to be ground truthed eventually.

Leavenworth county has identified properties in close proximity to the creek. There are 1,881 within one mile of Stranger Creek and 191 properties that actually touch the creek. Those 191 will be the main focus of Conservation District work with landowners on Stranger Creek water quality issues.

There is a huge problem with erosion in Linwood where the creek is steadily encroaching on the city, but the city does not have the money to fix it and has not been able to find other funds.

➤ **Discussion:**

- Most livestock operations will be found on the upper areas of the tributaries of Stranger Creek. There will only be a few in the bottoms of the main stem of the creek because the water levels in the creek are unpredictable and there could be losses.

● **Lower Kansas WRAPS 2010 Project Application Presentations:**

- Jim Weaver of the Douglas County Conservation District presented the John M. Adams Erosion and Sediment Control proposal to construct a water and sediment control basin terrace of 860 feet on a quarter section of native grasses in the Washington Creek drainage area. The project is in a high priority TMDL area for Dissolved Oxygen and is a high priority TMDL practice.

The original proposal has been revised to add plantings to the new terrace which brings the WRAPS dollars requested to \$2,81.40 rather than \$2,619.40.

- Jerry Wooley of the Leavenworth County Conservation District presented the Richard Frey Alternate Water Supply and Pond Fencing project. This would be a new pipe and tank system which, with the fencing, would keep the livestock out of the existing pond, improve the water quality and reduce erosion around the pond. The project is just outside a high priority TMDL area and within 4 miles of both Stranger Creek and the Kansas River.

WRAPS dollars requested = \$5,262.25.

➤ **Discussion:**

- Does the pond project give enough value in reducing pollutant loads or are we mainly investing in improving the pond? This pond is far from the creek and river on an ephemeral drainage.

**ISSUES INVOLVED:**

- How can we get projects that will have a more direct impact on the main creek? The slide show assessment showed many problem areas right on Stranger Creek. Can we use our education dollars to work directly with landowners on moving their CAFOs. We have hired service providers and we should tell them who we most want them to talk to.
- But we have to remember the system is voluntary. A landowner has to be committed to a project to the extent of coming up with their own money to provide part of the funding. Amanda Reed of KDHE said that it is possible for WRAPS money to be used for a landowner's cost share with another agency such as SCC.
- It is critical to realize that another side of this being voluntary and landowner driven is that people do talk about their successes and this influences other landowners.
- Putting a pipe in an already existing pond is a very good demonstration project. The question arises if the fencing is worth it. You can look on fencing as a buffer strip. The landowner can do flash grazing.
- Jim and Jerry both said that they had many other project applications this summer, but their other funding deadlines and the need to get that money spent meant that most of those projects have already been accounted for. They do rank the project applications they receive on the amount of pollution reduction and other factors.

- Amanda suggested that we get next year's funding period in sync with NPS and water resource funding in July. If our dollars were available then, it would give landowners more options. Rodney suggested that it would also be useful to coordinate with events such as Kansas Livestock Association meetings or county annual banquets to more efficiently use landowner time and attention.
- The question was asked whether next year's funding level would be affected if we did not spend all of this year's demo project money. Amanda said it wouldn't, but that KDHE would like to see as many BMPs as possible put in place in the watershed. Since we are still in the assessment and planning phase, specific load reduction targets are not strictly in place and perhaps projects don't have to be as tightly focused yet.
- We may have more than the \$15,000 in this year's budget to give away since the Brian Smith project and the Bonner Springs project from last year are in question and that money could be reallocated. Official letters have not yet been sent giving a specific deadline for project completion and stating that our funds will be withdrawn if the deadline is not met. There have been some informal contacts and the Brian Smith project appears unlikely to go forward. The Bonner Springs project is suffering from too many changes in project oversight personnel.

► **Mike Epler moved that we approve funding for the projects presented and discussed today, and that official letters be sent to Brian Smith and the city of Bonner Springs giving deadlines for project start and completion dates, and stating that if those deadlines are not met our funding will be withdrawn.**

Rodney Parsons seconded the motion. All SLT members present voted in favor. Rick will send letters.

● **Other agenda items:**

- Jim Weaver reported that applications are being taken for the Tri-County Technician position with interviews starting in October. They have many projects waiting for design help.
- Dave Bruton passed out brochures for the Jefferson County Forest Service Field Day on October 15.
- October 8 is the Kick Off day for the Douglas County cover crop demonstration/study project.

● **Next Meeting Date and Place:**

The next meeting will be from 9:00 a.m. to 12 noon on Wednesday, October 21, probably at the Douglas County Extension Office. Jim will check availability. We may be able to visit the Douglas County project.

The meeting adjourned at 1:10 p.m.