

**West Fork Des Moines River Watershed
Total Maximum Daily Load Implementation Project
Semi-Annual Meeting
Tuesday, December 10, 2013 – 10:30 am**

1. Welcome and Introductions

Kiel Tschumperlin, Heron Lake Watershed District (HLWD) opened the meeting at 10:35 am. In attendance were Jake Grages, Jackson Soil and Water Conservation District (SWCD); Andy Geiger, Jackson County; Al Langseth and Kathy Henderschiedt, Nobles County; Katherine Pekarek-Scott and Ben Crowell, Minnesota Pollution Control Agency (MPCA); Brady Swanson, Department of Natural Resources (DNR); Mark Hiles, Board of Water and Soil Resources (BWSR); Ed Lenz, Nobles SWCD; Adam Ossefoort, Pipestone Conservation and Zoning; Don Louwagie, Minnesota Soybean Growers Association; Jon Bloemendaal, Murray County; and Kiel Tschumperlin, Jan Voit, and Ross Behrends, HLWD.

2. West Fork Des Moines River (WFDMR) Total Maximum Daily Load (TMDL) Implementation Project PowerPoint Presentation

Kiel Tschumperlin, WFDMR Watershed Coordinator, gave a PowerPoint presentation that provided a project update since the last Semi-Annual Meeting, grant background, the role of partners, watershed information, progress to date on the inspection process, what to expect in the future, and sought input on how to allocate excess grant funds. A detailed summary of the PowerPoint is given below.

A manure management workshop was held on July 31, 2013 in the Heron Lake Community Center. The event was hosted by the HLWD in partnership with Jackson, Nobles, Murray, and Cottonwood Counties. Speakers were from the University of Minnesota (UM), MPCA, and Extended Ag Services, Inc. The economics of phosphorus management and grid sampling, manure application setbacks, manure record keeping requirements, and manure sampling techniques were among the topics covered at the workshop. Surveyed participants revealed they learned new information on various topics regarding manure management.

Attendees were also informed that a Clean Water Fund grant application was submitted for a feedlot fix in Murray County. The site exhibited a high priority due to its location and proximity to surface waters. The application was submitted on October 3, 2013.

A County Feedlot Officer (CFO) Meeting was held on October 23, 2013 at 10:30 am in the HLWD office. Topics covered included feedlot inspection breakdown by county, the usage of grassed waterways for buffers, usage of best professional judgment (BPJ), follow up letters, and manure records and manure

management plans (MMPs). It was determined that grassed waterways cannot be used as buffer because they are considered part of the drainage system and manure contaminated runoff is not permitted in these areas. The usage of BPJ is at the discretion of the CFO. The decision they make on a feedlot is the final ruling, regardless of MinnFARM. A copy of the follow up letter needs to be given to Kiel in the event that the CFO is overruling MinnFARM results. Manure records and MMPs need to be reviewed when required.

Kiel explained that the project partners are well known, respected individuals and organizations that landowners and farmers seek input and direction from in their everyday operations. Project partners also provide credibility to the implementation project. Without their support, the project would stand alone. The more organizations behind it, the more successful it will be. Kiel emphasized the need for the project partners to promote the project to the general public as well as landowners.

The WFDNR TMDL Implementation Project was funded through an Environmental Protection Agency (EPA) 319 Grant that is administered by the MPCA. The HLWD is the project sponsor and is responsible for providing office space and equipment for the watershed coordinator. Jan Voit and Kiel Tschumperlin, HLWD, are responsible for reporting to the MPCA. The purpose of the grant is to gather inventory on the feedlots in the watershed, not to enforce noncompliant sites that may be inspected. If a major issue arises, CFOs are responsible for enforcement.

Kiel gave an overview of the project. The first goal of the project is to conduct a Level III Feedlot Inventory on 80% of the feedlots in the WFDNR Watershed while strengthening partnerships between the four core counties and the HLWD. The project is a four year endeavor. The project work plan states that there are 742 feedlots in the watershed. Total number of feedlots to be inspected is 592. Emphasis was placed on the principle of continuity throughout the inspection process. Kiel was hired to ensure that each county is doing things in a similar way so the results are consistent across the four counties.

The second goal of the Implementation Project is to increase the knowledge of 50 feedlot operators through a one-day workshop. This step is now completed with the manure management workshop that was held on July 31, 2013.

The third goal of the Implementation Project is to increase public awareness of the project by developing a brochure and maintaining a website. Both the brochure and website have been completed. The website will be updated periodically and is an ongoing part of the project. Advisory Committee and Technical Committee (AC and TC) members and organizations were encouraged

to take as many brochures and distribute them to as many people as possible. Project partners are also encouraged to view the website.

The fourth goal of the project is to seek input and direction from the AC and TC. Kiel is responsible for providing them with project updates and organizing and hosting semi-annual meetings. The goal of the meetings is to update all partners on the progress of the project, receive input and direction for the project, as well as to remind all parties of their commitment to the project.

Kiel explained the process developed for feedlot inspections. It was determined that the Monday prior to the inspection week would be the planning day to determine what sites are going to be inspected. Protocol for Mondays usually involves printing Delta Detailed Reports and giving them to Kiel so he can prepare the customizable feedlot inspection form for the inspection. An aerial image of the site, preferably with LiDAR, is printed so watercourses and feedlot areas can be seen and documented when on site. Roof and buffer areas are also marked on the aerials during the inspection.

Feedlot breakdown by county includes 216 sites in Murray County, 190 in Jackson County, 142 in Nobles County, and 44 in Cottonwood County. There is a direct correlation between the percentage of land each county has in the watershed and the number of feedlots to be inspected in that county.

As of December 9, 2013, 211 feedlots have been inspected. This leaves a total of 381 feedlots remaining. The breakdown for the 211 inspected feedlots is as follows: 149 open lots, 37 total confinements or no discharge open lots, and 25 deactivated sites, sites with no lots remaining, or sites with less than 10 animal units (AU) and not in shoreland. Shoreland is defined as less than 1,000 feet from a lake, pond, or public wetland or less than 300 feet from a public drainage ditch, stream, or river. These watercourses can be found on the Public Waters Inventory (PWI) Map.

Of the 186 sites that are active, meaning they have open lots and are not deactivated, 118 are deemed compliant by MinnFARM standards and 68 are non-compliant. Of the 186 active sites, 114 have surface water within 1,000 feet. The compliance to non-compliance total on these sites is 62 compliant sites to 52 non-compliant sites. Of the 114 sites with surface water within 1,000 feet, 36 are located in shoreland with 18 sites being compliant and 18 being non-compliant. Sites in shoreland include total confinement operations. Four of the 14 compliant sites were total confinements.

Of the 149 sites with open lots, 81 are compliant and 68 are non-compliant. Of the 149 open lots, 101 have surface water within 1000 feet. Forty nine of those

sites are compliant and 52 are non-compliant. For open lots located in shoreland, there are 13 compliant sites and 18 non-compliant sites.

Of the 211 feedlots that have been inspected, 160 (75.8%) have livestock present. This threshold was very liberal; meaning any site with more than two or three head of livestock was determined to have livestock present. Out of the 211 feedlots inspected, 189 were active feedlots. So, 84.6% (160/189) of the active feedlots have livestock present. One hundred and twenty three of the open lots had livestock present. Sixty three were MinnFARM compliant and 60 were deemed non-compliant by MinnFARM standards. Open lots with livestock present and also with surface water within 1000 feet totaled 86 out of 123 (69.9%) and sites in shoreland totaled 26 out of 123 (21.1%).

The highest index achieved on a MinnFARM in the watershed is 100. The second highest index is 60. Both of these sites exhibit little to no treatment before feedlot runoff enters a waterway or water of the state. The lowest index recorded is zero. All total confinements are zero. Open lots have also scored zero predominantly because of the number of animal units (AUs) on site or their proximity to surface water. The average index across all feedlots with a MinnFARM is 9.5. This is up from the last meeting when the average MinnFARM index was 8.3. On the previous meeting held on October 16, 2012, the average MinnFARM index was 6.1.

Challenges faced throughout the feedlot inspection process are related predominantly to accurate representation and feedlot fixes. With grain farming being so profitable in 2012, many feedlots are empty or understocked, making it difficult to see what they may look like during a wet period when they are fully stocked. Volatile markets are keeping livestock producers on the conservative side. Also, getting producers on board to implement feedlot fixes has been a challenge. Approaching producers to apply for grants has been successful, but once the final numbers and information are presented they may choose to back out. Large amounts of time and effort are put into preparing cost estimates and working with landowners to provide them with all details needed for them to make an informed decision on whether to move forward with a grant application. Most producers want to incur the lowest possible cost for a feedlot fix, but the lowest cost option may not always be suitable for their operation. Patience and communication is necessary when working with producers.

The feedlot inspection process will continue to happen throughout the remainder of the grant. Feedlots will be prioritized based MinnFARM index and landowner cooperation. This will be used to apply for grants in the future. Non-compliant feedlots will be pursued to implement the necessary fixes to bring their operation into compliance.

Discussion was also held regarding the potential re-appropriation of funds. There is potential that all grant dollars will not be spent. The amount is not yet determined, but the partners' input was sought to brainstorm potential uses for the excess funds. Jon Bloemendaal, Murray County, suggested doing some advertisements in the media (newspapers and/or radio) about all of the programs that are offered to feedlot operators, such as Ag BMP loans and different grant programs. If done, these would cover all of the papers that are dispersed in the watershed. It was also suggested to run radio ads on the Linder Farm Network and other stations that target farmers. Mark Hiles cautioned that if this is done, make sure that the advertising only addresses available programs, which would avoid false hopes.

3. Questions

Ed Lenz, Nobles SWCD, asked if the files or notes kept include any information about feedlots that are in compliance, but if they expand, would be out of compliance. It was thought that this might be useful in the future if/when feedlot owners will ask to expand their operations. In line with this, it would be nice to know how close to being out of compliance some of the in compliance feedlots are. It was explained that scenarios are run for certain feedlots to determine what it would take to bring the site into compliance if they are out of compliance.

Ben Crowell, MPCA, asked if a Flevel has been run in the past for any of the feedlots. It was explained that no Flevels have been run on any sites encountered except for one. If a Flevel was completed in the past and shown to be in compliance, this takes precedence over a MinnFARM that shows a feedlot being out of compliance. The only way that a MinnFARM can overrule a Flevel is if the producer is expanding. The site must be in compliance with MinnFARM if a landowner intends to expand animal numbers.

It was mentioned that in the farmer's perspective, doing the feedlot fixes are not viewed as an opportunity, but as following the law.

It was asked if there is a farm model that shows the "perfect farm" where there are either no animals or it is "natural" to compare to a "bad" farm. No model like this is available to use. The current process uses a tool to compare feedlot discharge to the amount that they are allowed to discharge. It was also stated that there is no "perfect farm", it is more about determining how much discharge you are comfortable with and permitting to that amount. MinnFARM allows farms to pollute a certain amount of nutrients based on animal numbers. It does not require zero discharge to obtain compliance. The model assumes there are no pollutants if there are no open lots on the facility.

Kiel asked the partners what they would like to see regarding content for future meetings. The amount of statistical data available from the inventory offers a variety of information to be conveyed. Mark Hiles, BWSR, commented that he would like to see the number of or stories about feedlots that were out of compliance, but did their own small fixes, such as moved fences or put up gutters, and were re-inspected and found to be in compliance. No other suggestions were mentioned.

4. Adjourn

The meeting adjourned at 11:30 am.