

BUFFALO-RED RIVER WATERSHED DISTRICT

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**BUFFALO-RED RIVER WATERSHED DISTRICT
WHISKEY CREEK ENHANCEMENT PROJECT
Minutes for Landowner Informational Meeting
June 27, 2017**

The Board of Managers, Buffalo-Red River Watershed District (BRRWD), held a landowner informational meeting regarding the Whiskey Creek Enhancement Project on Tuesday, June 27, 2017, at 8:00 PM in the Kent Community Center, 204 Main ST. BRRWD Managers present were Mark T. Anderson, Jay A. Leitch, Troy E. Larson, and Catherine L. Affield. Other attending included: Bruce E. Albright, BRRWD Administrator, Erik S. Jones, Engineer, and Thomas Eskro, Engineer, Houston Engineering, Inc. (HEI); Pete Waller, Board Conservationist, Minnesota Board of Soil and Water Resources (BWSR); Don Bajumpaa, District Manager, Wilkin Soil and Water Conservation District (SWCD); Stephanie Miranowski and Lyle Hovland, Wilkin County Commissioners; Bruce Poppel, Wilkin County Environmental Officer; and landowners: Merrill Miranowski, Andy Beyer, Ron Krump, Joe Beyer, Ted Terfehr, Rick Terfehr, Elroy Murdoff, Pat Freese, Eric Drewlow, Steve Haire, James Miranowski, Bob Grotluschen, Jim Grotluschen, William Grotluschen, Sharon Josephson, Robert T. Chambers, and Earl Barton.

BRRWD Administrator Bruce E. Albright called the meeting to order at 8:00 PM. He explained that tonight's meeting was being held to discuss the restoration of Whiskey Creek, which became part of the BRRWD in 2012. It was apparent early on that there were significant drainage problems with Whiskey Creek, like many other rivers and streams within the BRRWD. The BRRWD is considering a landowner driven project for Whiskey Creek that will address channel erosion and sedimentation, similar to the process we are using to restore Wolverton Creek. The BRRWD was successful in obtaining a Minnesota Department of Natural Resources (DNR) permit to clean 26.2 miles of the Wolverton Creek channel. The DNR permit requirements include the adoption of measures to ensure that the channel doesn't return to its pre-project state.

Albright introduced the agency partners, who are working with the BRRWD on project development. Last year, Bruce Poppel, Wilkin County Environmental Officer, obtained a Clean Water Fund (CWF) Accelerated Implementation Grant (AIG) from BWSR, to fund a channel survey. Landowner permission was obtained to access land along the creek to collect data. Albright noted that HEI will present the survey results at tonight's meeting. He also mentioned that Don Bajumpaa, Wilkin SWCD District Manager, has also been instrumental in project development. Albright introduced the Wilkin County Commissioners, the BRRWD Managers, and HEI staff. He asked the audience to sign the attendance sheet and announced that the meeting was being recorded to aid in the preparation of meeting minutes.

Bruce Poppel noted that back in 2008/2009, the County held a meeting to discuss a possible project for Whiskey Creek. At that time, the area was not part of the BRRWD, and the County lacked funding for a comprehensive project. Now that this area is in the BRRWD, project development and funding is more feasible.

Robert Chambers, Connelly Township, felt that the recent channel cleanout project was started on the wrong end of the project, and asked if the proposed restoration project would incorporate and extend this recent work to the entire channel. Albright agreed that typically, channel restoration should begin at the outlet and work back upstream. He explained that when funding became available to repair the downstream Wilkin County ditch systems, the County decided to go ahead with the work under the assumption that a comprehensive repair project for Whiskey Creek was not feasible at that time, given a lack of funding and

the need to go through the DNR permitting process. The upstream work in the first mile of the Creek, including buffer strip and side inlet installations, was meant to provide a good example of what a comprehensive project for Whiskey Creek could look like. Chambers asked if it is realistic for the landowners to expect the BRRWD to be able to complete a restoration project for the Creek in the near future. Albright said that a project of this scope will take time to develop and construct, and we will need landowner cooperation to get it done. Tonight's meeting should provide the BRRWD with an idea about landowner interest in a project.

Thomas Eskro, HEI, began his presentation by discussing the background of the channel study HEI conducted for Whiskey Creek. As noted, it was funded by a CWF AIG grant from BWSR for \$128,875 (75/25 match). The workplan included a field survey of the public waters portion of the Creek, a culvert inventory, and preliminary best management practices (BMP) inventory, plus the development of a hydraulic model for the 2, 5, and 10-year flood events. Future work could include the development of alternative solutions, which would be followed by preliminary planset preparation, cost estimate, and the civic engagement process, including another meeting this winter/next spring. He discussed the project area map distributed to the landowners with the meeting notice, showing the public waters portion of Whiskey Creek and its tributaries, totaling 28.7 stream miles with a contributing drainage area of approximately 155 square miles (sq. mi.). Eskro explained that the project is being investigated because of channel drainage capacity/adequacy concerns. The Minnesota Pollution Control Agency (MPCA) has Whiskey Creek listed as impaired waters according to several criteria: aquatic macroinvertebrates, fecal coliform, dissolved oxygen, and turbidity (sediment). Eskro explained there are both water quantity and quality concerns regarding the Creek. He briefly discussed the 2015 channel restoration project completed on Whiskey Creek in Section 14, Connelly Township, where approximately one mile of the channel was restored between Trunk Highway (T.H.) No. 9 and 200th AVE. The gradeline was re-established with excavated pools at the outside bends, side inlets were installed at concentrated flow locations, and vegetated buffers were established. Approximately 3' of sediment was removed from the channel bottom. Eskro provided a profile sheet showing the before and after cleanout gradeline and a map showing the channel location on the downstream side of T.H. No. 9. Jones explained that the construction of pools along the channel bends were included to comply with the DNR's permit conditions for habitat enhancement.

Eskro discussed the project development process. He explained that currently, we are at the problem identification stage, which includes preliminary surveys and hydraulic modeling to confirm the problems. The data collection process involved getting a profile of the channel topography every 100 feet, cross sections every 500 feet, sediment test pits every 500 feet, inventories of in-stream crossings and road top overflows, building corners, beaver dams, gullies, totaling over 12,500 total points of data. Eskro discussed the existing creek conditions, including a structure inventory and sediment depths. He noted that generally, the county roads are protected to the 50-year event, and the township roads have at least 10-year protection. There are also 2 texas crossings and two locations with no elevation change (grade) between crossings. Both the texas crossings and the flat grade between crossing could potentially be problem areas. Eskro displayed a color-coded map showing the results from the test pit samplings. Sediment depths were measured between crossings and for the total channel length. He referred to a diagram depicting the existing conditions compared to a straight-line grade with the following results: 7.0 miles of the river had 0 feet of sediment, 4.8 miles had 0 to 1 foot, 14.6 miles had 1 to 2 feet, and 2.3 miles of the river had 2 to 3 feet of sediment.

Eskro displayed a series of color-coded HEC-RAS modeling maps showing potential flooding scenarios along Whiskey Creek for the 2, 5, and 10-year events. Erik Jones, Engineer, HEI, explained that a 2-year event has a 50% chance of happening in any given year (2.25 to 2.5 inches of rainfall per day), a 5-year event has a 20% chance (3.5 inches), and a 10-year event has a 10% chance (4 to -4.5 inches). Eskro encouraged the landowners to mark up the provided maps with drainage pattern corrections and problem area locations, based on their local experience, to assist the engineers in creating more realistic hydrological modeling. He

observed that the 10-year floodplain appears to be pretty well contained compared to other waterways in the BRRWD. According to his data, it appears that breakouts are not common for the 5 to 10-year events.

The survey also identified 207 locations where open cuts exist into the channel along the entire study stretch. The areas where drainage is coming into the Creek/tributaries are sources of sediment/erosion, contributing to the turbidity impairment. Eskro asked the landowners to mark on the maps where gullies are located on their property so that we can prioritize where BMPs could be applied. Jones noted that BWSR has a signup period ending in mid-August for CWF grant applications for BMP projects that could be leveraged to obtain 75/25 funding for this aspect of the overall project. Eskro explained how the installation of side inlet pipes would be used as a BMP to address a washout or gully. The group viewed "before and after" slides showing the benefits of side inlet installations. He also noted that they found a total of 26 beaver dams on the creek and tributaries, and pointed out that ongoing maintenance should be included in the project. Eskro explained that the Whiskey Creek outlet is impaired by heavy tree growth, woody debris in the stream, and tree dams/sedimentation. Eskro said that the next steps will be gather the local feedback from the map information the landowners provide at tonight's meeting, and based on that input, the engineers will adjust the modeling parameters and develop alternatives for the preliminary design and planset preparation. Following that, a final study report will be presented at a future public meeting.

Albright noted that the deadline for buffers to be in place on public waters is November 1, 2017. The buffer width must be 50 feet from the top of the bank. There are four legal ditch systems that use Whiskey Creek for an outlet, and those ditches will need to be planted with a 1-rod (16.5') grassed buffer strip by November 1, 2018.

Sharon Josephson related her experience with the pilot project Eskro described earlier to restore Whiskey Creek on her family's property in Section 14, Connelly Township, Wilkin County. She assured the audience that the BRRWD was very easy to work with, and the staff was able to alleviate her concerns about project impacts to her neighbors' property. Josephson encouraged her neighbors to work together as a community to address their common water problems. Someone noted that the restoration work on the Creek in this area appeared to provide significant improvement without doing any damage to the surrounding properties, including cropland and trees stands. Albright noted that the BRRWD's goal is to address water management within the District in coordination with willing landowners. In the case of the Josephson project, we were very satisfied with the finished project. Eskro noted that the BRRWD could provide landowners with maps showing what the buffer strip setbacks could potentially look like on their property.

Albright gave a brief history of the Mediation Agreement process, which includes the formation of a Project Team (PT) for each watershed district made up of agency personnel and watershed district staff. In 1998, the Minnesota Legislature mandated a process to improve the working relationship between state/local water management agencies to develop projects that satisfy agency requirements and watershed district goals. He also discussed the Comprehensive Plan process, which has recently developed into the One Watershed, One Plan (1W1P) process where County and Watershed Districts' water management plans will be combined to produce one document based on a watershed, not on political subdivisions. In the BRRWD, we will be able to include the Buffalo River, Red River, and Otter Tail River watersheds in our 1W1P, including the area in the southern part of the BRRWD that was added in 2012. He discussed a few of the BRRWD's current projects under development. The BRRWD is working with the Army Corps of Engineers (COE) and the Wilkin SWCD to restore a section of the Otter Tail River channel near Breckenridge, which the COE straightened in the 1950s. We are also developing restoration projects for Wolverton Creek, Stony Creek, Upper South Branch of the Buffalo River, and Whisky Creek in Barnesville Township.

Andy Beyer noted that the Connelly project only increased the velocity of the water coming into his property. The riverbank is washed out downstream of the Wilkin County Road (C.R.) No. 3 crossing. He added that no construction should take place until the beaver problem is addressed. He pointed out that the beaver dams

are creating a false "edge of bank" because of the water breaking out into the fields. He wants the beaver dams removed before the buffers are staked so the true river bank can be reestablished.

Albright explained that the BRRWD recently agreed to be the enforcement authority for the Buffer Law. If local agencies did not take jurisdiction, enforcement would have defaulted to BWSR. The BRRWD thought it would be better to keep enforcement local with personnel who are familiar with local water management and the local landowners.

Pat Freese has the same type of bank erosion problem as Andy Beyer. The river bank is washing out where it crosses C.R. No. 170. He felt that the County's practice of replacing bridges with culverts is causing the water velocity to increase, which causes a churning action in the channel that produces bank erosion. The group discussed options to reduce erosion, including toe-wood debris and sod mats installation. Eskro displayed slides of the 2016 Etten bank stabilization project site along the Otter Tail River in the NW¼, Section 34, Foxhome Township, Wilkin County, that included a toe-wood debris bench and bank grading. Albright noted that there could be funding available to address Beyer and Freese's bank erosion sites independent of the Whiskey Creek Restoration project funding.

Freese agreed that a common concern on the river channels is beaver activity. He thought this issue should be an easy problem to address. Albright noted that the DNR public waters are the outlets for all the drainage projects within the BRRWD, and it is important that we work together to repair/maintain these waterways.

Freese questioned the practice of cleaning ditches upstream of public waterways. Albright agreed by reiterating that it is time that we recognize that the outlets for our projects and ditch systems need to be repaired. He explained now that the channel survey is completed, we have a body of information on which to build a project. He added that BWSR has project funding available for watershed districts with a completed 1W1P. He expects that we will have our plan completed in the near future, so that we can leverage some of this funding for the Whiskey Creek Restoration project.

At 9:15 PM, the meeting was adjourned.

Respectfully submitted and prepared by,

Bruce E. Albright, BRRWD Administrator