

# ***BUFFALO-RED RIVER WATERSHED DISTRICT***

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## **Buffalo-Red River Watershed District Lower Otter Tail River Informational Meeting February 25, 2016**

The Board of Managers, Buffalo-Red River Watershed District (BRRWD), held an informational meeting regarding the Lower Otter Tail River (LOTR) on Thursday, February 25, 2016, at 7:00 PM, in the Courtroom, Wilkin County Courthouse, Breckenridge, MN.

BRRWD Managers present were: Mark T. Anderson, Troy E. Larson, Catherine L. Affield, and Peter V. Fjestad. BRRWD Staff attending included: Bruce E. Albright, BRRWD Administrator, Erik S. Jones, Engineer, and Thomas Eskro, Engineer, Houston Engineering, Inc. (HEI). Others attending included: Don Bajumpaa, District Manager, Wilkin Soil and Water Conservation District (SWCD); Pete Waller, Board Conservationist, Minnesota Board of Water and Soil Resources (BWSR); Dan Swedlund, Wilkin County SWCD; Bruce Poppel, Wilkin County Environmental Officer; Howard Fullhart, Assistant Fisheries Supervisor, Amanda Hillman, Restoration Coordinator, Jamison Wendel, Red River Fisheries, and Amy Childers, River Systems Information/Outreach Specialist, Minnesota Department of Natural Resources (DNR); and landowners: Tom Hiedeman, David Lindig, John Bertram, Chuck Schreiber, Brian Conzemius, Ed Lammel, Andy Blaufuss, Chad Friederichs, Paul Friederichs, JeAnne Green, Charlie Green, Shary Loeks, and Brad Brause.

Bruce E. Albright, BRRWD Administrator, announced that the meeting was being recorded to aid in the preparation of minutes and passed around a sign-up sheet to record attendance. He introduced the BRRWD Managers, staff, and local agency representatives.

Albright stated that the Otter Tail River, from the Orwell Dam downstream to Breckenridge, MN, is within the BRRWD. He explained that a Total Maximum Daily Load study (TMDL) was completed in 2006, prior to the BRRWD's involvement with the Lower Otter Tail River. The study results show there are some issues/impairments that should have long term solutions established. Albright gave an example of the length of time it takes to develop a project. He said landowners along Wolverton Creek first met in the 1950s to discuss a potential project. This project is just now at the point where construction could be started in the near future. He stated it can take many years to develop a project.

Albright gave a brief history of the LOTR. He explained that the Army Corps of Engineers (COE) constructed Orwell Dam in 1953 for the following reasons: flood control, a municipal water storage reservoir, agricultural water storage, and recreational use. Albright stated that the length of the river is approximately 32 miles from Orwell dam to the outlet in Breckenridge. There is approximately 1,212 square miles (sq. mi.) of contributing drainage upstream of Orwell Dam, with an additional 164 sq. mi. of contributing drainage area between Orwell Dam and Breckenridge. Albright described the section affected by the COE's project in the early 1950s. While referring to a displayed map, Albright stated that the project started between Sections 33 and 34, Foxhome Township, Wilkin County, downstream of the line between the City of Breckenridge and Sunnyside Township, Wilkin County. Jones stated that at the time, these improvements, in conjunction with the Orwell Dam, provided a 10-year level of flood protection for the area along the river and helped reduce the stage and duration of higher floods.

Jones stated that the COE straightened portions of the LOTR in Wilkin County in the 1950s. This greatly reduced the length of the river and steepened the slope, resulting in reduced habitat diversity and quality, and contributed to impaired water quality. Jones explained that the 2006 TMDL Study reflected a turbidity impairment in the waterway. He said the estimated annual sediment load was approximately 40,400 tons at

Breckenridge. Jones commented that the source for the majority of the sediment was from streambank and field erosion. This sediment load needs to be reduced by roughly 6,000 to 7,000 ton per year.

Jones explained the second part of the TMDL Study is an implementation plan that identifies steps to take that should improve the degraded stream conditions. Jones stated one improvement includes retrofitting all the County ditch systems with a one-rod (16.5') grassed buffer strip and side inlet structures to catch sediment. He also stated that area agencies, such as the DNR and others, would like to take additional steps to improve the stream habitat along the LOTR.

Jones stated the BRRWD applied for a Federal Section 319 Environmental Protection Agency (EPA) grant through the Minnesota Pollution Control Agency (MPCA). That grant was approved in the amount of \$242,000. He explained that one of the first steps would be to survey the existing channel to evaluate changes that have occurred since the completion of the COE project. Jones stated that data would need to be obtained to determine the extent of the down cutting and to identify locations along the bank where projects would provide sediment control.

Don Bajumpaa, Wilkin SWCD, stated that in addition to the Federal grant, the Wilkin SWCD obtained a grant through BWSR in the amount of \$203,000 to be used as a match for the EPA funding. Bajumpaa said this funding is obtained through the Clean Water Legacy (CWL) program, which comes from a percentage of sales tax revenue from the Legacy amendment. He explained that a local cost share would have applied, had there not been funds available through the CWL. This grant will be used to implement measures that would help improve the water quality, such as the establishment of buffers and side inlets along ditch systems that drain into the LOTR. Bajumpaa estimated that \$135,000 of this CWL grant would go towards streambank restoration work southwest of Foxhome. This restoration work should be completed by the fall of 2016.

Jones informed the landowners that the BRRWD has applied for a COE Section 1135 grant, which is possible only because the proposed project would be part of a past COE project that has been found to have contributed to environmental degradation. Jones explained that if approved, the St. Paul District of the COE would undertake an investigation of potential fish and wildlife habitat restoration measures at full Federal expense up to \$100,000. He said the feasibility study needs to show that the project is technically feasible, environmentally acceptable, and provides cost effective environmental benefits. The second step is project construction for which the federal cost share would be capped at \$10 million, including the design and initial study. The project construction requires a 25% match.

Jones stated the next steps in the process would be obtaining the completed landowner survey permission forms, start collecting survey data, begin data review, and then start modeling the river system. Finally, the BRRWD would hold another meeting with landowners to discuss the findings of the existing conditions and potential restoration ideas. Jones noted this would be the first of three planned meetings.

Albright asked what the timeframe was to use the EPA 319 Grant. Jones stated the grant is available from April 1, 2016 to February 2019.

Jones asked if there were any questions.

A landowner asked where the Etten Project is located. Bajumpaa explained that the project is located southeast of Foxhome along the Otter Tail River.

A landowner asked if the potential project could reconnect some of the old oxbows. Jones explained that the survey would provide more information to determine if this is possible. He mentioned it would depend on the elevation difference between the old oxbow and the current channel.

Albright mentioned that the COE had straightened several rivers within the Red River Basin back in the 1950s, and that he was unsure why they did so.

A landowner questioned when and how Breckenridge Lake was created. Jones was not sure but obtaining historic data would be part of the study. He said this would give a depiction of how things have changed.

Albright described a similar project completed in Hawley on the Buffalo River. He explained that when the Minnesota Department of Transportation (MNDOT) straightened the Buffalo River, the project created problems with down cutting, erosion, bank instability/failures to the point where homes were in jeopardy. The BRRWD in conjunction with the DNR completed a project that restored historic meanders and increased the total channel length by approximately 3,000'. Albright commented that root wads were placed into the banks for stabilization, covered with soil, and top dressed in sod.

A landowner asked if the geographical positioning systems (GPS) work would extend all the way to Breckenridge, and if this survey work would determine the extent of down cutting on the river bottom. Jones stated that is the plan at this time. He noted that he does have the COE's plans from the 1950s, which will be used to tie the current project into the former COE project.

A landowner questioned if Breckenridge Lake would also be surveyed in order to determine the current amount of sediment fill. Jones said that is part of the plan for now.

Albright mentioned that he had a phone conversation with Bruce Albertson, who grew up in the area and has fished on the Otter Tail River since he was young. Albertson informed Albright that he sees the most erosion occur when there are larger releases from the Orwell Dam. Albright explained that the shortening of the channel resulted in the same amount of fall occurring within a shorter distance and at a steeper grade, which increases water velocity.

Jones informed the landowners that part of the study would include evaluating the hydraulics of the river. He explained there are many factors to consider, and we also need to ensure we are not creating additional problems.

Bajumpaa repeated Albright's comment that this is not a unique situation in the Red River Valley. He explained that people are actively working on a similar project for the Sand Hill River. Bajumpaa stated there are multiple restoration approaches that can be taken. Jones commented that the survey would aid in the decision-making process and give a better idea of the right solution.

Albright restated that there were landowner survey permission forms available to fill out for those present tonight. He noted that these would also be mailed to affected landowners before the survey work could begin.

A landowner asked if there is any historic data showing the elevation of Breckenridge Lake. Jones stated that this is something that could be researched further. Albright thought that the COE might have that data on file.

A landowner questioned what specifically was going to be surveyed. Jones explained that the majority of survey work would be completed on the existing channel and areas where old oxbows could potentially be reconnected. He stated they would also obtain cross sections and profile the bottom of old meanders of the Otter Tail River. Albright noted that Light Detection and Ranging (LiDAR) data would be accurate enough in areas of bare earth/fields, but survey crews would have to obtain data in heavily vegetated areas.

There being no further comments or questions, the informational meeting was adjourned at 8:00 PM.

Respectfully submitted and prepared by,

Bruce E. Albright, BRRWD Administrator