



## **Upper Buffalo River Restoration Informational Meeting Minutes**

Monday March 28, 2022

**Managers Present:** Peter Fjestad; Catherine Affield; John Hanson; Paul Krabbenhoft; Gerald Van Amburg.

**Managers Absent:** Troy Larson; Mark Hanson.

**Staff Present:** Kristine Altrichter, Administrator; Lee Olson, Watershed Specialist; Matthew Schlaruderaff, Watershed Specialist.

**Consultants Present:** Erik Jones, Engineer; Aaron Young, Engineer, Houston Engineering, Inc. (HEI).

**Others Attending:** Tim Smith, Aquic; Joseph Williams, Ecosystem Investment Partners (EIP); Jerry Matter; Matt Jirara; David Donly; Anthony Boit; Alex Boit; Todd Boit; Bill Steffl.

President Fjestad called meeting to order at 7:00 PM.

Meeting held to discuss Upper Buffalo River Restoration, 9 mile restoration between Buffalo Lake and Becker County Ditch No. 21.

Project involves restoring Buffalo River in Sections 11, 12, 13, 15, 16 and 21, Riceville Township and Section 7 Callaway Township, Becker County. This stretch of Buffalo River identified by Minnesota Pollution Control Agency (MPCA) as impaired for sediment. BRRWD in partnership with Becker Soil and Water Conservation District (SWCD) received Section 319 grant through MPCA to address sediment in this watershed. In Section 7, Callaway Township and Section 12, Riceville Township there is a cut off channel with a head cut contributing significant amount of sediment to system. Breakout flows also contribute to downstream sedimentation and poor water quality. Proposed restoration provides opportunity for improved habitat and water quality. Becker SWCD has used Section 319 funds to install grade stabilization, grass waterways, and water and sediment control basins to address sediment in the watershed.

Historically, Buffalo River meandered north of current channel. At some point, Buffalo River left historic channel and started flowing down drainage ditch and started down cutting. Current channel is approximately 10 feet deeper than it was when Buffalo River left historic channel. Sediment from downcutting has accumulated downstream blocking outlet of Becker County Ditch No 21 into Buffalo River.

Proposed project is divided into two reaches, upper reach in Sections 11, 12, and 13 Riceville Township and Section 7, Callaway Township and lower reach in Sections 15, 16, and 21 Riceville Township. Proposed design plans include a 20 to 30 ft wide channel, 3.5 to 4.5 ft deep in lower reach. Pools are proposed to be created on outside bends of channel to allow sediment to move through channel following natural channel design principles. Similar design proposed for upper reach. Landowner in upper reach requested restored channel be shifted south from historic channel to avoid disturbing heavily wooded area along old streambed. In upper reach, proposed project would reconnect approximately 4 miles of channel. Low flows continue down historic channel instead of through cutoff channel.

Jones stated that repairing head cut would significantly reduce sediment moving through system. Proposed plan includes installing grade control structure on upper end of reconnection. Historic channel would be opened near reconnection point, and then allow stream to reestablish historic path beyond 220<sup>th</sup> Ave. Landowners stated that historic channel is filled with sediment and may need to be cleaned out to allow stream to reestablish in historic channel. Jones noted that additional survey work may be needed to finalize plans, however, area is well

vegetated so may not want to clean out because it could cause increased flows through channel and send more water downstream.

Jones noted that landowners in Section 12, Riceville Township are proposing to create wetland banking site on their property. BRRWD is coordinating project plans with landowners. During larger rain events, flow would be split between historic channel and current channel. Water that flows through current channel would be directed to proposed wetland bank site. New culverts would be installed in two locations through 220<sup>th</sup> Ave. to accommodate flows.

Additional survey is needed in upper reach where Buffalo River turns south in Section 12, Riceville Township and in lower reach at southern end of project east of County Road 105 in Section 21, Riceville Township.

Design of reconnection channel includes 29 ft wide channel 3.5-4.5 ft deep, rock riffles would be installed along straight portions of channel for grade control, pools would be constructed on outside bends with toe-wood sod mats to stabilize streambanks. Total project estimated to cost \$3-4 million.

Next steps for BRRWD include finalize design, acquire land rights, determine funding, complete and submit Engineer's Final Report, determine local assessment, hold final hearing and sign Project Order, finalize permitting, and construct project.

Jones discussed funding opportunities. To date, BRRWD has applied for additional Section 319 grant through MPCA to continue to install upland practices to address sediment in watershed. BRRWD has received funding from Lessard-Sams Outdoor Heritage Fund (LSOHF) through Lessard-Sams Outdoor Heritage Council (LSOHC) for stream restoration projects across District. Some of these funds could be utilized for Upper Buffalo River Restoration. BRRWD is working with Ecosystem Investment Partners (EIP) as potential funding partner.

Landowners asked if upper or lower reach would be constructed first. Jones noted that either project can move forward first. Final decision on order of construction will depend on potential partnership with EIP and funding. Jones also noted that addressing the head cut would be priority as it is a major contributor to sediment loading in system.

Landowner expressed concerns about sediment accumulating on west side of County Road 105 downstream of project area. Landowner stated that there is sediment accumulation that has already occurred. Jones noted that additional survey work could be completed to determine if project area needs to be extended. Jones noted that with a more stable channel, as designed, sediment should not increase downstream. Jones also stated that addressing head cut would reduce sediment loading in system.

Landowners expressed concern that historic channel would also need to be cleaned out to ensure that water could move through restored historic channel. Jones noted that additional survey work could be completed in this area to ensure water could move through system. Jones stated that putting flow back into reach, may be all that is required to restore historic channel.

Landowners asked if current channel would be blocked to prevent flow from moving down current channel instead of historic channel. Jones stated current channel would be plugged and dikes would be constructed to direct water to historic channel. However, large floods would allow some water to move south to proposed wetland banking site.

Landowner asked if buffer strips are distributed who would be responsible for replacing. Jones noted that any buffer strips disturbed by project construction would be replaced as part of a project expense.

Landowners asked about timeline and how wet conditions would impact project timeline. Jones noted that BRRWD would work with contractor to make sure project could be completed under appropriate conditions. Project could move forward as early as fall 2022, however, likely construction will not begin until 2023. BRRWD will need work with landowners to

acquire easements for construction. Jones noted that working with landowners and funding will determine if upper or lower reach moves forward first. However, addressing the ongoing head cut is a priority.

Landowner noted they would like to see project in lower reach stay within existing channel with sediment ponds in channel. Jones noted that permitting will determine project design. Jones recommended creating sediment ponds as upland practice.

Proposed channel design would involve excavating approximately 2 ft of sediment out of channel which would allow water to flow out of Becker County Ditch No. 21.

Landowner expressed concerned about ponds on north end of upper reach having higher water levels as a result of project. Jones said flow to ponds would result in slightly higher water levels in ponds. However, impacts downstream of ponds are unknown. Additional survey will address these concerns. Water levels in ponds are also concern for Township and their maintenance of adjacent road.

Landowner asked how much sediment load would be reduced by project. Jones said that information would be easy to determine. Landowners concerned that project would not remove enough sediment from system to make a difference downstream. Jones noted that BRRWD and Becker SWCD would continue to address gully erosion upstream. Stabilizing these reaches of Buffalo River would help address stream erosion.

Landowner stated they were concerned about sediment downstream outside of project area. Jones noted BRRWD has not reviewed downstream issues. Other landowners commented that starting to address the erosion problem would be beneficial and BRRWD could review downstream issues on future project.

President Fjestad adjourned meeting at 7:59 PM.

/s/ John Hanson

Secretary