



1303 4<sup>TH</sup> Ave. NE  
Barnesville, MN 56514  
218-789-3100  
www.brrwd.org

---

## Project 80 – Stony Creek Water Resource Enhancement Project Educational Meeting

Monday February 28, 2022

**Managers Present:** Peter Fjestad, Catherine Affield, Gerald Van Amburg, Paul Krabbenhoft (remote), Mark Hanson (remote).

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

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

**Consultants Present:** Erik Jones, Engineer; Bennett Uhler, Engineer; Ted Rud, Engineer, Houston Engineering, Inc. (HEI).

**Others Attending:** Jay Leitch, Charles Anderson, Rylee Anderson.

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

The purpose of this meeting was to provide Board of Managers with background and an update on project design for Stony Creek Water Resource Management Project (WRMP). Goal of meeting was to provide an educational opportunity and foster discussion on next steps.

Stony Creek watershed is approximately 131 square miles. Stony Creek WRMP was developed to address repeated agricultural flooding, sediment in channel, erosion and sedimentation from breakout flows, connectivity to floodplain, water quality, habitat, and peak flooding on South Branch Buffalo River and Red River. Stony Creek is impaired for turbidity west of Highway 9 (Hwy 9). During flood events, Stony Creek breaks out of its channel along Interstate 94 (I-94).

Stony Creek Impoundment site was identified as part of Red River Basin Commission Distributed Storage Investigation developed in 2013. During flood events, Stony Creek watershed contributes water to peak flows on the Red River and Buffalo River. Project identified in Comprehensive Watershed Management Plan (CWMP) and project has been developed through Mediation Project Team process. As part of Mediation Project Team process, BRRWD has taken project through U.S. Army Corps of Engineer's (USACE) Concurrence Process, a step in acquiring individual USACE permit. HEI investigated 25 alternatives for project. Finalized four components for best alternative including: 1) restore or create wetlands; 2) off- channel impoundments; 3) farmstead levees and evacuation of floodplain; and 4) channel restoration, setting back existing levees, and side inlet pipe installations. At this time, BRRWD has USACE Concurrence Point 1-3 complete. Jones reviewed a series of alternatives that were reviewed during project development.

Engineer's Report submitted in 2019 involved utilizing one pool in Sections 3, 4, and 9, Barnesville Township, Clay County. Project design has approximately 7,000 acre feet of storage, approximately 4 inches of runoff capacity. Project involves diversion channel with control structure on west side Clay County Ditch No. 31. Opening control structure would bring water through I-94 at diversion channel and into impoundment site. Diversion channel would require adding box culverts through I-94 to divert water into site. Emergency spillway on east side of I-94 to bring water to Stony Creek in events larger than 100-year flood event. Project contains three components: 1) impoundment, 2) channel restoration with setback levees and increased buffers, and 3) four farmstead ringdikes. Preliminary concept of project is classified as a high hazard dam.

Project identified two operation scenarios for impoundment. Spring operation would operate impoundment when flooding is forecasted. Stoplogs would be removed from diversion structure and principal spillway would be closed. Summer operation would keep stoplogs in diversion structure and principal spillway gate would remain partially open. Impoundment site would be utilized for events over the 2-year flood event. Four dam breach scenarios were investigated for Dam Safety Analysis. Project would install overflow on southwest corner of project through 140<sup>th</sup> Street.

Project benefits include 4.5 miles of restored stable stream, approximately 440 acres of permanently protected buffers, 7,000 acre feet of off-channel gated storage, improved water quality, and flood protection.

Stream restoration expected to cost \$2.2 million, I-94 culvert improvements estimated to cost \$1.1 million, and off-channel storage site estimated to cost \$14 million. BRRWD acquired Lessard-Sams Outdoor Heritage Funds through Department of Natural Resources (DNR) for \$2.2 million to cover costs of stream restoration. Other possible funding sources include: Conservation Reserve Enhancement Program (CREP) for \$0.7 million, DNR Flood Hazard Mitigation Grant Program for \$7.2 million, Metro Flood Diversion Authority for \$1.65 million, BRRWD \$5.55 million. Total project estimated to cost \$17.3 million.

Jones provided four alternatives for impoundment site with various sized pools. Alternatives had pool sizes of approximately 4,400 acre feet of storage estimated to cost \$14.2 million, 2,500 acre feet of storage estimated to cost \$11.1 million, and a site 1,300 acre feet of storage, estimated cost not determined. Jones showed an inundation map for the smallest site. Altrichter requested inundation maps be provided to Board of Managers for all alternatives at next Board Meeting, March 14, 2022.

Jones stated overall project will provide localized flood protection benefits to landowners around the proposed project site. Stream restoration without the impoundment site will likely send larger flood downstream.

Funding that has been received for Stony Creek WRMP has been used for additional survey and design work.

This site was selected for proposed impoundment because elevation across site allows more water to be stored over a smaller area.

Project Team reviewed the large (7,000 acre feet) site and BRRWD Board of Managers presented and approved concept following preliminary hearing in July 2019. Van Amburg recommended BRRWD focus on acquiring funding for project. Board of Water and Soil Resources (BWSR) may be interested in developing wetland bank in eastern most portion of site near I-94.

Jones spoke with Pheasants Forever, Inc. staff (PF) regarding potential partnership to acquire land for project. PF would be interested in discussing how partnership could work.

Jones outlined where BRRWD is at in the process and outlined next steps. Preliminary hearing held in June 2019. Board of Managers began acquiring easement options and purchase agreements. Next steps would require moving forward with acquiring easement options and finding additional funding for project. Project requires detailed Geotechnical Report and Engineer's Final Report. BRRWD needs to determine local assessment mechanism, submit Engineer's Final Report to BWSR and DNR for review, hold final hearing, approve and sign Project Order, acquire land, finalize permitting, and construct project.

Landowner noted that S ½ Section 4 and N ½ Section 9 are tiled that outlets on west side of Section 4.

The smallest site (1,300 acre feet) would have a low hazard dam and land is not tiled.

Landowner noted that at a minimum they would like the channel cleaned. Jones noted that with stream restoration and no impoundment site would need to allow break out flows to occur as they currently do. This could be done, however, the project would not reduce flooding. Channel restoration would clean from Section 14 to Section 5, Barnesville Township.

Landowner asked if project could be completed in phases. Van Amburg thought there might be funding opportunities to cover whole site. Jones noted that there would be additional costs for additional embankments.

Landowners asked if they would be able to have crop insurance if project completed in phases.

Van Amburg asked Jones to provide cost estimate for smallest site and start looking into funding opportunities and working with BWSR for possible wetland bank.

Jones mentioned BRRWD should work with DNR on FHM Grant if looking for funding. BRRWD should add this to list to bring to Legislatures in next few weeks with current state surplus.

President Fjestad adjourned meeting at 8:32 PM.

/s/ John Hanson

Secretary