Swift Coulee Project Team Meeting
February 16, 2017, 10AM
Bremer Bank, Warren, MN

Present were:

Project Team Landowner Representatives: Mark Yutrzenka, Stuart Nordling, Ken L Johnson, Jim Vansickle

Townships: Cecil Deschene Middle River Twp, Jared Sands Oak Park Twp, David Nelson Warrenton Twp

Agency: Denise Oakes MPCA, Stephanie Klamm DNR, Phil Talmage DNR, Doug Franke DNR, Matt Fischer BWSR, Brian Dwight BWSR, Craig Jarnot USACOE, Rodney Teigen MCHD, Darren Carlson SWCD, Danny Thorstad SWCD, Matt Waterworth NRCS, LeRoy Vonasek Marshall County Commissioner, Brent Silvis MSTRWD, Danny Omdahl MSTRWD, Roger Mischel MSTRWD Manager, Tony Nordby Houston Engineering

The August 10, 2016 meeting minutes were available as was an Agenda for the meeting.

For more information, visit http://mstrwd.org/wp-content/uploads/MSTRWD-FINAL-PLAN-MAY_2011.pdf . This Plan has pertinent information regarding Swift Coulee. The "Impoundments" page has the Swift Coulee project listed on it for further references.

Brent began the meeting with introductions.

Tony Nordby gave a PowerPoint presentation. He gave an overview of the problems in the Swift Coulee. There have been drainage problems in the coulee and the ditch into which it drains, Marshall County Ditch 3. A large portion of the system is designated protected waters by the DNR. The drainage area and the benefited area of the ditch are very different.

Tony Nordby presented a recap of the activities since the August meeting. A comment form had been distributed for participants to offer their assistance. Few were completed. The Watershed District staff had performed a profile survey from the ½ mile line of section 3 going upstream to the east side of US Hwy 75, for a distance of 3 miles. Houston Engineering prepared plan & profiles, along with cross sections of the existing channel. The existing conditions profile was compared with a culvert to culvert grade profile, which seemed to show multiple feet of sediment within the channel.

The plan & profile sheets and cross section sheets were submitted to Stephanie Klamm, the DNR hydrologist. She responded that an Environmental Assessment Worksheet (EAW) would be needed before any cleaning could be done. It was also recommended that soil borings be performed to find the approximate original channel bottom and shape. The affected areas will need to have a permanent vegetated buffer seeded and

field drainage outlet culverts, known as Side Water Inlets (SWI), are suggested. Also, the DNR would require that a need for the cleaning be clearly identified and a cleanout plan / design be submitted.

The District's 10 Year Water Management Plan was discussed and the resource concerns identified for the Swift Coulee sub-watershed were discussed. Tony reviewed a list of potential project types that could come out of the Project Work Team Process:

• Do Nothing (Quit PWT Process)
• Pursue Cleaning/Restore Coulee in Sections 3 & 2 West of Hwy. 75
• Improvement to CD #3/Redetermination of Benefits
• Channel Restoration Project (Swift Coulee)
• Set Back Levee Project (Swift Coulee)
• Retention/Impoundment Project
• Natural Resource Enhancement (NRE) Project
• Combination Project
• Others

He discussed the Red River Watershed Management Board (RRWMB). The MSTRWD along with 7 other Districts make up the RRWMB. RRWMB sponsored a Distributive Detention Study, the purpose of which was to hydraulically view streams and rivers for calculating how to achieve a goal of a 20% reduction to the peak flood flow on the Red River. He stated that the Swift Coulee sub-watershed was identified in the study for retention.

He then discussed 8 potential funding sources for larger scale Retention/Channel Restoration/Natural Resource Enhancement Projects.

- Red River Watershed Management Board Funds
- Local Watershed Project Funds
- Board of Water & Soil Resources (BWSR) Clean Water Grant Fund
- BWSR Reinvest in Minnesota (RIM) Reserve Program
- Flood Damage Reduction (FDR) Work Group Funds
- MnDNR Working Lands Initiatives (WLI)
- Lessard-Sams Outdoor Heritage Council (LSOHC) Funds
- Enbridge Ecofootprint Grant

Tony explained that it needs to be decided what this project is trying to accomplish. Tony said that, before projects are built, there needs to be a definition of scope. Generally, a small-scale project does not have to the same criteria as a large scale project when completing the project's "Purpose and Needs statement". Tony explained the "Need" – it defines why the existing condition is inadequate and needs to be changed. The "Purpose" definition is a specific goal or objective to be obtained by the project given the identified need. Additional steps include the development of an Array of Alternatives, Selection of an Alternative, Design of a Selected Alternative, and Implementation of the Project.

Brian Dwight commented that incorporating several Natural Resource Enhancements (NREs) encourages funding sources to see projects as very beneficial to the environment. He gave the example of the Grand Marais restoration project, which obtained funding from a long list of sources.

Jared Sands questioned the cost of the Grand Marais project. Matt Fischer said he believed it was about $6 million dollars for about six miles of restoration.

Jim Vansickle asked of how big could a project be developed within the drainage area. Tony said that it is dependent on what the Project Team develops.

A conversation of the Early, Middle, and Late Runoff Timing Zones map was held. *This map can be viewed here:* *http://mstrwd.org/current-projects/swift-coulee-pt/* Brian Dwight explained that the map can be used to identify practicable project concepts. Craig Jarnot asked which zone would apply to this system. Tony replied that the west end is in the early and the east end is more than likely in the middle.

Brian pointed out that, in the Grand Marais and other projects, the drainage system is preserved, environmental enhancements are provided and additional funding sources are accessed.

Rodney Teigen commented that the capacity of CD 3 reaches its limit when large runoff events occur. They started a sediment removal process in 2016, achieving 2 miles of removal and plan to continue the project in 2017. He added that the County has also repaired sloughed slopes in the past. Both Rodney and Tony agreed that this ditch is considered to be a 2-year frequency ditch. Tony pointed out that, based on this information, retention may be needed as part of the project component to decrease impacts downstream if channel enhancements are implemented upstream.

An accepted comment by the participants was that a flow event can fill the ditch in over a day, but then it can stay full for 2 weeks after the flow event, due to the Snake River outlet not accepting the flow.

David Nelson pointed out that the water also accumulates where the coulee meets the county ditch. Jim Vansickle added that there was a similar problem on the east side of Hwy 75, and blockage needs removed to provide a more consistent flow. An accepted comment was that US Hwy 75 seems to be a storage area from a flow event, with the probable explanation is that water will not pass downstream to CD 3 effectively.

Tony asked the group if this problem is noticeable further upstream. The response was that water comes faster from upstream, probably due to the land having a steeper grade. Mark Yutrzenka also pointed out that farther east the water seems to move fast. Tony asked if the project should focus on the area of Highway 75 and west. There was agreement.

Brian Dwight asked if there is an As-Built or other survey of the Swift Coulee. Rodney Teigen said that the Marshall County Highway Department only knows that CD 3 has an As-Built plan.

Mark Yutrzenka suggested some conditions had changed to the east, since water seems to move west more quickly than it used to. Brian Dwight suggested it might have occurred during some flood event. Danny Omdahl suggested that it could be due to land use change.

Brent asked if the Swift Coulee was cleaned within the benefitted area of CD 3 what effect would it have on CD 3 and could CD 3 successfully hold the flow. Tony thought it could be probable.

Danny asked if the group thought of the CD 3 problems as being more of a spring flow event or summer flow events. The comments were that both spring and summer see the ditch reach its capacity and that the backup of water occurs for each.

Danny then asked the group if they believed that the Snake River itself has too much restriction of flow. The comments were yes; the Snake does have a capacity issue. Jarod Sands added that the Snake has several fallen trees causing some of the flow problems. Tony suggested that, because of the restrictions due to the Snake River, retention may be necessary.

Brian Dwight spoke, saying that channel overload, sediment, backup problems and a long flow time should all be addressed. He said it would be wise to consider to view the system in “Reaches” so as to address local concerns. Then the concerns can be brought to the Project Team for further consideration for finding solutions.

Craig Jarnot said from a 404 (Section 404 of the Clean Water Act) standpoint it is acceptable to keep CD 3 capacity as originally designed when viewing a future project. This would not need a 404 permit. If the Team was to develop an alternative to expand CD 3, then the Corps would need to review the alternative. He said he thought that it would be helpful to move this project through the USACE/NRCS concurrence process.

Cecil Deschene mentioned that when CD 3 had bridges at the section lines the flows were better. When the bridges were replaced with box culverts it became noticeable that the flows slowed by a potential 3-5 days. He added that the Team should look for a long term solution.

Matt Fischer said to help with projected administrative costs, BWSR does have planning money available through the Clean Water Funds.

It was decided that Houston Engineering and the Watershed District would follow Brian’s advice and take a closer look at the various reaches of the system with the local landowners. The meeting was then concluded. Notification of the next meeting and agenda items will be distributed when more information comes available.