



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

Clay County Ditch No. 10 Informational Meeting Minutes

Monday March 11, 2024

Managers Present: Catherine Affield; John Hanson; Gerald Van Amburg; William Davis (remote); Curtis Stubstad.

Managers Absent: Peter Fjestad; Troy Larson.

Staff Present: Kristine Altrichter, Administrator; Matthew Schlauderaff, Watershed Specialist.

Consultants Present: Bennett Uhler, Engineer, Houston Engineering, Inc. (HEI).

Others Attending: Richard Menholt; Jerry Wetterlin; Ronnie Tang; Brian Dahl; Terry Eidem; David Kragnes; Loren Ingebretson; Duane Brendemuhl; Paul Loegering; Brian Thomas; Wayne Brendemuhl (remote); Larry Anderson (remote); Roger Haglund (remote); Stacy Erickson (remote); Rebecca Hecker (remote); Shawn May, United States Fish and Willdlife Service (USFWS) (remote); Paul Krabbenhoft, Clay County Commission (remote).

Affield called meeting to order at 5:01 PM.

Altrichter stated meeting was to discuss slope failures along Clay County Ditch No. 10. BRRWD is aware of multiple slope failures, so goal of meeting is to determine how benefited landowners would like to see failures repaired. Uhler completed a presentation and all parties were invited to provide comment.

Clay County Ditch No. 10 is located in Kragnes, Morken, and Flowing Townships and outlets into the Buffalo River in Section 15, Kragnes Township. Current ditch sloughing is creating road hazards. Slope failures are mainly occurring on roadside ditch slope. Existing known failures include: 1) 170 ft failure in Section 15, Morken Township; 2) 190 ft failure in NE ¼, Section 18, Morken Township; 3) 170 ft failure in NW ¼, Section 18, Morken Township; 4) 210 ft failure along roadside ditch in Section 15, Kragnes Township; 5) 970 ft failure along field side in Section 15, Kragnes Township.

BRRWD completed geotechnical analysis in 2015 and used recommendations to complete repairs in 2016 and 2021. Repairs have been expensive costing approximately \$1,000.00 per linear foot of ditch. Review of geotechnical analysis was completed in 2022. It was believed slope failures were a result of seepage through the soil into the ditch.

Options for future repairs of Clay County Ditch No. 10 include continuing with repair methods or completing a larger ditch repair. If BRRWD continues with current method, BRRWD would address failures as they arise and focus on impacts to road safety. If a large repair is completed, ditch would be moved away from road and side slopes would be flattened. This option would require additional right-of-way (ROW). BRRWD could complete this as one large repair or one mile at a time.

Tang noted there is an additional failure in Section 15, Morken Township along 80th Street N near the half mile line. Tang noted he is not sure when sloughing started but historically there was not an issue. He noticed land east of Section 15 does not drain as well as it has in the past. Tang wondered if the ditch to the west is filling in with sediment. Ditch now has a foot of water all year, historically it drained down throughout the year. Tang requested BRRWD verify that the grade to the west is correct for drainage. Uhler noted a ditch cleanout may be needed if water is standing on the east end of the ditch. He noted a ditch cleanout could cause additional slope failures.

Landowner asked what the cost per mile would be for a complete repair. Uhler noted additional investigation would be needed. A large portion of the cost would be for ROW acquisition. Uhler stated land values could impact overall cost, as well as, required side slopes to ensure ditch slopes are stable. Geotechnical analysis determined 4:1 slide slopes could fail and recommended 5:1 or 6:1 side slopes. Uhler noted this would result in a wide ditch with a significant amount of ROW acquisition. Uhler noted BRRWD does not want to invest in moving the ditch just to have it fail in the future. Uhler stated

March 11, 2024

HEI could run preliminary analysis to estimate a cost for a full repair. Altrichter stated there would likely be one additional informational meeting before a hearing to determine landowner interest in various options. Altrichter noted flattening side slopes would remove a significant portion of agricultural land into unproductive ROW.

Landowner asked what the current slope is. Uhler stated road slope is 2:1 and the field side is 4:1. Approximately 40 years ago side slopes were flattened, however, to save costs road slopes were not addressed. Uhler noted there are less slope failures on the field side compared to the roadside, however, the geotechnical report stated 4:1 slopes would not be sufficient for long term stability.

Ingebretson, Clerk of Morken Township, stated there was a similar failure closer to the Buffalo River a few years ago. He was told the weight of the road pushes down and rises up on the ditch and the water flushes dirt out of the ditch, which causes failures. He wondered if this was a similar situation. Uhler stated the geotechnical engineer thought the failures were caused by seepage through the road. However, there could have been a weight issue as well. The repairs already completed used a lightweight fill material to stabilize slopes.

Kragnes asked if it is a seepage issue, could tile installed on north side of the road to solve the problem. Uhler noted that was not a method he was familiar with, but it is possible that it could work. Uhler stated the geotechnical engineer recommended installing riprap at the toe of the slope to act as a conduit for water.

Ingebretson asked about relative costs of tiling proposed by Kragnes and cost of other options. Uhler stated tiling would be less expensive. He stated tiling to address seepage would be more experimental. Uhler stated this would take additional review to determine tile size, depth, and location. If the tile is outside of the road or ditch ROW, BRRWD may need to acquire more ROW. Ingebretson asked if it would be possible to try the tile and riprap on one of the worst failures to see if it is a possible solution. Uhler thought if BRRWD went with this option, they could try to use onsite material and see if repair worked and then they would know if this were a long-term solution.

Eidem asked Uhler to identify all the failure locations. Eidem asked if it was sloughing on both sides in Section 5, Kragnes Township. Uhler confirmed and stated it is possible that there is an issue with grade control near the outlet. Uhler stated the last mile is often steeper leading to increase erosion. Landowner stated the last time the ditch was cleaned the contractor dug two feet too deep for three-quarters of a mile before it was noticed. The contractor then reset their grade. Uhler stated this is likely the problem. Uhler said HEI could survey the grade and add rock drop structures to flatten the grade and reduce erosion.

Uhler asked landowners if option with tile was not feasible if landowners had a preference on moving the ditch or continuing to repair in manner BRRWD has done in the past. Landowner stated BRRWD should do whatever they can to not move the ditch. Eidem asked if BRRWD would change slope of road ditch if ditch were moved. Uhler confirmed. Landowner stated that would take twice as much ROW. Uhler noted culverts would likely need to be realigned which would add cost. Landowner stated that side inlets coming into the ditch would also need to be moved.

Stubstad asked how deep the ditch is. Landowners stated ditch was likely 20 feet deep. Stubstad noted a 6:1 slope would likely require 120 ft of additional ROW.

Eidem asked if previous repairs were working. Uhler confirmed that he has not heard about them failing again. Previous repairs were expensive because had to haul in material.

Landowner stated they would like to know if a tile could solve the problem. He thought the tile could be installed 6 ft deep without open cutting and thought it would be beneficial to install a tile every mile along the ditch. Uhler noted it would be beneficial to know which fields adjacent to the ditch were pattern tiled and if there were any failures adjacent to pattern tile. Landowner said Section 1, Morken Township is tiled, but did not know across the road in Section 16, Morken Township. Section 12, Kragnes Township is tiled on the north side of the road, this was a location of one of the failures. Landowners discussed if pattern tile was not deep enough to address seepage. Section 10, Kragnes Township is tiled. Uhler noted depth may determine if tile option will work. Uhler noted tile would be out of BRRWD ROW since it is on other side of road. Uhler stated landowners would need to be supportive of installing tile. Landowners suggested keeping tile in road ROW.

Stubstad summarized landowners appeared to want to try any solution except moving the ditch. Stubstad stated BRRWD may need to try a few options in different spots to find the best solution. Uhler stated landowners may need to be patient as BRRWD experiments with solutions. BRRWD will need time to develop possible solution and monitor to ensure it resolves the problems. Uhler noted weather may dictate success of repairs. Stubstad stated if BRRWD works in ROW, they can move forward with solutions faster. Uhler noted existing failures would need to be addressed as part of this.

Eidem asked for clarification on location of tile. Uhler stated tile would be on north side of road in road ROW and bore through road into ditch. Uhler noted if ditch is 20 feet deep, he will need to research how deep the tile needs to be. Uhler noted that some of the failures are near the bottom of the ditch.

Landowners noted they are not interested in moving the ditch because of the expense. Uhler noted BRRWD would pursue other options. Landowner could opt into moving the ditch in the future if needed. Tang noted outlet should be surveyed and repaired if it is too deep.

Uhler and Altrichter discussed financial account of the ditch. Account is recovering from expensive repairs.

Eidem noted both sides of the ditch in Section 18, Morken Township are tiled. There are failures in these areas. Uhler noted pattern tile might not be the solution. May need deeper tile to address seepage. Eidem thought tile on south of the ditch outletted into ditch and tile north of the road does not. Altrichter noted BRRWD would look through permit database and determine where fields are tiled and where they outlet.

Thomas noted he has a Texas crossing to get in his field near the outlet. He said crossing is nearly obsolete and he is unable to use it for his large equipment. He has used the top of the ditch bank to access his field. Uhler said BRRWD could look into the crossing. Uhler noted a new structure may need to be installed.

Kragnes asked why property was included in benefit area. Uhler noted it would have been explained in the Viewers Report when current benefits were determined. BRRWD would have to review Viewers Report to determine how property was determined to be benefited.

Hecker stated she lives at the farmstead in Section 8, Morken Township. Hecker asked where water was coming from on the north side of the ditch because failure occurred at end of driveway. Uhler stated there may be an issue with high water table.

Stubstad asked for a timeline on a solution. Uhler thought there could be a solution by fall 2024. Uhler asked landowners if they would like another meeting before a solution is installed. Landowners said they would like to know what BRRWD does. Eidem asked if BRRWD will just do spots. Uhler stated even if focus on one area would need to extend tile beyond failure. Uhler will need to research options on how tiling would work. Altrichter stated it might make sense to repair multiple locations to appropriately monitor if solution works. Altrichter stated this is a lot of background work that needs to be completed before a solution is determined Altrichter stated BRRWD could send notices to landowners so they know when the Board of Managers will be discussing the solution. She stated it could be a separate informational meeting or included in a regular board meeting depending on the findings.

Tang recommended monitoring Section 15, Morken Township because two failures are in that stretch and a portion of that section on the east side of the road is tiled. Tang also recommended reviewing the outlet and finding a solution for that area as well.

Affield adjourned meeting at 5:58 PM.

/s/ John E. Hanson
Secretary