

**Redwood County CD-20  
Improvement  
Viewers Report  
March 8, 2026 (Draft)**

**Valuation prior to drainage**

Beginning land use, property value, and economic productivity have been determined with the consideration that the benefited properties within the watershed originally did not have an adequate outlet for artificial drainage.

- “A” – Standing water or cattails, wetland classification with economic productivity for agriculture purposes of \$0 per acre, and a market value of \$2,000 to \$3,000
- “B” – Seasonally flooded/pasture ground. Pasture classification with economic productivity of \$90 per acre based on grazing days and/or hay values, and a market value of \$3,000 to \$6,000.
- “C” – Wet subsoil – Farmable land with moderate crop potential, with annual economic productivity of \$603 per acre based upon average annual yield of 78% of optimum with \$438 production costs, and a market value of \$6,000 to \$8,000.
- “D” – Upland areas not needing much artificial drainage and intermixed with wetter soils, with annual economic productivity of \$680 per acre based upon an average annual yield of 88% of optimum with \$438 production costs, and a market value of \$7,000 to \$9,000.

**Valuation with NRCS recommended drainage**

Potential land use, property value, and an increase in economic productivity, after public and private drainage have been installed as NRCS design standards as recommended in the Minnesota Drainage Guide, using current crop rotation, income, and expense:

- “A” – Drained slough area, medium classification land with economic productivity of \$634 per acre based upon average production of 82% of optimum with \$438 per acre production costs, and a market value of \$6,000 to \$7,000.
- “B” – Well drained ground, high land classification with economic productivity of \$680 per acre based upon average annual production of 88% of optimum with \$438 production costs, and a market value of \$7,000 to \$9,000.
- “C” – Well drained ground, highest land classification with economic productivity of \$711 per acre based upon average annual production of 92% of optimum with \$438 production costs, and a market value of \$8,000 to \$12,000.
- “D” – Well drained ground, high land classification with improved farm ability, with economic productivity of \$734 per acre based upon average production of 95% of optimum with \$438 production costs, and a market value of \$9,000 to \$11,000.

Utilizing these productive values, potential benefit values were determined for the system based upon a 25-year effective life with proper maintenance, private tile improvement cost were depreciated over the same 25-year period, and an allowance of 0.5% return on the system investment. A three-year average County yield was used for the benefit value calculations along with a three-year average sale price for the corn and beans.

**Increased productivity**

<b><u>Crop</u></b>	<b><u>Yield</u></b>	<b><u>Value</u></b>	<b><u>Income</u></b>	<b><u>%</u></b>	<b><u>Adjusted</u></b>
Corn	175.5	\$5.27	\$925	50%	\$462
Beans	49.7	\$12.50	\$621	50%	\$311
					<b>\$773</b>

**Production costs**

Corn	\$582 X 50% =	\$291
Beans	\$294 X 50% =	<u>\$147</u>
		<b>\$438</b>

**Potential Benefit value**

	<b><u>"A"</u></b>	<b><u>"B"</u></b>	<b><u>"C"</u></b>	<b><u>"D"</u></b>
	82% of \$773	88% of \$773	92% of \$773	95% of \$773
	\$634	\$680	\$711	\$734
Minus cost of production	<u>\$438</u>	<u>\$438</u>	<u>\$438</u>	<u>\$438</u>
Net income	\$196	\$242	\$273	\$296
Previous income	<u>\$0</u>	<u>\$90</u>	<u>\$165</u>	<u>\$242</u>
Increased income	\$196	\$152	\$108	\$54
Private tile costs	<u>\$56</u>	<u>\$31</u>	<u>\$27</u>	<u>\$18</u>
Annual increase	\$140	\$121	\$81	\$36
Capitalized for 25 years @ ½ %	<b>\$3,282</b>	<b>\$2,846</b>	<b>\$1,905</b>	<b>\$847</b>

The potential benefit values have been reduced to reflect a less than optimum yield. Benefit values were adjusted based on multiple factors. Location to the County tile, drainage coefficient, soil type. All benefits were reduced from the potential benefit value.

**Petition for an Improvement**

A petition for an improvement has been filed for Redwood County CD-20. Redwood County CD-20 was Re-determined in March of 2022. The parcel benefit values have been updated to current yields, input costs, and sale prices. These values reflect a three-year average.

**Summary**

- a. Redwood County CD-20 consists of 4,645.16 acres of farmland, roads, railroad and building sites with benefits of \$2,901,962.
- b. 4,485.76 acres of farmland and building sites in Redwood County in Delhi and Kintire Townships with benefits of \$2,806,871.
- c. 39.10 acres of MN valley Regional Railroad in Redwood County with benefits of \$20,832.
- d. 120.30 acres of County and Township roads with benefits of \$74,259

**Potential Benefit Value**

**Average land benefits**, over a 25-year period are **\$2,220** per acre.

- a. A soil \$3,282
- b. B soil \$2,846
- c. C soil \$1,905
- d. D soil \$847

**Building site benefit**

- a. (Average of B + C + D soils) X 1.5 = **\$2,799**

**Ponds, woodland, and non-benefited acres**

- a. **\$10**

**Road benefits**

- a. Gravel roads, County or Township  
(Average land benefit) X 1.0 = **\$2,220**
- b. Paved roads, County or Township  
(Average land benefit) X 1.5 = **\$3,330**
- c. Paved roads, wide, State or County  
(Average land benefit) X 1.25 = **\$2,775**

**Tile benefits**

- a. A tile benefit was given for most County tile at a rate of \$0.50 per linear foot. (Before improvement) This value was given because of the ease of access for private tile, and for the drainage the County tile may provide. There are 98,560 feet of County tile with **\$49,280 of tile benefits**. If the improvement is implemented, the parcels with new tile will receive a \$2.00 per foot benefit.

**Crop damages**

Crop damages will be paid per acre on standing crops damaged by construction or repair on the County open ditch or County tile system as determined by the Redwood County Drainage Department.

**Determining increased benefits (from the improvement)**

The engineer report states that the current drainage coefficient of CD-20 Main Trunk is 0.05 inches to 0.10 inches per day. Optimum drainage coefficient for tile is 0.50 inches per day. The proposed project will increase the Main Trunk tile drainage coefficient to 0.50+ inches per day. A portion of the main tile will be replaced with an open ditch. All the parcels within the CD-20 watershed will benefit from the increased efficiency of the Main Trunk.

**Redwood County CD-20 Improvement (cost verses benefits)**

The Engineer has estimated the project cost to be \$2,991,513. In accordance with Minnesota Statute 103E.215 Subdivision 6, the repair cost allocation for the project is \$1,457,249. This repair allocation will be assessed to all landowners in CD-20. The improvement portion of the project is \$1,534,264. This amount will be paid by only the landowners that benefit from the improvement. All the landowners in CD-20 will benefit from the improvement at different rates. All estimated assessments for the repair portion of the project and the improvement portion of the project are listed on the excel spreadsheet for the CD-20 improvement.

**Redwood County CD-20 Benefits**

<b>\$4,668,527</b>	<b>After improvement benefits</b>
<b>\$2,901,962</b>	<b>Before improvement benefits</b>
<b>\$1,766,565</b>	<b>Increased benefits</b>
<b>\$1,534,264</b>	<b>Improvement portion of the cost</b>
<b>\$232,301</b>	<b>Difference (The benefits outweigh the cost of the project)</b>

**Temporary damages**

There are temporary damages of 48.20 acres at \$600 per acre. These damages are listed on the Redwood CD-20 spreadsheet.

## Permanent damages

There are permanent damages of 19.43 acres at \$15,000 per acre. These acres are from the construction of the new County Open Ditch. These damages are listed on the Redwood CD-20 spreadsheet.

	40 Description	40 Owner	Parcel ID	Approximate Station Range	Improvement Description	Permanent Damages (Acres)	Length	Temporary Damages (Acres)
Mainline Tile	NW 1/4 SW 1/4 Section 12 Kintire Township	ANDERSON/GREGORY R & CECILIA M	57-012-2030	0+00 to 3+30	42-Inch Tile	N/A	330	1.14
	NE 1/4 SE 1/4 Section 11 Kintire Township	ANDERSON/GREGORY R/&	57-011-4040	3+30 to 14+50	42-Inch Tile	N/A	1120	3.86
	SE 1/4 NE 1/4 Section 11 Kintire Township	KNUTSON/JONATHON	57-011-1040	14+50 to 17+20	42-Inch Tile	N/A	270	0.93
	SW 1/4 NE 1/4 Section 11 Kintire Township	KNUTSON/CHARLOTTE A	57-011-1060	17+20 to 20+00	42-Inch Tile	N/A	280	0.96
	SW 1/4 NE 1/4 Section 11 Kintire Township	KNUTSON/CHARLOTTE A	57-011-1060	20+00 to 36+17	36-Inch Tile	N/A	1617	5.57
<b>Mainline Tile Total</b>						<b>N/A</b>	<b>3617</b>	<b>12.46</b>

	40 Description	40 Owner	Parcel ID	Approximate Station Range	Improvement Description	Permanent Damages (Acres)	Length	Temporary Damages (Acres)
Branch 4 Tile	NW 1/4 SW 1/4 Section 12 Kintire Township	ANDERSON/GREGORY R & CECILIA M	57-012-2030	0+00 to 12+15	36-Inch Tile	N/A	1215	4.18
	SW 1/4 SW 1/4 Section 12 Kintire Township	ANDERSON/GREGORY R & CECILIA M	57-012-3020	12+15 to 12+80	36-Inch Tile	N/A	65	0.22
	NE 1/4 SE 1/4 Section 11 Kintire Township	ANDERSON/GREGORY R/&	57-011-4040	12+80 to 13+75	36-Inch Tile	N/A	95	0.33
	SE 1/4 SE 1/4 Section 11 Kintire Township	ANDERSON/GREGORY R/&	57-011-4040	13+75 to 17+85	36-Inch Tile	N/A	410	1.41
	SE 1/4 SE 1/4 Section 11 Kintire Township	RIGGE/BRUCE A & JAMIE A	57-011-4060	18+95 to 20+14	36-Inch Tile	N/A	119	0.41
<b>Branch 4 Tile Total</b>						<b>N/A</b>	<b>1904</b>	<b>6.56</b>

<b>Ditch No. 20 Total</b>	<b>19.4</b>	<b>5,521</b>	<b>48.2</b>
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	40 Description	40 Owner	Parcel ID	Approximate Station Range	Improvement Description	Permanent Damages (Acres)	Length	Temporary Damages (Acres)
Mainline Open Ditch	NW 1/4 SE 1/4 Section 7 Delhi Township	JACQUES FARMS LLC	52-007-4020	0+00 to 11+50	New Standard Open Ditch Construction	1.83	N/A	1.96
	NE 1/4 SW 1/4 Section 7 Delhi Township	ANDERSON/KENNETH M & CAROL Y	52-007-3040	11+50 to 26+50	New Two-Stage Open Ditch Construction	4.14	N/A	6.78
	NW 1/4 SW 1/4 Section 7 Delhi Township	ANDERSON/KENNETH M & CAROL Y	52-007-3040	26+50 to 40+00	New Two-Stage Open Ditch Construction	3.75	N/A	5.97
	NE 1/4 SE 1/4 Section 12 Kintire Township	JORDAN/OSWALD A/DISCLAIMER TR	57-012-4020	40+00 to 53+00	New Standard Open Ditch Construction	2.43	N/A	3.71
	NW 1/4 SE 1/4 Section 12 Kintire Township	JORDAN/OSWALD A/DISCLAIMER TR	57-012-4020	53+00 to 66+00	New Standard Open Ditch Construction	2.57	N/A	4.10
	NE 1/4 SW 1/4 Section 12 Kintire Township	ANDERSON/GREGORY R & CECILIA M	57-012-2030	66+00 to 79+00	New Standard Open Ditch Construction	2.60	N/A	3.63
	NW 1/4 SW 1/4 Section 12 Kintire Township	ANDERSON/GREGORY R & CECILIA M	57-012-2030	79+00 to 90+00	New Standard Open Ditch Construction	2.11	N/A	3.04
<b>Mainline Open Ditch Total</b>						<b>19.43</b>	<b>N/A</b>	<b>29.19</b>

### **Benefits and damages statement**

This report covers the proposed improvement for a previously constructed drainage system. The basis for determining benefits and damages is therefore, based upon a comparison of the conditions that would have existed prior to the County open ditch and County tile systems construction, with those that do exist with the drainage system in a reasonable state of repair. Supporting documentation for the analysis and conclusions of the report are contained in our files and are available for inspection. The figures stated herein are based on a full and fair comparison of all pertinent facts and information that the viewers were aware of at the time of this process. The following aids were used in this viewing process.

- Redwood County online GIS parcel information site
- USDA Web Soil Survey
- Google Earth aerial satellite photos

- Yield averages taken from USDA National Agriculture Statistics Service.
- Production costs taken from University of Minnesota FinBin
- Average commodity sale prices from Minnesota Finbin
- Sales data from the Redwood County Assessor office and website
- Visual inspection of each 40-acre parcel or less
- Consultation with the Engineer and Redwood County Environmental Office

The Viewers determined that the lands affected by the drainage system are similar and that the following comments refer to all such tracts.

1. **Existing land use, property value, and economic productivity:**  
Land is presently used for building sites, roads, railroad and for agricultural purposes. The property value is consistent with most agricultural land sales within Redwood County. Agricultural lands are primarily used to produce corn and soybeans. The land has good economic productivity when properly drained.
2. **Potential land use, property value, and economic productivity from the drainage system:**  
The drainage system has been in existence for many years and provides drainage for agricultural purposes. The property value is consistent with most agricultural land sales within Redwood County. Land affected by the drainage system has the potential to produce above average yields.
3. **The benefits or damages from the drainage system:**  
Benefits derived by lands affected by the drainage system are due to (A) Improved capacity to remove surface waters due to previous construction and maintenance of the County tile system, which results in an increase in the current market value of property; or (B) an increase in the potential for agricultural production as a result of the previous construction and continued maintenance of the drainage system; or (C) increased value of the property as a result of potential different land use.
4. There is no damage to any riparian rights.
5. There are no acres added to any tract or lot and there are no public waters, wetlands, and other areas not currently being cultivated, that are proposed to be drained in this proceeding.
6. There are no acres which before the drainage benefits could be realized would require a public waters work permit to work in public waters under 103G.245 to excavate or fill a navigable water body under United States Code, Title 33, Section 403, or a permit to discharge into waters of United States under United States Code, Title 33, Section 1344.
7. There are no acres being assessed for drainage of areas that would be considered conversion of a wetland under United States Code, Title 16, Section 3821, if the area were placed in agricultural production.

This report is respectfully submitted to the Drainage Authority of Redwood County CD-20 by:

Mark Behrends \_\_\_\_\_

Robert M. Hansen \_\_\_\_\_

Wesley Dahl \_\_\_\_\_

Submitted this 8<sup>th</sup> day of March 2026