

STREAM SYSTEM HABITAT RATING FORM

Stream Mudd Cr Reach Location Goodwin Rd Reach Score/Rating 118 - Good
 County WINNEBAGO Date 5-11-82 Evaluator D. L. GELER Classification CONTIN FEA

Rating Item	Category							
	Excellent		Good		Fair		Poor	
1. <u>Erosion</u>	No evidence of significant erosion. Stable forest or grass land. Little potential for future erosion.	8	Some erosion evident. No significant "raw" areas. Good land mgmt. practices in area. Low potential for significant erosion.	(10)	Moderate erosion evident. Erosion from heavy storm events obvious. Some "raw" areas. Potential for significant erosion.	14	Heavy erosion evident. Probable erosion from any runoff.	16
2. <u>Nonpoint Source</u>	No evidence of significant source. Little potential for future problem.	4	Some potential sources. (roads, urban area, farm fields).	(8)	Moderate sources. (Small wetlands, tile fields, urban area, intense agriculture).	16	Obvious sources. (Major wetland drainage, high use urban or industrial area, feed lots, impoundment).	20
3. <u>Erosion, Failure</u>	No evidence of significant erosion or bank failure. Little potential for future problem.	6	Infrequent, small areas, mostly healed over. Some potential in extreme floods.	(9)	Moderate frequency and size. Some "raw" spots. Erosion potential during high flow.	15	Many eroded areas. "Raw" areas frequent along straight sections and bends.	18
4. <u>Vegetative Protection</u>	90% plant density. Diverse trees, shrubs, grass. Plants healthy with apparently good root system.	6	70-90% density. Fewer plant species. A few barren or thin areas. Vegetation appears generally healthy.	9	50-70% density. Dominated by grass, sparse trees and shrubs. Plant types and conditions suggest poorer soil binding.	(15)	<50% density. Many raw areas. Thin grass, few if any trees and shrubs.	18
5. <u>Channel Capacity</u>	Ample for present plus some increase. Peak flows contained. W/D ratio ≤ 7 .	8	Adequate. Overbank flows rare. W/D ratio 8-15.	(10)	Barely contains present peaks. Occasional overbank flow. W/D ratio 15 to 25.	14	Inadequate, overbank flow common. W/D ratio > 25 .	16
6. <u>Deposition</u>	Little or no enlargement of channel or point bars.	6	Some new increase in bar formation, mostly from coarse gravel.	(9)	Moderate deposition of new gravel and coarse sand on old and some new bars.	15	Heavy deposits of fine material, increased bar development.	18
7. <u>Scouring and Deposition</u>	Less than 5% of the bottom affected by scouring and deposition.	4	5 to 30% affected. Scour at constrictions and where grades steepen. Some deposition in pools.	(8)	30 to 50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools.	16	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition.	20

Rating Item	Category							
	Excellent		Good		Fair		Poor	
Bottom 8. <u>Substrate</u>	Greater than 50% rubble, gravel or other stable habitat.	2	30 to 50% rubble, gravel or other stable habitat. Adequate habitat.	7	10 to 30% rubble, gravel or other stable habitat. Habitat availability less than desirable.	(17)	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious.	22
9. <u>Average Depth Q7,2</u>	Greater than 24".	0	12" to 24".	(6)	6" to 12".	18	Less than 6".	24
10. <u>Flow Q7,2</u>	Warm water, >5 cfs. Cold water, greater than 2 cfs.	0	Warm water, 2 to 5 cfs. Cold water, 1 to 2 cfs.	(6)	Warm water, .5 to 2 cfs. Cold water, .5 to 1 cfs. Continuous flow.	18	Less than .5 cfs. Stream may cease to flow in very dry years.	24
Stream 11. <u>Pool/Riffle, Pool/Bend Ratio</u>	5 to 7. Variety of habitat. Deep riffles and pools.	4	7 to 15. Adequate depth in pools and riffles. Bends provide habitat.	(8)	15 to 25. Occasional riffle or bend. Bottom contours provide some habitat.	16	Greater than 25. Essentially a straight stream. Generally all "flat water" or shallow riffle. Poor habitat.	20
12. <u>Aesthetics</u>	Wilderness characteristics, outstanding natural beauty. Usually wooded or unpastured corridor.	8	High natural beauty. Trees, historic site. Some development may be visible.	10	Common setting, not offensive. Developed but uncluttered area.	(14)	Stream does not enhance aesthetics. Condition of stream is offensive.	16

Column Total --

Add column scores E ____ + G 72 + F 46 + P ____ Total Reach Score 118

≤ 70 = Excellent, 71-129 = Good, 130-200 = Fair, >200 Poor

GAMMURUS

SNAILS

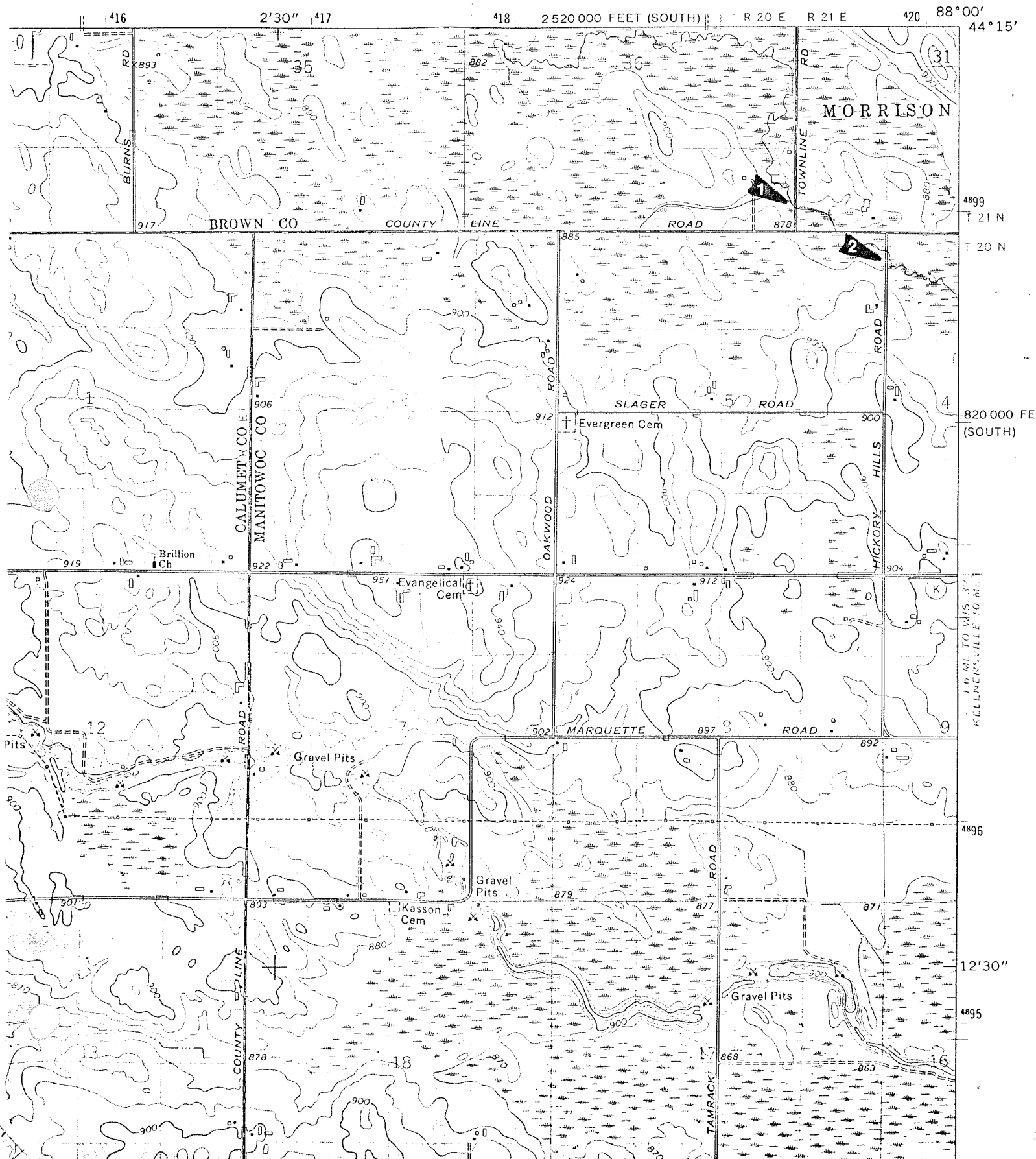
FERTILE STREAM -

SOME PUNCTATUS AGNE PRESENT ALREADY

WISCONSIN
STATE
TOPOGRAPHIC SURVEY

BRILLION QUADRANGLE
WISCONSIN
7.5 MINUTE SERIES (TOPOGRAPHIC)
NE/4 CHILTON 15' QUADRANGLE

3472 IV SW
(MORRISON)



Rating Item	Category							
	Excellent		Good		Fair		Poor	
Bottom 8. <u>Substrate</u>	Greater than 50% rubble, gravel or other stable habitat.	2	30 to 50% rubble, gravel or other stable habitat. Adequate habitat.	7	10 to 30% rubble, gravel or other stable habitat. Habitat availability less than desirable.	(17)	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious.	22
9. <u>Average Depth Q7,2</u>	Greater than 24".	0	12" to 24".	(6)	6" to 12".	18	Less than 6".	24
10. <u>Flow Q7,2</u>	Warm water, >5 cfs. Cold water, greater than 2 cfs.	0	Warm water, 2 to 5 cfs. Cold water, 1 to 2 cfs.	(6)	Warm water, .5 to 2 cfs. Cold water, .5 to 1 cfs. Continuous flow.	18	Less than .5 cfs. Stream may cease to flow in very dry years.	24
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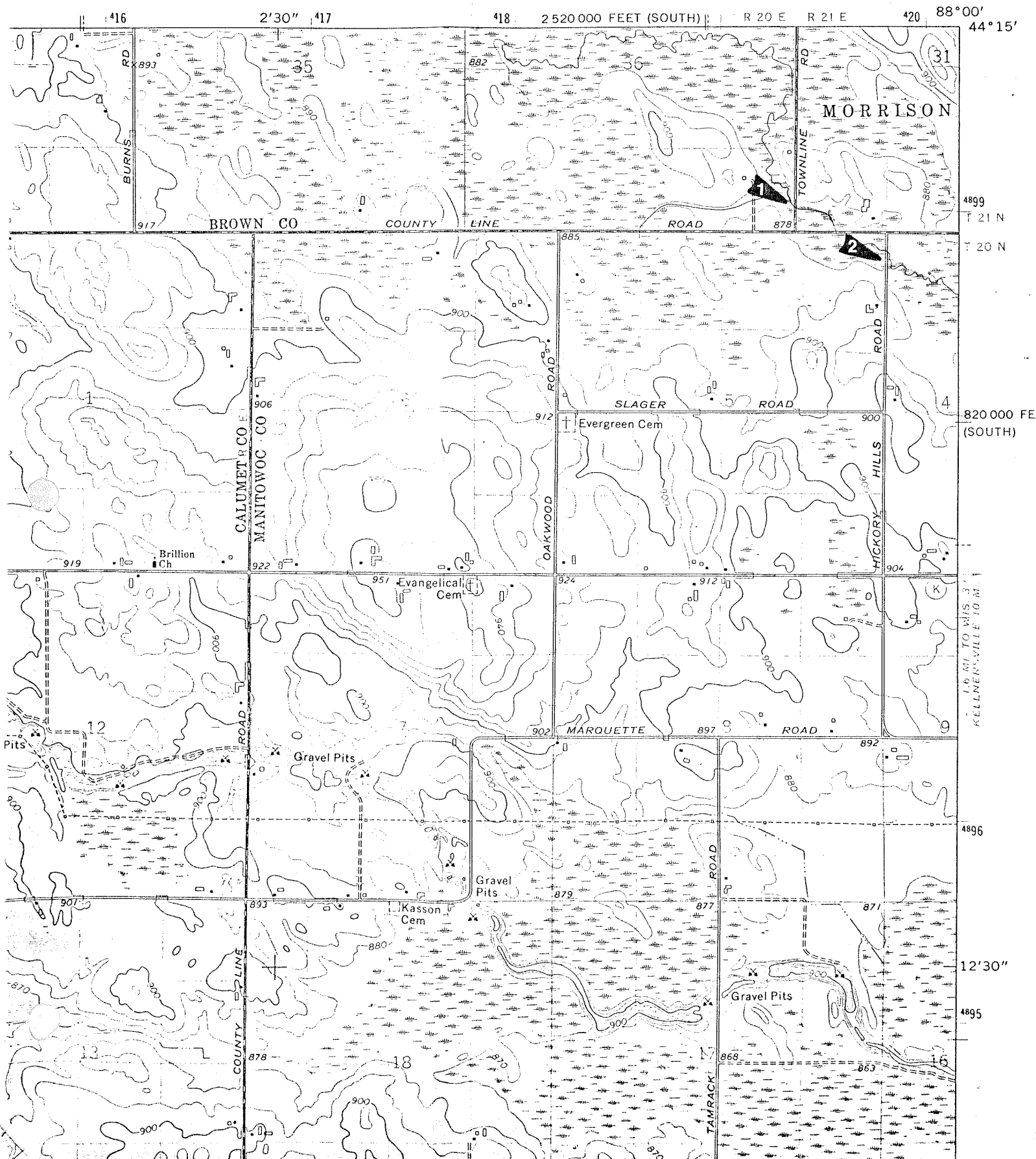
FERTILE STREAM -

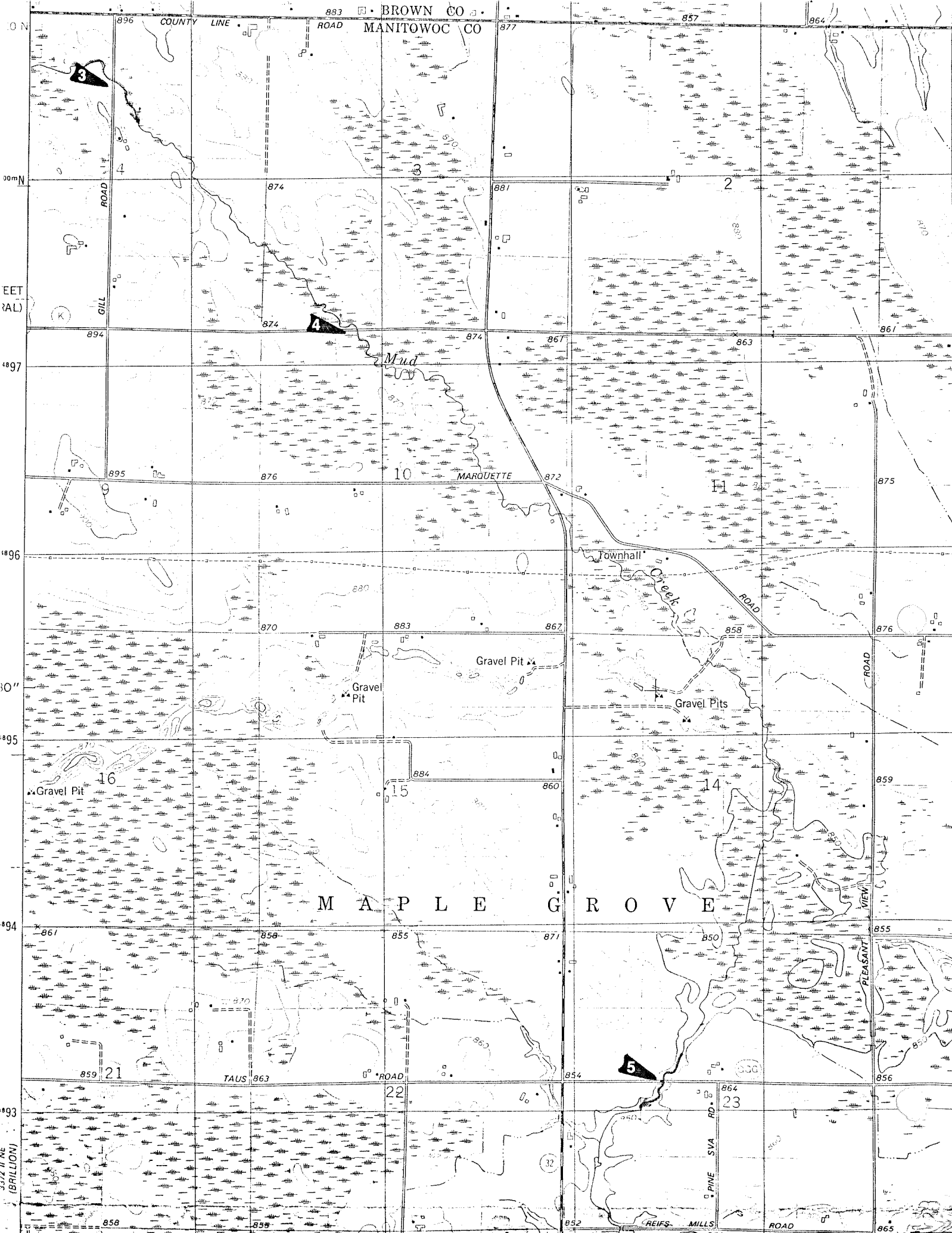
SOME PUNCTATUS AGNE PRESENT ALREADY

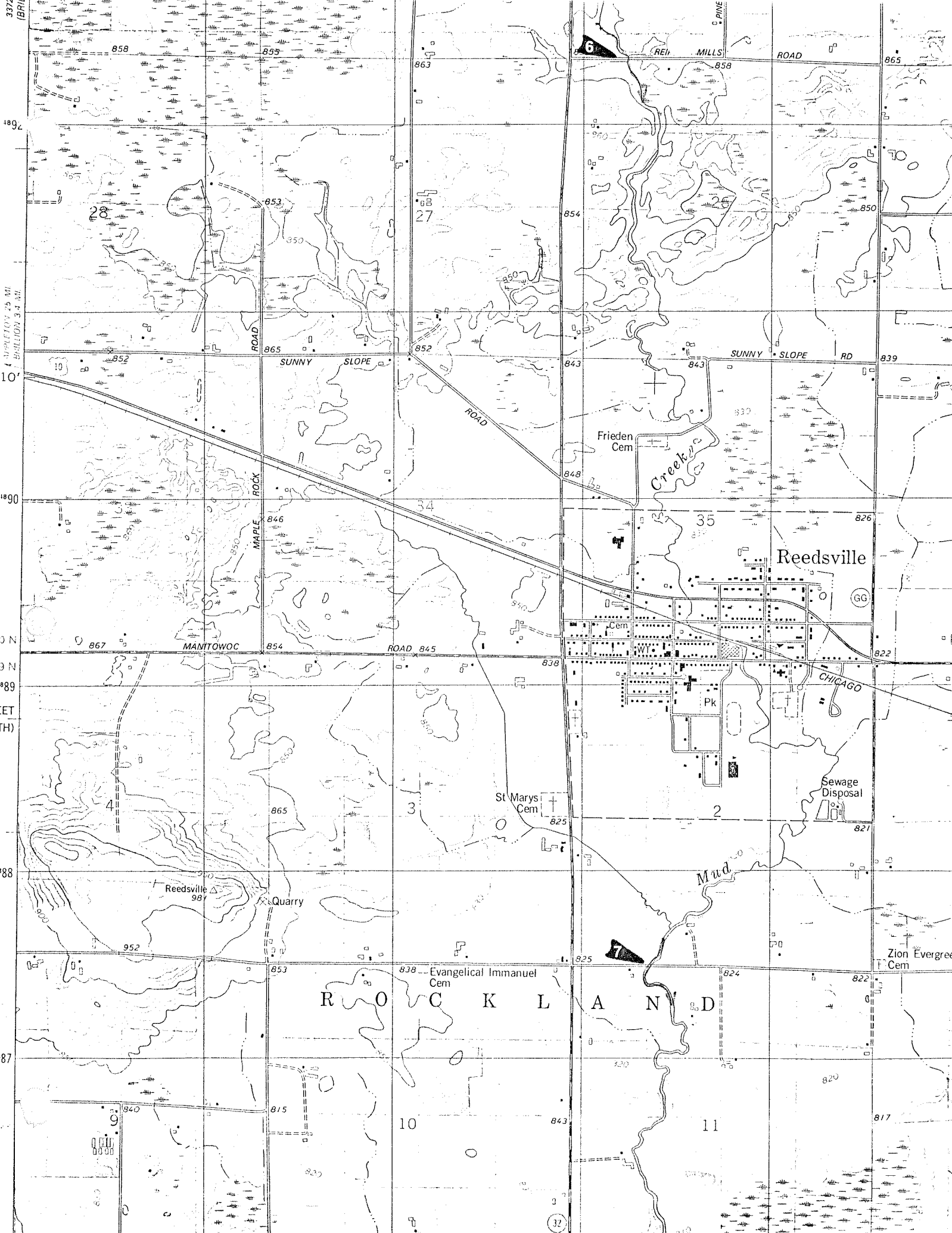
WISCONSIN
STATE
TOPOGRAPHIC SURVEY

BRILLION QUADRANGLE
WISCONSIN
7.5 MINUTE SERIES (TOPOGRAPHIC)
NE/4 CHILTON 15' QUADRANGLE

3472 IV SW
(MORRISON)







STREAM SYSTEM HABITAT RATING FORM

Stream MJD Reach Location TOWNLINE RD Reach Score/Rating 140
 County MAINT Date 8/23 Evaluator MR Classification CONTI/INTER

Rating Item	Category							
	Excellent		Good		Fair		Poor	
1. <u>Erosion</u>	No evidence of significant erosion. Stable forest or grass land. Little potential for future erosion.	(8)	Some erosion evident. No significant "raw" areas. Good land mgmt. practices in area. Low potential for significant erosion.	10	Moderate erosion evident. Erosion from heavy storm events obvious. Some "raw" areas. Potential for significant erosion.	14	Heavy erosion evident. Probable erosion from any runoff.	16
2. <u>Nonpoint Source</u>	No evidence of significant source. Little potential for future problem.	4	Some potential sources. (roads, urban area, farm fields).	(8)	Moderate sources. (Small wetlands, tile fields, urban area, intense agriculture).	16	Obvious sources. (Major wetland drainage, high use urban or industrial area, feed lots, impoundment).	20
3. <u>Erosion, Failure</u>	No evidence of significant erosion or bank failure. Little potential for future problem.	6	Infrequent, small areas, mostly healed over. Some potential in extreme floods.	(9)	Moderate frequency and size. Some "raw" spots. Erosion potential during high flow.	15	Many eroded areas. "Raw" areas frequent along straight sections and bends.	18
4. <u>Vegetative Protection</u>	90% plant density. Diverse trees, shrubs, grass. Plants healthy with apparently good root system.	(6)	70-90% density. Fewer plant species. A few barren or thin areas. Vegetation appears generally healthy.	9	50-70% density. Dominated by grass, sparse trees and shrubs. Plant types and conditions suggest poorer soil binding.	15	<50% density. Many raw areas. Thin grass, few if any trees and shrubs.	18
5. <u>Channel Capacity</u>	Ample for present plus some increase. Peak flows contained. W/D ratio ≤ 7 .	8	Adequate. Overbank flows rare. W/D ratio 8-15.	(10)	Barely contains present peaks. Occasional overbank flow. W/D ratio 15 to 25.	14	Inadequate, overbank flow common. W/D ratio >25.	16
6. <u>Deposition</u>	Little or no enlargement of channel or point bars.	(6)	Some new increase in bar formation, mostly from coarse gravel.	9	Moderate deposition of new gravel and coarse sand on old and some new bars.	15	Heavy deposits of fine material, increased bar development.	18
7. <u>Scouring and Deposition</u>	Less than 5% of the bottom affected by scouring and deposition.	(4)	5 to 30% affected. Scour at constrictions and where grades steepen. Some deposition in pools.	8	30 to 50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools.	16	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition.	20

Rating Item	Category								
	Excellent		Good		Fair		Poor		
Bottom	8. <u>Substrate</u>	Greater than 50% rubble, gravel or other stable habitat.	2	30 to 50% rubble, gravel or other stable habitat. Adequate habitat.	7	10 to 30% rubble, gravel or other stable habitat. Habitat availability less than desirable.	17	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious.	22
	9. <u>Average Depth Q7,2</u>	Greater than 24".	0	12" to 24".	6	6" to 12".	18	Less than 6".	24
	10. <u>Flow Q7,2</u>	Warm water, >5 cfs. Cold water, greater than 2 cfs.	0	Warm water, 2 to 5 cfs. Cold water, 1 to 2 cfs.	6	Warm water, .5 to 2 cfs. Cold water, .5 to 1 cfs. Continuous flow.	18	Less than .5 cfs. Stream may cease to flow in very dry years.	24
Stream	11. <u>Pool/Riffle, Pool/Bend Ratio</u>	5' to 7. Variety of habitat. Deep riffles and pools.	4	7 to 15. Adequate depth in pools and riffles. Bends provide habitat.	8	15 to 25. Occasional riffle or bend. Bottom contours provide some habitat.	16	Greater than 25. Essentially a straight stream. Generally all "flat water" or shallow riffle. Poor habitat.	20
	12. <u>Aesthetics</u>	Wilderness characteristics, outstanding natural beauty. Usually wooded or unpastured corridor.	8	High natural beauty. Trees, historic site. Some development may be visible.	10	Common setting, not offensive. Developed but uncluttered area.	14	Stream does not enhance aesthetics. Condition of stream is offensive.	16

Column Total 65

Add column scores E 24 + G 27 + F 83 + P 18 Total Reach Score

≤ 70 = Excellent, 71-129 = Good, 130-200 = Fair, >200 Poor

1
 24
 27
 83

 140

STREAM SYSTEM HABITAT RATING FORM

Stream Mud Cr.

Reach Location TN Line Rd. # 3

Reach Score/Rating 150 - Fair

County Blount

Date 9-23-82 Evaluator DCW

Classification _____

	Rating Item	Category							
		Excellent		Good		Fair		Poor	
Watershed	1. <u>Erosion</u>	No evidence of significant erosion. Stable forest or grass land. Little potential for future erosion.	(8)	Some erosion evident. No significant "raw" areas. Good land mgmt. practices in area. Low potential for significant erosion.	10	Moderate erosion evident. Erosion from heavy storm events obvious. Some "raw" areas. Potential for significant erosion.	14	Heavy erosion evident. Probable erosion from any runoff.	16
	2. <u>Nonpoint Source</u>	No evidence of significant source. Little potential for future problem.	4	Some potential sources. (roads, urban area, farm fields).	(8)	Moderate sources. (Small wetlands, tile fields, urban area, intense agriculture).	16	Obvious sources. (Major wetland drainage, high use urban or industrial area, feed lots, impoundment).	20
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	4. <u>Vegetative Protection</u>	90% plant density. Diverse trees, shrubs, grass. Plants healthy with apparently good root system.	(6)	70-90% density. Fewer plant species. A few barren or thin areas. Vegetation appears generally healthy.	9	50-70% density. Dominated by grass, sparse trees and shrubs. Plant types and conditions suggest poorer soil binding.	15	<50% density. Many raw areas. Thin grass, few if any trees and shrubs.	18
Upper Bank	5. <u>Channel Capacity</u>	Ample for present plus some increase. Peak flows contained. W/D ratio ≤ 7 .	8	Adequate. Overbank flows rare. W/D ratio 8-15.	10	Barely contains present peaks. Occasional overbank flow. W/D ratio 15 to 25.	(14)	Inadequate, overbank flow common. W/D ratio >25.	16
	6. <u>Deposition</u>	Little or no enlargement of channel or point bars.	(6)	Some new increase in bar formation, mostly from course gravel.	9	Moderate deposition of new gravel and course sand on old and some new bars.	15	Heavy deposits of fine material, increased bar development.	18
Lower Bank	7. <u>Scouring and Deposition</u>	Less than 5% of the bottom affected by scouring and deposition.	(4)	5 to 30% affected. Scour at constrictions and where grades steepen. Some deposition in pools.	8	30 to 50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools.	16	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition.	20

Rating Item	Category							
	Excellent		Good		Fair		Poor	
Bottom 8. <u>Substrate</u>	Greater than 50% rubble, gravel or other stable habitat.	2	30 to 50% rubble, gravel or other stable habitat. Adequate habitat.	7	10 to 30% rubble, gravel or other stable habitat. Habitat availability less than desirable.	17	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious.	22
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Stream 11. <u>Pool/Riffle, Pool/Bend Ratio</u>	5' to 7. Variety of habitat. Deep riffles and pools.	4	7 to 15. Adequate depth in pools and riffles. Bends provide habitat.	8	15 to 25. Occasional riffle or bend. Bottom contours provide some habitat.	16	Greater than 25. Essentially a straight stream. Generally all "flat water" or shallow riffle. Poor habitat.	20
12. <u>Aesthetics</u>	Wilderness characteristics, outstanding natural beauty. Usually wooded or unpastured corridor.	8	High natural beauty. Trees, historic site. Some development may be visible.	10	Common setting, not offensive. Developed but uncluttered area.	14	Stream does not enhance aesthetics. Condition of stream is offensive.	16

Column Total --

Add column scores E 30 + G 8 + F 46 + P 66 Total Reach Score 150

≤ 70 = Excellent, 71-129 = Good, 130-200 = Fair, >200 Poor

Comments — IT is Evident that water remains at this location year round. Before an official classification can be made — Fish management should be contacted for their interpretation of the Fisheries — Contact Paul Peters to do a nursery shocking 100' above and below Bridge — *PCW*

STREAM SYSTEM HABITAT RATING FORM

Stream MUD

Reach Location HICKORY HILLS RD

Reach Score/Rating 142 / FAIR

County MANITOWISSE

Date 6-2-82

Evaluator DOELGER

Classification CONTINUOUS - INTERMEDIATE

Rating Item	Category							
	Excellent		Good		Fair		Poor	
Watershed 1. <u>Erosion</u>	No evidence of significant erosion. Stable forest or grass land. Little potential for future erosion.	(8)	Some erosion evident. No significant "raw" areas. Good land mgmt. practices in area. Low potential for significant erosion.	10	Moderate erosion evident. Erosion from heavy storm events obvious. Some "raw" areas. Potential for significant erosion.	14	Heavy erosion evident. Probable erosion from any runoff.	16
2. <u>Nonpoint Source</u>	No evidence of significant source. Little potential for future problem.	4	Some potential sources. (roads, urban area, farm fields).	8	Moderate sources. (Small wetlands, tile fields, urban area, intense agriculture).	(16)	Obvious sources. (Major wetland drainage, high use urban or industrial area, feed lots, impoundment).	20
Upper Bank 3. <u>Erosion, Failure</u>	No evidence of significant erosion or bank failure. Little potential for future problem.	(6)	Infrequent, small areas, mostly healed over. Some potential in extreme floods.	9	Moderate frequency and size. Some "raw" spots. Erosion potential during high flow.	15	Many eroded areas. "Raw" areas frequent along straight sections and bends.	18
4. <u>Vegetative Protection</u>	90% plant density. Diverse trees, shrubs, grass. Plants healthy with apparently good root system.	(6)	70-90% density. Fewer plant species. A few barren or thin areas. Vegetation appears generally healthy.	9	50-70% density. Dominated by grass, sparse trees and shrubs. Plant types and conditions suggest poorer soil binding.	15	<50% density. Many raw areas. Thin grass, few if any trees and shrubs.	18
Lower Bank 5. <u>Channel Capacity</u>	Ample for present plus some increase. Peak flows contained. W/D ratio ≤ 7 .	8	Adequate. Overbank flows rare. W/D ratio 8-15.	10	Barely contains present peaks. Occasional overbank flow. W/D ratio 15 to 25.	(14)	Inadequate, overbank flow common. W/D ratio >25.	16
6. <u>Deposition</u>	Little or no enlargement of channel or point bars.	(6)	Some new increase in bar formation, mostly from coarse gravel.	9	Moderate deposition of new gravel and coarse sand on old and some new bars.	15	Heavy deposits of fine material, increased bar development.	18
Bottom 7. <u>Scouring and Deposition</u>	Less than 5% of the bottom affected by scouring and deposition.	4	5 to 30% affected. Scour at constrictions and where grades steepen. Some deposition in pools.	(8)	30 to 50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools.	16	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition.	20

Rating Item	Category							
	Excellent		Good		Fair		Poor	
8. <u>Substrate</u>	Greater than 50% rubble, gravel or other stable habitat.	2	30 to 50% rubble, gravel or other stable habitat. Adequate habitat.	7	10 to 30% rubble, gravel or other stable habitat. Habitat availability less than desirable.	17	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious.	(22)
9. <u>Average Depth</u> <u>Q7,2</u>	Greater than 24".	0	12" to 24".	(6)	6" to 12".	18	Less than 6".	24
10. <u>Flow</u> <u>Q7,2</u>	Warm water, >5 cfs. Cold water, greater than 2 cfs.	0	Warm water, 2 to 5 cfs. Cold water, 1 to 2 cfs.	6	Warm water, .5 to 2 cfs. Cold water, .5 to 1 cfs. Continuous flow.	18	Less than .5 cfs. Stream may cease to flow in very dry years.	(24)
11. <u>Pool/Riffle,</u> <u>Pool/Bend</u> <u>Ratio</u>	5' to 7. Variety of habitat. Deep riffles and pools.	4	7 to 15. Adequate depth in pools and riffles. Bends provide habitat.	8	15 to 25. Occassional riffle or bend. Bottom contours provide some habitat.	(16)	Greater than 25. Essentially a straight stream. Generally all "flat water" or shallow riffle. Poor habitat.	20
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Column Total --

Add column scores E 26 + G 24 + F 46 + P 46 Total Reach Score 142

≤ 70 = Excellent, 71-129 = Good, 130-200 = Fair, >200 Poor

TADPOLES -

*INVERTS NOT SAMPLED DUE TO DEPTH
LACK OF HABITAT*

AREA ABOVE THIS SITE IS HEADWATERS

Rating Item	Category							
	Excellent		Good		Fair		Poor	
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AREA ABOVE THIS SITE IS HEADWATERS

STREAM SYSTEM HABITAT RATING FORM

Stream Mud

Reach Location Gill RD

Reach Score/Rating 158 / FAIR

County MANITOWOC

Date 6-2-82 Evaluator DAELGER

Classification CONTINUOUS / INTERMEDIATE

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Bottom 8. <u>Substrate</u>	Greater than 50% rubble, gravel or other stable habitat.	2	30 to 50% rubble, gravel or other stable habitat. Adequate habitat.	7	10 to 30% rubble, gravel or other stable habitat. Habitat availability less than desirable.	17	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious.	(22)
9. <u>Average Depth Q7,2</u>	Greater than 24".	0	12" to 24".	6	6" to 12".	(18)	Less than 6".	24
10. <u>Flow Q7,2</u>	Warm water, >5 cfs. Cold water, greater than 2 cfs.	0	Warm water, 2 to 5 cfs. Cold water, 1 to 2 cfs.	6	Warm water, .5 to 2 cfs. Cold water, .5 to 1 cfs. Continuous flow.	18	Less than .5 cfs. Stream may cease to flow in very dry years.	(24)
Stream 11. <u>Pool/Riffle, Pool/Bend Ratio</u>	5' to 7'. Variety of habitat. Deep riffles and pools.	4	7 to 15. Adequate depth in pools and riffles. Bends provide habitat.	8	15 to 25. Occassional riffle or bend. Bottom contours provide some habitat.	16	Greater than 25. Essentially a straight stream. Generally all "flat water" or shallow riffle. Poor habitat.	(20)
12. <u>Aesthetics</u>	Wilderness characteristics, outstanding natural beauty. Usually wooded or unpastured corridor.	8	High natural beauty. Trees, historic site. Some development may be visible.	(10)	Common setting, not offensive. Developed but uncluttered area.	14	Stream does not enhance aesthetics. Condition of stream is offensive.	16

Column Total --

Add column scores E 26 + G 18 + F 48 + P 66 Total Reach Score 158

≤ 70 = Excellent, 71-129 = Good, 130-200 = Fair, >200 Poor

CADDIS FLIES

SNAILS

LARGE FISH STARTLED - DID NOT OBSERVE IT (CARP?)

STREAM SYSTEM HABITAT RATING FORM

Stream MUD

Reach Location CRNK

Reach Score/Rating 158/FAIR

County MANITOWOC

Date 6-2-82 Evaluator DOELGER

Classification CONTIN. INTERMED

Rating Item	Category			
	Excellent	Good	Fair	Poor
1. <u>Erosion</u>	No evidence of significant erosion. Stable forest or grass land. Little potential for future erosion. (8)	Some erosion evident. No significant "raw" areas. Good land mgmt. practices in area. Low potential for significant erosion. 10	Moderate erosion evident. Erosion from heavy storm events obvious. Some "raw" areas. Potential for significant erosion. 14	Heavy erosion evident. Probable erosion from any runoff. 16
2. <u>Nonpoint Source</u>	No evidence of significant source. Little potential for future problem. 4	Some potential sources. (roads, urban area, farm fields). 8	Moderate sources. (Small wetlands, tile fields, urban area, intense agriculture). (16)	Obvious sources. (Major wetland drainage, high use urban or industrial area, feed lots, impoundment). 20
3. <u>Erosion, Failure</u>	No evidence of significant erosion or bank failure. Little potential for future problem. (6)	Infrequent, small areas, mostly healed over. Some potential in extreme floods. 9	Moderate frequency and size. Some "raw" spots. Erosion potential during high flow. 15	Many eroded areas. "Raw" areas frequent along straight sections and bends. 18
4. <u>Vegetative Protection</u>	90% plant density. Diverse trees, shrubs, grass. Plants healthy with apparently good root system. (6)	70-90% density. Fewer plant species. A few barren or thin areas. Vegetation appears generally healthy. 9	50-70% density. Dominated by grass, sparse trees and shrubs. Plant types and conditions suggest poorer soil binding. 15	<50% density. Many raw areas. Thin grass, few if any trees and shrubs. 18
5. <u>Channel Capacity</u>	Ample for present plus some increase. Peak flows contained. W/D ratio ≤ 7 . 8	Adequate. Overbank flows rare. W/D ratio 8-15. 10	Barely contains present peaks. Occasional overbank flow. W/D ratio 15 to 25. (14)	Inadequate, overbank flow common. W/D ratio >25. 16
6. <u>Deposition</u>	Little or no enlargement of channel or point bars. (6)	Some new increase in bar formation, mostly from coarse gravel. 9	Moderate deposition of new gravel and coarse sand on old and some new bars. 15	Heavy deposits of fine material, increased bar development. 18
7. <u>Scouring and Deposition</u>	Less than 5% of the bottom affected by scouring and deposition. 4	5 to 30% affected. Scour at constrictions and where grades steepen. Some deposition in pools. (8)	30 to 50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools. 16	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition. 20

Rating Item	Category							
	Excellent		Good		Fair		Poor	
Bottom	8. <u>Substrate</u>	Greater than 50% rubble, gravel or other stable habitat.	2	30 to 50% rubble, gravel or other stable habitat. Adequate habitat.	7	10 to 30% rubble, gravel or other stable habitat. Habitat availability less than desirable.	17	Less than 10% rubble, gravel or other stable habitat. Lack of habitat is obvious. (22)
	9. <u>Average Depth Q7,2</u>	Greater than 24".	0	12" to 24".	6	6" to 12".	(18)	Less than 6". 24
	10. <u>Flow Q7,2</u>	Warm water, >5 cfs. Cold water, greater than 2 cfs.	0	Warm water, 2 to 5 cfs. Cold water, 1 to 2 cfs.	6	Warm water, .5 to 2 cfs. Cold water, .5 to 1 cfs. Continuous flow.	18	Less than .5 cfs. Stream may cease to flow in very dry years. (24)
Stream	11. <u>Pool/Riffle, Pool/Bend Ratio</u>	5' to 7. Variety of habitat. Deep riffles and pools.	4	7 to 15. Adequate depth in pools and riffles. Bends provide habitat.	8	15 to 25. Occasional riffle or bend. Bottom contours provide some habitat.	16	Greater than 25. Essentially a straight stream. Generally all "flat water" or shallow riffle. Poor habitat. (20)
	12. <u>Aesthetics</u>	Wilderness characteristics, outstanding natural beauty. Usually wooded or unpastured corridor.	8	High natural beauty. Trees, historic site. Some development may be visible. (10)		Common setting, not offensive. Developed but uncluttered area.	14	Stream does not enhance aesthetics. Condition of stream is offensive. 16

Column Total --

Add column scores E 26 + G 18 + F 48 + P 66 Total Reach Score 158

≤ 70 = Excellent, 71-129 = Good, 130-200 = Fair, >200 Poor

GAMMARUS

TADPOLES

DIVING BEETLE

STREAM SYSTEM HABITAT RATING FORM

Stream MUD Reach Location CTH 444 Reach Score/Rating 126 - GOOD
 County MANITOWOC Date 6-2-82 Evaluator DEJGER Classification CONTIN - F4A

Rating Item	Category							
	Excellent		Good		Fair		Poor	
1. <u>Erosion</u>	No evidence of significant erosion. Stable forest or grass land. Little potential for future erosion.	(8)	Some erosion evident. No significant "raw" areas. Good land mgmt. practices in area. Low potential for significant erosion.	10	Moderate erosion evident. Erosion from heavy storm events obvious. Some "raw" areas. Potential for significant erosion.	14	Heavy erosion evident. Probable erosion from any runoff.	16
2. <u>Nonpoint Source</u>	No evidence of significant source. Little potential for future problem.	4	Some potential sources. (roads, urban area, farm fields).	(8)	Moderate sources. (Small wetlands, tile fields, urban area, intense agriculture).	16	Obvious sources. (Major wetland drainage, high use urban or industrial area, feed lots, impoundment).	20
3. <u>Erosion, Failure</u>	No evidence of significant erosion or bank failure. Little potential for future problem.	(6)	Infrequent, small areas, mostly healed over. Some potential in extreme floods.	9	Moderate frequency and size. Some "raw" spots. Erosion potential during high flow.	15	Many eroded areas. "Raw" areas frequent along straight sections and bends.	18
4. <u>Vegetative Protection</u>	90% plant density. Diverse trees, shrubs, grass. Plants healthy with apparently good root system.	6	70-90% density. Fewer plant species. A few barren or thin areas. Vegetation appears generally healthy.	(9)	50-70% density. Dominated by grass, sparse trees and shrubs. Plant types and conditions suggest poorer soil binding.	15	<50% density. Many raw areas. Thin grass, few if any trees and shrubs.	18
5. <u>Channel Capacity</u>	Ample for present plus some increase. Peak flows contained. W/D ratio ≤ 7 .	8	Adequate. Overbank flows rare. W/D ratio 8-15.	10	Barely contains present peaks. Occasional overbank flow. W/D ratio 15 to 25.	(14)	Inadequate, overbank flow common. W/D ratio >25 .	16
6. <u>Deposition</u>	Little or no enlargement of channel or point bars.	(6)	Some new increase in bar formation, mostly from coarse gravel.	9	Moderate deposition of new gravel and coarse sand on old and some new bars.	15	Heavy deposits of fine material, increased bar development.	18
7. <u>Scouring and Deposition</u>	Less than 5% of the bottom affected by scouring and deposition.	4	5 to 30% affected. Scour at constrictions and where grades steepen. Some deposition in pools.	(8)	30 to 50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools.	16	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition.	20