

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. 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 20 + G 41 + F 65 + P ____ Total Reach Score 126

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

MAVELY
CADDIS FLY
GAMMARUS
SNAILS
CRAYFISH

CORRESPONDENCE/MEMORANDUM

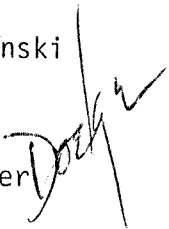
JUN 16 1982

STATE OF WISCONSIN

Date: June 14, 1982

File Ref: 3200

To: Dave Jelenski

From: Tim Doelger 

Subject: Mud Cr/Kasson Cheese

On 5-11-82 and 6-2-82, I re-evaluated Mud Creek using the new Stream Classification Guidelines.

Habitat rating forms were completed at Hickory Hills Road, Gill Road, County K, County GGG, Reif's Mills Road, and Goodwin Road. Using the new system Mud Creek will be reclassified as continuous intermediate from Hickory Hills Road to County GGG where it changes to continuous Fish and Aquatic. The habitat rating forms are attached.

Although the report has not been finalized, these classifications will not change and should be used to establish discharge limits for Kasson Cheese.

TD:pk

cc: Mike Russo

STREAM SYSTEM HABITAT RATING FORM

Stream MAUD

Reach Location MAUD

Reach Score/Rating 142 / FAIR

County MAINTOWN

Date 6-2-32

Evaluator DOUGLAS - INTERMEDIATE

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

Watershed

Upper Bank

Lower Bank

Bottom

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. 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 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

STREAM SYSTEM HABITAT RATING FORM

Stream *Ne*

Reach Location GILL RD

Reach Score/Rating 153 / Fair

County Montgomery

Date 6-2-32 Evaluator D. J. [Signature]

Classification CONTINUOUS / INTERMEDIATE

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	
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 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, 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

CADWIS FEELS

SNAILS

LARGE FISH STARTLED. DID NOT OBSERVE IF (CARP?)

STREAM SYSTEM HABITAT RATING FORM

Stream Mud

Reach Location CRK

Reach Score/Rating 153/154

County MAINTOWSE

Date 6-2-82 Evaluator D. J. J. J.

Classification CONTIN. IMPROVED

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

Watershed

Upper Bank

Lower Bank

Bottom

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 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, 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 Wub.

Reach Location CTH 466

Reach Score/Rating 126 - Good

County MAHITSLIDE

Date 6-2-82

Evaluator DAVID

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

Watershed

Upper Bank

Lower Bank

Bottom

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 20 + G 41 + F 65 + P ____ Total Reach Score 126

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

MAYFLY
 CADDIS FLY
 GAMMARUS
 SNAILS
 CRAYFISH

STREAM SYSTEM HABITAT RATING FORM

Stream Mudice Reach Location Reids Mills P. Reach Score/Rating 99 Good
 County Winn-Dixie Date 7-11-82 Evaluator Don E. G. R. Classification Good F-1A

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

Watershed

Upper Bank

Lower Bank

Bottom

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. 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 inhance aesthetics. Condition of stream is offensive.	16

Column Total --

Add column scores E 14 + G 71 + F 14 + P ____ Total Reach Score 99

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

STREAM SYSTEM HABITAT RATING FORM

Stream

Reach Location

Reach Score/Rating 118 - Good

County Albion

Date 5-11-84

Evaluator D. J. [unclear]

Classification CONTIN FEA

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
	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
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 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
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	
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
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 12 + G 46 + P 18 Total Reach Score 118

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

GAMMARUS

SNAILS

FEEDING STREAM

SOME PUNCTATUS ALREADY PRESENT

February 3, 1977

Village of Reedsville - Manitowoc County

The Village of Reedsville Sewage Treatment Plant was placed in operation in October, 1973. Treatment units include a contact-stabilization type activated sludge plant followed by polishing pond. Discharge from the polishing pond is directed to Mud Creek.

Mud Creek originates in a marsh area in Brown County. Flowing south into Manitowoc County, the creek drains Maple Grove Swamp to the north of Reedsville. After bisecting the village, the creek drains Collins Marsh before joining the Manitowoc River.

The creek is characterized by brown-stained water and a muck bottom. The fish population consists of forage fish. The adjoining wetlands provide valuable habitat for migrating waterfowl. A dam is located east of Collins near County Trunk Highway 'JJ'. At the time of the survey, the creek was dry below the dam.

Recommendation:

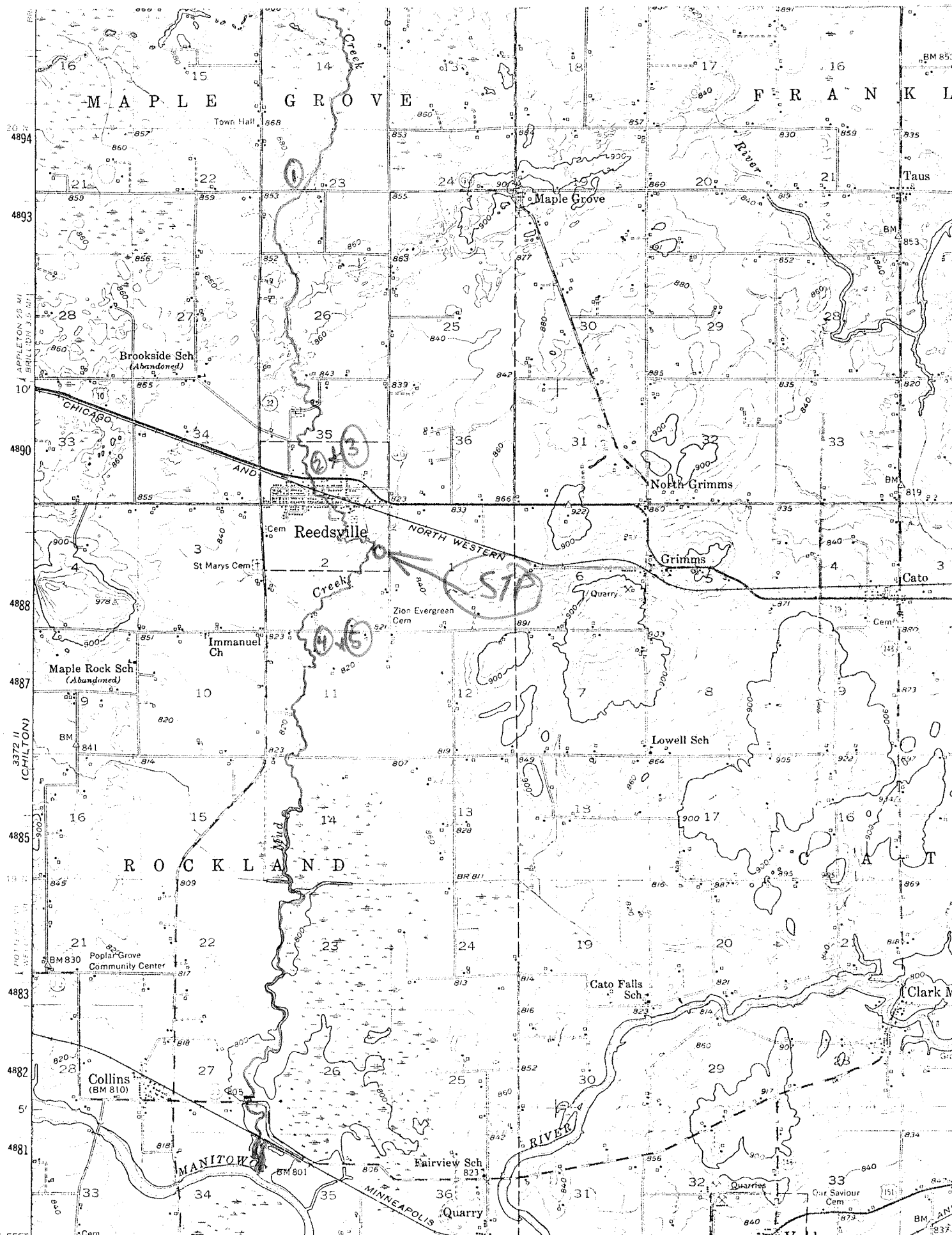
Non-continuous, marginal uses from origin to Manitowoc River.

A handwritten signature in cursive script, appearing to read "Bob Lucas".

Robert B. Lucas

RBL:sh

① = Photo locations



Reedsville - Photos

Photo ① is a slide showing Mud Creek dry above
County Trunk 'G G G'



② Mud Creek
at Hwy 10
- Downstream
- Above STOP



③ Same location
- Upstream

Reedsville - Photos



④ W. Goodwin Rd
- Downstream
- Below STP



⑤ Same location
- Upstream