

Region SCR County Dodge Report Date 8/1991 Classification LAL/LFF
 Water Body: Beaver Creek, Randolph Br. Trib
 Discharger: Village of Randolph

If stream is classified as Limited Forage Fish (LFF) or Limited Aquatic Life (LAL), check any of the following Use Attainability Analysis factors that are identified in the classification report:

- Naturally occurring pollutant concentrations prevent the attainment of use
- Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met
- Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place
- Dams, diversions or other types of hydrologic modifications Channelization preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or operate such modification in a way that would result in the attainment of the use
- Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses
- Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact

Supporting Evidence in the report (include comments on how complete/thorough data is)

- Biological Data (fish/invert) macro,
- Chemical Data (temp, D.O., etc.)
- Physical Data (flow, depth, etc.)
- Habitat Description
- Site Description/Map
- Other: photos/slides

Historical Reports in file:

- 8/1991 - Marc Jesing
- 9/23/74 - Tom Bainbridge

Additional Comments/How to improve report:

- effluent ditch = LAL -- ~~no more data~~ -- should this be drop deleted?
- need more justification for LFF classin.

**RANDOLPH BRANCH TRIBUTARY
TO BEAVER CREEK**

**TRIENNIAL STANDARDS REVIEW
RANDOLPH WWTP**

AUGUST 1991

MARK SESING - SOUTHERN DISTRICT

**BUREAU OF WATER RESOURCES MANAGEMENT
WISCONSIN DEPARTMENT OF NATURAL RESOURCES**

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SUMMARY

This report covers two separate stream reaches. One of these is an effluent ditch, LAL(f) (marginal) and the second is an irretrievably culturally impacted tributary to the Beaver Creek, LLF(e) (intermediate). Examination of physical and biological conditions on the tributary to Beaver Creek supports the previous use classification assigned. However, the effluent ditch, LAL(f), no longer exists as it has been entirely contained within a culvert until joining with the tributary.

The Village of Randolph is permitted (WPDES permit #WI-0031160-4) to discharge treated wastewater effluent to the Beaver Dam River subwatershed via a culvert which flows into a small ditched tributary of Beaver Creek. The receiving stream, a tributary to Beaver Creek, received a variance classification authorized under Chapter NR 104 of Wisconsin Administrative Code because it qualified under one or more of the following criteria:

- a) The presence of in-place pollutants
- b) Low natural stream flow
- c) Natural background conditions
- d) Irretrievable cultural alterations

Due to limited depth and width, the recreational use classification would be for partial body contact only.

SUMMARY

This report covers two separate stream reaches. One of these is an effluent ditch, LAL(f) (marginal) and the second is an irretrievably culturally impacted tributary to the Beaver Creek, LLF(e) (intermediate). Examination of physical and biological conditions on the tributary to Beaver Creek supports the previous use classification assigned. However, the effluent ditch, LAL(f), no longer exists as it has been entirely contained within a culvert until joining with the tributary.

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- d) Irretrievable cultural alterations

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GENERAL DESCRIPTION

Effluent Channel to Tributary (Randolph Branch Tributary)

This channel has been enclosed within a culvert and it's sole purpose is to convey treated wastewater effluent to the tributary. Average daily flow is 0.255 mgd. The effluent channel should be removed from the variance listing in Ch. NR 104.

Tributary to Beaver Creek

This is continuous flowing, spring fed, creek which joins Beaver Creek at T12N, R12E, Section 24, NW $\frac{1}{4}$, NW $\frac{1}{4}$. The adjoining land use is agricultural. The stream flows southwesterly for approximately 3 miles. The effluent culvert (discussed above) joins this tributary approximately 2 miles upstream of its junction with Beaver Creek and just east of the Randolph WWTP.

The $Q_{7,10}$ for this tributary stream is 0.03 CFS (USGS). The tributary originates in small springs located just north of the WWTP. Runoff from the Village of Randolph is also directed to the tributary.

STREAM HABITAT, WATER QUALITY, BIOLOGY

The tributary was surveyed in May, 1989. Field investigations included semi-qualitative macroinvertebrate sampling (HBI) fish sampling and habitat assessment (Ball 1982: Platt, S. 1983).

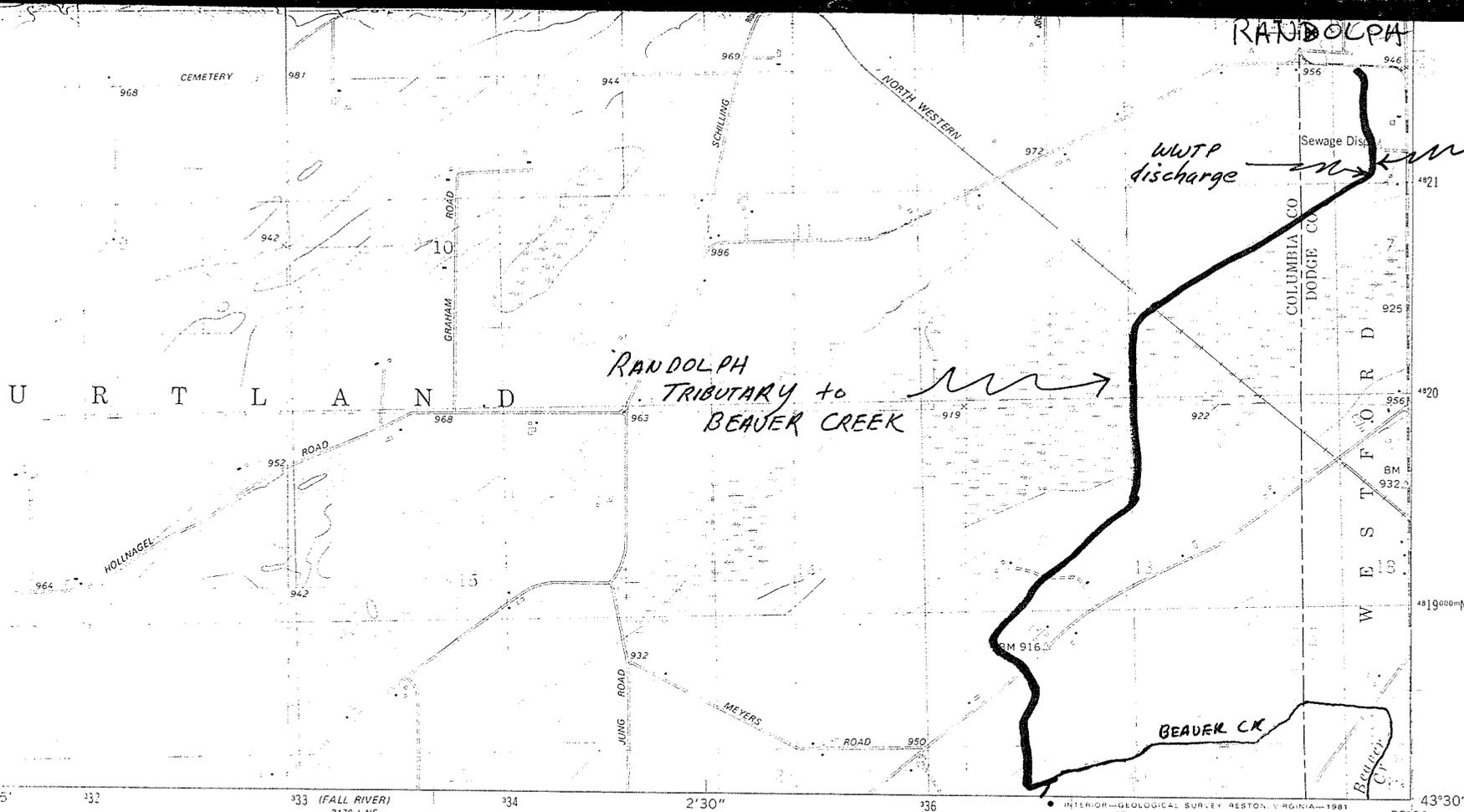
An HBI sample was obtained (map and Appendix 2) prior to the tributary receiving effluent. The invertebrates present were dominated by the midge family (Chironomidae) and the "kick" yield an HBI value of 5.17. Limited electroshocking of an approximate 100 foot reach also indicated a tolerant community of forage fish consisting solely of brook sticklebacks, Culaea inconstans.

Habitat evaluations (Appendix 1) show poor available habitat. Cultural impacts from channelization, agricultural non-point sources, and naturally occurring size and flows create conditions which are unable to sustain a balanced community of aquatic life. Silt, clay, and sand are primary substrate types and scour/sedimentation limits invertebrate colonization to sediment tolerant species. Imbeddedness of the original substrate is >75%. Riparian habitat availability is fair and dominated by overhanging grasses. Turbidity and filamentous algae are significant. Prior channelization of the entire stream length has occurred and the stream has very little aesthetic quality.

The available biological, habitat, and physical characteristics of the Beaver Creek Tributary confirm the original variance classifications of Limited

Forage Fish Communities, LFF(e). The Randolph Branch effluent channel no longer exists and should be deleted from NR 104.

RANDOLPH TRIB TO BEAVER CK.

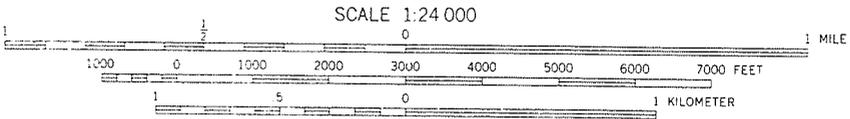


HBI and Fish monitoring site (5-19-89)

RANDOLPH TRIBUTARY to BEAVER CREEK

WWTTP discharge

BEAVER CK



CONTOUR INTERVAL 10 FEET
 NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS FOR SALE BY U.S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092 AND WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY, MADISON, WISCONSIN 53706. A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST.



ROAD CLASSIFICATION

Primary highway, hard surface	Light-duty road, hard or improved surface
Secondary highway, hard surface	Unimproved road
Interstate Route	U. S. Route
	State Route

RANDOLPH, WIS.
 SE 4 RANDOLPH 15' QUADRANGLE
 N4330-W8900/7.5

1980

(LOST LAKE)
 3230 N.W.

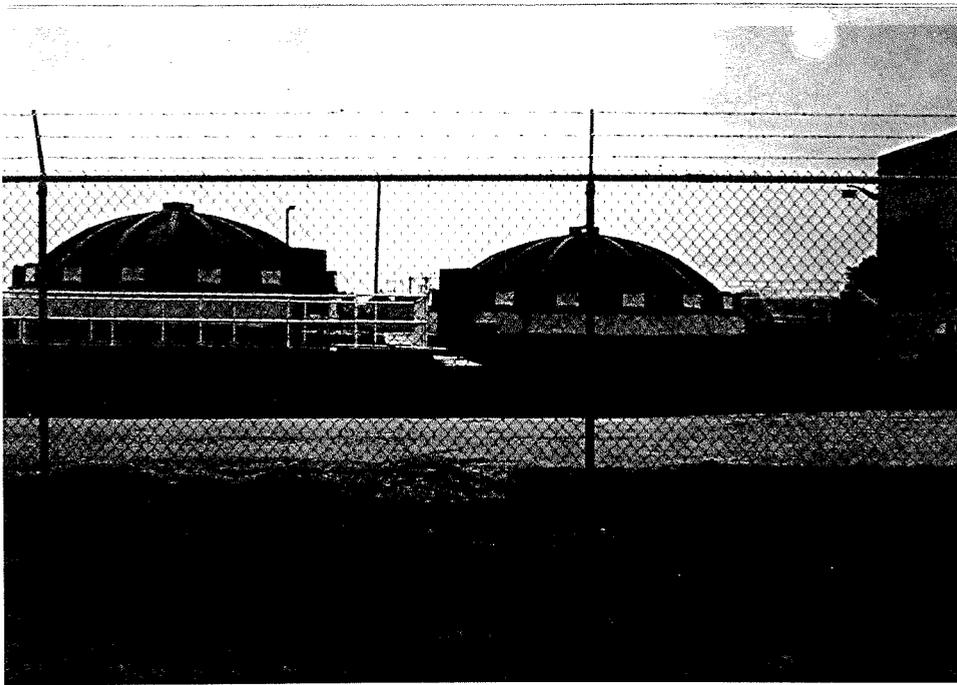
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Randolph Tributary to Beaver Creek. This segment is upstream of the wastewater discharge and is formed by two small springs south of the Village of Randolph.

Randolph Tributary to Beaver Creek below the wastewater discharge point. Dense overhanging vegetation provides habitat for a tolerant forage fishery.





Village of Randolph WWTP

Randolph Tributary to Beaver Creek at CTH G, about two stream miles downstream from WWTP. Land use is agricultural and nonpoint sources are significant.



Stream Randolph Trib to Beaver Creek Reach Location Randolph Trib between STH 73 + 946 Reach Score/Rating _____
 County Dodge/col Date 5-19-89 Evaluator MA. Seering Classification _____

Rating Item	Category			
	Excellent	Good	Fair	Poor
Watershed Erosion	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 run off. 16
Watershed Nonpoint Source	No evidence of significant source. Little potential for future problem. 8	Some potential sources (roads, urban area, farm fields). 10	Moderate sources (small wetlands, tile fields, urban area, intense agriculture). 14	Obvious sources (major wetland drainage, high use urban or industrial area, feed lots, impoundment). 16
Bank Erosion, Failure	No evidence of significant erosion or bank failure. Little potential for future problem. 4	Infrequent, small areas, mostly healed over. Some potential in extreme floods. 8	Moderate frequency and size. Some "raw" spots. Erosion potential during high flow. 16	Many eroded areas. "Raw" areas frequent along straight sections and bends. 20
Bank Vegetative Protection	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 Channel Capacity	Ample for present peak flow plus some increase. Peak flow 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 15-25. 14	Inadequate, overbank flow common. W/D ratio >25. 16
Lower Bank Deposition	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 Scouring and Deposition	Less than 5% of the bottom affected by scouring and deposition. 4	5-30% affected. Scour at constrictions and where grades steepen. Some deposition in pools. 8	30-50% 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
Bottom Substrate/Available Cover	Greater than 50% rubble, gravel or other stable habitat. 2	30-50% rubble, gravel or other stable habitat. Adequate habitat. 7	10-30% 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
Avg. Depth Riffles and Runs	Cold >1' 0 Warm >1.5' 0	6" to 1' 6 10" to 1.5' 6	3" to 6" 18 6" to 10" 18	<3" 24 <6" 24
Avg. Depth of Pools	Cold >4' 0 Warm >5' 0	3' to 4' 6 4' to 5' 6	2' to 3' 18 3' to 4' 18	<2' 24 <3' 24
Flow, at Rep. Low Flow	Cold >2 cfs 0 Warm >5 cfs 0	1-2 cfs 6 2-5 cfs 6	.5-1 cfs 18 1-2 cfs 18	<.5 cfs 24 <1 cfs 24
Pool/Riffle, Run/Bend Ratio (distance between riffles ÷ stream width)	5-7. Variety of habitat. Deep riffles and pools. 4	7-15. Adequate depth in pools and riffles. Bends provide habitat. 8	15-25. Occasional riffle or bend. Bottom contours provide some habitat. 16	>25. Essentially a straight stream. Generally all flat water or shallow riffle. Poor habitat. 20
Aesthetics	Wilderness characteristics, outstanding natural beauty. Usually wooded or un-pastured 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 Totals: _____ 10 74 114

Column Scores E _____ + G 10 + F 74 + P 114 = 198 = Score

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

RANDOLPH TRIB TO BEAVER CK

PHYSICAL CHARACTERIZATION/WATER QUALITY
FIELD DATA SHEET

PHYSICAL CHARACTERIZATION

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use:

Forest Field/Pasture Agricultural Residential Commercial Industrial Other _____

Local Watershed Erosion: None Moderate Heavy

Local Watershed NPS Pollution: No evidence Some Potential Sources Obvious Sources

Estimated Stream Width 1 m Estimated Stream Depth: Riffle 0.1 m Run 0.2 m Pool 0.3 m

High Water Mark _____ m Velocity <0.5 ^{fps} Dam Present: Yes _____ No Channelized: Yes No _____

Canopy Cover: Open to Partly Open Partly Shaded Shaded

SEDIMENT/SUBSTRATE:

Sediment Odors: Normal Sewage Petroleum Chemical Anaerobic None Other _____

Sediment Oils: Absent Slight Moderate Profuse

Sediment Deposits: Sludge Sawdust Paper Fiber Sand Relict Shells Other clay + silt + muck

Are the undersides of stones which are not deeply embedded black? Yes No

Inorganic Substrate Components		
Substrate Type	Diameter	Percent Composition in Sampling Area
Bedrock	>256-mm (10 in.)	—
Boulder	64-256-mm (2.5-10 in.)	— 10
Cobble	2-64-mm (0.1-2.5 in.)	— 10
Gravel	2-64-mm (0.1-2.5 in.)	— 10
Sand	0.06-2.00-mm (gritty)	— 10
Silt	.004-.06-mm	— 35
Clay	<.004-mm (slick)	— 35

Organic Substrate Components		
Substrate Type	Characteristic	Percent Composition in Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM)	—
Muck-Mud	Black, Very Fine Organic (FPOM)	—
Marl	Grey, Shell Fragments	—

WATER QUALITY

Temperature _____ C Dissolved Oxygen _____ pH _____ Conductivity _____ Other _____

Instrument(s) Used _____

Stream Type: Coldwater Warmwater

Water Odors: Normal Sewage Petroleum Chemical None Other _____

Water Surface Oils: Slick Sheen Globs Flecks None

Turbidity: Clear Slightly Turbid Turbid Opaque Water Color brown

WEATHER CONDITIONS cloudy, light rain

PHOTOGRAPH NUMBER Photo sequence (1) Hwy 73 upstn WWTP (2) Bridge at WWTP (3) CTH 6 (downstn) (4) private drive before CTH 6 and WWTP

HABITAT ASSESSMENT FIELD DATA SHEET

Habitat Parameter	Category			
	Excellent	Good	Fair	Poor
1. *Bottom substrate/ available cover ^(a)	Greater than 50% rubble, gravel, submerged logs, undercut banks, or other stable habitat. 16-20	30-50% rubble, gravel or other stable habitat. Adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability less than desirable. 6-10	Less than 10% rubble gravel or other stable habitat. Lack of habitat is obvious. 5 0-5
2. Embeddedness ^(b)	Gravel, cobble, and boulder particles have between 0 and 25% of their surface covered by fine sediment 16-20	Gravel, cobble, and boulder particles have between 25 and 50% of their surface covered by fine sediment 11-15	Gravel, cobble, and boulder particles have between 50 and 75% of their surface covered by fine sediment 6-10	Gravel, cobble, and boulder particles have over 75% of their surface covered by fine sediment 3 0-5
3. ≤0.15 cms (5cfs) * *Flow ^(a) at rep. low flow or >0.15 cms (5cms) * Velocity/depth	Cold >0.05 cms (2 cfs) Warm >0.15 cms (5 cfs) 10-20	0.03-0.05 cms (1-2 cfs) 0.05-0.15 cms (2-5 cfs) 11-15	0.01-0.03 cms (.5-1 cfs) 0.03-0.05 cms (1-2 cfs) 6-10	<0.01 cms (.5 cfs) <0.03 cms (1 cfs) 0-5
	Slow (<0.3 m/s), deep (>0.5 m); slow, shallow (<0.5 m); fast (>0.3 m/s), deep; fast, shallow habitats all present. 16-20	Only 3 of the 4 habitat categories present (missing riffles or runs receive lower score than missing pools). 11-15	Only 2 of the 4 habitat categories present (missing riffles/runs receive lower score). 6-10	Dominated by one velocity/depth category (usually pool). 5 0-5
4. * Channel alteration ^(a)	Little or no enlargement of islands or point bars, and/or no channelization. 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channelization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks. 4-7	Heavy deposits of fine material, increased bar development; most pools filled w/silt; and/or extensive channelization. 3 0-3
5. Bottom scouring and deposition ^(a)	Less than 5% of the bottom affected by scouring and deposition. 12-15	5-30% affected. Scour at constrictions and where grades steepen. Some deposition in pools. 8-11	30-50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools. 4 4-7	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition. Only large rocks in riffle exposed. 0-3

(a) From Ball 1982.

(b) From Platts et al. 1983.

Note: * = Habitat parameters not currently incorporated into BIOS.

Figure 5.2-1. Habitat Assessment Field Data Sheet for use with all Rapid Bioassessment Protocols.

Sample ID # 890519-14-02 Waterbody Name Randolph Trib to Beaver Creek
Y Y M M D D Cnty Field #

Water Temp (Celsius) NA Dissolved Oxygen (mg/l) NA

Sample Location: SE NW 07 12N 13E Master Waterbody # 0836500
1/16 1/4 Sec. Tn., Rng.

Project Name TRIENNIAL REVIEW Storet Station # _____

Ave. Stream Width (Ft.) at Site 3.0 Ave. Stream Depth (Ft.) at Site 0.5

Collector SESING, M. Field # 02 (Rep 1) Rep 2 Rep 3
(Last Name, First Initial) Measured Velocity (fps) _____

Sorter McMullin Ron Est. Velocity (fps) V. Slow (<0.2)
Slow 0.2-0.5
Moderate (0.5-1.5)
Fast (1.5- >)

Est. % of sample sorted 7%

Taxonomist Dimick, J.

Location Description Ricicle 30' downstream of WWTP ROAD CROSSING Sampled Habitat: 1. Riffle 2. Run 3. Pool 4. Lake

Sampling Device 1. D Frame, 2. Artificial Substrate, 3. Surber, 4. Other Est. Time Spent Sampling (Min.) 1

Substrate at Site Location (%)
Bedrock _____ Rubble (2.5 -10.0" dia.) 15 Sand 10 Clay 35 Muck _____
Boulders (10.0" dia.) 10 Gravel (0.1 - 2.5" dia.) 35 Silt 10 Detritus _____ Debris/Veg _____

Substrate Sampled (%) (Same as above NO)
Bedrock _____ Rubble (2.5 - 10.0" dia.) _____ Sand _____ Clay _____ Muck _____
Boulders (10.0 dia.) 90 Gravel (0.1 - 2.5" dia.) 10 Silt _____ Detritus _____ Debris/Veg _____

Aquatic Vegetation _____ % of Total Stream Channel at Sample Site

Observed Instream Water Quality Indicators (Perceived WQ: Excellent, Good, Fair, Poor)

	Not Present	Insignificant	Significant	Comments
Turbidity	1	2	3	
Chlorine or Toxic Scour	1	2	3	- Chironomids dominate sample
Macrophytes	1	2	3	
Filamentous Algae	1	2	3	
Planktonic Algae	1	2	3	- stickle backs
Slimes	1	2	3	
Iron Bacteria	1	2	3	

Factors Which May Be Affecting Habitat Quality

	Not Present	Insignificant	Significant	Comments
Sludge Deposits	1	2	3	
Silt and Sediment	1	2	3	
Channel Ditching	1	2	3	
Down/Up Stream Impoundment	1	2	3	
Low Flows	1	2	3	
Wetlands	1	2	3	

Pollutant Sources

	Not Present	Insignificant	Significant	Comments
Livestock Pasturing	1	2	3	
Barnyard Runoff	1	2	3	
Cropland Runoff	1	2	3	
Tile Drains	1	2	3	
Septic Systems	1	2	3	
Streambank Erosion	1	2	3	
Urban Runoff	1	2	3	
Construction Runoff	1	2	3	
Point Source (Specify Type)	1	2	3	
Other (Specify)	1	2	3	

SOUTHERN DISTRICT District Biotic Index Report

HBI 5.170 Rep1 0.000 Rep2 0.000 Rep3
 Sample ID # B90519-14-02 Waterbody Name RANDOLPH TRIBE/BEAVER CREEK
 Water Temp (Celsius) _____ Dissolved Oxygen (mg/l) _____
 Sample Location: SE NW S 7 T12N R13E Master Waterbody # 0836500
 Project Name TRIENNIAL REVIEW Storet Station # _____
 Ave Stream Width (Ft.) at Site 3.0 Ave. Stream Depth (Ft.) at Site 0.5
 Collector SESING, M. Field # 02 Rep 1
 Measured Velocity (fps) _____
 Est. Velocity (fps) _____
 Sorter McMULLIN, R. _____
 Est % of sample sorted 7 _____ Slow (0.2-0.5)
 Taxonomist DIMICK, J. _____ Sampled Habitat _____
 Location Description RIFFLE 30' DWNSTRM OF WWTP ROAD _____
 CROSSING _____

Est. Time Spent Sampling (Min.) 1

Sampling Device 1. D Frame

Substrate at Site Location (%)
 0.0 Bedrock 15.0 Rubble 10.0 Sand 35.0 Clay 0.0 Muck
 0.0 Boulders 10.0 Gravel 35.0 Silt 10.0 Detritus 0.0 Debris/Veg

Substrate Sampled (%) (Same as above No_)
 0.0 Bedrock 90.0 Rubble 0.0 Sand 0.0 Clay 0.0 Muck
 0.0 Boulders 10.0 Gravel 0.0 Silt 0.0 Detritus 0.0 Debris/Veg

Aquatic Vegetation 0 % of Total Stream Channel at Sampling Site
 Observed Instream Water Quality Indicators (Perceived WQ _____)

	Not Present	Insig- nificant	Sig- nificant	Comments
Turbidity		2		CHIRONOMIDS DOMINATE SAMPLE
Chlorine or Toxic Scour	1			STICKLEBACKS
Macrophytes		2		
Filamentous Algae			3	
Planktonic Algae		2		
Slimes			3	
Iron Bacteria	1			

Factors Which May Be Affecting Habitat Quality

Sludge Deposits	1		
Silt and Sediment			3
Channel Ditching			3
Down/Up Stream Impoundment	1		
Low Flows			3
Wetlands		2	

Pollutant Sources

Livestock Pasturing	1		
Barnyard Runoff	1		
Cropland Runoff			3
Tile Drains		2	
Septic Systems	1		
Stream Bank Erosion		2	
Urban Runoff		2	
Construction Runoff		2	
Point Source (Specify Type)		2	
Other (Specify)			

SAMPLE ID# 890519-14-02

PAGE 2

TAXA	SPECIES	TAXONOMIC TOL		ORGANISM ID	ORGANISM COUNT		
		KEY USED	VAL		REP1	REP2	REP3
COLEOPTERA							
ELMIDAE							
OPTIOSERVUS		*1	4.00	07020500	1	0	0
DIPTERA							
CERATOPOGONIDAE							
PROBEZZIA		*1	6.00	08030600	1	0	0
NILOBEZZIA		*1	6.00	08030900	1	0	0
CHIRONOMIDAE							
	PUPAE	*2		08050002	1	0	0
	POOR SPECIMEN	*1		08050004	1	0	0
CHAETOCLADIUS	SP.A	*3	5.00	08050503	2	0	0
CRICOTOPUS	NR.INTERSECTUS	*3	7.00	08051302	8	0	0
	SP.A	*3	6.00	08051304	1	0	0
	SP.C	*3	7.00	08051306	1	0	0
ORTHOCLADIUS	SP.B	*3	3.00	08054002	48	0	0
	SP.D	*3	5.00	08054004	13	0	0
PSECTROCLADIUS		*1	8.00	08055400	1	0	0
RHEDCRICOTOPUS		*1	6.00	08055800	115	0	0
THIENEMANNIMYIA		*3		08057000	1	0	0
PARAPHAENOCLADIUS		*3	4.00	08058500	8	0	0
ORTHOCLADINAE	**POOR SPECIMEN**	*1		08059101	1	0	0
OLIGOCHAETA							
TERRESTRIAL		*4		16050000	1	0	0

*** TOTALS: ***

205

0

0

*** BIOTIC INDEX: ***

5.170

Taxonomic Key Code References

- *1 Hilsenhoff 1981
- *2 Merritt, Cummins 84
- *3 Hilsenhoff 1981, 85
- *4

Village of Randolph
Dodge County
September 23, 1976

Randolph Branch - The Randolph sewage treatment plant discharges into the Randolph Branch. The Randolph Branch is an intermittent water course with some small springs in its headwaters. Randolph Branch has been ditched and straightened throughout.

Beaver Creek Tributary - Randolph Branch flows into the Beaver Creek tributary which originates in and is entirely buffered by a large marsh. Its lower reaches dissipates into a marsh before entering Beaver Creek. The stream has a limited fishery because of low flow and high temperatures.

Recommendations

From the Randolph sewage treatment plant outfall downstream to the juncture with Beaver Creek Tributary the classification should be noncontinuous marginal surface waters. From this point and for the remainder of Beaver Creek Tributary, the classification should be noncontinuous surface waters not supporting a balanced aquatic community.

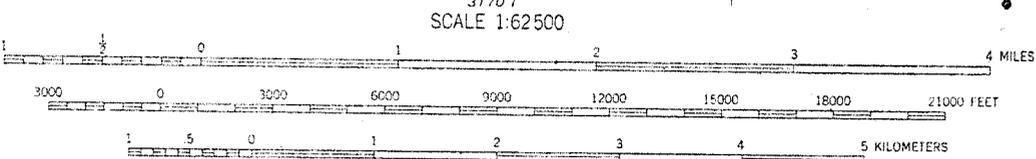
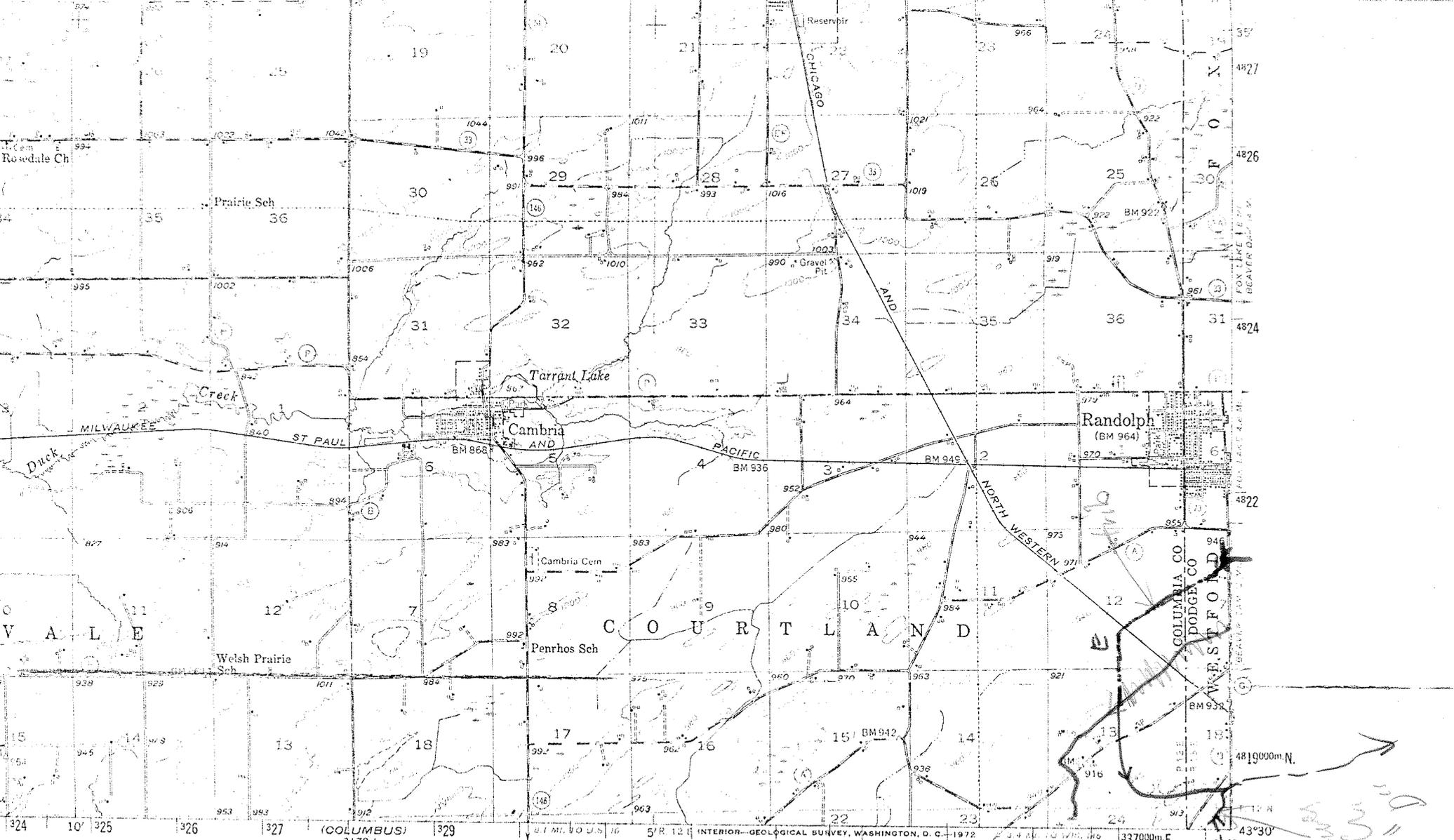
The above recommendations represent a concurrence of opinion of the stream classification team who are as follows:

Robert Weber - District Engineer
Jim Congdon - Area Fish Manager
Tom Bainbridge - District Biologist
Roger Schlessler - Natural Resources Technician

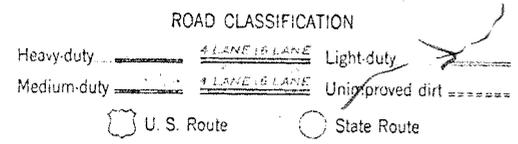
Respectfully submitted,


Thomas Bainbridge
Stream Classification Coordinator

RS:lg



CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL



RANDOLPH, WIS.
N4330-W8900/15

1955

AMS 3171 II-SERIES V761

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242
AND WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY, MADISON, WISCONSIN 53706
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

Handwritten notes:
4819000m N
43°30'
89°00'
BEAVER DAM
3270 IV

STATE OF WISCONSIN

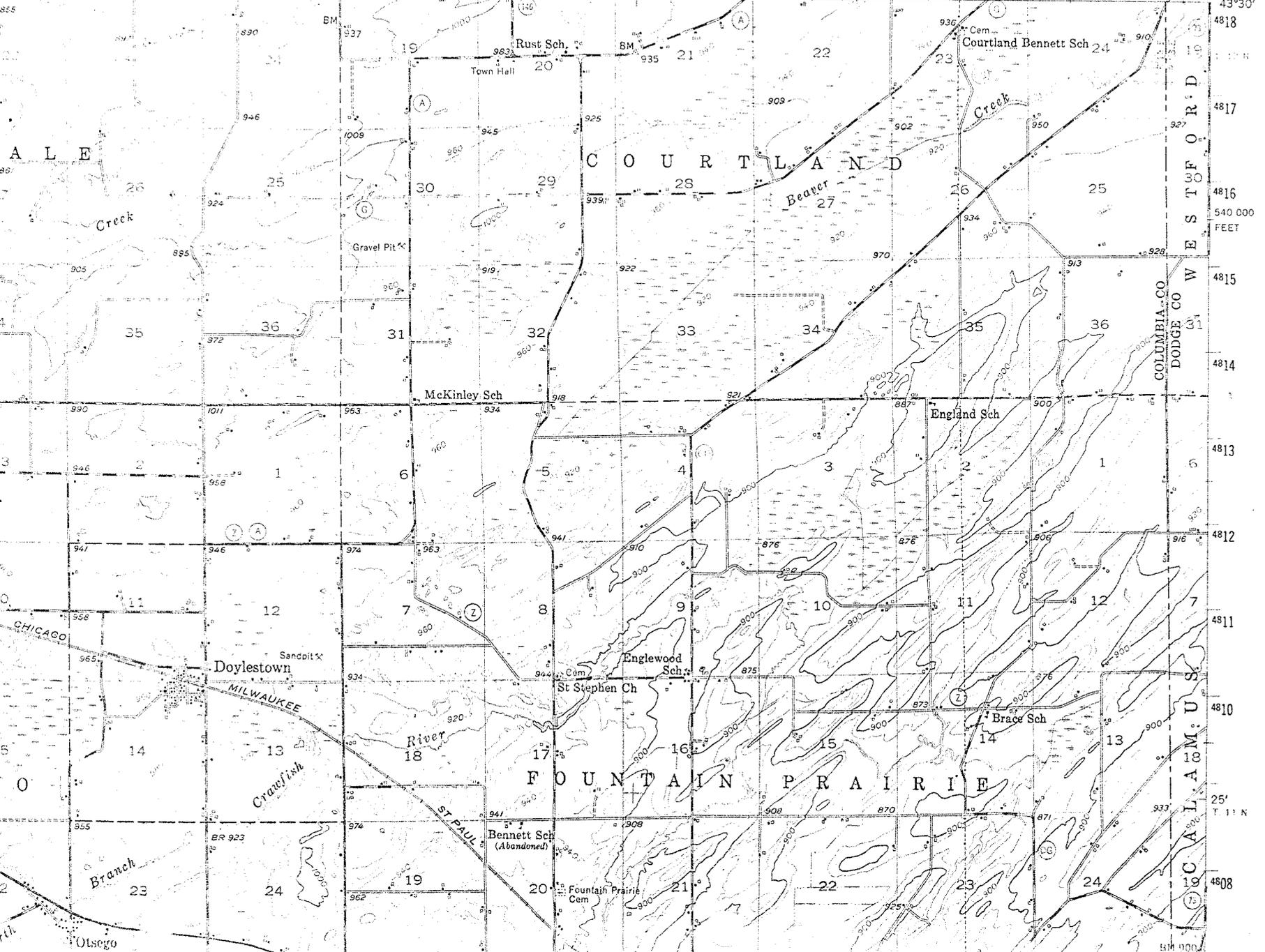
COLUMBUS QUADRANGLE

WISCONSIN

15 MINUTE SERIES (TOPOGRAPHIC)

3271 III
FOX LAKE

324 10' 325 326 327 3171 II (RANDOLPH) 329 4.5 MI. TO WIS. 33 CAMBRIA 3 MI. 5' 332 R. 12 E. RANDOLPH 4.3 MI. 335 2 260 000 FEET 89°00'



43°30'
4818
4817
4816
540 000
FEET
4815
4814
4813
4812
4811
4810
25'
T 11 N
4808

C O U R T L A N D

F O U N T A I N P R A I R I E

COLUMBIA CO
DODGE CO

C A L A M U S