

**Region** NER **County** Fond du Lac **Report Date** August 1975 and January 1983 **Classification** LFF

**Water Body:** Tributary to the Sheboygan River

**Discharger:** Mt. Calvary Wastewater Treatment Plant

**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 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) Some fish and invertebrate data are provided in the 1975 report (just a list of common names). The 1983 report says tolerant macroinvertebrates found and several fish spp. including perch, dace, and pumpkinseed.
- Chemical Data (temp, D.O., etc.) 1975 report does not present any chemical data. 1983 report presents no chemical data either.
- Physical Data (flow, depth, etc.) 1975 report cites a 0.0 cfs gage. No other physical data presented in either report except the stream has "low flow" (no flow data though)
- Habitat Description None in the 1975 report. The 1983 report describes stream as slow, silted, and covered with duckweed. Habitat ratings of 187 and 155 given. Rubble bottom but silted.
- Site Description/Map Length of stream before joining an agricultural drainage ditch (1975 report) and Sheboygan River. (The 1983 report says perch and pumpkinseed likely swim up from Sheboygan River one-mile downstream.)
- Other: \_\_\_\_\_

**Historical Reports in file:**

- 1975 Wastewater Receiving Stream Classification for Mount Calvary, Fond du Lac County, 1 page.
- 1983 - Stream Classification of Tributary to Sheboygan River at Mount Calvary, 1 page.
- 3 photos (1975?), 1 map

**Additional Comments/How to improve report:**

The most recent biological data were collected in 1983. May need updating given the observation of perch and pumpkinseed (may have come from Sheboygan River, or may not have). More recent flow data would also be helpful.

Mount Calvary, Fond du Lac County

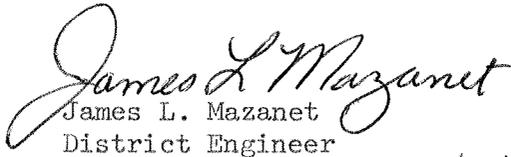
Wastewater Receiving Stream Classification

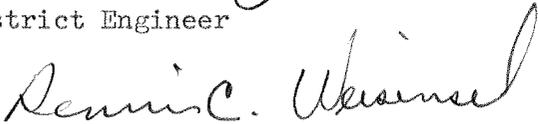
Survey Date: 8-6-75

The Village of Mount Calvary operates a two cell aerated lagoon wastewater treatment plant. Plant effluent is discharged to a seepage cell, but due to unsuitable soils, the cell overflows. Treated effluent enters a small stream having a  $7Q_{10}$  of 0.0 CFS. It flows for approximately 1/2 mile to CTH "CCC" where it is joined by an agricultural drainage ditch. At this point, the bottom life consists of mayflies, scuds, and chironomidae. Suckers, shiners, bullheads and perch were present. The stream flows for approximately one more mile before it joins the Sheboygan River.

Recommendations

The tributary flowing past the Mount Calvary STP shall be classified as a non-continuous stream, intermediate aquatic life. This classification will hold until the tributary joins the Sheboygan River. Sheboygan River shall be classified as a continuous, fish and aquatic life stream.

  
James L. Mazanet  
District Engineer

  
Dennis C. Weisensel  
District Biologist

JLM:DCW:sh

Date: January 5, 1983

File Ref: 3200

To: Files

From: Keith F. Hutchison

Subject: Stream Classification of Tributary to Sheboygan River at Mount Calvary

On September 8, 1982, the stream was assessed at the Mt. Calvary Wastewater Treatment Plant (WWTP) in Fond du Lac County. One assessment was made for the reach adjacent to the lagoons. This reach has been ditched, probably when the WWTP lagoons were constructed. The stream was sluggish, silted, covered with duckweed and accessible to cattle pastured on the south side of it. The stream system habitat rating form was used and the stream was assigned a value of 137.

The stream was also rated just above the WWTP and was assigned a habitat rating value of 155. The stream is not ditched in this reach. There is a nice rubble bottom but there are some siltation problems. Only a few tolerant macroinvertebrates could be found. However, numerous minnows were observed swimming in the pool areas. Some slimes were observed on the rocks.

A fish survey was conducted on this stream about 1/2 mile below the WWTP and just above Cln "CCC" on May 9, 1980. The following species and numbers of fish were captured and identified: Brook Stickleback-48; Central Mudminnow-35; Golden Shiner-18; Yellow Perch-15; Fathead Minnow-6, Pearl Dace-2; Northern Redbelly Dace-1; White Sucker-1, and Pumpkinseed-1. This is a fishery dominated by tolerant to very tolerant forage fish. Yellow Perch were present, but the survey was conducted in spring, and the sampling site is only a mile above the confluence with the Sheboygan River. It is likely that the perch (and pumpkinseed) swam upstream during the high water. One would surely not expect perch in the stream at the WWTP during summer low-flows.

In summary, this tributary to the Sheboygan River is sluggish with low flow and siltation problems. The 1969 Surface Water Resources of Fond du Lac County states that the stream is pastured and ditched in portions and nearly dries up during low flow periods. This stream is not large enough for a viable sport fishery, but is capable of supporting forage fish as evidenced by the minnows observed on September 8, 1982, and by the survey conducted on May 9, 1980.

Both stream system habitat rating values of 137 and 155 indicate a D "use class." Based on file data, this writer's observations and the stream habitat rating values, this tributary to the Sheboygan River should be classified as a class D stream, or noncontinuous intermediate aquatic life at Mt. Calvary.

KH:bes

cc: Tom Bainbridge - SD → Dan Moran - GEF II

BASSWOOD RD.

CTH 'UUD'

STP

MOUNT CALVARY

CTH 'WW'

CTH 'CCC'

DRAINAGE DITCH

Ch. 33.5

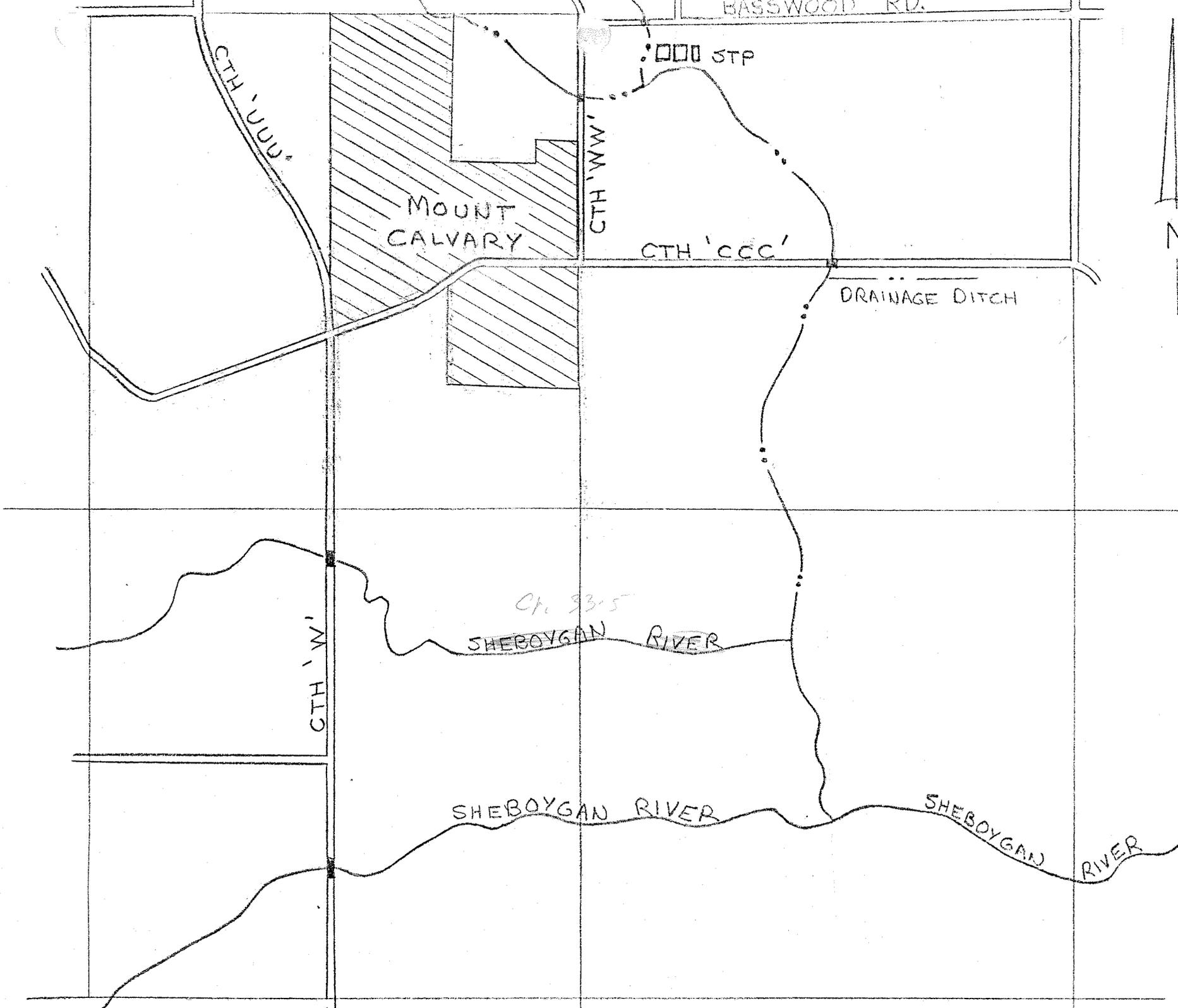
SHEBOYGAN RIVER

CTH 'W'

SHEBOYGAN RIVER

SHEBOYGAN RIVER

RIVER





Dry streambed at Basswood Road.



Looking downstream at the Mount Calvary STP.  
Discharge pipe is at center of photo. Note  
standing water above discharge.



Looking downstream from County "CCC"  
Drainage ditch comes in from left.