

Date 6/26/2000

Facility Name NONE

Receiving Water ULLA MANA CR.

Evaluated by WU WOUNG

This stream classification is not included in the revised code because (select one):

The discharger is no longer at this location.

A new classification has resulted in a full fish and aquatic life designation.
New survey date _____ Please provide copy of new classification report.

This receiving water should be added to the database and to the code. Specify information, as it should be included in code.

Other (please explain)

THERE ARE NO KNOWN SPECIFIC WASTE-
WATER PERMITS THAT DISCHARGE TO THIS
SURFACE WATER - THEREFORE, EXCLUDE
FROM THE CODE.

Villa Mann Creek Stream Classification
Kinnickinnic River Watershed
from Richard Randall, 1984
Water Resource Management
Southeast District
revised March, 1993

Introduction

Villa Mann Creek is a small tributary of Wilson Park Creek with a drainage area of 1.3 sq. miles. The stream originates from two separate storm sewer outfalls in Sec. 24, T6N, R21E and Sec. 19, T6N, R22E, in the cities of Greenfield and Milwaukee. The stream flows northeast for 1.2 miles draining medium and high density residential areas and a commercial area. There are storm sewer discharges to Villa Mann Creek with no known sanitary sewer flow relief devices or industrial discharges.

Habitat Evaluation

The natural stream channel has been replaced by a concrete invert for 0.6 miles above the confluence with Wilson Park Creek. Above this section the stream has been channelized in an earthen channel. A branch of Villa Mann Creek enters at the beginning of the concrete channel through a 0.25 mile underground conduit with the upstream sections of this branch being ditched. No Q7,10 data is available for Villa Mann Creek, however the stream conveys primarily storm water runoff and at times there is little base flow in the stream. Average width of the stream in the concrete channel is 1.5 feet and the average depth is 0.1 feet. Upstream of the concrete channel the average width is 2-4 feet and the average depth 0.1-0.3 feet. Substrates in these areas are primarily gravel, sand, and silt with areas of scour and deposition. Over bank flows along the earthen channel are common during storm events resulting in some bank erosion, however banks are generally stable with grass, sedge, and shrub cover. Habitat in the stream is rated poor using the Stream System Habitat Rating form due to major channel modifications, inadequate depths, and urban non point sources.

Biological Data

There are no biological data available for Villa Mann Creek. Any aquatic life would generally be limited to the areas above the concrete channel. These areas with natural substrates can support very tolerant macroinvertebrates, however a viable fish community is doubtful due to insufficient stream flow and other cover. Upstream movement of fish from Wilson Park Creek is limited by several drop structures within the concrete section.

Water Quality

Chemical data for Villa Mann Creek is limited to one sample collected October 23, 1975 above the confluence with Wilson Park

Creek as part of the Milwaukee County Rivers Basin Report. The biochemical oxygen demand was >47 mg/l indicating a possible waste source. Currently there are no permitted discharges to Villa Mann Creek. The sample was collected during base flow and did not assess the impacts of urban runoff.

Conclusions and Recommendations

Habitat in Villa Mann Creek is severely limited by concrete channels, inadequate depths, and lack of cover. Water quality is limited by urban nonpoint sources. Abatement of urban nonpoint sources of pollution would improve water quality in Wilson Park Creek, the Kinnickinnic River and estuary. Villa Mann Creek does not have the potential to support a viable fish community due to the impacts associated with concrete channelization. Therefore it is recommended that the stream be classified as a **Limited Aquatic Life** per NR 102 and NR 104 capable of supporting a limited and very tolerant macroinvertebrate community and an occasional fish.

References

- Ball, Joseph, 1982. Stream Classification Guidelines for Wisconsin. WDNR Technical Bulletin.
- SEWRPC. 1978. A Comprehensive Plan for the Kinnickinnic River Watershed. Planning Report No. 32.
- WDNR. 1977. Milwaukee County Rivers Basin Report.

CORRESPONDENCE/MEMORANDUM

Date: July 30, 1993

File Ref: 3200

To: Joe Ball WR/2

From: Will Wawrzyn WR/SEH

Subject: Water Resource Management Appraisals and Standards Reviews for the Kinnickinnic River Watershed

Attached please find copies of water resource Appraisals and Standards Review for the Kinnickinnic River Watershed. Stream classifications were originally developed for these waterbodies in 1984 as part of the bound report titled Kinnickinnic River Watershed - Volume 3 Potential Stream Uses. These stream classification were prepared as part of the Milwaukee River Basin - MMSD Service Area Standards Reviews. A bound folder of these reports is available in both the SED and central office library. Please append the original bound documents with these latest versions.

Only one stream classification has been revised since 1993⁸⁴ as a result of portions of the concrete invert being removed from the Wilson Park Creek channel. Changes are as follows:

1984, Kinnickinnic River Watershed - Volume 3 Potential Stream Uses
Wilson Park Creek
Marginal Use Class E per NR 102 and NR 104

1993, Appraisal and Standards Review
Wilson Park Creek

1. All concrete lined and enclosed channel reaches shall be classified as Limited Aquatic Life
2. All earthen channel reaches located upstream and downstream of the I-94 overpass shall be classified as a Limited Forage Fish Community per NR 102 and NR 104.

I have not included any additional references (maps, photos or text) for the reports. References attached to the 1984 document have not changed.

Please call me if you feel additional information is needed or revisions are necessary.

c: Sharon Gayan WR/SEH
Pat Trochell WR/2
Kent Taylor WR/2

South 43rd Street Ditch

Stream Classification: Limited Aquatic Life

Limiting Factors: Water quality
 Loss of habitat
 Contaminated sediment (metals)
 Aesthetics and recreational use
 Limited fish, aquatic life and wildlife communities

Sources: Urban nonpoint sources of pollution
 Channelization and enclosure
 Sanitary sewer overflows
 Chronic spills

Holmes Avenue Creek

Stream Classification: Limited Aquatic Life

Limiting Factors: Water quality
 Loss of habitat
 Aesthetics and recreational use
 Limited fish, aquatic life and wildlife communities

Sources: Urban nonpoint sources of pollution
 Channelization and enclosure
 Sanitary sewer overflows
 Chronic spills

Lyons Park Creek

Stream Classification: Limited Aquatic Life

Limiting Factors: Water quality and quantity
 Loss of habitat
 Aesthetics and recreational use
 Limited fish, aquatic life and wildlife communities

Sources: Urban nonpoint sources of pollution
 Channelization and enclosure
 Sanitary sewer overflows
 Chronic spills

Wilson Park Creek

Stream Classification: Limited Aquatic Life (all concrete lined and enclosed reaches)
Limited Forage Fish Community (earthen channel reaches
upstream and downstream of I-94 overpass and upstream of airport)

Limiting Factors: Water quality and quantity
Loss of habitat
Contaminated sediment (metals and PCBs)
Aesthetics and recreational use
Limited fish, aquatic life and wildlife communities

Sources: Urban nonpoint sources of pollution
Channelization and enclosure
Sanitary sewer overflows
Chronic spills

Cherokee Creek

Stream Classification: Limited Aquatic Life

Limiting Factors: Water quality and quantity
Loss of habitat
Aesthetics and recreational use
Limited fish, aquatic life and wildlife communities

Sources: Urban nonpoint sources of pollution
Channelization and enclosure

Kinnickinnic River and Estuary

Stream Classification: Limited Aquatic Life (upstream of 6th St.)
Warm Water Sport Fish Community (downstream of 6th St. to
confluence with the Milwaukee River)

Limiting Factors: Water quality and quantity
Loss of habitat
Contaminated sediment
Fish Consumption advisory
Aesthetics and recreational use
Limited fish, aquatic life and wildlife communities

Sources: Urban nonpoint sources of pollution
Channelization and enclosure
Sanitary sewer overflows
Combined sewer overflows
Chronic spills

Villa Mann Creek

Stream Classification: Limited Aquatic Life

Limiting Factors: Water quality and quantity
Loss of habitat
Aesthetics and recreational use
Limited fish, aquatic life and wildlife communities

Sources: Urban nonpoint sources of pollution
Channelization and enclosure

While the biological use and recreational use is very limited for these waterbodies, consideration must be given to protecting and enhancing these uses in downstream reaches of the watershed and basin, specifically the Milwaukee Harbor Estuary and Lake Michigan. As such, the development of future water resource management objectives need to consider those already adopted or proposed for the Estuary and Lake Michigan.