

Date 6/26/2000

Facility Name NONE

Receiving Water HOLMES CREEK

Evaluated by WU WAWRZYŃ

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 PERMIT DISCHARGES TO THIS
STREAM (HOLMES CR).

**Holmes Avenue Creek Stream Classification
Kinnickinnic River Watershed
from Richard Randall, 1984
Water Resource Management
Southeast District
Revised February, 1993**

Introduction

Holmes Avenue Creek is a small tributary of Wilson Park Creek with a drainage area of 1.6 sq. miles. The stream originates in Sec. 29, T6N, R22E from two separate storm sewer outfalls in the city of Milwaukee and flows east and north for 1.1 miles. Land uses in the drainage area include industrial, commercial, and medium density residential. There is one sanitary sewer bypass and three industrial discharges which are non-contact cooling water. The headwater area is drained by four storm sewer outfalls.

Habitat Evaluation

The entire natural stream channel has been converted to a concrete invert. The stream habitat is unsuitable for most aquatic life. There are no pool or riffle areas in the channel and the average width of the stream is 1.5 feet with an average depth of 0.1 feet. No Q7,10 data is available. The stream conveys primarily storm water runoff and any base flow is probably cooling water discharges and groundwater infiltration through storm sewers.

Biological

No biological data is available for the stream. It is possible that very tolerant macroinvertebrates may exist in algae growths on the concrete channel, however scour during storm events would probably eliminate any significant populations. No viable fish community could exist in the channel due to insufficient depths and lack of cover.

Water Quality

Chemical data available for the stream is limited to one sample collected on October 23, 1975 as part of the Milwaukee County Rivers Basin Report. All parameters analyzed met state water quality standards. The sample was collected during base flow and did not assess the impacts of urban runoff and the sanitary bypass which would affect water quality during storm events. This base flow sample assessed the limited impact from cooling water discharges. The stream has a history of petroleum-like spills.

Conclusions and Recommendations

The conversion of the natural stream channel to concrete in Holmes Avenue Creek has severely limited the stream habitat and is unsuitable for most aquatic life. Water quality is likely limited by the sanitary by-pass, spills, and urban runoff. Abatement of urban runoff, spill prevention, and the elimination of the sanitary sewer discharges will improve water quality in Wilson Park Creek, the Kinnickinnic River and estuary.

Because Holmes Avenue Creek does not have the potential to support fish and other aquatic life, it is recommended that the stream be classified as a **Limited Aquatic Life** stream per NR 102 and NR 105 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. Water Resource Management, Madison.

SEWRPC. 1978. A Comprehensive Plan for the Kinnickinnic River Watershed. Planning Report No. 32.

WDNR. 1977. Milwaukee County Rivers Basin Report. Water Resource Management, Southeast District.

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 199⁸⁴ 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.