

Region NER County Brown + Calumet Report Date April 1979 Classification "Marginal use" = LAL

Water Body: Plum Creek Tributaries and Plum Creek

Discharger: Forest Junction WWTP

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 *Observations made in 1979. No real measurement*
- 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) *No fish noted in small streams. Found only Asellus sp. in small streams. However, methods are not described, lacking detail. Observational only? Real survey?*
- Chemical Data (temp, D.O., etc.) *None.*
- Physical Data (flow, depth, etc.) *Flow data provided for two stations on Plum Creek only. Not for the tributaries. Described as "minimal" and often "not discernable". Again, no methods described*
- Habitat Description *Steep, eroded banks. Width and depth data provided ("0.5' to 2' wide, up to 2' deep") as a range. No data on individual tributaries were provided.*
- Site Description/Map *Agricultural impacts observed; land tilled to stream banks, or used for pasture. Barnyards observed to be contributing "pollutants". Map + photos provided*
- Other: _____

Historical Reports in file:

- Memorandum to Central office from Dennis Weissenel, dated April 19, 1979 - one page
- Report by Dennis Weissenel on stream classification in conjunction with proposed discharge. - one page
- USGS topographic maps of area
- Eight photographs

Additional Comments/How to improve report:

The memo states that the tributaries are "maintaining marginal conditions" mainly because of agricultural practices in the area. Because such agricultural practices may have changed greatly since 1979 or may no longer be present, information for this stream classification needs to be updated. The report, however, basis its marginal use designation on low flows, while this may be appropriate, flow should be measured to provide updated, reliable evidence of a limited use designation. Biological data should be updated as well.

CORRESPONDENCE/MEMORANDUM

STATE OF WISCONSIN

Date: April 19, 1979

File Ref: 3210

To: Central Office - Madison

(M. Tusler) 11

DNR

APR 23 1979

From: Dennis C. Weisensel

Dennis C. Weisensel

Subject: Stream Classification for Tributaries to Plum Creek near Forest Junction.

Plum Creek tributaries were investigated on April 18, 1979 in conjunction with a proposed wastewater treatment facility at Forest Junction. The facility location is proposed for Section 9, Town of Brillion. Discharge of facility would be to tributary #5 and perhaps to #4.

Tributaries 4, 5, 6 and 7 are noncontinuous. Agricultural practices in the area do not protect the water courses from runoff. Several barnyards were noted to contribute pollutants directly to the streams. The tributaries are therefore maintaining marginal conditions. All four tributaries listed are classified as noncontinuous-marginal surface waters.

Station #8 is located on the main stem of Plum Creek. On August 2, 1976, 0.12 C.F.S. was recorded at this station. April 18, 1979, 2.20 C.F.S. was recorded. Based on flow data and configuration of the stream, I have concluded the stream is continuous or perpetually wet. At a point between station #8 and the confluences of the 4 tributary streams, Plum Creek becomes a continuous stream. The morphology of the stream in the station 8 area provides sufficient habitat for maintaining a usable fishery. The stream at that point should maintain fish and aquatic life conditions.

This memo provides the conclusions of the stream classification in the Forest Junction area. A formal report will be submitted at a later date.

You may wish to contact Gary A. Radtke, Foth and VanDyke and Associates, Inc., (414) 497-2500 to provide him with discharge limits based on the classification.

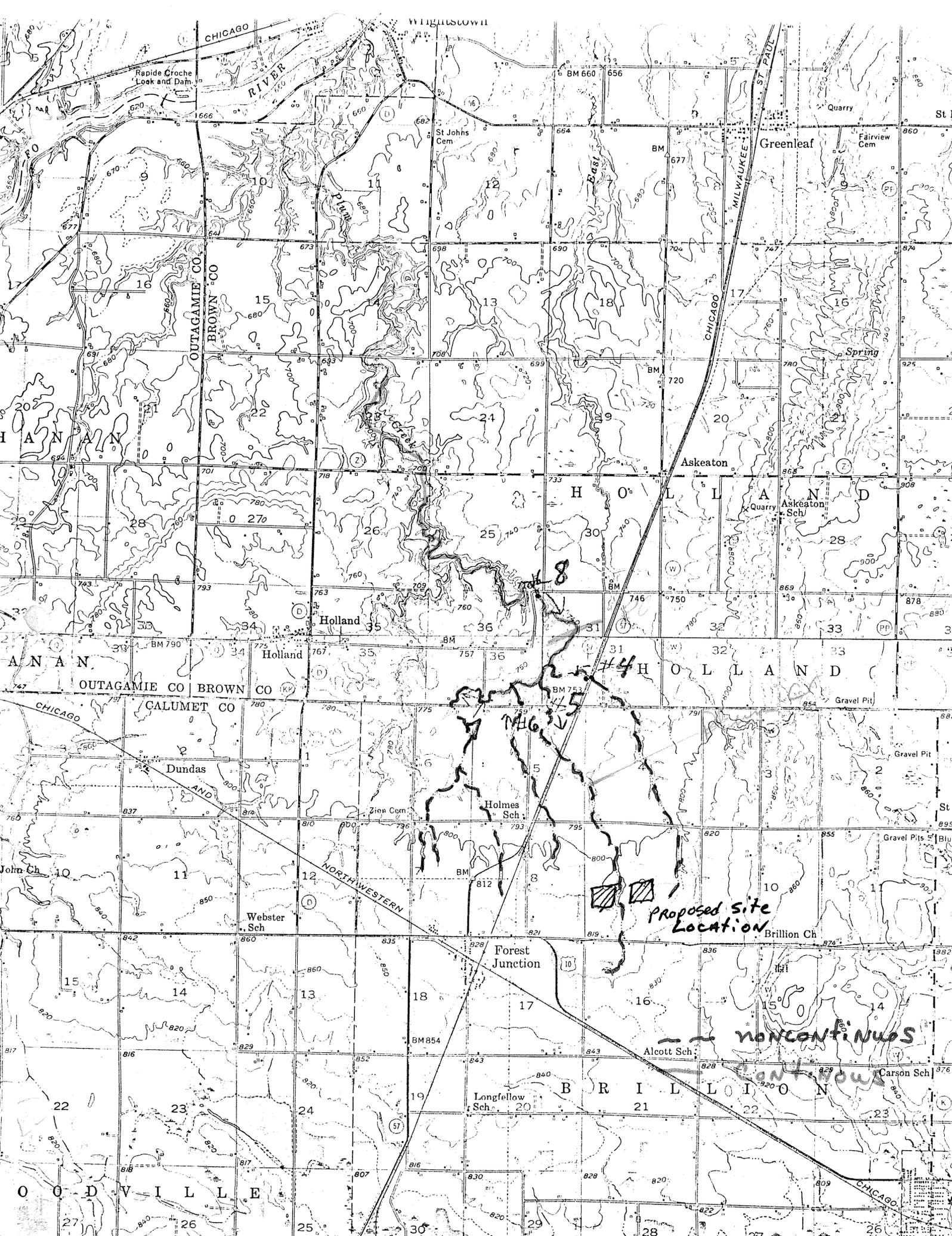
DCW:sh

cc: David Hildreth

NOTED:

Date _____

Concludes marginal due to barnyard degradation. This is not an irretrievable loss. MV



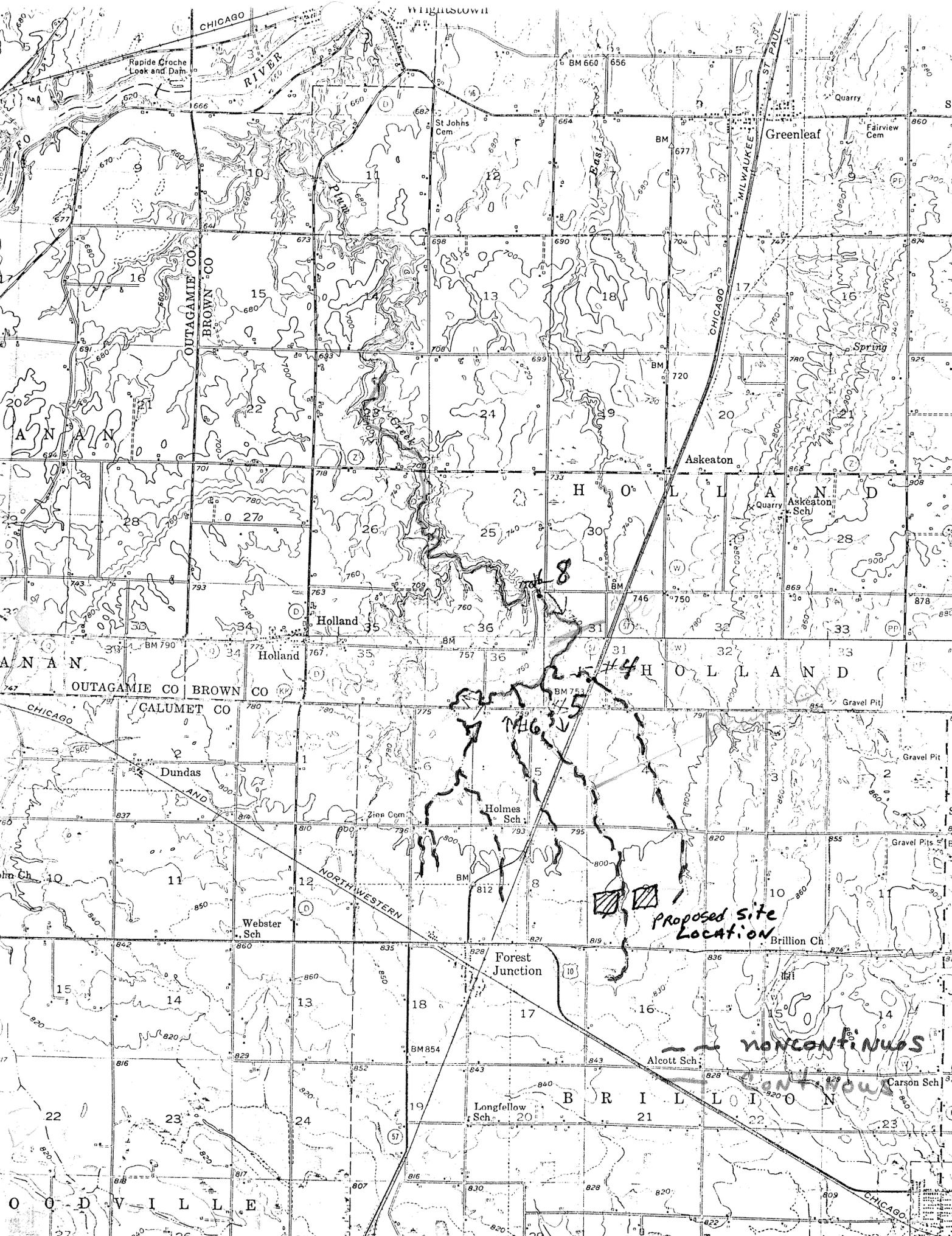
CHICAGO RIVER
MILWAUKEE RIVER
CHICAGO RIVER
Waukegan
Greenleaf
Askeaton
Holland
Dundas
Forest Junction
Brillilo
Oodville

Proposed Site Location

MAG 15

NONCONTINUOUS

CONTINUOUS



OUTAGAMIE CO
BROWN CO
CALUMET CO
BRILLILO
St. Johns Cem.
Zion Cem.
Holmes Sch.
Webster Sch.
Alcott Sch.
Longfellow Sch.
Quarry
Fairview Cem.
Spring
Askeaton Sch.
Gravel Pit
Gravel Pits
Carson Sch.

Forest Junction
Mun. W. Waters.

April 19, 1979

3210

Central Office - Madison

(M. Tusler)

Dennis C. Weisensel

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~~Intermittent aquatic life~~
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DCW:sh

cc: David Hildreth

NOTED:

Date _____

5-1-79
as per
Schmitt
Tusler

As per Mark
Tusler
4-24-79

SMALL STREAM CLASSIFICATION IN CONJUNCTION WITH A PROPOSED DISCHARGE FROM
FOREST JUNCTION

Dennis C. Weisensel, District Biologist
Dan Helf, Environmental Specialist
Jeff Haack, District Engineer

INTRODUCTION

Forest Junction Sanitary District requested effluent limits for several tributaries or headwater streams of Plum Creek in the vicinity of Forest Junction. Before limits could be determined, the tributaries and Plum Creek needed classifying in conjunction with NR 104, Wisconsin Administrative Code. The classification survey was conducted on April 18, 1979.

Plum Creek begins its flow with a series of rivulets just north of Forest Junction. It flows in a northwesterly direction and meets the Fox River at Wrightstown. Four of the header streams were examined to determine stream classification. The rivulets collect surface water runoff from agricultural lands in the area. In many areas, land is tilled up to the stream banks. The stream flood plain areas are extensively used for pasture lands when steep eroded banks prevent tilling. The soils in the area are clay. The four headwater streams range in a width from $\frac{1}{2}$ to 2' with depths up to 2'. The flows are minimal and often not decernable. All the rivulets are contained within natural banks and have natural beds. No fish or minnow species were noted in any of the rivulets. Asellus was the only macroinvertebrate noted in the small streams.

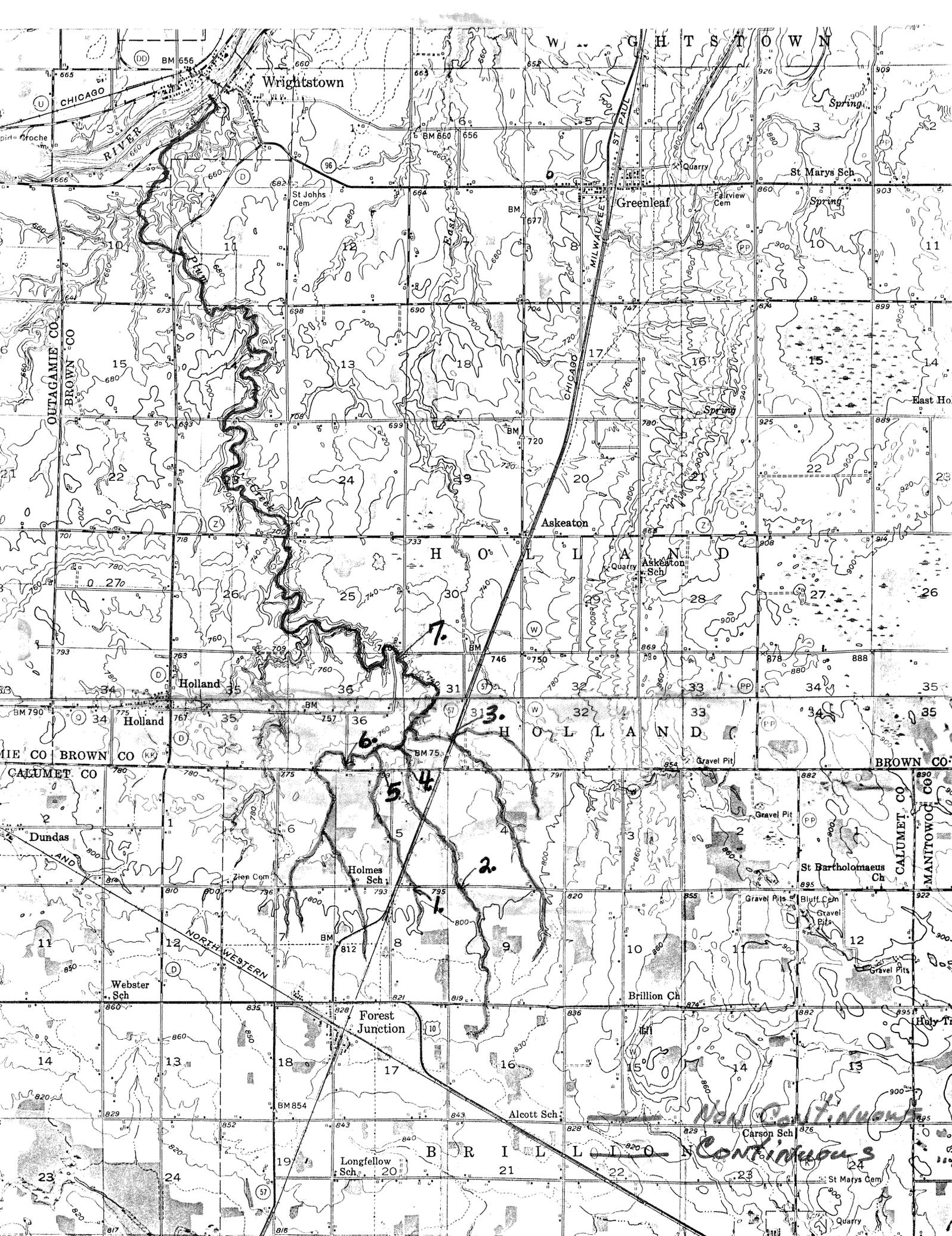
The small streams converge at a point northwest of Forest Junction as indicated on the enclosed map. Plum Creek was examined at the first Town road downstream after the rivulets join into one stream. The creek at this point is approximately 4' wide and from .5' to 3' deep. The stream flows through ravine areas which buffers it on both sides. Adjacent to these areas are agricultural lands. The creek has natural banks and contains interspersed pool and riffle areas. The flow on April 18, 1979, was 2.2 CFS. A flow on August 2, 1976 was 0.12 CFS. Station 7 contained only Asellus and no fish or minnows were noted. The pool areas were sufficient to sustain a foraging minnow population and could sustain smaller game fish species.

The attached map indicates the locations of the seven stations. Photos of the stations are also attached.

CONCLUSION

The rivulets or header streams to Plum Creek are noncontinuous. The flows at the time of the survey were minimal or barely decernable. They are classified as marginal use.

At a point above station 7 and after all the rivelets converge to form Plum Creek, the creek becomes continuous. The morphology of the stream is sufficient to sustain a foraging minnow population and supply sufficient habitate for small game fish species. The stream at this point is classified as fish and aquatic use.



W R I G H T S T O W N

Wrightstown

CHICAGO RIVER

MILWAUKEE RIVER

Greenleaf

St Marys Sch

Askeaton

Askeaton Sch

H O L L A N D

Holland

H O L L A N D

BROWN CO

OUTAGAMIE CO

Dundas

Holmes Sch

St Bartholomaeus Ch

Webster Sch

Forest Junction

Brillion Ch

Alcott Sch

Longfellow Sch

B R I L L O

Non Cont. Nuon
Continuons

Carson Sch

St Marys Cem

Quarry



Wrightstown

Greenleaf

Askeaton

Holland

HOLLAND

HOLLAND

AMIE CO BROWN CO CALUMET CO

BROWN CO CALUMET CO

Dundas

Holmes Sch

Brillion Ch

Webster Sch

Forest Junction

Alcott Sch

Carson Sch

Longfellow Sch

St Marys Cem

RIVER

CHICAGO & MILWAUKEE ST. PAUL

NORTHWESTERN

BURIEL LOD

LOUISIANA

OUTAGAMIE CO BROWN CO

AMIE CO BROWN CO CALUMET CO

BROWN CO CALUMET CO

AMIE CO BROWN CO CALUMET CO

AMIE CO BROWN CO CALUMET CO

AMIE CO BROWN CO CALUMET CO

AMIE CO BROWN CO CALUMET CO

AMIE CO BROWN CO CALUMET CO

AMIE CO BROWN CO CALUMET CO

AMIE CO BROWN CO CALUMET CO

AMIE CO BROWN CO CALUMET CO

AMIE CO BROWN CO CALUMET CO

#1



STATION # 1 - FACING UPSTREAM

#2



STATION # 2 - FACING UPSTREAM

#2



STATION # 2 - FACING DOWNSTREAM



STATION # 3 - FACING DOWNSTREAM



STATION # 4 - FACING UPSTREAM



STATION # 5
FACING DOWNSTREAM



STATION # 6 - FACING UPSTREAM



STATION # 7
FACING
UPSTREAM