State of Wisconsin
Department of Natural Resources
dnr.wi.gov

Fish and Aquatic Life Use Designation Summary

Form 3200-121 (12/04)

(Attach supporting data sheets)

Use Designation Information – Required

Water Body Name	WBIC #	Date
Un Trib. to East Twin River	3000211	05/14/2009

Region:	Basin	County
☑ NER ☐ NOR ☐ SCR ☐ SER ☐ WCR	Twin-Door-Kewaunee (Lakeshore)	Kewaunee

Quad Map Where Segment is Shown

Stangelville

Reference Site(s) (Attach use designation form for reference site/cond.)

None

Segment Description for Segment 1 of 1 (headwater = segment 1)

From:

the mouth of the Unnamed Tributary to the East Twin River in T23N R24E S30 NW NW upstream about 1.4 miles.

upstream 7476 ☐ mi., ☐ km., ☑ ft., ☐ M.

Latitude:	DEG	MIN	SEC	
	44	26	20.0000	N

Longitude:	DEG	MIN	SEC		Datum Used
	087	40	08.0000	W	

Township		Range		Section	¼-Section	¼, ¼-Section
23	N	24	☑ E ☐ W	30	NE	SE

To:

the confluence with the tributary in T23N R23E S26 NE SE (which is approximately 1/4 mile upstream of Sleepy Hollow Road).

Latitude:	DEG	MIN	SEC	
	44	26	36.0000	N

Longitude:	DEG	MIN	SEC		Datum Used
	087	38	29.0000	W	

Township		Range		Section	¼-Section	¼, ¼-Section
23	N	23	☑ E ☐ W	26	NE	SE

Attach site map and photos (prefer digital) showing stream segment and discharge point.

Date Fieldwork Conducted/Completed

08/04/2008

Use Designation Status:

- ☐ New Use Designation (First Field Assessment)
- ☑ Standards Review (Updating Previous Field Assessment)
- ☐ Reference Site

Current Codified Fish and Aquatic Life Use Designation:

- ☐ Coldwater Community
- ☐ Warmwater Sport Fish Community
- ☐ Warmwater Forage Fish Community
- ☐ Tolerant Fish and Aquatic Life Community (LFF)
- ☐ Very Tolerant Aquatic Life Community (LAL)

- ☑ Default
- ☐ Field Assessment – Date (mm/dd/yyyy): _____

Existing FAL Use Based on Current Data:

- ☐ Coldwater Community
- ☐ Warmwater Sport Fish Community
- ☑ Warmwater Forage Fish Community
- ☐ Tolerant Fish and Aquatic Life Community (LFF)
- ☐ Very Tolerant Aquatic Life Community (LAL)

Recommended Attainable Use Designation:

- ☐ Coldwater A (Coldwater)
- ☐ Coldwater B (Coldwater)
- ☑ Diverse Fish and Aquatic Life
- ☐ Tolerant Fish and Aquatic Life (LFF)
- ☐ Very Tolerant Aquatic Life (LAL)

Recommended Seasonal Use Designation(s): Effective Date: (mm/dd/yyyy)

☐ Coldwater A (Coldwater)	_____	to	_____	
☐ Coldwater B (Coldwater)	_____	to	_____	
☐ Diverse Fish and Aquatic Life	_____	to	_____	
☐ Tolerant Fish and Aquatic Life (LFF)	_____	to	_____	
☐ Very Tolerant Aquatic Life (LAL)	_____	to	_____	

Other Applicable Uses (as recognized by existing administrative rule):

- ☐ Outstanding Resource Water
- ☐ Exceptional Resource Water
- ☐ Great Lakes System
- ☐ Public Drinking Water Supply
- ☐ Recreational Use
- ☐ Wildlife

Community Types:

- ☐ Class I Trout
- ☐ Class II Trout
- ☐ Class III Trout
- ☐ Coldwater A
- ☐ Coldwater B
- ☐ Game Fish
- ☑ Non-Game Fish
- ☐ Macroinvertebrates
- ☐ Endangered/Threatened Species
- ☐ Intolerant Species
- ☐ Coolwater
- ☐ Tolerant Fish
- ☐ Tolerant Macroinvertebrates

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Use Designation Information (continued)

Basis for Use Designation Decision (List and briefly discuss key elements for the decision) – Use Attachment A, if necessary

Historical assessment by Tim Doelger on 3/30/1987 and most recent assessment using fish survey, macroinvertebrate survey, water chemistry data, and a habitat assessment on 8/4/2008. The DNR stream natural community assessment methodology model also supports this determination.

Discharger Information – Required

Municipality/Company	WPDES Permit Number	Date Permit Issue	Permit Renewal
Trega Foods, Inc - Luxemburg	0050237	06/27/2000	

Outfall Location

T 23N R23E S26 SE SE

Contact Person	Contact Date(s)
Ted Winkelman, Trega Foods wastewater treatment facility operator	8/4/2008

Did a Representative Observe Field Assessment? ☐ Yes ☐ No

Representative	Telephone Number (include area code)
Ted Winkelman, Trega Foods wastewater treatment facility operator	(920) 845-2901

Comments about facility representative's observations, etc.

See attached pictures with Ted Winkelman present during the fish survey on 8/4/2008.

Literature Review – Use Attachment B, if necessary

1. Previous classification reports and use designations – cite here and attach

Tim Doelger memo dated 3/30/1987 and Tom Tewes memo dated 3/14/2000 - Attachments B2 and B3.

2. All previous studies and data associated with the water body that are applicable to use designation – cite here and attach

I could not find any other information on this stream in the files.

3. Is stream listed as trout water in Wisconsin Trout Streams? ☐ Yes ☑ No If yes, cite here and attach a copy

4. Any other literature applicable to the fish and aquatic life use designation – cite here and attach

N/A

5. Summarize and interpret the literature available and how it relates to and supports the recommended use designation

The most recent stream assessment and previous data and observations all agree and support the current recommendation. Even the DNR stream natural community assessment methodology model supports this use designation.

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Field Assessment Data and Observations – Use Attachment C, if necessary

Assessment Date (mm/dd/yyyy): 08/04/2008; Additional Assessment Date(s): 05/14/2009

Stream Segment Physical/Chemical Data:

Length	136	☐ feet ☑ meters ☐ miles
Avg. Width	3.1	☐ feet ☑ meters
Max. Width	5.0	☐ feet ☑ meters
Avg. Depth	0.13	☐ feet ☑ meters
Max. Depth	0.3	☐ feet ☑ meters

Gradient _____ Velocity _____

Substrate Material:

Silt	15 %	Organic	21 %
Rubble	25 %	Gravel	7 %
Sand	22 %	Other	10 %

Stream Flow 0.72 cfs ☑ Measured ☐ Estimated

At time of assessment, flow was: ☐ High ☑ Low ☐ Very Low

7Q2 Flow _____ cfs

7Q10 Flow _____ cfs

Stream Temperature 19.3 °C ☑ Instantaneous ☐ 24-Hr. Maximum ☐ 24-hr. Avg.

Dissolved Oxygen (Instantaneous) 6.8 mg/L Time of Day 09 : 30 ☑ am ☐ pm

Minimum Dissolved Oxygen Recorded _____ mg/L Time of Day ____ : ____ ☐ am ☐ pm

Maximum Dissolved Oxygen Recorded _____ mg/L Time of Day ____ : ____ ☐ am ☐ pm

Method of Analysis: ☑ Meter ☐ Modified Winkler Method

Effluent Flow:

Daily Average _____ cfs ☐ Measured ☐ Estimated

Design Flow _____ cfs (Convert MGD to cfs by multiplying by 1.55)

Chemical Data Collected: (STORET # 10029040)

☑ Ammonia	☐ Pesticides	☑ Other: Calcium
☐ Atrazine	☑ Phosphorus	☑ Other: Hardness
☐ Bacteria	☐ Metals	☑ Other: Magnesium

Brief Interpretation/Comments:

On 5/14/2009 DO=7.2, Temp=15.9°C, pH=8.0.

Habitat – Use Attachment D, if necessary

Procedure:

☐ Guidelines For Evaluating Fish Habitat in Wisconsin Streams (Simonson, Lyons and Kanehl, 1994)

☐ Development and Evaluation of a Habitat Rating System For Low Gradient Wisconsin Streams

☑ Other – Describe: Wadeable stream habitat Evaluation - Form 3600-228

Habitat Rating – Attach Habitat Rating Forms: ☐ Excellent ☐ Good ☑ Fair ☐ Poor

Significant Problems Affecting Use Attainment:

☑ Low-flow ☐ Sedimentation ☐ Bank Erosion ☐ Ditching ☐ Fish Cover ☑ Depth

☐ Other – Describe: _____

Observations About Habitat Quality:

The stream at Sleepy Hollow Road has a defined bed and banks and provides adequate full fish and aquatic life habitat. Another intermittent stream joins this tributary about 1/4 mile above Sleepy Hollow Road. This provides the stream with more flow and cooler water to support more diverse fish and aquatic life uses. The stream substrate has some organic matter, but also gravel, rubble, and boulders. Riffles, pools, and runs are all available habitats. Even more stream flow would provide more stream habitat. The stream at this location runs through a large woodlot so the stream is entirely shaded.This is a second order stream at this location.

Water Body Name	WBIC #	Date
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Biological Data – Fish data is required

Fish:

Sampling Date (mm/dd/yyyy) 08/04/2008

Species List and IBI Forms: ☑ Attached to Report ☐ Not Applicable

Survey Location(s) Upstream of Sleepy Hollow Road

Distance Sampled 136 ☐ feet ☑ meters ☐ miles

Sampling Gear: ☑ Backpack Shocker ☐ Other – Describe: _____

Number of Species Collected 10 Total Number of Fish Collected 253

Number of Intolerant Species 1 % Intolerant Species 2

Endangered or Other Special Category Species Collected:

Species N/A No. of Individuals Collected _____

Species _____ No. of Individuals Collected _____

Species _____ No. of Individuals Collected _____

IBI Score 14 Rating very poor

Macroinvertebrates:

Sampling Date (mm/dd/yyyy) 09/15/2008 ☑ HBI ☐ FBI

Survey Location(s) Upstream of Sleepy Hollow Road

Sampling Procedure Kick sample using D-frame net

☐ Less than 100 organisms were found – List Dominant Genera, etc.:

Genus _____ Number Found _____ HBI Score _____

Genus _____ Number Found _____ HBI Score _____

Genus _____ Number Found _____ HBI Score _____

☑ More than 100 organisms found – Attach taxonomy bench sheet or other analyses

Other Biological Data/Observations – Use Attachment E, if necessary

Interpretations Based on Existing Fish and Aquatic Life Community – Use Attachment F, if necessary

Both the fish survey and the macroinvertebrate survey results show that the stream can support diverse biological communities. The intolerant fish species, mottled sculpin were captured in the survey. Although only 4 individuals were captured, it shows that the stream has potential to support species sensitive to poor water quality, siltation and incresed turbidity, and reduced habitat heterogeneity. The macroinvetebrate community showed an HBI value of 6.325 which is considered "fair" water quality. Some sensitive species, such as mayflys and caddisflys were captured in the survey. The IBI score of 14 gives the stream a "very poo"' biotic integrity rating.

WATERSHED DATA AND OBSERVATIONS – Optional (Please answer to the best of your ability. Estimates are acceptable.)

Approximate Area 100 ☑ Acres ☐ Square Miles

Land Use: Crop Land _____% Pasture _____ % Forest 90 %

Grass Land _____% Urban 10 % Wetland _____%

Number of Feedlots/Barn Yards Near Stream 0

Other Nonpoint Sources Woodland with some rural development

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WATERSHED DATA AND OBSERVATIONS (continued) – Use Attachment G, if necessary

Is this watershed currently or proposed to receive nonpoint source management under a State, Federal or local organization?

☑ No ☐ Yes List Date(s) (mm/dd/yyyy) _____ _____ _____

Explain _____

Discuss nonpoint source impacts and controllability, and nonpoint relationship to fish and aquatic life existing and attainable uses. Include factors such as bank erosion, land cover/use near stream, gully erosion, barnyards, etc. (attach additional sheets if required):

The stream at this location runs through 90% woodland with some rural development. The immediate area is not impacted by nonpoint sources although both upstream and downstream of this site the landuse is heavy agriculture with row crops the primary landuse type. The stream has adequate stream flow, gradient, buffers, substrate type, and bank cover at this location to provide fair to good aquatic life habitat. Some filamentous algae groth on the rocks is proof that nonpoint source nutrients do reach the stream. The greatest impact is probably to the downstream recieving waterbody - the East Twin River.

VTAL/TFAL Justification – Required – Use Attachment H, if necessary

Note: This section must be completed when the use designation is tolerant fish and aquatic life (formerly LFF) or very tolerant aquatic life (formerly LAL)

Recommended Attainable Use Designation: ☐ **TFAL** ☐ **VTAL**

Tolerant Fish and Aquatic Life and Very Tolerant Aquatic Life use designations (LFF & LAL) are not defined as full fish and aquatic life uses. However, these uses are in most cases the best use that can be attained by these resources due to habitat or water quality limitations. A designated use recommendation into one of these sub-categories must be based on one or more of the following factors (sec. 283.15, Stats.). Check all that apply to this use designation and provide a brief description of the situation:

☐ a. Naturally occurring pollutant concentrations prevent the attainment of a full fish and aquatic life community.

☐ b. Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of a full fish and aquatic life community, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating water conservation requirements.

☐ c. Human caused conditions or sources of pollution prevent the attainment of a full fish and aquatic life community and cannot be remedied or would cause more environmental damage to correct than to leave in place.

☐ d. Dams, diversions or other types of hydrologic modifications preclude the attainment of a full fish and aquatic life community, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of a full fish and aquatic life community.

☐ e. Physical conditions related to the natural features of the water body, such as the lack of proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of a full fish and aquatic life community.

Description:

Prepared By

Preparer Signature	Printed Name	Date Prepared
	Mary Gansberg	05/14/2009

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Author and Peer Review

The author should submit a peer-reviewed report to Watershed Program Coordinator for review and approval.

Submitted By	Date
Mary Gansberg	05/14/2009
Peer Reviewed By	Date
Mark Hazuga	05/21/2009

Approval Signatures

Review, approval, and signature by the Watershed Program Coordinator (Expert), Regional Water Leader (or designee) as well as the Water Quality Standards Section Chief (or designee) is required.

Printed Name of Watershed Program Coordinator (Expert)	Watershed Program Coordinator (Expert) Signature	Date
N/A		
Printed Name of Regional Water Leader (or designee)	Regional Water Leader (or designee) Signature	Date
Charlie Verhoeven		
Printed Name of Water Quality Standards Section Chief (or designee	Water Quality Standards Section Chief (or designee) Signature	Date
Bob Masnado		

Final Report Distribution List

Once the Use Designation Report has been approved by the Water Quality Standards Section Chief (or designee), the report can be distributed to the appropriate individuals, as listed below. Please indicate below individuals who should be copied on final report distribution. It should be noted that the classification recommendation in the report does not become official until it is approved by the Natural Resources Board and adopted into Wisconsin Administrative Code.

Facility Contact Tom Winkelman

Basin Engineer Tom Tewes

Basin Planner N/A

Effluent Limits Calculator Jim Schmidt

Endangered Resources
(when T&E Species Present)

Other Interested Parties:

Nan Jameson

Kelley O'Connor