

(Attach supporting data sheets)

Use Designation Information – Required

Water Body Name Un Trib. to the E. Twin R.	WBIC # 3000212	Date 05/14/2009
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Region: <input checked="" type="checkbox"/> NER <input type="checkbox"/> NOR <input type="checkbox"/> SCR <input type="checkbox"/> SER <input type="checkbox"/> WCR	Basin Twin-Door-Kewaunee (Lakeshore)	County Kewaunee
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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 confluence with the tributary in T23N R23E S26 NE SE (which is approximately 0.25 miles upstream of Sleepy Hollow Road) upstream <u>7075</u> <input type="checkbox"/> mi., <input type="checkbox"/> km., <input checked="" type="checkbox"/> ft., <input type="checkbox"/> M.	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Latitude:</td> <td>DEG <u>44</u></td> <td>MIN <u>26</u></td> <td>SEC <u>20.0000</u></td> <td>Datum Used N</td> </tr> <tr> <td>Longitude:</td> <td>DEG <u>087</u></td> <td>MIN <u>40</u></td> <td>SEC <u>08.0000</u></td> <td>Datum Used W</td> </tr> <tr> <td>Township</td> <td>Range</td> <td><input checked="" type="checkbox"/> E <input type="checkbox"/> W</td> <td>Section</td> <td>¼-Section</td> <td>¼, ¼-Section</td> </tr> <tr> <td><u>23</u> N</td> <td><u>23</u></td> <td></td> <td><u>26</u></td> <td>SE</td> <td>SE</td> </tr> </table>	Latitude:	DEG <u>44</u>	MIN <u>26</u>	SEC <u>20.0000</u>	Datum Used N	Longitude:	DEG <u>087</u>	MIN <u>40</u>	SEC <u>08.0000</u>	Datum Used W	Township	Range	<input checked="" type="checkbox"/> E <input type="checkbox"/> W	Section	¼-Section	¼, ¼-Section	<u>23</u> N	<u>23</u>		<u>26</u>	SE	SE
Latitude:	DEG <u>44</u>	MIN <u>26</u>	SEC <u>20.0000</u>	Datum Used N																			
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<u>23</u> N	<u>23</u>		<u>26</u>	SE	SE																		

To: the headwaters in T23N R23E S27 SE SE just north of Cherneyville Road and west of CTH AB (formally 163). Total stream segment = approximately 1.3 miles.	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Latitude:</td> <td>DEG <u>44</u></td> <td>MIN <u>25</u></td> <td>SEC <u>50.0000</u></td> <td>Datum Used N</td> </tr> <tr> <td>Longitude:</td> <td>DEG <u>087</u></td> <td>MIN <u>41</u></td> <td>SEC <u>10.0000</u></td> <td>Datum Used W</td> </tr> <tr> <td>Township</td> <td>Range</td> <td><input checked="" type="checkbox"/> E <input type="checkbox"/> W</td> <td>Section</td> <td>¼-Section</td> <td>¼, ¼-Section</td> </tr> <tr> <td><u>23</u> N</td> <td><u>23</u></td> <td></td> <td><u>27</u></td> <td>SE</td> <td>SE</td> </tr> </table>	Latitude:	DEG <u>44</u>	MIN <u>25</u>	SEC <u>50.0000</u>	Datum Used N	Longitude:	DEG <u>087</u>	MIN <u>41</u>	SEC <u>10.0000</u>	Datum Used W	Township	Range	<input checked="" type="checkbox"/> E <input type="checkbox"/> W	Section	¼-Section	¼, ¼-Section	<u>23</u> N	<u>23</u>		<u>27</u>	SE	SE
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<u>23</u> N	<u>23</u>		<u>27</u>	SE	SE																		

Attach site map and photos (prefer digital) showing stream segment and discharge point. Date Fieldwork Conducted/Completed <u>08/04/2008</u>	Use Designation Status: <input type="checkbox"/> New Use Designation (First Field Assessment) <input checked="" type="checkbox"/> Standards Review (Updating Previous Field Assessment) <input type="checkbox"/> Reference Site
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Current Codified Fish and Aquatic Life Use Designation: <input type="checkbox"/> Coldwater Community <input type="checkbox"/> Warmwater Sport Fish Community <input type="checkbox"/> Warmwater Forage Fish Community <input type="checkbox"/> Tolerant Fish and Aquatic Life Community (LFF) <input type="checkbox"/> Very Tolerant Aquatic Life Community (LAL)	<input checked="" type="checkbox"/> Default <input type="checkbox"/> Field Assessment – Date (mm/dd/yyyy): _____	Existing FAL Use Based on Current Data: <input type="checkbox"/> Coldwater Community <input type="checkbox"/> Warmwater Sport Fish Community <input type="checkbox"/> Warmwater Forage Fish Community <input type="checkbox"/> Tolerant Fish and Aquatic Life Community (LFF) <input checked="" type="checkbox"/> Very Tolerant Aquatic Life Community (LAL)
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Recommended Attainable Use Designation: <input type="checkbox"/> Coldwater A (Coldwater) <input type="checkbox"/> Coldwater B (Coldwater) <input type="checkbox"/> Diverse Fish and Aquatic Life <input type="checkbox"/> Tolerant Fish and Aquatic Life (LFF) <input checked="" type="checkbox"/> Very Tolerant Aquatic Life (LAL)	Recommended Seasonal Use Designation(s): <input type="checkbox"/> Coldwater A (Coldwater) <input type="checkbox"/> Coldwater B (Coldwater) <input type="checkbox"/> Diverse Fish and Aquatic Life <input type="checkbox"/> Tolerant Fish and Aquatic Life (LFF) <input type="checkbox"/> Very Tolerant Aquatic Life (LAL)	Effective Date: (mm/dd/yyyy) _____ to _____ _____ to _____ _____ to _____ _____ to _____
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Other Applicable Uses (as recognized by existing administrative rule): <input type="checkbox"/> Outstanding Resource Water <input type="checkbox"/> Exceptional Resource Water <input type="checkbox"/> Great Lakes System <input type="checkbox"/> Public Drinking Water Supply <input type="checkbox"/> Recreational Use <input type="checkbox"/> Wildlife	Community Types: <input type="checkbox"/> Class I Trout <input type="checkbox"/> Class II Trout <input type="checkbox"/> Class III Trout <input type="checkbox"/> Coldwater A <input type="checkbox"/> Coldwater B <input type="checkbox"/> Game Fish <input type="checkbox"/> Non-Game Fish <input type="checkbox"/> Macroinvertebrates <input type="checkbox"/> Endangered/Threatened Species <input type="checkbox"/> Intolerant Species <input type="checkbox"/> Coolwater <input type="checkbox"/> Tolerant Fish <input checked="" type="checkbox"/> Tolerant Macroinvertebrates
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Fish and Aquatic Life Use Designation Summary

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Water Body Name	WBIC #	Date
Un Trib. to the E. Twin R.	3000212	05/14/2009

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 determined a use designation as non-continuous marginal classification. Another assessment on 3/8/200 by Tim Rasman, Steve Hogler, and Tom Tewes confirmed the classification as "limited aquatic life". Further monitoring on 8/4 2008 has again confirmed that the current and potential stream designated uses have not changed.

Discharger Information – Required

Municipality/Company	WPDES Permit Number	Date Permit Issue	Permit Renewal
Trega Foods, Inc. - Luxemburg (Krohns Dairy)	0050237	06/27/2000	

Outfall Location

SE SE T23N R23E S27

Contact Person	Contact Date(s)
Ted Winkelman, wastewater treatment facility operator for Trega Foods	08/04/2008

Did a Representative Observe Field Assessment? Yes No

Representative	Telephone Number (include area code)
Ted Winkelman, wastewater treatment facility operator for Trega Foods	(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 studies 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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Water Body Name: Un Trib. to the E. Twin R.
WBIC #: 3000212
Date: 05/14/2009

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 102 meters, Avg. Width 1.6 meters, Max. Width 2.2 meters, Avg. Depth 0.08 meters, Max. Depth 0.14 meters, Gradient, Velocity.
Substrate Material: Silt 40%, Organic 25%, Rubble 0%, Gravel 5%, Sand 25%, Other 5%.
Stream Flow: 0.17 cfs Measured.
At time of assessment, flow was: Low.
7Q2 Flow: 0 cfs, 7Q10 Flow: 0 cfs.

Stream Temperature: 27 C, Instantaneous.
Dissolved Oxygen (Instantaneous): 2.1 mg/L, Time of Day 01:00 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.

Effluent Flow: Daily Average, Design Flow.
Chemical Data Collected: (STORET # 10029041)
Ammonia, Phosphorus, Other: Calcium, Hardness, Magnesium.

Brief Interpretation/Comments: on 5/14/09 DO=7.3, Temp=20.2 C, pH=7.7

Habitat - Use Attachment D, if necessary

Procedure: Other - Describe: Wadeable stream habitat evaluation-Form 3600-228

Habitat Rating - Attach Habitat Rating Forms: Poor

Significant Problems Affecting Use Attainment: Low-flow, Depth

Observations About Habitat Quality: This is a low gradient, low flow headwaters drainage way. The majority of the flow at Cherneyville Road is made up from the wastewater discharge (effluent-dominated stream). It has very little for pools or riffles. Mostly silt and organic substrate with some sand and very little gravel. It runs almost entirely through cropland. This is a second order stream at this location.

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Water Body Name Un Trib. to the E. Twin R. WBIC # 3000212 Date 05/14/2009

Biological Data - Fish data is required

Fish: Sampling Date 08/04/2008 Species List and IBI Forms: Attached to Report Survey Location(s) Downstream from Cherneyville Road Distance Sampled 102 meters Sampling Gear: Backpack Shocker Number of Species Collected 1 Total Number of Fish Collected 4 Number of Intolerant Species 0 % Intolerant Species 0 Endangered or Other Special Category Species Collected: IBI Score NA Rating NA

Macroinvertebrates:

Sampling Date 09/15/2008 Survey Location(s) Downstream from Cherneyville Road Sampling Procedure Kick sample using D-frame net Less than 100 organisms were found - List Dominant Genera, etc.: 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

The fish IBI could not be run because not enough fish were present. The one species found (central mudminnow) are tolerant to low dissolved oxygen. Only 4 fish total were captured. Macroinvertebrate HBI rating was very poor (9.948) with the majority of the organisms caught having a tolerance value of 10.00. Almost all organisms were chironomides.

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

Approximate Area 100 Acres Land Use: Crop Land 80% Pasture 5% Forest 5% Grass Land Urban 5% Wetland 5% Number of Feedlots/Barn Yards Near Stream 0 Other Nonpoint Sources Parking lot stormwater runoff from Trega Foods

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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 land area is mostly row crops. Nonpoint source BMP's could lessen the amount of soil and nutrients reaching this headwater tributary and are probably impacting the stream at this location. However, nonpoint sources are probably more significantly impacting the downstream receiving waterbody (East Twin River). The grassy banks are providing a good buffer and are not eroding but with row crop all around, sediment does reach this stream. Operating barnyards are not immediately within this stream segment.

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:

This is a drainage way created mainly from the discharge from the Trega Foods wastewater discharge and does not have the potential to support full fish and aquatic life uses. The very limited stream flow and predominantly silt, organic matter, and sand substrate prevent the stream from attaining a higher use designation at this time.

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

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Water Body Name	WBIC #	Date
Un Trib. to the E. Twin R.	3000212	05/14/2009

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	

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 N/A
(when T&E Species Present)

Other Interested Parties:

Nan Jameson

Kelley O'Connor
