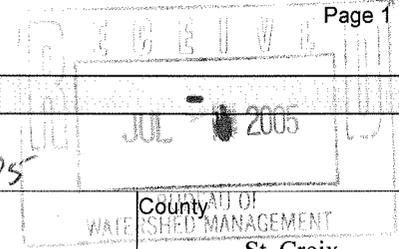


(Attach supporting data sheets)



Use Designation Information – Required

| | | | |
|--|-------------------------|-----------------|--|
| Water Body Name Wilson Creek Tributary | WBIC # 206600 | Date 6/27/05 | |
| Region: <input type="checkbox"/> NER <input type="checkbox"/> NOR <input type="checkbox"/> SCR <input type="checkbox"/> SER <input checked="" type="checkbox"/> WCR | Basin Lower Chippewa | | |
| County St. Croix | | | |

Quad Map Where Segment is Shown

Wilson

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

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

| | | | |
|---|--|--|---|
| From: Wilson Creek | Latitude: DEG MIN SEC 44 57 10.9000 N | Longitude: DEG MIN SEC 092 09 55.3000 W | Datum Used WTM91 |
| upstream <u>1500</u> <input type="checkbox"/> mi., <input type="checkbox"/> km., <input type="checkbox"/> ft., <input checked="" type="checkbox"/> M. | Township 29 N | Range <input type="checkbox"/> E <input checked="" type="checkbox"/> W 15 | Section <input type="checkbox"/> 1/4-Section 35 SW |
| 1/4, 1/4-Section NW | | | |

| | | | |
|---------------------------------------|--|--|---|
| To: Village of Wilson WWTP Outfall | Latitude: DEG MIN SEC 44 56 59.4000 N | Longitude: DEG MIN SEC 092 10 21.0000 W | Datum Used WTM91 |
| | Township 29 N | Range <input type="checkbox"/> E <input checked="" type="checkbox"/> W 15 | Section <input type="checkbox"/> 1/4-Section 35 SW |
| 1/4, 1/4-Section NW | | | |

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

Date Fieldwork Conducted/Completed

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):

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

Effective Date: (mm/dd/yyyy)

_____ to _____
 _____ to _____
 _____ to _____
 _____ to _____
 _____ 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

| | | |
|------------------------|--------|---------|
| Water Body Name | WBIC # | Date |
| Wilson Creek Tributary | 206600 | 6/27/05 |

Use Designation Information (continued)

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

Stream is a dry run tributary to Wilson Creek. Flow is only present in the stream under run-off event conditions and when the Village of Wilson WWTP is discharging. See Attachment A.

Discharger Information – Required

| | | | |
|----------------------|---------------------|-------------------|----------------|
| Municipality/Company | WPDES Permit Number | Date Permit Issue | Permit Renewal |
| Village of Wilson | 0032140 | 07/01/2005 | 06/30/2010 |

Outfall Location

Wilson Creek Tributary at HWY 12

| | |
|----------------|-----------------|
| Contact Person | Contact Date(s) |
| | |

Did a Representative Observe Field Assessment? Yes No

| | |
|----------------|--------------------------------------|
| Representative | Telephone Number (include area code) |
| Steve Nielson | (715) 772-4502 |

Comments about facility representative's observations, etc.

Literature Review – Use Attachment B, if necessary

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

Wilson, St. Croix County Wastewater Receiving Stream Classification, Terry Moe, 03/28/1979; Water Quality Standards Review for the Headwaters of Wilson Creek near Wilson WI, Paul LaLiberte, 08/21/1996

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

Report of a Pre-Operative Background Point Source Impact Study on Wilson Creek, Paul LaLiberte, 04/1982

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

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

Hydraulic conditions remain unchanged in the tributary to Wilson Creek since the first filed work on the stream in 1979. It was and continues to be a dry run with flow only occurring under event conditions or when the WWTP is discharging. Further fieldwork could be performed on Wilson Creek itself to better determine the exact upstream extent of the trout stream classification, however this would not affect the classification of the tributary to Wilson Creek.

Fish and Aquatic Life Use Designation Summary

Form 3200-121 (12/04)

Page 3 of 6

| | | |
|---|------------------|-----------------|
| Water Body Name Wilson Creek Tributary | WBIC # 206600 | Date 6/27/05 |
|---|------------------|-----------------|

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

| | |
|--|--|
| Assessment Date (mm/dd/yyyy) 06/29/2004 | Additional Assessment Date(s): 10/27/2003 |
|--|--|

| | |
|---|--|
| <p>Stream Segment Physical/Chemical Data:</p> <p>Length <u>1500</u> <input type="checkbox"/> feet <input checked="" type="checkbox"/> meters <input type="checkbox"/> miles</p> <p>Avg. Width _____ <input type="checkbox"/> feet <input type="checkbox"/> meters</p> <p>Max. Width _____ <input type="checkbox"/> feet <input type="checkbox"/> meters</p> <p>Avg. Depth <u>0</u> <input type="checkbox"/> feet <input checked="" type="checkbox"/> meters</p> <p>Max. Depth <u>0</u> <input type="checkbox"/> feet <input checked="" type="checkbox"/> meters</p> <p>Gradient _____ Velocity _____</p> | <p>Substrate Material:</p> <p>Silt _____ % Organic _____ %</p> <p>Rubble _____ % Gravel _____ %</p> <p>Sand _____ % Other _____ %</p> <hr/> <p>Stream Flow <u>0</u> cfs <input checked="" type="checkbox"/> Measured <input type="checkbox"/> Estimated</p> <p>At time of assessment, flow was: <input type="checkbox"/> High <input type="checkbox"/> Low <input checked="" type="checkbox"/> Very Low</p> <p>7Q2 Flow <u>0</u> cfs</p> <p>7Q10 Flow <u>0</u> cfs</p> |
|---|--|

Stream Temperature _____ °C Instantaneous 24-Hr. Maximum 24-hr. Avg.

Dissolved Oxygen (Instantaneous) _____ mg/L Time of Day ____:____ 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

| | |
|--|--|
| <p>Effluent Flow:</p> <p>Daily Average <u>0.23</u> cfs <input checked="" type="checkbox"/> Measured <input type="checkbox"/> Estimated</p> <p>Design Flow <u>0.04</u> cfs (Convert MGD to cfs by multiplying by 1.55)</p> | <p>Chemical Data Collected: (STORET # _____)</p> <p><input type="checkbox"/> Ammonia <input type="checkbox"/> Pesticides <input type="checkbox"/> Other: _____</p> <p><input type="checkbox"/> Atrazine <input type="checkbox"/> Phosphorus <input type="checkbox"/> Other: _____</p> <p><input type="checkbox"/> Bacteria <input type="checkbox"/> Metals <input type="checkbox"/> Other: _____</p> |
|--|--|

Brief Interpretation/Comments:

The Village of Wilson operates a three-cell aerated pond treatment system with a holding pond to handle domestic and commercial waste. The average annual design flow is 0.024 MGD, and the facility had an actual annual average flow of 0.009 MGD in 2004. The tributary to Wilson Creek is dry during non-event conditions, effluent is limited by permit to 0.15 MGD during periods of discharge. During 2004 the facility only discharged from 1-Oct to 28-Oct. See attachment C for maps and photos of receiving stream.

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: _____

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: Seasonal Discharge

Observations About Habitat Quality: _____

| | | |
|---|------------------|-----------------|
| Water Body Name Wilson Creek Tributary | WBIC # 206600 | Date 6/27/05 |
|---|------------------|-----------------|

Biological Data – Fish data is required

Fish:

Sampling Date (mm/dd/yyyy) 06/29/2004

Species List and IBI Forms: Attached to Report Not Applicable

Survey Location(s) _____

Distance Sampled 1500 feet meters miles

Sampling Gear: Backpack Shocker Other – Describe: Visual observation, no water in channel

Number of Species Collected 0 Total Number of Fish Collected 0

Number of Intolerant Species _____ % Intolerant Species _____

Endangered or Other Special Category Species Collected:

| | |
|---------------|------------------------------------|
| Species _____ | No. of Individuals Collected _____ |
| Species _____ | No. of Individuals Collected _____ |
| Species _____ | No. of Individuals Collected _____ |

IBI Score _____ Rating _____

Macroinvertebrates:

Sampling Date (mm/dd/yyyy) _____ HBI FBI

Survey Location(s) _____

Sampling Procedure _____

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

Stream is dry run, with no flow under non-event conditions.

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

Since the stream is dry run, with no flow under non-event conditions and the period of discharge averages around 30 days in any given year there is no opportunity for a higher use to develop in the presence of the discharge.

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

Approximate Area 1.5 Acres Square Miles

Land Use: Crop Land 50 % Pasture _____ % Forest _____ %
Grass Land 50 % Urban _____ % Wetland _____ %

Number of Feedlots/Barn Yards Near Stream _____

Other Nonpoint Sources _____

| | | |
|---|------------------|-----------------|
| Water Body Name Wilson Creek Tributary | WBIC # 206600 | Date 6/27/05 |
|---|------------------|-----------------|

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):

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:

Since the stream is dry run, with no flow under non-event conditions and the period of discharge averages around 30 days in any given year there is no opportunity for a higher use to develop in the presence of the discharge.

Prepared By

| | | |
|--|-------------------------------|--------------------------|
| Preparer Signature  | Printed Name Pat Oldenburg | Date Prepared 6/27/05 |
|--|-------------------------------|--------------------------|

Fish and Aquatic Life Use Designation Summary

Form 3200-121 (12/04)

| | | |
|---|------------------|-----------------|
| Water Body Name Wilson Creek Tributary | WBIC # 206600 | Date 6/27/05 |
|---|------------------|-----------------|

Author and Peer Review

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

| | |
|-------------------------------|-----------------|
| Submitted By Pat Oldenburg | Date 6/27/05 |
| Peer Reviewed By | Date |

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) Paul LaLiberte | Watershed Program Coordinator (Expert) Signature <i>Paul LaLiberte</i> | Date 6-27-05 |
| Printed Name of Regional Water Leader (or designee) Dan Bauman | Regional Water Leader (or designee) Signature <i>Dan Bauman</i> | Date 6-30-05 |
| Printed Name of Water Quality Standards Section Chief (or designee) Bob Masnado | Water Quality Standards Section Chief (or designee) Signature <i>Bob Masnado</i> | Date 7-11-05 |

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 Steven J Nielson

Basin Engineer Peter Skorseth

Basin Planner Karen Voss

Effluent Limits Calculator Pat Oldenburg

Endangered Resources _____
(when T&E Species Present)

Other Interested Parties:

Ken Schreiber

Fish and Aquatic Life Use Designation Summary

Attachments for Form 3200-121

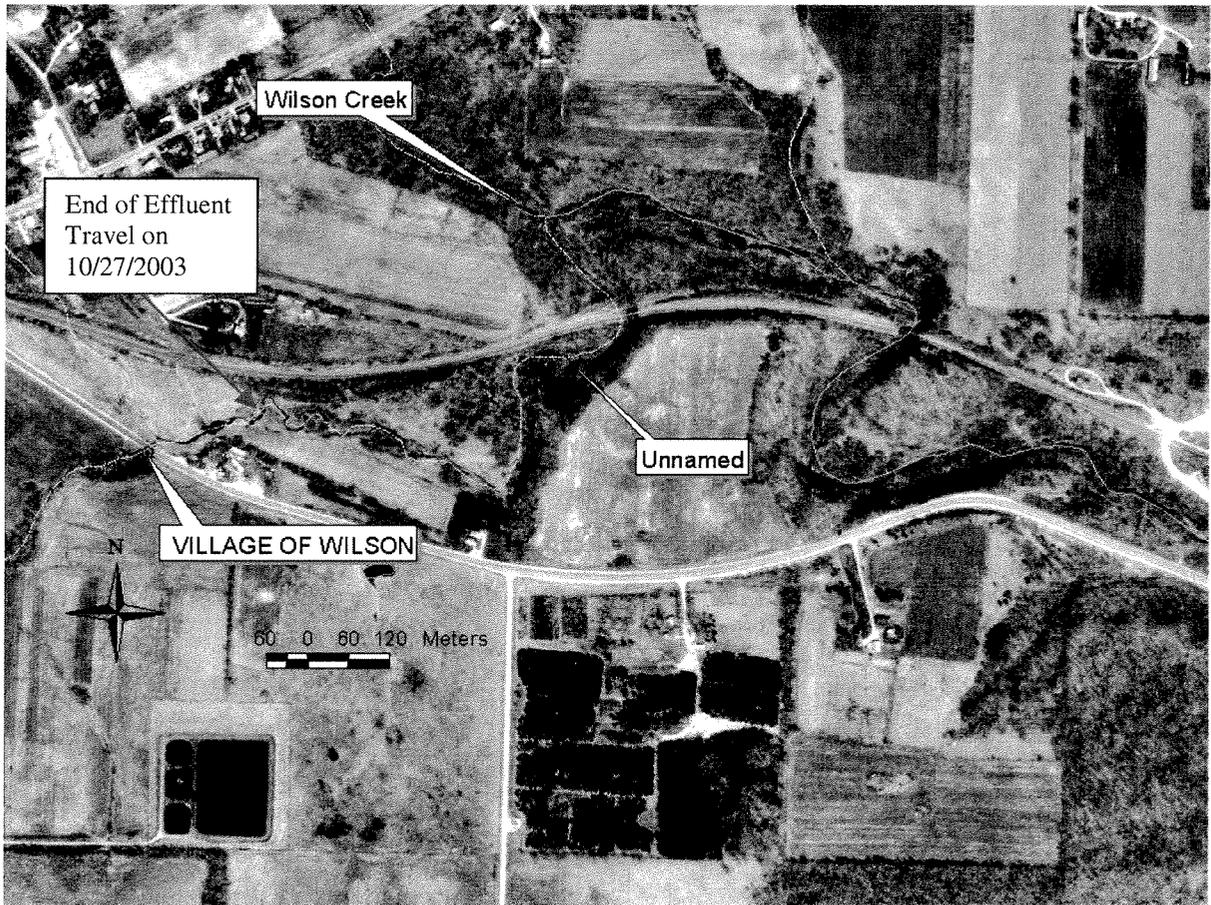
Attachment A: Basis for Use Designation (p2)

The Wilson WWTP only discharges approximately 30 days in the spring and/or fall. This is not enough time for a diverse aquatic life community to develop. Under non-event conditions the effluent from the WWTP is lost to groundwater within approximately 200 m from the outfall further limiting the potential of the segment since there is limited potential for upstream migration into the segment.

Attachment B: Literature Review (p2)

Attachment C: Field Assessment Data and Observations (p3)

Figure 1. Map of Site:



Fish and Aquatic Life Use Designation Summary
Attachments for Form 3200-121

Figure 2. Village of Wilson WWTP Outfall



**Fish and Aquatic Life Use Designation Summary
Attachments for Form 3200-121**

Figure 3. End of effluent travel on 10/27/2003.



Attachment D: Observations about Habitat Quality (p4)

Attachment E: Other Biological Data/Observations (p4)

Attachment F: Interpretations Based on Existing Fish and Aquatic Life Community (p4)

Attachment G: Watershed Data and Observations Discussion (p5)

Attachment H: VTAL/TFAL Justification (p5)

**Fish and Aquatic Life Use Designation Summary
Attachments for Form 3200-121**

Additional Attachments: Map, photos, other information
