

Region WCR County St. Croix Report Date 10/1995 Classification LAL - new

Water Body: Cady Creek

Discharger: Foremost Farms

**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
- 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)
- Chemical Data (temp, D.O., etc.)
- Physical Data (flow, depth, etc.)
- Habitat Description
- Site Description/Map
- Other:

**Historical Reports in file:**

- 10/9/95 - Paul Laliberte
- 11/4/88 - Paul Laliberte
- 8/25/75 - ?

**Additional Comments/How to improve report:**

- low flow limits ability to meet PAR
- data would be useful to justify class'n.

WATER QUALITY STANDARDS REVIEW FOR THE HEADWATERS OF CADY CREEK  
IN ST CROIX COUNTY NEAR THE DISCHARGE FROM FOREMOST FARMS USA COOP -  
WILSON (AKA WISCONSIN DAIRIES COOP & SUMMIT CHEESE)  
T28N, R15W, SECTIONS 10 & 15

Paul La Liberte

October 9, 1995

This stream was first evaluated and recommended for listing as a variance water in NR104 in 1975. Although the classification never was formally promulgated, the Wisconsin Dairies Coop has received several WPDES permits based on the recommended classification. The original recommendation was for "non-continuous, capable of supporting marginal fish and aquatic life". The basis for the classification was:

1. The effluent creates a small amount of flow (design flow of 0.03 mgd in 1994) in a drainage channel which is otherwise dry under base flow conditions.
2. The effluent seeps into the groundwater within one mile of the outfall and does not get within three miles of the continuously flowing waterbody downstream (Cady Creek).

The stream was inspected again in October 1988. A standards review report of that visit recommended continuing the same classification. Additional inspections in 1989 and 1995 have confirmed that the conditions described in the original stream classification are still present. The limited flow in the drainage channel provided by the facility is insufficient to support a classification higher than Limited Aquatic Life (formerly called marginal aquatic life). Below the continuously flowing origin of Cady Creek near Hwy 29, Cady Creek is classified as an exceptional resource water.

The three miles of dry channel that exists between the outfall and the continuously flowing origin of Cady Creek effectively isolates the facility's wastewater load under base flow conditions. Flow would reach Cady Creek only under conditions of significant stormwater flow or snow melt. Under these conditions, the wastewater would be diluted with a very large quantity of surface water, rendering the wastewater load insignificant. The isolated nature of the discharge removes it as a threat to downstream surface waters. It is therefore a candidate for an alternative effluent phosphorus limit.

Because the effluent from this facility seeps to groundwater, compliance with groundwater standards must be considered, as well as surface water standards. The most recent WPDES permit issued to the facility required they develop a plan to assess their impacts on groundwater.

foremo.rpt

- c. P. Skorseth - Baldwin  
M. Engel - Baldwin  
J. Ball - WR/2  
B. Masnado - WR/2

## CORRESPONDENCE/MEMORANDUM

Date: November 4, 1988  
To: Summit Cheese Facility File

File Ref: 3200

From: Paul LaLiberte *Paul*

Subject: Water Quality Standards Review for the Headwaters of Cady Creek in St. Croix County

The headwater area of Cady Creek, which receives treated wastewater from Summit Cheese near ~~Wilson, Wisconsin~~, was informally classified by Water Resources Management in 1975 as "non-continuous, marginal." At the time, the cheese plant created flow in a normally dry channel, which persisted for about one mile. Continuous flow began at the vicinity of Hwy 29, about four miles below the cheese plant. An inspection of the site in October 1988 found these conditions were still present.

In recognition of the poor aquatic habitat resulting from the lack of flow, the headwaters of Cady Creek from Summit Cheese to Hwy 29 should continue to be classified "non-continuous, capable of supporting marginal aquatic life (class E)."

Enc.

c. → D. Schuettpelz - WR/2  
WR/PL008.sz

8-25-75

Summit Cheese Factory - Lady Creek - At cheese  
factory access road to lagoon

picture 10 - looking upstream above lagoon  
outfall

picture 11 - downstream view below lagoon

\*Note - exceptionally high flow due to a  
great deal of rain within the last week

picture 12 - of the cheese factory lagoon

Normally there is no flow above the  
cheese factory lagoon outfall. There is  
a defined bed & banks. Open agricultural  
land with cattle pasturing along the stream  
bank is characteristic.

Recommendations:

Non-continuous agricultural should be  
the classification down to STH "29".

Note - Stream dries up  $\approx$  1 mile below <sup>Discharge</sup> at CTH "N"  
& is continuous again at ~~STH~~ STH "29". Below  
STH "29", continuous fish & aquatic life  
standards should apply.

# SUMMIT CHEESE FACTORY

CADY CR.

St. Croix Co.

Sim. St. Classification Information

- HEAD WATERS TO SUMMIT CHEESE DISCHARGE  
NON-CONTINUOUS MARGINAL

- DISCHARGE CREATES FLOW IN STREAM DOWN TO CTH  
"N" ( $\approx$  1 MILE) WHERE IT DRY'S UP.

- CTH "N" DOWNSREAM TO STA 29 - STILL DRY

- STA 29 - CONTINUOUS FLOW BEGINS

There fore: CADY CR. IS CLASSIFIED AS  
NON-CONTINUOUS MARGINAL FROM HEADWATERS DOWNSREAM  
TO STA 29 - (AT LEAST 9 STREAM MILES FROM DISCHARGE TO STA 29)

CADY CR. IS CLASSIFIED AS  
CONTINUOUS FISH AND AQUATIC LIFE.