

Region WCR County Chippewa Date 1-25-95 Classification LAL

Water Body: Wetland

Discharger: Camp manitou

If classified as Limited Forage Fish (LFF) or Limited Aquatic Life (LAL), check any of the following Use Attainability Analysis factors that apply:

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
insufficient water depth,

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 included

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

Comments:

wetland = LAL

good report...

1/25/95 - Paul LaLiberte

WATER QUALITY STANDARDS REVIEW
FOR THE RECEIVING WATER FOR **CAMP MANITOU**

PAUL LA LIBERTE
January 25, 1995

Treated domestic wastewater from the Eau Claire YMCA Camp, Camp Manitou, (SE, NW, S20, T32N, R8W, Chippewa County) discharges to a 0.75 acre wetland. Wastewater discharge to the wetland through a new WWTP began about 25 years ago. The facility was issued its first WPDES permit in 1986, at which time the first receiving stream classification was done (8-20-86). A water quality standards review was done in 1990. Since no new information was available, no classification changes were recommended. This classification review includes an initial application of NR103, Water Quality Standards for Wetlands (promulgated in 1991) as well as NR104. Observations of the wetland made on 12-21-94 are combined with those made on 8-20-86 to support this evaluation.

The WWTP consists of a septic tank and a sand filter. The effluent design flow is about 6,000 gpd and effluent BOD₅ is about 15 mg/L. The outfall pipe terminates below the water surface in the wetland and is not visible. The wetland is a groundwater depression wetland common in the Chippewa Moraine area. It has no channelized inlet or outlet and has a watershed which does not extend more than 100' beyond the wetland boundary. Land use in the small watershed is forest. There is no surface hydrologic connection with Long Lake. The wetland is too small to appear on Wisconsin's wetland inventory.

The wetland is 90% inundated and densely vegetated with cattails, arrowhead and *Scirpus sp.*. Some willow and alder shrubs are also present. Insufficient water depth is present for submergent aquatic plants (generally 2-6"). *Lemna spp.* are abundant. No channelized flow is evident in the wetland. Another wetland exists about 50' to the southwest. There is no surface water connection between the two wetlands, but they are likely linked via the groundwater. This second wetland is about two times larger. The greater abundance of cattails vs *Scirpus sp.* suggests that the larger wetland is wetter and therefore at a slightly lower elevation.

The wetland receiving water looks similar to other wetlands common in the area and does not appear to be significantly affected by the WWTP effluent. If small increases in hydrologic loading were to occur in the future, the wetland would likely experience a vegetation change so that it resembled the larger wetland to the southwest. In either event, wetland functional values should not be affected.

RECOMMENDED CLASSIFICATION:

The receiving water for Manitou Camp should continue to be **Limited Aquatic Life**. Wetland water quality standards should continue to be met in the foreseeable future as long as the WWTP continues to be well maintained (regular septic tank pumping). The wetland is not capable of maintaining dissolved oxygen levels suitable for most aquatic life. No full body contact recreational use is possible due to lack of open water.

manitou.rpt

c. P. Trochlell -WR/2
J. Ball - WR/2

Wisconsin Department of Natural Resources

RAPID ASSESSMENT METHODOLOGY FOR EVALUATING
WETLAND FUNCTIONAL VALUES

GENERAL INFORMATION

Name of Wetland/Owner:	Eau Claire YMCA
Location: County	Chippewa ; NW ¹ / ₄ , NE ¹ / ₄ , Section 19, Township 32 N, Range 8 W
Project Name:	Manitou Camp
Evaluator(s):	P. LaLiberte
Date(s) of Site Visit(s):	12-21-94

Description of seasonality limitations of this inspection due to time of year of the evaluation and/or current hydrologic and climatologic conditions (e.g. after heavy rains, snow or ice cover, during drought year, during spring flood, during bird migration): 6" snow & ice

WETLAND DESCRIPTION

Wisconsin Wetlands Inventory classification:	not listed
Wetland Type:	shallow open water deep marsh shallow marsh seasonally flooded basin bog floodplain forest alder thicket sedge meadow coniferous swamp fen wet meadow shrub-carr low prairie hardwood swamp
Estimated size of wetland in acres:	.75 Ac

SUMMARY OF FUNCTIONAL VALUES

Based on the results of the attached functional assessment, rate the significance of each of the functional values for the subject wetland and check the appropriate box. Complete the table as a summary.

FUNCTION	SIGNIFICANCE				
	Low	Medium	High	Exceptional	N/A
Floral Diversity	X				
Wildlife Habitat		X			
Fishery Habitat					X
Flood/Stormwater Attenuation	X				
Water Quality Protection	X				
Shoreline Protection					X
Groundwater	X				
Aesthetics/Recreation/Education				X	

List any Special Features/"Red Flags":

SITE DESCRIPTION

I. HYDROLOGIC SETTING

A. Describe the geomorphology of the wetland:

- Depressional (includes slopes, potholes, small lakes, kettles, etc.)
- Riverine
- Lake Fringe
- Extensive Peatland

B. N Has the wetland hydrology been altered by ditching, tiles, dams, culverts, well pumping, diversion of surface flow, or changes to runoff within the watershed (circle those that apply)? *apparently not*

C. N Does the wetland have an inlet, outlet, or both (circle those that apply)? *none*

D. N Is there any field evidence of wetland hydrology such as buttressed tree trunks, adventitious roots, drift lines, water marks, water stained leaves, soil mottling/gleying, organic soils layer, or oxidized rhizospheres (circle those that apply)? *water evident*

E. N Does the wetland have standing water, and if so what is the average depth in inches? 2-6" Approximately how much of the wetland is inundated? 90%

F. How is the hydroperiod (seasonal water level pattern) of the wetland classified?

- Permanently Flooded
- Seasonally Flooded (water absent at end of growing season)
- Saturated (surface water seldom present)
- Artificially Flooded
- Artificially Drained

G. N Is the wetland a navigable body of water or is a portion of the wetland below the ordinary highwater mark of a navigable water body? List any surface waters associated with the wetland or in proximity to the wetland (note approximate distance from the wetland and navigability determination). Note if there is a surface water connection to other wetlands.

II. VEGETATION

A. Identify the vegetation communities present and the dominant species.

floating leaved community dominated by:	probably duckweed
submerged aquatic community dominated by:	?? too shallow
emergent community dominated by:	80% Scirpus 20% cattail
shrub community dominated by:	willow & Alder
deciduous broad-leaved tree community dominated by:	
coniferous tree community dominated by:	
open sphagnum mat or bog	
sedge meadow/wet prairie community dominated by:	
other (explain)	

B. Other plant species identified during site visit:

only dominants evident due to snow cover

III. SOILS

not done - wetland obvious

A. SCS Soil Map Classification: _____

B. Field description:

___ Organic (histosol)? If so, is it a muck or a peat?

___ Mineral soil?

- Mottling, gleying, sulfidic materials, iron or manganese concretions, organic streaking (circle those that apply)?

• Soil Description: _____

• Depth of mottling/gleying: _____

• Depth of A Horizon _____

• Munsell Color of matrix and mottles

-Matrix below the

A horizon (10" depth): _____

-Mottles: _____

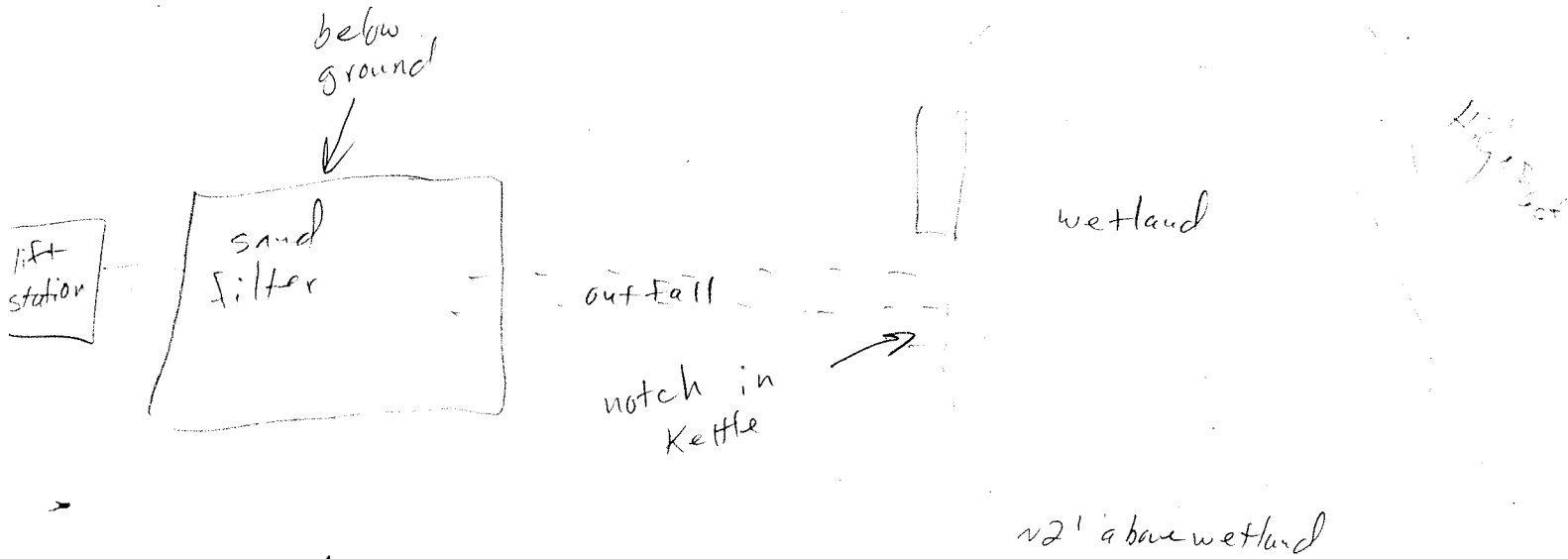
V. SURROUNDING LAND USES

A. What is the estimated area of the wetland watershed in acres? 175 Ac

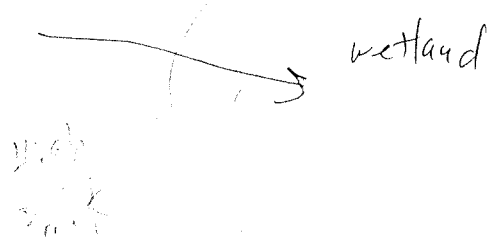
B. What are the surrounding land uses? Forest + Youth Camp

LAND-USE	ESTIMATED % OF WETLAND WATERSHED
Developed (Industrial/Commercial/Residential)	
Agricultural/cropland	
Agricultural/grazing	
Forested	100
Grassed recreation areas/parks	
Old field	
Highways or roads	
Other (specify)	

VI. SITE SKETCH



This wetland is ~ 50% scirpus + 50% cattail. Suspects a lower elevation + slightly wetter location. About 2x larger than adjacent wetland.



FUNCTIONAL ASSESSMENT

The following assessment requires the evaluator to examine site conditions that provide evidence that a given functional value is present and to assess the significance of the wetland to perform those functions. Positive answers to questions indicate the presence of factors important for the function. The questions are not definitive and are only provided to guide the evaluation. After completing each section, the evaluator should consider the factors observed and use best professional judgement to rate the significance. The ratings should be recorded on page 1 of the assessment.

Special Features/ RED FLAGS

1. **Y** **N** Is the wetland in or adjacent to an area of special natural resource interest (NR 103.04, Wis. Adm. Code)? If so, check those that apply:

- a. Cold water community as defined in s. NR 102.04(3)(b), Wis. Adm. Code, (including trout streams, their tributaries, and trout lakes);
- b. Lakes Michigan and Superior and the Mississippi River;
- c. State or federal designated wild and scenic river;
- d. Designated state riverway;
- e. Designated state scenic urban waterway;
- f. Environmentally sensitive area or environmental corridor identified in an area-wide water quality management plan, special area management plan, special wetland inventory study, or an advanced delineation and identification study;
- g. Calcareous fen;
- h. State park, forest, trail or recreation area;
- i. State and federal fish and wildlife refuges and fish and wildlife management areas;
- j. State or federal designated wilderness area;
- k. Designated or dedicated state natural area;
- l. Wild rice water listed in ch. NR 19.09, Wis. Adm. Code;
- m. Surface water identified as an outstanding or exceptional resource water in ch. NR 102, Wis. Adm. Code.

2. **Y** **(N)** According to the Natural Heritage Inventory (Bureau of Endangered Resources) or direct observations, are there any rare, endangered, or threatened plant or animal species in, near, or using the wetland or adjacent lands? If so, list the species of concern:

3. **Y** **(N)** Is the project located in an area that requires a State Coastal Zone Management Plan consistency determination?

Floral Diversity

1. Y N Does the wetland support a variety of native plant species (i.e. not a monotypic stand of cattail or giant reed grass and/or not dominated by exotic species such as reed canary grass, brome grass, buckthorn, purple loosestrife, etc.)?
not a species in winter
2. Y N Is the wetland plant community regionally scarce or rare?

Wildlife and Fishery Habitat

1. List any species observed, evidenced (e.g. tracks, scat, nest/burrow, calls), or expected to utilize the wetland:
2. Y N Does the wetland contain a number of diverse vegetative cover types and a high degree of interspersed of those vegetation types?
3. Y N Is the estimated ratio of open water to cover between 30 and 70 percent? What is the estimated ratio? 0 %
4. Y N Does the surrounding upland habitat likely support a variety of animal species?
5. Y N Is the wetland part of or associated with a wildlife corridor or designated environmental corridor?
6. Y N Is the surrounding habitat and/or the wetland itself a large tract of undeveloped land important for wildlife that require large home ranges (e.g. bear, woodland passerines)?
7. Y N Is the surrounding habitat and/or the wetland itself a relatively large tract of undeveloped land within an urbanized environment that is important for wildlife?
8. Y N Are there other wetland areas near the subject wetland that may be important to wildlife?
many wetlands nearby
9. Y N Is the wetland contiguous with a permanent waterbody or periodically inundated for sufficient periods of time to provide spawning/nursery habitat for fish?
10. Y N Can the wetland provide significant food base for fish and wildlife (e.g. insects, crustaceans, voles, forage fish, amphibians, reptiles, shrews, wild rice, wild celery, duckweed, pondweeds, watermeal, bulrushes, bur reeds, arrowhead, smartweeds, millets...)?
Yes but very small
11. Y N Is the wetland located in a priority watershed/township as identified in the Upper Mississippi and Great Lakes Joint Venture of the North American Waterfowl Management Plan?
12. Y N Is the wetland providing habitat that is scarce to the region?

Flood and Stormwater Storage/Attenuation

1. Y N Are there steep slopes, large impervious areas, moderate slopes with row cropping, or areas with severe overgrazing within the watershed (circle those that apply)?
2. Y N Does the wetland significantly reduce run-off velocity due to its size, configuration, braided flow patterns, or vegetation type and density?
3. Y N Does the wetland show evidence of flashy water level responses to storm events (debris marks, erosion lines, stormwater inputs, channelized inflow)?
4. Y N Is there a natural feature or human-made structure impeding drainage from the wetland that causes backwater conditions?
5. Y N Considering the size of the wetland area in relation to the size of its watershed, at any time during the year is water likely to reach the wetland's storage capacity (i.e. the level of easily observable wetland vegetation)? [For some cases where greater documentation is required, one should determine if the wetland has capacity to hold 25% of the run-off from a 2 year-24 hour storm event.]
6. Y N Considering the location of the wetland in relation to the associated surface water watershed, is the wetland important for attenuating or storing flood or stormwater peaks (i.e. is the wetland located in the mid or lower reaches of the watershed)?

Water Quality Protection

1. Y N Does the wetland receive overland flow or direct discharge of stormwater as a primary source of water (circle that which applies)?
2. Y N Do the surrounding land uses have the potential to deliver significant nutrient and/or sediment loads to the wetland?
3. Y N Based on your answers to the flood/stormwater section above, does the wetland perform significant flood/stormwater attenuation (residence time to allow settling)?
4. Y N Does the wetland have significant vegetative density to decrease water energy and allow settling of suspended materials?
5. Y N Is the position of the wetland in the landscape such that run-off is held or filtered before entering a surface water?
6. Y N Are algal blooms, heavy macrophyte growth, or other signs of excess nutrient loading to the wetland apparent (or historically reported)?

Shoreline Protection

1. Y N Is the wetland in a lake fringe or riverine setting? If NO, STOP and enter "not applicable" for this function. If YES, then answer the applicable questions.
2. Y N Is the shoreline exposed to constant wave action caused by a long wind fetch or boat traffic?
3. Y N Is the shoreline and shallow littoral zone vegetated with submerged or emergent vegetation in the swash zone that decrease wave energy or perennial wetland species that form dense root mats and/or species that have strong stems that are resistant to erosive forces?
4. Y N Is the stream bank prone to erosion due to unstable soils, land uses, or ice floes?
5. Y N Is the stream bank vegetated with densely rooted shrubs that provide upper bank stability?

Groundwater Recharge and Discharge

1. Y N Related to discharge, are there observable (or reported) springs located in the wetland, physical indicators of springs such as marl soil, or vegetation indicators such as watercress or marsh marigold present that tend to indicate the presence of groundwater springs?
2. Y N Related to discharge, may the wetland contribute to the maintenance of base flow in a stream?
3. Y N Related to recharge, is the wetland located on or near a groundwater divide (e.g. a topographic high)? *watershed only about 1.5 AC.*

Aesthetics/Recreation/Education and Science

1. Y N Is the wetland visible from any of the following kinds of vantage points: roads, public lands, houses, and/or businesses? (Circle all that apply.)
2. Y N Is the wetland in or near any population centers?
3. Y N Is any part of the wetland in public or conservation ownership?
4. Y N Does the public have direct access to the wetland from public roads or waterways? (Circle those that apply.)

Aesthetics/Recreation/Education and Science (continued)

5. Is the wetland itself relatively free of obvious human influences, such as:

- a. Y N Buildings?
- b. Y N Roads?
- c. Y N Other structures?
- d. Y N Trash?
- e. Y N Pollution?
- f. Y N Filling?
- g. Y N Dredging/draining?
- h. Y N Domination by non-native vegetation?

6. Is the surrounding viewshed relatively free of obvious human influences, such as:

- a. Y N Buildings?
- b. Y N Roads?
- c. Y N Other structures?

7. Y N Is the wetland organized into a variety of visibly separate areas of similar vegetation, color, and/or texture (including areas of open water)?

8. Y N Does the wetland add to the variety of visibly separate areas of similar vegetation, color, and/or texture (including areas of open water) within the landscape as a whole?

9. Does the wetland encourage exploration because any of the following factors are present:

- a. Y N Long views within the wetland?
- b. Y N Long views in the viewshed adjacent to the wetland?
- c. Y N Convoluted edges within and/or around the wetland border?
- d. Y N The wetland provides a different (and perhaps more natural/complex) kind of environment from the surrounding land covers?

10. Y N Is the wetland currently being used for (or does it have the potential to be used for) the following recreational activities? (Check all that apply.)

ACTIVITY	CURRENT USE	POTENTIAL USE
Nature study/photography		X
Hiking/biking/skiing		too small
Hunting/fishing/trapping		
Boating/canoeing		↓
Food harvesting		
Others (list)		Youth Camp Activities

11. Y N Is the wetland currently being used, and/or does it have the potential for use for educational or scientific study purposes (circle that which applies)?

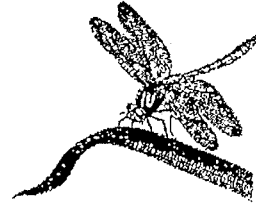
CORRESPONDENCE/MEMORANDUM

Date: April 9, 1990

File Ref: 3200

To: Manitou Camp - YMCA Facility File

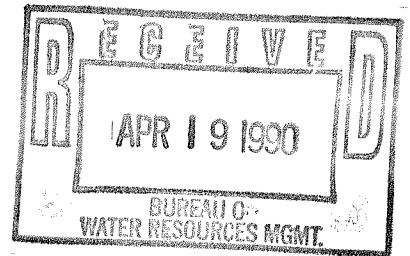
From: Paul LaLiberte *facel*



Subject: Water Quality Standards Review

Since the original stream classification for the wetland receiving water for this facility (1986), no additional information has been collected. The stream classification therefore should remain the same. No changes in applicable water quality standards are needed.

cc Duane Schuettpelz WR/2 *[Signature]*
Steve Thon



CLASSIFICATION OF A WETLAND NEAR LONG LAKE, CHIPPEWA COUNTY
LOWER CHIPPEWA RIVER BASIN
(EAU CLAIRE YMCA CAMP)

EVALUATION DATE: 8/20/86

BY
PAUL LALIBERTE

An unnamed wetland located at SE, NW, S20, 32N, 8W, Chippewa County, was evaluated to determine the appropriate surface water classification for setting effluent limits as specified in NR 104 and 210, Wisconsin Administrative Code. A YMCA camp on Long Lake discharges domestic wastewater to the wetland after treatment via a septic tank and sand filter. The treatment plant design was reviewed and approved by the Department about 15 years ago. Data provided by the area engineer indicates that the design flow was 6,000 gallons per day and the current effluent BOD₅ is about 15 mg/l. The outfall is submerged. It was located using blueprints of the treatment plant.

The wetland is about one acre in size, too small to be on a DNR wetland map. There is no outflow from the wetland and the watershed draining into it is very small. It is probably a groundwater depression wetland. It is densely vegetated with cattails and arrowhead and contains no patches of open water greater than a few square feet. Lemna is abundant.

Land use in the area, other than the camp itself, is forest. Heavy vegetation makes access to the wetland difficult. Mosquitoes are abundant, and it is unlikely that camp residents would spend much time near the wetland.

Recommended Classification:

The wetland should be classified as incapable of supporting aquatic life (use class E). Effluent limits for the present discharge from the YMCA camp should be based on those included in NR 210.03 (3), Wisconsin Administrative Code. Effluent dissolved oxygen is not a concern because the wetland would not be expected to contain much oxygen due to natural limiting factors -- (no flow, dense vegetation, high sediment oxygen demand, etc.). Since there is no open water to allow swimming or other full body contact recreational use, the wetland should be classified partial body contact recreational use. No disinfection of the effluent is necessary.

PLT293