

Region NOR County Oneida Report Date 7/1994 Classification U
Water Body: Thunder Lakes Wetland
Discharger: V. of Three Lakes WWTP

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:

1994 - B Jaeger (wetland review)
1978 - J. Neis, B. Jaeger

Additional Comments/How to improve report:

- LAL ~~is~~ (by default) b/c of wetland classification.

Wetland Review for the Three Lakes Sanitary District
WI-0022853

The Village of Three Lakes operates a municipal wastewater collection and treatment system with a design flow of 0.131 mgd. The effluent is discharged to part of a large wetland complex around Thunder Lake. A large share of this wetland is managed as the Thunder Lake State Wildlife Area.

The larger wetland encompasses about eight square miles which is mainly peat bog that has been substantially modified. Some of the wetland has been transformed to commercial cranberry farms. A system of drainage ditches were dug long ago throughout the wetland. In the last five years the Department of Natural Resources has substantially modified much of the wildlife area by removing the tree cover and digging ponds to create open water waterfowl habitat. The wildlife area also includes Rice Lake which is a high quality wild rice marsh, waterfowl refuge and State Natural Area.

The Three Lakes wastewater effluent impacts only a small area on the east end of the larger wetland complex. The wetland receiving the effluent has an area of about 100 acres. It is bounded to the east by upland, to the south and west by berms left when the ditches were dug, and the water flows north to Townline Creek. Vegetative cover includes areas dominated by shrubs, mixed trees and shrubs, and mixed emergent plants and shrubs. A few acres in the immediate area of the outfall is dominated by cattail among the trunks of dead trees. This area has been receiving wastewater for at least 25 years so it may be the wastewater has flooded out the trees and encouraged the cattail.

The Three Lakes wastewater treatment plant appears to have impacted part of the wetland that receives it's effluent. Because the wastewater has been discharged at this site for many years most of the changes caused by additional hydraulic and nutrient load have probably taken place. Since no changes in effluent characteristics have been proposed for this permit issuance the best alternative is to continue the discharge at the existing location.

Prepared by:

Bill Jaeger 7/4/94

William C. Jaeger
Water Resources Biologist

THREE LAKES, ONEIDA COUNTY

Wastewater Receiving Stream Classification

Three Lakes sewage treatment plant discharges its effluent to a swamp approximately one-quarter mile west of the community. A drainage ditch transects this swamp which in turn could drain into either Townline Lake or Rangeline Lake. During the summer months, it is unlikely that any of the effluent reaches Townline Lake. The effluent does appear to enter the drainage ditch, as determined from aerial photographs. During the summer, the water in the ditch was not reaching Rangeline Lake.

There are no large streams in the immediate vicinity that could assimilate the wastes from the sewage treatment plant.

Recommendations: Three Lakes discharge area fits into the category of a wetland.

Surveyed by: Jerome T. Neis, and William C. Jaeger.

10/3/00 - on Bill Jaeger's copy
in the NOR file date
is 1976