Department of Natural Resources

INTRA-DEPARTMENT

MEMORANDUM

Green Bay
Station

Date June 7, 1977

IN REPLY REFER TO: 3400

TO: Central Office - Madison

FROM: James J. McDonald

SUBJECT: Stream Classification - Florence, Wisconsin, Florence County

The Village of Florence operates a 2-cell stabilization pond system with a discharge to a swampy area; eventually drains to Weber Creek, and the Brule River.

Weber Creek is classified by DNR fisheries personnel as a class I trout stream for the lower two-thirds, or lower 1.8 miles, and a class III trout stream for the upper one-third, of .8 miles. The stream is inhabited by brook trout.

Information from 'Low Flow Characteristics of Wisconsin Streams at Sewage Treatment Plants' by U.S. Geological Survey in cooperation with Wisconsin DNR indicated that drainage area of Weber Creek, about a half a mile upstream from the Florence Treatment Plant was .6 sq. miles. Low flow characteristics were not indicated. However, measurements taken north of Florence 2.6 miles on the Brule River, with a drainage area of 389 sq. miles, indicated $Q7_{10}$ of 160 CFS.

Discharge from the secondary lagoon at Florence is from one or both of two pipes; one discharging at a slightly higher elevation that the other. The discharge is to a wetland area, however there is a noticeable velocity in certain portions of the wetland. A portion of this velocity is possibly contributed by the treatment plant discharge. From the discharge at the lagoons, sewage flows in a north-northwesterly direction to confluence with Weber Creek through the wetland area, and thence through Weber Creek approximately 2 miles to confluence with the Brule River.

On May 26, 1977, the writer and District Biologist on a site investigation did notice trout in the area of confluence with discharge from the wetland area. Velocities were evident through the wetland area in certain locations but no definite stream channel was created or continuous.

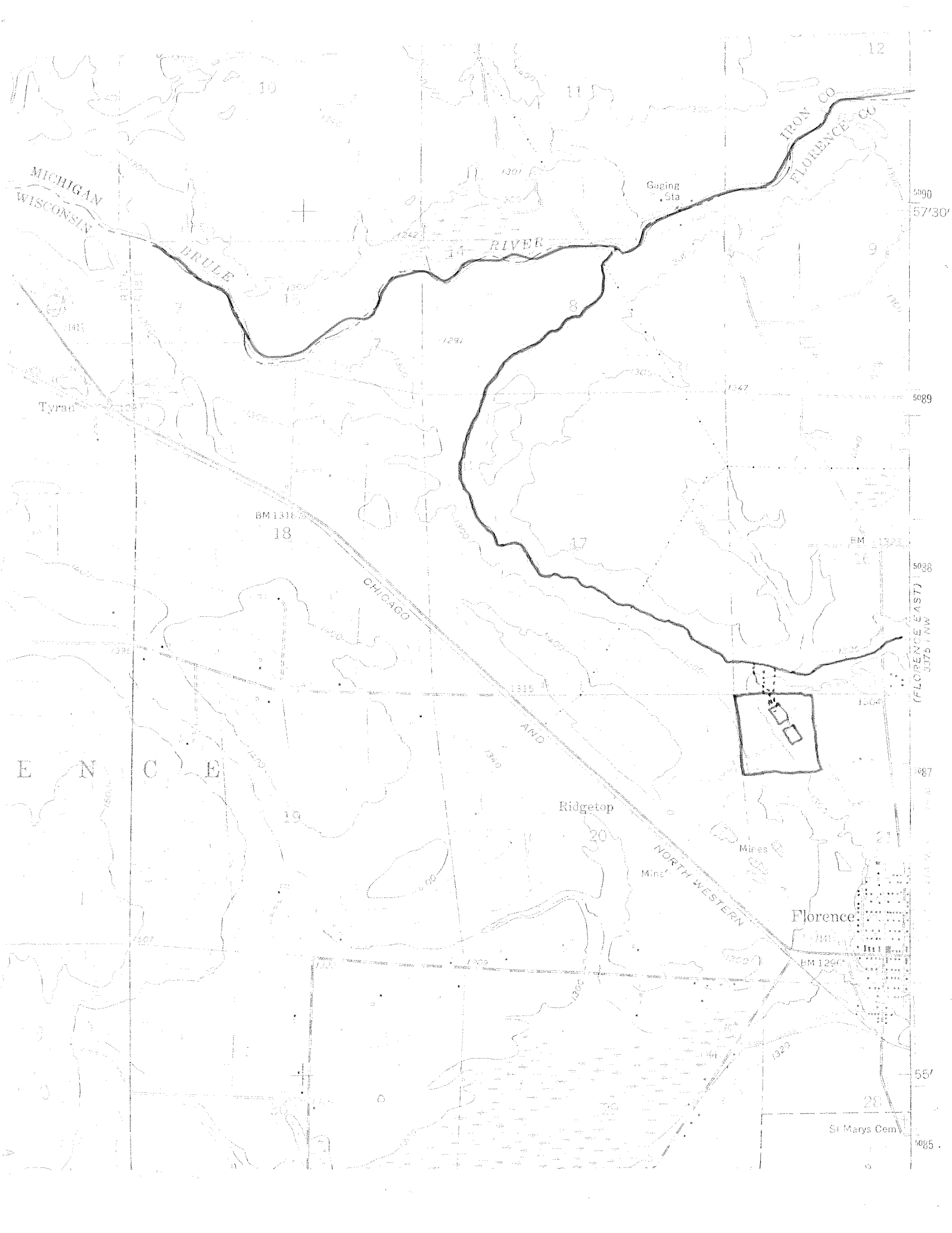
Recommendations:

That the area between the discharge of the Florence Treatment Plant to confluence with Weber Creek be classified as wetlands; further, that Weber Creek from confluence with the wetlands discharge to the Brule River be classified as continuous fish and aquatic life; further, that the Brule River be classified continuous fish and aquatic life.

James J. McDonald
District Engineer

Dennis C. Weisensel
District Biologist

JJM:ct
NOTED: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