

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: December 11, 1998

TO: Michael Rief-Oshkosh

FROM: Bradley Johnson-Wautoma *Ba*

SUBJECT: Stream Classification – Unnamed Tributary to Lake Butte des Mortes

On October 19th 1998, a stream classification was conducted on an unnamed tributary that discharges to Lake Butte des Mortes at NW ¼, SW ¼, Sec 8, T18N, R16E. The Michels Materials, Sheppard Quarry, operation discharges untreated dewatering effluent to this tributary.

The tributary has a small drainage area that is primarily made up of agricultural and residential land. The stream is considered navigable and non-continuous and only flows during runoff events. In the past, the tributary flowed through the quarry property (Figure 1), but it has since been channeled around the quarry along the west and north sides (Figure 2). At the time of our site inspection, no water was present upstream of the quarry discharge.

The discharge from the materials pit occurs roughly 150 feet south of the northeast corner of the quarry, the effluent then flows into the ditch on the west side of Leonard Point Road, flows north and enters the stream channel before going under Leonard Point Road. The stream flows for roughly 500 feet before it enters Lake Butte des Mortes. For much of the year, the streamflow is primarily made up of effluent. More consistent flow would improve the stream's ability to support fish and other aquatic life.

A stream is classified based on its natural physical and chemical characteristics, the cultural influences on the stream system, and its potential biological use. These factors affect the ability of the surface water to support certain uses. The stream was evaluated based on its existing biological use and the likely potential use that could be attained in the absence of controllable impacts.

A d-frame net was used to sample for the presence of macroinvertebrates in the stream. The only insect discovered is in the order Diptera. This single insect was located fairly near the mouth of the stream otherwise the stream was devoid of insect life. Other streams in the area had excellent insect communities. A macroinvertebrate sample collected from Honey Creek (located just east of this tributary) had an abundant population of insects with many orders represented. Due to the discharge and the inconsistent flows in the stream, and after looking at other comparable streams in the area, the macroinvertebrate community of this tributary has been severely degraded.

No fish were observed above the Leonard Point Lane road-bridge. Other streams in the area have seasonal spawning runs of northern pike and white suckers and year-round populations of forage fish species. Honey Creek to the east and Spring Brook to the west of this tributary have good fish species diversity primarily made up of forage fish communities. Due to the discharge and inconsistent flow regimes and based on these comparable streams, the fish community in this tributary has been negatively impacted.

In summary, based on the stream's natural and cultural characteristics, the stream received the following use classification:

The existing biological use of this tributary is **Limited Aquatic Life Community**. This stream has the potential to support a **Warm Water Forage Fish Community**. The classification should therefore be **Warm Water Forage Fish Community**.

CC Mary Gansberg-NER
Joe Ball-FH/2
Dennis Weisensel-NER

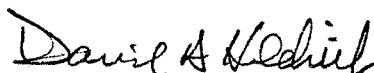
STREAM CLASSIFICATION

Survey Date: May 11, 1976

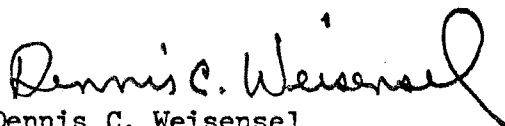
Butte des Morts Sanitary District - Winnebago County

The Butte des Morts S. D. WWTP discharges to Lake Butte des Morts.
The small discharge probably could not be detected in the receiving water.

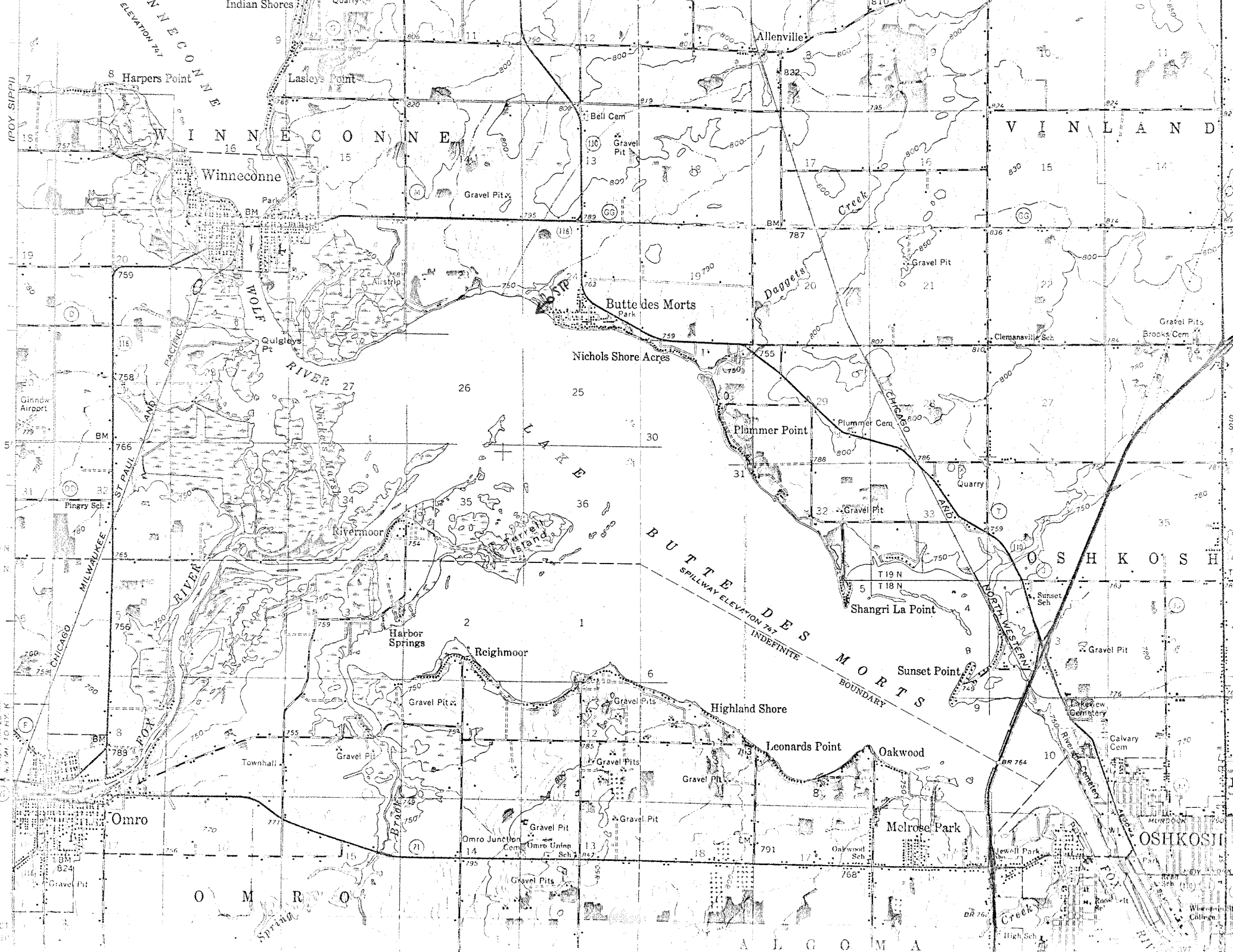
Recommendation: Classify Lake Butte des Morts as fish and aquatic life category.



David A. Hildreth
District Engineer



Dennis C. Weisensel
District Biologist



Union Oil Truck Stop and Edison Mobile Home Court

Winnebago County

Wastewater Receiving Stream Classification

Survey Date: 8-8-75

The two facilities have discharges from polishing ponds located approximately 100 feet apart. Both discharges are into a backwater of Lake Butte des Morts. This slough is formed at the mouth of a non-continuous stream which appears to have been ditched to enhance drainage of bordering agricultural land. The stream was dry above the backwater from the Lake. The amount of water in the slough varies with wind direction and the Lake level as controlled by the Lake Winnebago outlet dams. The vegetation indicates that the slough has water year round at the point of discharge from the two treatment plants. The water was 75 to 100 feet wide and 1/2 to 1 foot deep at the point of discharge.

Recommendations

The receiving stream should be classified as a portion of Lake Butte des Morts. Lake Butte des Morts supports a diversified game fish population. (Photos 1 and 3)

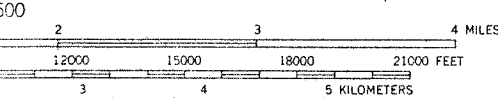
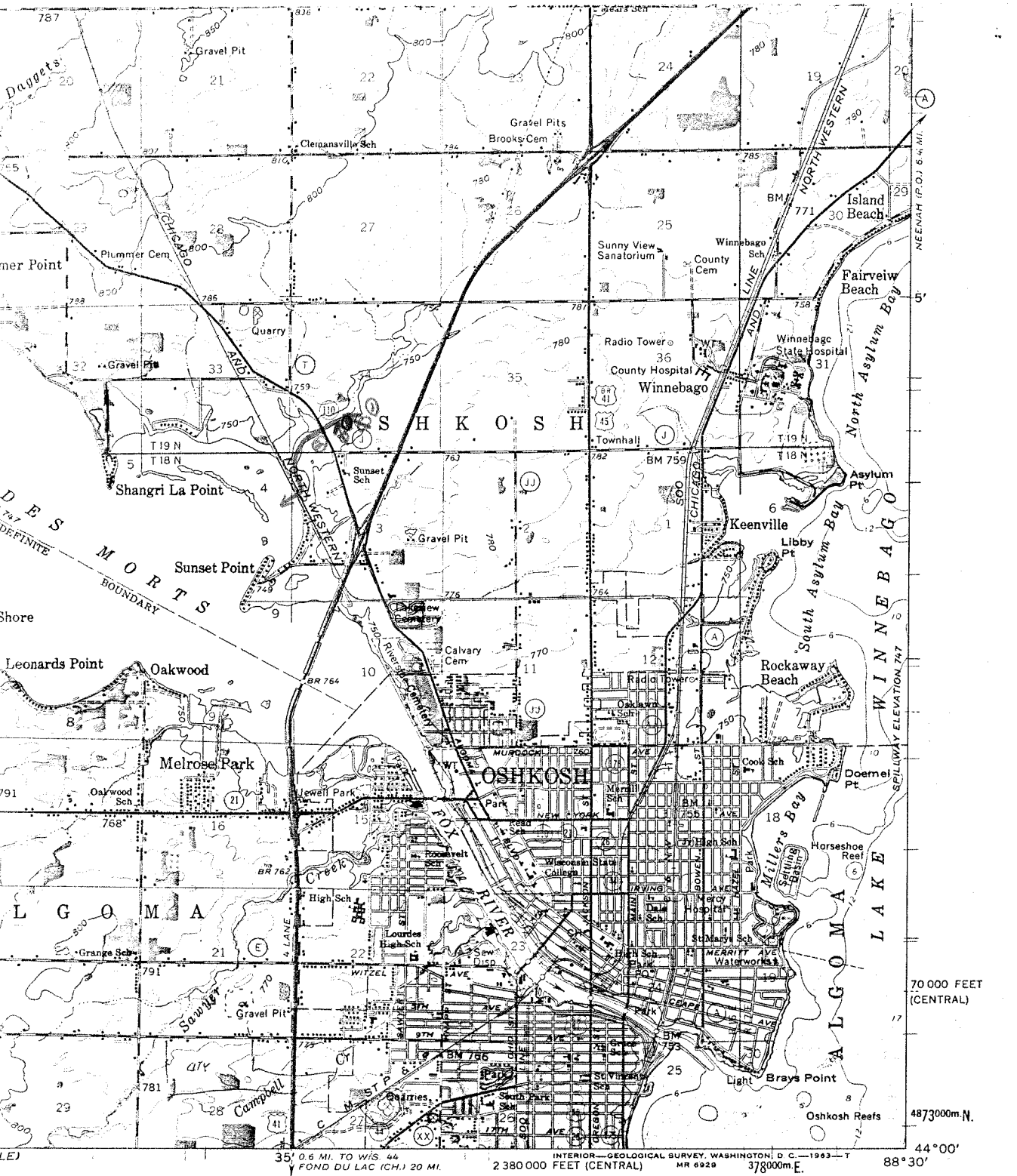
David A. Hildreth

David A. Hildreth
District Engineer

Dennis C. Weisensel

Dennis C. Weisensel
District Biologist

DAH:DCW:sh



10 FEET
SEA LEVEL
DATUM IS LOW WATER 746.8 FEET

MAP ACCURACY STANDARDS
VEY, WASHINGTON 25, D. C.
HISTORY SURVEY, MADISON 6, WISCONSIN
IS AVAILABLE ON REQUEST



QUADRANGLE LOCATION

ROAD CLASSIFICATION

Heavy-duty ——— Light-duty ———
Medium-duty ——— Unimproved dirt ———

U.S. Route State Route

The SE quarter of this map also covered by 7.5 minute
1:24,000-scale map: Oshkosh 1961

OSHKOSH, WIS.
N4400-W8830/15

1961

58

Union Oil Truck Stop & Edison Mobile Home



Slough of Lake Butte Des Morts looking
downstream from 50 feet above WWTP discharge.



Slough of Lake Butte Des Morts looking downstream
from Hwy 110 bridge.