DRESSER, POLK COUNTY

Wastewater Receiving Stream Classification

The Dresser two cell sewage stabilization pond is sited at the transitional edge of agricultural land and a wet cattail swamp with open water. The lagoon discharges to the swamp which drains from south to north through a one-half mile long constructed ditch. The constructed ditch empties into a natural surface water drainage channel surrounded by agricultural land.

The ditch draining the swamp was constructed to reroute natural drainage thereby making the effected land more suitable for agricultural use (Seymour - 1975). Flow in the constructed ditch is small and invertebrate life is controlled by the condition, especially dissolved oxygen concentration, of the swamp water as influenced by prevalent climatic conditions. The solid freezing of the ditch also has a marked seasonal influence upon invertebrate life status.

The presence of sewage effluent may or may not be worsening water quality conditions of the marsh water. The volumetric contribution may be an important factor in maintaining drainage out of the swamp.

The natural surface water drainage way, which receives the swamp/sewage drainage, ultimately reaches Hatchery Creek, 1.5 miles distant, after traversing agriculatural and natural land. This drainage way is probably dry during some portion of the year.

Missing photo?

Dresser Lagoon (mid-left) located adjacent to open marsh (right) looking east

Constructed ditch draining marsh - looking north

Recommendations:

The wastewater receiving area for the Dresser sewage stabilization pond shall be classified as a wetland.

The one-half mile long, constructed ditch draining the wetland shall be classified as noncontinuous, intermediate aquatic life. The intermediate aquatic life classification is justified because while the ditch flows between two cornfields, the physical relationship between the fields and ditch and the vegetation buffer is such that the potential for negative water quality impact is low.

The 1.5 mile long natural drainage way tributing to Hatchery Creek, shall be classified a noncontinuous intermediate aquatic life stream.

NOTE:

In the future, Dresser and St. Croix Falls are scheduled for a combined treatment facility with a discharge to the St. Croix River.

Evaluation Date: August 25, 1975

Personnel:

Lewis A. Seymour - Environmental Engineer - WCD
Terry A. Moe - Water Pollution Biologist - WCD
Bert J. Apelgren - Area Fish Manager - Menomonie Area
Richard E. Wedepohl - Engineer - Water Quality Evaluation - Madison
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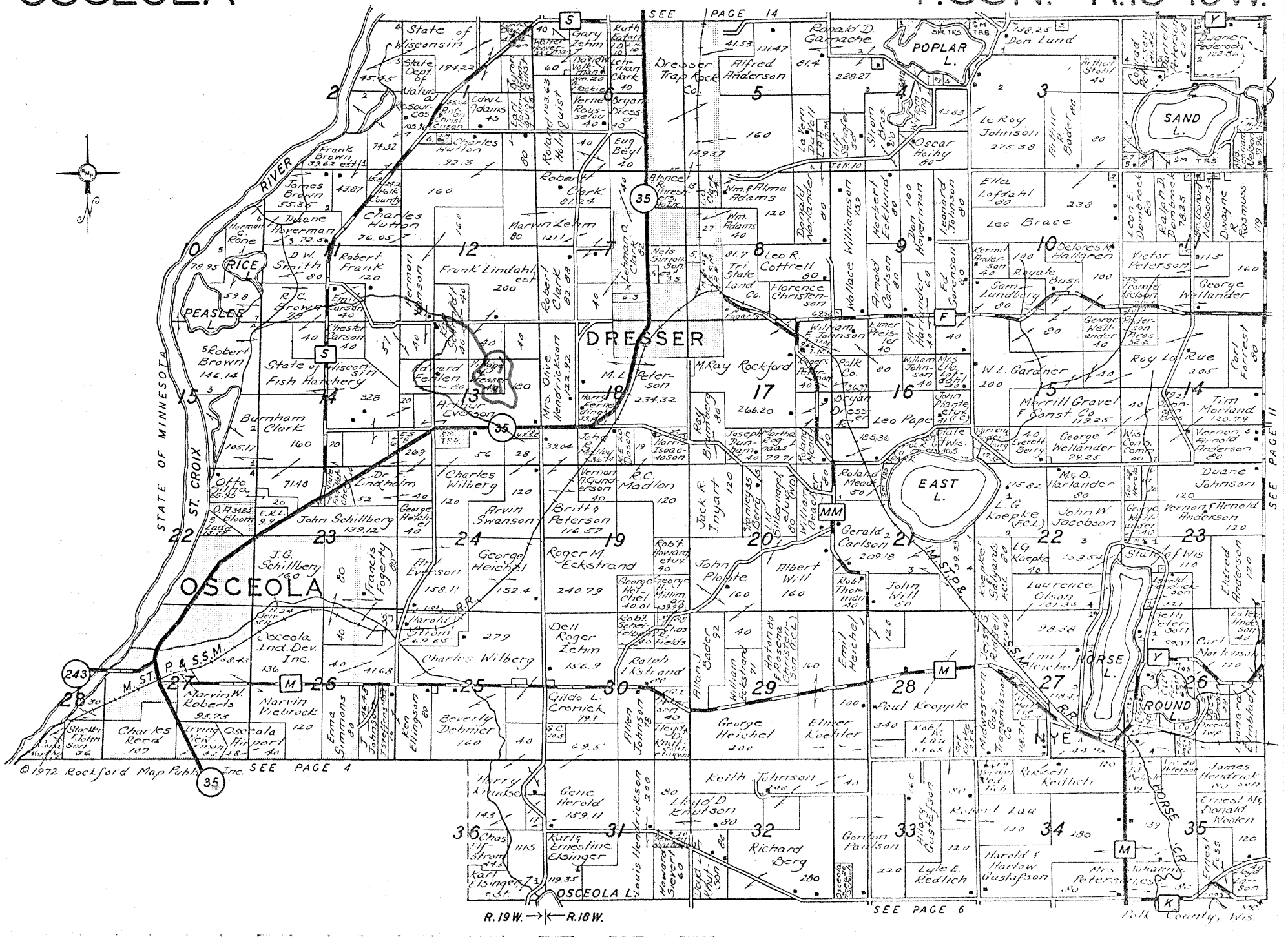
DRESSER Swamp below outfall

Cont

SHAFER
ST CROIX FALL
Colby Lake
Kahbakong Cem
Gravel Pit
RIVER
MINNEAPOLIS
Wyckstrom Lake
St Croix Falls
Taylors Falls
St Croix Falls Cem
Barneys Lake
St Croix Dalles
Town Hall
Lawrence
Folsom Island
Lake O' the Dalles
ST CROIX
INTERSTATE
PARK
Folsom Lake
Poplar Lake
Franconia Cem
Franconia
Creek
Close Slough
Rice Lake
Peaslee Lake
Dresser
Gravel Pits
Fish Hatchery
Lower Lake
Ski Lift
OSCEOLA
East Lake
CHISAGO CO
POLK CO
Trail
SAULT STE MARIE
AND
Gazing Stock
Osceola
MINNESOTA
WISCONSIN
Hale Cem
Brook
Osceola Landing Field
Nye
Grace Ch
Horse Lake
Farmington Center Sch
Ramsey Cem
Osceola Lake
Pleasant Lake
Island Lake
Quarry

OSCEOLA

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