Dale Swamp Subwatershed

Subwatershed Conditions

This 20 square mile subwatershed is the only subwatershed in the project which extends into Winnebago, Outagamie, and Waupaca counties. The major tributary is the Little Rat River, which begins at Squaw Lake and flows 3 miles before joining the main stem of the Rat River (See map 3-3).

Much of the Dale Swamp subwatershed is comprised of a large wetland complex, but the cropland acres north of highway 150 do contribute significant amounts of sediment.

Water Resource Conditions

The Little Rat supports a limited forage fish community for 1.2 miles upstream from the confluence with the Rat River. Upstream from the county line the stream is classified as limited aquatic life. Water resource problems include sedimentation, nutrient loading, and loss of habitat.

Water Resource Objectives

The following water resource management objectives are recommended for the Dale Swamp subwatershed:

- Increase aquatic life by improving overall habitat conditions.

  a. Reduce sedimentation of gravel and rubble.
  b. Reduce nutrient loading to reduce macrophyte growth and improve overall dissolved oxygen levels.

- Protect and enhance wildlife habitat by improving wetland and grassland habitat through reduction of sediment and phosphorus loadings.

Lake Butte Des Morts Subwatershed

Subwatershed Description

This is the smallest subwatershed in the watershed project, 6.2 square miles in size. It drains directly to Lake Butte des Morts through small intermittent streams and dredged channels. The eastern half of the village of Winneconne and the unincorporated town of Butte des Morts lie within this subwatershed (See map 3-4).

Water Resource Conditions

The tributaries in this subwatershed are seasonal ditches and do not support fish populations. Therefore, stream habitat and fish survey information was not collected during the summer of 1991.

Water resource problems include sedimentation of the tributaries and sediment loading directly to the lakes, nutrient loading to the lakes, channelization of the tributaries and side channels, low flows, and limited habitat in the tributaries. There is a concern for the urban nonpoint sources as well given the extensive shoreline development.

Water Resource Objectives

The following water resource management objectives are recommended for the Lake Butte des Morts subwatershed:

- Increase aquatic life by improving overall habitat conditions.

    a. Reduce sedimentation of gravel and rubble.
    b. Reduce nutrient loading to reduce macrophyte growth and improve overall dissolved oxygen levels.

- Protect and enhance wildlife habitat by improving wetland and grassland habitat through reduction of sediment and phosphorus loadings.

- Control lake shoreline erosion by installing rock riprap or GEOWEB type materials.

- Reduce urban nonpoint source pollution.