

Long LWQMA



Figure 5-5. Long LWQMA.

The Long LWQMA is 2,384 acres and includes Long and Strunk Lakes. Strunk Lake, a small 24-acre basin, drains to Long Lake via a series of wetlands, but little is known about the lake itself (**Figure 5-5**). Long Lake is the main lake in this LWQMA, with 407 acres and 6 miles of shoreline. Most of Long Lake's water comes from groundwater sources, although there is some surface flow from its direct watershed and from wetlands near Strunk Lake. Long Lake eventually drains through a small outlet to St. Clair Lake.

Most of the land in the Long Lake LWQMA has been greatly altered. Gravel mining takes place in this LWQMA, highways have impacted drainage patterns, and 9 percent of land is impervious. Still, 20 percent of land is forested and there are some large wetland areas. Shoreline along Long Lake has also been greatly modified. The lake has had shoreline development for decades, but in the last 10 years, conversion of resort land to residential land has further increased shoreline development. There are some important

areas of shoreline wetlands and emergent aquatic plants on Long Lake that need special protection from development, namely Long Lake's three aquatic management areas located on the west and north sides of the lake. Recreational pressure on the lake is also very high. Boat traffic and noise have sometimes emerged as issues, especially with the advent of wake surfing boats.

The water quality in Long Lake is very good. There is some evidence that clarity has decreased in recent years, but other eutrophication indicators are either unchanged (e.g., chlorophyll-a) or improved (e.g., total phosphorus). Residents have complained of shoreline erosion and other water quality issues resulting from boat traffic, but a 1997 District study could not detect the impact of boating on turbidity or phosphorus levels. However, wakeboard boats have been introduced since that time. Phosphorus loading from septic systems is not an issue because most areas along and near Long Lake's shores are served by sanitary sewer. Watershed nutrient loading is the largest threat to Long Lake's water quality at present. The watershed is becoming more impervious, native shoreline vegetation is being removed, drainage is being altered, etc., all of which promote nutrient runoff.