

Chapter 4:

Existing Land Use

4.1 Pattern of Land Divisions

As development occurs, larger tracts of land are generally broken down into smaller parcels. Therefore, studying the existing pattern of land divisions is one way to analyze the status of land use and development. Land division patterns for Leland Township are discussed below.

The largest undivided parcels in Leland Township are typically agricultural and/or forested properties.

Other land divisions are occurring as larger parcels along the roads are split into smaller parcels. In terms of land division patterns, it is worth noting that some of the newer residential developments in Leland Township are often being created as site condominiums rather than traditional subdivisions.

A site condominium does not actually create lots by land division. Therefore, a site condominium project may continue to appear as a large, undivided tract when it has already been converted to relatively dense residential use.

4.2 Existing Land Use Statistics and Characteristics

According to the 1990 Census, Leland Township's land area is 45.6 square miles. The mainland area of Leland Township is bordered on the west and north by Lake Michigan and on the northeast by Leelanau Township. The Township is bordered on the southeast by Sutton Bay Township and Centerville Township on the south.

The land use mapping from the Leelanau County was utilized as a starting point for the Township mapping, and then updated using Michigan Department of Natural Resources 1998 aerial photographs, and supplemental field checking. The updated information was then computerized to produce the existing land use statistics. Table 4-1 presents the percentage of Leland Township currently in each land use category, from largest to smallest. Each of the land use categories is discussed in detail later in this chapter.

Table 4-1: 2004 Existing Land Use Leland Township - Mainland		
Land Use Category	Acreage	Percentage
Upland Forest	5,084.9	28.0%
Agricultural	3,647.6	20.1%
Water	3,107.9	17.1%
Residential	2,408.8	13.3%
Nonforest	2,220.0	12.2%
Lowland Forest	976.8	5.4%
Wetlands	289.1	1.6%
Beaches and Sand Dunes	144.2	0.8%
Recreation/Institutional	134.5	0.7%
Industrial/Extraction/Utilities	116.7	0.6%
Commercial	35.82	0.2%
Total	18,166.52	100.0%
Source: Michigan Resource Information System and MC P&D Field Verification and Map Updating.		

4.2.1 Forests and Wetlands

Forests, which include upland hardwoods and conifers, account for 28 percent of the Township land area. Heavily wooded areas are found throughout the Township, as can be seen in Figures 4-1. A decrease in forested land is directly attributable to development, primarily residential development.

Wetlands include land that has sufficient water at, or near, the surface to support wetland or aquatic vegetation. These areas are commonly referred to as swamps, marshes, or bogs. Wetland areas may also include land that supports lowland hardwoods and conifers. Wetland information was not verified by field inspection when these maps were compiled. Thus, the areas shown as wetlands by the Michigan Resource Information System (MIRIS) may not meet State and Federal criteria for legally regulated wetlands.

Lowland Forests (forested wetlands) and wetland areas comprise seven percent of the Township. As illustrated in Figure 4-1, the main wetland area in the Township is along the northern portion of Lake Leelanau.

Leland Township

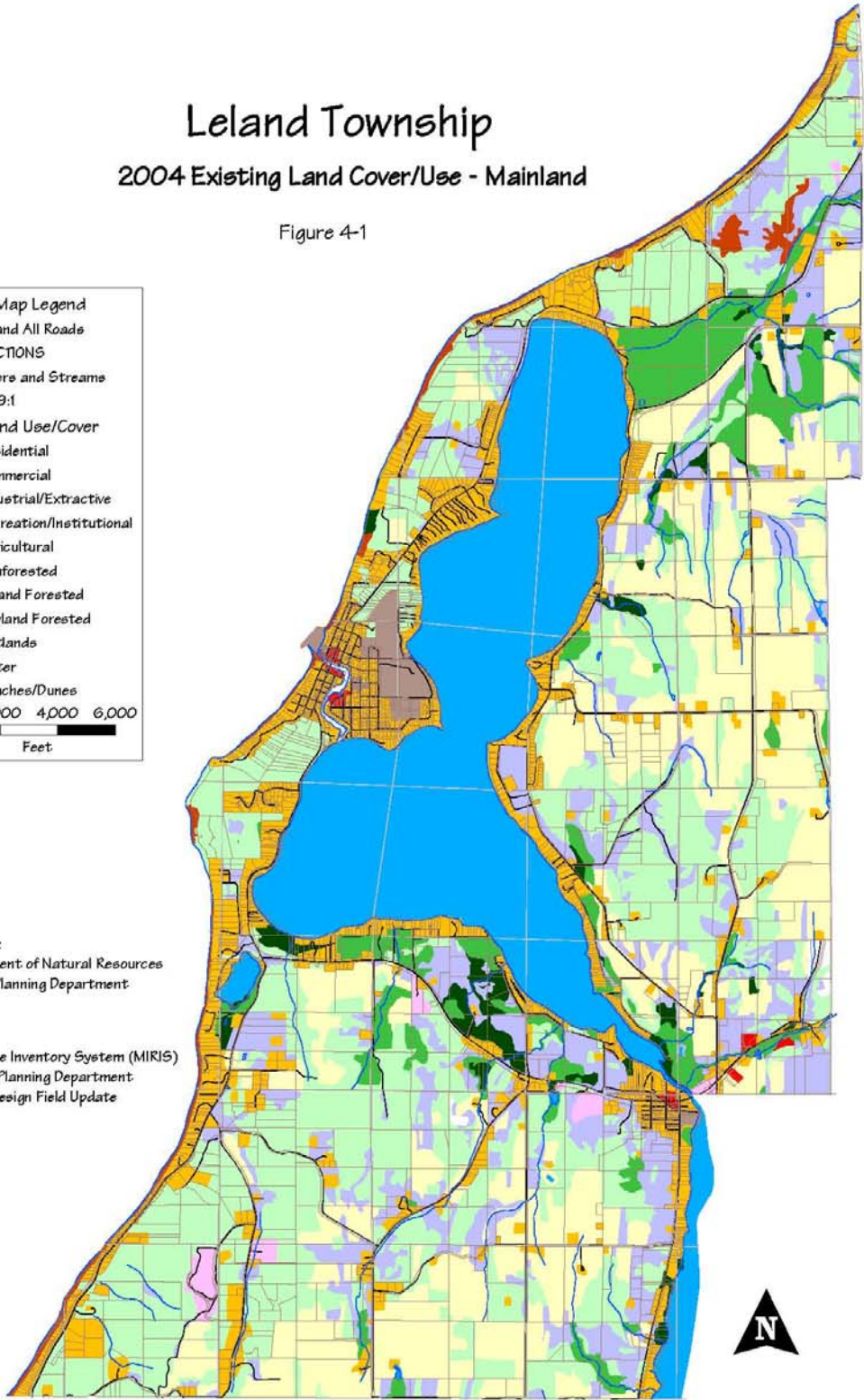
2004 Existing Land Cover/Use - Mainland

Figure 4-1



Base File Sources:
Michigan Department of Natural Resources
Leelanau County Planning Department

Land Use Data:
Michigan Resource Inventory System (MIRIS)
Leelanau County Planning Department
M.C. Planning & Design Field Update



4.2.2 Agricultural

Agricultural use is the second most prominent land use in Leland Township. As shown in Table 4-1, agricultural lands occupied approximately 20 percent of Township land area in 2004. As is illustrated in Figure 4-1, the agricultural lands are well dispersed across the Township.

The agricultural classification also includes agricultural lands that may be enrolled in the Conservation Reserve Program. This program pays farmers to remove certain erodible lands from agricultural production.

4.2.3 Water

Open water comprises over 17 percent of the Township area, due primarily to Lake Leelanau. Figure 4-1 illustrates the locations of the lakes and streams in the Township.

4.2.4 Residential

As can be seen from Table 4-1, the amount of land being used for residential purposes is approximately 13 percent of the Township.

The pattern of residential development within Leland Township is shown in Figure 4-1. Residential use has been primarily located along lakeshores and road frontage. Recent residential growth has primarily occurred in new subdivisions and site condominium developments.

4.2.5 Nonforested

The nonforested land category consists of herbaceous open and shrub land. As shown in Table 4-1, the percent of nonforested land in the Township is approximately 12 percent, and are scattered throughout the Township, as shown in Figure 4-1.

4.2.6 Beaches and Sand Dunes

The beaches and sand dune areas comprise nearly one percent of the Township and are shown in Figure 4-1. Additionally the State regulated Critical Dune Areas are shown in Figure 3-4 of the Natural Resources Chapter of this plan.

4.2.7 Recreation and Institutional

Recreation and institutional lands in the Township comprise less than one percent of the mainland portion of the Township, as shown in Table 4-1. Detailed information regarding the individual recreation sites is presented in the Leland Township Recreation Plan. Leland Township with frontage on both Lake Michigan and Lake Leelanau provides extensive water-related recreation opportunities. The largest recreation area is North Manitou Island which is part of Sleeping Bear National Lakeshore; the other mainland recreation lands mapped in Leland Township are the Leland Country Club golf course, the Leland Township Harbor and the public access sites on Lake Leelanau. Figure 4-1 illustrates the locations of recreation and open space lands in the Township.

4.2.8 Industrial/Extractive/Utilities

Based on the Michigan Resources Inventory System (MIRIS) mapping classification, industrial, extractive, transportation and utilities are grouped together. These properties are shown in Figure 4-1. Table 4-1 shows a combined percent for industrial, extractive, transportation and utility uses less than one percent.

4.2.9 Commercial

Table 4-1 shows a limited amount of land in commercial use in Leland Township; approximately 0.2 percent of the land in the Township is in commercial use. As apparent in Figure 4-1, the commercially used properties are primarily concentrated in the Villages of Leland and Lake Leelanau, as well as east of Lake Leelanau along M-204.