

## Chapter 5 - Existing Land Cover/Use

Prior to determining future land uses and developing a future land use map, a community must have an accurate assessment of existing land uses. This chapter presents information on both the types and location of existing land uses. The process identifies both urban built-up land uses such as residential and commercial, along with natural land cover types like forests and wetlands. As a result the final map presented in this chapter is a hybrid that combines land cover and land use.

### Land Division Patterns

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 South Branch Township are discussed below. Approximately 68 percent of the land area is publicly owned. The US Forest Service (USFS) is the largest single owner covering approximately 48.5 square miles or 46 percent of the land area. USFS lands cover much of T.26N.-R.1W. and T.25N.-R.1W. There are 22.6 square miles owned by the State of Michigan.

Most of the private ownership is in tracts that are 10 acres and smaller. Large tracts of private ownership, typically hunt/fish clubs, are scattered throughout the Township. The highest concentration of private ownership is located in T.25N.-R.2W. This part of the township is characterized by a number of platted subdivisions, groups of small tracts and a predominance of parcels 10 acres and smaller. Subdivisions and small tracts are clustered along the South Branch of the Au Sable and M-18. Forest Dunes Golf Course and associated residential development is located in Sections 2 and 3 of this town and range. Much of the southeastern town and range, T.25N.-R.1W, is in public ownership under the US Forest Service. Lands within the Mason Tract are under State of Michigan ownership. Smaller tracts of private ownership are found around several lakes in the southeastern corner and within the community of El Dorado. The northern most portion of the township, T.26N.-R1W., is dominated by large tracts of public lands under US Forest Service ownership. Public lands east of the South Branch and north of the Main Branch of the Au Sable River are owned by the State of Michigan. Small tracts of private lands as well as subdivisions are located along the Au Sable River.

### Existing Land Cover/Use Characteristics

NEMCOG mapped existing land cover/use in the Township in 2005. The map of existing land use, shown as **Figure 5.1**, illustrates the distribution of land uses throughout the Township. Michigan Resource Information System (MIRIS) land cover/use classification categories were used to map the existing land cover/use. The map represents an update of the 1978 MIRIS land cover/use map. The MIRIS map was updated with 1998 digital ortho-photo quads and field checking (conducted in spring of 2005). The updated information was then computerized to produce the existing land cover/use map and statistics. **Table 5.1** presents the land uses, showing the number of acres and percent of the Township in each of the land use categories. Each of the land use categories is discussed later in this chapter. One important land use trend was noted during the MIRIS land cover/use map update. There has been an increase in low density residential development on both large and small tracts throughout the township. These are typically occurring on parcels two acres and larger

Residential

As can be seen in **Figure 5.1** - Existing Land Cover/Use Map and **Table 5.1**, residential use ranks third in the amount of land under a particular land use. Residential use occupies approximately five percent (3,237 acres) of the land in the Township. Residential development is concentrated in the southwestern parts of the Township and along waterways and lakes. Single family residential accounts for all of the residential development in the Township.

Commercial

One site was identified as commercial in use. Private campgrounds and canoe liveries are included in the recreation category. Lands used for commercial purposes comprise less than one tenth of one percent of the Township's area.

Industrial/Extractive/Utilities

Land in this use category covers three tenths of a percent or 224 acres of the Township. This category includes gas wells and processing facilities, community solid waste transfer station, and several sand and gravel pits.

<p align="center"><b>Table 5.1</b> Existing Land Use Statistics South Branch Township</p>		
<b>Land Use Category</b>	<b>Number of Acres</b>	<b>Percent of Township</b>
Residential	3,237	4.8
Commercial	3	Less than 0.1
Industrial/Extractive/Utilities	224	0.3
Institutional/Recreational	579	0.9
Agricultural	207	0.3
Non-forested Uplands	1,591	2.4
Upland Forests	54,143	80.3
Lowland Forests	5,373	8.0
Non-Forest Wetlands	1,753	2.5
Water	308	0.5
<b>TOTAL</b>	<b>67,419</b>	<b>100</b>
<p>Source: Michigan Resource Inventory System and NEMCOG photo interpretation, field verification and map updating.</p>		

Institutional/Recreational

This category includes institutional uses such as churches, parks, cemeteries, campgrounds, golf courses and community facilities. Developed public and private recreational facilities are mapped as part of this category.

As noted earlier, some 68 percent of South Branch Township area is in public ownership. While these areas were not classified as recreational, the considerable amount of public land does offer residents and visitors ample area for a wide range of outdoor recreational activities. For example, persons wishing to pursue the sport of fishing can access Au Sable, tributary creeks and several small lakes.

Agricultural

Due to the sandy, droughty soils, agricultural uses were historically very limited in the Township. The limited agricultural base has diminished in the past several decades. However, generally the land is converting to a less intensive use of open lands and not being converted to subdivisions and commercial uses.

Non-forested Uplands

The non-forested land category is the fourth most prominent land cover type in the Township. This category consists of herbaceous open and shrub land. As shown in **Table 5.1**, 1,591 acres or 2.4 percent of the Township is in the non-forested category. A majority of the non-forest areas are old farm fields. Information sources on pre-settlement vegetation types show non-forest openings were more prevalent 100's of years ago. The pre-settlement vegetation map prepared by the Michigan Department of Natural Resources surmised nearly eleven thousand acres were in grassland, pine barrens and pine/oak barrens. These cover types were created by wildfires or other severe disturbances.

Upland Forests

The upland forested lands are the most predominant land cover in the Township and accounts for 80 percent or 54,143 acres of the Township. Of the forested lands, the most prevalent forest type is jack pine. Jack, red and white pine trees are found in the pine forest category. Droughty, low fertility sandy soils in the Township supported pre-settlement jack pine forests, that were perpetuated by wildfires. Today, the forest type is perpetuated by management activities of the U.S. Forest Service and Michigan Department of Natural Resources. Other forest types include aspen-birch, oak and northern hardwoods. More information on these forest types can be found in Chapter 4.

Lowland Forests and Wetlands

Wetlands are defined as 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 and bogs. The wetland category comprises non forested types such as lowland brush (tag alder and willow), sphagnum bogs, emergent vegetation in lakes and beaver floodings and wet meadows. Non-forested wetlands account for 1,774 acres or 2.5 percent of the Township.

Lowland forests grow on soils with a seasonally high water table and are often classified as wetlands. Lowland forests, include areas that support lowland hardwoods and conifers, such as northern white cedar, black spruce, balsam fir, elm, black ash, red maple, ash and aspen species. Lowland forests occupy 5,373 acres or eight percent of the Township area. Two of the most important functions of wetlands are water quality protection and ecological corridors. As can be noted on the Existing Land Use Map, the major wetland areas are adjacent to rivers and

creeks. The network of wetlands receive surface water and subsurface water discharge, creating the many streams and creeks which in turn flow into the area lakes. The interconnected resources exemplify how activities distant from major water bodies can still have an impact on the water quality.

Surface Water

Open water comprises less than 0.5 percent of South Branch Township. Lakes, beaver floodings and Main Branch of the Au Sable River are mapped in this category.

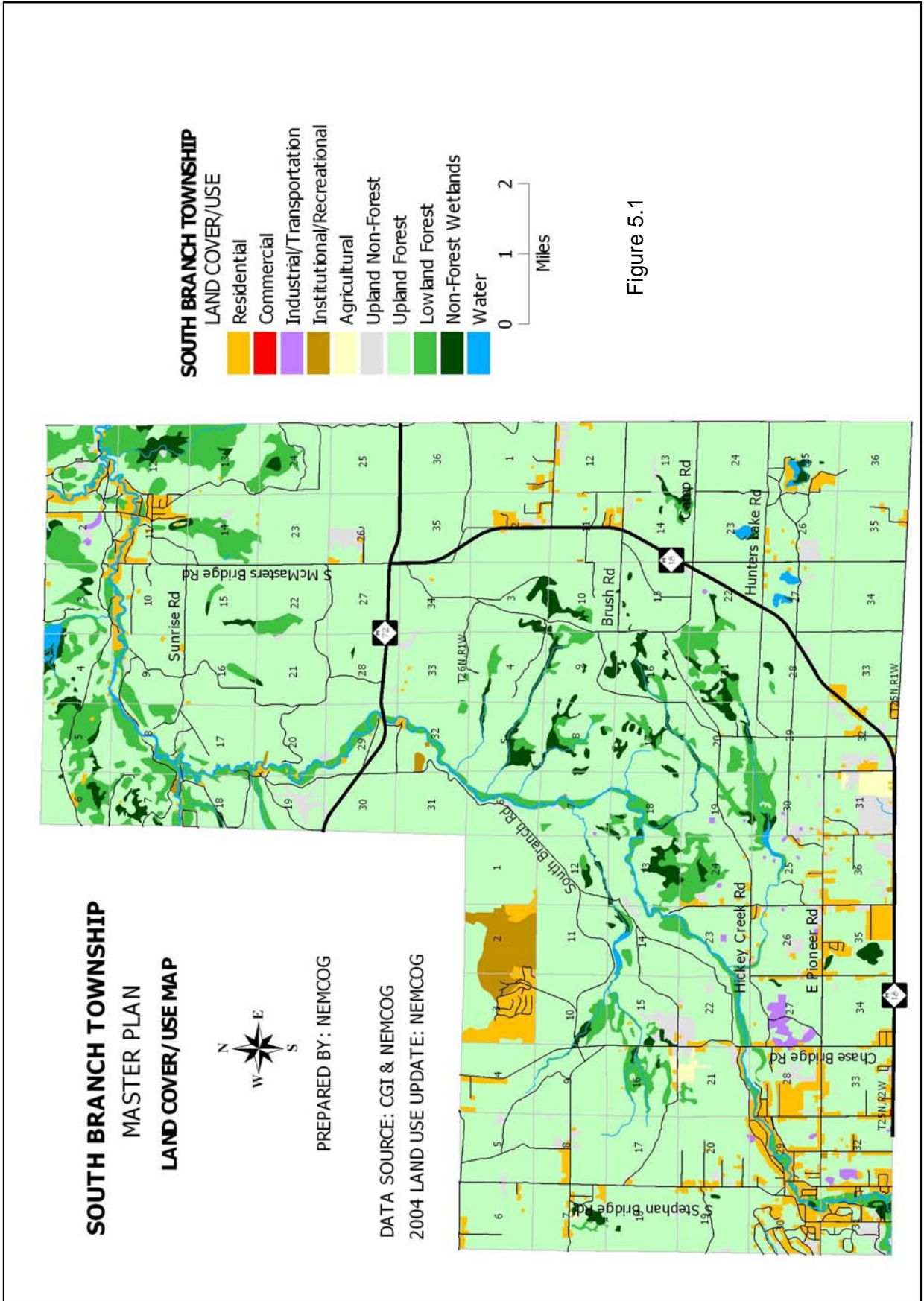


Figure 5.1