

## **9. Land Use**

Land use analysis is a means of broadly classifying how land is used, as well as how it is regulated. Each type of use has its own characteristic that can determine compatibility, location, and preference to other land uses. The maps, especially existing land use, are used to analyze the current pattern of development, and serves as the framework for formulating how land will be used in the future.

To arrive at an optimum plan that will be both effective and implemented, the plan must account for past development activity as well as current market factors and conditions that shape where and how land will be developed. Because land use is a people-oriented process, personal opinions, desires, and attitudes, and legal and political considerations all have land use impacts. Some of these variables have been discussed in earlier sections and will be used as a reference; other aspects will be discussed as the preferred land use plan is developed.

The land use section includes a brief explanation of the planning process and associated implementation tools, a discussion of the planning efforts which have occurred in the county to date, inventory and analysis of existing land uses by classification, analysis of zoning within the county including comparison of existing land use to existing zoning, and an analysis of permits (i.e., sanitary, building, zoning) and identification of potential impacts of land use in the county.

### **9.1 Existing Plans**

The current planning statutes require all communities that "affect land use" will need a Comprehensive Plan by January 2010. Several Vilas County communities have been proactive and are either in the planning process or have recently completed land use plans. The City of Eagle River did a plan in 1990, the Town of Arbor Vitae in 1996, the Town of St. Germain in 1998. The Town of Manitowish Waters adopted a comprehensive plan in 2003. Land O' Lakes completed a partial plan in 1992. The growth pressures and local planning activity stimulated the County to develop a county plan, and six communities took advantage of a local, bottom-up process including the Towns of Cloverland, Plum Lake, Winchester, Presque Isle, and Washington. The Town of Lincoln and the City of Eagle River initially agreed to develop a joint plan, however the City discontinued their participation in 2002.

Table 9-1 is an inventory of local plans and ordinances that affect land use in Vilas County. The veil of county ordinances such as county shoreland zoning applies in all unincorporated areas. The combination of these existing plans and ordinances constitute the development and regulatory procedure in Vilas County. The planning process places stress on land use regulations as the plans denote preferred land uses, which may, and typically do not coordinate well with existing zoning patterns.

**Table 9-1 Existing Ordinance and Plan Inventory Vilas County**

Municipality	ORDINANCES										PLANS				PUBLIC INPUT		
	Town/Municipal Zoning	County Zoning	County Shoreland	Land Division / Land Use	Sign	Design Review	Mobile Homes	Condominium	Lake & Water Access	Minimum Lot Width	Driveway/ Private Roadway	Land Use	Economic Development	Outdoor Recreation	Bicycle & Pedestrian	Community Survey	Community Issues Workshop
<b>TOWNS</b>																	
Arbor Vitae		X	X		X	X						X				X	X
Boulder Junction		X	X					X	X								
Cloverland		X	X							X		X					X
Conover		X	X	X	X												
Lac Du Flambeau	X		X														
Land O' Lakes	X	x	X	X								X <sub>3</sub>	X			X	
Lincoln		X	X									X				X	X
Manitowish Waters	X	x	X	X <sub>2</sub>	X <sub>2</sub>	X	X <sub>2</sub>	X <sub>2</sub>	X <sub>2</sub>	X <sub>2</sub>		X				X	X
Phelps		X	X											X		X	X
Plum Lake		X	X		X							X		X	X		X
Presque Isle	X	x	X	X <sub>2</sub>	X <sub>2</sub>		X <sub>2</sub>	X <sub>2</sub>	X <sub>2</sub>	X <sub>2</sub>	X <sub>2</sub>	X <sub>1</sub>		X	X	X	X
St. Germain	X	X	X	X	X <sub>2</sub>		X <sub>2</sub>			X <sub>2</sub>		X		X	X	X	X
Washington		X	X		X <sub>1</sub>							X				X	X
Winchester		X	X	?						X		X				X	X
<b>CITIES</b>																	
Eagle River	X			X	X <sub>2</sub>		X <sub>2</sub>			X <sub>2</sub>		X		X		X	X
<b>VILAS COUNTY</b>	X	X	X	X				X	X	X		X	X	X	X <sub>1</sub>		

1 - Draft documents, in process of review or approval by the town .

2 - Language included in a municipal zoning ordinance.

3 - Di some planning for the downtown area

? - Need to determine status.

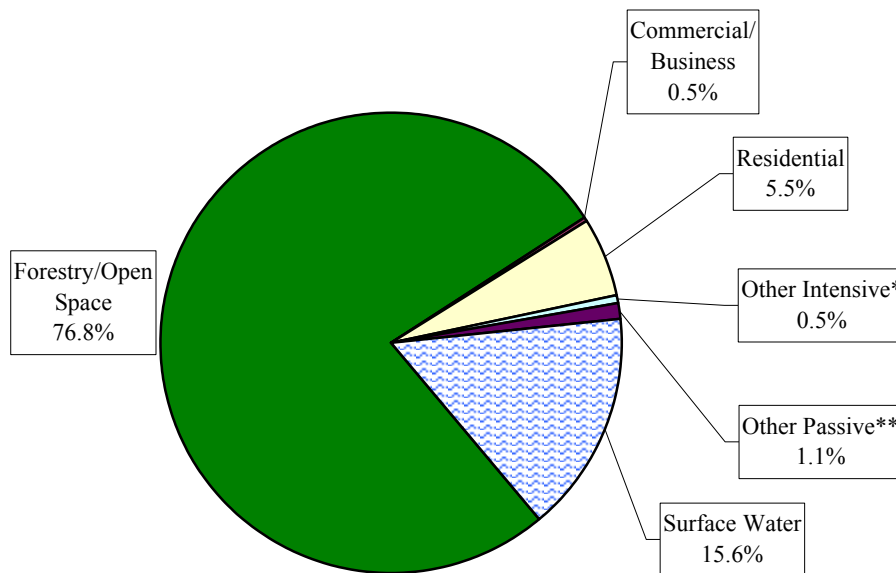
\* Note - All town zoning ordinances regulate outside of the shoreland zone (shorelands regulated by Vilas County).

## 9.2 Existing Land Use Inventory and Analysis

The first step in the land use analysis process was to conduct an inventory of the existing land uses within the county by municipality. Existing land use maps were previously completed for the communities of Arbor Vitae, Manitowish Waters, Phelps, St. Germain, and the City of Eagle River. Aerial photographs (1996) were interpreted by the individual land use planning committees of participating communities, which were then followed up with windshield surveys. For purposes of accuracy, the land use maps were also available for review and comment at public meetings. The Vilas County Mapping Department digitized the existing land uses from the aerial photographs to develop the existing land use maps. Vilas County Zoning staff then inventoried land use within the non-participating communities that did not have an existing land use inventory to generate the existing land use map. The compilation of the efforts described above is illustrated on Map 9-1, Existing Land Use.

Twenty-four (24) general land use classification categories were identified. Acreage totals for each general land use classification were calculated and are shown in Table 9-2 and Figure 9-1. In Vilas County the existing land use situation is somewhat simplified by the general dominance of forest as a land use.

**Figure 9-1 Vilas County Existing Land Use**



\*Other intensive includes Industrial, and Government Facilities/Services/Utilities, and Private Utilities/Services.

\*\*Other passive includes Park & Recreation Areas and Agricultural uses.

Source: Vilas County Mapping Department, 2000; Foth & Van Dyke, 2000.

This page intentionally left blank.



This page intentionally left blank.

**Table 9-2  
Existing Land Use  
Vilas County , 1999**

Last revised: 4/18/01

Codes	Land Use Type	Arbor Vitae	Boulder Junction	Cloverland	Conover	Lac du Flambeau	Land O' Lakes	Lincoln	Manitowish Waters	Phelps	Plum Lake	Presque Isle	St. Germain	Washington	Winchester	Eagle River	Vilas County	% of County
	<b>Residential</b>	<b>1,193.0</b>	<b>2,830.7</b>	<b>1,820.6</b>	<b>3,971.2</b>	<b>5,290.7</b>	<b>2,549.3</b>	<b>3,066.6</b>	<b>1,635.9</b>	<b>2,146.8</b>	<b>1,141.4</b>	<b>2,730.3</b>	<b>1,972.2</b>	<b>2,686.5</b>	<b>2,496.8</b>	<b>225.6</b>	<b>35,757.6</b>	<b>5.5%</b>
111	Single-Family	1,161.0	2,788.4	1,756.0	3,944.5	5,268.6	2,515.8	3,022.5		2,136.9	1,121.2	2,722.2	1,894.5	2,635.7	2,412.3	180.8	<b>33,560.4</b>	<b>5.2%</b>
1112	SF Residence w/ Business		37.3	50.5	26.7	12.2	31.2	24.6			18.3	2.9		48.4	84.5	2.0	<b>338.6</b>	<b>0.1%</b>
112	Two-Family			14.1		0.0		12.2		0.3	1.9		17.3			27.6	<b>73.4</b>	<b>0.0%</b>
113	Multi-Family	32.0	5.0			9.9	2.3	7.3		9.6	0.0	5.2	60.4	2.4		15.2	<b>149.3</b>	<b>0.0%</b>
	<b>Commercial/Business</b>	<b>113.0</b>	<b>419.1</b>	<b>26.2</b>	<b>205.8</b>	<b>268.0</b>	<b>305.3</b>	<b>321.3</b>	<b>227.0</b>	<b>81.1</b>	<b>160.0</b>	<b>163.7</b>	<b>421.1</b>	<b>410.3</b>	<b>295.2</b>	<b>145.9</b>	<b>3,563.0</b>	<b>0.5%</b>
124	Resort		208.8	20.2	131.7	162.6	68.0	54.4		58.6	109.5	58.7	268.1	274.9	21.1	0.7	<b>1,437.3</b>	<b>0.2%</b>
121	Highway		149.1	1.1	67.9	68.9	87.6	255.5		15.4	35.1		35.5	22.3	18.1	56.3	<b>812.8</b>	<b>0.1%</b>
122	Community		3.5	4.9	6.2		149.7	11.4		7.1	2.4	99.7	117.5	9.6	249.8	88.9	<b>750.7</b>	<b>0.1%</b>
123	Private Campground		57.7			36.5					13.0	5.3		103.5	6.2		<b>222.2</b>	<b>0.0%</b>
	<b>Industrial</b>	<b>39.0</b>	<b>0.0</b>	<b>4.1</b>	<b>82.9</b>	<b>62.0</b>	<b>125.8</b>	<b>71.7</b>	<b>6.9</b>	<b>53.1</b>	<b>2.5</b>	<b>29.8</b>	<b>0.0</b>	<b>46.9</b>	<b>166.8</b>	<b>48.7</b>	<b>740.2</b>	<b>0.1%</b>
130	Industrial	1.0		1.6	4.4	6.2	77.1	32.6	6.9	53.1	0.0			3.9		48.7	<b>235.5</b>	<b>0.0%</b>
131	Active and Abandoned Gravel Pits	38.0		2.5	78.5	55.8	48.7	39.1			2.5	29.8		43.0	166.8		<b>504.7</b>	<b>0.1%</b>
	<b>Government Facilities/Services</b>	<b>12.0</b>	<b>115.0</b>	<b>5.1</b>	<b>73.4</b>	<b>100.0</b>	<b>130.3</b>	<b>67.2</b>	<b>298.1</b>	<b>37.9</b>	<b>7.3</b>	<b>38.6</b>	<b>156.7</b>	<b>10.5</b>	<b>46.7</b>	<b>558.0</b>	<b>1,656.8</b>	<b>0.3%</b>
189	Public Facilities & Services		46.5		18.8	50.1	4.7				7.3			5.5	25.6	55.1	<b>213.6</b>	<b>0.0%</b>
180	Public Schools		7.2			10.5		54.6				28.3				11.3	<b>111.9</b>	<b>0.0%</b>
181	Cemetery		10.0		5.0	14.9					5.4			7.4	18.1		<b>60.8</b>	<b>0.0%</b>
182	Active & Closed Landfill Sites/ Transfer Stations/Recycling		2.5	5.1	49.6	24.5	17.9	12.6				4.9		5.0	2.4	1.8	<b>126.3</b>	<b>0.0%</b>
183	Airfield		48.8				107.7						483.0				<b>639.5</b>	<b>0.1%</b>
	<b>Private Utilities and Services</b>	<b>0.0</b>	<b>0.0</b>	<b>2.7</b>	<b>0.9</b>	<b>0.0</b>	<b>0.0</b>	<b>6.4</b>	<b>0.0</b>	<b>0.8</b>	<b>0.0</b>	<b>5.7</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>38.4</b>	<b>54.9</b>	<b>0.0%</b>
185	Private Utilities			0.2					0.8		5.7						<b>6.7</b>	<b>0.0%</b>
184	Private Schools			2.5	0.9			2.1						5.3			<b>20.8</b>	<b>0.0%</b>
186	<b>Religious Institutions</b>	0.0					4.3						23.1				<b>27.4</b>	
<b>190</b>	<b>Parks and Recreation Areas</b>	<b>0.0</b>	<b>25.2</b>	<b>7.5</b>	<b>87.4</b>	<b>0.0</b>	<b>56.0</b>	<b>8.4</b>	<b>0.0</b>	<b>176.2</b>	<b>454.3</b>	<b>34.8</b>	<b>324.6</b>	<b>28.4</b>	<b>0.6</b>	<b>154.9</b>	<b>1,358.3</b>	<b>0.2%</b>
<b>191</b>	<b>Youth/Adult Education Camps</b>	<b>0.0</b>		<b>82.2</b>				<b>111.5</b>			<b>5.7</b>			<b>0.0</b>	<b>0.0</b>	<b>5.9</b>	<b>205.3</b>	<b>0.0%</b>
	<b>Agriculture</b>	<b>0.0</b>	<b>0.0</b>	<b>31.2</b>	<b>598.7</b>	<b>0.0</b>	<b>0.0</b>	<b>1,137.9</b>	<b>1,243.8</b>	<b>698.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1,131.7</b>	<b>58.0</b>	<b>0.0</b>	<b>4,899.3</b>	<b>0.8%</b>
210	Active Farmland (tilled, pasture, etc.)			31.2	585.3			804.2		698.0				1,090.5	58.0		<b>3,267.2</b>	<b>0.5%</b>
211	Farmsteads				13.4			296.9					30.7				<b>341.0</b>	<b>0.1%</b>
220	Orchards/Nurseries/X-Tree					36.8					10.5						<b>47.3</b>	<b>0.0%</b>
<b>400</b>	<b>Forests and Open Space</b>	<b>37,959.0</b>	<b>46,815.6</b>	<b>17,808.6</b>	<b>44,361.2</b>	<b>57,839.0</b>	<b>51,047.5</b>	<b>15,010.2</b>	<b>14,447.9</b>	<b>56,916.5</b>	<b>53,614.0</b>	<b>36,550.1</b>	<b>18,352.4</b>	<b>22,098.5</b>	<b>27,650.2</b>	<b>242.7</b>	<b>500,713.4</b>	<b>76.9%</b>
	<b>Surface Water</b>	<b>6,104.5</b>	<b>12,850.0</b>	<b>2,649.4</b>	<b>5,550.4</b>	<b>18,337.5</b>	<b>8,849.3</b>	<b>2,996.0</b>	<b>5,066.2</b>	<b>9,266.2</b>	<b>7,554.5</b>	<b>9,586.3</b>	<b>4,529.8</b>	<b>4,168.6</b>	<b>3,950.8</b>	<b>117.9</b>	<b>101,577.4</b>	<b>15.6%</b>
<b>1</b>	<b>Roads</b>			<b>800.6</b>						<b>193.4</b>	<b>994.0</b>	<b>0.2%</b>						
	<b>TOTAL</b>	<b>45,420.5</b>	<b>63,055.6</b>	<b>22,437.6</b>	<b>54,931.9</b>	<b>81,897.2</b>	<b>63,063.5</b>	<b>23,597.8</b>	<b>22,925.8</b>	<b>69,376.6</b>	<b>62,939.7</b>	<b>49,139.3</b>	<b>25,756.8</b>	<b>30,581.4</b>	<b>34,665.1</b>	<b>1,731.4</b>	<b>651,520.2</b>	<b>100.0%</b>

As can be observed from Table 9-2 and Figure 9-1, forest land and open space dominate the county's landscape, comprising over three-fourths of the county's total area (77%). Surface water is the next most predominant, covering 15.6% of the county (the significance of surface water on the county's landscape is discussed in detail in Section 8). Intensive development (i.e., residential, commercial, industrial, government facilities and services, private utilities and services) comprises approximately 6.5% of the county.

## **Existing Land Uses**

Generalized existing land use categories include residential, commercial/business, industrial, government facilities/services/utilities, private utilities/services, park and recreation areas, agriculture, forestry/open space, and surface water. While the vast majority of the county is forested and rural in character with low-density residential uses, there are some areas of higher-density development (lakeshores) and areas where development pressures for higher densities are increasing. The land use inventory was completed to allow assessment of existing conditions and to allow analysis of proposed uses in comparison. There can be no comparison in percentage change of land uses over time as Vilas County has not had a comprehensive existing land use map or land use plan prior to the effort presented in this document.

### **Residential**

Residential development has consumed about 5.5% of the total land use in Vilas County. Residential uses are split into four categories: single family, single family with business, two-family residential, and multi-family residential. Residential development patterns can be generally characterized into four categories. These include: 1) high & low density lakeshore residential, 2) community and neighborhood concentrations, 3) remote subdivisions, and 4) rural, large-parcel forestry/residential. A majority of residential development occurs along or in close proximity to the lakeshore areas. There is tremendous pressure for lakeshore development in Vilas County, as discussed previously in Section 8. Lakeshore development has occurred on the majority of the county's lakes which are 50 acres or greater. As the larger lakes become developed, the trend will shift the development pressure to the numerous smaller-sized lakes (less than 50 acres). Much of the lakeshore development consists of second homes and seasonal conversions to permanent housing. Scattered low-density development is occurring in many areas of Vilas County, radiating outward from the lakeshore areas. This demand is impacting land prices which have more than doubled in the past five years, and is also creating a larger market (demand) for forested land as available lakeshore property is becoming scarce and expensive.

Most towns in Vilas County also have a small downtown areas that concentrate residential development. Such development patterns allow for the provision of adequate utilities and reasonably efficient delivery of services. In other cases, remote subdivisions or individual land divisions are located a considerable distance from established communities and are typically located on 1.5 acres or more of land. Many are surrounded by or adjacent to national, state, or county forest lands. The provision of services in such areas is not as efficient. Access roads are forest roads or private easements which generally receive little or no regular maintenance.

## **Commercial/Business**

Commercial uses are also split into four categories, including 1) resort commercial, 2) highway commercial, 3) community commercial, and 4) private campgrounds. Resort commercial uses include those areas specifically used for accommodations including hotels, motels and resorts which are located throughout the county, particularly along lakeshores. Highway commercial consists of those developments which are located along a highway corridor and thus the majority of their customers are the result of their location. Examples of highway commercial uses may include gas/service stations, gift shops, restaurants, etc. Community commercial uses include those uses which provide goods and services required by both year-round and seasonal populations such as grocery stores, medical facilities, banks, etc. Private campgrounds are scattered throughout the county and include campground facilities which are owned and managed by private investors as opposed to public campsites such as those in the national, state and county forests. The Town of Washington has the greatest amount of acreage in private campground use in the county.

Commercial and business development is a major concern and issue in most county communities. Business development is small in terms of total land use, using only ½ percent (0.5%) of the total land use. There are several small communities with concentrations of development, including a mix of residential and commercial, with the largest being the City of Eagle River. There is concentrated commercial in the form of local downtown areas in several towns such as Boulder Junction, Manitowish Waters, St. Germain, Phelps, Presque Isle, Sayner, and Land O' Lakes to name a few. The downtown areas play a large role in Vilas County's community character and northwoods aesthetic. Most of the local business activity is located along the road system, scattered throughout the county. Higher concentrations of commercial uses exist along the state and federal highways, including STH 70, USH 45 and STH 51. Much of the local business activity is home-based, and consists of local trade, service, and retail.

Although expansion of commercial activity is inevitable with population growth (both year round and seasonal), future locations, types of uses, and property development standards are currently regulated through the Vilas County General Zoning Ordinance. As many of the existing zoning districts (besides single family residential) allow for some form of commercial use(s), the commercial development pattern should be reviewed closely when assessing commercial and business growth. Community service issues such as power, road limits, noise, traffic impacts, and character issues also should be evaluated.

## **Industrial**

Industrial uses in Vilas County are very low and comprise only 0.1% of the county's total existing land use. The majority (70%) of industrial uses in the county consist of active and abandoned gravel pits. Because of the desire for municipal water, sewer, fire protection, cheap land and other services, most industrial uses are typically located in incorporated municipalities, which is why the highest concentration of industrial use occurs in the City of Eagle River. Although historically industrial uses have been segregated from residential areas, certain industrial facilities may be compatible with these areas if there is an adequate buffer and protection. Because protection of the natural environment, including water, air and forest resources is so important in Vilas County, heavy polluting industries will likely not be a part of the area's industrial growth. The City of Eagle River does have the county's only industrial

park, however it is nearing capacity. The City purchased and annexed an additional 40 acres on the south side in 2003 to create a new business/industrial park.

### **Agricultural Uses**

Very little productive agricultural land exists within Vilas County in terms of traditional agriculture and production of cash crops. In fact, such uses comprise less than 1% of the county's total land uses. The Town of Washington has the largest area of tillable land in the county. Sandy soils and a limited growing season make cash cropping very difficult. However, cranberry operations in the Town of Manitowish Waters have been a very strong agricultural component in terms of production and for generating tourism.

### **Government and Private Facilities/Services/Utilities**

Such uses are comprised of lands used for public schools, cemeteries, airfields, active and closed landfill sites, transfer stations/recycling sites, public facility and service buildings (i.e. municipal buildings, community centers), and provision of community utilities and services such as power, gas, and telephone.

### **Forests/Open Space**

Over three-fourths (76.9%) of the county is comprised of forest land and open space areas. The majority (55%) of this land in forest use is owned and managed by public entities including the U.S. Forest Service, Wisconsin Department of Natural Resources, and the Vilas County Forestry Department. Much of this land is heavily used for recreation and for commercial timber production. In fact, public entities own approximately 43% of the county's total acreage.

These areas are not only used by local residents, but also attract people from around the nation, and thus protection of these areas is important to maintaining the county's viable tourist economy. Protection of environmentally sensitive areas, such as riparian and forested habitats and floodway areas, whether on public or private land, is important for the same reason.

### **Surface Water**

Surface Water comprises 15.6% of the land area in Vilas County. The development pattern is a direct reflection of the location of lakes, rivers, and streams. The importance and significance of surface water in Vilas County was previously discussed in Section 8, but cannot be understated in its importance and impact on the natural and built environment.

### **Park and Recreation Areas**

Vilas County has many areas that are dedicated for public parks and outdoor recreation. With an array of recreational resources provided from local, county, state and federal sources, the effects of a growing population and accompanying service demands will place greater demands on the recreational facilities. Approximately 0.2% of the county is used for parks and recreation, but that does not include the vast resources of land and outdoor recreation found in the Nicolet and Chequamegon National Forests, Northern Highland-American Legion State Forest, and the Vilas County Forest. The land use inventory categorized the active activity areas, campgrounds, trails, and parks into this land use. Vilas County recently completed the 2002-2006 Vilas County Outdoor Recreation Plan, which inventoried the areas and assessed future recreational demands.

Land use patterns in Vilas County have been shaped by a variety of factors, including:

- ◆ Public Land Ownership
- ◆ Lakes and Natural Resource Features (water and forest resources)
- ◆ Location of Industrial Forests
- ◆ Lands Enrolled in Forest Management Programs
- ◆ Location and Function of Highways.

These key factors and their associated influence on the county's land use are responsible for much of the development pattern as it exists in Vilas County today.

### 9.3 Public Land Ownership

Public ownership of property has a significant impact on the development pattern which has occurred in Vilas County to date. Approximately 43% of the county's total area is owned by public entities, including national forest land, state lands/forest, county lands/forest, town lands/forest, and tribal land. When public ownership acreage is combined with the acreage comprised of surface water (16%), approximately 41% of the county's total acreage remains for private ownership and/or development as seen below.

Public Ownership	Total Acreage	% of Total Public Ownership	% of County Acreage
Nicolet-Chequamegon National Forest/Lands	53,969.1	19.4%	8.3%
Northern Highland - American Legion State Forest/Lands	149,733.6	53.9%	23.0%
Vilas County Forest/Lands	39,502.5	14.2%	6.1%
Town Lands/Forest	5,563.1	2.0%	0.9%
Tribal Lands	29,114.1	10.5%	4.5%
	277,882.4	100%	42.8%

The significant amount of public ownership provides long-term insurance against major development in these areas of the county and contributes greatly to the resulting development pattern in the privately held lands.

### 9.4 Lakes and Natural Resource Features

The amount of natural features in the county, primarily its numerous lakes, is a major factor in the existing development pattern of the county. Section 8, Natural Resources, provides discussion on when and why development in the "Northwoods" was sparked. Today, the effects of the desire of property owners to establish seasonal or permanent residences along lakes and other water bodies in Vilas County are unmistakable, as major residential developments exist along the majority of the county's lakes. Most communities in Vilas County can be described generally by "woods and waters". A majority of the lake shorelines are held in private ownership, hence the concentrated lakeshore development.

Three major trends are likely to continue throughout the planning period which relate to lake/waterfront development:

- ◆ Conversion of seasonal to permanent residences will increase as the baby-boomer generation migrates northward for their retirement location.
- ◆ Waterfront development pressure and cost of shoreline property will increase as fewer lakefront properties are available.
- ◆ Large, privately-owned parcels adjacent to lakes will likely face heavy development pressure for subdivision.

### **9.5 Location of Industrial Forests and Private Land Owned and Managed for Industrial Forest Production.**

A significant amount of land in Vilas County and other northern Wisconsin counties is owned and managed for the production of timber for industrial uses. The most significant amount of industrial forest land in Vilas County is located in the Town of Winchester, which comprises approximately 58.5% of the total industrial forest land in the county. Overall, the county has 15,562 acres of land, or 2.4% held in as industrial forest. The bottom line impact of industrial forest ownership is similar to that of other private ownership on which intensive development could occur. The event of a land sale or redesignation of use could have significant impact on land use. Recent land sales of large tracts of industrial forest in the county indicate the long term use of industrial forest land is not solid.

### **9.6 Land Enrolled in Forest Management Programs**

Contributing 25,640.1 acres of forest in the county are privately owned properties enrolled in forest management programs. The three most common programs administered by the WDNR are the Woodland Tax Law, Forest Crop Law, and Managed Forest Law; the Managed Forest law is currently the primary forest management program in the state. The location of properties enrolled in the programs can be viewed on Map 8-2.

With respect to future land use change, lands enrolled in forest management programs provide some level of assurance that the use will continue in forestry. Under these programs, land can be removed or contracts can be allowed to expire. At that time of land transition, lands could be developed per the applicable zoning restrictions. With respect to the existing land use pattern, most enrolled properties are associated with larger parcels held in private ownership. The potential transition of these lands into other land use types (i.e. rural residential) will be a likely land use trend during the planning period.

### **9.7 Location and Function of Highways**

The transportation system, in its various forms, ties together the land use pattern of a community and of the surrounding region. Vilas County's location in the great northwoods is becoming more accessible every year due to improved roads and highways. Seasonal ownership patterns alone describe the ability and desire of people to access the great outdoors and northwoods of

Wisconsin. With recent and planned improvements to STH 51 & STH 29, and with well maintained state, county, and town roads in the county, development pressure will result due to increased access alone, let alone the natural aesthetics the county has to offer.

## **9.8 General Zoning**

Under Wisconsin Statutes, counties (and local units of government) are authorized to adopt "zoning" ordinances. Zoning is a method for implementing or carrying out the "land use plan" by predetermining a logical pattern of land use development. The planning process in Vilas County was built to identify local preferred land use patterns while identifying possible county implementation strategies. The coordination between planning and zoning will play a large role in the success of the planning process and will be a primary focus at the county level in assessing possible implementation strategies. The local plans have identified issue areas that either do or do not coordinate with the county zoning regulations. The (in)consistencies between what municipalities prefer for the long term use and development of land versus the existing regulations will determine in part how the county should evaluate the adequacy of the Vilas County General Zoning Ordinance. This issue is discussed in greater detail below.

A zoning ordinance consists of a map and a written text. The zoning map arranges the community into districts or zones...conservancy, agriculture, residential, commercial, industrial, etc. Within each of these districts, the text of the zoning ordinances specifies the permitted land uses, the size of buildings, yard/lot dimensions, and other prerequisites in obtaining permission to develop. The goal of the zoning ordinance is to secure a reasonable development pattern by keeping similar and related uses together and separating dissimilar, unrelated and incompatible uses; particularly in relationship to transportation facilities, utilities and public services and facilities. In Vilas County, zoning in many cases has been the only land use control in the unincorporated townships. Many of the existing zoning districts permit, or "roll-up", uses that are permitted in other districts. The effect is permitted land uses that range far from the intent of the district and actually cause inconsistency of use. The rationale behind the Vilas County Land Use Plan process is to establish preferred uses of land, then compare to existing zoning districts to determine the compatibility of uses.

A County may promulgate a zoning ordinance as described above for the unincorporated areas of the county, that is, outside the corporate boundaries of cities and villages, but it is only effective if a Town adopts it for application to its jurisdiction. In the absence of a county zoning ordinance, Towns can adopt their own zoning ordinances, but if there is a county ordinance in place and a Town wants to adopt zoning, it must adopt the county ordinance, or have the County approve a separate ordinance for that town. Any ordinance, ordinance revision, or amendment to a "town" zoning ordinance under these conditions must first be approved by the County before it may become effective. The Vilas County General Zoning Ordinance and Shoreland Zoning Ordinance No. 85 was adopted January 15, 1985, and amended (#85-99) May 1, 1999, and revised May 04, 2000.

According to Table 9-1, the Towns of St. Germain, Presque Isle, Lac Du Flambeau, Manitowish Waters, and the City of Eagle River have their own general zoning codes. Typically, the towns who want their own zoning adopt the county code as reference, which means each of the referenced towns are under county zoning but have adopted additional regulations that have been

approved by Vilas County. The municipal zoning codes have individual enforcement and are regulated locally.

The zoning districts of the county are shown on Map 9-2. The zoning district acreage can be seen in Table 9-2.

**Table 9-2 1999 Existing Zoning District Acreage Vilas County**

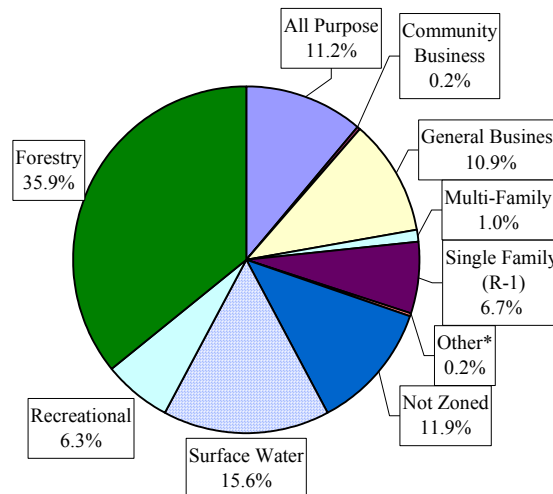
Zoning District	Land in Acres	Percent of Total
Single-Family R-1	43,329.8	6.7
Multi-Family	6,747.0	1.0
General Business	71,269.6	10.9
Community Business	1,158.9	0.2
Recreational	40,898.9	6.3
Forestry	233,314.8	35.8
All Purpose	73,125.7	11.2
Parks & Recreation	190.0	0.0
Industrial	1,189.4	118.4
Not Zoned	77,714.8	11.9
Roads	1,004.4	0.2
Surface Water	101,577.2	15.6
<b>Total</b>	<b>651,520.5</b>	<b>100%</b>

Source: Vilas County Mapping Department

General Business: Vilas County 'GB' zone + Eagle River 'C-1','C-2' zone

Community Business: Vilas County 'CB' Zone + Eagle River 'OR' zone

**Figure 9-2 Existing Zoning as Percent of Total Vilas County**



\*Other includes roads.

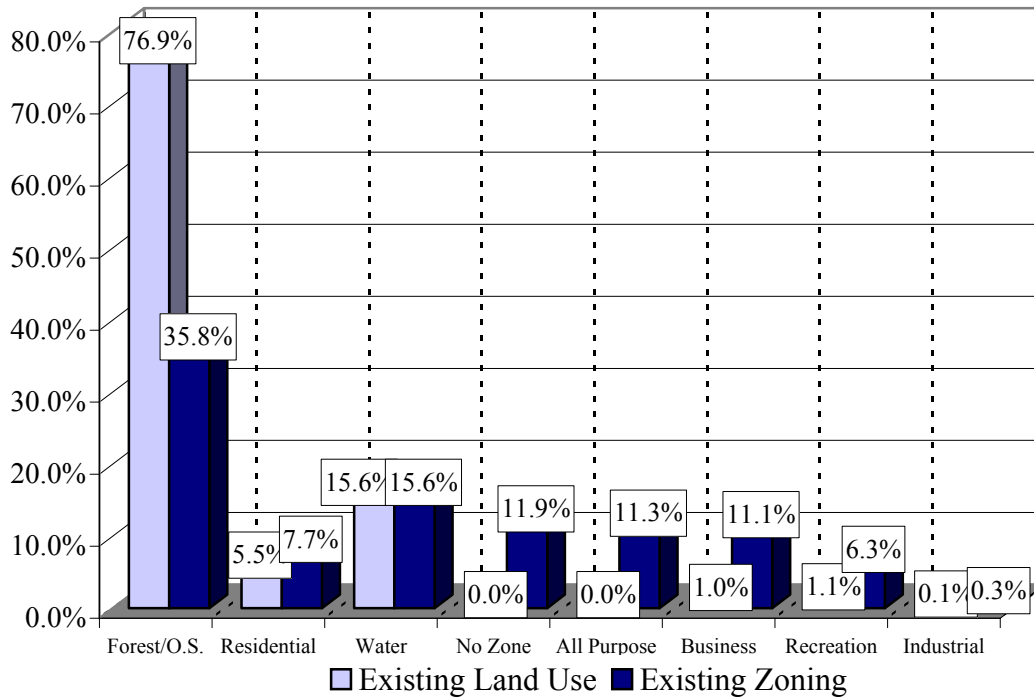
Counties are mandated to promulgate and adopt a zoning ordinance that regulates land use in shoreland/wetland and floodplain areas for the entire area of the county outside of villages and cities, which Vilas County has also done. This ordinance supersedes any town ordinance unless a separate town ordinance is more restrictive. About half of the municipalities have additional regulations that are more restrictive (ex. 200 ft. minimum lake frontage requirements). The shoreland/wetland and floodplain area is that area that lies within 1,000 feet of a lake, within 300 feet of a navigable stream, or to the landward side of a floodplain, whichever distance is greater. All shoreland property in the county, outside of the City of Eagle River, must comply with the minimum standards set forth in the Vilas County Shoreland Zoning Ordinance.

Vilas County does have a subdivision control ordinance, yet the main land use control mechanism is the county zoning ordinance. County zoning does have benefit for coordination, administration, and enforcement of development. The local land use planning has identified some gaps in the zoning ordinance. However, drawbacks include zoning districts and permitted uses that may not match the Town's goals such as the many uses allowed under the "Recreational", "All Purpose" or "Forestry" zones.

In Vilas County, there is wide variance between how lands are used versus how they are actually zoned. Figure 9-2 displays the inconsistencies between the existing land use and the existing zoning. As an example, 6.7% of the county is zoned single-family (R-1), and only 5.5% of the county is residentially developed. Although a majority of R-1 zoning is located along the lakeshores, a majority of the residentially developed lakeshores are not zoned R-1. Another prime example is commercial use. Over 11%, 72,140 acres of lands are zoned either General Business (GB) or Community Business (CB), yet only one half of one percent (.5%, 3,563 acres) is used for commercial uses. Forestry serves as another example where 77% of existing lands in the county are forested, yet only 35.8% are zoned for that use. This list does not include the Recreational zone (REC, 40,898.9, 6.3%) and All Purpose zone (AP, 73,125.7, 11.2%) which together constitute 17.5% of the land area and allow a wide range of uses including varying commercial and residential uses. In addition, 77,714.8 acres are not zoned, although a majority of those areas are either publicly owned or are located outside the shoreland zone in the Town of Land O' Lakes. The inconsistency between the existing use and existing regulation could be perpetuated if zoning ordinance text and maps are not modified to reflect what is planned.

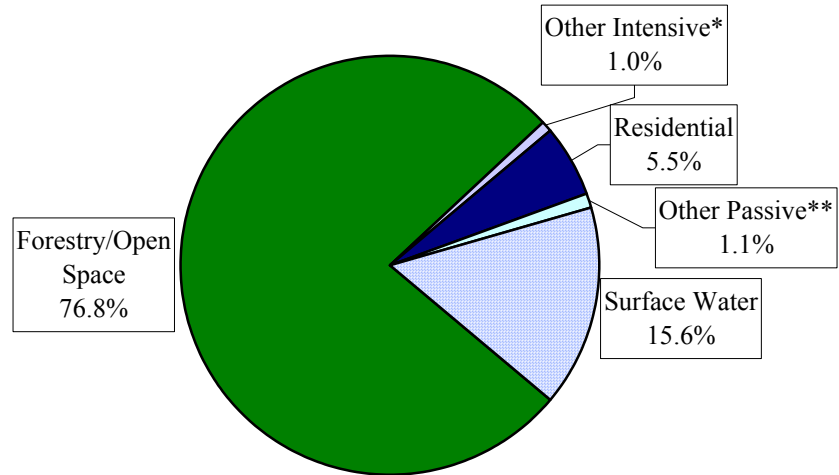
It may be necessary to revise existing or add new zoning districts that reflect the intent of the local preferred land use maps. Vilas County will need to work cooperatively with its respective municipalities on zoning revisions as guided by local preferred land use to enable the county and municipalities to best accommodate, plan, and manage future land use.

**Figure 9-3 Existing Land Use, Existing Zoning Comparison, 1999**

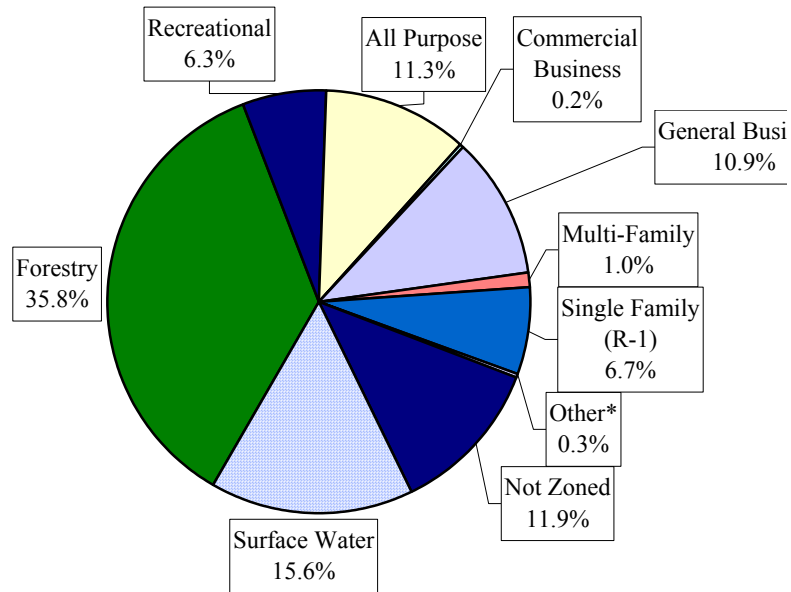


**Figure 9-4 Existing Land Use, Existing Zoning Comparison, 1999**

Existing Land Use



Existing Zoning



This page intentionally left blank.



This page intentionally left blank.

## 9.9 Permit Data

Land use activity can be tracked by a variety of means. Typically the issuance of permits relates to the incidence of new housing starts, rezonings, or the number of land transactions into activity trends that impact the landscape. Table 9-3 provides total figures for the various types of permits and land development activity that have occurred in Vilas County between 1980 and 1998. Residential building permits and permits for commercial structures are found in Table 9-4.

**Table 9-3 Development Activity Vilas County 1980-1998**

Item	Activity	Total 80-89	Total 90-98	Total 80-98
Rezoning	Petitions	39	53	92
	No. of Lots	19/27A <sup>1</sup>	120A	19/147A
Subdivisions <sup>2</sup>	No. of Plats	231	259	490
	No. of Lots	1,481	1,782	3,209
Conditional Use	No. Permitted	86	88	174
Condos	No. Submitted	63	67	130
	No. of Units	721	850	1,571
Sanitary	New	2,837	3,397	6,234
	Replace ('81-98)	1,944	2,566	4,510
Lots <sup>3</sup>	No. <5 Acres	1,539	1,703	3,242
Parcels	Parcels Created	5,974	4,256	10,230

<sup>3</sup>No. of lots do not include lot splits, outlots or lots >5 acres, nor land divisions created via certified survey maps of 2 lots or less.

<sup>2</sup>The no. of lots and plats do not include lot splits, outlots, or lots greater than 5 acres.

<sup>1</sup>Acres

Source: Vilas County Zoning Office.

### Building Permit Data

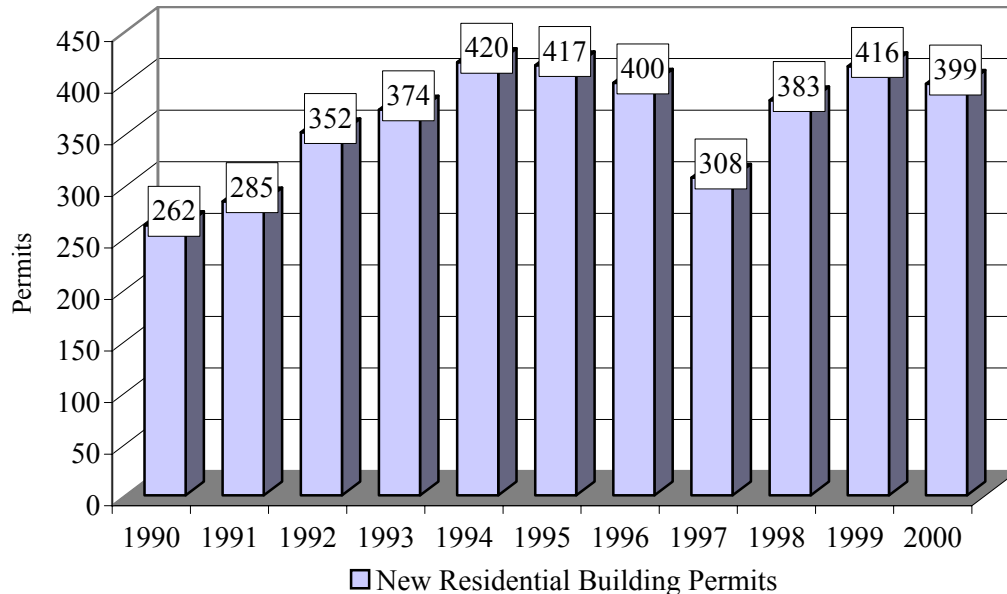
An additional measure that assists in the illustration of the growth in residential housing and commercial development activity for Vilas County is building permit activity. Table 9-4 displays the building permit activity for the county as recorded by the Vilas County Zoning Department Annual Reports. Figure 9-3 displays the 1990-2000 trend for new residential building permits in Vilas County.

**Table 9-4 Residential and Commercial Building Permit Activity Vilas County Zoning 1980-2000**

Year	Single Family Permits	Multi-Family Permits	Mobile Home Permits	Total Residential Permits	Commercial Permits	Total Permits
1980-89	1,914	16	198	2,128	251	2,379
1990	231	0	31	262	25	287
1991	256	2	27	285	27	312
1992	316	1	35	352	29	381
1993	335	2	37	374	34	408
1994	384	2	34	420	38	458
1995	378	12	27	417	36	453
1996	372	2	26	400	28	428
1997	288	7	13	308	52	360
1998	358	6	19	383	33	416
1999	383	14	19	416	45	461
2000	357	26	16	399	36	435
Total 90-00	3,658	74	284	4,016	383	4,399
Total Permits 80-00	5,572	90	482	6,144	634	6,778

Source: Vilas County Zoning Office Annual Reports, 1980 - 2000.

**Figure 9-5 Trend in New Residential Building Permits Vilas County Zoning 1990-2000**



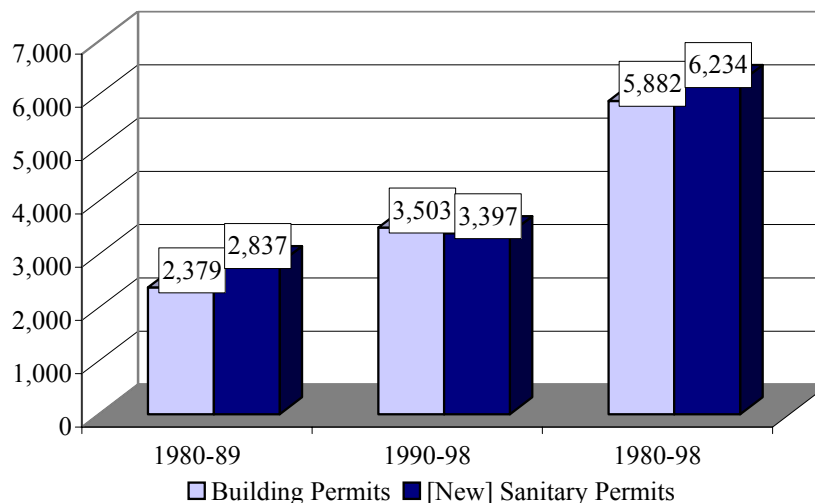
Source: Vilas County Zoning Office Annual Reports, 1990-2000.

Vilas County Zoning (not including the City of Eagle River) averaged 213 residential building permits per year between 1980 and 1989, and averaged 364 residential building permits per year between 1990 and 2000 (see Figure 9-5). Overall, the county averaged 280 residential building permits per year between 1980 and 2000. Commercial permit activity has been relatively low, with an average of 25 permits issued annually between 1980 and 1989, and an average of 34 permits issued annually between 1990 and 2000, or an average of 29 commercial permits issued annually between 1980 and 2000. For purposes of this report, it is assumed the building permit is intended for a new structure, not replacement of an existing structure. Vilas County does not track new/replacement information as a part of the permitting process. According to Vilas County Zoning Department staff, the percentage of replacement buildings per total permits granted is less than five percent on a county-wide basis.

Overall, 3,242 lots of five acres or less were divided between 1980 and 1998, and 6,234 new sanitary permits were issued (see Figure 9-6). According to Table 9-4, 5,882 residential building permits were issued during the same time frame. Comparing the building permit data to sanitary permits, and the number of lots created, a general indication of land conversions can be constructed.

It must be assumed all lots were created for purposes of development, and building or sanitary permits were issued for newly created lots. Assuming the issued sanitary permits correspond to new development, and the average lot size of new development was 1.0 acres<sup>1</sup>, then approximately 6,234 acres of land were developed to intensive use since 1980. Using the building permit data, 5,882 acres (5,882 permits at 1.0 acres) were developed since 1980. The intent of the comparison is to allow for inference to the level of development in Vilas County and how that development activity will or should be planned for. Similar estimates related to future land consumption are discussed in Section 10, Growth Forecasts.

**Figure 9-6 Total Building Permits/Total [New] Sanitary Permits Vilas County**



<sup>1</sup> Lot sizes typically conform to county zoning minimums: 20,000 ft<sup>2</sup> in lake frontage, 1.5 acre back lots, and 5 acres in the forestry zone. The 1.0 acre figure is an estimate only.

## Forest Land Sales

As discussed in Section 8, sale of individual and other managed forest land can result in conversion to residential or other more intensive land uses, which impacts road construction and maintenance and other service demands. Table 9-5 illustrates that over 1,800 acres of forest land were diverted to other uses in just four years between 1998 and 2001.

**Table 9-5 Forest Land Sales Vilas County 1998-2001**

	1998	1999	2000	2001	# Change 1998-2001	% Change 1998-2001
<b>Forest Land Continuing in Forest Land</b>						
Number of Transactions	24	30	21	12	-12	-50.0%
Acres Sold	1,244	2,452	1,474	402	-842	-67.7%
Dollars per Acre	\$938	\$1,404	\$1,468	\$1,504	\$566	60.3%
<b>Forest Land Being Diverted to Other Uses</b>						
Number of Transactions	9	9	7	5	-4	-44.4%
Acres Sold	607	485	338	391	-216	-35.6%
Dollars per Acre	\$1,169	\$2,015	\$2,523	\$1,931	\$762	65.2%
<b>Total of all Forest Land</b>						
Number of Transactions	33	39	28	17	-16	-48.5%
Acres Sold	1,851	2,937	1,812	793	-1058	-57.2%
Dollars per Acre	\$1,013	\$1,505	\$1,664	\$1,715	\$702	69.3%

Source: Wisconsin Agricultural Statistics Service, Forest Land Sales, 1998-2001.