LAND USE

8.1 INTRODUCTION

The Land Use Element is intended to provide important background data, analyze trends, and define future needs related to community land use. This information will serve as the foundation for the development of goals, objectives, policies, programs, and actions. This planning element must be defined and utilized in conjunction with the other eight elements and will serve as a guide to future growth and development within the community. Tools to implement the community actions related to land use are defined and described under Element 9 Implementation.

Defining appropriate land use is about more than making ecologically and economically intelligent choices. It is also about retaining values, lifestyles, cultural assets, and community character. The planning of future land uses is sometimes perceived as an intrusion on the rights of private property owners. The actual purpose of this activity is to protect the rights of the individual and to give landowners, citizens, and local communities the opportunity to define their own destiny.

Many northern Wisconsin communities are facing the same problems now engulfing the southern parts of the state including pollution, a loss of community character, traffic problems, and rising costs to individuals and governments. Taxes have reached all time highs and infrastructure and maintenance costs continue to encumber local units of government. These issues are being further exacerbated by the trends of unplanned, haphazard growth and development. By giving communities the opportunity to define the way they wish to grow and by developing a "road map" to reach that destination, the magnitude of these problems can be reduced.

8.2 BACKGROUND

The Town of Madge, located in southern Washburn County, encompasses 21,798 acres (34.04 sq. mi.). The town is dotted with numerous lakes and borders Long Lake, the largest surface water feature in Washburn County. The Town of Madge is rural in nature and generally has a low development density, with the exception of shoreland areas.

8.3 EXISTING LAND USE

An inventory of existing land uses was compiled through analysis of 1996 digital aerial photography and verified by the town's comprehensive planning committee in December 2002. The determined land use boundaries are approximations based of photo-identifiable changes in land use and are not based on parcel classifications used for assessment and zoning purposes.

A standard land use classification system was used to assign different use areas into categories.

- **Agriculture/Open Space** The lands include croplands, livestock grazing, dairy farming, privately owned non-wooded undeveloped lands, and fallow fields.

- **Commercial** Retail sales establishments, restaurants, hotels/motels, and service stations.

- **Commercial Forest** The use of land primarily for the cultivation of trees for timber and other forest products.

- **Communications/Utilities Facilities** Lands used for generating and\or processing electronic, communication, or water, electricity, petroleum, or other transmittable product, and for the disposal, waste processing, and/or recycling of by-products.

- **Government/Institutional** These lands include: government-owned administration buildings and offices, fire stations, public hospitals and health care facilities, day care centers, public schools, colleges and educational research lands, and lands of fraternal organizations (BSA, VFW, etc.). Cemeteries, churches, and other religious facilities are included in this land use category.

- **Industrial** Manufacturing and processing, wholesaling, warehousing and distribution, and similar activities.

- **Mobile Home Park** Designated multi-unit mobile home clusters.

- **Parks and Recreation** Recreation lands under public or private ownership. Publicly owned recreational lands may include: town parks, nature preserves, athletic fields, boat landings, campgrounds, etc. Examples of privately owned lands may include: golf courses, campgrounds, marinas, shooting range, etc.

- **Residential** Lands with structures designed for human habitation including: permanent, seasonal, and mobile housing units (not in a designated mobile home park) and recreational cabins and cottages.

- **Transportation** Use of land corridors for the movement of people or materials, including related terminals and parking facilities.

- **Water** Open water areas, including natural and impounded lakes and streams.

- **Woodlands** Forested lands under public and private ownership.

8.4 EXISTING LAND USE PATTERN

Woodlands

The dominant land use within the Town of Madge is woodlands. Most town woodlands are under private ownership. Approximately 3,228 acres of woodlands or about 19 percent of total woodlands in the town are part of the Washburn County forest system. About one percent is

state-owned woodlands. County forestlands in the town are heavily used for recreational purposes including hunting, trapping, horseback riding, and other uses. These lands are also managed for timber production and wildlife. The private woodlands are used as recreational parcels, forest crop production, and provide general intrinsic benefits to landowners. In the Town of Madge, approximately 3,330 acres (20%) is public woodlands and 13,273 acres (80%) is under private ownership.

Agriculture/Open Space

Agricultural use is the second most dominant land use in the Town of Madge comprising 12.4 percent of the total land use within the town. Agricultural land use is especially prevalent in the flat, productive soils found in central and southern portions of the town.

Residential

Rural density residential land use is scattered throughout the Town of Madge. The majority of these residences are single-family homes and seasonal/recreational structures. The spatial distribution of homes corresponds to typical patterns for a rural northern Wisconsin community. Several permanent and seasonal residences line the perimeter of Long Lake, the largest surface water body in the county. Development density along Long Lake's perimeter is very high in places with some shoreland areas having attained maximum build-out. Development along this water body has, in some cases, extended to the second tier (non-adjoining property with lake views), which is typical around Wisconsin lakes with extensively developed shorelines. Other town lakes such as Little Devil's, Big Devil's and Deep Lake have significant shoreland development as well. Seasonal and recreational development along the smaller town lakes such as Moody and Leesome has increased significantly over the past ten-year period.

Table 8.1: Land Use by Category

Land use	Acres	Percent of Total
Agriculture/Open space	2,699.0	12.4%
Commercial	7.6	<0.1%
County Highways	110.2	0.5%
Gov't/Inst	3.7	<0.1%
Local Roads	239.3	1.1%
Park & Rec	107.2	0.5%
Residential	254.8	1.2%
State Highways	18.3	0.1%
Water	1,741.0	8.0%
Woodlands	16,603.0	76.2%
TOTALS	21,784.2	100.0%

Transportation (local and county roads)

Road corridors are defined as the actual road surface and the associated right-of-ways. The town has a fairly extensive road network consisting of both county and town roadways; although, large tracts of roadless areas are still found in the northern half of the town.

Commercial

The Town of Madge has very little commercial land use. Most commercial areas in the town are resorts, bars, and small businesses. Some of these businesses are seasonal in nature. A trend towards commercial home-based business has emerged in many Washburn County communities. It is difficult to determine the exact numbers of these businesses in the community due to lack of available data. The 2000 decennial census indicated that 34 town residents worked at home.

Industrial
No industrial use areas were identified in the Town of Madge.

Government/Institutional
Government/Institutional land use within the Town of Madge consists of the town hall located along CTH M, a church at the intersection of CTH B and Todd Road, and a cemetery located south of the church on Todd Road.

Park and Recreation
The Butternut Hills Golf Course and several public boat launch sites are park and recreational use lands within the town.

Mobile Home Park
Currently there are no designated mobile home parks within the Town of Madge.

Communication Facilities/Utilities
No communication facilities or utilities are located within the Town of Madge.

8.5 Primary Factors Influencing the Development Pattern in the Town of Madge

Transportation Network
The town's road network provides access to land parcels throughout the town. Further road development will open new lands to potential development pressure. Highways and roads also produce a large amount of runoff with negative consequences for area streams and lakes. Historically, little effort has been made to slow down or infiltrate this runoff before it reaches a water body. As more attention is paid to non-point pollution, additional consideration may need to be given to the ways that roads impact water bodies.

Surface Water Resources
A visible trend across northern Wisconsin continues to be the development of private lakeshore frontage and, in some cases, second tier (backlot) growth. Surface waters are attractive resources for a wide variety of reasons including recreation, quiet, and aesthetic views. Areas adjacent to and near lakeshores have experienced a dramatic increase in seasonal/retirement home development. Many seasonal homes on county lakes have been converted to year-round residences as people retire and occupy these dwellings permanently. Remaining undeveloped shoreland areas along town lakes are likely to continue to experience continued growth pressure, as are non-adjoining parcels (second tier). The continuing build up of impervious surfaces adjacent to lakes and wetlands presents a major challenge, as the additional runoff from this area will surely impact water quality.

Forested Rural Lands
As lake frontage becomes more developed and more cost prohibitive, landowners will look towards developing homes in rural forested lands. These types of development can lead to fragmentation of the landscape and a general loss of the local rural character. Large tracts of

forestland are important for protecting water quality and providing habitat to migratory birds and other wildlife, and their potential loss represents a threat to the environmental health of Madge. Rural developments of this type often have long and/or un-maintained driveways that pose challenges for emergency, police, and fire response.

County Forest Land

Nearly 15 percent of the Town of Madge's total land area is part of the Washburn County Forest. These are publicly owned lands that essentially prohibit most forms of development; although, fringe development along the privately owned periphery of public lands is a growing trend in northern Wisconsin.

Lands Enrolled in Forest Management Programs

Lands that are enrolled in forestry programs such as the Managed Forest Law (MFL) program can provide some assurance that these lands will continue to be utilized as forest. These lands are under contractual commitment, which may or may not be renewed upon expiration.

Proximity to Metropolitan Areas

The town's geographic proximity to the Duluth/Superior metropolitan area and relatively short driving distance to Eau Claire and the Twin Cities is a local development factor. Non-residents own numerous seasonal residences and land parcels within the town.

Land Trends

The value of and price paid for vacant and developed properties has continued to increase. This increase is not expected to slow, except for minor dips related to the national economy.

Equalized values have continued to see significant increases. In 1999, the total equalized value of the Town of Madge was $52,715,900, while in 2003 the total equalized value was $90,476,700. The five-year period represented from 1999 to 2003 identifies an increase in overall equalized value of over 71 percent. In 2003, the residential classification accounted for 79 percent of the total, while forestry classification accounted for just over 17 percent.

Demand for properties varies depending on location and attributes, such as lakes, rivers, streams, and forest type. Based on a listing of MLS (multiple listing service) entries as of May 10 and 11, 2004, there were a number of properties for sale in the town. Undeveloped properties included four properties. Three of the properties offered views of the Butternut Hills Golf Course. Each lot having five acres was selling for $66,000. Another property having access to Kade Lake and undeveloped was selling for $117,000 (37 acres).

Six residential properties containing shoreland were also listed on the MLS. These properties included one on Deep Lake for $199,900 (.75 ac.), one on Kade Lake for $174,900 (4.5 ac.), two on Ripley Lake for $275,000 (5.28 ac.) and $174,900 (1.89 ac.), and two on Long Lake for $1,100,000 (.80 ac.) and $1,650,000 (1.5 ac.). Non-shoreland residential properties only found one property overlooking the Butternut Hills Golf Course for $109,000. No properties for commercial, manufacturing, or agricultural land sales were found.

Due to the vast majority of the town being undeveloped and rural, it is projected that continued pressure for development will occur. Developers and private property owners are encouraged to redevelop properties instead of encroaching on undeveloped land, where applicable.

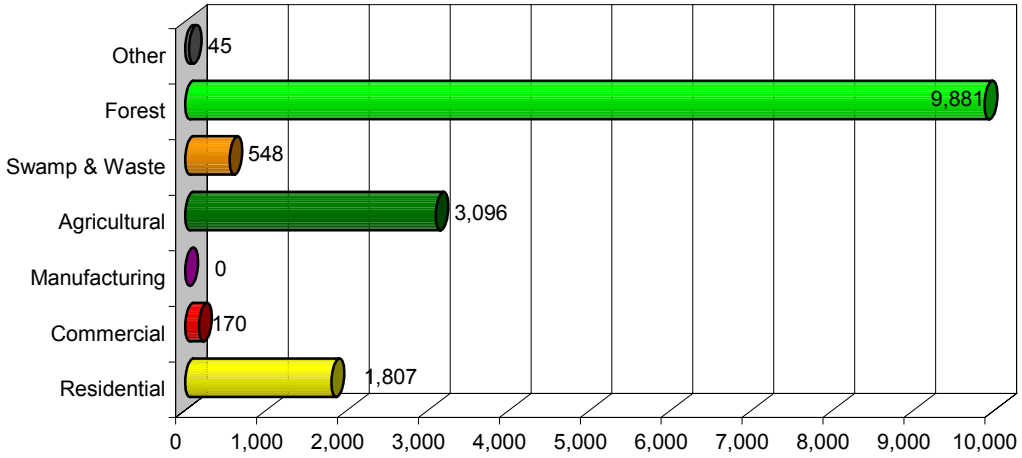
Community members expressed concerns over the amount of development, both shoreland and non-shoreland, that has occurred in the town over the past several decades. Although the consensus is that limited land use conflicts exist today, the potential for future land use conflicts will exist. Use of this comprehensive plan will assist in reducing future land use conflicts.

8.6 WISCONSIN DEPARTMENT OF REVENUE ASSESSMENT STATISTICS

Wisconsin Department of Revenue real estate classes are used to determine land assessments and valuations. Because these data cover extensive time periods, they can be useful in conducting a simplified land use analysis and for examining trends, which are determined by the conversion from one type of assessment class to another over a period of time. The land use classes used for assessment purposes are: Residential, Commercial, Manufacturing, Agricultural, Swamp and Waste, and Forest. Excluded from this inventory are lands categorized as "other" or tax-exempt lands. Figure 8.1 identifies selected assessment data by number of acres for the Town of Madge. As identified in Figure 8.1, the majority of land in the Town of Madge is classified as forestry, followed by agricultural and residential.

Figure 8.1

Wisconsin Department of Revenue 2001 Tax Class Acres



Source: Wisconsin Department of Revenue

Wisconsin Real Estate Class Definitions

Residential includes any parcel or part of a parcel of untilled land that is not suitable for the production of row crops on which a dwelling or other form of human abode is located.

Commercial includes properties where the predominant use is the selling of merchandise or a service. Apartment buildings of four or more units and office buildings.

Manufacturing property consists of all property used for manufacturing, assembling, processing, fabricating, making, or milling tangible personal property for profit. It also includes establishments engaged in assembling component parts of manufactured products. All manufacturing property is assessed by the Wisconsin Department of Revenue.

Agricultural land means land exclusive of buildings and improvements that is devoted primarily to agricultural use as defined by rule.

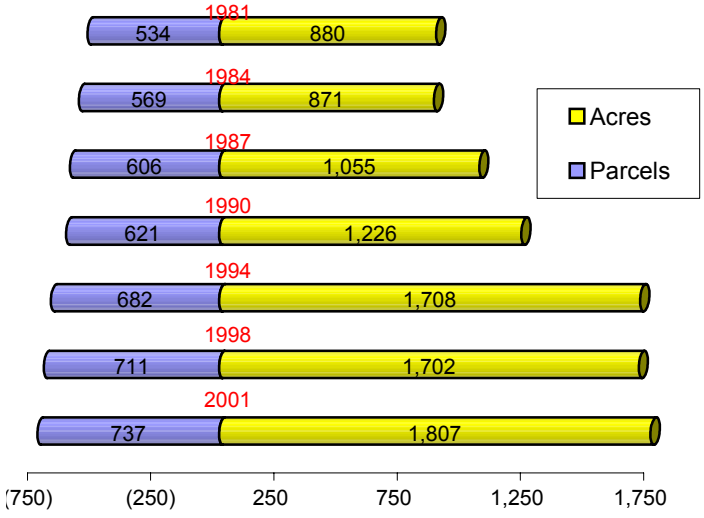
Swampland or wasteland means bog, marsh, lowland brush, and uncultivated land zoned as shoreland under §59.692 and shown as a wetland on a final map under §23.32 or other nonproductive lands not otherwise classified.

Productive forestland means land that is producing or is capable of producing commercial forest products.

8.7 HISTORIC TRENDS

To further analyze trends in land use, assessment data spanning a number of different years from 1981 to 2001 was examined. As indicated by Figure 8.2, the number of residential parcels and the total acreage of lands assessed for residential purposes have increased significantly over the past 20 years. Residential acreage increased 105 percent and the number of residential parcels increased 38 percent between 1981 and 2001.

Figure 8.2:
Residential Assessments, 1981-2001



Lands assessed for agricultural purposes have declined noticeably over the past 20 years, a trend which is occurring at both the county and state levels. While the total acreage of lands in the agricultural[1] class have declined slightly, the number of parcels in this category remained relatively stable from 1981 through 2001. The decreased acreage in this class combined with a stable number of agricultural parcels indicates that the average size of agricultural parcels in the Town of Madge has decreased.

[1] It is important to note that changes in the way land is assessed have occurred over the past 20 years. Under Wisconsin's use value assessment (Implemented in 2000), only land that is actually used for crop or pasture production is eligible for use value assessment. This means that land associated with the farmstead, road rights-of-way, ungrazed woodland, and swampland, etc. is currently excluded from land assessed under use value.

Over the past 20 years, the total acreage of lands assessed as forest declined in the Town of Madge. The total number of forest parcels declined slightly, while the total acreage in this class has decreased by 8.2 percent.

Figure 8.3:
Agricultural Assessments, 1981-2001

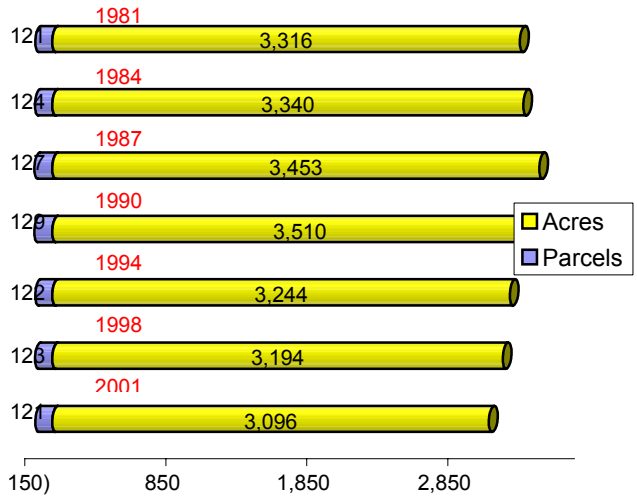
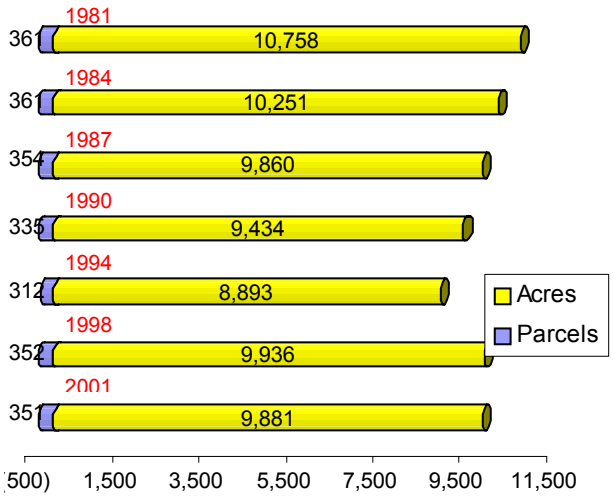
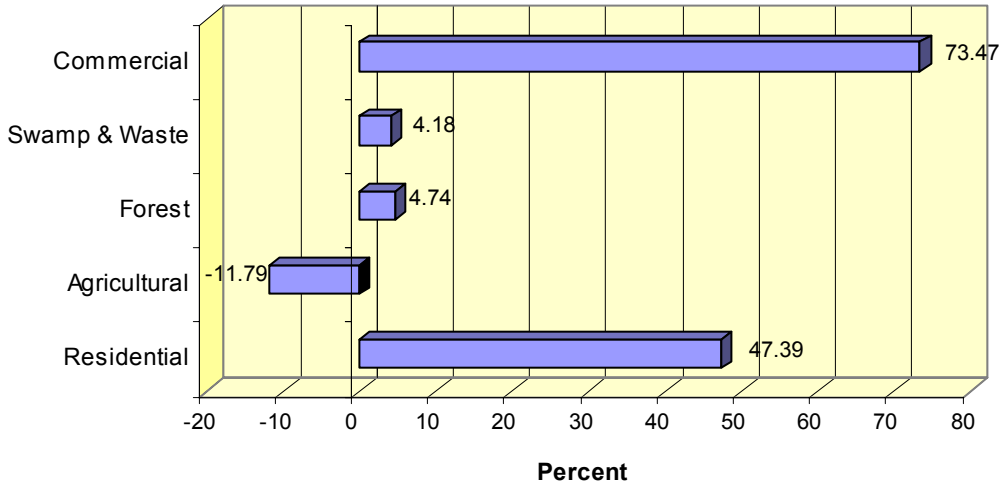


Figure 8.4:
Forest Assessments, 1981-2001



Commercial acreage in the Town of Madge has increased in 20 years, from 97 acres in 1981 to 170 in 2001. The 'swamp & waste' classification experienced an overall decline in acreage between 1981 and 2001, from 641 acres to 548. The Town of Madge has not had 'manufacturing' assessments in the past 20 years.

Figure 8.5: Percent Change in Assessment Classes, 1990-2001



8.8 LAND USE REGULATION

General Land Use

Zoning is the regulation of the use of land and buildings that permits a community to control the development of its own jurisdiction. Zoning is a locally enacted law that regulates and controls the use of private property. Zoning involves dividing the countryside into districts or zones for agricultural, residential, commercial, industrial, and public purposes. Zoning states which specific uses are permitted in each district and under what circumstances. It provides for orderly growth by protecting homes and property from harmful uses on neighboring properties.

Zoning is the primary tool regulating land use in the Town of Madge. The town has adopted the Washburn County Zoning Ordinance and has authorized the county to enforce zoning throughout the town. The town could develop and enforce its own land and subdivision ordinance if it were to choose so.

Over the three-year period covering 2001-2003, the Washburn County Board of Supervisors approved seven rezoning applications. The majority of permits approved were for a change in shoreland zoning.

Table 8.2: Town of Madge Approved Rezoning Applications

	2001	2002	2003
Shoreland	1	2	3
Non-Shoreland	0	0	1

Source: Washburn County Zoning Department May 28, 2004

Zoning ordinances must be based on a land use plan in order to be effective and protect the public interest. Furthermore, after 2010 all zoning ordinances in Wisconsin must be based on comprehensive plans that meet the definition of a plan in state statutes. The current general Washburn County zoning ordinance is not plan based and, to some extent, fails to recognize the interests of local government, landowners, and the general public. The planning for future land uses as a component of the Washburn County comprehensive planning process will form the basis for revision of the existing zoning ordinances.

Shorelands and Wetlands

The Washburn County shoreland/wetland zoning ordinance establishes development standards for lands adjacent to county surface waters. These standards are based on the lakes classification system, which assigns each county water body into one of three classes (I, II, III). The lakes classification rating is based on the individual characteristics of each lake, with class I lakes requiring minimum protection and class III needing the most. Mapped wetlands are also regulated under this ordinance. Wetlands data and maps can be found in the Natural, Agricultural, and Cultural Resource element.

Subdivision Regulations

Subdivision regulations are used by the county and state to ensure that the division of land is done in such a way as to not negatively impact the public. The current subdivision regulations follow the state minimum guidelines and are only enacted when a landowner seeks to create five

or more lots within five years, each under 1.5 acres in size. Counties and towns have the option of creating their own subdivision ordinances to better manage growth and development. For example, towns can have land division ordinances that specifically address lot sizes and layouts for new lots larger than the state's 1.5-acre cutoff. Such local ordinances could better address issues of storm water runoff management, private on-site wastewater system locations, and access to buildings for emergency vehicles. Enacting and enforcing a subdivision ordinance can be done through the town board and planning commission and does not require the creation of a new administrative office. Municipal (town) subdivision ordinances do not require review or approval by the county.

Town Enforced Land Use Controls

The town has no land use controls in which it can enforce actions. The town could develop and enforce its own zoning ordinance. Counties are granted general zoning powers within the unincorporated areas (towns) of the county. However, a general county zoning ordinance becomes effective only in those towns that approve the county ordinance. Towns in counties with a general zoning ordinance (such as Washburn County), which have not adopted the county zoning ordinance may adopt village powers and use the city zoning enabling authority, subject to county board approval. The Town of Madge may wish to work with Washburn County to refine and update the county subdivision ordinance to better implement the town's comprehensive plan. Alternatively, the town could create its own land division ordinance based on this plan (see above).

Town of Madge Zoning Districts

Table 8.3 represents an analysis of zoning districts in the Town of Madge. This analysis is based on digitizing a hand drawn zoning map from the Washburn County Zoning Department. Nearly 70 percent of the town is represented by agricultural and forestry zoning districts.

Table 8.3: Existing Zoning District Acreage -Town of Madge Map GIS analysis

Zoning District	Parcels	Total Acres	Percent of Total Area
Agriculture	300	9,896.22	45.4%
Commercial	6	20.52	0.1%
Commercial w/conditions	1	17.64	0.1%
Forestry	151	5,483.11	25.1%
Industrial	1	6.34	0.0%
Planned Unit Development (golf course)	2	82.34	0.4%
Resource Conservation	2	39.58	0.2%
Residential Agricultural	46	1,155.78	5.3%
Residential Agricultural w/conditions	1	39.08	0.2%
Residential Mobile	4	80.69	0.4%
Residential Recreational (1)	50	334.05	1.5%
Residential Recreational (2)	235	3,502.53	16.1%
Residential Shoreland	2	36.54	0.2%
Water	-	1,111.10	5.1%
Total	**801**	**21,805.50**	**100.0%**

Source: Washburn County Zoning, 2002

Relationship Between Development and Lake Water Quality

As smaller lots are created for new housing units, there is a marked increase in storm water runoff and nutrient transport to lakes and wetlands in Madge. Three dimensions of housing development combine to increase runoff and nutrient loading. First, housing adds impervious surfaces from driveways, patios, and buildings. Runoff from these impervious surfaces is often channeled and concentrated. Second, existing vegetation is often removed during construction and development. The elimination of trees and shrubs in particular can increase the yield in storm water on the ground. Third, the area surrounding a house is most often compacted and regraded to drain to lakes or nearby ditches or streams. People prefer smooth lawns to pitted, natural landscapes. These three processes effectively minimize the amount of water that can infiltrate into the ground before reaching a stream, wetland or lake.

There is an inverse relationship between lot size and runoff and nutrient export from the land. Smaller lots are more thoroughly developed and yield more runoff; larger lots generally have a portion of the lot that remains undisturbed. Table 8.4 below shows the expected nutrient yield from an average lot of various sizes in the Madge area. The change in land use to one-acre residential lots is expected to yield 14 times the amount of phosphorous than a 40-acre size.

Table 8.4: Nutrient Yield

Lot Size (acre)	Impervious (House, driveway)	Developed Pervious (Lawns, gardens)	Undeveloped (natural)	Estimated phosphorus transfer rate (pounds/acre/year)	Annual phosphorous yield from a 40 acre parcel (pounds)
0.25	34%	67%	0%	.59	23.6
0.5	23%	77%	0%	.4	16
1	16%	84%	0%	.28	11.2
2	12%	50%	38%	.18	7.2
5	7%	20%	73%	.09	3.6
10	5%	10%	85%	.05	2
40	2.5%	2.5%	95%	.02	.8

The Long Lake Management Plan recommends that residential lots in the Long Lake watershed be limited to a five acre minimum and that on-site storm water BMPs be implemented to minimize runoff from new development. This recommendation is to protect the lake from excessive phosphorous that would come from increases in stormwater runoff. Stormwater BMPs are discussed in Section Nine of this report (Implementation).

8.9 REDEVELOPMENT AND CONTAMINATED SITES

Leaking underground storage tanks (LUST's) are often a source of localized contamination problems and may pose threats to health and safety. These threats may include: contamination of soil and groundwater; contamination of drinking water; or contamination of lakes, rivers, and streams. Underground storage tanks are regulated in Wisconsin under,

- **Comm 10** Wisconsin Department of Commerce's rule governing installation, registration, maintenance, and abandonment of petroleum storage tanks.

- **NR 746** - Applies specifically to sites where petroleum products have discharged from storage tanks.

- **Comm 47** Department of Commerce rule that governs reimbursement from Petroleum Environmental Cleanup Fund Act (PECFA).

- **PCFA** Wisconsin's reimbursement program for eligible costs of cleaning up contamination from leaking underground and aboveground petroleum storage tank systems administered by the Department of Commerce.

As of May 2004, a total of 54 LUST sites are under management by either the Wisconsin Department of Natural Resources or the Wisconsin Department of Commerce. No sites are located within the Town of Madge.

Closed Sites with Groundwater Contamination

The Wisconsin Department of Natural Resources GIS registry of closed remediation sites indicates four sites of known groundwater contamination. Only closed sites with groundwater contamination remaining above chapter NR140 enforcement standards or soil contamination above NR720 residual contaminant levels are included in this registry. None of these sites are located in the Town of Madge.

Redevelopment and Smart Growth Areas

Wisconsin Chapter 66 planning legislation requires local communities to explore and plan for redevelopment options such as infill (developing vacant lots in urban areas before new ones) housing, brownfield[2] sites, and obsolete buildings. Local communities are also responsible for identifying potential "smart growth areas" or areas with existing infrastructure and services in place, where development and redevelopment can be directed. These areas may also be recently developing land contiguous to existing development that will be developed at densities that will have relatively low public service costs.

The plan does not specifically identify any particular area or parcel in the Town of Madge in need of redevelopment. The vast majority of the town is currently undeveloped.

8.10 Future Land Use Development Strategy

The future land use development strategy for the Town of Madge is based on several components. Early in the planning process, surveys were distributed to all landowners in the town; the results of these surveys assisted the town planning committee in defining community issues and opportunities. A series of goals and objectives were developed which provided the direction for development of a preferred future land use scenario. These tools were utilized in

[2] With certain legal exclusions and additions, the term `brownfield site' means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

conjunction with GIS analysis of existing environmental, infrastructure, and transportation conditions to determine the most appropriate locations for future growth and development. Finally, growth forecasts based on the projections found in the *Issues and Opportunities* and *Housing Elements* provided the means to assess future needs related to land use. The combination of public involvement, assessment of conditions, and expected future needs led to the development of a future land use map, recommendations, policies, programs, and actions.

8.11 EXPECTED FUTURE TRENDS IN THE TOWN OF MADGE

A. The year-round population of the Town of Madge will continue to rise. More retirees will likely relocate to the town.

B. The number of seasonal residents and tourists is expected to increase.

C. Demands for rural housing will continue to increase, coupled with increased demand for larger parcels of land.

D. Demand for waterfront property will continue to be high, with increased pressure to develop smaller lake properties.

E. Future industrial development is not expected.

F. Commercial growth will continue in limited locations.

G. Increased traffic will occur on town roads to accommodate more residents and visitors.

H. More lake users will result in a more intensive recreational use of town lakes, especially Long Lake.

I. Areas within the town will be attractive to developers wishing to create condominium and retirement communities.

J. Land prices and taxes will continue to rise.

K. Seasonal housing units will continue to be converted to year-round permanent residences.

L. Home-based business and tele-commuting will become more prevalent allowing more people the flexibility to live in rural areas such as the Town of Madge.

M. There will be no significant expansion of infrastructure into the town within the next 20 years.

N. Water quality concerns will increase due to increased development.

8.12 GROWTH FORECASTS

Residential

The population projections for the Town of Madge indicate that by the year 2025 an additional 112 people will be year-round residents of the town.

Table 8.5 Population and Housing – Town of Madge

	2000	2005	2010	2015	2020	2025
Population	454	485	513	536	553	566
Average Household Size	2.24	2.19	2.14	2.09	2.04	1.99
Year Round Units	214	235	254	272	287	301
Seasonal Units	196	215	233	249	263	276
Single Family Units	180	197	214	229	242	253
Rental Units	22	24	26	28	30	31

Note: Does not include vacant housing units, which are factored into totals

The number of single-family units in the Town of Madge by the year 2025 is projected to be 253, a 40 percent increase over 2000 figures. The number of seasonal homes is also expected to increase by 80 units. The projected increase in numbers of housing units is due, in part, to the steadily decreasing average household size. This trend is also being experienced at both the state and national levels. The number of projected future homes is based on anticipated population and proportion of seasonal/year round units.

Acreage requirements for residential growth will be a factor of both number of housing units required and housing unit density. Table 8.6 reflects the varying acreage requirements for residential growth based on different housing unit densities. Optimal housing density varies significantly by community and should be based on the community's goals and objectives. The purpose of the table is to show how differing development densities will impact the overall community land base. Not factored into the projections is the rate of conversion of seasonal homes to permanent homes. This phenomenon is certainly occurring in many Washburn County communities but is difficult to quantify due to the lack of available data.

Table 8.6: Potential Acreage Required for Residential Housing Units 2005-2025

Average Density (Acres)	2005 Potential New Units	2005 Acres	2010 Potential New Units	2010 Acres	2015 Potential New Units	2015 Acres	2020 Potential New Units	2020 Acres	2025 Potential New Units	2025 Acres	Total Acres 2005-2025
40	40	1,600	37	1,480	34	1,360	29	1,160	27	1,080	6,680
20	40	800	37	740	34	680	29	580	27	154	3,340
10	40	400	37	370	34	340	29	290	27	270	1,670
5	40	200	37	185	34	170	29	145	27	135	835
3	**40**	**120**	**37**	**111**	**34**	**102**	**29**	**87**	**27**	**81**	**501**
1	40	40	37	37	34	34	29	29	27	27	167
0.5	40	20	37	19	34	17	29	15	27	14	84

Commercial

If historical commercial growth trends continue, the town is expected to require about 267 total acres of commercial land by the year 2025 (Table 8.7). This estimate means that the town could gain about 97 total acres of commercial land between 2001 and 2025. Projections were developed using a FORECAST model based on assessed acreages from 1981, 1984, 1987, 1990, 1994, 1998, and 2001.

Table 8.7: Projected Commercial Acreage – Town of Madge

	2001	2005	2010	2015	2020	2025
Commercial Acres Needed	170	184.2	204.3	224.5	244.7	267.3
Additional Acres	-	14.2	20.2	20.2	20.2	22.7

Industrial

The Town of Madge has very little industrial land use. Additional industrial growth is not projected to occur within the town during the next 20 years.

Agricultural

Based on the continuation of current trends, the Town of Madge is expected to require about 9.4 percent less agricultural land by the year 2025 as compared to 2001 (Table 8.8). Projections were developed using a FORECAST model based on assessed acreages from 1981, 1984, 1987, 1990, 1994, 1998, and 2001.

Table 8.8: Projected Agricultural Acreage – Town of Madge

	2001	2005	2010	2015	2020	2025
Agricultural Acres Needed	3096	3122.2	3057.3	2992.4	2927.6	2831.7
Additional Acres	-	26.2	-64.9	-64.9	-64.9	-95.8

Gross Developable Land

In order to determine gross development land, public ownership and natural constraints such as wetlands and surface water were deducted from the total. This total should be viewed as an **approximation** for planning purposes, as **not all lands within this total would typically be considered developable**. Lands proposed for future growth and development should be measured against natural constraints outlined in the "Natural, Agricultural, and Cultural Resources Element", infrastructure requirements, and other site-specific conditions that will contribute to actual site development potential. In this example, a 3-acre residential parcel was used to determine future land acres that would be needed to accommodate residential properties.

Total Land Area = 21,798 Acres

Development Factors

Surface Waters =1,741 Acres
Wetlands[1] = 1,108 Acres (1,264 Total Acres)
Roads & Existing Development = 741 Acres
County Forest = 3,228 Acres

[1] Excludes portion which is county forest, industrial forest, or Wisconsin DNR land

DNR Land = 102 Acres
Industrial Forest = 78 Acres

Development Factors= 6,998 Acres
Total Land Area – Development Factors = 14,800 Acres of Gross Developable Land

2025 Future Land Use Summary

Total Additional Residential Land (2025)	501 Acres
Total Additional Commercial Land (2025)	98 Acres
Total Additional Industrial Land (2025)	0 Acres
Total Additional Developed Lands by 2025	**599 Acres**

8.13 LAND USE GOALS, OBJECTIVES, ACTIONS, AND POLICIES

A set of recommended goals, objectives and action steps has been developed to assist the Town of Madge with existing and future land use activities.

GOAL: Encourage a coherent, consistent land use pattern within the Town of Madge and in conjunction with neighboring towns so that growth occurs in an organized, environmentally, and economically sound manner.

Objective 1: Promote education of public leading to an understanding of land use issues facing the town.
- *a. Make the comprehensive plan available to the town residents.*
- *b. Make available resource documents regarding resource constraints.*

Objective 2: Determine appropriate levels of non-shoreland development.
- *a. Identify areas with potential non-shoreland development.*
- *b. Work with Washburn County zoning on strengthening pertinent ordinances.*
- *c. Refer to appropriate elements for development standards.*

Objective 3: Ensure land use activities that protect the public's health, safety, and welfare.
- *a. Develop a checklist of requirements ensuring health, safety, and welfare for land use change proposals.*
- *b. Distribute the checklist to applicants to complete and present to the plan commission.*

Objective 4: Maintain an active planning process at the town and county level to coordinate land use activities.
- *a. Establish and maintain a plan commission.*

b. Periodically meet with adjoining plan commissions to discuss issues of mutual concern.

Objective 5: Discourage large-scale, high-density residential and commercial development.

a. Develop a subdivision ordinance based on the comprehensive plan.

Objective 6: All development costs shall be born by the developer not by the residents of Madge.

a. Establish standards for public infrastructure (i.e. roads) the developers must adhere to before the town will accept from the development.

b. Establish a fee schedule for proposals to the town.

Objective 7: Discourage land use practices that may have a detrimental affect on surface and ground water resources.

a. Discourage development around and near environmentally sensitive areas.

b. Utilize the educational components outlined throughout the land use element.

c. Appropriate agencies shall strictly enforce rules and regulations to protect the natural environment.

d. Require site visits for land use proposals on or near sensitive lands.

Objective 8: Towns shall have a greater voice on the application of variances.

a. Provide direct input to all variance requests.

b. Request the county board chair to appoint only members of plan commissions or town boards from any town to the Board of Adjustments.