



Langlade County Comprehensive Plan 2019

2024 Revision



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Chapter One

Background & Demographics

1.1 Background

This is the first of nine chapters that comprise the Langlade County Comprehensive Plan. The plan provides detailed information on the county and also includes all seventeen towns, a village and one city.

Langlade County is located in northeastern Wisconsin and is bounded on the north by Forest and Oneida counties, on the east by Oconto County, on the south by Marathon, Shawano, and Menominee counties, and on the west by Lincoln County. See the planning context map.

The county is a predominantly rural area with a large proportion of its land in agriculture, wetlands, and forests. Residents and visitors from both near and far utilize its water and expansive natural areas for recreational purposes. The City of Antigo is the county seat and largest community in the county with a population of about 8,600.

History

Native Americans inhabited Langlade County when the first European explorers, missionaries and fur traders traveled into the

county. These traders followed a centuries old route from the Fox River at Green Bay that ran along the Wolf River to the copper area of Lake Superior. Europeans established communities at Ackley, Langlade, and Lily in the 1860's as trading posts. Settlement in Langlade County was further spurred by the U.S. Government, which in the 1860's and 1870's built a road to transport military forces from Fort Howard in Green Bay to Fort Wilkins on the Keweenaw Peninsula. Timber production and agriculture were the dominant forces for the growth of the county, and they continue to be important today.

Geography

The county's total surface area is about 888 square miles or 567,621 acres; of which about 78% is forested, 15% is used for agriculture, 2% is water, and the remaining 5% is used for transportation, residential, commercial and industrial uses. Elevations in Langlade County range from 1,070 feet above sea level where the Wolf River leaves the county, to about 1,900 feet above sea level in the Town of Langlade.

The county has topography of glacial origins. Glacial features in the county include mostly moraines and outwash plains; but also include drumlins, eskers, lake plains, and bogs. The moraines include the older drift area in the southwestern part of the county. The outwash plains include the Antigo Flats, which are located in the south-central park of Langlade County, and the state soil (Antigo Silt Loam) is found there.

Planning Context

State of Wisconsin

Planning and zoning has been a function of local units of government for over 50 years in Wisconsin. Over the years almost every city, village and county has developed various plans, from land use plans, to master plans to development plans. Existing authority for planning is provided in state statutes, including ss. 59, 60, 61 and 62.

In October of 1999, the Governor signed into law Wisconsin Act 9, the Budget Bill, containing substantial revisions of statutes governing comprehensive planning. The law has been revised by the signing of two additional bills into law. The first is AB 872, containing “technical revisions” which was signed May 10, 2000. The second bill, signed April 13, 2004, is AB 608, which reduced the number of items that must be consistent with the plan to three, these are: official mapping, subdivision ordinances and zoning ordinances. Taken together these

bills represent the most sweeping revision of the State’s planning enabling laws in half a century.

The law (§66.1001 WI Stats.) requires all jurisdictions within the state that exercise control over land-use to prepare a comprehensive plan by 2010. It lays out the nine required elements or chapters of the plan, including natural resources, housing, transportation, economic development, utilities & community facilities, and land use. Also required is a public participation process that follows and adopted plan.

The comprehensive planning law is significant in many ways. The law creates for the first time a definition of a comprehensive plan; it requires that almost all local units of government have a plan; it sets requirements for public participation; and requires that the plan be consistent with local implementations tools. Most important, is that it maintains that the process be locally driven so all local units of government decide their own future.

Public Participation

As part of the planning process a variety of public participation efforts were conducted to involve as many viewpoints into the planning process. A Citizen’s Advisory Committee (CAC) was established to provide oversight to the planning process. This group met several times and invited others with

various technical backgrounds to participate based on meeting topics.

A formal public participation plan was adopted outlining these efforts. A public hearing was held in the fall of 2019. [See Attachment A.](#)

1.2 Demographics

Demographics are critical to the planning process. This data can reveal past and future trends that aide in current decision making processes. Below we examine total population, population projections, age distribution, households, educational attainment, employment, income levels, and race.

Population

In 2010, nearly 20,000 people lived in Langlade County. In 2016, the population decreased to 19,414. Between 2000 and 2010, Langlade County lagged behind the state in terms of percentage growth, with a rate of -4 percent, compared to the state average of 6 percent. The County continues to lag behind the

state between 2010 and 2016 as well.

Table 1-1 displays total population for each local unit (minor civil division), the County and the state. Although the state has seen growth, majority of the local units in the County are not expected to see growth into the future. Nearly half of the civil divisions saw a decrease in population between 2010 and 2016. The town of Upham grew the most, adding 112 residents. As a percent of the total, the Village of White Lake lost the most residents between 2010 and 2016. Between 2010 and 2016 Langlade County lost a total of 563 residents. The Land Use Chapter also discusses population.

Table 1-1: Population

Minor Civil Division	2000	2010	2016 Estimate	2000-2010 % Change	2010-2016 % Change	2010-2016 Net Change
Ackley	510	524	444	3%	-15%	-80
Ainsworth	571	469	410	-18%	-13%	-59
Antigo	1,487	1,412	1,417	-5%	0%	5
Elcho	1,317	1,233	1,133	-6%	-8%	-100
Evergreen	468	495	421	-6%	-15%	-74
Langlade	472	473	455	0%	-4%	-18
Neva	994	902	923	-9%	2%	21
Norwood	918	913	937	-1%	3%	24
Parrish	108	91	103	-16%	13%	12
Peck	354	349	366	-1%	5%	17

Polar	995	984	916	-1%	-7%	-68
Price	243	228	256	-6%	12%	28
Rolling	1,452	1,504	1,522	4%	1%	18
Summit	168	163	169	-3%	4%	6
Upham	689	676	788	-2%	17%	112
Vilas	249	233	260	-6%	12%	27
Wolf River	856	731	668	-15%	-9%	-63
V. of White Lake	329	363	296	10%	-18%	-67
City of Antigo	8,560	8,234	7,930	-4%	-4%	-304
County						
County	20,740	19,977	19,414	-4%	-3%	-563
State	5,363,675	5,686,986	5,757,798	6%	1%	394,123

Source: U.S. Census, American Community Survey (ACS)

Age Distribution

Age composition of an area impacts what kind of services, accommodations and policies should be developed. It is common to observe two particular groups; 17 years of age and younger, and 65 years of age and older. These groups are often referred to as dependent populations and have differing needs. The younger group requires schools, while the older group is retiring. Considering these differing groups helps decision makers predict economic behavior helping to determine equitable distribution of resources.

As indicated in **Table 1-2**, from 2000 to 2010 the population of the 17 and younger group declined from 24 percent to about 21 percent of Langlade County's population. In 2016, it is estimated that there will be nearly 400 less people 17 years of age and younger. The state is losing this young age group at a faster rate than Langlade County. The County

In 2016 the median age in Langlade County was 47.7, a 2.8 year increase from 2010.

rate of decline is below average (21 percent) compared to the state (24 percent).

As the proportion of younger residents declines, the share of residents 65 years of age and older has increased. **Table 1-3** shows that from 2000 to 2010 the population of the 65 and older group increased by 329 residents. In 2016, the towns of Antigo, Langlade, and Upham, and the City of Antigo are estimated to see the largest increase in population 65 and older. Based on increasing life expectancy and advances in medicine, the 65 and older group is expected to grow in absolute numbers and as a percentage of total population. This trend is occurring at both the state and national levels.

Consistent with current state and national trends, the Wisconsin DOA, Demographic Services projects that Langlade County's population of 18 year olds and younger will continue to decline through 2040. Whereas, the population of 65 and older will continue to grow significantly through 2040. By 2030, all baby boomers will be older than age 65, expanding the size of the older population so that 1 in every 5 residents will be retirement age.

According to the United Nations Economic Commission, due to lower

population density, and more geographically dispersed populations, rural areas tend to have less access to services and activities. This puts rural populations at a disadvantage, which could be problematic for elders who already face challenges accessing vital services. Additionally, the shift in population toward the older age groups will significantly impact the future labor supply, school systems, health care industry, and quality of life in Langlade County.

Table 1-2: Persons 17 Years of Age and Younger

Minor Civil Division	2000	2010	2016 Estimate	2000 % of Total	2010 % of Total	2010-2016 Net Change
Ackley	114	114	79	22%	22%	-35
Ainsworth	97	68	37	17%	14%	-31
Antigo	384	286	276	26%	20%	-10
Elcho	237	210	137	18%	17%	-73
Evergreen	128	75	76	27%	15%	1
Langlade	87	80	48	18%	17%	-32
Neva	278	189	217	28%	21%	28
Norwood	271	202	201	30%	22%	-1
Parrish	24	11	18	22%	12%	7
Peck	84	67	102	24%	19%	35
Polar	298	225	177	30%	23%	-48
Price	56	48	78	23%	21%	30
Rolling	398	354	434	27%	24%	80
Summit	41	33	32	24%	20%	-1
Upham	109	97	114	16%	14%	17
Vilas	61	54	44	25%	23%	-10
Wolf River	189	76	68	22%	10%	-8
V. of White Lake	90	90	53	27%	25%	-37
City of Antigo	2,102	1,936	1,626	25%	24%	-310
County	5,048	4,215	3,817	24%	21%	-398
State	1,368,756	1,339,492	1,300,584	26%	24%	-38,908

Source: U.S. Census

Table 1-3: Persons 65 Years of Age and Older

Minor Civil Division	2000	2010	2016 Estimate	2000 % of Total	2010 % of Total	2010-2016 Net Change
Ackley	83	83	60	16%	16%	-23
Ainsworth	124	120	141	22%	26%	21
Antigo	236	294	373	16%	21%	79
Elcho	351	357	368	27%	29%	11
Evergreen	77	115	99	17%	23%	-16
Langlade	108	137	177	23%	29%	40
Neva	144	152	171	15%	17%	19
Norwood	117	145	177	13%	16%	32
Parrish	23	18	17	21%	20%	-1
Peck	56	58	64	16%	17%	6
Polar	123	142	154	12%	14%	12
Price	31	28	22	13%	12%	-6
Rolling	158	218	230	11%	14%	12
Summit	30	38	33	18%	23%	-5
Upham	148	204	291	22%	30%	87
Vilas	29	38	36	12%	16%	-2
Wolf River	190	186	196	22%	25%	10
V. of White Lake	68	82	88	21%	23%	6
City of Antigo	1,812	1,571	1,618	21%	19%	47
County	3,908	3,986	4,315	19%	20%	329
State	702,553	777,314	874,729	13%	14%	97,415

Source: U.S. Census

Median Age of Population

Langlade County is aging, but all the municipalities are not aging at the same rate. The Towns of Elcho, Neva, Peck, Price and Rolling all had their median age drop between 2010 and 2016. The Village of White Lake saw the largest median age increase by over six years. **Table 1-4** shows how the median age has changed.

All municipalities in the county had a median age above the state level (39.1 years). The Towns of

Ainsworth, Elcho, Langlade, Upham and Wolf River all had a median age over 55, and two municipalities (Langlade and the Village of White Lake) had their median age increase by more than 10 percent between 2010 and 2016. This may indicate that a large proportion of the increase in housing units reflects an increase in older residents. During this period the median age for the county rose by 4 percent.

Table 1-4: Median Age

Minor Civil Division	2000	2010	2016 Estimate	2010-2016 % Change	2010-2016 Net Change
Ackley	39.6	43.3	47.1	9%	3.8
Ainsworth	48.5	53.2	57.8	9%	4.6
Antigo	41.1	48.2	51.2	6%	3.0
Elcho	51.2	52.2	56.8	9%	4.6
Evergreen	41.8	50.3	49.5	-2%	-0.8
Langlade	47.4	52.5	58.8	12%	6.3
Neva	38.9	46.2	45.5	-2%	-0.7
Norwood	37.2	43.7	45.6	4%	1.9
Parrish	41.5	46.5	48.3	4%	1.8
Peck	40.6	47.3	44.4	-6%	-2.9
Polar	37.3	44.8	48.3	8%	3.5
Price	38.9	43.0	40.7	-5%	-2.3
Rolling	36.1	43.7	41.8	-4%	-1.9
Summit	41.5	48.8	49.6	2%	0.8
Upham	49.7	54.1	57.9	7%	3.8
Vilas	38.6	42.7	44.0	3%	1.3
Wolf River	45.6	54.0	56.4	4%	2.4
V. of White Lake	40.9	44.8	51.0	14%	6.2
City of Antigo	38.9	40.6	42.7	5%	2.1
County					
County	40.5	45.7	47.7	4%	2.0
State					
State	36.0	38.5	39.1	2%	0.6

Source: U.S. Census, American Community Survey (ACS)

Households

In 2010, the 19,977 residents of Langlade County formed 8,587 households. Total households increased by 135 households between 2000 and 2010. In 2016, it is estimated that the county will see a decrease of roughly 70 households. See [Table 1-5](#). According to the American

Community Survey (ACS), the average household size has remained at 2.25 people from 2010 to 2016. During the same time, the amount of family households has decreased from 70.1 percent to 62.1 percent. Additionally, the amount of single parent households has slightly decreased from 14.2% to 13.6%.

Table 1-5: Total Households

Minor Civil Division	2000	2010	2016 Estimate	2000-2010 % Change	2010-2016 % Change	2010-2016 Net Change
Ackley	202	211	187	4%	-11%	-24
Ainsworth	255	222	215	-13%	-3%	-7
Antigo	550	580	561	5%	-3%	-19
Elcho	613	579	533	-6%	-8%	-46
Evergreen	181	209	169	15%	-19%	-40
Langlade	208	223	208	7%	-7%	-15
Neva	360	369	353	2%	-4%	-16
Norwood	332	360	359	8%	0%	-1
Parrish	41	36	39	-12%	8%	3
Peck	136	144	140	6%	-3%	-4
Polar	354	384	364	8%	-5%	-20
Price	92	94	93	2%	-1%	-1
Rolling	512	576	559	13%	-3%	-17
Summit	66	71	73	8%	3%	2
Upham	319	320	352	0%	10%	32
Vilas	97	93	105	-4%	13%	12
Wolf River	368	347	324	-6%	-7%	-23
V. of White Lake	136	156	131	15%	-16%	-25
City of Antigo	3,630	3,613	3,756	0%	4%	143
County	8,452	8,587	8,521	2%	-1%	-66
State	2,084,544	2,279,768	2,310,246	9%	1%	30,478

Source: U.S. Census

Educational levels

Educational attainment is improving in Langlade County. More students are completing four years of high school or more. The number of people, who graduated from high school as a percentage of those over 25 in Langlade County, increased from 81 percent in 2000 to 87 percent in 2010, as seen in **Table 1-6A**. The County increase was reflected in most local units between 2010 and 2016. In 2016, the largest increase in high school educational attainment for people 25 and older

can be seen in the City of Antigo, and in the towns of Antigo, Elcho, and Norwood.

Shown in **Table 1-6B**, is the rate of persons 25 and older with four or more years of college. From 2010 to 2016, it is estimated that roughly half of the civil divisions will see a decrease of people 25 and older who have completed four or more years of college. In 2016 the County is expected to see a decrease in college attainment by nearly 240 people. In terms of percent of total, Langlade County lags behind the state, 13%

of people 25 and older who have completed four or more years of

college, compared to 26% for the state in 2010.

Table 1-6A: Persons 25 and Over Who Have Completed Four Years of High School or More

Minor Civil Division	2000	2010 Estimate	2016 Estimate	2000 % of Total	2010 % of Total	2010-2016 Net Change
Ackley	310	340	317	85%	95%	-23
Ainsworth	297	333	303	67%	80%	-30
Antigo	843	862	1,010	84%	92%	148
Elcho	828	775	855	81%	81%	80
Evergreen	228	231	273	71%	82%	42
Langlade	278	406	324	74%	89%	-82
Neva	516	629	576	79%	90%	-53
Norwood	483	575	636	82%	86%	61
Parrish	50	66	80	70%	88%	14
Peck	180	215	220	74%	88%	5
Polar	535	640	623	82%	88%	-17
Price	123	189	158	79%	95%	-31
Rolling	766	971	914	80%	92%	-57
Summit	80	110	117	72%	85%	7
Upham	485	570	602	83%	92%	32
Vilas	122	160	165	79%	92%	5
Wolf River	479	486	503	77%	88%	17
V. of White Lake	183	162	173	76%	77%	11
City of Antigo	4,841	4,918	4,951	83%	86%	33
County	11,627	12,641	12,800	81%	87%	159
State	2,957,461	3,342,883	3,555,156	85%	89%	212,273

Source: U.S. Census, American Community Survey

Table 1-6B: Persons 25 and Over Who Have Completed Four or More Years of College

Minor Civil Division	2000	2010 Estimate	2016 Estimate	2000 % of Total	2010 % of Total	2010-2016 Net Change
Ackley	35	49	42	10%	14%	-25
Ainsworth	13	29	25	3%	7%	-59
Antigo	104	129	238	10%	14%	138
Elcho	111	121	166	11%	13%	-15
Evergreen	22	21	34	7%	8%	31
Langlade	28	35	29	7%	8%	-66
Neva	46	92	86	7%	13%	-47

Norwood	63	58	86	11%	9%	34
Parrish	0	4	9	0%	5%	8
Peck	25	15	27	10%	6%	9
Polar	81	128	109	13%	18%	-45
Price	23	29	19	15%	15%	-25
Rolling	97	165	219	10%	16%	-59
Summit	10	12	12	9%	9%	3
Upham	81	117	163	14%	19%	31
Vilas	6	17	15	4%	10%	8
Wolf River	79	78	83	13%	14%	22
V. of White Lake	24	12	13	10%	6%	-1
City of Antigo	834	752	911	14%	13%	-180
County						
County	1,682	1,868	2,286	12%	13%	-238
State	779,273	960,986	1,104,082	22%	26%	152,009

Source: U.S. Census, American Community Survey

Employment

Table 1-7 shows the total employed persons in each minor civil division, County and state. In 2010, there were 9,622 people employed in Langlade County. Between 2000 and 2010 there was a 1 percent or 81 resident decrease in total

employed persons, and in 2016 there will be roughly 700 less people employed in the County. In 2016, there were 8,924 people employed in Langlade County and the major industries included; Educational services, health care and social assistance, followed by manufacturing, and retail trade.

Table 1-7: Total Employed Persons

Minor Civil Division	2000	2010 Estimate	2016 Estimate	2000-2010 % Change	2010-2016 % Change	2010-2016 Net Change
Ackley	279	296	269	6%	-9%	-27
Ainsworth	240	232	159	-3%	-31%	-73
Antigo	750	646	675	-14%	4%	29
Elcho	519	435	479	-16%	10%	44
Evergreen	216	174	209	-19%	20%	35
Langlade	217	242	147	12%	-39%	-95
Neva	449	531	453	18%	-15%	-78
Norwood	515	515	450	0%	-13%	-65
Parrish	37	54	55	46%	2%	1
Peck	168	167	153	-1%	-8%	-14
Polar	498	510	467	2%	-8%	-43

Price	120	159	137	33%	-14%	-22
Rolling	801	921	758	15%	-18%	-163
Summit	87	98	71	13%	-28%	-27
Upham	348	281	295	-19%	5%	14
Vilas	117	128	149	9%	16%	21
Wolf River	340	336	276	-1%	-18%	-60
V. of White Lake	137	109	97	-20%	-11%	-12
City of Antigo	3,865	3,788	3,625	-2%	-4%	-163
County						
County	9,703	9,622	8,924	-1%	-7%	-698
State	2,734,925	2,869,310	2,910,339	5%	1%	41,029

Source: U.S. Census, American Community Survey

Income levels

The average weekly wage in 2017 for Langlade County residents was \$654, compared to \$1,021 for the State. Median household income and per capita income are the two major indicators of income. **Table 1-8** shows Langlade County's median household income, this rose by 6

percent from 2010 to 2016. In 2016, the estimated average median income in Langlade County was \$43,501. Between 2010 and 2016 County per capita income increased by 12 percent, compared to the state increase of 10 percent. See **Table 1-9**. Note that these changes have been adjusted for inflation.

Table 1-8: Median Household Income

Minor Civil Division	2000	2010 Estimate	2016 Estimate	2000-2010 % Change	2010-2016 % Change	2010-2016 Net Change
Ackley	\$42,000	\$61,429	\$50,750	46%	-17%	-\$10,679
Ainsworth	\$27,727	\$35,333	\$40,875	27%	16%	\$5,542
Antigo	\$43,849	\$48,571	\$58,688	11%	21%	\$10,117
Elcho	\$29,010	\$33,250	\$42,298	15%	27%	\$9,048
Evergreen	\$30,536	\$43,125	\$53,750	41%	25%	\$10,625
Langlade	\$27,054	\$40,278	\$37,188	49%	-8%	-\$3,090
Neva	\$40,368	\$50,714	\$51,827	26%	2%	\$1,113
Norwood	\$45,000	\$43,875	\$55,078	-3%	26%	\$11,203
Parrish	\$40,625	\$60,625	\$70,625	49%	16%	\$10,000
Peck	\$34,167	\$53,036	\$45,833	55%	-14%	-\$7,203
Polar	\$41,477	\$55,625	\$57,143	34%	3%	\$1,518
Price	\$53,750	\$55,500	\$54,688	3%	-1%	-\$812
Rolling	\$43,026	\$63,021	\$69,276	46%	10%	\$6,255
Summit	\$29,375	\$56,250	\$40,625	91%	-28%	-\$15,625
Upham	\$36,786	\$50,682	\$60,476	38%	19%	\$9,794

Vilas	\$30,417	\$44,625	\$47,083	47%	6%	\$2,458
Wolf River	\$31,413	\$37,446	\$41,250	19%	10%	\$3,804
V. of White Lake	\$29,722	\$26,250	\$35,417	-12%	35%	\$9,167
City of Antigo	\$29,548	\$36,597	\$35,700	24%	-2%	\$(897)
County						
County	\$33,168	\$41,034	\$43,501	24%	6%	\$2,467
State	\$43,791	\$51,598	\$54,610	18%	6%	\$3,012

Source: U.S. Census, American Community Survey

Table 1-9: Per Capita Income

Minor Civil Division	2000	2010 Estimate	2016 Estimate	2000-2010 % Change	2010-2016 % Change	2010-2016 Net Change
Ackley	\$18,113	\$30,437	\$28,823	68%	-5%	-\$1,614
Ainsworth	\$14,162	\$17,043	\$25,351	20%	49%	\$8,308
Antigo	\$18,445	\$23,932	\$31,191	30%	30%	\$7,259
Elcho	\$17,016	\$20,992	\$26,871	23%	28%	\$5,879
Evergreen	\$16,519	\$20,227	\$23,024	22%	14%	\$2,797
Langlade	\$14,418	\$24,433	\$21,451	69%	-12%	-\$2,982
Neva	\$16,503	\$25,479	\$24,130	54%	-5%	-\$1,349
Norwood	\$17,893	\$21,297	\$24,912	19%	17%	\$3,615
Parrish	\$18,645	\$18,504	\$28,759	-1%	55%	\$10,255
Peck	\$15,466	\$23,456	\$19,366	52%	-17%	-\$4,090
Polar	\$17,141	\$27,221	\$32,942	59%	21%	\$5,721
Price	\$20,338	\$25,416	\$25,040	25%	-1%	-\$376
Rolling	\$17,946	\$26,428	\$30,249	47%	14%	\$3,821
Summit	\$14,795	\$29,205	\$22,711	97%	-22%	-\$6,494
Upham	\$20,498	\$30,833	\$32,246	50%	5%	\$1,413
Vilas	\$14,423	\$19,900	\$20,913	38%	5%	\$1,013
Wolf River	\$16,224	\$26,214	\$26,616	62%	2%	\$402
V. of White Lake	\$16,768	\$16,317	\$26,385	-3%	62%	\$10,068
City of Antigo	\$16,592	\$18,696	\$20,811	13%	11%	\$2,115
County						
County	\$16,960	\$22,025	\$24,772	30%	12%	\$2,747
State	\$21,271	\$26,624	\$29,253	25%	10%	\$2,629

Source: U.S. Census, American Community Survey

Diversity

Diversity is created when individuals and groups with a broad spectrum of demographic and ideological attributes come together

to work towards a common goal. Examples include, race, ethnicity, gender, sexual orientation, socio-economic status, age, physical ability, and political beliefs are all factors that contribute to the

diversity of groups. Diversity has the ability to drive cultural, economic, social vitality and innovation. In 2016, 96.1 percent of Langlade

County residents identified as White. A diverse community can drive economic growth, and foster a more creative and innovative workforce.

Planning Issues and Goals, Objectives & Policies

Planning Issues

A variety of issues were identified throughout the planning process. Many of these were brought up during the series of planning meetings, others were taken from existing documents, and some were taken from other public meetings. The next seven chapters of this plan will list the issues that relate to those chapters.

Goals, Objectives and Policies

Each of the six following comprehensive plan chapters will conclude with a set of goals, objectives and policies, which will be used to guide the future development of the community. For purposes of this planning process, goals, objectives and policies are defined as follows:

Goals: Broad statements that express general public priorities about how the community should approach development issues during the next 20 years. These goals are based on key issues,

opportunities and problems that affect the community.

Objectives: More specific than goals and are usually attainable through planning and implementation activities. The accomplishment of an objective contributes to the fulfillment of a goal.

Policies: Rules or courses of action used to ensure plan implementation and to accomplish the goals and objectives. Policies are intended to be used by decision-makers on a regular basis.

In addition to the goals, objectives, and policies some of the following chapters will list the various federal, state, and regional programs that may be available to assist the county.

Chapter Format

Each of the next seven chapters will be presented in three basic sections:

- ✓ Background
- ✓ Inventory & Trends
- ✓ Goals, Objectives and Policies

Chapter Two

Natural, Agricultural & Cultural Resources

2.1 Introduction

This is the second of nine chapters that comprise the Langlade County Comprehensive Plan. This chapter is based on the statutory requirement for a “compilation of objectives, policies, goals, maps, and programs for the conservation, and promotion of the effective management, of natural resources such as groundwater, forests, productive agricultural areas, environmentally sensitive areas, threatened and endangered species, stream corridors, surface water, floodplains, wetlands, wildlife habitat, metallic and nonmetallic mineral resources, parks, open spaces, historical and cultural resources, community design,

recreational resources and other natural resources.”

The chapter is organized into three main topic areas: natural resources, agriculture resources, and cultural resources. Although these topics are separated, they are all interrelated. For example, the location of agricultural uses described in the “Agriculture” section of this chapter is based upon the soil and water information in the “Natural Resources” section. Similarly, this chapter relates to the other chapters as well. In addition, this chapter includes a variety of information related to farmland preservation planning.

2.2. Natural Resources

Background

Langlade County is located in northeastern Wisconsin and is bounded on the north by Oneida and Forest Counties, on the east by Oconto County, on the south by Menominee, Shawano, and Marathon Counties, and on the west by Lincoln County.

The county’s total area is about 873 square miles or 569,000 acres, with about 10,000 acres of surface water including lakes, rivers and streams, as well as over 100,000 acres of wetlands. The topography of Langlade County is of glacial origin, with a steep sloping end moraine splitting the county between the

gently rolling hills, and the vast flat lands called the Antigo Flats. The Ice Age National Scenic Trail runs parallel to the terminal moraines throughout the county. Forests cover almost two-thirds of the county and provide raw materials, wildlife habitat, and recreational opportunities. Agriculture is common south of the terminal moraine on the Antigo Flats and the county is a major producer of potatoes as well as milk and dairy product. Many county trails are found in the county forests for ATViing, snowmobiling, biking, hiking, and water trails.

Previous Planning Efforts

Previous Plans & Studies Related to Natural Resources

In the last decade, several plans were adopted or prepared by Langlade County to address protection and management of natural resources. These plans may be used as resources to guide local policy and decision making regarding resource management and protection.

County Efforts

Langlade County Land & Water Resource Management Plan, 2019

This plan inventories and analyzes the land and water resources of Langlade County, then develops a strategy to best manage these resources. This plan identified that Langlade County farms generally have less soil erosion than the state average, and that wind erosion is a

concern throughout the Antigo Flats. This includes an inventory of impaired waters, exceptional and outstanding resource waters and strategies for invasive species management. The plan describes the general susceptibility of groundwater to contamination. It includes performance standards for agriculture to minimize negative impacts to the land and water and a work plan to improve the land and water resources in the County from 2015 to 2019. This plan has recently been updated.

Langlade County Public Access Study, 2007

This report identifies publicly owned lake shore frontages; describes their locations and sizes if known; describes the condition. It is designed to aid county, town, village, and city officials in managing publicly owned lake access' so as to promote the most appropriate and efficient use of the people's access to the waters of Langlade County.

Langlade County Outdoor Recreation Plan, 2017

This report assesses the existing recreation system in Langlade County, identifies recreation needs based upon public input and recreation standards, sets forth goals and objectives to be used as guidelines in formulating recreation plans, and establishes recommendations for improving the recreation system over the next five years.

[Langlade County Forest
Comprehensive Land Use Plan, 2006](#)

The purpose of this plan is “to provide the basis for a permanent program of county forests and to enable and encourage the planned development and management of the county forests for optimum production of forest products, to protect public rights, and to compensate the counties for the public uses, benefits, and privileges these lands provide; all in a manner which will provide a reasonable revenue to the towns in which such lands lie”.

[USGS Protecting Wisconsin’s
Groundwater Through
Comprehensive Planning, 2007](#)

In a joint effort by the Wisconsin Department of Natural Resources (WDNR), the University of Wisconsin System and the U.S. Geological Survey, a website has been made available with data and information on geology, general hydrology and groundwater quantity/quality. The website was developed to aid government officials and planners in addressing groundwater in their comprehensive plans. The most recent data available for Langlade County was published in 2007.

[Antigo Lake Comprehensive
Management Plan, 2013](#)

Sponsored by the Antigo Inland Lake Protection and Rehabilitation District (AILPR) and funded by the WDNR Grant Program, this plan was completed in May of 2013.

Antigo Lake is a 32-acre impoundment located in the center of the City. The AILPRD was formed in 1974 by the City of Antigo City of Antigo Comprehensive Plan 2018 Page 14 for the purpose of rehabilitating the two-most downstream basins of the four that comprise the system. Since its formation the AILPRD has worked to enhance and protect Antigo Lake. Over the past thirty-plus years, the district conducted numerous management actions aimed at improving the lake’s water quality, plant community and flood control system. Dredging projects were implemented in the early 1900’s and until 1990. Annual plant control treatments have also been completed. Being a Class I trout stream, the AILPRD has also partnered with Trout Unlimited to improve fisher habitat within Springbrook Creek.

The purpose of this project was to assess the overall ecological integrity of Antigo Lake in terms of the lake’s water quality, watershed, aquatic plant community and shoreline condition.

[Urban Sediment Loading Analysis:
Inland Lake and Protection and
Rehabilitation District, 2018](#)

This 2018 study conducted by the engineering firm MSA Professional Services Inc. evaluated the feasibility and potential effectiveness of 12 proposed alternative storm water detention ponds that would capture sediment before discharging into Antigo Lake.

County Ordinances

In addition to these planning efforts there are several county ordinances in place related to natural resources. These include the Non-Metallic Mining Reclamation Ordinance, Private Onsite Waste Treatment System Ordinance, Animal Waste Storage Ordinance, Soil and Water Conservation Standards for the Farmland Preservation Program, Shoreland Zoning Ordinance, and the General Zoning Ordinance.

State Efforts

[Waters of Wisconsin: The Future of our Aquatic Ecosystems and Resources](#)

This report looks at a broad range of issues involving water, from storm water runoff to land-use and transportation as they affect water quality. The over-riding message of the report is the inter-relationship between all the elements of the hydrological cycle, specifically the link between groundwater and surface water quality. It suggests that policy should:

“...begin to act on recognition of the connections that characterize water – between the waters of the atmosphere, surface waters, and groundwater; between human uses and ecosystem needs; between water quality and water quantity;

between Wisconsin and its neighbors; between our generation and generations to come.”

Of particular significance to Langlade County is the discussion of the quantity of groundwater and how it should be safeguarded. Because of the prevalence of irrigated agriculture in the county the amount and quality of groundwater is a special concern. Statewide, “water use for irrigation has more than doubled since 1980. Ninety percent of the water used in irrigation is consumptive use; 99 percent of irrigation water originates as groundwater.” In addition to agriculture, water use by industry in the state has increased by over 600 percent in the last half century, which could potentially have a significant effect on water table levels.

The Headwaters Integrated Basin Plan (also called the "Headwaters State of the Basin Report") provides a snapshot of the current conditions of land and water resources in the basin. This effort inventoried and assessed the land and water resource conditions, identified major issues, priorities and objectives, and recommended action.

Some of the recommendations of this plan include: protection and restoration of shoreline, identification of critical habitats, wetland protection and restoration, monitor nonmetallic mining effects on water quality, and encourage wellhead protection plans.

[Wisconsin Statewide Forest Action Plan, 2010](#)

The Statewide Forest Action Plan is a 10-year strategic plan that guides the work of Wisconsin's forestry community. The plan provides an analysis of forest conditions and trends, delineates priority forest landscape areas and offers practical, long-term strategies for investing resources where they can be most effective in the protection and sustainable management of Wisconsin's forests. It also identifies a common vision for the state's forest resources and a framework for achieving that vision. It incorporates the full range of trends and issues affecting Wisconsin's forests and their ecological, economic and social implications, and developed a variety of standards. In addition to forestry standards, some others areas relate to water resources, minerals and fish & wildlife. The plan also is a call to all interested parties to address the challenges facing Wisconsin's forests both now and in the future.

[State Trails Network Plan, 2003](#)

This 2003 document clarifies a Wisconsin Department of Natural Resources (WDNR) role and strategy in the provision of all types of trails. The plan identifies a series of potential trail corridors that would link existing trails, public lands, natural features, and communities. This statewide network of interconnected trails would be owned and maintained by municipalities, private entities, and partnerships of the two. Preserving

transportation corridors, such as old rail lines, is specifically discussed as a very important strategy in the creation of recreational and alternative transportation corridors.

Segment 19—Langlade County to Michigan

NCWRPC note: The right-of-way no longer exists, so this segment is not described.

Segment 56—Argonne to Shawano

NCWRPC note: This is now the Wolf River State Trail from Crandon south to White Lake.

This is an active rail corridor with abandonment expected in fall of 2000 on the segment from Crandon to White Lake. Argonne is on the Dresser to Michigan corridor in the north, and Shawano links to the Mountain Bay Trail in the south of the corridor. The Crandon to Tomahawk corridor and the White Lake to Antigo corridor link to the Langlade County to Michigan corridor to form a loop. An old abandoned corridor east of White Lake in the future could link this corridor to the Nicolet State Trail or connect it to road routes. This corridor runs along the east shore of Lake Metonga at Crandon, then runs south through forested lake areas of the Nicolet National Forest. In Langlade County it follows the Wolf River for about seven miles and continues south through the Northwest portion of the Menominee Indian Reservation, terminating at Shawano and its connection to the Mountain Bay Trail.

Segment 70—Antigo to White Lake

NCWRPC note: The right-of-way no longer exists, so this segment is not described.

Wisconsin Land Legacy Report 2006-2056

This report is a comprehensive inventory of the special places that will be critical to meet future conservation and outdoor recreation needs for the next fifty years. Some of the questions asked to guide creation of this report were: Which lands and waters remain unprotected that will be critical for conserving our plants and animals and their habitats? What gaps exist now (and will likely emerge in the future) in providing abundant and satisfying outdoor recreation? How can we most effectively build upon the state's existing investment in protected lands to fill conservation and recreation gaps? What special places will our children and grandchildren wish we had protected?

Six Legacy Areas were identified in the county, and rated using five criteria: size, protection initiated, protection remaining, conservation significance, and recreation potential. Legacy Areas in Langlade County include the Chequamegon-Nicolet National Forest, Prairie River, East and West Branches of the Eau Claire River, Red River, Upper Wolf River, and the Langlade Moraine. The Land Legacy report recommends protection of these lands by using federal, state, and local funding opportunities; along with possibly creating new kinds of

incentives for landowners, working to draft comprehensive plans, or offering different types of technical assistance.

Issues

- Natural Resource Protection

Land and water resources are a major component of the quality of life in Langlade County. In addition to their contribution to the areas history and economy, they are valued for their natural and scenic beauty, wildlife habitat, and the recreational opportunities they provide. The planning effort needs to incorporate the protection and preservation of the critical natural resources.

- Protect Water Quality

Protecting and improving water quality is a priority for the county. The county is involved in efforts to improve water quality through enforcement of regulations, such as: shore land and wetland zoning, permit review for septic systems, and developing watershed management plans.

- Metallic Mining

Although not a current threat, long-term, as conditions change metallic mining in the county or adjoining counties could create environmental concerns. Groundwater quality may be affected by the handling, storage, and disposal of mining wastes; the mine excavation itself; the water-table drawdown; the wastewater

discharge; and the storage and handling of chemicals, reagents, and fuels at the mine site.

Inventory and Trends

Understanding the natural resources of Langlade County is an essential component of planning for the future. The County's resources represent both the potential and the limiting constraints on development and change. The natural resources of Langlade County are comprised of many elements such as topography, soils, mineral deposits, ground and surface waters, woodlands, wetlands, and wildlife. These elements continue to provide the stage for development and exert pressures that greatly influence the direction and form future development will take. For example, constraints in the form of unsuitable soils, and steep slopes may preclude the use of an area for certain agricultural pursuits.

Achieving balance and harmony between the preservation and use of the county's natural resources is one of the primary goals of comprehensive planning. Sound decisions about future development depend upon knowledge of the supply, demand and intrinsic value of the County's resources. If properly sustained, the resource base will continue to be a major economic and recreational asset to its residents and visitors.

Climate

Langlade County has a continental climate characterized by cold, snowy winters, warm summer days and cool summer nights. The short frost-free period during the summer restricts suitable crops mainly to forage, small grain, and vegetables. Precipitation is well suited to outdoor activities with an annual snow fall range from 20 to 90+ inches and an annual mean of 51.9 inches during the past 40 years. June is generally the wettest month and the last part of August the driest. Precipitation averages 30.6 inches annually. The sun shines 65 percent of the time possible in summer, and 45 percent in winter. The prevailing wind is from the southwest. Average wind speed is highest in spring at 12 miles per hour.

Topography

Langlade County topography or the arrangement of natural physical features of an area is of glacial origin, and is characterized mostly by moraines and outwash plains and partly by drumlins, eskers, kames, lake plains, bogs. The moraines terrain includes older drift area largely in the western part of the county. Older drifts exist in the west central part of the county in the Towns of Vilas, Peck and Summit. The outwash plains include the Antigo Flats, which are located in the south-central part of Langlade County. Elevations in Langlade County range from 1,070 feet above sea level where the Wolf River leaves the County, to about

1,900 feet above sea level in the Town of Langlade.

The eastern part of the county is within the drainage basin of the Wolf River, and the western part is within the Wisconsin River drainage basin. In Langlade County, the Wolf River starts at Upper Post Lake, flows generally south and east, and leaves the county just south of Markton. The Wolf River drops about 440 feet in the county, but mainly it drops between the communities of Lily and Markton. [See the Natural Resources Map.](#)

In the 1980s, the U.S. Department of Energy ranked Wisconsin's Wolf River Batholith as a potential high-level nuclear waste repository. The Batholith is a 1,000 square mile watershed that extends over seven counties, including Langlade, Shawano, Waupaca, Menominee, Portage, Marathon and Oconto counties, and the land of three tribes (Stockbridge-Munsee, Menominee and Ho-Chunk). There has been no active discussion related to this, but the geography of the area still exists.

[Soils](#)

There are 33 different soil types in Langlade County identified in the County Soil Survey. The Natural Resource Conservation Service (NRCS) is a federal agency that produced the Langlade County Soil Survey. The survey contains predictions of soil behavior for selected land uses and also highlights the limitations and hazards inherent in the County's

soil. A series of detailed maps identifying the location of soil types in Langlade County accompanies the survey.

These soils are grouped into six major soil associations that have distinct soil patterns, relief, and drainage features. The Langlade County Soil Survey contains detailed descriptions of each soil type, and includes tables to determine suitability and limitations. [See the Generalized Soils Map.](#)

[Kennan-Keweenaw](#)

This soil association consists of soils on terminal and recessional end moraines and partly of soils on ground moraines and drumlins. Soils are well drained loamy sand, undulating to very steep, stony, loamy and silty soils on moraines and drumlins.

Most of the acreage is woodland, including a few small, wooded swamps. The main concerns in managing woodland are the restricted use of machinery, erosion, seedling survival, and competing plants that interfere with tree regeneration.

In some areas the soils are used for farming. Dairying is the main farm enterprise on these soils. The major crops are oats, alfalfa, and corn. The main concerns in managing cropland are soil

blowing and low fertility on the Keweenaw soils and water erosion and stoniness on both of the major soils. Applications of lime are needed for most crops.

Sanitary facilities and building site development may be limited by large stones and slopes related to this soil group. Local roads and streets on the Kennan soils may be damaged by frost heave.

Antigo-Pence

This soil association consists mostly of soils on rather flat outwash plains that are pitted with kettles and interspersed with hills and ridges of outwash deposits. Soils are well drained, nearly level to very steep, silty and loamy soils on outwash plains, kames, and eskers

Most of the acreage is woodland, including some wooded swamps. The main concerns in managing woodland are the restricted use of machinery, erosion, seedling survival, and competing plants that interfere with tree regeneration.

In mostly the southern part of the County the soils are used for farming as well. Dairying and potato farming are the main farm enterprises. The major crops are oats, alfalfa,

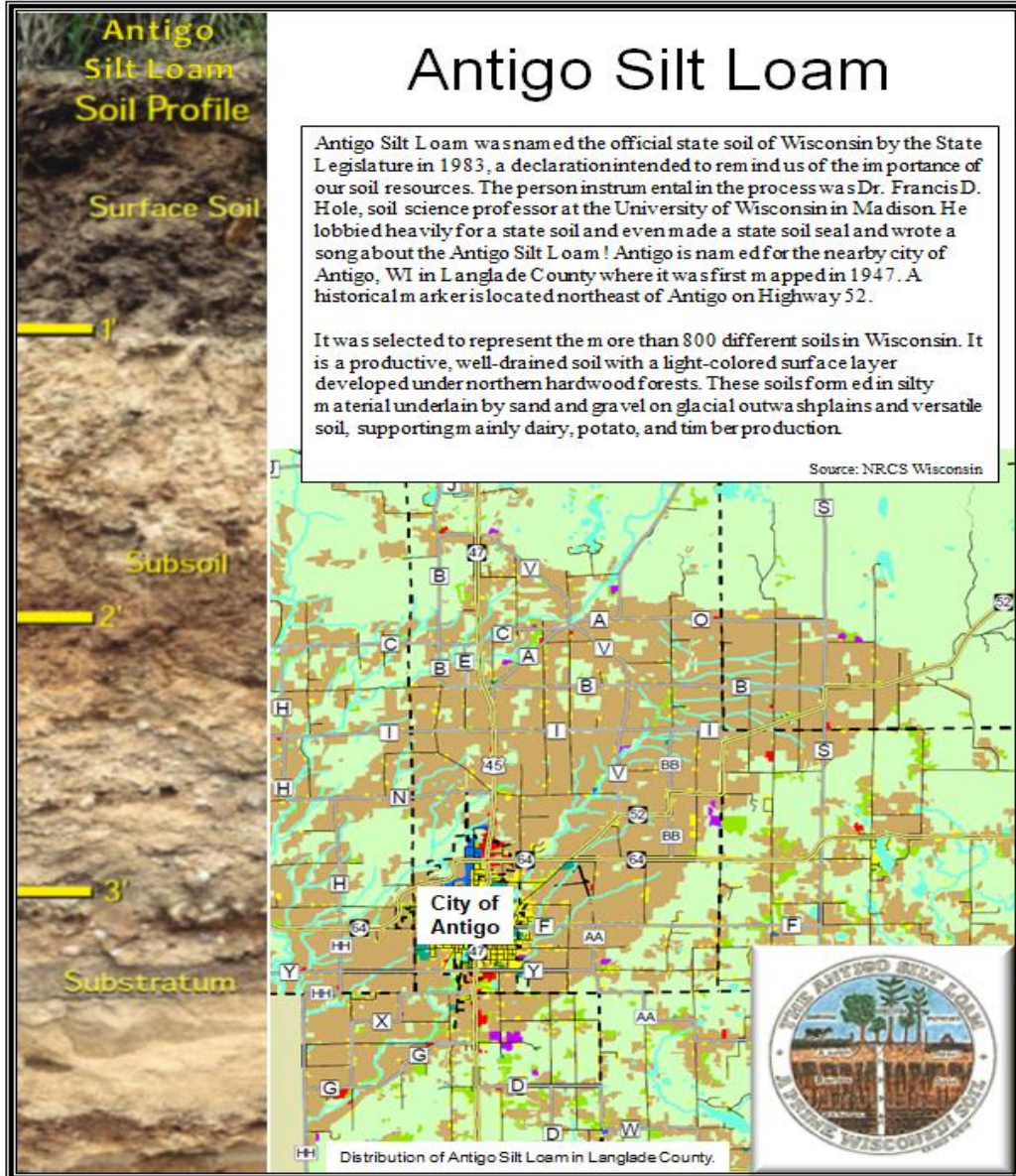
corn, red clover, and potatoes. The main concerns in managing cropland are soil blowing and low fertility on the Pence soils, water erosion on both of the major soils, and crusting of the surface layer in the Antigo soils. Applications of lime are needed for most crops. Coarse gravel and cobbles in the surface layer interfere with potato harvesting. Most of the gravel pits in the county are in areas of Antigo soils. (Antigo silt loam is the state soil.) Generally, these soils have few limitations for sanitary facilities or building site development. The effluent from waste disposal facilities can pollute ground water because of the poor filtering capacity of the substratum, which consists of sand and gravel.

Magnor-Cable

This soil association mostly consists of soils on ground moraines that have little local relief and few prominent features. The landscape is one of broad swells with long side slopes interspersed with long drainageways that broaden into large basins in places. Small swells or knolls are within some of the basins. The drainageways are frequently ponded during wet periods. Many streams and a few hills and manmade impoundments are in areas of this unit. Slopes are mostly

long and smooth. Soils are somewhat poorly drained and very poorly drained, nearly

level and gently sloping, silty and mucky soils on moraines.



Most of the acreage is woodland, including many wooded swamps. Large woodlots are common. The main concerns in managing woodland are the restricted use of machinery, windthrow, seedling survival, and

competing plants that interfere with tree regeneration.

In some areas the soils are used for dairy farming. The major crops are oats, red clover, and forage grasses.

The main concerns in managing cropland are wetness, water erosion, and crusting of the surface layer. Applications of lime are needed for most crops.

Sanitary facilities, building site development, and roadways are generally limited by wetness or ponding. Also, restricted permeability limits the use of the soils for sanitary facilities, and frost heave may damage local roads and streets.

[Oesterle-Minocqua-Scott Lake](#)

This soil association is on outwash plains where most of the soils have a seasonal high water table. The landscape is one of low flats interspersed with depressional areas, such as drainageways and basins. The low flats are not much higher than the depressional areas. The drainageways are frequently ponded during wet periods. Many streams and a few lakes are in areas of this unit. Slopes are mostly long and smooth. Soils are somewhat poorly drained, very poorly drained, and moderately well drained, nearly level, silty and mucky soils on outwash plains.

Most of the acreage is woodland, including many wooded swamps. Large woodlots are common. The main concerns in managing woodland are the restricted

use of machinery, windthrow, seedling survival, and competing plants that interfere with tree regeneration.

In some areas the soils are used for dairy farming. The major crops are oats, red clover, potatoes, and forage grasses. The main concerns in managing cropland are wetness and crusting of the surface layer. Applications of lime are needed for most crops. Coarse gravel and cobbles in the surface layer interfere with potato harvesting.

Sanitary facilities, building site development, and roadways are generally limited by wetness or ponding. Also, the effluent from waste disposal facilities can pollute ground water because of the poor filtering capacity of the substratum, and local roads and streets may be damaged by frost heave.

[Antigo-Langlade](#)

This soil association is part of a large, roughly triangular outwash plain that is called the Antigo Flats. Areas are broad and are rather flat, except for a few knolls, swells, swales, the foot slopes bordering terminal moraines, drainageways, and valleys. The one major valley, which is along Spring Brook, is very long, flat floored, and

frequently flooded during wet periods. Secondary valleys or drainageways carry runoff to Spring Brook. Slopes are mostly long and smooth. Soils are well drained, nearly level and gently sloping, silty soils on outwash plains

Some of the acreage is woodland, including a few small, wooded swamps. The upland woods are mostly areas of sloping soils and soils bordering terminal moraines. The main concern in managing woodland is controlling competing plants that interfere with tree regeneration.

The Antigo-Langlade soils are the most intensively farmed soils in the county. Dairying and potato farming are the main enterprises. The major crops are oats, alfalfa, red clover, potatoes, and corn. The main concerns in managing cropland are water erosion and crusting of the surface layer. Applications of lime are needed for most crops. Coarse gravel and cobbles in the surface layer interfere with potato harvesting.

Generally these soils have few limitations for sanitary facilities or building site development. The effluent from waste disposal facilities, however, can pollute ground water because of the poor filtering capacity of the

substratum. Also, local roads and streets may be damaged by frost heave. The substratum of the soils is a source of sand and gravel.

[Milladore-Sherry-Mylrea](#)

This soil association consists of soils on ground moraines that have little local relief and few prominent features. Granite bedrock is close to the surface. The landscape is one of broad swells with long side slopes interspersed with long drainageways that broaden into large basins in places. The drainageways are frequently ponded during wet periods. A few streams and manmade impoundments are in areas of this unit. Slopes are mostly long and smooth. Soils are somewhat poorly drained and very poorly drained, nearly level and gently sloping, silty and mucky soils on moraines

Most of the acreage is woodland, including many wooded swamps. The main concerns in managing woodland include the restricted use of machinery, windthrow, seedling survival, and competing plants that interfere with tree regeneration.

Sanitary facilities, building site development, and roadways are generally limited by wetness or ponding. Restricted permeability limits

the use of Milladore and Sherry soils for sanitary facilities. Granite bedrock can restrict excavations. Local roads may be damaged by frost heave.

These soil associations demonstrate the relationship between soil types and characteristics to the various types of development or use. Residential, commercial, and industrial buildings are limited by shallow depth to bedrock which restricts foundation depth or increases construction costs; by high water tables which cause wet basements and are often found with unstable soils; and by land with steep slopes (over 12 percent) which hampers commercial and industrial uses more than residential.

Soils and soil conditions greatly affect certain types of development. Depth to bedrock, poor filtration capabilities, slow water percolation, wetness, ponding, susceptibility to erosion (slope), and subsidence are all factors that make development activities difficult. These types of soils are generally found in wetlands, on hillsides, and in shallow soils overlying bedrock. Due to their fragile nature, destruction of vegetative cover on such soils can trigger damage from wind and gully erosion. These conditions also pose problems for underground utilities to serve such areas.

Modern codes and ordinances that regulate land development and building location are based upon soil characteristics. Several ways of

guiding development where soils are poor include not allowing residential/commercial/industrial development unless sewer is available; requiring alternative systems to on-site absorption of septic; prohibiting the use of holding tanks requiring large lot sizes.

Prime Farmland

Prime farmland is one of several kinds of important farmland defined by the USDA. Other important farmlands include: unique farmland, farmland of statewide importance, and prime farmland if drained. **See the Farmland Soils Map.**

Antigo Silt Loam is the state soil and is prime farmland.

Prime farmland is land that has the best combination of soil properties, growing season, and moisture supply needed for producing high yields of food, feed, forage, fiber, and oilseed crops and that is available for these uses.

These soils have an acceptable level of acidity or alkalinity, acceptable content of salt, few or no rocks, are permeable to water and air, are not excessively eroded or saturated with water for long periods of time, have an adequate and dependable water supply from precipitation or irrigation, and are located in an area with a favorable growing season.

Metallic and Nonmetallic Resources

Langlade County contains some significant non-metallic deposits, and as such, several quarries are in operation. Currently there are 37 approved non-metallic mining quarries that are greater than 1 acre in size. The County adopted Non-Metallic Mine Reclamation Ordinance, Chapter 20, to assure that lands opened to mining are reclaimed to near pre-mine conditions, or to some other pre-determined final use. Any new mine would be subject to the reclamation standards under this ordinance.

Although there are no known major metallic deposits within the county, there are known deposits in adjoining

counties. Activities and processes that occur at metallic mining sites have the potential to affect the quantity and quality of groundwater surrounding the project area, especially those areas that are located downstream of such operations. Depending on the site's local hydrology, mining activities may affect groundwater quantity by lowering the water table elevation, which in turn may impact nearby lake levels and base flow in streams. Additionally, groundwater quality may be affected by the handling, storage, and disposal of mining wastes; the mine excavation itself; the water-table drawdown; the wastewater discharge; and the storage and handling of chemicals, reagents, and fuels at the mine site.

Table 2-1: Langlade County Lakes over 100 acres

Lake Name	Acreage	Township
Boulder Lake	370	Wolf River-South
Duck Lake	120	Elcho-West
Dynamite Lake	100	Upham-North
Enterprise Lake	509	Elcho-West
Greater Bass Lake	244	Upham-West
Little Sand Lake	237	Ainsworth-North
Mary Lake	154	Wolf River
Moccasin Lake	113	Elcho-West
Moose Lake	113	Norwood
Pickereel Lake*	1272	Ainsworth-North
Post (Lower) Lake	379	Elcho-East
Post (Upper) Lake	765	Elcho-East
Rolling Stone Lake	682	Ainsworth-North
Rose Lake (Bear)	115	Wolf River-Central
Sawyer Lake (Edith)	149	Wolf River-Central
Summit Lake	279	Elcho-West
Summit Lake		Upham-West
White Lake	153	Wolf River-South

Source: WDNR, *A portion of this lake is not in Langlade County.

While there have been improvements to mining practices, significant environmental risks remain. Water pollution from mine waste rock (tailings) may need to be managed for decades after closure. These impacts depend on a variety of factors, such as the susceptibility to groundwater contamination, the composition of bedrock being mined, the type of technology employed; the skill, knowledge and environmental commitment of the company; and our ability to monitor and enforce compliance with environmental regulations.

Surface Water

Langlade County has 843 lakes covering 9,148 acres, and 225 streams with a total length over 500 miles and a surface area of about 1,800 acres. The largest body of water is the Wolf River, which flows through the eastern part of the county, and is one of the most valuable rivers in the state. The river travels the full length of the County with 984 acres. Lakes cover 8,864 surface acres and 381 miles of shoreline, with 418 of the 843 lakes having public access. See **Table 2-1**. Overall, the general water quality is good, however, eutrophication is a major pollution problem. Eutrophication begins with increased loading of nutrients into the water from various sources increasing algae blooms that cover surface water, blocking sunlight, which can cause fish kills among other effects. The water is predominantly very soft in the seepage, drained, and drainage lakes, but the water is hard in many

of the spring lakes and streams. Most of the lakes are spring lakes or seepage lakes.

Spring lakes are abundant throughout the county. These lakes have no inlet, but do have an outlet. The primary source of water for spring lakes is groundwater flowing into the bottom of the lake from inside and outside the immediate surface drainage area. These lakes do not have an inlet or an outlet, and only occasionally overflow. Seepage lakes are landlocked water bodies, with the principal sources of water being precipitation or runoff, supplemented by groundwater from the immediate drainage area. Seepage lakes are the most common lake type in Wisconsin. White Lake is the largest spring lake, while Upper Post Lake, an impoundment and a drainage lake, is the largest lake in the County. The deepest lake is Goto Lake, which is 82 feet deep. **See the Natural Resources Map.**

The Wolf River flows southeast through the county from its headwaters in Pine Lake near Hiles, Wisconsin. From the Langlade-Menominee County line downstream (which is not in Langlade County) to Keshena Falls, the Wolf River is designated as a national Wild and Scenic River. No additional dams are permitted on the Wolf River in Langlade County (§30.25(1) Wis. Stats.). The gradient is very steep for a Midwestern river. It drops 420 feet in 50 miles from the Upper Post Lake Dam to the Menominee Indian Reservation. There are 17 named

rapids on the Wolf River as it winds through Langlade County.

Surface water is an important resource to Langlade County, however it is threatened by both point and non-point source pollution. Nonpoint source pollution, often the result of stormwater runoff and erosion, is pollution that cannot be traced to a single source, and can come from roadways, parking lots, farm fields and construction sites. The more of these impervious surfaces the greater the runoff that is carried into the waterways.

The Wisconsin State Legislature created the Wisconsin Nonpoint Source Water Pollution Abatement Program (NPS) in 1978 (§281.66, Wis. Stats.). The goal of the NPS Program is to improve and protect the water quality of streams, lakes, wetlands, and groundwater by reducing pollutants from agricultural and residential non-point sources. The WDNR and DATCP administer the program, which focuses on critical hydrologic units called priority watersheds. The program is implemented through priority watershed projects led by local units of government. Landowners, land renters, counties, cities, villages, towns, sewer districts, sanitary districts, lake districts, and regional planning commissions are eligible to participate.

The Wisconsin Department of Natural Resources (WDNR), per requirements of the U.S. Environmental Protection Agency (EPA), maintains a list of water bodies that do not currently meet water quality standards under the Clean Water Act. This list is commonly known as the "303(d) list," corresponding to the applicable subsection of the Clean Water Act. The WDNR is required to update the list every two years.

Langlade County has 14 water bodies appearing on the 2018 303(d) list. See [Table 2-2](#). Spring Brook Creek is listed because of metals and phosphorus contamination, and will receive a TMDL within 2-years, based upon its priority designation of "high," on a level of low-medium-high. A Total Maximum Daily Load (TMDL) is a plan to reduce the amount of specific pollutants reaching an impaired lake or stream to the extent that water quality standards will be met. Waste load allocations will be implemented through the WPDES permit program for point sources, and through Wisconsin's nonpoint source program. The following lakes are on the list because of mercury contamination from atmospheric deposition: Clear Lake, Deep Wood Lake, Greater Bass Lake, Little Sand Lake, Lower Bass Lake, and Summit Lake. The DNR issues fish consumption advisories based upon atmospheric mercury pollution.

Table 2-2: Lnglade County Impaired Waters [303(d)]

Waterbody	Pollutant	Impairment Indicator	Priority
Clear Lake	Mercury	Contaminated Fish Tissue	Low
Deep Wood Lake	Mercury	Contaminated Fish Tissue	Low
Enterprise Lake	Unknown	Excess Algal Growth	Low
Greater Bass Lake	Mercury	Contaminated Fish Tissue	Low
Lily River	Unknown	Elevated Water Temperature	Low
Little Sand Lake	Mercury	Contaminated Fish Tissue	Low
Lower Bass Lake	Mercury	Contaminated Fish Tissue	Low
Moose Lake	Total Phosphorus	Unknown	High
Ninemile Creek	Unknown	Elevated Water Temperature	Low
Upper Post Lake**	Total Phosphorus	Excess Algal Growth	High
Rolling Stone Lake	Unknown	Excess Algal Growth	Low
Spring Brook Creek**	Total Phosphorus	Degraded Biological Community	High
Spring Brook Creek**	Total Phosphorus	LOW DO	High
Spring Brook Creek**	Unspecified Metals	Chronic Aquatic Toxicity	Low
Spring Brook Creek**	Unknown	Degraded Biological Community	Low
Spring Brook Creek**	Unspecified Metals	Chronic Aquatic Toxicity	Low
Summit Lake	Mercury	Contaminated Fish Tissue	Low
W BR Eau Claire River**	Total Phosphorus	Degraded Biological Community	High

Source: WDNR online search Dec. 2018, **TMDL Development

The WDNR also maintains a list of Outstanding Resource Waters (ORWs) and Exceptional Resource Waters (ERWs). Outstanding Resource Water is defined as a lake or stream which has excellent water quality, high recreational and aesthetic value, and high quality fishing and is free from point source or nonpoint source pollution. An

Exceptional Resource Water is defined as a stream which exhibits the same high quality resource values as outstanding waters, but which may be impacted by point source pollution or have the potential for future discharge from a small sewer community. See [Table 2-3](#).

Table 2-3: Lnglade County Outstanding and Exceptional Resource Waters

Waterbody	Portion of waterbody classified ORW or ERW	Classification
Clearwater Creek	All	ORW
Dalton Creek	All	ERW
Demlow Springs	All	ERW
Demster Creek	All	ERW
Drew Creek	All	ORW

East Branch Eau Claire River	From STH 64 upstream to firelane crossing in T33N R11E S35 SW 1/4	ERW
Elton Creek		ORW
Little Evergreen Creek	All	ORW
Evergreen River	All	ORW
Lower Post Lake	All	ORW
Garski Flowage	All	ERW
Getchell Creek	All	ERW
Hansen Creek	All	ERW
Hunting River	From Fitzgerald Dam Road downstream to T33N R11E S1	ERW
Little West Branch Wolf River	All	ERW
Markgraf Creek	All	ERW
Mayking Creek	All	ORW
McCloud Creek	Above Hwy H	ERW
McGee Creek	All	ERW
Michelson Creek	All	ORW
Middle Branch Embarrass River	All	ORW
Mondl Creek	All	ERW
Oldens Creek	All	ERW
Plover River	All	ERW
Prairie River	All	ERW
Rabes Creek	All	ERW
Rasmussen Creek	All	ERW
Silver Creek	All	ERW
South Branch Oconto River	All	ORW
Spring Brook	Above Antigo, & Downstream from CTH Y south of Antigo to the Marathon County Line	ERW
Spring Creek	All	ERW
Squaw Creek	All	ERW
Stevens Creek	All	ERW
Thompson Creek	All	ERW
West Branch Red River	All	ERW
Woods Flowage	All	ERW
Upper Post Lake	All	ORW

Source: WDNR

Wetlands

Wetlands are important for groundwater aquifer recharge, wildlife habitat, and serving social functions such as open space, recreation, and aesthetics. They

also act as water storage “sponges” in times of high water by absorbing excess water and then releasing it back into the watershed slowly, thereby preventing flooding and minimizing flood damage. Wetlands have valuable ground and surface

water purification capabilities since potentially harmful compounds and bacteria in the water are absorbed into plant tissues thus buffering the adjacent water body. Wetlands occur in areas where the water level is usually near or above the soil surface. Wetlands cover over 100,000 acres of land throughout the county. [See the Natural Resources Map.](#)

Swamps, bogs, marshes, potholes, wet meadows, and sloughs are all considered wetlands. The soils in these areas are usually saturated within a few inches of the surface during the growing season and need some type of artificial drainage to be made arable. Besides their ecological value, wetlands are also an important recreational, educational, and aesthetic resource. Wetlands are a breeding and nesting ground for waterfowl and for many other animals depending upon aquatic habitats. Maintaining these breeding grounds ensures a variety and adequate amount of game for hunting and wildlife observation. Sometimes a particular chain of wetlands can be home to a rare or endangered species thereby provoking interest from scientists and educators. Lastly, the visual appearance of the wetlands themselves can constitute a scenic resource.

Historically, the greatest threats to wetlands in the county have been agricultural drainage and urban development. Given their important role, destruction of wetlands can negatively affect the public in many ways. The development of

impermeable surfaces and the addition of fill materials can destroy the hydrological function of a wetland site while simultaneously increasing flood dangers downstream. The WDNR has promulgated minimum standards for managing wetlands to help reduce the negative impacts of developing in or near wetland areas.

The DNR identifies the location of wetlands on their Wisconsin Wetland Inventory maps and associated database. According to this database, Langlade County has over 100,000 acres of wetlands, which also includes wooded wetlands. Significant concentrations of wetlands in Langlade County include Bogus Swamp in the Town of Upham, Ackley State Wildlife Area and surrounding county forest, the Antigo Flats west of USH 45, and in scattered areas along the Wolf River. Additional wetlands associated with the floodplains and smaller wetlands are scattered throughout the County.

[Floodplains](#)

Floodplains are a natural flood control system that provides an area where excess water can be accommodated. The extent to which a floodplain may become inundated depends upon the amount of water, the speed and distance that the water travels, and the topography of the area. Langlade County contains approximately 25,000 acres of floodplain, some of which is also wetlands. [See the Natural Resources Map.](#)

Floods are one of Wisconsin's most common types of natural disasters. Each year Wisconsin communities suffer millions of dollars in flood damages. The Federal Emergency Management Agency (FEMA) designates floodplain areas in the state. These are areas predicted to be inundated with floodwaters in the 100-year storm event (e.g., a storm that has about a 1 percent chance of happening in any given year, or a 26 percent chance of happening over a 30-year period).

Given that these areas are prone to flooding, development in floodplains is usually discouraged. Even so, development does occur in these areas and in turn affects the ability of this system to function properly.

Chapter NR 116 of the Wisconsin Administrative Code requires all municipalities to adopt reasonable and effective floodplain zoning ordinances for the purpose of protecting individuals, private property, and public investments from flood damage. Floodplain zoning regulates development in the floodway and flood fringe areas, usually by requiring structures to be built above flood levels or be otherwise flood-protected. For regulatory purposes, a floodplain is generally defined as land where there is a one percent chance of flooding in any year (also known as the 100-year floodplain). Floodplain regulation can also keep communities eligible for the Federal Emergency Management Agency's (FEMA) National Flood Insurance Program (NFIP). FEMA offers emergency monetary assistance to

flood stricken communities provided these areas are in compliance with NFIP requirements and have also completed a Flood Insurance Study.

Currently, Langlade County, the City of Antigo, and the Village of White Lake all participate in the NFIP program, have completed the Flood Insurance Study, and have created a Flood Insurance Rate Map (FIRM) that delineates those areas likely to be inundated by a 100-year flood (also known as "A" Zones). In the next year the county plans to update the floodplain ordinance and maps.

Watersheds

Langlade County is divided into 16 watersheds and four drainage basins. The sub-continental divide separates the Mississippi River drainage basin from the Lake Michigan drainage basin. On the eastern side of the divide, water flows into the Wolf and Oconto Rivers, which lead to Lake Michigan. On the Western side of the divide, the water flows into the Wisconsin River then to the Mississippi River. **[See the Natural Resources Map.](#)**

The eastern part of the county is within the drainage basin of the Wolf and Oconto Rivers, and the western part is within the drainage basin of the Wisconsin River. In Langlade County, the Wolf River enters at Upper Post Lake, flows generally south and east, and leaves the county just south of Markton. Seven principal tributaries of the Wolf River that are at least partly in the county include: Swamp Creek,

Pickereel Creek, Hunting River, Lily River, Ninemile Creek, Evergreen River, and Red River. Five principal tributaries of the Wisconsin River that drain the western part of the county include: Prairie, Pine, Trappe, Spring Brook Creek, and Eau Claire Rivers.

The Antigo Flats are drained by Spring Brook, a tributary of the Eau Claire River, and by the east and west branches of the Eau Claire River. All of these streams drop about 7 feet per mile. The drainage valleys are large in relation to the size of the streams occupying them, because of the large volume of glacial meltwater that they once carried.

The WDNR issues grants for the implementation of watershed projects through a cost-share approach. The Priority Watershed Program provides financial assistance to local units of government in selected watersheds to address land management activities that contribute to urban and rural runoff. The grantees use the funds to reimburse costs to landowners for installing voluntary Best Management Practices (BMPs). Spring Brook is a priority watershed established in 1994.

Groundwater Resources

Groundwater supplies nearly all of the water for residential, commercial, and industrial uses in Langlade County. In general, groundwater use has increased in the county as urban areas continue to grow and agricultural users

install more high capacity wells. The increase in rural housing developments and water bottling facilities, each with their own private well, also places demands on groundwater.

Groundwater is comprised of the portion of rainfall that does not run off to streams or rivers and that does not evaporate or transpire from plants. This water percolates down through the soil until it reaches the saturated zone of an aquifer. The average recharge from precipitation on 1 square mile of the Antigo Flats is about 256,000 gallons per day (USGS, 1954). The groundwater generally moves southward, and the level generally rises in spring, declines in summer, rises slightly in fall, and declines in winter. Use of groundwater for irrigation has caused a measurable decline in the level only in the immediate vicinity of the withdrawal. The depth to groundwater ranges to as much as 138 feet beneath the hills on the moraines. On the Antigo Flats, groundwater depth averages about 25 feet. Groundwater yields from the glacial deposits vary. Generally, the outwash yields more than the glacial till. Till is derived from the erosion and entrainment of material by the moving ice of a glacier. It is deposited some distance down-ice to form terminal, lateral, medial and ground moraines. The underlying crystalline bedrock yields little or no water.

Natural groundwater generally discharges at streams, marshes, lakes, and springs or as underflow. The continued flow of perennial

streams during long dry periods is caused by the natural discharge of the groundwater reservoir. Langlade County uses approximately 1.4 billion gallons of groundwater for irrigation, bottling, and mining operations each year. Urban groundwater uses in the county are approaching 2 million gallons (PSC online) annually from the three municipal water systems combined. Ensuring an adequate supply of usable groundwater is an important issue in Langlade County since the water becomes more difficult to obtain for everyone when the resource is more heavily used.

The quality of the ground water is generally very good. Many soils however have very porous layers that are poor filters for domestic waste and agricultural chemicals. The impact of development and agriculture may cause deterioration of the ground water. Generally, the content of dissolved solids in the ground water is relatively low in the western half of Langlade County and relatively 16,000, high in the eastern half. The higher content in the eastern part probably results from a higher content of limestone in the glacial deposits.

Groundwater quality can be impaired by a variety of pollutants including leaking underground storage tanks (LUSTs), landfills, septic tanks, over-application of pesticides and fertilizers, and spills of hazardous chemicals. The most common contaminants found in Wisconsin's groundwater are pesticides, nitrates, nitrogen, and volatile organic compounds (VOCs).

These contaminants come from a multitude of sources including nitrogen-based fertilizers, septic systems, animal waste storage, feedlots, municipal and industrial wastewater discharges, and sludge disposal. Nitrates are an issue in the southern part of the county in vegetable and potato production areas. Groundwater contaminants can affect the health of humans, livestock, and wildlife. Because groundwater seeps more slowly than surface runoff, pollution that occurs today may not become evident for several years. Once polluted, the groundwater is very difficult to purify and may take many years to clean itself by the dilution process.

Most private wells provide a clean, safe supply of water; however, contaminants can pollute private wells and unfortunately you cannot see, smell, or taste most of them. Cracks in well casings and poorly sealed caps can develop and allow contaminants to enter the water you drink. So the only way to know for sure is to test your water. There is no requirement to test a private well, except for bacteria when it is drilled or when the pump is changed, most homeowners forget to test their well on a regular basis. Homeowners are responsible for making sure their water is safe. The Land Records and Regulations Department can assist with water testing. The department sells a water sample bottle kit for a minimal fee. With the kit you collect a water sample and send it in to the Water & Environmental Analysis Laboratory in Stevens Point. The Homeowner Package test is

recommended. That package tests for the following: 1) Total Coliform Bacteria, 2) Nitrate plus Nitrite-Nitrogen, 3) pH, 4) Alkalinity, 5) Hardness, 6) Chloride, 7) Conductivity, and 8) Corrosivity.

If you decide to do this test, just simply stop in to the department's office and ask for a water sample bottle. They can also help with the paperwork that needs to be sent in with it. Other tests are available from the lab upon request for a separate fee. The decision on what to test your water for is based on land uses near your well.

Forests

At one time, much of Wisconsin was covered with magnificent stands of pine, hemlock, and hardwoods on the highlands, and cedar, spruce, and balsam on its lowlands. Woodlands cover approximately about 435,000 acres throughout the county.

As of 2023, there were about 125,000 acres of privately-owned forestland enrolled in either the Forest Crop Law (FCL) or Managed Forest Law (MFL) program, both administered by WDNR. The FCL program was enacted in 1927 as a landowner incentive program that encourages long-term sustainable management of private woodlands. In exchange for following an FCL management schedule, the landowner pays reduced property taxes. Enrollment in FCL was closed on January 1, 1986; but

expiring FCL contracts may be enrolled into MFL. The Managed Forest Law (MFL) program was enacted in 1985 to replace the Forest Crop Law program, and is open to all private owners of forested land. To be eligible for the MFL program, a landowner must have a minimum of 20 acres of contiguous land and at least 80 percent of that land must be productive forest land.

Both the FCL and MFL programs are administered by the WDNR. Contact the WDNR to find what land is available to the public for the recreational purposes of hunting, fishing, hiking, skiing, and sightseeing.

Forest Legacy Area (FLA) – The WDNR recently purchased the development rights for two industrial forests in the towns of Langlade and Wolf River. No additional land in the county is targeted for FLA creation at this time, but all land in Langlade County is within the Northern Forest FLA, which makes it eligible for this program.

Table 2-4 displays information on the amount of forestland in Langlade County. The change in forest cover over time can be an important indicator of how sustainable forestry activities are within the county. From 1983 to 2015, forested land within Langlade County has increased by 44,000 acres or about 11 percent. The county and state increased at the same rate.

Table 2-4: Area of Forest Land (Public and Private Acreage)

Minor Civil Division	1983 Forest Land	2004 Forest Land	2015 Forest Land	1983-2015 % Change	1983-2015 Net Change
Langlade County	391,700	404,442	435,896	11%	44,196
State	15,351,300	16,037,233	17,055,100	11%	1,703,800

Source: USDA Forest Service, 1983, 2004 & 2016 & NCWRPC GIS, 2015

Woodland plays a key role in the protection of environmentally sensitive areas like steep slopes, shorelands, wetlands, and flood plains. Removal of woodland cover can be detrimental to these areas in both ecological functions and to visual enjoyment. The health of a forest is measured by its capacity for renewal, for recovery from a wide range of disturbances, and for retention of its ecological resiliency. At the same time it must meet current and future needs of people for desired levels of values, uses, products, and services. Arguably, invasive exotic species like garlic mustard and multiflora rose present the greatest threat to the long-term health and integrity of the forests. Invasive plants present a problem for native plants as they invade natural systems, often dominating a community by competing for nutrients, sunlight and space, and by altering the food web or physical environment. Invasive species like the Gypsy moth and the Asian long-horned beetle can prey on native species.

Langlade County Forest

The Langlade County Forestry and Recreation Department manages over 130,000 acres of county forest and associated park and recreational facilities (7th largest in

Wisconsin). This land is managed for multiple uses, and is independently certified as sustainably managed and harvested. Some of the county forest is closed to motorized vehicles. Examples of permitted recreational activities are hunting, fishing, hiking, snowmobiling, camping, bough cutting (permit required), firewood collection (permit required), and wildlife observation.

School Forests

The Unified School District of Antigo owns and maintains several school forests that are listed below. Contact the Unified School District of Antigo for rules of use on school forest lands.

- Pleasant View School Forest, 20 acres;
- Crestwood School Forest, 38 acres;
- Forestview School Forest, 38 acres;
- Liberty Bell Forty, 40 acres;
- Deerbrook School Forest, 80 acres;
- Noboken School Forest, 168 acres;

The Elcho School District owns and maintains two school forests listed below. Contact the Elcho School

District for rules of use on school forest lands.

- Elcho School Forest, 31 acres;
- Summit Lake School Forest, 78 acres;

School Park Forest is a 6 acre forest owned and maintained by the White Lake School District. Contact them for rules of use on school forest lands.

Town of Peck Forest

The Town of Peck owns 2,333 acres of land for the Peck Town Forest, and 80 acres for Peck School's Forest.

National Forest

The Chequamegon-Nicolet National Forest has lands in several counties including Langlade. The Lakewood area of the Chequamegon-Nicolet National Forest covers about 39,680 acres in the eastern portion of the county.

The United States Department of Agriculture's Forest Service controls these lands. A Land and Resource Management Plan was developed in 2004 for the Chequamegon-Nicolet Forest areas. That plan provides guidance for all resource management activities in the National Forests.

Wildlife, Fish, & Natural Areas

The State of Wisconsin, primarily through the Department of Natural Resources, holds several tracts of land within Langlade County as

Wildlife Areas, Fishery Areas, and Natural Areas. In total, WisDNR owns over 17,000 acres in the county mainly as state natural, fishery, or wildlife areas; These lands are open to the public for a variety of uses. Boundary signs posted near parking lots and along borders explain the uses on that parcel.

State Wildlife Areas (SWA):

SWA were acquired to preserve habitat for wildlife. Two State wildlife areas exist in Langlade County.

Ackley Wildlife Area is 1,158 acres, plus 20,000 acres of county lands managed to complement the state ownership in the Town of Ackley.

Peters Marsh Wildlife Area is 1,687 acres, and is mostly surrounded by county forest in the Towns of Ainsworth and Price.

State Fishery Areas (SFA):

SFA have been purchased to protect important waterways from improper land use due to agriculture or urban runoff. Some protect and improve spawning grounds for area fisheries, while others prevent the blocking of important waterways. Some fishery areas consist of fee-title ownership as well as easements. Boundary signs posted near parking lots and along borders explain the property's use.

Ten state fishery areas exist in Langlade County. They are:

Clubhouse Lake-Sunshine Springs Fishery Area is 41 acres and is located in the Town of Evergreen.

Daneault Springs Fishery Area is 40 acres and is located in the Town of Rolling.

Demlows Lake Fishery Area is 74 acres along Upper and Lower Demlow Lake in the Town of Norwood.

Eau Claire River Fishery Area is 44 acres and is also in the Peters Marsh Wildlife Area in the Town of Upham.

Evergreen River Fishery Area is 1,391 acres along the Evergreen River west of White Lake in the Town of Wolf River.

Lambert Springs Fishery Area is 40 acres east of STH 52 at CTH A and is located in the Town of Langlade.

Prairie River Fishery Area is 151 acres along the Prairie River in the Town of Parrish.

Rabes Lake Fishery Area is 120 acres and is located around Rabe Lake in the Town of Polar.

Upper Wolf River Fishery Area is 9,273 acres along the Wolf River in the Town of Langlade.

Woods Flowage Fishery Area is 1,232 acres and is located mainly in the Town of Evergreen.

State Natural Areas (SNA):

SNA's were designated to protect the state's natural diversity, provide sites for research and environmental education, and serve as benchmarks for assessing and guiding use of other lands in the state. Natural areas are defined as tracts of land or water, which have native biotic communities, unique natural features, or significant geological or archeological sites. Generally, natural areas are remnant areas that largely have escaped disturbances since settlement or which exhibit little recent disturbance so that recovery has occurred and presettlement conditions are approached.

Natural areas provide an important reservoir of our state's genetic or biologic diversity. They act as important reserves for native biotic communities and provide habitat for endangered, threatened, or critical species or other species of special concern to scientists. They often include areas with highly significant geological or archaeological features. They tend not to have much facility development, though there may be a designated trail or two on site. Some properties allow limited hunting.

Langlade County has nine state natural areas. They are:

Flora Spring Pond (No. 78) is 40 acres and is located in the Town of Evergreen.

Oxbow Rapids, Upper Wolf River (No. 163) is 40 acres and is located within the Upper Wolf River State Fishery Area in the central area in the Town of Wolf River.

Bear Caves (No. 286) is 50 acres and is located in the Town of Wolf River.

Bogus Swamp (No. 287) is 870 acres and is located in the Town of Upham.

Minito Lake (No. 288) is 24 acres and is located in the western half of the Town of Elcho.

Lawrence Lake (No. 404) is 326 acres and is located in the Town of Price.

Hunting River Alders (No. 527) is 104 acres and is located within the county forest in the eastern half of the Town of Elcho.

Kelly Lynn Bog (No. 528) is 774 acres and is located within the county forest in the Town of Parrish.

Swamp Creek Fen (No. 589) is 115 acres and is located just south-west of Mole Lake.

WisDOT also maintains the Bina Wetland Mitigation Bank in Ackley.

Threatened and Endangered Species

Langlade County contains a wide range of plant and wildlife habitats. These natural habitats have been greatly affected by rural development and agricultural practices. In most cases, these influences are directly responsible for the endangerment or threatening of certain species. The Endangered Species Act (ESA) requires all federal agencies to conserve endangered and threatened species. The State of Wisconsin has similar statutes.

Wisconsin law prohibits the “taking” of any plant or animal listed as endangered or threatened. Taking is defined as the act of killing, harming, collecting, capturing, or harassing a member of a protected species. The WDNR-Bureau of Endangered species operates the Wisconsin’s Natural Heritage Inventory (NHI), which maintains data on the location and status of rare species, natural communities, and natural features in Wisconsin. WDNR's Natural Heritage Inventory program maintains data on the general location and status of rare, threatened, or endangered plant and animal species in the state. This data is obtained through field inventory. According to that inventory, Langlade County has 60 species or natural communities in the Wisconsin Natural Heritage Inventory. Langlade County has fewer rare species occurrences than other surrounding counties.

According to the U.S. Fish and Wildlife Service, Langlade County has two species that are federally listed as threatened or endangered. The Gray Wolf (*Canis lupus*) is the only endangered species in Langlade County and the Northern long-eared bat (*Myotis septentrionalis*) is the only species considered threatened. Due to a federal court decision, wolves in the western Great Lakes area (including Michigan, Minnesota, and Wisconsin) were relisted under the Endangered Species Act, effective December 2014. The bald eagle is no longer listed, but is now protected by the Bald and Golden Eagle Protection Act. Several other species of plants and animals are listed as rare species.

Environmentally Sensitive Areas/Ecological Landscapes

The presence of surface water, floodways, wetlands, and steep slopes creates situations where some locations are less suitable for development than others. These less suitable areas are often referred to as “environmentally sensitive areas” due to the generally negative impact development in these areas has on the environment. As a rule, the areas where development is most harmful are the same areas where development is most difficult or expensive. For example, building a house on the edge of a steep hillside requires expensive footings and erosion control measures to prevent the structure from falling. At the same time, the removal of trees and dirt for construction can compromise the integrity of the cliff

and cause more stormwater erosion or landslides thus harming the entire hill itself.

Ecological Landscapes were created as a WDNR handbook for resource managers to assist with their ecological assessment of an area, and to help determine sustainable uses. The northern half of the County lies in the ecological landscape known as the North Central Forest, while the southern area lies in the Forest Transition landscape.

Air Resources

Air quality in Langlade County meets National Ambient Air Quality Standards (NAAQS) for the six principal pollutants monitored: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM₁₀ and PM_{2.5}), and sulfur dioxide (SO₂). Even so, there are sources of localized air pollution that are cause for concern, such as carbon monoxide from vehicle exhausts in attached garages, volatile organic compounds (VOCs) located in paints and solvents that dry quickly, and wood burning. Incomplete combustion from outdoor wood boilers and wood furnaces create particulate matter (PM₁₀ and PM_{2.5}), polycyclic aromatic hydrocarbons (PAHs), dioxins and furans, carbon monoxide, volatile organic compounds and metals into the air we breathe.

Goals, Objectives & Policies

Goals:

- 1) Protect the county's natural features, including lakes, open space, wetlands, wildlife habitat, woodlands, and unique physical areas.
- 2) Protect large tract woodlands and enhance County Forests.
- 3) Reduce contamination of surface and groundwater resources in the county.
- 4) Encourage and support the preservation of natural areas that minimize flooding, such as grasslands, wetlands and woodlands.
- 5) Allow for needed non-metallic mining while balancing the interests of adjacent landowners and the county.

Objectives:

- 1) New development should not negatively impact natural resources.
- 2) Protect surface water, groundwater, and shoreline quality.
- 3) Identify the critical natural resources, such as lakes, streams, rivers, wetlands, steep slopes, and woodlands.
- 4) Promote opportunities that support both natural resource

protection and economic development.

- 5) Encourage the development of a natural area network connecting open areas, wetlands, and woodlands.
- 6) Increase and improve wildlife habitat.
- 7) Balance access to natural areas with resource protection efforts.
- 8) Minimize the conversion of woodlands into other uses.
- 9) Promote development that minimizes surface and groundwater impacts from on-site septic systems and other sources.
- 10) Promote surface and ground water protection efforts to maintain and lower nitrate, pesticide, and volatile organic compound pollution.

- 11) Minimize impacts to the County's natural resources from non-metallic mineral mining.
- 12) Promote proper reclamation techniques in the County.

Policies:

- 1) Identify and assess the current drainage system in the County.
- 2) Monitor dams and drainage systems in the County.

- 3) Support dam/drainage way repair and removal where appropriate to minimize flooding in the County.
- 4) Recommend land owners with private wells to periodically

test their wells for water quality.

Additional policies related to this topic may be found in the County's Land & Water Resource Management Plan.

2.3 Agricultural Resources

Background

In the early 1870's the first European traders established posts in the Northwoods. Soon after the areas vast forests provided lumber for the developing cities of the Midwest. Farming began as an auxiliary use to forestry, but with the arrival of rail in the 1880's new markets for commodities opened. Oats, potatoes, and wheat were and remain important commodities for the county, and later dairy farming.

Today, a variety of other vegetables are grown in the county, such as: snap beans, peas, and sweet corn. Acreage of these crops can swing year to year. Acreage has increased recently as canning contracts have shifted northward out of the Central Sands region of Wisconsin due to the increased demand for field corn acreage there. Soybeans are also extensively grown for both the use on local dairy farms and as a commodity sold outside of the County.

According the 2017 U.S. Census of Agriculture, related to market value, vegetables and potatoes accounted

for \$47.1 million, followed by livestock and poultry with \$42.6, and milk at \$31.6 million.

Potatoes are by far the most important cash crop in the County. The production of certified seed potatoes for domestic and international markets has added value to the commodity over the last decades. Several factors make Langlade County an excellent location for seed production: skilled management, cool climate, silt loam soils, packaging equipment, and management of crop protectants.

Previous Planning Efforts

[NRCS Soil Survey for Langlade County, 1986](#)

The Natural Resource Conservation Service (NRCS) is a federal agency that prepared the Langlade County, Wisconsin Soil Survey. The survey contains predictions of soil behavior for selected land uses and also highlights the limitations and hazards inherent in the county's soil. A series of detailed maps identifying the location of soil types

in Langlade County accompanies the survey.

[Langlade County Farmland Preservation Plan, 2014](#)

This plan inventories and analyzes the agriculture related resources of Langlade County including components such as farmland, utilities infrastructure, communications and land use. It describes programs available to help maintain and preserve productive farmland and woodlands. This plan also discusses the importance of the agriculture industry to the local economy. It establishes the goal of promoting working forests and farms, and includes a number of objectives and policies to meet this goal, as well as criteria for designating farmland preservation areas. An earlier version of this plan was adopted in 1982. This plan is being updated and incorporated into this comprehensive plan.

A 2019 amendment to the Langlade County Comprehensive Plan incorporated the Farmland Preservation Plan's required elements into this Langlade County Comprehensive Plan.

County Ordinances

Some related county ordinances include the Animal Waste Storage Ordinance, A-1 Exclusive Agriculture Zoning (certified), Soil and Water Conservation Standards for the Farmland Preservation

Program, and the General Zoning Ordinance.

Issues

- Protecting Productive Farmland

There is a strong desire to protect farmland in the county. Maintaining a critical mass of farming is essential for the continued agricultural economy in the county.

- Minimizing conflicts between farm and non-farm uses

As more and more non-farm development occurs in the rural area conflicts arise. Some of these relate to odors, noise or uses. These conflicts need to be minimized.

- CAFOs & Manure Storage

Large scale animal operations, including CAFOs, that produce large quantities of animal manure may pose a greater risk to water quality in the absence of careful management and regulation. Operators must be careful with storage and spreading of manure. CAFOs are regulated by the Department of Natural Resources under NR 243.

- Nutrient Runoff

To produce good yields, farmers need to apply nitrogen, phosphorus and other nutrients to their crops. Excess nitrates not used by plants can leach into the groundwater and

excess phosphorus will runoff into lakes, streams and wetlands. Proper measuring of nitrogen and phosphorus in manure saves farmers the cost of purchasing extra commercial fertilizer – and also protects groundwater. Spring snowmelt or excessive rainfall can lead to fish kills and contamination of drinking water wells due to bacteria in manure that has run off from farm fields.

Inventory and Trends

Farm Size

Agriculture continues to be a major part of the county. **Table 2-5** provides data regarding the total amount of farmland and the size of farms in the county and state. Between 2012 and 2022, the county lost farmland, while average farm size increased.

Table 2-5: County Farmlands (acres)

Minor Civil Division	Farmlands (acres)			Average size of Farm (acres)		
	2012	2017	2022	2012	2017	2022
Langlade County	113,881	116,386	109,487	288	269	329
State	14,568,926	14,318,630	13,784,678	209	221	236

Source: Census of Agriculture, 2012, 2017 & 2022

Table 2-6 shows the number of farms by size in the county. Between 2012 and 2022, data indicated that the total number of farms decreased from 396 to 333, a decrease of 63 farms. See Table 2-6 for which farm sizes by acreage changed.

The trend toward larger farms indicates the increase of large-scale farming operations. These farms generally produce on large tracts of land and have full-time employees. Large farms produce large quantities of food and are so modernized that they require only a fraction of the labor force.

Table 2-6: Langlade County Farms by Size

Year	1 to 49 acres	50-179 acres	180-499 acres	500-999 acres	1000 plus acres	Total Farms
2012	106	139	103	34	24	396
2017	103	155	121	34	19	432
2022	111	95	60	39	28	333
2012-2022 Net Change	5	(44)	(43)	5	4	(63)

Source: Census of Agriculture, 2012, 2017 & 2022

Row Crops

Major crop exports produced in Langlade County include grain corn, potatoes, and soybeans. In terms of acres harvested, potatoes lead the way with over 10,000 acres, followed by oats, soybeans, and corn for grain.

Langlade County is one of the major producers of potatoes in Wisconsin. **Table 2-7** provides historical data on crop production in Langlade County.

Table 2-7: Langlade County Major Crop Type (acres harvested)

Crop	2012	2017	2022	2022 % Of Harvest	2012-2022 Net Change
Corn (for grain)	7,933	7,588	4,964	7.8%	(2,969)
Oats	5,810	9,232	6,013	10.0%	203
Soybeans	4,532	6,931	5,412	9.0%	880
Potatoes (all)	10,018	10,630	10,530	17.5%	512
Sub-Total	28,293	34,381	26,919	44.3%	(1,374)
Other Crops	40,085	32,901	33,151	55.7%	(6,934)
Total Harvest	68,378	67,282	60,070	100%	(8,308)

Source: Census of Agriculture, 2012, 2017, & 2022

Livestock

There are about 19,000 cattle and calves in the county. In 2021 there were 9,300 dairy cows in 24 total herds. All but one herd produces Grade A milk. Overall, milk production increased to 232,500,000 pounds or about 25,000 pounds per cow. Milk production in Langlade County continues to trend with the State of Wisconsin. Farmers are decreasing the number of cows while increasing the pounds of milk produced. There are several beef herds also in the county

Langlade County producers still have many options to market their milk. While some of the milk produced is used by the local dairy plant, a large amount of milk is

hauled into neighboring counties. Some small herds are pursuing organic certification and shipping milk to this rapidly growing market.

Aquaculture

Langlade County ranks 8th in Wisconsin for farm raised fish. This includes private and state fish hatcheries. Game fish and baitfish were raised at three different fish farms in Langlade County.

Productive Agricultural Areas

The most productive agricultural areas are be found on the Antigo Flats. Quality soils, flat land, and limited development make this area productive. Other areas with high

water tables and steep slopes are less productive for row crop production, but many are suited well for forage and managed pasture. Irrigation is now widely used throughout this area of the county. Approximately 23,000 acres of crop land is now irrigated. These areas are mostly flat and therefore conducive to the use of large farm machinery and the efficient application of chemicals. Even irregular fields are planted into potato production if they can be suitably irrigated. Productive agricultural areas are used in the determination of farmland preservation areas.

Farm Infrastructure

Farm-to-market roads, commodity storage and processing plants, and implement dealerships are probably the most significant farming infrastructure. Quality roads are absolutely necessary to the farmer for transporting the wholesale farm product to the appropriate market in a timely manner. Farm-to-market roads are discussed in more detail in the Transportation Chapter of this plan. Adequate land and electricity must be available to store and process the harvested crops. There are many potato storage facilities in and around the City of Antigo. Tractors break down, and other implements need replacement parts. The number and type of farms in the county support several businesses to service modern farm implements. Depending upon the type of farming, irrigation wells may also be extremely important. Irrigation equipment is a common sight in Langlade County as farmers

seek to maintain proper soil moisture on a crop that needs steady soil moisture.

Gross Regional Product (GRP)

Total gross regional product (GRP) in Langlade County in 2018 was over \$665,456,000. The revenues from NAICS 11: Agriculture, Forestry, Fishing and Hunting in the county resulted in a total GRP of \$61,460,000. In comparison to other industries, the agriculture industry generates the third largest gross regional product (excluding government) and accounts for almost nine percent of the county's GRP. Only the manufacturing and retail sectors produced a higher GRP than the agriculture industry in 2018.

Exports

In 2018, Langlade County firm's exported over \$900 million in total revenue. Agriculture, Forestry, Fishing and Hunting was the second highest export industry accounting for over \$124 million in export revenue, or about 14 percent of total export revenue. Only manufacturing exported more goods and services. The ability to export goods and services is essential to the county's economy as it introduces new money to the economy, rather than simply circulating money that is already in the region. This influx of new revenue is redistributed throughout the economy at local restaurants, suppliers, and retailers.

Agricultural Land Values

Agricultural land values throughout Wisconsin have changed since use-value assessment of farmland was implemented nearly two decades ago. Use values for most farmland are grouped into four categories based on relative soil productivity within the county. The Department of Revenue (DOR) determines actual values assigned to farmland in these categories each year for every municipality in the state. Land associated with the farmstead, road rights-of-way, ungrazed woodland and swampland, etc. is excluded from use value assessment.

Land and buildings in the farmstead area are assessed at full market value, as are woodlands, swamp, and any fields or pasture areas not

actually used for cropland or pasture. If agricultural land is converted to another use, the county where the land is located will administer a penalty on the property tax. The DOR will determine the penalty within each county based on the difference between the average per-acre fair market value of agricultural land sold in the county in the previous year and the average per-acre equalized value of agricultural land in the county in the previous year.

The number of agricultural land sale transactions per year has increased from 2016 to 2021. **Table 2-8** indicates that farms when sold are continuing in that use. Data indicates that agricultural land values have decreased slightly from 2016 to 2021, however, anecdotal evidence disagrees with this finding.

Table 2-8: Agricultural Land Sales (Land Without Buildings and Improvements)

Minor Civil Division	Number of transactions		Agricultural land continuing in agricultural use		Agricultural land being diverted to other uses		Total of all agricultural land	
	2016	2021	2016	2021	2016	2021	2016	2021
	Number		Acres					
			886	448	0	0	886	448
Langlade County	12	16	Dollars per acre					
			\$3,013	\$2,672	N/A	N/A	\$3,013	\$2,672

Source: Wisconsin Agriculture Statistics, 2016 & 2022

Agricultural Land Uses

Table 2-9 provides data related to cropland, woodlands and pastureland in the county. Over the ten-year period, cropland, woodland, and

permanent pasture declined, while there was an increase in other lands such as farmsteads

Table 2-9: Agricultural Land Uses

Land Use	Acres			
	2017	2022	% Change	Net Change
Total Crop Land	75,817	70,639	-6.8%	- 5,178
Total Woodland	28,286	26,860	-5.0%	-1,426
Permanent Pasture	7,188	6,473	-9.9%	-715
Other	5,095	5,515	8.2%	420
Total	116,386	109,487	-5.9%	-6,899

Source: Census of Agriculture, 2017 & 2022

Farmland Preservation Areas

The goal of the farmland preservation process is to identify land areas that are important to protect for agriculture and related uses. Minimizing uses that would limit agriculture are also important to identify. The Farmland Preservation Plan Map identifies: “Farmland Preservation Areas,” and “Planned Out” areas.

Farmland preservation areas were determined by including all the soils listed as prime farmland, and by including the following existing land uses: agriculture, farmstead, open lands, and woodlands. Planned out area are excluded. Basically, all land that is planned for development over the next 10-15 years was removed from farmland preservation, including both the City of Antigo and the Village of White Lake. To determine these areas a criteria was developed – see box on page 51 for criteria.

Farmland Preservation Areas – Parcels that meet the Farmland

Preservation Plan mapping criteria. Landowners in this area may apply for farmland preservation income tax credits, if the town has adopted County zoning. In an un-zoned town, the residents may apply for an Agricultural Enterprise Area if they meet the criteria. These areas have been identified during the planning process to be agricultural uses or open spaces. No non-agricultural development is planned in the next fifteen years for those areas identified as farmland preservation areas. In addition, if there is a conflict with other plan maps, the Farmland Preservation Map will supersede those other maps.

Over 244,000 acres has been included in the farmland preservation areas, or about 43 percent of the county. **See Farmland Preservation Map.**

Planned Out – Parcels that do not allow the owner to apply for farmland preservation income tax credits.

These parcels are “planned out,” or excluded because they meet the criteria for non-farmland preservation areas. About 321,000 acres have been planned out, or about 57 percent of the county.

Farmland Preservation Maps were prepared for each town in the county and are included in **Attachment B**.

Criteria for Farmland Preservation Areas:

- Lands depicted on the Farmland Soils Map as farmlands.
- Lands depicted on the Existing Land Use Map or the Future Land Use Map as agricultural areas, forestry areas, or preservation & open space.
- All “agricultural use” (per Sec. 91.01(2) Wis. Stats.) buildings outside of the City of Antigo, Village of White Lake, and the sewered area of Elcho. Concentrated Animal Feeding Operations (CAFOs) are active farms that shall be included as farmland preservation areas.
- All land within an agricultural enterprise area.

Criteria for Non-Farmland Preservation Areas

Exclude all of the following:

- The City of Antigo, the Village of White Lake, and the sewered area of Elcho.
- Tax exempt land.
- All zoning districts except Exclusive Agriculture (A-1), General Agriculture (A-2), or Forestry (F).
- Lands identified on the Recreation Map for recreational use.

Agricultural Enterprise Areas

In addition to the farmland preservation areas discussed above, there is another level of protection for farmland. Agricultural enterprise areas, or AEAs, are community led efforts establishing designated areas important to Wisconsin’s agricultural future.

More specifically, an AEA is an area of productive agriculture that has received designation from the state at the request of landowners and local governments. As a part of the state’s Farmland Preservation Program, AEAs strive to support local farmland protection goals.

Local communities can voluntarily pursue designation of an AEA by submitting a petition to the Department of Agriculture, Trade and Consumer Protection (DATCP). Through this designation, the community can encourage continued agricultural production and investment in the agricultural economy. Landowners within designated AEAs are eligible to enter into voluntary farmland preservation agreements.

There are two such areas designated in Langlade County. One is located the Antigo Flats, which connects with areas in Marathon County; the other is the Evergreen-Wolf River. The Antigo Flats AEA is about 70,000 acres, while the Evergreen-Wolf River is about 20,000 acres. [See Agricultural Enterprise Map.](#)

Goals, Objectives & Policies

Goals:

- 1) Protect and promote economically productive farmlands and forests.
- 2) Eliminate negative impacts related to manure storage.

Objectives:

- 1) Work to preserve farming as a viable occupation within the County.
- 2) Limit the number of non-farm uses in agricultural areas.
- 3) Monitor and control manure storage methods in the county.

- 4) Minimize the conversion of agricultural lands and woodlands in to other uses.
- 5) Encourage retaining large, contiguous, forestry and farmland tracts.

Policies:

- 1) Encourage the development and utilization of Nutrient Management Plans.
- 2) Promote farmland preservation programs from all levels of government.
- 3) Promote agricultural cost share programs to farmers per the Langlade County Land and Water Resource Management Plan.
- 4) Promote DATCP's tax credit program for eligible farmland owners.
- 5) Promote Managed Forest Law participation to forestland owners.
- 6) Restrict non-agricultural development within the Farmland Preservation Zoning District.
- 7) Promote the expansion of Farmland Preservation Areas.

Additional policies related to this topic may be found in the County's Land & Water Resource Management Plan.

2.4 Cultural Resources

Background

Cultural resources are markers of our collective heritage that are deemed significant. These resources strengthen community values while preserving heritage and history, they build community character and a sense of place, they enhance community engagement and participation as well as improve overall economic vitality.

Langlade County was originally part of the Northwest Territory in 1851. In 1879 the Wisconsin legislature created Marinette and "New County" from Shawano and Oconto County territory largely through the efforts of one man, Squire A. Taylor, a Lily citizen. In 1880, the legislature changed the name to Langlade County in honor of Charles de Langlade, the most colorful and renowned pioneer of the wild and unexplored Wisconsin territory of the 1700s.

Prior to the mid-1800's, the Indigenous were the only inhabitants, with a few European fur trappers and traders who began traveling the wilderness in the 1600's. These traders followed a centuries old route from the Fox River at Green Bay that ran along the Wolf River to the copper area of Lake Superior. Traders along the Lake Superior Trail, including "Old Dutch Frank," and George Gardner, who had posts at Lily and White Lake in the 1860's, were among the area's early European settlers. West

of the present-day city of Antigo, Willard LeRoy Ackley set up a trading post on the Eau Claire River in about 1850, encouraging future growth. Settlement was further spurred by the U.S. Government, which in the 1860's built a road to transport military forces from Fort Howard in Green Bay to Fort Wilkins on the Keweenaw Peninsula.

Logging became the dominant industry as the county was settled. The first prospectors and early settlers were engaged in lumbering with only white pine being cut. River channels were improved with dams and other measures by private companies to ease the task of moving the logs down the Wolf River to Shawano and Oshkosh and on the Eau Claire to Wausau. As the original forests were cut agriculture became the dominant economic activity.

The loggers, operating far from farms and markets and using oxen as draft animals, found it impractical to drive them out of the timbered areas after winter logging or to haul in feed. Areas were cleared for pasture and wild hay production. For two generations lumbering and farming interacted as the county's economic components.

The early farmers sold produce to the lumber camps and many early settlers in the upper Wolf River Valley derived their principal income from winter logging and spring log drives. Most of the pioneers used

their income from working in the timber and sawmill in supporting their families and improving their cleared farms. Among these were the Germans, Czechs, Poles, and

Scandinavians. Today logging, agriculture, recreational tourism and manufacturing are the important industries in the county.

Historical Throwback

In dire economic straits, Antigo and the County sought and received federal Civil Works Administration (CWA) funds for eleven city projects and twelve County projects. Civilian Conservation Corps (CCC) camps were also established in Langlade County as an important work relief, forest restoration, and infrastructure program. Federal assistance was not only limited to construction projects. The Works Progress Administration (WPA) also hired people to organize recreational, sports, and cultural activities for the people of Langlade County (Wi101.wisc.edu).



CCC Camp 657 recruits marching from Summit Lake to their new barracks in Elcho, WI, 1933. Photograph courtesy of the Langlade County Historical Society.

Previous Planning Efforts

[Wisconsin Historic Preservation Plan 2016-2025](#)

The Wisconsin's Historic Preservation Plan for 2016-2025 presents achievable goals and objectives to protect and enhance our state's cultural resources. This plan is the product of collaboration between the State Historical Society of Wisconsin and a number of governmental and non-

governmental agencies. It seeks to describe a vision for historic and cultural preservation efforts throughout the state. The plan identifies five goals that should be addressed over the next several years:

1. Wisconsin must build a strong network of parties interested in historic preservation.

2. Wisconsin must have a strong educational structure for historic preservation.
3. Preservation must become a core value for Wisconsinites.
4. Wisconsin needs financial stability for preservation activities, ranging from the State Historic Preservation Office to property owners.
5. Citizens and local governments need tools to preserve the state's most threatened cultural resources.

Issue

- A desire to preserve and promote the history of the county.

Inventory and Trends

Historical Structures

The practice of preserving historic sites and structures recognizes the architectural, engineering, archaeological, cultural, or historic importance of these assets to a community. In 1994, the Wisconsin Legislature enacted statutes requiring cities and villages with property listed in the National Register of Historic Places or the State Register of Historic Places to enact an ordinance to preserve these places. The City of Antigo has a preservation ordinance.

There are 5 historical structures in Langlade County—the Antigo Depot (1900-1924), Antigo Opera House (1900-1924), Antigo Post Office

(1916), Antigo Public Library – now the Langlade County Historical Museum (1905), and the Langlade County Courthouse (1905).

The City of Antigo has more structures listed onto the Architecture and History Inventory (AHI) than other municipalities, likely due to its county seat status, and growth as the largest community in the county. Antigo currently has 85 architecturally significant buildings on the state AHI, most of which are homes.

Many structures throughout the county are considered historic even though they are not list on any historical registers. The following buildings are locally historic:

- Neff Switch School, Town of Antigo;
- Selenski School, Town of Antigo;
- Pioneer School, Town of Antigo;
- Elton Grade School, Town of Evergreen;
- Langlade Rearing Station, Town of Wolf River;
- Alft Boardinghouse, Town of Wolf River;
- District Number 1 School, Town of Neva;
- Crystal Springs Rearing Station, Town of Upham;
- Elcho High School, Town of Elcho;
- Range Line Road Bridge over Eau Claire River branch, Town of Ackley;
- Fern School, Town of Ackley;

- Charles H. Lazelere Trading Post, Town of Langlade;
- St. Matthew's Lutheran Church, Town of Neva;
- Bridge over W. Branch of Eau Claire River, Town of Peck; and
- Peck Dairy and Produce Co., Town of Peck

Century Farms

In celebration of Wisconsin's agricultural heritage, long time farm and homeowners are encouraged to register for Century Farm status. To qualify as a century farm the property must be proven to have been in continuous family ownership for the past 100 years. Thirty Century Farms have been awarded in Langlade County, as of January 15, 2018, as identified by the Wisconsin State Fair:

- Anderson Farm, Polar, Settled in 1904.
- Karen Balyeat Farm, Antigo, Settled in 1885.
- Rodney and Arnold Barta Farm, Neva, settled in 1893.
- Milton Barta Farm, Neva, Settled in 1879.
- Richard and Elaine Bergman Farm, Summit, Settled in 1891.
- Julia and Gerald Budd Farm, Wolf River, Settled in 1902.
- Carley and Ray Fronek, Ackley, Settled in 1902.
- Grace and Myron Grimes Farm, Wolf River, Settled in 1897.
- Keith and Rosemary Heinzen Farm, Neva, Settled in 1882.

- Robert, Tom, Randy & Ron Houdek Farm, Neva, settled in 1916.
- Donald and Virginia Husnick Farm, Rolling, Settled in 1889.
- Mary and Harold Igl's Homestead Farm, Antigo, Settled in 1904.
- Sheila Johnson Farm, Peck, Settled 1903.
- Eugene Kamps Farm, Norwood, Settled in 1884.
- Dorothy Lee Farm, Summit, Settled in 1893.
- Gene and Eugene Matuszewski Family Farm, Antigo, Settled in 1905.
- Elaine and John McCullough Farm, Antigo, Settled in 1885.
- Steven and Diane Menting Farm, Norwood, Settled in 1884.
- Janet and Duane Olson Farm, Polar, Settled in 1890.
- Bonnie and Kenneth Ourada Farm, Ackley, Settled in 1917.
- Dennis Pukall Farm, Summit, Settled in 1907.
- Edward Schmutzer Farms, Neva, Settled in 1883 and 1889.
- Dennis and Susan Schroeder Farm, Rolling, Settled in 1884.
- Paul Schuman Farm, Polar, Settled in 1884.
- Naomi and Bob Stickney, Antigo, Settled in 1879.
- Bernard Urban Farms, Neva, Settled in 1894.
- Wahleithner Farms, Wolf River, Settled in 1889.

- Virginia and Morris Wegner Farm, Peck, Settled in 1907.
- Charles J's Wild Wild's Dairy Farm, Rolling, Settled in 1903.

Registers of Architectural, Historical, and Archaeological Places

The State and National Registers of Historic Places lists properties, historic districts, individual buildings, parks, bridges, locomotives, and archaeological sites. There are 5 buildings listed on either or both registers in Langlade County, the Antigo Depot, Antigo Opera House, Antigo Post Office, Antigo Public Library and Deleglise Cabin (a Carnegie Library), and the Langlade County Courthouse. All of the buildings are in Antigo.

Similar to the State Register of Historic Places, the Architecture and History Inventory (AHI) also provides historical and architectural information. This database contains information on approximately 120,000 properties in Wisconsin and is maintained by the Wisconsin Historical Society. The AHI contains data on structures that illustrate Wisconsin's unique history and cultural landscape. Inclusion in this inventory affords no special protection to structures nor does it convey special status, rights, or benefits to owners. The majority of the structures in the inventory are located in the City of Antigo. In all, there are 146 buildings listed in this inventory.

The Archaeological Site Inventory (ASI) is the most comprehensive list of the archaeological sites, mounds, marked and unmarked cemeteries, and cultural sites in the state. However, it includes only those sites that have been reported to the Wisconsin Historical Society and therefore does not include all possible sites and cemeteries of archeological significance in the state. This inventory has been developed over a period of 150 years, therefore, each entry in the database varies widely and the information has not been verified in all cases.

Community Design and Retaining Community Character

The appearance of a community changes over time. Styles of buildings and development patterns react to changing economic conditions and technologies, and to changing tastes. Each community becomes an expression of the conditions that have prevailed throughout its history.

The design of a community must be primarily focused on serving the needs of residents today. In the process of adapting community design to changing needs care must be taken not to discard the remnants of the past that has made the community what it is today. At the same time a community is not a museum and must change with the times. Community design is a balancing act: balancing the past and the future; the needs of business with those of families; the modern and the traditional; and, most importantly, the diverse needs

and aspirations of the people who call that community home.

Goals, Objectives & Policies

Goals:

- 1) Preserve and enhance cultural, historic, and archeological resources.
- 2) Promote arts and culture throughout the county.

Objectives:

- 1) Continue identification and protection of key cultural, historic and archeological sites.
- 2) Encourage nomination of sites to the State Historical Society.
- 3) Support efforts of the Langlade County Historical Society.

Policies:

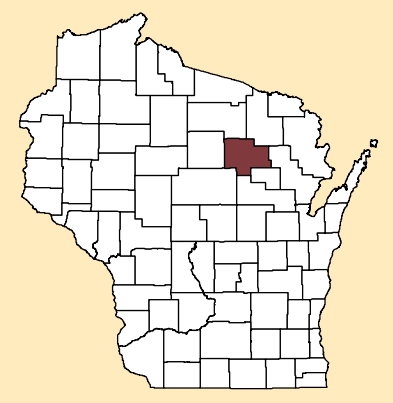
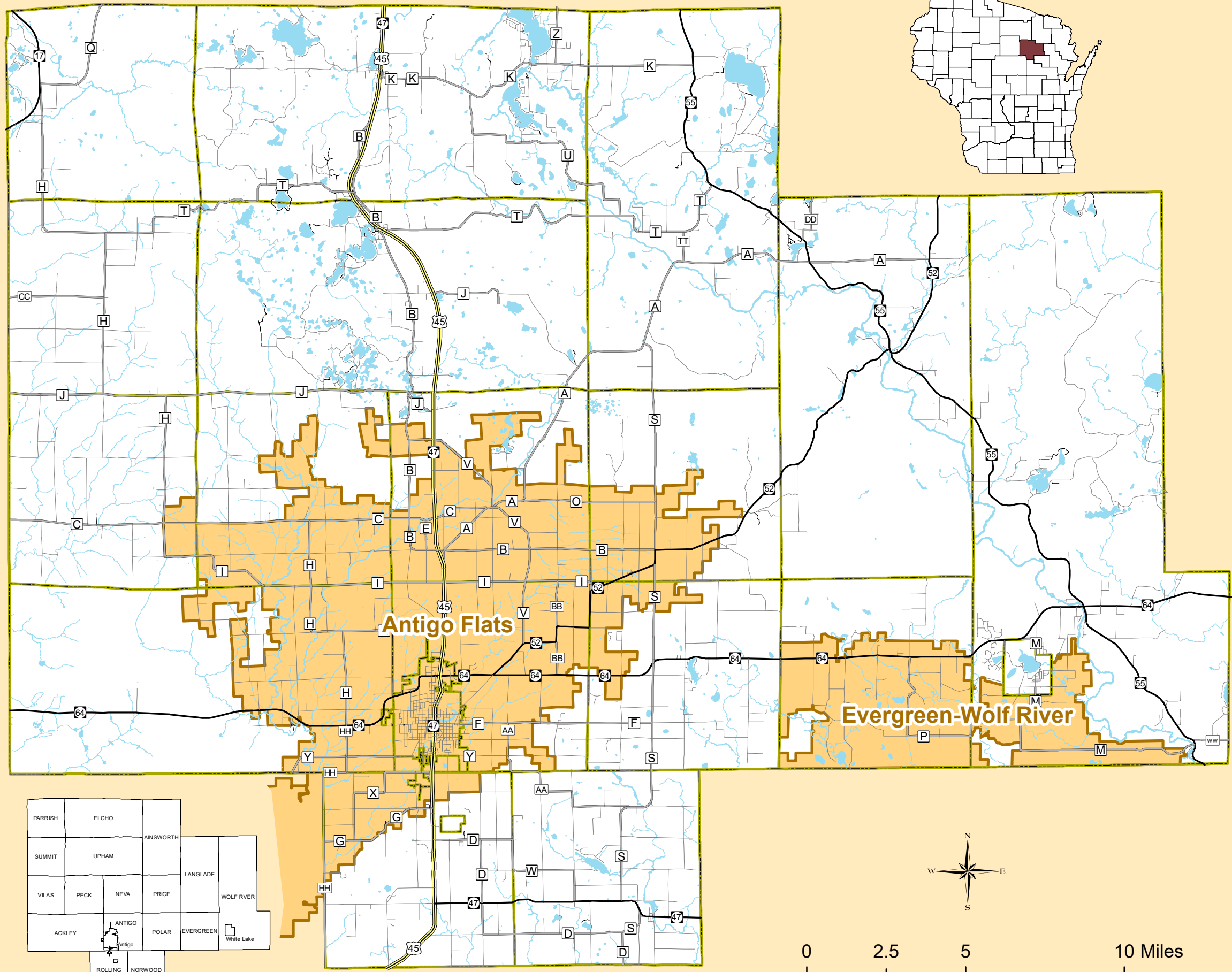
- 1) Work to identify and preserve the locations of historic sites throughout the county.
- 2) Discourage the destruction of these sites and minimize incompatible uses around them that would have negative impacts on the resource.
- 3) Work with federal, state and county agencies to ensure all

sites are identified and properly protected.

- 4) Encourage efforts to educate and inform the public about history and local culture.

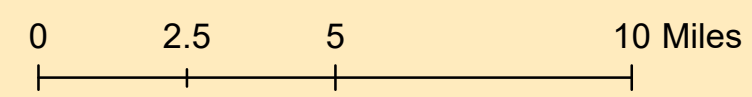
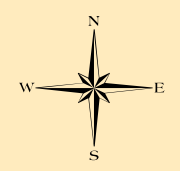
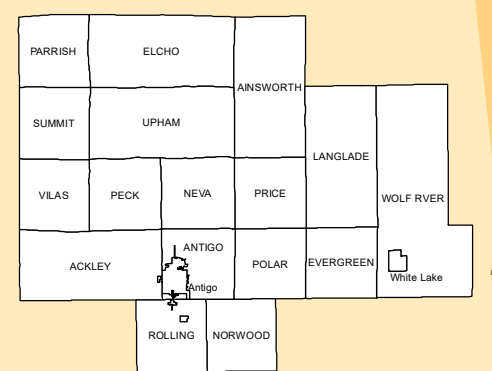
Map 5
Agricultural Enterprise Areas (AEA)

Langlade County, Wisconsin



- Minor Civil Divisions
- U.S. Highway
- State Highway
- County Highway
- Local Road
- Private Road / Other
- Water
- Agricultural Enterprise Area (AEA)

Source: WI DNR, NCWRPC, Langlade Co, DATCP
 This map is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only. NCWRPC is not responsible for any inaccuracies herein contained.



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Chapter Three

Housing

3.1 Background

This is the third of nine chapters that comprise the Langlade County Comprehensive Plan. This chapter is based on the statutory requirement for a “compilation of objectives, policies, goals, maps, and programs of the local governmental unit to provide an adequate housing supply that meets existing and forecasted housing demand in the local governmental unit.

The chapter also assesses the age, structural value and occupancy characteristics of the local governmental unit’s housing stock. Additionally, it identifies specific policies and programs that promote the development of housing for residents of the local governmental unit and provides a range of housing choices that meet the needs of persons of all income levels, all age groups, persons with special needs, policies and programs that promote the availability of land for the development or redevelopment of low-income and moderate-income housing. As well as policies and programs to maintain or rehabilitate

the local governmental unit’s existing housing stock.”

Housing is a basic need for everyone the availability of good housing is a central concern of any comprehensive planning effort. Planning for the future of the county requires a comprehensive approach to assure that the housing needs of all segments of the population are addressed.

Previous Planning Efforts

[Wisconsin State Consolidated Housing Plan, 2015-19](#)

The Consolidated Housing Plan is required by the Department of Housing and Urban Development (HUD) in the application process required of the State in accessing formula program funds for Small Cities Community Development Block Grants (CDBG), HOME Investment Partnerships, Emergency Shelter Grants, and Housing Opportunities for Persons with AIDS. “The Consolidated Plan provides the framework for a planning process used by States and localities to identify housing,

homeless, community and economic development needs and resources and to tailor a strategic plan for meeting those needs.” This is how the Department of Housing and Urban Development (HUD) describes the Consolidated Plan, which consists of a 5-year strategic plan, annual action plans, and annual performance reports.

The Consolidated Plan has five parts: (1) an overview of the process; (2) a description of public participation; (3) a housing, homeless, community and economic development needs assessment; (4) long-term strategies to meet priority needs; and (5) an action plan. The Division of Housing and Intergovernmental Relations (DHIR) prepares the Consolidated Housing Plan, and is focused on low income and special needs populations.

The plan looks at a number of different factors that are significant components of the housing picture. Housing affordability is a primary consideration. According to federal guidelines a family should not have to spend more than thirty percent of its income on housing. Using this standard “...households in the low-income range have great difficulty finding adequate housing within their means and that accommodates their needs.

The gap between wages and housing costs is only made worse by the

shortage of affordable housing units. “Despite overall economic prosperity state and nationwide, community and housing resources are becoming scarcer. If the dwindling resources are not as a result of appropriation cuts, it is then because of significantly increasing needs.” Bearing in mind that this report was prepared in 2000, it is safe to assume that the situation has not improved significantly. Recent economic conditions have been unlikely to reduce the need for affordable housing, and the supply has probably not kept pace.

Other factors than the construction of new housing units affect the quality and availability of housing as well. Just as the difficulty of providing affordable housing to low-income families can be stated in terms of an hourly wage, there is more involved in a well-housed community than the number of housing units.

The State Consolidated Housing Plan (CHP) is primarily focused on how government action can address special needs, not on the workings of the private housing market. The focus of activities and strategies described in the Plan primarily address meeting the evolving needs of low and moderate income persons, including persons of special needs requiring targeted assistance.

Regional Livability Plan, 2015

The Regional Comprehensive Plan was adopted by the North Central Wisconsin Regional Planning Commission in 2015. It is an update of a plan adopted by NCWRPC in 1981. The RPC looks at housing in all ten counties that make up the North Central Region, including Langlade. It looks at general trends within the Region and recommends how county and local government can address their housing issues.

Housing is a crucial component of livability. The complex dynamics of the housing market impact future housing development. Understanding this relationship provides a basis for the formulation of policy to coordinate transportation facilities with a sustainable pattern of residential development. The connection between home and work is a fundamental function of any transportation system. Home-work connections should be efficient, reinforce and strengthen community ties, and foster economic development and environmental sustainability. Understanding the factors affecting people's decisions on meeting their housing needs provides a basis for establishing solid home-work connections in the region.

The policies that affect the availability and affordability of

housing, such as minimum lot sizes, can have an effect on traffic levels, land use patterns and infrastructure costs, by determining the density of development. A range of factors must be considered to ensure access to a safe, sanitary, and affordable housing for all needs and income levels. Policies that regulate the location and standards for housing can also have a profound effect on the quality of life and the character of our communities throughout the Region.

Balancing the needs of diverse communities with different housing issues requires that each situation be considered individually, but that a uniform standard of quality and affordability be applied, and that each community seeks the solution which fits the unique challenges that it faces. This planning process will identify goals, objectives and performance measures to advance the Region's housing efforts.

Issues

- Aging Housing Stock

According to the 2010 Census nearly 42 percent of occupied housing units in the county were built before 1960, a slightly higher share than the 39.5 percent of units in the state as a whole. However, these older housing units are not evenly distributed throughout the county. In the Town of Ainsworth they represent less than six percent

of the housing stock, whereas in the City of Antigo they make up almost two-thirds of all housing. These units are reaching (or have passed) the half-century mark, and as such, require a higher level of maintenance in order to meet the standards of safe and sanitary housing. This is why housing rehabilitation programs that allow homeowners to improve the condition of their older housing are important.

- Affordability

Moderately priced housing available to middle-income, and working families is as important to the county as meeting the needs of the poor, elderly, or disabled. The availability of housing for workers can be an important factor in economic development.

Over the years there have been significant increases in the value of rural and especially lakefront property. This has had the effect of making real estate and property taxes difficult for long-time residents and people on fixed income to afford. Generally the highest levels of property value increase are in the towns seeing the greatest increase in the number of seasonal and recreational housing units. All of the five towns (Ackley, Antigo, Neva, Peck and Vilas) where the percentage of housing units built before 1960 is higher than the state level are in the area around the City of Antigo. This older housing surrounding the county's largest

urbanized area offers a way to provide affordable housing.

The National Low Income Housing Coalition assembles a yearly list of estimates of the income required to afford housing using this "cost-burden" standard for localities across the country. This report focuses on rental housing, but can be broadly applied to owner-occupied housing as well. The report calculates that for the state as a whole a full-time worker must earn \$16.52 an hour in order to be able to afford a two-bedroom apartment. In Langlade County a full time worker must earn \$13.25 per hour to afford the two-bedroom apartment. For a worker earning minimum wage this means working 73 hours every week to afford that apartment.

- Seasonal Dwellings

Langlade County is unique in the number of seasonal and recreational housing units throughout the County. During the 1990s growth in seasonal dwellings slowed, and some towns saw an actual decrease. This likely is the result of conversion of seasonal to year-round dwellings as residents retire to what had been recreational properties. By the time of the 2000 Census most of the prime lakefront property in the county had been developed. Most of

the increase in the number of seasonal dwellings took place during the 1980s.

These trends speak to more fundamental changes that have taken place in the county over that period. The growth in seasonal dwellings during the 1980s was part of change from an economy primarily based on natural resources to an orientation toward tourism and outdoor recreation. The subsequent conversion of seasonal to year-round and retirement housing, reflects the aging of the Langlade County population. Although agriculture, forestry and manufacturing still form the basis of the county's economy, the influx of visitors and retirees to the county offers both challenges and opportunities for how Langlade County may change in the future.

The proliferation of seasonal dwellings and the subsequent conversion to retirement homes both exemplify important trends in the county: the aging of the population and a gradual shift away from the exploitation of natural resources as raw materials to nature-based tourism. Forestry will remain an important economic activity, but more and more of the county's forests and lake will be important as amenities that will provide a basis

for the Langlade County economy in the future.

- Elderly/Retiree Housing Needs

Langlade County is aging. Not just as a result of residents getting older, but also as older people move there to retire. Nearby Oneida and Vilas Counties has been identified as two of a number of counties around the country that are particularly attractive to residents looking for a place to retire. This influx of seniors has a number of results: it has increased the population and led to the construction of new housing units; raising the median age; and it has brought many new residents into the county from a number of different backgrounds with various personal assets that have expanded the local economy. In one way though, it has introduced a different dynamic into the county. This change creates a special set of housing issues.

Around the country a number of local governments have made a conscious decision to make it part of their economic development strategy to attract retirees. These new residents bring new resources to the community; they can provide growth to what had been stagnant rural economies; and have led to job growth in other sectors that capitalize on the same amenities that draw people to the county looking for a retirement home. The continued retirement of the baby boom generation, will bring a new

influx of retirees to the places that seek to serve this growing market.

If the county is to consider marketing itself as an attractive alternative for retiring boomers then it needs to look at an integrated approach to the kind of public services that go along with an increase in the aging population. As people age they have more need for specialized services. The most obvious of these is for health care, but there is a more subtle relationship between an aging population and their housing needs.

“Aging in place” is the phrase used to describe how a person is able to remain in their home as they age. Sometimes the support a person needs to remain in her home can be as simple as someone to help with the yard-work, cleaning, or shopping. Sometimes it can mean having a home health-care worker visit a few times a week to assist with medications or physical therapy. Almost always such services are cheaper than moving that person to a more structured living situation. Whether and how these services, that permit seniors to age in place, are provided is thus a housing issue.

The predominance of seasonal and recreational housing units in Langlade County presents a special challenge. The dispersed nature of

this type of housing and the “Northwoods” character of the county itself make providing these services to residents problematic.

- Subsidized/Special-needs Housing

The USDA-RD’s Section 515 provides low-interest loans for low-income rental units in rural areas and cities with populations under 10,000. This was the financing mechanism for roughly forty percent of the subsidized units in the county.

Section 8 is the largest federal housing program, which take two forms: project-based and tenant-based. There are 149 project-based Section 8 units in Langlade County. The tenant-based Section 8, also known as housing vouchers is not tied to particular housing units but instead allows clients to arrange with any landlord who agrees to participate in the program, to rent an apartment at market rates. The tenant is required to pay a portion of the rent, usually conforming to thirty percent of gross income, and present a voucher for the remainder that is subsidized.

There are currently 232 housing units that take advantage Low-Income Housing Tax Credits (LIHTC). This is privately owned housing that receives a tax credit in exchange for pledging to offer rental units at affordable prices to low- and moderate-income families. In addition to directly subsidized housing units and indirect

subsidies, such as tenant-based Section 8 or LIHTC meant to reduce the cost of rental housing to low-income residents, there are also a number of programs focused on rehabilitation and reducing the cost of homeownership.

A number of factors affect affordability, including the availability and cost of developable land, market demand, and the type and quality of housing. Using the federal standard of thirty percent of income, although affordability is not a serious problem in Langlade County at this time, certain trends within the economy, especially the appreciation of lakefront property, could lead to it becoming a problem in the future.

- Waterfront Development

What distinguishes waterfront development from other similar

developments elsewhere is the unique potential for environmental degradation. Shoreland zoning has the goal of protecting water quality, fish and wildlife habitat, recreation, and natural beauty.

The concentration of on-site sewage disposal systems in close proximity to surface water presents two challenges. First, adequate land is necessary to contain a septic system away from all drinking wells. The second challenge is to keep septic effluent contained in a drainage field long enough to break down nitrates and phosphates, so they don't combine with surface water. High nitrate and phosphate levels in surface waters produce algae blooms. The developing awareness of the linkage between surface and groundwater contamination from lakeside development has led to a DNR rule revision process for shoreland zoning (NR 115).

3.2 Inventory & Trends

Planning for housing considers if the housing needs of all Langlade County residents are being met. Only Langlade County housing was evaluated, not neighboring counties. Parts of the county have seen strong growth in the number of housing units, with much of this growth in seasonal and recreational properties. Much of the highest value property is concentrated in the area around Antigo and the established recreational areas in the northwest corner of the county.

Langlade County has a higher level of owner occupancy compared to state levels. Homeownership levels are lowest in the City of Antigo and the Village of White Lake. Nearly twenty five percent of all housing units in the county are seasonal.

The combined total of both renters and owners in 2016 who report spending more than thirty percent on housing was highest in the Town of Rolling, followed by Ackley, the City of Antigo, and Norwood.

Existing Housing Stock

across the county. **Table 3-1** shows the trend in housing units.

Housing Units

The total number of housing units in Langlade County (12,387) rose by 1 percent or 119 units between 2010 and 2016, just under the state's growth of 2 percent. But this increase was not spread evenly

Table 3-1: Total Housing Units

Minor Civil Division	2000	2010	2016 Estimate	2000-2010 % Change	2010-2016 % Change	2010-2016 Net Change
Ackley	226	238	229	5%	-4%	-9
Ainsworth	549	529	589	-4%	11%	60
Antigo	580	617	585	6%	-5%	-32
Elcho	1370	1512	1453	10%	-4%	-59
Evergreen	218	281	254	29%	-10%	-27
Langlade	375	473	443	26%	-6%	-30
Neva	385	448	450	16%	0%	2
Norwood	374	430	439	15%	2%	9
Parrish	92	101	104	10%	3%	3
Peck	163	190	170	17%	-11%	-20
Polar	383	456	428	19%	-6%	-28
Price	101	125	125	24%	0%	0
Rolling	539	623	646	16%	4%	23
Summit	142	180	158	27%	-12%	-22
Upham	661	904	909	37%	1%	5
Vilas	161	171	187	6%	9%	16
Wolf River	746	898	895	20%	0%	-3
V. of White Lake	184	212	208	15%	-2%	-4
City of Antigo	3938	3972	4115	1%	4%	143
County	11,187	12,268	12,387	10%	1%	119
State	2,321,144	2,593,073	2,649,597	12%	2%	56,524

Source: U.S. Census, American Community Survey

Over the period 2010 to 2016 the number of housing units in the

towns of, Ainsworth, Neva, Norwood, Parrish, Rolling, Upham, Vilas, and

the City of Antigo increased. The largest increase was in the City of Antigo, which added roughly 140 housing units.

An interesting pattern emerges when looking at the total number of housing units added in the county over the decade of the 1990s. Eight towns (Elcho, Evergreen, Parrish, Peck, Price, Summit, Upham and Wolf River) actually saw a decline in the number of housing units during the decade. Four of these (Elcho,

Parrish, Upham, and Wolf River, again all in the north and east) are towns where the number of units doubled over the twenty-year period. This may reflect a loss of some less substantial recreational units. During the 2000s every town, but the Town of Ainsworth saw an increase in total housing units. However, between 2010 and 2016 just about half of the towns saw an overall decrease in housing units especially in the Towns of Elcho, Antigo, and Langlade.

Table 3-2: Housing Units, Year Built, 2016

Minor Civil Division	Before 1940	1940-59	1960-79	1980-99	2000-16	Total Units
Ackley	60	26	37	58	48	229
Ainsworth	44	44	183	209	109	589
Antigo	141	67	145	174	58	585
Elcho	215	282	309	404	243	1453
Evergreen	23	18	101	54	58	254
Langlade	42	37	85	184	95	443
Neva	120	66	93	94	77	450
Norwood	128	43	82	124	62	439
Parrish	13	15	24	28	24	104
Peck	52	21	26	39	32	170
Polar	116	34	76	114	88	428
Price	30	19	26	31	19	125
Rolling	100	37	166	259	84	646
Summit	31	3	29	59	36	158
Upham	116	228	214	192	159	909
Vilas	41	21	40	66	19	187
Wolf River	57	87	225	334	192	895
V. of White Lake	68	23	45	39	33	208
City of Antigo	1566	923	645	742	239	4115
County	2,963	1,994	2,551	3,204	1,675	12,387
% of Total	24%	16%	21%	26%	13%	100%
State	523,908	450,626	651,553	635,326	388,184	2,649,597

Source: U.S. Census, American Community Survey

Building Age

Langlade County has a housing stock that is slightly older than the state. For the state 36.8 percent of the housing was built before 1960, in Langlade County 40 percent are that old. **Table 3-2** shows the number of housing units built during twenty-year periods. While only 15 percent of housing in the state reported in the 2016 American Community Survey was built in the previous sixteen years, 14 percent of housing in Langlade County was built over the same time period. The town of Elcho saw the greatest increase in units built between 2000 and 2016, adding 243 units, just more than the City of Antigo which added 239 units over the same period.

Housing Type

The most significant fact about housing types in Langlade County is the predominance of single-family housing 82 percent for the county as against 71 percent for the state as a whole. This is not unusual for a rural area. Also notable is the number of manufactured and mobile homes¹, which account for 7.2 percent of housing units, nearly double the percentage for the state.

Table 3-3 shows the number and percentage of housing units of each type.

¹ The Census lumps the two together under the definition of “a housing unit that was originally constructed to be towed on its own chassis.”

Table 3-3: Housing Type, 2016

Minor Civil Division	Single Family	Duplex	3 to 19 Units	Over 20 Units	Mobile Homes	Other
Ackley	204	11	0	0	14	0
Ainsworth	479	0	0	0	110	0
Antigo	562	4	0	0	19	0
Elcho	1277	4	35	0	137	0
Evergreen	202	0	0	0	52	0
Langlade	360	0	0	2	81	0
Neva	411	2	0	0	37	0
Norwood	393	0	11	0	33	2
Parrish	97	0	0	0	7	0
Peck	156	0	0	0	14	0
Polar	388	5	6	0	29	0
Price	113	1	0	0	11	0
Rolling	536	4	8	0	98	0
Summit	131	0	0	0	27	0
Upham	878	0	0	0	31	0
Vilas	160	0	0	0	27	0
Wolf River	750	0	0	0	145	0
V. of White Lake	153	5	34	0	16	0
City of Antigo	2856	369	556	299	8	27
County	10,106	405	650	301	896	29
State	1,878,581	172,510	319,784	183,978	94,171	573

Source: U.S. Census, American Community Survey

Single-family residences are the largest class of housing type, ranging from 69 percent of total housing units in the City of Antigo to over ninety percent in eight towns (Antigo, Neva, Norwood, Parrish, Peck, Polar, Price, and Upham). The Towns of Ainsworth, Evergreen and Langlade have the highest percentages of mobile home housing units. Altogether, there are seven towns (Ainsworth, Evergreen, Langlade, Rolling, Summit, Vilas, and Wolf River) where mobile homes

make up more than ten percent of the housing stock.

Value Characteristics

Median Home Value

There is only one town in Langlade County above the median home value for the state. The highest median value is in the Town of Upham; 112 percent of the state median. Five towns (Ackley, Evergreen, Peck, Polar, and Rolling) saw median values increase by more than 70 percent between 2000 and

2016, with values in the Town of Peck increasing by 134 percent. Median home values in the City of Antigo, the Village of White Lake, and the Town of Summit were half or less than the state median. Between 2010 and 2016 the Town of Summit saw the largest decrease in median values, decreasing by 42

percent or roughly \$64,000. The greatest increase in median home values was in the Town of Peck, as their median home value grew by 20 percent or roughly \$22,000. **Table 3-4** shows the median value of owner-occupied housing and how it has changed.

Table 3-4: Median Home Value of Owner Occupied Housing

Minor Civil Division	2000	2010	2016 Estimate	2000-2016 % Change	2010-2016 % Change	2010-2016 Net Change
Ackley	\$75,800	\$131,300	\$133,200	76%	1%	\$1,900
Ainsworth	\$71,200	\$125,700	\$121,100	70%	-4%	-\$4,600
Antigo	\$85,700	\$129,500	\$128,600	50%	-1%	-\$900
Elcho	\$95,300	\$145,500	\$157,700	65%	8%	\$12,200
Evergreen	\$56,700	\$115,800	\$116,300	105%	0%	\$500
Langlade	\$78,900	\$158,600	\$130,700	66%	-18%	-\$27,900
Neva	\$81,100	\$120,400	\$118,300	46%	-2%	-\$2,100
Norwood	\$77,400	\$126,100	\$132,800	72%	5%	\$6,700
Parrish	\$85,000	\$143,800	\$123,800	46%	-14%	-\$20,000
Peck	\$56,900	\$110,900	\$133,300	134%	20%	\$22,400
Polar	\$87,900	\$164,200	\$154,300	76%	-6%	-\$9,900
Price	\$86,300	\$138,200	\$135,400	57%	-2%	-\$2,800
Rolling	\$91,000	\$153,100	\$159,400	75%	4%	\$6,300
Summit	\$85,000	\$152,500	\$88,300	4%	-42%	-\$64,200
Upham	\$108,000	\$168,500	\$186,700	73%	11%	\$18,200
Vilas	\$87,500	\$132,100	\$135,400	55%	2%	\$3,300
Wolf River	\$85,400	\$126,400	\$129,700	52%	3%	\$3,300
V. of White Lake	\$46,900	\$76,900	\$67,300	43%	-12%	-\$9,600
City of Antigo	\$56,700	\$77,600	\$77,400	37%	0%	-\$200
County	\$68,600	\$107,500	\$108,100	58%	1%	\$600
State	\$112,200	\$169,000	\$167,000	49%	-1%	-\$2,000

Source: U.S. Census, American Community Survey (ACS)

Although the median home value in Langlade County is roughly 65 percent of the state median, it grew close to the same rate during the 1990s. Of the top ten towns in

terms of median value four (Ackley, Polar, Norwood, and Rolling) are located near the City of Antigo. Elcho and Upham, located in the Northern part of the County are also

included in terms of highest median home value.

Rents in Langlade County are lower but generally comparable to rents in surrounding counties. There seems to be little correlation between the level of rents and the median home values. Neither does there appear to be a connection between high home values and the level of affordability, defined as spending more than 30 of income on housing.

Monthly Owner Costs

There is a general consensus that a family should not have to spend more than thirty percent of its income on housing – this is the accepted definition of housing affordability. The highest median owner costs are in the Towns of Upham and Rolling, followed by the Town of Elcho, however, where Elcho has one of the highest percentages of homeowners spending over 30 percent of their income on housing, Upham is in the mid-range and Rolling has one of the lowest percentages of homeowners spending over 30 percent of their income on housing. The highest percentage of households with owner costs more

than 30 percent of income are in the Town of Vilas (38.3%) followed by Elcho (36.8%) and Evergreen (35.5%). The lowest percentages are in the Town of Price (8.7%), Town of Neva (17.4%), and Town of Summit (17.4%). Overall, 26 percent of Langlade County homeowners reported spending over 30 percent of their income on housing, just under the rate for the entire state. **Table 3-5** shows the percentage of homeowners and renters who spend more than thirty percent of their income on housing.

There seems to be small connection between the dollar value of housing units and affordability as expressed as a percentage of income. The Town of Upham, with the highest home prices is tenth in terms of affordability, while the City of Antigo with the second lowest median value is the seventh highest in affordability. In White Lake, with the lowest median home value in the county, 30.9 percent of homeowners spent more than 30 percent of their income on housing, the sixth highest. The Town of Polar has the second highest median value, but is twelfth in affordability.

Table 3-5: Monthly Housing Cost >30% of Income, 2010-2016

Minor Civil Division	2010		2016	
	Owner	Renter	Owner	Renter
Ackley	23.1%	15%	18.7%	62.6%
Ainsworth	24.7%	28%	32.4%	0%

Antigo	20.2%	30.3%	12%	44.1%
Elcho	36.8%	34.6%	28.3%	29.5%
Evergreen	35.5%	0%	26.4%	33.4%
Langlade	27.6%	30%	33.9%	21.1%
Neva	17.4%	39.3%	22.5%	35.3%
Norwood	29.5%	26.1%	26.8%	46.7%
Parrish	25.8%	0%	2.6%	0%
Peck	31.4%	0%	34.6%	40%
Polar	29.5%	33.3%	18.4%	25.9%
Price	8.7%	13.3%	14.3%	41.7%
Rolling	23.5%	28.3%	18.2%	65.2%
Summit	17.4%	0%	28.7%	0%
Upham	27.6%	24%	25.1%	42.9%
Vilas	38.3%	22.2%	26.9%	25%
Wolf River	34.9%	12.5%	32.9%	21.3%
V. of White Lake	30.9%	73.9%	9%	50%
City of Antigo	23.6%	48.5%	20.1%	53.2%
County	26%	43.9%	22.1%	48.8%
State	28.4%	44.3%	22.8%	43.8%

Source: U.S. Census, American Community Survey (ACS)

Median Rent

Rents increased in Langlade County faster than in the state as a whole. However, renting costs in Langlade County are still lower than they are for the state as a whole. Langlade County seems to be average when compared to the rents in surrounding counties; however they seem to be increasing at the high end of the range. See [Table 3-6](#).

Gross rent increased by thirty percent or more between 2000 and 2010 in thirteen of the nineteen municipalities in Langlade County. Two towns (Elcho and Langlade) saw increases less than fifteen percent.

Overall the county affordable housing situation appears to be about average for a rural county. According to NLIHC workers in Langlade County working at minimum wage would have to work 73 hours a week to afford a two-bedroom apartment, compared to 77 hours a week for the states non-metro areas. For all non-metro counties 26 percent of households rent, in Langlade County 24 percent of households rent. [Table 3-7](#) shows median gross rents within Langlade County.

According to the 2010 Census, affordability problems were not evenly distributed through the county. In seven of nineteen

municipalities (Antigo [city & town], Elcho, Langlade, Neva, Polar, and the Village of White Lake) more than

twenty percent of renters spend over thirty percent of income on housing.

Table 3-6: Median Gross Rent, Surrounding Counties

Minor Civil Division	2000	2010	2016 Estimate	2010-2016 % Change	2010-2016 Net Change
Forest	\$325	\$495	\$472	-0.05%	-\$23
Lincoln	\$433	\$548	\$620	13%	\$72
Marathon	\$484	\$639	\$704	10%	\$65
Menominee	\$245	\$336	\$457	36%	\$121
Oconto	\$429	\$561	\$617	10%	\$56
Oneida	\$460	\$618	\$730	18%	\$112
Shawano	\$438	\$574	\$602	5%	\$28
Langlade	\$405	\$509	\$613	20%	\$104
State	\$540	\$713	\$789	11%	\$76

Source: U.S. Census, American Community Survey (ACS)

Table 3-7: Median Gross Rent

Minor Civil Division	2000	2010	2016 Estimate	2010-2016 % Change	2010-2016 Net Change
Ackley	\$300	\$625	\$532	-15%	-\$93
Ainsworth	\$425	\$940	\$660	-30%	-\$280
Antigo	\$423	\$670	\$775	16%	\$105
Elcho	\$392	\$442	\$541	22%	\$99
Evergreen	\$475	*	\$625	*	*
Langlade	\$413	\$392	*	*	*
Neva	\$419	\$725	\$579	-20%	-\$146
Norwood	\$583	\$769	\$816	6%	\$47
Parrish	\$500	*	*	*	*
Peck	\$188	\$750	\$667	-11%	-\$83
Polar	\$471	\$634	\$668	5%	\$34
Price	\$425	\$842	\$808	-4%	-\$34
Rolling	\$443	\$621	\$606	-2%	-\$15
Summit	\$425	*	*	*	*
Upham	\$379	\$579	*	*	*
Vilas	\$0	\$850	*	*	*
Wolf River	\$386	\$492	\$573	16%	\$81
V. of White Lake	\$381	\$692	\$533	-23%	-\$159
City of Antigo	\$398	\$471	\$613	30%	\$142

County	\$405	\$509	\$613	20%	\$104
State	\$540	\$713	\$789	11%	\$76

Source: U.S. Census, American Community Survey (ACS)
 * Information not disclosed because of a small sample size.

Occupancy Characteristics

Owner Occupied

Homeownership is about ten percent higher in Langlade County than in the state as a whole. At over 79 percent in 2000 this rate has remained relatively stable going as far back as 1980, and has just slightly decreased between 2000 and 2016. This is fairly typical of

rural areas, where there are few rental units. Every town has a homeownership rate over 85 percent in 2010, except for Elcho, which had the lowest rate at 81 percent, a three percent drop since 2000. The levels of owner-occupancy are lowest in the City of Antigo and the Village of White Lake. Homeownership levels in both municipalities have been declining, but are still close to the state levels. **Table 3-8** shows the percentage of owner occupied units and how it has changed.

Table 3-8: Owner Occupancy

Minor Civil Division	2000	2010 Estimate	2016 Estimate	2010-2016 % Change
Ackley	90%	89%	83%	-6%
Ainsworth	91%	90%	87%	-3%
Antigo	90%	91%	89%	-1%
Elcho	84%	81%	85%	4%
Evergreen	88%	87%	88%	0%
Langlade	89%	87%	91%	4%
Neva	91%	89%	90%	2%
Norwood	91%	88%	87%	-1%
Parrish	93%	97%	100%	3%
Peck	94%	87%	93%	6%
Polar	88%	90%	85%	-5%
Price	87%	87%	74%	-13%
Rolling	87%	88%	88%	-1%
Summit	88%	94%	90%	-4%
Upham	90%	90%	96%	6%

Vilas	95%	90%	89%	-2%
Wolf River	87%	85%	85%	1%
V. of White Lake	71%	64%	68%	4%
City of Antigo	67%	62%	62%	0%
County				
County	79%	76%	76%	0%
State	68%	68%	67%	-1%

Source: U.S. Census, American Community Survey

Vacancy

The vacancy rate in Langlade County (13.3%) is slightly higher than the rate for the entire state (8.1%). Vacancy rates dropped in roughly half of the municipalities, but rose in Ackley, the Town of

Antigo, Evergreen, Langlade, Neva, Norwood, Peck Price and Summit. In 2010 the highest vacancy rates were in the Town of Parrish and Town of Upham. **Table 3-9** displays the vacancy rates for 2000, 2010 and 2016, and the change over those time periods.

Table 3-9: Vacancy Rates

Minor Civil Division	2000	2010 Estimate	2016 Estimate	2010-2016 % Change
Ackley	3.5%	5.6%	16%	10.2%
Ainsworth	3.9%	5.3%	0%	-5.3%
Antigo	4.3%	7.8%	12%	4.1%
Elcho	3.5%	12.9%	7%	-6.1%
Evergreen	3.7%	1.1%	4%	2.8%
Langlade	6.1%	14.3%	32%	17.6%
Neva	3.4%	7.0%	17%	9.8%
Norwood	2.9%	7.6%	14%	5.9%
Parrish	1.1%	55.4%	0%	-55.4%
Peck	3.1%	1.6%	4%	2.1%
Polar	2.6%	14.4%	11%	-3.8%
Price	4.9%	1.2%	6%	4.3%
Rolling	3.9%	7.2%	2%	-5.4%
Summit	4.2%	2.9%	6%	2.8%
Upham	6.0%	32.8%	1%	-32.2%
Vilas	3.2%	4.5%	0%	-4.5%
Wolf River	2.8%	8.7%	1%	-8.0%
V. of White Lake	9.8%	15.0%	15%	-0.1%
City of Antigo	7.3%	11.5%	1%	-10.6%

County	5.1%	13.3%	4%	-9.6%
State	4.1%	8.1%	7%	-1.5%

Source: U.S. Census, American Community Survey

Seasonal Housing

There has been overwhelming growth in seasonal dwellings in Langlade County over the last twenty years. Of the towns that saw an increase in seasonal dwellings, the smallest increase was in the Towns of Ackley, Neva, Parrish, and the Village of White Lake. Between

2000 and 2016, seasonal dwellings in the county increased by 69 percent. However, over the last six years the rate has slowed to only 1 percent. **Table 3-10** shows seasonal housing units.

Table 3-10: Seasonal Housing Units

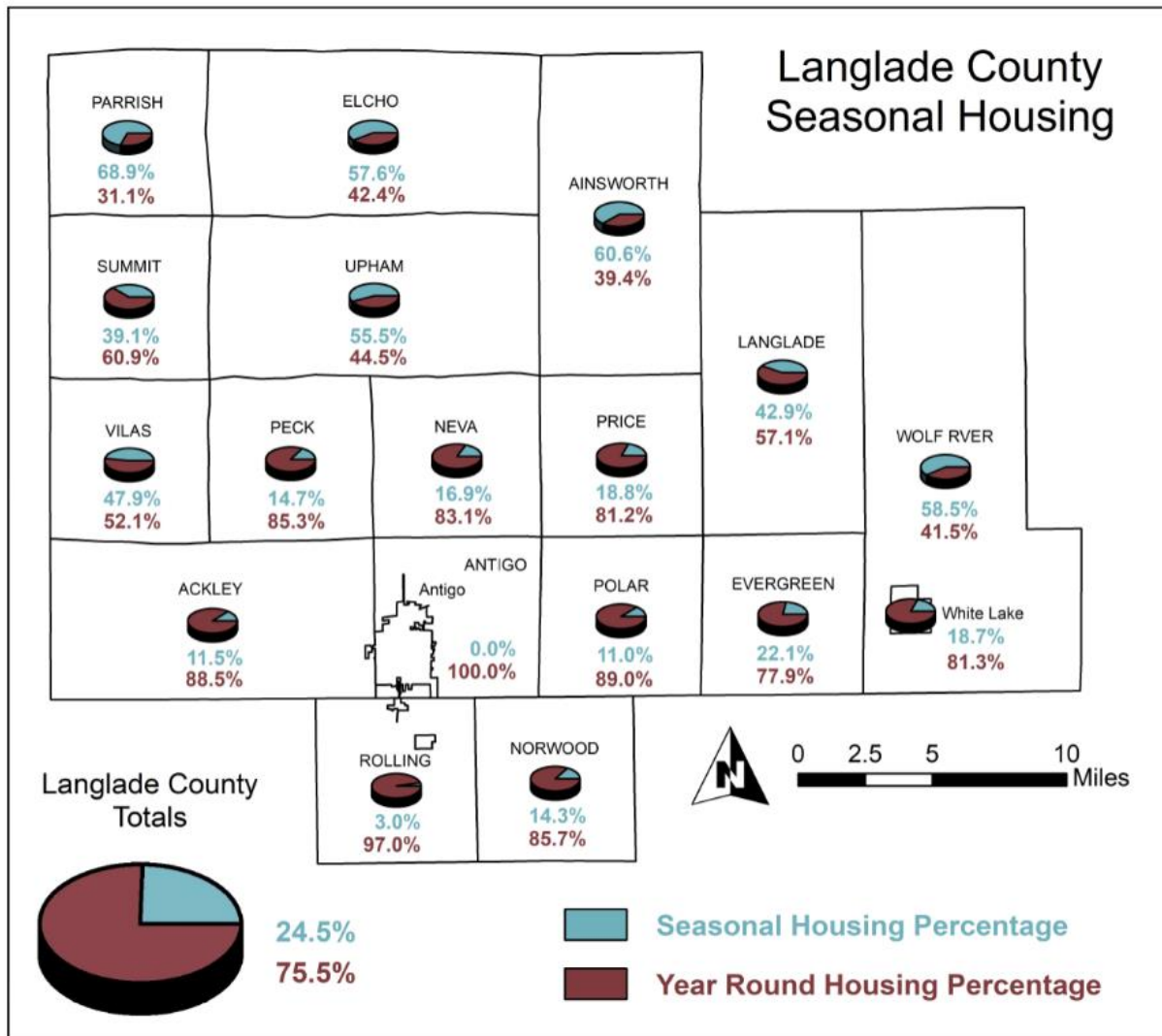
Minor Civil Division	2000	2010	2016 Estimate	2010-2016 % Change	2010-2016 Net Change
Ackley	16	19	21	11%	2
Ainsworth	273	293	346	18%	53
Antigo	5	9	-	-100%	(9)
Elcho	709	880	862	-2%	(18)
Evergreen	29	60	73	22%	13
Langlade	144	229	195	-15%	(34)
Neva	12	61	63	3%	2
Norwood	31	51	51	0%	0
Parrish	50	61	65	7%	4
Peck	22	38	19	-50%	(19)
Polar	19	44	45	2%	1
Price	4	26	28	8%	2
Rolling	6	18	27	50%	9
Summit	70	102	75	-26%	(27)
Upham	302	550	524	-5%	(26)
Vilas	59	66	72	9%	6
Wolf River	357	507	548	8%	41
V. of White Lake	30	43	44	2%	1
City of Antigo	20	43	59	37%	16
County	2,158	3,100	3,117	1%	17
State	142,313	193,046	188,664	-2%	(4,382)

Source: U.S. Census, American Community Survey (ACS)

Seasonal dwellings are a significant part of the housing stock in most of the towns. Only in six towns surrounding Antigo (Ackley, Antigo, Norwood, Peck, Polar, and Rolling) are seasonal dwellings less than 15 percent of the housing stock. In five

towns (Ainsworth, Elcho, Parrish, Upham, and Wolf River) seasonal dwelling are more than half of all housing units. All of these are located in northern or eastern sections of the county. [See Display 1.](#)

DISPLAY 1: Seasonal Housing by Municipality



Demand Characteristics

- Persons per Household

Household size declined in every municipality in the county during the 2000s. The rate of decline for the county was slightly higher than

for the state. Between 2010 and 2016 the greatest decline (9%) was in the Town of Ainsworth, followed by the City of Antigo, Ackley, the Village of White Lake, Wolf River, Polar and Vilas). **Table 3-11** shows the average number of persons per household.

Table 3-11: Persons Per Household

Minor Civil Division	2000	2010	2016 Estimate	2010-2016 % Change	2010-2016 Net Change
Ackley	2.52	2.48	2.37	-4%	-0.11
Ainsworth	2.24	2.11	1.91	-9%	-0.20
Antigo	2.70	2.43	2.53	4%	0.10
Elcho	2.15	2.12	2.13	0%	0.01
Evergreen	2.59	2.37	2.49	5%	0.12
Langlade	2.27	2.09	2.12	1%	0.03
Neva	2.76	2.44	2.61	7%	0.17
Norwood	2.77	2.54	2.61	3%	0.07
Parrish	2.63	2.19	2.26	3%	0.07
Peck	2.60	2.42	2.61	8%	0.19
Polar	2.81	2.56	2.52	-2%	-0.04
Price	2.64	2.43	2.75	13%	0.32
Rolling	2.84	2.61	2.72	4%	0.11
Summit	2.55	2.3	2.32	1%	0.02
Upham	2.16	2.11	2.24	6%	0.13
Vilas	2.57	2.51	2.48	-1%	-0.03
Wolf River	2.31	2.05	2.00	-2%	-0.05
V. of White Lake	2.42	2.33	2.26	-3%	-0.07
City of Antigo	2.29	2.21	2.05	-7%	-0.16
County	2.42	2.29	2.25	-2%	-0.04
State	2.50	2.43	2.43	0%	0.00

Source: U.S. Census, American Community Survey (ACS)

Government Housing Programs

The Federal Low Income Housing Tax Credit (LIHTC) is administered by Wisconsin Housing and Economic Development Authority. Investors who allocate a number of units as affordable to low-income families for a certain period (usually 15 years) are allowed to take a credit on their income tax. There are 232 housing units that utilize the LIHTC in the county.

U.S. Department of Housing and Urban Development Section 8 Housing Choice Vouchers are administered locally by the Antigo/Langlade County Housing Authority. Eligible families are issued vouchers that they can use to secure housing in the private market. Having found a suitable housing unit, which meets minimum health and safety standards and where the owner has agreed to rent under the program, the eligible family uses its voucher to cover the part of the rent beyond the portion it pays, usually 30 percent of its income. The landlord receives a subsidy directly for the portion of the Fair Market Rent not paid by the tenant. The voucher-holder signs a lease for a term of, at least, one year and the landlord signs a contract with the Housing Authority, running concurrently with the lease. Eligibility for the

program is generally limited to families with incomes below 50 percent of the median for the county in which they reside. The program is open to any housing unit where the owner agrees to participate and where the unit satisfies the standards.

U.S. Department of Agriculture – Rural Development (USDA-RD) is focused on rural areas, and thus may be the most promising source of housing-related funding. Below is a partial listing of programs available to localities:

- *Section 502 Homeownership Direct Loan* program of the Rural Housing Service (RHS) provides loans to help low-income households purchase and prepare sites or purchase, build, repair, renovate, or relocate homes.
- *Section 502 Mutual Self-Help Housing Loans* are designed to help very-low-income households construct their own homes. Targeted families include those who cannot buy affordable housing through conventional means. Participating families perform approximately 65 percent of the construction under qualified supervision.
- *Section 504 Very-Low-Income Housing Repair* program, provides loans and grants to

low-income homeowners to repair, improve, or modernize their homes. Improvements must make the homes more safe and sanitary or remove health or safety hazards.

- *Section 515 Multi-Family Housing Loan* program supports the construction of multi-family housing for low-income residents. Under the program, which has been in operation in Wisconsin since 1969, USDA underwrites fifty-year mortgages at a one percent interest rate in exchange for an agreement to provide housing for low and very low-income residents.
- *Section 521 Rural Rental Assistance* program provides an additional subsidy for households with incomes too low to pay RHS-subsidized rents.
- *Section 533 Rural Housing Preservation Grants* are designed to assist sponsoring organizations in the repair or rehabilitation of low-income or very-low-income housing. Assistance is available for landlords or members of a cooperative.

The above programs are all available through USDA-RD to those who meet the income requirements.

There are also programs through the Department of Housing and Urban Development (HUD):

- The *HUD Self-Help Homeownership Opportunity Program* finances land acquisition and site development associated with self-help housing for low-income families. Loans are made to the nonprofit sponsors of development projects and are interest-free. Portions of the loans are forgiven if promised units of housing are completed within a given period. These forgiven “grant conversion” funds may be used to subsidize future development projects.
- The *HOME Investment Partnership Program* aims to encourage the production and rehabilitation of affordable housing. HOME funds may be used for rental assistance, assistance to homebuyers, new construction, rehabilitation, or acquisition of rental housing.
- The *Small Cities Development Block Grant* program is the rural component of HUD’s Community Development Block Grant (CDBG) program, which is administered by state agencies. The state CDBG program provides assistance for the development of affordable housing and

economic development efforts targeted to low- and moderate-income people.

The Low-Income Housing Tax Credit (LIHTC), like HOME, aims to encourage the production and rehabilitation of affordable housing. It provides an incentive for private entities to develop affordable housing. The credit reduces the federal taxes owed by an individual or corporation for an investment made in low-income rental housing. The amount of the tax deduction is tied to the proportion of low-income residents in the housing produced. The credit is paid out over 15 years to investors in the housing project. LIHTC provides funding for the construction of new buildings or the rehabilitation or conversion of existing structures. To qualify, a property must set aside a certain share of its units for low-income households. Currently there are three projects – Station House, Depot and Westview apartments, all in Antigo – that receive the LIHTC.

The Antigo/Langlade County Housing Authority combines the administration of housing programs for the County and City. The Housing Authority administers the Section 8 program in the county, as well as the Housing and Homeownership Opportunity Program, which provides low interest loans to help qualified buyers purchase a home of their own.

Langlade County has received Community Development Block Grant (CDBG) funding for housing rehabilitation and homebuyer assistance through the state CDBG Small Cities Housing Program. CDBG housing funds are loaned to low and moderate-income (LMI) households, and to local landlords in exchange for an agreement to rent to LMI tenants at an affordable rate. Once CDBG housing loans are repaid to the community they are identified as CDBG Housing Revolving Loan Funds (RLFs).

3.3 Goals, Objectives & Policies

Goals:

- 1) Encourage an adequate supply of affordable housing for individuals of all income levels throughout the community.
- 2) Discourage residential development in unsuitable areas.
- 3) Encourage adequate affordable housing for all individuals consistent with the rural character of the

community.

- 4) Promote the maintenance and renovation of the existing housing stock as a source of affordable housing.

Objectives:

- 1) Multi-family dwellings and subdivision facilities should be located to coincide with major throughways.
- 2) Single-family residences should be the preferred type of housing in rural areas.
- 3) Encourage local land use controls and permitting procedures that allow affordable housing opportunities.
- 4) Promote appropriate public & private sector development of senior and special needs housing within the County.
- 5) Prepare for the transition of many seasonal to year-round residences by fostering the level of service required by full-time residents.

Policies:

- 1) Restrict the location of new development in areas that are shown to be unsuitable for specific uses due to septic limitations, flood hazard,

groundwater pollution, highway access problems, etc.

- 2) Direct new or expanded agricultural development away from existing residential or commercial buildings.
- 3) In the event that a manufactured home does not utilize a perimeter load-bearing foundation, any space between ground level and siding should be enclosed with permanent, non-load bearing concrete or masonry having a foundation-like appearance.
- 4) Foster services that will help elderly residents remain in their homes, to the extent possible.
- 5) Steer more intensive residential development such as two-family, multi-family and senior housing to the Village of White Lake, the area served by the Elcho Sanitary District, or the City of Antigo where the utilities and services exist to accommodate the development.
- 6) Direct residential development away from existing agricultural uses and buildings to avoid conflicts.

Chapter Four

Utilities & Community Facilities

4.1 Background

This is the fourth of nine chapters that comprise the Langlade County Comprehensive Plan. This chapter is based on the statutory requirement for a “compilation of objectives, policies, goals, maps and programs to guide the future development of utilities and community facilities in the local government unit such as sanitary sewer service, storm water management, water supply, solid waste disposal, on-site wastewater treatment technologies, recycling facilities, parks, telecommunications facilities, power-generating plants and transmission lines, cemeteries, health care facilities, child care facilities and other public facilities, such as police, fire and rescue facilities, libraries, schools and other government facilities.”

This chapter will focus on describing these public services and facilities and identifying goals, objectives, and policies intended to protect and utilize these resources in a responsible and efficient manner.

Previous Studies

[Langlade County Land & Water Resource Management Plan, 2015](#)

This plan was prepared in 2015-2019 to meet the State requirement to create a land and water resource management planning process. The plan consists of an overview of the land and water resource management plan, performance standards and prohibitions, land and water resource management concepts, as well as issues more particular to Langlade County. Special attention is paid to the Spring Brook watershed. Because of the prominence of agriculture in the county soil erosion and its effect on water quality merits extra attention.

Because of the degree to which Langlade County is dependent on agriculture and natural resources, both in terms of forestry and tourism, the quality of surface water is especially important, as the plan describes it:

“Langlade County has 843 natural lakes within its boundaries. Of these lakes, 418 have

public access, 248 of them being the wilderness type. A good number of these lakes are in an unspoiled, untamed natural setting. There is a total of 387 miles of prime trout fishing resource waters in Langlade County. The Wolf River, Eau Claire River and Spring Brook constitute highly regarded Class 1 trout fishing resources within the county.”

Beyond the value of surface water as an attraction or amenity it has an inter-relationship with the quality of groundwater, the primary source of drinking water to the majority of the counties rural residents, and thus perhaps the most important “utility” in the county. This plan is currently being updated.

[Langlade County Outdoor Recreation Plan, 2016](#)

The primary purpose of this five year recreation plan is to provide continued direction in meeting the current and future recreation needs of the County. This direction takes the form of an inventory and analysis of outdoor recreational facilities followed by establishing recommendations to meet identified needs. Adoption of this plan and its subsequent acceptance by the Wisconsin Department of Natural Resources (WisDNR) allows for continued eligibility for financial assistance from the Land and Water Conservation Fund (LAWCON), the

Stewardship Fund, and many other federal and state funding programs. The North Central Wisconsin Regional Planning Commission prepared the plan for the Langlade County Forestry and Recreation Department.

This Plan makes reference to Langlade County’s emergence as the “County of Trails.” In order to effectuate such a vision planning should include completion of the Ice Age National Scenic Trail, and coordination of efforts to foster expansion of cross-country ski trails, snowmobile and ATV trails, and maximize the use public lands such as County forests for recreational purposes.

[Langlade County All-Hazard Mitigation Plan, 2014](#)

This document was produced in response to the federal Disaster Mitigation Act of 2000, which requires local governments to adopt such a plan to be eligible for certain disaster mitigation programs. The report looks at general conditions in Langlade County, including population, transportation, land use and economics. A detailed description of the county’s wetlands, floodplains and water bodies sets the stage for subsequent discussions of flooding events. An inventory of utilities, community facilities and emergency services form the background for understanding how the County might respond to a disaster. This plan will be updated later this year.

Risk assessment is at the heart of the All-Hazards Mitigation program. In order to mitigate the risks, it's necessary to assess their relative importance. The report reviews mostly weather-related disasters and how they have affected the county in the past. Examples of hazards include floods, tornadoes, winter storms, drought, fire, and hazardous materials accidents. The likelihood of any given hazard occurring is estimated based upon historical data and the impact of these hazards is evaluated. The plan seeks to recommend how County government should respond to such occurrences and suggests mitigation measures to reduce the risk caused by identified hazards.

Langlade County has created an *Emergency Operations Plan (EOP)* to coordinate the County and local units of government during times of response and recovery. The EOP provides a general guide for county and municipal emergency response personnel when responding to disasters and links the County and municipal emergency operations plans.

[State Trails Network Plan, 2003](#)

This 2003 document clarifies a Wisconsin Department of Natural Resources (WDNR) role and strategy in the provision of all types of trails. The plan identifies a series of potential trail corridors that would link existing trails, public lands, natural features, and communities. This statewide network of interconnected trails would be owned and maintained by

municipalities, private entities, and partnerships of the two. Preserving transportation corridors, such as old rail lines, is specifically discussed as a very important strategy in the creation of recreational and alternative transportation corridors.

Segment 19—Langlade County to Michigan

NCWRPC note: The right-of-way no longer exists, so this segment is not described.

Segment 56—Argonne to Shawano

NCWRPC note: This is now the Wolf River State Trail from Crandon south to White Lake.

This is an active rail corridor with abandonment expected in fall of 2000 on the segment from Crandon to White Lake. Argonne is on the Dresser to Michigan corridor in the north, and Shawano links to the Mountain Bay Trail in the south of the corridor. The Crandon to Tomahawk corridor and the White Lake to Antigo corridor link to the Langlade County to Michigan corridor to form a loop. An old abandoned corridor east of White Lake in the future could link this corridor to the Nicolet State Trail or connect it to road routes. This corridor runs along the east shore of Lake Metonga at Crandon, then runs south through forested lake areas of the Nicolet National Forest. In Langlade County it follows the Wolf River for about seven miles and continues south through the Northwest portion of the Menominee Indian Reservation, terminating at

Shawano and its connection to the Mountain Bay Trail.

Segment 70—Antigo to White Lake

NCWRPC note: The right-of-way no longer exists, so this segment is not described.

Waters of Wisconsin: The Future of Our Aquatic Ecosystems and Resources, 2003

This report is the product of a yearlong effort involving State agencies and private groups to emphasize the importance of water in the state. It looks at a broad range of issues involving water quality including storm water runoff, land-use, and transportation. One of the major findings in the report is the need for policy adjustment regarding the protection of groundwater and surface water.

“The ‘buried treasure’ of groundwater is simply indispensable to life on the ‘surface’ of Wisconsin. Groundwater connects to and feeds our wetlands, streams, and lakes; supplies water to 750,000 private wells and 97% of Wisconsin’s municipalities; supports farming across the state, including more than 340,000 acres of irrigated land; and contributes in countless ways to Wisconsin’s commercial, industrial, and recreational economy.”

The residents of Langlade County have a heavy reliance on groundwater for drinking water and agricultural uses. This high demand

makes it especially important to implement policies that will ensure the quality and quantity of water resources.

Langlade County Public Access Study, 2007

This report was prepared by NCWRPC as an inventory of lake access facilities within the county. The report looks at every lake in the county and identifies the lake class (as defined by the County’s adopted lake classification system), the area and maximum depth, the fish present, and the type of public access available, if any. Recommendations are made for improvements necessary for public access facilities where they are available.

Ice Age Trail Corridor Plan, 2013

In 2013, the National Park Service, Ice Age Trail Alliance, Wisconsin Department of Natural Resources, and North Central Wisconsin Regional Planning Commission developed the Ice Age National Scenic Trail - Corridor Plan and Environmental Assessment for Southern Langlade County, Wisconsin. The Ice Age National Scenic Trail is one of eleven National Scenic Trails within the country, and is approximately 1,000 miles in length, spanning 30 different counties. The trail is mainly intended for pedestrian use, but does allow for bicycling in portions of the trail that share a segment with a state multi-use trail. Currently, Langlade County contains 54 miles of the statewide

trail, and is expected to contain between 70 and 75 miles of trail with the completion of this plan. The purpose of this plan is to create a corridor/path for a future segment of trail that would connect the current endpoint of the trail located in the Town of Polar to the proposed endpoint of the trail at the Town of Rolling/Marathon County border line. Implementation of the Plan is a work in progress.

[Langlade County Bicycle & Pedestrian Plan, 2019](#)

The Langlade County Bicycle and Pedestrian Plan focuses on enhancing the viability of bicycling and walking as a form of transportation throughout the County. This plan focuses on guidelines for planning bicycle facilities, with general design and funding information included. This plan also examines existing conditions for biking and walking countywide and suggests routes and segments on which to prioritize bicycling and walking improvements.

The primary emphasis of the Langlade County Bicycle and Pedestrian Plan is on developing a more bicycle friendly transportation system by establishing a facilities network and bringing all streets up to a minimum level of compatibility. Pedestrian accommodations are also reviewed and improvements are also suggested in this plan. Often the focus of a bicycle plan is solely on a network of improved roads and trails, but it is equally important to consider the policies and practices

that help build a better bicycle and pedestrian network.

[Issues](#)

- Groundwater Protection

Langlade County resident depends on groundwater for drinking water. A combination of factors makes the county's groundwater an exceptional resource. Because of the unique glacial geology of the county there are a large number of natural springs, especially in the eastern part of the county. But because many of the soils have very porous layers that are poor filters for domestic waste and agricultural chemicals the quality of groundwater is threatened. Fertilizer and pesticides used in agriculture also pose a threat to water quality, and high-volume wells used for irrigation can draw down aquifers in their immediate area. Many of the 270 wells are located in the Antigo Flats, where agriculture is most intensive. Groundwater plays a central role in meeting the drinking water needs of county residents, because of this great care must be taken to safeguard the quality of this important resource. Another agricultural impact is that of manure storage, especially in areas with concentrated animals.

Septic systems that have reached, or are about to reach, the end of their useful life also pose a threat to groundwater quality. A program to replace or update these systems is an important step that could be

taken to safeguard the quality of drinking water in the county. Malfunctioning or older septic systems in large numbers can overload this natural filtration system and contaminate the underground drinking water aquifers. Other threats to quantity and quality include the number of high capacity wells within the County. These wells are mainly intended for drawing water for irrigation.

Although not an imminent threat, metallic mining could be an issue related to groundwater. There are no active mine sites in the area now, but there are some deposits, particularly in surrounding counties. If and when market conditions change, there might be efforts to license and operate a mine in the county or surrounding county.

- Recreational Amenities

Described as the “County of Trails”, Langlade County is seen as one of the best kept secrets in Wisconsin for recreational opportunities. There are 530 miles of snowmobile trails, nearly 200 miles of ATV trails, 98 miles of hike and bike trails, and 50 miles of cross-country ski trails. These assets along with 800 plus lakes, 225 streams and tens of thousands of acres of public lands all form a basis for the county’s visitor appeal, but they also offer a significant amenity to the people who make Langlade County their home.

There has been recent attention to the effects of the sedentary lifestyle on the health of Americans. Obesity has been described as an epidemic. One of the more obvious prescriptions for this condition is to get out and walk more or ride a bike. The infrastructure to support such a cure is clear: sidewalks or trails, and somewhere to go within walking or biking distance. The low population density and distances between places in rural areas can pose significant obstacles to this kind of activity, but in the built-up areas of the county like Antigo sidewalks and trails can be more feasible. Policies that foster walkability are useful. Expansion of a countywide trail system would offer county residents and visitors an attractive way get their exercise.

- Access to Broadband

Many areas within the County have limited access to broadband. Internet access is the key to the information economy. Having the broadband access that is necessary to do business over the Internet could be a significant factor in Langlade County’s economic viability in the future. The City of Antigo initiated an effort to provide broadband access throughout the city, and acting with a private sector partner, has established a wireless Internet network capable of reaching many parts of the county.

- Needs of an Aging Population

Langlade County’s increasing aging population puts special burdens on

the infrastructure in the county, especially the health-care system. As noted in the Housing Chapter, there are special services that can help seniors stay in their homes as they age and to avoid more expensive institutional care. The quality and availability of hospitals, assisted living, nursing homes, and EMS facilities are of particular concern to older residents.

Accessibility of public facilities is a consideration not merely to the disabled, but to the entire aging population. For example, curb cuts and handicap accessible ramps make it easier for everyone to get around. Social support networks and nutrition programs also provide a fuller and richer life for seniors and special needs populations.

4.2 Inventory & Trends

Water-related Facilities

Drinking water

The City of Antigo, the Village of White Lake, and the Town of Elcho provide water supplies for domestic and commercial use. Elcho Sanitary District supplies public water to the “village” area of the town. Although Antigo, White Lake, and Elcho operate the only municipal water systems in the county, there are sixteen high-volume, non-municipal wells licensed in the county.

The City of Antigo maintains seven high capacity wells, two large water towers and an in-ground boosted reservoir, including one completed in 1988, for a combined storage capacity of roughly 850,000 gallons. Antigo and White Lake have wellhead protection plans incorporated into their zoning ordinances; Elcho does not currently have a Wellhead protection plan or ordinance.

Wastewater

A municipal wastewater treatment facility serving the City of Antigo is located on the south side of the city along Spring Brook. A wastewater treatment facility serves the Elcho Sanitary District #1. It is located on Lagoon Lane and empties into the Hunting River. In White Lake the pond style treatment plant is east of the village and drains to the Wolf River.

In Langlade County, a combination of County and state regulations control the installation and maintenance of privately owned wastewater disposal systems (POWTS). Traditionally on-site disposal systems have relied on drain-fields or mounds that spread effluent over a large area allowing waste to be dispersed without adversely affecting groundwater quality. The success of these systems is dependent on the depth and permeability of the soils in which they are installed.

Soil suitability characteristics in Langlade County vary widely for installation of POWTS. A small portion of land generally in the western part of the County holds severe limitations for these systems. A severe rating usually indicates that the soils are not desirable for the operation of a soil absorption system because of poor soil permeability, high water tables, periodic flooding, shallow depth to bedrock, and steep slopes. When these conditions prevail, the area is unsuitable for development that utilizes septic tanks for wastewater disposal. The Wisconsin Fund offers financial assistance to homeowners who meet financial criteria to replace failed septic systems, is being phased out.

Stormwater

Most of the City of Antigo is served by a storm sewer system. As part of this system is a four acre detention basin. The stormwater system drains into Spring Brook.

Dams

There are 63 dams in Langlade County. Thirteen of these dams are described as large, 30 are small and the other 20 are unclassified. Twenty-six of these dams are owned by the Department of Natural Resources (DNR), two are owned by the County, four by the City of Antigo, one by the Village of White Lake, four by Towns, one is owned by Post Lake Protection and Rehabilitation District, and the remaining are privately owned.

Solid Waste & Recycling Related Facilities

The City of Antigo owns, and operated until 2004, the County's only sanitary landfill to serve the City and majority of the county. The 300-acre facility is located in the Town of Rolling, and has been capped and groundwater continues to be monitored. Since closing the landfill residents of the city, and the county, have contracted with private haulers, who for a fee have provided curbside pick-up of garbage and recycling. The Village of White Lake contracts for curb-side pick-up, including recycling.

Currently, several of the Towns maintain transfer sites, including Elcho, Upham, Polar, Peck, Norwood, Wolf River and Evergreen, often at the town hall or the former town dumpsite. Most town dumps were closed during the 1980s. A variety of private haulers pick-up trash from these sites and transport it to various licensed landfills.

Every other year Langlade County Land Conservation Department hosts a hazardous waste Clean Sweep and medication disposal event.

The City of Antigo has a brush and mulch landfill in the Town of Rolling. The majority of municipalities within the county utilize a private service to pick-up and haul waste and recycling material. Private garbage pickup is

provided by *Advanced Disposal Service* and *Waste Management*.

A Hazardous Materials Clean Sweep program is held at the Langlade County Highway Shop as often as money is available, approximately every two years. This service helps local farmers and landowners dispose of waste that is potentially dangerous to keep on hand. This program has been very successful and would be welcomed every year if possible.

Public Works

Town Halls & Garages

Each town, the Village of White Lake, and the City of Antigo have various public buildings that are used for government meetings and other public gatherings. Adjacent to most of these buildings are garages for the storage of road maintenance equipment as well as firefighting equipment in several cases. Several of the Town Halls are also where solid waste transfer sites are located.

Cemeteries

Cemeteries serve as unique and tangible links to our past. There are 27 cemeteries located throughout the Langlade County. There are also some known private plots in the county. Many of the existing cemeteries have substantial capacity and there are many undeveloped areas throughout the county suitable for new cemeteries.

Public Safety

Sheriff/Police

The Wisconsin State Patrol, the Langlade County Sheriff's Department, and the City of Antigo Police Department are the three law enforcement agencies that operate within Langlade County. The State Patrol has statewide jurisdiction on all public roads but operates mainly on State and U.S. numbered highways as a matter of general practice. The County Sheriff provides general law enforcement services throughout the County and to the Village of White Lake. Antigo's police serve the city.

The County provides computer-enhanced 911 dispatch services to the City and the rest of the county. The Langlade County Jail in Antigo serves the entire county.

Jail

The Langlade County Jail is located in Antigo adjacent to the County Courthouse. It handles all prisoners for the County Sheriff's Department as well as those from the City of Antigo. From time to time it houses prisoners from other counties as well.

Fire

Fire protection services in most of the County are provided by volunteer fire departments in a complex pattern with mutual aid assistance agreements between Towns. There are nine fire

departments located in Langlade County that serve the local units of government: City of Antigo, Town of Antigo, Peck, Langlade, Elcho, Pickerel (Ainsworth), Norwood, White Lake, Wolf River, and Rural Fire Control. Three Towns (Antigo, Polar and Price) are served by the Town of Antigo Fire Department, and another three Towns (Ackley, Neva and Rolling) are covered by Rural Fire Control. Two Towns are served by the Elcho (Elcho and Upham) and Peck (Peck and Vilas) Fire Departments. Three Towns rely on fire departments located outside the county – the Towns of Parrish and Summit on the Russell Fire Department (Lincoln County), and remote parts of the Town of Wolf River on the Webeno Fire Department (Forest County) and the Doty and Townsend Fire Departments (Oconto County). The Town of Wolf River is actually covered by five different fire departments, including the Wolf River and White Lake Fire Departments.

The City of Antigo has the only full-time fire department in the county. The Antigo Fire Department only serves the city, but has mutual aid agreements with the surrounding Towns.

Emergency Medical Service (EMS)

There are eight EMS service providers in the County. The City of Antigo EMS provides service to the city and ten Towns. Elcho EMS covers only the Town of Elcho. Pickerel EMS serves the Towns of Ainsworth and Langlade. Troutland

EMS is based in White Lake and serves the village and the Towns of Evergreen and Wolf River. From outside the county, the Town of Parrish is served by Rhinelander EMS, and the Town of Norwood is served by Birnamwood EMS.

Health Care

Aspirus Langlade Hospital, located at 112 East 5th Avenue in Antigo, is owned by both Catholic Health International and Aspirus. The hospital provides a wide variety of inpatient and outpatient services, including 24-hour emergency physician services, critical care, obstetrics, and general medical and surgical services provided by primary care physicians, internal medicine specialists, and general surgeons.

The hospital offers complete rehabilitation services, including speech, occupational, and physical therapies and cardiopulmonary rehabilitation. Outpatient services include same-day surgery, laparoscopic surgery, general surgery, eye surgery, mammography, ultrasound, CT scanning, MRI scanning, nuclear medicine, a full range of laboratory services including cholesterol testing, hospice, lifeline, home care, respite care, home oxygen services, and adult day health services. Physician specialty services available by appointment through the hospital include oncology, urology, cardiology, audiology, orthopedics, neurology, radiology, pathology, and ophthalmology.

Hospital-sponsored adult retirement housing is available at Pine Meadow Congregate Housing Facility. Pine Meadow offers apartments that include housekeeping, meals, lifeline, transportation, and all utilities for elderly people who would like additional support to help them remain independent. Evergreen Terrace is another senior housing facility. Eastview Nursing Home provides a greater level of care to seniors. There are also level 1, 2, and 3 CBRFs in the City of Antigo. Public education/support groups are provided in the areas of grief, diabetes, Parkinson's disease, stroke, heart disease, prenatal and postnatal care, breast cancer, and arthritis.

There are a number of clinics throughout the county, including Antigo, Elcho, and White Lake, that provide medical care, as well as several independent doctor's offices.

Education, Recreation & Culture

Educational Facilities

Three school districts cover the majority of the county. The Unified School District of Antigo serves the Towns of Summit, Vilas, Ackley, Peck, Neva, Price, Polar, Antigo, Rolling and Norwood. The Elcho School District serves the Towns of Elcho, Upham and Ainsworth and the White Lake School District serves the Towns of Langlade, Evergreen, and Wolf River.

Three other districts reach into the county. The Rhinelander School District covers all of the Town of Parrish, while parts of the Towns of Ackley and Vilas are part of the Merrill School District, and a portion of the Town of Wolf River is part of the Wabeno School District. There are also two private/parochial schools in Langlade County.

Generally enrollment is declining for area school districts and the trend is projected to continue into the future. Over the coming years, the major issue for these school districts will be to compensate for a shrinking student population while maintaining high-quality education.

Most of the county is in the Northcentral Technical College district, except for the Elcho and Rhinelander Schools Districts, which are in the Nicolet College district. The University of Wisconsin-Stevens Point and its Wausau Campus is the nearest four year institution.

Libraries

The Antigo Public Library and its three branches in Elcho, Elton, and White Lake have over 264,000 items available in either physical or digital formats with over half of them being checked out at least once a year. The main facility is located in Antigo on Clermont Street. The Antigo Public Library had over 75,000 visitors in 2018. Additionally, there was over 58,000 uses of WiFi and almost 10,000 uses of computer stations. The Library offered over 160 programs last year for children and

adults bringing in roughly 5,400 people.

More than half of county residents regularly utilize the library and its services. The library system in Langlade County is part of the Wisconsin Valley Library Service consortium. The Antigo Public Library is jointly owned and maintained by the City of Antigo and Langlade County, with the operating costs split 50/50. The Antigo Public Library Foundation supports the library through fundraising as well as supporting library programming and other enhancements to services.

Recreation - Parks, Trails & Natural Areas

The County operates six parks and manages nine state natural areas. The county operates a campground at Veterans Memorial Park, and is in the process of developing another. Langlade County recently purchased the former Robert S. Lyle Scout Reservation Site located in the Town of Elcho. This site is about 500 acres with access to both Aninnan Lake and Perch Lake. A vast majority (91%) of this site is currently forested. However, there is existing infrastructure already on site that the County can work with. Existing infrastructure includes existing campsites, showers, electric service, roads, restrooms, cabins, and a main lodge. Recreational amenities that this site provides include trails for walking, running,

hiking, biking and horseback riding; and two lakes, which provide for kayaking, canoeing, fishing, and swimming. It should be noted that the ***Langlade County Scout Camp Concept Plan*** was developed to help determine the future for this site.

The City of Antigo, Village of White Lake and the Town of Elcho also provide neighborhood and community level recreational facilities for their residents. There are 21 parks in Antigo, three in White Lake and three parks in Elcho. These facilities provide opportunities for active and passive recreation experiences. Public recreation areas in the county includes ninety publicly owned access points to lakes in the county, 18 developed, 65 undeveloped and 7 parks with possible beaches. By providing access to water-based recreational opportunities these facilities broaden the range of options available to residents and visitors alike. Additional information can be found in the County Outdoor Recreation Plan.

Recreational facilities are also available on school grounds, including playgrounds, ball diamonds, tennis courts, soccer fields, and basketball hoops. There are nine such facilities in the Unified School District of Antigo, one in Elcho and one in White Lake. There are also ten school forests, totaling more than 570 acres, in addition to the more than 130,673 acres of County forests, all open to the public, although some areas are

closed to motorized vehicles. [See the Recreation Map.](#)

Trails

Langlade County has nearly 200 miles of ATV trails, and over 600 miles of snowmobile trails, as well as cross-country ski trails, horse trails, off-road motorcycle, and hiking trails; including the Ice Age National Scenic Trail, the Kettlebowl and Gartzke Flowage ski areas, Evergreen Horseback Riding Trails, Augustyn Springs ATV Trails, Parrish Highlands ATV Trails, White Lake ATV Trails, and Wolf River ATV Trails, among others.

The Antigo/Langlade Chamber of Commerce initiated a campaign in recent years to brand Langlade as The County of Trails. Describing the county as “one of the best kept secrets in Wisconsin” the concepts seeks to exploit the natural assets of the county to position it as a destination and as a place to live and do business. A system of trails, or even a more systematic approach to the trails that already exist, could serve to, literally, tie together these assets. The goal of such an approach is the development of a plan for on-road and off-road bike and hiking/running trails which connect existing cultural, economic, and natural resources throughout Langlade County. [See the Recreation Map.](#)

Other Facilities

There are 13 private campgrounds totaling over 500 campsites in Langlade County. All of these

campgrounds are available for a fee to the public. There is 1 private 18-hole golf course and 2 private 9-hole golf courses that are open to the public for greens fees. Two driving ranges also exist.

Natural Areas

The State also manages two other natural areas and two wildlife areas that function as public hunting grounds. The DNR also has extensive holdings in the county most notably along the Upper Wolf River as state-sponsored fishery areas, and scattered other holdings.

[Wolf River State Trail](#)-The Wolf River State trail in Langlade County is open to snowmobile use when the trails are officially open. The trail from White Lake to ¼ mile north of Highway 64 is open to ATV's and UTV's. ATV/UTV use then branches off of the rail grade to the northwest to connect with existing county ATV trail system. The section from Hwy 55 at Lily north to the Forest County line was developed in 2012 and is open to ATV/UTV use. The section from Lily south to ¼ mile north of Highway 64 was developed in 2014 as a non-motorized segment during the spring, summer and fall months. Hiking, biking and horseback riding are permitted on this section of trail. No motorized uses (except snowmobiles) will be allowed on the section from Highway 64 to Lily.

[Ice Age National Scenic Trail](#)- The Ice Age National Scenic Trail was authorized as a National Scenic Trail by Congress in 1980 and as a State Scenic Trail in 1987. The route

generally follows the nationally significant glacial features of Wisconsin and is intended to provide opportunities for low impact, non-motorized recreational use. The trail has existed in Langlade County since 1975 with more than 50 miles already on the ground between the Lincoln County line north of Highway 17 to the community of Polar. Much of this existing trail passes through the Langlade County Forest.

Museums

The major museum in the County is the Langlade County Historical Society. The Museum was originally dedicated in 1905 as the Antigo Public Library through a \$15,000 grant from the Carnegie Foundation. It became a museum when the library was moved to a new, updated quarters in 1997. The facility houses artifacts from the logging and Indian era, as well as, handmade and early agricultural woodworking and lumbering implements. It also contains one of the finest archives in the Northwoods complete with old scenes and pictures of the early days of Langlade County and the City of Antigo. The Museum and Deeglise Cabin are maintained through the efforts of the Langlade County Historical Society a non-profit organization. There is a school located at the Fair Grounds in Antigo and there is another in the Town of Neva.

In the summer of 2011 the Langlade County Historical Society entered into an agreement with the Antigo Visual Arts (AVA). The LCHS acts as a 501(c)3 fiscal sponsor and provides the AVA with a space in the

museum. AVA's mission is to showcase the visual arts of local artists and host student exhibits. The AVA does its own fundraising, has its own budget and has its own board of directors.

White Lake has two small historic museums, located in the railroad depot and former bank building that commemorate the origins of the community and the role of logging in its history.

Day Care

Availability to child care is an important component within a community, especially as it relates to economic development. The Department of Children & Families maintains a list of licensed child-care providers available to Langlade County residents. The list shows 9 licensed providers, all of which are in Antigo, except for one group facility in Elcho. Three of the providers are group facilities, one is a public school, and the other five are family facilities.

Energy & Telecommunication

Electric

Wisconsin Public Service serves the largest part of the county. Alliant Energy serves many areas in the eastern part of the county. There are two main high-voltage transmission lines traversing the county. One line runs along the route of US-45 north from Antigo; the other follows STH 64 from Lincoln County through Antigo to

Polar and from there south into Shawano County.

Solar Energy Potential

Langlade County recognizes the potential impacts to our community of large-scale Solar Energy projects (100 MW or greater) can be both positive and negative. Since the landscape of our County offers prime conditions for solar energy development, the County recognizes the need to encourage the siting of potential solar projects to specific areas that best fit the needs and desires of both the citizens and the agricultural community while minimizing negative impacts on existing land use trends and public interests.

Natural Gas

The ANR pipeline enters Langlade County from Lincoln County running to Antigo. City Gas Company of Antigo provides natural gas service to the surrounding area along the main roads, including parts of the towns of Antigo, Rolling, Neva, Ackley, Peck, Norwood, and Polar. Wisconsin Public Service provides natural gas service in the Elcho, Post Lake and White Lake areas, and which runs west along STH 64 to evergreen and eastern parts of Polar. The remainder of the county depends on bottled gas from local suppliers.

Telecommunication

Landline telephone service in Langlade County is provided by three telephone providers – Charter Spectrum, Frontier, and Solarus. This service features copper wires and digital switches that are linked

to a fiber optic cable and digital microwave network.

Internet and broadband service are critical. Currently, the City of Antigo has a citywide, fiber optic backbone system to provide broadband Internet service as a self-supporting utility. There are fiber optic providers in the county are Cirrinity and Frontier. Residents are connected to the system for a fee where service is available.

Cable TV lines provide a digital signal for TV, internet, and telephone over coaxial cable serving most residents and businesses in the County. There are ten different internet providers that service Langlade County, this includes: AT&T, Bertram Wireless, Cellcom, Charter Spectrum, Cirrinity, DIRECTV, Frontier, Hughes Net, Solarus, and Verizon.

Cellular telephone service is provided by a variety of companies that have coverage in the area. Roaming agreements between antenna owners, cellular networks, and PCS providers make creating a comprehensive list of providers very difficult. Local providers include: AT&T, Cellcom, Verizon, and T Mobile.

Cellular telephone service and wireless internet service have become important tools in today's farming climate. However, internet and cellular communication reception service is spotty/non-existent in some rural areas of Langlade County.

4.3 Goals, Objectives & Policies

Goal:

- 1) Strive to provide the best quality public services, such as schools and libraries, law enforcement, fire and EMS, to all the citizens of the county.

placing undue financial burden on county taxpayers.

- 2) Encourage maintenance and repair of failing septic systems, especially around lakes.

Objectives:

- 1) Direct more intensive development to areas where a full array of utilities, community facilities and public services are available

- 3) With the phasing out of the Wisconsin Fund, which helps to upgrade failing on-site disposal systems, consider developing a local program.

- 2) Monitor and control the effects of high-volume wells, private on-site waste disposal systems, and solid waste disposal on the quality and quantity of groundwater in the county.

- 4) Assure public health and groundwater quality when permitting and monitoring private on-site wastewater and wells.

- 3) Provide for law enforcement, ambulance, volunteer fire and first responder services to residents, whether by the county or by local units of government.

- 5) Encourage the development of a comprehensive county-wide trail plan that includes facilities for hikers, bikers, ATVs, as well as the disabled and elderly, and that ties together attractions and natural and cultural resources throughout the county, including the Ice Age Trail.

- 4) Support high quality educational opportunities for all residents.

- 6) Encourage land acquisition and development strategies for parks, as outlined in the County Outdoor Recreation Plan.

Policies:

- 1) Ensure that schools, public safety, health care, and other community facilities are of the highest quality without

- 7) Encourage the expansion of broadband throughout the County.

Chapter Five

Transportation

5.1 Background

This is the fifth of nine chapters of the Langlade County Comprehensive Plan. The chapter is based on the statutory requirements for a compilation of objectives, policies, goals, maps and programs to guide the future development of the various modes of transportation, including highways, transit, transportation systems for persons with disabilities, bicycles, walking, railroads, air transportation, trucking and water transportation.

This chapter compares the County's objectives, policies, goals and programs to state and regional transportation plans. The chapter also identifies highways within the County by function and incorporates state, regional and other applicable transportation plans, including transportation corridor plans, county highway functional and jurisdictional studies, urban area and rural area transportation plans, airport master plans and rail plans that apply in Langlade County. Transportation networks extend beyond individual community boundaries, necessitating coordination and cooperation among adjacent units of government.

Previous Studies

Connections 2030, 2009

The Wisconsin Department of Transportation (WisDOT) historically has conducted medium to long range planning for the state's transportation system. In addition, separate plans were drafted for various modes like air, rail and waterborne transportation systems.

Connections 2030 is Wisconsin's latest long-range, statewide multimodal transportation plan. It was prepared by WisDOT in 2009. Connections 2030 identifies a series of system-level priority corridors that are critical to Wisconsin's travel patterns and the state's economy. The following priority corridors have been identified with routes through Langlade County:

- Northwoods Connection (Oshkosh to Rhinelander)
- Wisconsin Heartland (Eau Claire to Green Bay)

Coordinated Public Transit-Human Services Transportation Plan, 2018

The Coordinated Plan is a federal requirement under the Fixing America's Surface Transportation

(FAST) Act. The Coordinated Plan identifies transportation gaps faced by transportation-disadvantaged populations, establishes priorities for funding decisions, and focuses on a broad range of mobility services to improve coordination among public transit agencies and human services transportation providers.

[Regional Livability Plan, 2015](#)

The 2015 RLP, prepared by the North Central Wisconsin Regional Planning Commission (NCWRPC), addresses issues of livability in the areas of housing, transportation, economic development, and land use. The RLP identifies three major transportation issues.

- *Modes of Transportation to Work:* The Region's workforce is extremely dependent on the automobile. In 2012, over 80 percent of the Region's workforce drove alone to work on a daily basis. Another ten percent carpooled, leaving less than ten percent for the non-automobile methods such as walking, biking, and using transit. The average commute time in the North Sub Region, which includes Langlade County, was 20.2 minutes.
- *Age of Drivers in the Region:* The Region is seeing a change in the number of licensed drivers by age groups. Between 2004 and 2013, the region saw a 20 percent decrease in the number of drivers age 17 and age 19.

During the same years, the Region had a 20 percent increase in drivers over age 65. These changes mean communities increasingly need multimodal options for those who are unable or choose not to drive.

- *Transportation Costs:* It is expensive to maintain the transportation infrastructure in the Region. The current reliance on fuel tax and registration fees is inadequate, unstable, and may soon be outmoded. The inability to fund improvements and maintenance on transportation infrastructure will impact the ability to transport goods and provide safe, reliable, and efficient roads. Additionally, transportation accounts for a large portion of the average household's budget, and is greatly affected by housing location. Many low income and fixed income families are unable to afford the cost of owning and maintaining vehicles, thereby limiting employment opportunities.

[Langlade County Bicycle and Pedestrian Plan, 2019](#)

The Langlade County Bicycle and Pedestrian Plan, 2019 focuses on enhancing the viability of bicycling and walking as a form of transportation throughout the county. This plan focuses on

guidelines for planning bicycle facilities, with general design and funding information included. This plan also examines existing conditions for biking and walking countywide and suggests routes and segments on which to prioritize bicycling and walking improvements.

The primary emphasis of the Langlade County Bicycle and Pedestrian Plan is on developing a more bicycle friendly transportation system by establishing a facilities network and bringing all streets up to a minimum level of compatibility. Pedestrian accommodations are also reviewed and improvements are also suggested in this plan. Often the focus of a bicycle plan is solely on a network of improved roads and trails, but it is equally important to consider the policies and practices that help build a better bicycle and pedestrian network.

Issues

- Upgrade / Improvement of Road System

A major concern is the need to upgrade or improve the current road system. Many roads throughout the County are narrow, which exacerbates the conflicts between vehicles, equipment (farm, etc.) and bicyclists or pedestrians. The rolling hills common in certain parts of the County are another concern in that faster moving vehicles have no time to slow/react when “unexpectedly” coming up on one of these other slower moving users.

Inadequate shoulders and ditches are also an issue. Certain bridges (A Bridge, Langlade Bridge and others) need widening to accommodate multiple-use traffic.

- Road Maintenance

Regular road maintenance including roadside brushing and mowing and winter road maintenance is a common issue. Some local units do their own maintenance while others contract for services. Lack of adequate funding for maintenance is a major concern. Another maintenance issue stems from the forested/recreational nature of the County, which results in a demand for “mixed use” on County roads. On some roads ATVs are required to travel on the pavement to reduce damage to the shoulders and ditches. Signage is needed.

- Weight Restrictions

With the logging and agricultural activities throughout the County, there are issues/concerns regarding weight limits on roads. The recent change by the State allowing an extra axle and increasing allowable weight by 10,000 pounds to 90,000 has raised concern. In Langlade County, with the number of non-metallic mining pits, gravel trucks, as well as farm trucks hauling produce and overweight garbage trucks, are particular issues.

- Roadway Use Conflicts / Capacity

Slow moving and large agricultural vehicles and equipment, as well as bikes and pedestrians, are often forced to compete with motor vehicles for use of many public highways in the County, particularly in areas where significant agricultural and residential uses coexist. When larger farm equipment is on the smaller rural roads it creates a conflict between farm and non-farm traffic. Some farm equipment can take up the whole road. If this plan is going to preserve farm land and give people the right to farm, then information and education needs to be done with the non-farmer population on the

conflicts that arise with these types of issues.

- Speeding Areas

High speeds documented on some town roads are a particular concern due to the safety issue posed by the geometrics of the roads and further compounded by the excessive speed. Higher traffic speeds may be a factor in the increase in the percentage of fatal crashes in the County. Communities and residents that have issues can meet with the County Highway Safety Commission. This group meets quarterly and has representatives from local law enforcement in attendance.

5.2 *Inventory & Trends*

The transportation system in Langlade County is comprised of a roadway network used by automobiles, trucks, taxis, buses, bicycles, and pedestrians where no sidewalks exist, a public airport, and several private landing areas. In this section the transportation system is described along with trends in usage and development. Specialized transit is also a component of the overall network. Although the County is rural, it is also very accessible and the existing transportation network is adequate for the foreseeable future. The County road network is in relatively good shape. The future land use plan shows a low level of new development so no new major

county road improvements have been identified for the future.

Roadways

Langlade County's roadway network is comprised of over 1,150 miles of highways and streets connecting communities and their citizens to businesses and recreational activities throughout the County, as well as to major urban centers in relatively close proximity.

Classifications

These roads are classified in two ways: 1) by jurisdiction and 2) by function. The jurisdictional classification indicates who owns or

is responsible for the roadway. The functional classification identifies the role or function the roadway plays in moving traffic.

In addition to these main classifications, a road or segment of road may hold a variety of other designations including county forest road, rustic road, emergency route, or truck route. There is one federal forest road (Chequamegon Forest Trail) but no rustic roads within Langlade County. Truck routes are discussed at the end of this chapter under Trucking.

Jurisdiction

Within a jurisdictional framework, the County's roads fall into three major classifications: state (state trunk highways - "STH"), county (county trunk highways - "CTH") and city, village, or town

streets/roads (local roads). The Transportation System Map illustrates the jurisdictional classification of roadways within Langlade County. Towns maintain jurisdiction over the greatest mileage of the County's road system with nearly 60 percent of the total mileage. County trunk highways make up the next largest category with 271.09 miles for about 24 percent of the system. **Table 5-1** gives the mileage breakdown for the jurisdictional classification of roads within Langlade County.

There is one U.S. highway in the County—USH 45. The County contains portions of five state trunk highways: 17, 47, 52, 55, and 64. The majority of highways and roads are located along section boundaries throughout the county, with some significant roads crossing the County at 45-degree angles.

Table 5-1: Road Mileage by Jurisdiction and Functional Class in County, 2019

Jurisdiction	Functional Classification			Totals
	Arterial	Collector	Local	
U.S. and State	115.10	26.97	0	142.06
County*	0.00	206.86	64.23	271.09
All Towns	1.99	36.27	634.20	672.46
Village of White Lake	0.00	0.35	7.29	7.64
City of Antigo	2.55	13.48	40.77	56.80
Totals	119.6	283.9	746.5	1,150.1

Source: WisDOT & NCWRPC
 *Does not include County Forest Roads of 7.67 miles

Road placement is affected by lakes, rivers, and hills. The Terminal Moraine (see description in the

Natural Resources Chapter) is a large countywide natural feature that affects road layout. In a

general sense, STH 55 follows the curves of the Wolf River and HWY 47 follows the Summit Lake Moraine.

Functional Classification

A functional classification system groups streets and highways into classes according to the character of service they provide. This character of service ranges from providing a high degree of travel mobility to providing land access functions.

The current functional classification system used in Wisconsin consists

of five classifications that are divided into urban and rural categories. Functional classifications are used to determine eligibility for federal aid. For purposes of functional classification, federal regulations define urban as places of 5,000 or more in population, so the rural classifications apply throughout Langlade County. Roads in Antigo use the urban classification. **Table 5-2** gives the mileage breakdown for the jurisdictional classification of roads within Langlade County.

Table 5-2: Rural Highway Functional Classification System	
Principal Arterials	Serve interstate and interregional trips. These routes generally serve all urban areas greater than 5,000 population. The rural principal arterials are further subdivided into 1) Interstate highways and 2) other principal arterials.
Minor Arterials	In conjunction with the principal arterials, they serve cities, large communities, and other major traffic generators providing intra-regional and inter-area traffic movements.
Major Collectors	Provide service to moderate sized communities and other inter-area traffic generators and link those generators to nearby larger population centers or higher function routes.
Minor Collectors	Collect traffic from local roads and provide links to all remaining smaller communities, locally important traffic generators, and higher function roads. All developed areas should be within a reasonable distance of a collector road.
Local Roads	Provide access to adjacent land and provide for travel over relatively short distances. All roads not classified as arterials or collectors are local function roads.

Source: WisDOT

Road Design Standards

Roads should be designed for the function they serve. Lightly traveled rural town roads may remain

graveled to reduce speed levels and maintain a rural "country" character in the landscape. Where higher traffic volumes are expected, roads should be paved. Communities

should consider the current and potential future usage of a road to determine if minimum design standards will be adequate or if more is needed. WisDOT has multiple resources and guidelines for facility design.

Construction of new or complete reconstruction of existing town roads are required to meet a higher level of design standards than less substantial resurfacing or reconditioning improvements. Examples of resurfacing and reconditioning improvements which may be appropriate for existing town roads include pavement rehabilitation; widening of lanes and shoulders; replacing bridge elements to correct structural deficiencies; bridge deck overlays, bridge and

culvert replacement; and other related improvements such as minor grading, sub-grade work and correction of drainage problems.

Surface Conditions

Langlade County and many of the local units within the County utilize the PASER system developed by the University of Wisconsin Transportation Information Center for measuring the condition of their roadways. PASER stands for Pavement Surface Evaluation and Rating System. Although there are different scales for concrete, asphalt, sealcoated, gravel and unimproved roads, they are generally based on a scale ranging between "1" (very poor condition) to "10" (excellent condition).

Table 5-3: County Highway Surface Ratings

2012				2018			
Rating	Class	Miles	Percent	Rating	Class	Miles	Percent
0	Failing	0.00	0.0%	0	Failing	0.00	0.00%
1,2	Very Poor	0.00	0.0%	1,2	Very Poor	0.00	0.00%
3	Poor	0.00	0.0%	3	Poor	0.00	0.00%
4,5	Fair	24.18	8.9%	4,5	Fair	43.29	16.0%
6,7	Good	150.11	55.4%	6,7	Good	173.56	64.0%
8	Very Good	52.26	19.3%	8	Very Good	29.28	10.8%
9,10	Excellent	44.53	16.4%	9,10	Excellent	24.92	9.2%
Total		271.08	100.0%	Total		271.05	100.0%

In general, county highways are in good or better condition. No segments of county highway in Langlade County rated below worse than fair in either 2012 or 2018. See [Table 5-3](#).

WisDOT now requires all local units of government to submit road condition rating data every two years as part of the Wisconsin Information System for Local Roads (WISLR). PASER and WISLR are

tools that local governments can use to manage pavements for improved decision making in budgeting and maintenance. The Langlade County Highway Department uses this information to develop a long-range highway improvement plan.

Proposed Highway Improvements

The WisDOT prepares a six-year improvement program that identifies improvement projects for state trunk highways and federal highways within Langlade County. The County Highway Department

prepares its own roadway management plan identifying needed improvements on county highways. It is important to remember that continually changing needs, funding availability, and political climate affect the ultimate implementation of these improvement plans on a year-to-year basis.

The most recent state six-year improvement program identifies seven projects within Langlade County for the 2018-2023 period, and are shown in **Table 5-4**.

Table 5-4: WisDot 6-Year Highway Improvement Program 2018-2023, Langlade County

Year	Highway	From	To	Mileage	Type of Improvement
2020	USH 45	Antigo	Monico	9.55	Remove top layer of pavement and apply a new surface
2021-2023	USH 45	Antigo	Monico	8.10	Remove top layer of the pavement and apply a new surface
2021-2023	USH 45	Antigo	Monico	3.56	Remove top layer of pavement and apply a new surface
2021-2023	USH 45	Town of Elcho	Antigo Street	0.67	Recondition existing street by replacing the pavement, curb and gutter
2020	STH 52	Antigo	Langlade	0.00	Replace deficient existing bridge at its present location
2021-2023	STH 64	Antigo	Langlade	0.01	Replace culvert at Elton Creek on STH 64 in Langlade County
2021-2023	STH 64	Antigo	Langlade	0.00	Replace deficient existing bridge with a wider one at its present location

Source: WisDOT

Bridges

Bridges are critical infrastructure to support the road network. A bridge can be defined as a structure having a clear span of more than twenty feet, designed to convey vehicles (and/or pedestrians) over a

watercourse, railroad, public or private right-of-way, or any depression. Structures having a clear span of less than twenty feet are generally designated as culverts.

WisDOT maintains 82 bridges in the County along STHs within Langlade County. WisDOT maintains 12 bridges in the County with six on

STH 64, two on STH 55, one on STH 52, and one that crosses the Lily River for both STHs 52 and 55. The Langlade County Highway Department maintains 27 bridges on county trunk highways. Various town governments are responsible for 30 bridges.

WisDOT inspects bridges on state trunk highways on a two-year rotation and requires that local units of government have bridges on roads under their jurisdictions inspected every two years by qualified inspectors. The inspections allow WisDOT to monitor the condition of all bridges and prevent any deterioration of structural integrity that might threaten safety or level of service.

Bridges with sufficiency ratings of less than 50 are eligible for replacement or rehabilitation, while those of 50 to 80 are only eligible for rehabilitation. Based on the current ratings 10 bridges, whose sufficiency scores are less than 50 are eligible for replacement or rehabilitation (also shown in **Table 5-5**):

- B-34-007: T over the Wolf River, in the Town of Ainsworth

- B-34-842: STH 64 over Spring Brook, in the Town of Antigo
- P-34-004: CTH B over the E BR Eau Claire River, in the Town of Upham
- P-34-401: LRD Blue Bell Road over McDougal Creek, in the Town of Peck
- P-34-701: 4th Ave over Spring Brook, in the City of Antigo
- P-34-705: CTH Y/Forest St over Spring Brook, in the City of Antigo
- P-34-903: Old 64 over Evergreen Creek, in the Town of Wolf River
- P-34-906: County Line Rd over Pine River, in the Town of Vilas
- P-34-917: Range Line Rd over Black Brook, in the Town of Ackley
- P-34-918: County Line Rd over Big Hay Meadow Creek, in the Town of Summit

Culverts function similar to bridges in conveying lanes of travel over some underlying feature. Culverts are commonly used to carry water under roadways but also serve as pedestrian, bicycle or cattle underpasses. Culverts range from a small diameter tube to multi-celled box culverts. There are eight culverts in the County.

Table 5-5: Highway Bridge/Structures Inventory-Langlade County, Wisconsin: Sufficiency Rating of 80 or less

Bridge ID	Location	Owner	Feature On	Feature Under	Sufficiency (2018)
B-34-005	T Ackley	State	STH 64	Black Brook	71.5
B-34-006	T Parrish	County	CTH H	Prairie River	66.5
B-34-007	T Ainsworth	County	CTH A	Wolf River	38.2
B-34-026	T Elcho	County	CTH K	Wolf River	70.5

B-34-050	T Langlade	State	STH 52	Wolf River	79.4
B-34-838	T Wolf River	State	STH 64	Wolf River	67.5
B-34-842	T Antigo	State	STH 64	Spring Brook	38.0
P-34-004	T Upham	County	CTH B	E Br Eau Claire River	28.7
P-34-043	T Summit	Town	1 st . Ave	N Br Pine River	76.5
P-34-068	T Wolf River	Town	Van Alstine Rd (Dead End)	S Br Oconto River	72.4
P-34-401	T Peck	Town	LRD Blue Bell Road	McDougal Creek	40.7
P-34-701	C Antigo	City	4 th Ave	Spring Brook	48.1
P-34-702	C Antigo	City	7 th Ave	Spring Brook	60.8
P-34-703	C Antigo	City	8 th Ave	Spring Brook	50.8
P-34-705	C Antigo	County	CTH Y/Forest St	Spring Brook	33.0
P-34-706	C Antigo	City	Gowan Rd	Spring Brook	70.8
P-34-903	T Wolf River	Town	Old 64 (Dead End)	Evergreen Creek	30.0
P-34-906	T Vilas	Town	County Line Rd (Dead End)	Pine River	36.8
P-34-909	T Rolling	Town	Koszarek Rd	Br Spring Brook	62.9
P-34-917	T Ackley	Town	Range Line Rd	Black Brook	39.9
P-34-918	T Summit	Town	County Line Rd	Big Hay Meadow Creek	46.1
P-34-921	T Wolf River	Town	Stamper Rd	Evergreen Creek	53.3

Source: WisDOT, NCWRPC

Trucking

County Trunk Highways connect the County's rural areas with the designated state truck routes, which then provide Langlade County with access to the rest of the state and the nation. There are two types of WisDOT designated truck routes within Langlade County—1) Designated Long, and 2) 65 foot Restricted. The Designated Long Truck Routes are USH 45, STHs 17 and 64. The 65' Restricted Truck Routes are STHs 47, 52, and 55.

These routes provide Langlade County with access to the rest of the state and the nation. Local truck routes often branch out from these major corridors to link local industry with the main truck routes as well as for the distribution of commodities within the local area. Mapping these local routes is

beyond the scope of this study, and local issues such as safety, weight restriction, and noise impacts play significant roles in the designation of local truck routes.

County Trunk Highways (CTH) connect the County's rural areas with the designated state truck routes. County trunk highways serve an important role in linking the County's agricultural and forestry resources to the Region's major highways and economic centers. All county highways are generally open to truck traffic. The County uses seasonal weight limits in an effort to minimize damage.

Access Management

WisDOT manages access to some degree on all state trunk highways. However, the rollback of Trans 233 regulations curtails some of this

control. USH 45 is part of WisDOT's access management plan, with some additional statutory authority to control access.

The goal of access management is to limit the number and spacing of access points along a roadway. This will reduce the number of potential conflict points and create a more safe and efficient flow of traffic. Some access management techniques include:

- Restricting access points a certain distance from an intersection.
- Limiting the number of access points allowed for each property.
- Requiring shared driveways between adjacent developments.
- Promoting inter-connectivity between adjacent parcels.

US Highway 45, north of the City of Antigo, is one example of controlled access improving traffic flow. However, there multiple properties left with no driveways on USH 45. A frontage road would provide the

added potential for development of these and other properties. This would result in economic development benefits while preserving safety and traffic flow on USH 45.

The County does have a driveway ordinance, which it uses to regulate access onto county highways. Some towns also have driveway ordinances for their local roads, however, these are often more concerned with emergency vehicle access to the property than the impact of access on the roadway. Local governments should consider more actively managing access, particularly those in areas with significant development and or traffic anticipated.

Table 5-6 displays recommended minimum distances between driveways along local roadways. These spacings are based on average vehicle acceleration and deceleration rates and are considered necessary to maintain safe traffic operations. The County and towns should consider adopting these recommended standards.

Table 5-6: Recommended Spacing Between Direct Road Access Points

Roadway Speed Limit (miles per hour)	Minimum Driveway Spacing Measured at the Road Right-of-Way Line (feet)
25	105
30	125
35	150
40	185
45	230
50	275
55	300

Source: Institute of Traffic Engineers.

Traffic Volumes

Annual Average Daily Traffic (AADT) counts for selected locations on state and county highways in Langlade County. The counts come from WisDOT's regular traffic counting program selected to give a general feeling for the traffic levels throughout the County. The selected counts do not necessarily reflect the peak traffic location of a given road. WisDOT places counters at selected locations along principal arterials and some higher volume minor arterials every three years. All classified roadways are counted in the County occasionally.

Average Annual Daily Traffic counts are calculated by multiplying raw hourly traffic counts by seasonal, day-of-week, and axle adjustment factors. The daily hourly values are then averaged by hour of the day and the values are summed to create the AADT count. [See the Transportation Map.](#)

Generally, traffic on most roads has increased. USH 45 traffic increased 20 percent or more over its length within the County, with the highest traffic count occurring north of the City of Antigo by CTH I. Two areas where there was a slight decline was

on the highways near Lily and White Lake. STHs 55 and 52 crossing through Lily declined slightly from 2012 to 2018. As did STH 64 near White Lake.

The growth in AADT can be attributed to a number of factors. First is the increase in development within the County resulting in higher population and housing units: there are more residents traveling the roadways. Another factor is the significant role tourism plays in the County's economy with people traveling into and around the County. Statewide, the trends are toward an increase in the average number of vehicle trips per person and of vehicle miles traveled: people are generally traveling more.

Commuting Patterns

County-to-County Worker Flow data compiled by the US Census is a convenient way to analyze commuting patterns, see [Table 5-7](#). Langlade County is a net exporter of workers. Nearly 4,400 workers leave the County for work on a regular basis, while about 2,400 enter the County for work. This creates a net loss of 2,000 workers, which could work in Langlade County if there were jobs for them.

Table 5-7: Langlade County Commuting Patterns, 2015

County	Living in listed county-working in Langlade County	Living in Langlade County-Working in listed county	Net gain or loss of workers
Langlade	4,401	4,401	0
Forest	106	153	-47
Oneida	203	226	-23
Lincoln	160	218	-58

Marathon	457	866	-409
Shawano	338	293	45
Outagamie	29	250	-221
Brown	70	272	-202
Menominee	6	33	-27
Oconto	87	64	23
Total	5,857	6,776	-919

Source: US Census LEHD, NCWRPC

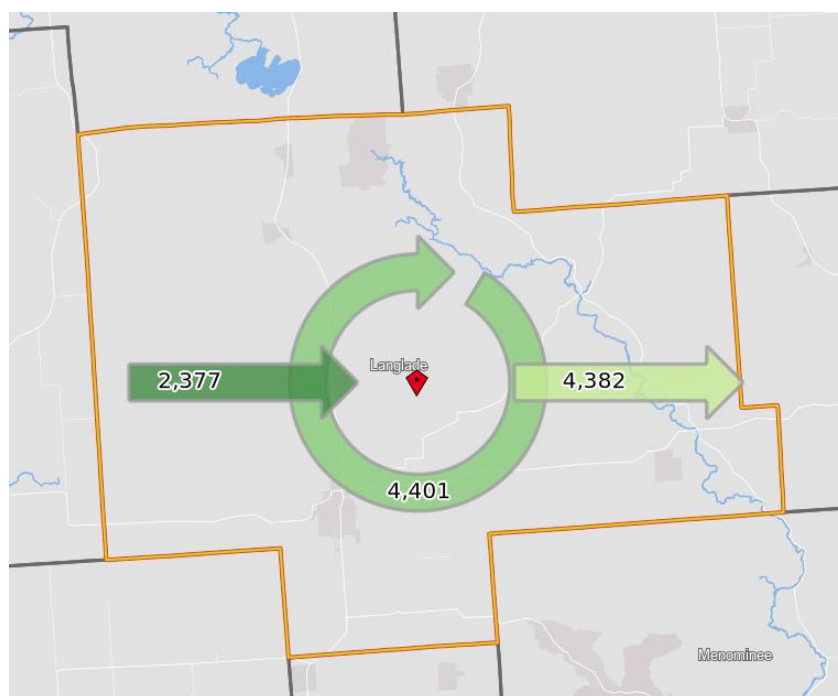
The primary beneficiary of this exchange is Marathon County which gains 866 workers. Marathon attracts a large number of workers not only due to its proximity, but also because average annual wages in that county are higher than in Langlade. Marathon is designated as a metropolitan statistical area which is attained when the population reached 50,000. Wages in metropolitan areas are usually higher, and there are usually more job openings in a wider variety of occupations than in more rural areas.

Langlade County is generally a net exporter of labor to surrounding

counties, although it does have a positive exchange with Shawano County where it gains 45 workers. **See Display 5-1.**

Display 5-1: Commuter Inflow/Outflow, 2015

Source: LEHD, 2015



Park and Ride

With increasing cost of vehicle use, people are attempting to reduce those expenses by sharing rides, particularly for employment related commuting. Park and ride lots are one tool being promoted by WisDOT. The nearest designated park and ride facility is located at USH 51 and CTH S south of Tomahawk in Lincoln County. There are also lots in Shawano and Oconto Counties. Unofficial park and ride sites within the County exist at the Ackley Town Hall and some local businesses.

Crashes and Safety

Statewide the number of motor vehicle crashes has fluctuated but remained relatively stable of the last five to ten years. In Langlade County the number of crashes has slightly decreased over the last five years from 420 in 2011 to 409 in 2016. The County has averaged 393 crashes per year over this period. Total fatalities in 2017 were 2, while 2014 had 5, but the figure has fluctuated around 3 per year. In general about 46.5% of the crashes are occurring on the state highway system while 25% are on the County system and 28% on local roads.

Other Modes of Transportation

Transit & Transportation Systems for Persons with Disabilities

Langlade County's Coordinated Transportation program operates an ADA Paratransit fixed route as well door to door service to ensure access to, medical institutions & clinics, pharmacies, nutrition sites, grocery stores, educational facilities, and employment. There are also rural routes and specified routes for developmentally disabled individuals. Service is available Monday to Friday from 7:00am to 9:00pm. Red Robin Transit is a partnership between the Menominee Regional Public Transit, Aspirus and the county to provide on call transportation throughout the county.

Other transportation providers serving Langlade County include a number of Specialized Medical Vehicles (SMV's) that transport people with significant personal or medical care needs.

Long Distance Intercity Bus Service

There is no scheduled bus service in Langlade County. Private charter bus companies based in the Antigo area include Mid Wisconsin Coaches, Palmer Bus Company, and Philipps Bus Service.

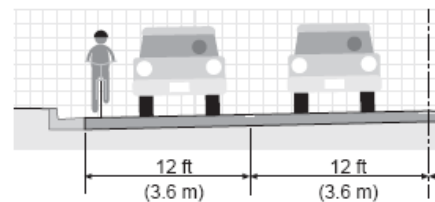
Bicycle and Pedestrian Facilities

All roads except freeways are available for bicycle and pedestrian

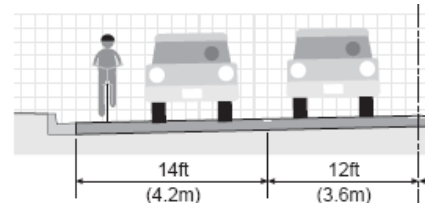
Display 5-2:

Bicycle Facilities Cross-Sections

Standard Roadway

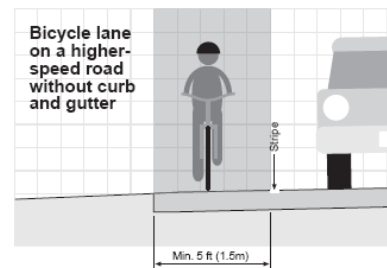


Wide Outside Lane



5 foot wide shoulder

for high traffic road



travel. Langlade County has designated bike routes on highways and off-road. Sidewalks exist in Antigo, White Lake, and the town center of Elcho. Various bike planning efforts over years has established a network of on-road bike routes covering much of the county. There is currently a County-wide Bike Plan nearing completion.

Basic types of bicycle facilities include shared roadways, improved shoulders (bike lanes), and off-road shared use paths. See [Display 5-2](#).

On a shared roadway, bicyclists and motorists are accommodated in the same travel lane, where motorists may sometimes find it necessary to overtake bicyclists by switching into the oncoming travel lane. The majority of cycling in rural areas currently occurs on paved roadways with no special accommodations for bikes. On lower speed roadways, bicycle lane widths of 4 feet may suffice. But where motor vehicle speeds exceed 35mph, or where there are high motor vehicle volumes, a minimum width of 5 feet is recommended.

[Rail](#)

There is no rail service in Langlade County. Shipments needing rail service would have to be trucked to nearby cities with rail access such as Merrill, Rhinelander, or Wausau. Rail is an important transportation choice, especially for the movement of freight.

[Airports](#)

Langlade County Airport, located in the Town of Antigo, is classified as a Medium General Aviation (GA) facility, and offers two asphalt runways. It is the only airport in the county with paved runways. General Aviation (GA) airports are intended to serve virtually all small general aviation single and twin-engine aircraft, both piston and turboprop, with a maximum takeoff weight of 12,500 pounds or less. These aircraft generally have approach speeds below 121 knots and wingspans of less than 79 feet. Typically, these aircraft are used for business and charter flying and for personal reasons. In Wisconsin, airports in this category normally have a primary runway length of 3,900 to 4,800 feet.

In 2017 total aviation operations (take-offs and landings) at the Langlade County airport was 8,250. The airport is served by Walker Aviation, a full service fixed-base operator. The airport has approximately 23 based aircraft and includes a single hangar, a multi-unit T-hangar and a terminal building. In 2003 and 2004 Langlade County completed a project through local, state, and federal funding to reconstruct Runway 16-34 and also construct a new parallel taxiway A, which goes from the Apron to runway 8-26, with runway 16-34 taxiway connectors B and C. This is part of a long term plan to lengthen runway 16-34 to 5000 feet with a full parallel taxiway. Additionally, there was a 6-bay hangar built in 2008.

The Wisconsin Bureau of Aeronautics (BOA) Project Funding Report for 2019-2024 lists a snapshot of the BOA's 5-year program based on assumptions about available revenue, legislative decisions and local funding. Current proposed projects include: Land acquisition for runway approaches, installation of a perimeter fence and gates, expansion of terminal apron toward hangars, and construction of a parallel taxiway to Rwy 9/27. Inclusion in this program is not a guarantee of funding or an indicator of final approval. The airport has various building and development regulations in place, including a height restriction ordinance.

The closest scheduled air passenger service available to Langlade County residents is at the Rhinelander - Oneida County Airport in Rhinelander, and the Central Wisconsin Airport (CWA) near Wausau. These two airports are air carrier / cargo facilities. Air Carrier/Cargo (AC/C) airports are designed to accommodate virtually all aircraft up to and, in some cases, including, wide body jets and large military transports. Airports in this category are usually referenced by the type of air carrier service being provided.

The Aspirus Langlade Hospital Heliport is for medical use only, and is located on the hospital grounds in Antigo. Another medical use only heliport is located in Pickerel near

the Fire and Rescue Squad Building. There is one private grass runway airport in the county near Summit Lake.

Water Transportation

There are no harbors or ports within Langlade County. Today, tubing, boating and sailing are popular forms of recreational transportation in and around Langlade County. Langlade has more than 500 miles of navigable streams and rivers and over 800 lakes.

Recreational Transportation

There is significant use of a variety of miscellaneous other vehicles within Langlade County including all-terrain vehicles (ATVs), snowmobiles, horses, cross-country skis, and others. For the most part, however, these forms of travel are not recognized as modes of transportation, but rather as forms of recreation. However, it is important to be aware of interactions between recreational forms of travel and more traditional transportation systems. For example, snowmobiles have an extensive network of their own trail routes that often parallel or cross public highways. A snowmobile trail may compete against a bike trail for the same right-of-way. Although snowmobile and bicycle trails can easily coexist, fundamental differences often keep the interests at odds.

5.3 Goal, Objectives, & Policies

Goal:

- 1) To provide an integrated, efficient and economical transportation system that affords mobility, convenience and safety and that meets the needs of all citizens, including transit-dependent and disabled citizens, while maintaining the rural character of the County.
- 4) Minimize the negative impacts of proposed transportation facility expansions.
- 5) Seek Rustic Road designation where appropriate to help preserve the rural character of special roadways within the County and promote them for economic development/tourism and recreational purposes.

Objectives:

- 1) Maintain the efficiency, safety and functionality of the County's existing transportation system, which links the urban center with outlying towns, adjacent communities and the region.
- 2) Encourage a balanced transportation network that provides a range of transportation choices in the type of mode (i.e. car, bus, bike, walking, etc.) easy transfer between modes and transportation opportunities for those without use of an automobile.
- 3) Achieve close coordination between development of transportation facilities and land use planning, land development and rural character preservation.

Policies:

- 1) Work with the Department of Transportation (WisDOT) and the NCWRPC to ensure that the County's transportation system is coordinated with surrounding regional systems and that the County's interests are well served when major transportation facilities or programs are proposed.
- 2) Work with WisDOT on corridor preservation for all federal and state highways.
- 3) Preserve scenic views by limiting off-premise advertising along selected highways.
- 4) Plan for extension of County highways and other major arterials as necessary to complete connections, provide for appropriate routes for trucks and emergency

- vehicles and serve planned development areas.
- 5) Consider future roadway, bike routes & trails, or connections when reviewing development plans and proposals.
 - 6) Work with local governmental units to plan for a network of interconnected roads in planned development areas to control highway access, preserve rural character, and improve access to these areas.
 - 7) Space roadway access according to minimum standards to increase safety and preserve capacity.
 - 8) Avoid land uses that generate heavy traffic on roads that have not been constructed or upgraded for such use.
 - 9) Plan for new developments to minimize extensive road construction and avoid burden to towns for maintenance. Consider assisting towns with implementing road impact fees for new development projects that place a burden on or require upgrading of town roads.
 - 10) Work with the towns to update and implement Town Roadway Management Plans to provide for the appropriate maintenance of town roads.
 - 11) Support coordination and consolidation of specialized transit by a variety of agencies that serve the County's elderly and handicapped residents.
 - 12) Work with WisDOT and surrounding counties to establish park and ride facilities on key commuting corridors between employment centers and tie-in the local transit system.
 - 13) Review and update Airport Land Use Ordinance to protect the public investment in Langlade County Airport.

Chapter Six

Economic Development

6.1 Background

This is the sixth of nine chapters that comprise the Langlade County Comprehensive Plan. This chapter is based on the statutory requirement for a “compilation of objectives, policies, goals, maps, and programs to promote the stabilization, retention, or expansion of the economic base and quality employment opportunities”.

An analysis of the economic base and labor force of Langlade County is included, as is the identification of the county’s strengths with respect to attracting and retaining business. A variety of economic development programs available at the local, regional, state, and federal levels are included as well.

Previous Plans:

All planning processes should include a review of previous planning processes. Below is a review of the three most relevant economic development-planning efforts.

[Comprehensive Economic Development Strategy \(CEDS\), 2017](#)

Langlade County is one of ten counties included in the North

Central Wisconsin Economic Development District as designated by the U.S. Department of Commerce, Economic Development Administration (EDA). The North Central Wisconsin Regional Planning Commission (NCWPRC) is the agency that is responsible for maintaining that federal designation. As part of maintaining that designation, the NCWPRC annually prepares a Comprehensive Economic Development Strategy (CEDS) report.

The report serves to summarize and assess economic development activities of the past year and present new and modified program strategies for the upcoming year. In addition this report identifies potential public works projects for funding within the region. Key findings from this regional level plan involve an inventory of the physical geography of the Region and its resident population. Labor, income, and employment data are covered with analysis of the economic status of the Region. Construction, wholesale trade, retail, transportation, and manufacturing all have grown. Finance, insurance, real estate, and services have lagged behind national averages.

Regional Livability Plan (RLP), 2015

The Regional Livability Plan is a comprehensive plan for the ten-county Region prepared by the North Central Wisconsin Regional Planning Commission. The RLP identified ways to address the region's opportunities and weaknesses to increase the region's livability to become more livable for all residents. The plan addresses four specific areas: housing, economic development, transportation, and land use. The economic development goals of the RLP are as follows:

- Foster efficient business expansion and retention to increase employment opportunities and employment in the region.
- Create an innovative atmosphere to foster an entrepreneurial-supportive environment.
- Promote and attract new business from outside the region.
- Encourage the future availability of a skilled and flexible workforce prepared to meet the needs of both existing and emerging industries and technologies.
- Meet the full range of businesses' infrastructure needs with emphasis on transportation, utilities, and communications.
- Promote and increase communications between regional and county economic development, workforce

development, and planning organizations.

Langlade County Economic Development Strategy, 2005

This planning effort was undertaken to develop a county strategy and examine the need for a county-wide economic development organization. A joint City-County Economic Development Committee held a series of meetings to develop the plan. As a result of this study and other local efforts, the City and County created and funded the Langlade County Economic Development Corporation.

The strategy included an inventory of the economy in Langlade County, including an assessment of strengths and weaknesses. Current issues were identified by way of a business survey and committee discussions. Several organizational options for the creation of an economic development entity or corporation were discussed as well. Finally, strategies and recommendations were developed to assist decision makers in prioritizing needs before proceeding to implementation. The North Central Wisconsin Regional Planning Commission facilitated the planning process and prepared the written plan.

Currently the Langlade County Economic Development Corporation is preparing a new economic development strategy to align with business needs. A variety of stakeholders are involved in that process.

Issues:

The planning process includes the identification of issues. These are the things that need to be addressed in the plan.

- Forestry

The county must monitor the status of its forest resources through proper management practices if the forestry industry is to maintain its position as a primary driver of the county's overall economy. The county has substantial forest areas that produce timber for the wood products industry as well as value added wood products firms. Balancing tourism and development against forestland use fragmentation will be a challenging economic development issue in Langlade County's future.

- Agriculture

Langlade County is a major producer of potatoes, and has some remaining dairy production. The number of total dairy farms has declined, but production has been relatively stable, in part because of confined animal feeding operations (CAFO). Despite fewer dairy farms, cheese production remains a major industry in the county. Demand for dairy products remains high.

- Recreation and Tourism

There is an opportunity to capitalize on the natural resource base of the county as it relates to outdoor recreation and tourism. In 2017,

tourism spending was estimated at about \$47.7 million, which ranks 43rd overall in the state.

- Commuting Patterns

There are about 2,000 more persons leaving the county for employment opportunities, than there are persons coming into the county. The majority of those leaving are going to Marathon County, followed by Shawano, Brown, Outagamie and Oneida County. These 2,000 persons indicate an available workforce. The goal should be to balance the flow in and out of the county. This is based on the latest *U.S. Census On The Map* data (2015).

- Housing

Economic development efforts geared toward job creation require that there is housing available for the population taking the new jobs. Providing jobs for persons who do not live in the area greatly reduces the economic impact of the business upon the community. Employees tend to spend the majority of their wages in areas near their home. If employees are unwilling or unable to purchase/rent homes near their place of work, they will live in "bedroom communities" to obtain a more affordable housing situation. Creating situations in which both the business and its employees live in the same community can maximize the benefits of commercial activity with respect to revenues and economic performance. Currently, the City of Antigo and the Village of

White Lake see a demand for mid-range priced housing.

- Retain and Attract Youth

The county needs to provide opportunities for high school graduates, college graduates, and young adults. Part of a strategy includes job opportunities, vibrant communities, with amenities such as entertainment, restaurants and shopping. As the county population stagnates and grows older, without an influx of new residents the county workforce will shrink.

- Commercial and Industrial Development

Not all available sites are capable of offering the wide range of services necessary to appeal to all types of industrial development. Access to a

major interstate highway and rail service are both unavailable. Langlade County also suffers from lack of diversification in its industrial economy leading to a heavy reliance on relatively few industries. Such dependence means that local employment, as well as commercial retail trade, goes up and down with the business cycles for the dominant local industry. Continued economic diversification is a key to the community's growth.

- Income and Employment Levels

Although the county has made progress toward closing the gap over the last twenty years, income levels still are below state and federal levels and the unemployment rate exceeds both state and federal levels. A focus should be placed on living wage jobs.

6.2 *Inventory & Trends*

The purpose of analyzing the County's economy and identifying economic trends in this element is to answer some obvious questions. Which industries in the County have lagged in terms of economic performance? What are the underlying causes of poor economic performance in certain industries? What measures can be taken to address the economic problems that exist? When answering these questions, it is customary to use a comparative analysis between the

County, the State of Wisconsin, and the nation.

The analysis helps to determine the strengths and weaknesses of each industry sector in the County thereby identifying potential strategies for economic development. The information presented in this analysis has been collected from the Wisconsin Department of Workforce Development (DWD).

Economic Sectors

Overall, in 2016, there were 7,412 persons employed in the basic economic “sectors” in Lacleade County. That is a decrease of about 7 percent since 2000. The county, much like many other rural counties, has not fully recovered from the Great Recession.

Those economic sectors are presented below. They are: Natural Resources & Mining; Construction; Manufacturing; Trade, Transportation, & Utilities; Information; Financial Activities; Professional & Business Services; Education & Health Services; Leisure & Hospitality; Public Administration; and Other Services. **Table 6-1** displays the employment trends by sector within Lacleade County.

Table 6-1: Lacleade County Employment by Sector

Sector	2000	2010	2016	2000-2016 Net Change	2010-2016 % Change
Natural Resources & Mining	470	437	424	-46	-9.8%
Construction	305	209	194	-111	-36.4%
Manufacturing	1,730	1,470	1,378	-352	-20.3%
Trade, Transportation, & Utilities	1,922	1,869	2,057	135	7.0%
Information	91	*	62	-29	-31.9%
Financial Activities	250	240	294	44	17.6%
Professional & Business Services	180	201	269	89	49.4%
Education & Health Services	1,399	1,507	1,409	10	0.7%
Leisure & Hospitality	895	763	697	-198	-22.1%
Public Administration	493	473	434	-59	-12.0%
Other Services	235	355	194	-41	-17.4%
Sector Totals	7,970	7,524	7,412	-558	-7.0%

Source: Department of Workforce Development, QCEW ES202 Results, 2000, 2010 and 2016 & NCWRPC

*Data suppressed - some federal employees not reflected in totals

Between 2000 and 2016, the three fastest growing sectors were Professional & Business Services; Financial Activities; and Trade, Transportation, & Utilities. Although the Professional & Business Services sector was the fastest growing sector in terms of percentages, it accounts for less

than four percent of total employment. In terms of total employment, Trade, Transportation, & Utilities is the largest segment of the economy, followed by Education & Health Services; and Manufacturing.

It should be noted that the number of employees in certain sectors, particularly those workers engaged in agriculture, forestry & fishing, may be understated because this information utilizes Department of Workforce Development data; those who are self employed or work in family businesses are not reflected in this data.

1. Natural Resources and Mining:

Between 2000 and 2016, this sector shrunk by about 10 percent. There are 424 people employed in this sector. The state's growth rate in this sector was 60 percent. This is the sixth-largest sector in the County, accounting for about 6 percent of total employment.

This natural resource based sector is critical to the county and surrounding counties. It is these raw products that supply the demand for many major industries. Agriculture production of milk, potatoes, oats, barley, hay, snap beans, green peas, sweet corn, and soybeans is critical for the dairies and food processing industries. The timber produced in the area supplies the lumber mills, the pulp and paper mills, the millwork and housing components industries and the factory-built housing industry.

2. Construction

Between 2000 and 2016, this sector decreased by 36 percent, compared to a 10 percent decrease experienced in the state during the same time period. 194 persons are

employed in this sector. Construction is tied for the ninth-largest sector, accounting for about 3 percent of total employment.

3. Manufacturing

Between 2000 and 2016, this sector decreased by about 20 percent, roughly equivalent to the 22 percent decline experienced in the state during this time period. 1,378 persons are employed in the Manufacturing sector, making it the third-largest sector within Langlade County.

4. Trade, Transportation, & Utilities

Between 2000 and 2016, this sector increased by about 7 percent, compared to a 3 percent decrease experienced in the state during the same time period. The Trade, Transportation, & Utilities sector accounts for about 28 percent of total employment within the county with 2,057 persons employed in the sector, making it the largest sector in Langlade County.

5. Information

Between 2000 and 2016, this sector decreased by about 32 percent, compared to only an 8 percent decrease experienced in the state during the same time period. The Information sector accounts for about 1 percent of total employment with 62 persons employed in the sector, making it the smallest sector within Langlade County.

6. Financial Activities

Between 2000 and 2016, this sector increased by about 18 percent, a much higher increase than the 1 percent increase experienced in the state. The Financial Activities sector accounts for about 4 percent of total employment within the county with 294 persons employed in the sector, making it the seventh-largest sector within Langlade County.

7. Professional & Business Services

Between 2000 and 2016, this sector increased by about 49 percent, a rate of increase that is higher than the 30 percent increase experienced in the state. With 269 persons employed within the Professional & Business Services sector, employment within this sector accounts for about 4 percent of total employment within the county, making it the eighth-largest sector within Langlade County.

8. Education & Health Services

Between 2000 and 2016, this sector increased by about 1 percent, a much slower increase than the 25 percent experienced in the state. With 1,409 persons employed within the Education & Health services sector, employment within this sector accounts for about 19 percent of total employment within the county, making it the second-largest sector within Langlade County.

9. Leisure & Hospitality

Between 2000 and 2016, this sector decreased by about 22 percent, compared to a 16 percent increase experienced in the state. With 697 persons employed within the Leisure & Hospitality Sector, employment within this sector accounts for about 9 percent of total employment within the county, making it the fourth-largest sector within Langlade County.

10. Public Administration

Between 2000 and 2016, this sector decreased by 12 percent, compared to a 2 percent decrease experienced in the state during the same time period. With 434 persons employed in the Public Administration sector, employment within this sector accounts for about 6 percent of total employment within the county, making it the fifth-largest sector within Langlade County.

11. Other Services

Between 2000 and 2016, this sector decreased by about 17 percent, compared to a 2 percent increase experienced in the state during the same time period. With 194 persons employed in the Other Services sector, employment within this sector accounts for about 3 percent of total employment within the county, making it tied for the ninth-largest sector within Langlade County.

Economic Analysis

The primary technique used here to analyze the county's economic base is called the "Location Quotient". The technique is commonly used to provide detailed economic information about the local economy and industry sectors within the economy.

Location Quotient

This analysis technique compares local, state and national employment levels by economic sector. The result of this analysis is a numeric value called a location quotient. The model is derived from the premise that the local economy may be divided into two sectors: 1) a "basic" or non-local sector and 2) a "non-basic" or local sector.

Those employers providing goods and services that are purchased or consumed by customers outside the study (the county in this case) are considered to be basic employers. Conversely, goods and services consumed by the local community are considered non-basic. Thus, economic success of the community is measured by its ability to bring in money from outside of the community; the community offers goods and services that are sought out by other regions that do not have them. This type of economy is also known as an export economy and is usually the overall goal of many economic development programs.

The location quotient model uses employment information for both the County and the nation by industry and compares their ratios of sectoral employment to total employment. Each industry sector is assigned a location quotient value which in turn is used to identify those employees considered export, or "basic" within a given industry sector. "Non-basic" employees are those workers whose wages are derived from money circulating within the existing local economy. In any community, certain goods and services simply cannot be obtained locally and consumers must look elsewhere. This is known as an industry sector "leakage". Too many leakages can result in a declining economy as consumers continue to spend their money in communities other than their own. Fortunately, Langlade County has more basic employees than non-basic, however, if existing industries are not retained and new opportunities are not created in basic industries such as manufacturing, this status could change in the future.

The location quotient can be described by the following equation:

$$LQ_i = (e^t_i / e^t_T) / (E^t_i / E^t_T)$$

where:

e^t_i = regional (county)
employment in industry i in
year t

e^t_T = total regional (county)
employment in year t

E_i^t = national employment in industry i in year t

E_T^t = total national employment in year t

If that number is greater than 1.00, it is determined to be an exporting sector, while if it is below 1.00, it is

determined to be an importing sector. Exports bring money from outside the county into the local economy and imports represent local dollars flowing outside the county. **Table 6-2** provides a summary of the location quotient analysis results of those categories that exceed 1.00.

Table 6-2: Location Quotient by Major Category

Economic Category	Location Quotient
Agriculture, Forestry, Fishing and Hunting	9.18
Manufacturing	2.05
Retail Trade	1.61
Transportation and Warehousing	1.38
Other Services (except public administration)	1.04

Source: EMSI 2019.1

Categories with a location quotient exceeding 1.0 are highlighted below:

- **Agriculture and Forestry**

The Agriculture and Forestry sector is the most significant driver of Langlade County's economy. This category has a Location Quotient of 9.18, reflecting that Langlade County is a significant exporter of agricultural goods. Dairy, long the main farming enterprise of Langlade County, is the largest part of Langlade County's agriculture in terms of combined on-farm value and processing value; however, row crops, such as potatoes have become increasingly important. Much of the corn and forage crops grown in the County remain in the County for livestock feed. As the price of corn has risen, so has the production of corn for export out of the County. That new corn acreage

came from fallow land, and former dairy herd land. Potatoes are by far the most important cash crop in the County. Several factors make Langlade County an excellent location for seed potato production: skilled management, cool climate, silt loam soils, packaging equipment, and management of crop protectants. In addition to the certified seed potato producers, the County is the home of two seed cleaning and packaging companies that market corn, soybean, and small grain seeds.

There is also an increasing demand for wood and wood products globally, including the products that Langlade County's forests provide. This forestry-based economy has long supported employment opportunities and generated strong revenues for landowners. The presence of these forests in

Langlade County has also led to a demand for a mix of both forest products and recreational uses. As more people move into the rural areas of Langlade County, more development follows, which affects how the forest is used and impacts the ecology of these areas. The county must address the issue of how much forested land to protect and how much to develop.

- [Manufacturing](#)

Manufacturing is always an important component of any economy given its tendency to provide more and higher paying jobs than most other sectors. This category has a Location Quotient of 2.05. In Langlade County, this sector has the largest number of employees. Two significant export industries are small arms ammunition manufacturing, wood products, and electrical power supply components.

- [Retail Trade](#)

Retail trade is commonly in demand in rural areas. Langlade County provides basic retail services to residents, but most specialized retail requires imports from surrounding areas. This category has a Location Quotient of 1.61.

- [Transportation and Warehousing](#)

Langlade County has a developed transportation and warehousing industry. The local supply of these services is roughly adequate to meet

overall demand. This category has a Location Quotient of 1.38. Many industries rely upon transportation and warehousing as a major component of their business practice. Langlade County's rural setting creates a situation where the local industries must have effective transportation and warehousing services to compete in a regional, national, or global market.

- [Other Services](#)

This category collects all of the private sector service jobs that do not fit into other categories. This category has a Location Quotient of 1.04.

[Agricultural Economy](#)

Agriculture is a significant employer and economic driver for Langlade County. The county produces a variety of agriculture products like corn, oats, and hay alfalfa as well as milk production. The agricultural industry infuses a significant amount of revenue into the county economy through the sale of agricultural products to customers outside of the State of Wisconsin. Agriculture is one of the county's top export industries generating more than \$90 million in export revenue in 2018.

The agriculture industry in Langlade County continues to grow the Region's gross regional product while increasing access to local produce for the region. The increase in access ensures that local communities have the ability to eat

fresh, affordable produce creating a healthier population. The agricultural industry will continue to be a driver economy for Langlade County supporting a variety of additional industries like transportation and warehousing, manufacturing, wholesale trade, retail and service.

- **Farms**

Langlade County experienced a decrease in the number of farms over the past ten years. Peaking in 2007 with 487 farms, the county decreased the total number of farms to 432 in 2017, a reduction of 55 farms. The reduction in the total number of farms also impacted the total land in farms. Between 2007 and 2017 the county decreased the total land in farms from 122,895 acres to 116,386 acres, a 6,509 acre decrease.

Although the total number of farms and land in farms are decreasing in the county, the county has experienced a slight increase in the average size of farms. Between 2007 and 2017, the size of farms increased 17 acres between 2007 and 2012 increasing from 252 acres to 269 acres. The increase in the median size of farms in the county has helped offset the reduction in the number of farms over the past decade.

- **Agricultural Production**

Some of the county's major agriculture products are identified below, with market value of products

sold according to the U.S. Census of Agriculture:

Crops, including greenhouse and nursery products - \$59 Million

Vegetables, including potatoes - \$47 Million

Livestock and Poultry - \$42 Million

Milk production - \$31 Million

Corn and soybeans are also extensively grown for use both on local dairy farms and as a commodity sold outside of the County. Other vegetables grown in the county include: snap beans, peas, and sweet corn. Maple syrup, berries, and Christmas trees also contribute to the local economy.

Direct marketing to consumers through roadside stand, farmers' markets and pick-your-own generate some revenue for farmers for a variety of crops.

- **Agricultural Exports**

In 2018, Langlade County exceeded \$900 million in export revenue. Agriculture, Forestry, Fishing and Hunting was the second highest export industry accounting for over \$124 million in export revenue, or 14 percent of total export revenue. Only manufacturing exported more goods and services. The agriculture industry continues to be a major export industry. The agriculture, forestry, fishing and hunting industry is 8.78 times more concentrated in Langlade County than it is on average in the United

States. The ability to export goods and services is essential to the county's economy as it introduces new money to the economy, rather than simply circulating money that is already in the region.

Labor Force Analysis

This section examines four factors related to the county labor force. These factors are labor force, unemployment, workforce participation, and education & training. **Table 6-3** displays a variety of information related to the county labor force.

Table 6-3: Labor Force Indicators

Indicators	2000	2010	2016	2000-2016 County Change	2000-2016 State Change
Labor Force	10,760	10,181	9,612	-10.7%	5.1%
Employed	10,248	9,062	9,115	-11.1%	4.6%
Unemployed	512	1,119	497	-2.9%	19.3%
Unemployment Rate	4.8%	11.0%	5.2%	8.3%	14.3%
Participation Rate	62.8%	63.5%	59.7%	-4.9%	-3.2%

Source: DWD Local Area Unemployment Statistics (LAUS) Annual Averages; 2000, 2010, 2016; U.S. Census

Labor Force

Overall, the labor force has shrunk from 10,760 in 2000 to 9,612 in 2016. That represents a drop of about 11 percent, which is less than the state's growth rate of about 5 percent. The labor force is defined simply as the number of persons, sixteen and over, employed or looking to be employment. Persons over sixteen who are students, homemakers, retired, institutionalized, or unable/unwilling to seek employment are not considered part of the labor force. In 2000, 10,248 of those were employed and that dropped to 9,115 in 2016, a decrease of about 11 percent.

As identified earlier in the plan, the County has experienced a significant amount of aging. In 2000, about 25 percent of the population were 17 and under, while about 19 percent were 65 and older. By 2016, only about 19 percent were 17 and under, while the percentage of those 65 and older grew to over 22 percent. These population trends create issues for the expansion of the local labor force.

Unemployment

In 2000 the County had a 4.8 percent unemployment rate, compared to the state rate of 3.5 percent. In 2016, the County had a 5.2 percent unemployment rate,

compared to the state rate of 4.0 percent. Unemployment is defined as the difference between the total civilian labor force and total persons employed. Stay-at-home parents, retirees, or persons not searching for employment are not considered unemployed because they are not considered to be part of the “labor force”. Over the last sixteen years, Langlade County has generally had higher unemployment rates than the state average.

Workforce Participation

In 2000, about 63 percent of the population over 16 was in the labor force. By 2016, that rate decreased to about 60 percent. Workforce participation is a measure expressed in terms of a percentage of persons not actively seeking employment divided by the total working age population. These persons may not seek employment due to retirement, disability, choose to be a home care provider, or simply are not looking for work. In any event, these persons are not receiving unemployment benefits, nor are they seeking employment in any capacity.

Considering its population, Langlade County has fewer people participating in the workforce. Overall, the county has a labor force participation rate of about 60 percent while the state average is almost 67 percent. This, along with the decline in the labor force participation rate, can partially be attributed to the county’s high median age.

Education & Training

Worker productivity has often been cited as one important reason for the strength of Wisconsin’s economy. Both education and training is critical to maintaining that productivity.

The level of educational attainment is an important indicator of the skills of the labor force. Formal education and job training reflect a community’s ability to provide a labor force for certain types of industry. As identified earlier in the plan, educational attainment in the county is very similar to the national average in terms of those with a high school diploma or better, and bachelor’s degrees or higher, although, the county does lag behind the state in both areas.

Training is another labor force indicator. Partnerships between local businesses, governments, and educational institutions are very useful in developing the Regional economy. Institutions such as UW-Stevens Point and Nicolet Technical College, often direct their programs to the training needs of local workers and businesses. Training services for dislocated workers is provided at the “Job Center” located in the City of Antigo. The center is a one-stop resource for employers to meet their workforce needs and job seekers to get the career planning, job placement, and training services they need to obtain jobs. Organizations such as the North Central Wisconsin Workforce Development Board are important to this process as well.

Incomes & Wages

There are two basic measures of income: median household income and per capita income. Median household income provides an indication of the economic ability of the typical family or household unit while per capita income provides a measure of relative earning power on a per person level. As identified in the Demographics Chapter of this plan the Median Household income in 2000 was \$33,168 and the Per Capita income was \$16,960. Both Median and Per Capita Incomes have risen over the last decade, by 30 and 46 percent respectively. Both of these rates are faster the

state growth rates for the same time period.

Table 6-4 provides average annual wage data by industry as collected by the Wisconsin Department of Workforce Development (DWD) in 2016. While average wages in Langlade County are lower than in most of the neighboring counties, significant variations exist in certain industries. For example, average wages in the Trade, Transportation & Utilities industry are higher in Langlade County than in Lincoln County, despite Lincoln County having a higher average total across all industries (county total).

Table 6-4: Average Annual Wage by Industry, 2016

Industry	Langlade	Lincoln	Marathon	Oconto	Oneida
Natural Resources	\$29,629	\$32,345	\$34,007	\$28,308	\$35,647
Construction	\$39,038	\$50,632	\$55,474	\$40,368	\$47,068
Manufacturing	\$43,159	\$51,050	\$50,064	\$42,906	\$50,886
Trade, Transportation & Utilities	\$30,697	\$29,973	\$34,871	\$27,591	\$30,385
Information	\$25,927	\$26,169	\$46,632	\$39,863	\$49,884
Financial Activities	\$44,141	\$79,395	\$58,846	\$35,533	\$48,506
Professional & Business Services	\$38,162	\$39,069	\$48,040	\$30,909	\$37,224
Education & Health Services	\$36,498	\$40,133	\$49,413	\$31,401	\$53,201
Leisure & Hospitality	\$12,056	\$11,285	\$13,734	\$12,150	\$14,956
Public Administration	\$33,507	\$41,150	\$39,475	\$31,941	\$45,034
Other Services	\$27,736	\$23,398	\$28,347	\$34,772	\$24,476
County Total	\$33,381	\$41,894	\$43,265	\$32,068	\$38,445

Source: WI DWD, 2016

Economic Development Infrastructure

Overall, Langlade County's economic development infrastructure is concentrated in the City of Antigo, although there are industrial park facilities in Elcho and White Lake. This infrastructure investment provides a wider range of opportunities for the prospective entrepreneur or expanding business, and greatly increases the county's chances of developing and maintaining a stable employment base for its workforce in the future.

Langlade County's variety of infrastructure amenities includes:

- Three industrial parks including:
 - Antigo Industrial Park - a fully serviced 620-acre industrial park located in the City of Antigo.
 - Elcho Industrial Park - a fully serviced 52-acre industrial park located in Elcho
 - White Lake Industrial Park - a fully serviced 12.85-acre industrial park located in the Village of White Lake
- 142 miles of federal and state highway, including U.S. Highway 45 and State Highways 47, 52, 55 & 64.
- Approximately 271 miles of County Highways.

- Langlade County Airport - A public-use airport with two asphalt runways and offers some of the best approaches in the state due to the surrounding flat farmlands.
- Electricity - supplied by Alliant Energy & Wisconsin Public Service
- Garbage Removal - Services offered by B&B Containers and Waste Management
- Various Internet providers
- Fiber optics provided by Cirrinity & Frontier in some locations
- Natural Gas - services offered by City Gas Company & Wisconsin Public Service
- Propane Gas - services offered by various companies
- Telephone - services offered by Charter - Spectrum, Frontier & Solarus
- Municipal Water/Sewer Services - services available in Antigo, Elcho & White Lake

Industrial Parks are the critical economic development infrastructure in the county. The creation of industrial parks enables communities to compete with other communities to attract new businesses or to relocate existing businesses for expansions. An industrial park is a parcel of land

that has been developed according to a plan that provides sites for potential industrial firms. The “park” is designed in such a way that it ensures compatibility among industrial operations and the existing activities of the area in which the park is located. The “park plan” provides for appropriate building setbacks, lot sizes, building to land ratios, architectural specifications, and landscaping required by the local codes and as necessitated by the nature of industrial activity.

Economic Development Programs

Local:

Langlade County Economic Development Corporation (LCEDC)

A city – county funded organization that promotes the economic development of Langlade County. The organization is comprised of area businesspersons, citizens, local government, utility company representatives, state agencies and elected officials, educational institutions and other organizations essential to the growth of Langlade County. The purpose of the LCEDC is to serve the needs of new businesses coming to the area as well as to assist existing companies.

Antigo Chamber of Commerce

The Antigo Chamber of Commerce is dedicated to the promotion of the business community in Langlade County. The Chamber offers information on local business and industry to encourage and promote

the general business interest and promote tourism for the benefit of Langlade County Communities.

Regional:

Grow North

Grow North is a non-profit organization whose mission is to assist area counties and communities in their efforts to recruit and retain businesses, stimulate new job creation and to foster an environment conducive to entrepreneurial growth. Grow North was created in 2004 to foster cooperation among economic development partners and foster economic growth efforts in Forest, Langlade, Lincoln, Oneida and Vilas counties among others.

North Central Wisconsin Development Corporation

The North Central Wisconsin Development Corporation (NCWDC) manages a revolving loan fund designed to address a gap in private capital markets for long-term, fixed-rate, low down payment, low interest financing. It is targeted at the timber and wood products industry, tourism and other manufacturing and service industries.

Northwest Wisconsin Manufacturing Outreach Center (NWMOC)

The Northwest Wisconsin Manufacturing Outreach Center provides operations assessments, technology training, and on-site assistance to help firms throughout Wisconsin modernize and streamline manufacturing processes.

State:

Wisconsin Small Cities Program

The Wisconsin Department of Administration provides federal Community Development Block Grant (CDBG) funds to eligible municipalities for approved housing and/or public facility improvements and for economic development projects. Economic Development grants provide loans to businesses for such things as: acquisition of real estate, buildings, or equipment; construction, expansion or remodeling; and working capital for inventory and direct labor.

Wisconsin Economic Development Corporation

WEDC provides a variety of assistance and programs to promote business development. They provide tax credits, grants and loans.

The Wisconsin Innovation Service Center (WISC)

This non-profit organization is located at the University of Wisconsin at Whitewater and specializes in new product and invention assessments and market expansion opportunities for innovative manufacturers, technology businesses, and independent inventors.

Wisconsin Small Business Development Center (SBDC)

The UW-SBDC is partially funded by the Small Business Administration and provides a variety of programs and training seminars to assist in the creation of small business in Wisconsin.

Transportation Economic Assistance (TEA)

This program, administered by the Wisconsin Department of Transportation, provides immediate assistance and funding for the cost of transportation improvements necessary for major economic development projects.

Other State Programs

The State operates and staffs a Job Center in Antigo at the Library. This site is currently open one day a week and provides an array of employment and training related services for workers, youth and businesses.

Federal:

Economic Development Administration (EDA)

EDA offers a variety of grants to promote economic development, including a public works grant program. These funds are administered through local units of government for the benefit of the local economy and, indirectly, private enterprise. Within the County, EDA funding has assisted industrial park development and the Wood Technology Center of Excellence. North Central Wisconsin Regional Planning Commission provides assistance with the various programs offered by EDA.

U.S. Department of Agriculture – Rural Development (USDA – RD)

The USDA Rural Development program is committed to helping improve the economy and quality of life in all of rural America. Financial

programs include support for such essential public facilities and services as water and sewer systems, housing, health clinics, emergency service facilities, and electric and telephone service. USDA-RD promotes economic development by supporting loans to businesses through banks and community-managed lending pools. The program also offers technical assistance and information to help agricultural and other cooperatives get started and improve the effectiveness of their member services.

Small Business Administration (SBA)
SBA provides business and industrial loan programs that will make or guarantee up to 90% of the principal and interest on loans to companies, individuals, or government entities for financing in rural areas. Wisconsin Business Development Finance Corporation acts as an agent for the U.S. Small Business Administration (SBA) programs that provide financing for fixed asset loans and for working capital.

6.3 Goals, Objectives & Policies

Goals:

- 1) Maintain, diversify and expand the economy in the county, while maintaining the rural character of the county.
- 2) Encourage the coordination of economic development efforts with the city, village and towns, as well as other organizations.
- 3) Promote the relocation of compatible businesses to the county.
- 4) Maintain and enhance public facilities and services.
- 5) Pursue increased funding from both public and private sources.
- 6) Encourage and support attraction of young adults to the county.

Objectives:

- 1) Promote the retention and expansion of the current economic base.
- 2) Encourage the creation of new businesses.
- 7) Preserve and enhance the quality of life for residents.

Policies:

- 1) Support county and local efforts related to economic development.
- 2) Conduct a business retention survey from time to time to understand the needs of area businesses.
- 3) Assist local inventors to create new firms, work with area entrepreneur networks.
- 4) Encourage educational institutions to develop training programs needed by the area's businesses to meet identified needs.
- 5) Support and work with local school officials on expanding the school to work program.
- 6) Maintain a list of available sites & buildings and market to brokers and targeted firms.
- 7) Determine current employment characteristics and identify existing and future employment needs.
- 8) Expand existing and secure additional revolving loan funds to assist local economic development efforts.
- 9) Continue to support the Langlade County Airport as an economic development asset.
- 10) Evaluate, maintain and enhance infrastructure as necessary to facilitate economic growth, such as an industrial park.
- 11) Plan for an adequate supply of land for commercial and industrial needs.
- 12) Promote telecommunications infrastructure, such as broadband, and other related technology county-wide.
- 13) Direct industrial development to areas with the infrastructure and services to support the development.
- 14) Pursue state and federal grants, among others, to invest in economic development infrastructure.
- 15) Develop strategies to attract new people to the county, particularly young people to increase workforce.

Chapter Seven

Land Use

7.1 Background

This is the seventh of nine chapters that comprise the Langlade County Comprehensive Plan. This chapter is based on the statutory requirement for a compilation of goals, objectives, maps, and recommendations to guide the future physical development of the County. This chapter brings together many of the previous chapters to provide a general framework for planning throughout the county.

Previous Planning Efforts

As in the previous chapters, it is important to review prior planning efforts related to land use. County level plans are mentioned first, followed by local plans, and regional efforts.

County Plans

There are a variety of county plans that relate to land use that have been completed over the last several years. These plans include:

Farmland Preservation Plan:

The Farmland Preservation Plan's required elements are incorporated into this Langlade County Comprehensive Plan.

Outdoor Recreation Plan: This plan's primary purpose is to identify existing recreational facilities and identify needed facilities for a five-year period. A variety of information is included in that plan, such as trail information, park inventory and future needs.

Land & Water Resource Management Plan: The primary intent of this plan is to identify strategies to protect the quality and quantity of the county's soil and water resources.

Comprehensive Forestry Plan: The purpose of the plan is to manage, conserve and protect the natural resources within the county forest on a sustainable basis. The Plan contains information about forest resource planning, outdoor recreation planning, silvicultural practices, aesthetic management zones, trails and access control, biological communities, and wildlife species that exist within the county forest.

Local Comprehensive Plan Efforts

City of Antigo Comprehensive Plan -
In 2018, the City of Antigo prepared

an update of its comprehensive plan. The previous plan was completed in 2004. The land use map identifies future growth areas of the city. Residential growth is planned to the east and west of the city in the surrounding towns, while north fringe of the city is planned for more mixed uses of commercial and industrial.

Village of White Lake - The Village prepared a comprehensive plan in 2015. That plan provides an extensive inventory of the community, identifies issues, and sets forth direction for future growth.

Town Comprehensive Plans - Several towns within the county have prepared comprehensive plans, including: Antigo, Elcho, Neva, Polar, and Rolling. Most of those plans are in need of their 10 year update. The Town of Antigo updated their plan in 2019, while only the Town of Polar is in the process of updating its plan.

Regional Efforts

Regional Livability Plan

The Regional Livability Plan is a comprehensive plan for the ten-county Region prepared by the North Central Wisconsin Regional Planning Commission. The RLP identifies ways to address the region's opportunities and weaknesses to increase the region's livability for all residents. The plan addresses four specific areas: housing, economic development, transportation, and land use. This

regional effort was created, in part, to provide a framework for county and local unit plans within the region.

Land Use Planning Issues

Conflicting Land Uses

Scattered, low-density development is found in many parts of the County. This type of development is generally not sewerred and diminishes the level of development in the areas where public water and sewer are available. These developments can also encroach on farm and forestry areas, taking land out of production in a piecemeal fashion and change the rural character of an area. Ironically, the subdivision of rural areas for sprawl development ends up destroying the rural setting originally sought. Sprawl also makes siting landfills, quarries, and shooting ranges and other uses much more difficult as the close proximity of rural housing makes safety and aesthetics an issue, thus forcing the costs of these services up since they must be obtained elsewhere. Utilities and other services are also more expensive in sprawl development since roads, water, sewer, and electrical lines must be longer and spread out. All of these factors significantly affect the economic well-being of the County.

Conflicting land uses in urban and rural areas often include such things as: industries adjacent to residences, intermingling of commercial and residential uses,

and residences adjacent to industrial uses. Agricultural practices such as improper manure spreading and forestry practices, such as non-buffered clear cutting, can be offensive to non-farm rural residents and visitors to forest areas. With regard to recreational land-use, competition on public lands between backpackers, bicyclists, all-terrain-vehicles, and horseback riders as well as public water bodies between water skiers, boaters, anglers, and swimmers must be considered. Some conflicts also exist where land owners have unkept or unsightly properties, including visible junk and old vehicles.

Sustainable Agriculture & Forestry

Sustainable practices in agriculture involve carefully planned techniques to prevent soil erosion, soil contamination, non-point water pollution, and productivity loss. Organizations such as the State Department of Natural Resources (DNR) and the Natural Resources Conservation Service (NRCS), along with county staff support responsible land management practices with the intent of preserving land productivity for the long-term.

Sustainable practices in forestry involve carefully planned techniques to prevent soil erosion, soil contamination, non-point water pollution, and productivity loss. The process of converting large contiguous areas of forest into smaller patches of forest is called

forest fragmentation. Breaking up the continuous area with non-forest land-uses can inhibit the regeneration of the forest and may negatively impact both plant and animal species. Wildlife often needs a safe path from food to water; development may prevent animals from obtaining these necessities because of man-made barriers such as highways, fences, structures, etc. Species may also become extinct if they are isolated within small “islands” of forest that lack the appropriate genetic diversity to ensure healthy procreation. Fragmentation may be temporary or permanent. Fire and timber harvest are examples of temporary fragmentation, while road building, agriculture, and urban development cause permanent fragmentation.

Location of Public Facilities and Infrastructure

The location and impacts of public service facilities are of great importance to land-use planning. Schools, airports, and highways tend to attract new development while utility corridors, power plants, and landfills generally try to avoid areas where development will occur. The topography, geography, population, land market, and economic conditions of the County often directly affect these location decisions.

Environmentally Sensitive Areas

Wetlands, rivers, streams, lakes, steep terrain, and other natural features are often in conflict with

human development. Over-development along shorelines and in other riparian areas can cause pollution and destruction of an area's natural beauty as well as detrimental impact on flora and fauna. This, in turn, may negatively impact recreational activities and subsequently the economy of the County. Failing septic systems can cause contamination of surface water bodies reducing recreational attractions and increasing health risks. Steep slopes or other areas unsuitable for building foundations should be avoided for development, because the shifting earth can cause great damage to a structure's foundation over time. Another concern is that of mining, particularly metallic mining. Although there are no known economically viable deposits in the county, there are nearby deposits that could impact the area environment if they are opened.

Community Revitalization

Cities, villages and unincorporated communities provide identity to their surrounding areas. Where important parts of such communities are deteriorating, the rest of the area suffers. Problems involving abandoned and dilapidated buildings, loss of business and tax revenue, and inefficient use of valuable urban land gives rise to the need for appropriate land-use policies to address them. Planned redevelopment helps to re-establish a positive identity for these communities.

Local Land Use Tools

Zoning Regulations

There are two basic types of zoning, general and shoreland.

General Zoning has been a tool used by units of government since the 1920's in Wisconsin. Zoning provides a reasonable protection of property rights of landowners by minimizing incompatible uses. Generally, zoning identifies a variety of broad districts that identifies the primary allowable or permitted uses, as well as a list of permitted uses with some conditions, called conditional uses. Often a district will list non-permitted uses. These districts are displayed on an official zoning map. The County last revised its general zoning in 1985, with minor updates annually. Thirteen of seventeen towns utilize general county zoning. These are: Ackley, Ainsworth, Antigo, Elcho, Neva, Norwood, Parrish, Peck, Polar, Price, Rolling, Vilas, and Wolf River. Four towns have no zoning. These are the Towns of Evergreen, Langlade, Summit, and Upham.

Shoreland Zoning is mandated by state law and is administered at the county. The intent of shoreland zoning is to control development near waterways, in the most sensitive environmental areas. The area defined by state law is the area within 300 feet of a stream or river or to the landward side of the floodplain and 1000 feet of a lake, flowage, or pond. The county has jurisdiction throughout all of the

towns for shoreland zoning, regardless if they have county zoning, local town zoning or no zoning, therefore all seventeen towns fall under county shoreland zoning ordinance. Shoreland zoning does not apply to incorporated areas. County Shoreland Zoning was last updated in 2002, and included the adoption of a water classification system.

Land Division Regulations

The purpose of a land division or subdivision ordinance is to regulate and control the division of land to: Further the orderly layout and use of land; Prevent the overcrowding of land; Lessen the congestion on streets and highways; and Facilitate adequate provision for water, sewage and other public improvements. A subdivision ordinance includes technical requirements, design standards for plats and certified survey maps, and required improvements (i.e. stormwater detention, public and private sewage, land dedication).

The Lnglade County Land Division Ordinance outlines procedures for land division, technical requirements, design standards for plats and certified survey maps, and outlines required improvements (i.e. stormwater detention, public and private sewage, land dedication). Local units of government may also elect to have a separate land division ordinance if it is more restrictive than the county ordinance.

Consistency

Following 2010, land-use actions related to both general and shoreland zoning and land division must be consistent with an adopted plan. Therefore, an attempt should be made to make decisions between the plan and zoning and land division consistent to the greatest degree possible.

The consistency requirement in the comprehensive planning statutes deals with the need for land use decisions to be consistent with the plan, but there is no legal requirement that plans be consistent one with the other, except that where a Town is under County zoning. In that case the adopted town plan should be consistent with the County plan, so that decisions that affect the Town reflect a common policy direction.

Counties are required by statute to seek approval from Town boards for any re-zoning within that town. In addition, counties routinely consult towns on conditional use applications and changes to zoning and land division ordinances. Cooperation in planning and zoning can increase the efficiency and effectiveness of local government. As an example, during a rezoning where the Town has the ability to reject a decision made by the County, if the Town and the County plans are significantly different in terms of the future vision for land use it is difficult for decisions to be consistent with each other.

State Land Use Programs

There are two state programs that relate directly to this plan. They are listed below:

Wisconsin Comprehensive Planning Program

In October of 1999, Wisconsin Act 9 was signed into law. This was the comprehensive plan law – now state statute 66.1001. The law requires all jurisdictions within the state that exercise control over land-use to prepare a comprehensive plan. It outlines nine required chapters of the plan and requires a public participation plan be included as part of the process. Jurisdictions that do not have a comprehensive plan in place by the deadline may not engage in actions that impact land-use, including zoning and land division. The comprehensive planning law is significant in many ways. It established a definition of what a comprehensive plan should cover; it establishes requirements for public participation; and it requires that the plan be consistent with local implementations tools. Most important, is that it maintains that the process be locally driven so all local units of government decide their own future.

It is this law that requires the counties to prepare comprehensive plans. Langlade County prepared a

plan in 2009 and it is being updated and expanded to include the Farmland Preservation Plan.

Working Lands Initiative

The Wisconsin Working Lands Initiative was passed as a part of the state's 2009—2011 biennial budget process. This is included as part of state statute chapter 91. The goal of the Working Lands Initiative is to achieve preservation of areas significant for current and future agricultural uses through successful implementation of these components. The main components include:

- Expand and modernize the state's existing farmland preservation program
- Establish agricultural enterprise areas (AEAs)
- Increase tax credit opportunities and certainty of credit value
- Development of an agricultural conservation easement program

The Wisconsin Working Lands Initiative requires that each county update its Farmland Preservation Plans. Langlade County prepared an update in 2014 and it is being updated and incorporated into this plan as part of the comprehensive plan update.

7.2 Inventory & Trends

The inventory and trends section identifies the County's land uses. It also looks at the change over the last twenty years and makes projections into the future. The element relies on many things discussed in earlier elements, such as population and natural resources.

In terms of land area the county covers nearly 559,000 acres. Eleven of the seventeen towns are standard 6 by 6 mile towns, or about 23,000 acres each. However, six of the

towns are either double or triple that size. **Table 7-1** displays the land area of each of the local units of government in the county. Standard size towns are about 23,000 acres, while some of the larger towns are 45,000 acres. The City of Antigo is the largest incorporated community in the county with about 4,100 acres, while the Village of White Lake has only 1,400 acres. The Town of Wolf River is the largest town with nearly 75,000 acres.

Table 7-1: Land Area

Minor Civil Division	Land Area in Acres	% of County Land Area
Town of Ackley	45,355	8.1%
Town of Ainsworth	44,514	8.0%
Town of Antigo	19,880	3.6%
Town of Elcho	45,764	8.2%
Town of Evergreen	22,930	4.1%
Town of Langlade	45,771	8.2%
Town of Neva	23,959	4.3%
Town of Norwood	22,868	4.1%
Town of Parrish	23,276	4.2%
Town of Peck	23,788	4.3%
Town of Polar	22,806	4.1%
Town of Price	23,153	4.2%
Town of Rolling	23,029	4.1%
Town of Summit	23,293	4.2%
Town of Upham	45,380	8.1%
Town of Vilas	22,955	4.1%
Town of Wolf River	74,710	13.1%
Village of White Lake	1,410	.3%
City of Antigo	4,142	.7%
Langlade County	558,983	100.0%

Source: 2010 U.S. Census Tiger Files & NCWRPC

Natural Landscape Overview

Natural resources was discussed earlier in the plan, however land use is the foundation for this chapter. We briefly review the environmentally sensitive areas, which includes open water, wetlands, floodplains, as well as soils with limitations for development, groundwater contamination susceptibility, steep slopes, large tract forest and areas of prime farmland. Many of these natural features have an impact on where development can and cannot occur and need to be reviewed to create the future land use plan.

Environmentally sensitive areas include surface water, wetlands, and floodplains. These are areas that often fall under the county shoreland regulations.

- The county has an abundance of surface water, including the Wolf River, numerous lakes, as well as many streams. However, as waterfront development continues additional pressure is placed on the existing water bodies and the surrounding natural communities.
- Wetlands are scattered throughout the county. Wetlands act as a water storage mechanism, lessening flooding during heavy rain events by moderating downstream flow rates by releasing collected water over a longer time. The water

filtration function of wetlands protects the quality of both groundwater and surface water. Development increases the amount of runoff and can make flooding worse, endangering wildlife habitat and damaging property.

- Floodplains follow along the river and streams within the county. Building within floodplain areas can increase flood elevations and velocity, causing damage to downstream property and infrastructure, and increasing erosion and sedimentation.

Other natural features that should be considered in the development of a future land use plan include steep slopes, large tract forest, and areas of prime farmland.

- Steep slopes create difficulties for development; however, these areas are often unique and desirable sites for development. Development in these areas can create a negative effect on the landscape. Slopes are extremely vulnerable to erosion, are difficult to stabilize once disturbed by construction, and can reduce the aesthetics of an area. In addition to erosion, many rare habitat communities and species are lost to construction on steep slopes. There are relatively few areas of steep slopes, those that are

greater than a 20 percent grade, in the county.

- Much of the county is forested, with large tracts in private ownership. Fragmentation results in the decrease of forest products production, and decreased production of interior forest wildlife species. Development, especially in larger tract forests creates some problems, although not for the actual development of the parcel, but indirectly as a result of the development in the larger community.
- There are major areas of highly productive soils in the county, particularly the silt loams in the Antigo area. Land with the optimal soil composition, slope, and moisture for agriculture is considered to be “prime”. Much of this has been identified in the Farmland Preservation Plan. Scattered development within the agricultural community creates problems of conflicting land uses. When enough residential development occurs, it decreases the ability of the area to continue in agricultural uses, because of neighbor opposition to farming activities and because the amount of contiguous farmland shrinks to an un-economic amount of acreage.

Existing Land Use

The first step in analyzing land use is to inventory existing land uses. Utilizing 2015 air photos, the NCWRPC categorized all lands into several broad general land use categories or classifications. These classifications are: Agriculture, Commercial, Industrial, Woodlands, Residential, Transportation, Quarry, Open Grassland, Outdoor Recreation, Government/Public/Institutional, and Water. See [Existing Land Use Map](#).

The Existing Land Use map provides a “birds eye view” of existing development patterns in the county. It shows how land is currently being used. Easily observed are the vast woodlands, including wetlands, as well as the major agricultural areas throughout the county. Residential development is concentrated in Antigo and around many of the larger lakes in the northern part of the county, and scattered along town and county roads throughout the county.

Using this map, calculations were made with a geographic information system (GIS) to determine acreage calculations. Note that these are generalized and are not intended to be exact, but rather provide an overview of what the land is being used for now. The information is displayed in [Table 7-2](#).

Table 7-2: Existing Land Use, 2015

General Category	Acres	Percent
Agriculture	82,200	14.5%
Commercial	1,304	0.2%
Industrial/Quarry	844	0.1%
Governmental/Public/Institutional	1,022	0.2%
Open Lands	17,002	3.0%
Outdoor Recreation	837	0.1%
Residential	11,739	2.1%
Transportation	5,866	1.0%
Woodlands	435,896	76.8%
Water	11,125	1.9%
Total Acres*	567,824	100.0%

Source: Existing Land Use Map based on Local Plans, Cluster Meeting Maps & NCWRPC GIS

* These calculations do not include the City of Antigo

Woodlands are currently the largest land use in the county. Nearly 77 percent of the county is considered woodlands, although much of this is also wetland, the second largest land use is agriculture, with about 15 percent of the total. Combined these two uses represent almost 92 percent of the land use in the county. Residential uses make up just over 2 percent of the total.

Public Ownership

Ownership is an important factor to consider related to comprehensive planning. Different levels of government throughout the county own various lands. About 30 percent of the county is publicly owned land.

- Federal Ownership

Lands in the county owned by the federal government total approximately 40,000 acres as part of the Chequamegon-Nicolet National Forest, most of which is in the Town of Wolf River.

- State of Wisconsin Ownership

Within the county, the state of Wisconsin owns approximately 18,000 acres. The Wisconsin Department of Natural Resources owns land in fisheries and wildlife areas across the County, much of Wolf River's shoreland, along with the Wolf River State Trail.

- Langlade County Ownership

Langlade County Forests were the first county forests created from tax delinquent land in Wisconsin under the County Forest Crop Law, with the first state aid payment being received in June of 1932.

Langlade County owns 129,968 acres of county forest. This land is managed for multiple uses, and is independently certified as sustainably managed and harvested. This includes the recently purchased former Robert S. Lyle Scout Reservation Site, a 522-acre camp that the County plans on using as a campground with public access to both Aninnan Lake and Perch Lake.

- Town Ownership

Town-owned lands comprise less than 1 percent of the county's total acreage. Primarily, town-owned land is used for town facilities such as administration buildings, community centers, garages/maintenance buildings, fire stations, etc. The Town of Peck owns 2,333 acres of land for the Peck Town Forest and 80 acres for Peck School's Forest.

For a visual representation of publicly-owned lands within the county. [See the Land Ownership Map.](#)

Demographics Affecting Land Use

Population, housing and employment are the three most critical demographic factors that influence land use patterns. In an effort to determine future land use needs, a series of projections were completed using 1990, 2000, and 2010 population, housing units and

employment information. By continuing the trends of the last twenty years into the future, we determine the number of additional persons, housing units, and jobs that will need a place somewhere in the county.

Population

As discussed earlier in the plan, the population has been slowly growing over the last twenty years. In 1990 the population was 19,505 and by 2010 it was 19,977, an increase of about 2.4 percent.

For this section, two sets of population projections are displayed. North Central Wisconsin Regional Planning Commission (NCWRPC) developed one set based on the past twenty-year trend. The Wisconsin Department of Administration (DOA) develops projections for all counties and the state following the Census release. Those projections are highly refined and based on a variety of factors including birth rates, death rates and migration. They are provided as a comparison and as another possible scenario of population trends in the county.

NCWRPC's projections are based on the percentage growth rate from 1990 to 2010 and projected into the future. That method indicates a growth rate of 2.4 percent. By 2040 a population of about 20,700 is expected. The DOA projections indicate a decline of 2.2 percent over the 20-year period. The projected population for 2040 is 19,470, but indicates an increase of population

up until 2030 with a decline afterwards.

Table 7-3 displays the projected increase for population in five-year increments for 2020, 2025, 2030, 2035 and 2040.

Housing

Over the last twenty years there have been substantial increases in the number of housing units in the county. In 1990, there were 10,285 housing units in the county and by 2010 there were 12,268 housing units, an increase of over 19 percent.

Based on the NCWRPC population projections, housing units are expected to increase. As displayed in table there will be an additional 490 persons in the county by 2030. Based on projected population growth and existing persons per household of 2.2 we determined the total units needed in the county. An additional 220 housing units will be needed for the new residents alone. This does not include demand for

seasonal housing, which is a significant portion of the housing stock.

Table 7-3 displays the projected increase for housing units in five-year increments for 2020, 2025, 2030, 2035, and 2030.

Employment

In 1990, 6,439 jobs were located in the county and by 2010 there were 7,524, an increase of nearly 17 percent. Based on the NCWRPC employment projections, employment is expected to continue to increase. Using the 1990 to 2010 historic employment trend data almost an additional 1,470 jobs will be created in the county.

Table 7-3 displays the projected employment increases in five-year increments for 2020, 2025, 2030, 2035, and 2040.

Table 7-3: Population, Housing & Employment Projections

	2020	2025	2030	2035	2040
Population					
NCWRPC	20,219	20,342	20,465	20,589	20,713
DOA	19,915	20,210	20,340	20,140	19,470
Housing Units					
NCWRPC	12,378	12,434	12,490	12,546	12,603
Employment					
NCWRPC	8,171	8,515	8,874	9,248	9,638

Source: NCWRPC, WI DOA

Land Demand

Overall county population growth is expected to drive the growth in the county. An increasing population drives demand for both housing and

employment opportunities. The previous projections highlighted those trends. To determine future land use needs we examine existing densities and project those into the

future to determine land use demand.

Table 7-4 display the future land use demands in five-year increments for residential uses and employment uses for both commercial and industrial. Assuming existing density patterns, about 890 acres will be needed to meet future residential, commercial & industrial demands.

Table 7-4: Land Use Demand in Acres

	2020	2025	2030	2035	2040
Residential	68	68	69	69	70
Commercial	55	57	60	62	65
Industrial	45	47	49	51	54

Source: NCWRPC

Agricultural demand will remain stable over the period, so no additional land is needed. In fact, some of the additional acres needed for other uses will likely be converted from existing agricultural uses outside of farmland preservation areas.

Land Values

Overall county equalized land values have increased 55 percent over the

last eighteen years; meanwhile, the State of Wisconsin increased 100 percent. **Table 7-5** displays information for both 2000 and 2018. Not all types of land increased equally. Residential property values increased by 120 percent and commercial values increased by only 27 percent, and agricultural values declined 55 percent. Meanwhile, undeveloped lands increased by 65 percent. Agricultural (AG) Forest was not a category in 2000.

Table 7-5: Equalized Values (Land)

Type of Property	2000	2018	% Change
Residential	\$152,047,700	\$318,770,800	120%
Commercial	\$28,979,100	\$36,712,100	27%
Manufacturing	\$919,400	\$1,901,500	107%
Agricultural	\$29,868,800	\$13,482,600	-55%
Undeveloped	\$8,716,600	\$14,362,700	65%

AG Forest	\$0	\$18,613,800	NA
Forest	\$134,280,000	\$148,158,800	10%
Other	\$4,097,300	\$5,223,200	27%
Total Value:	\$358,908,900	\$557,225,500	55%

Source: WI DOR, Statement of Changes in Equalized Values 2000 & 2018

Future Land Use

After reviewing the natural and built environments and after examining

population, housing, employment and land demand trends, the next step is to develop a future land use plan map. The future land use plan map represents the preferred long-term land uses in the county. Although the map is advisory and does not have the authority of zoning, it is intended to reflect community desires and serve as a guide for local officials to coordinate and manage future development. The planning horizon for this plan is twenty-years.

Land Use Categories

As was done with the existing land use process several future land use categories were established. These are meant to be similar but not exactly the same categories or classifications. These nine categories are defined below:

Residential

Identifies areas recommended for residential development typically consisting of smaller lot sizes. (Usually about 5 acres or less)

Rural Residential

Identifies areas that are recommended for less dense residential development, consisting of larger minimum lot sizes than the residential category. These areas will also allow a mixture of residential uses, and provide a good transition from more dense development to the rural countryside. (About 10 acres or more).

Commercial

Identifies areas recommended for commercial development, as well as existing commercial establishments located throughout the county.

Industrial

Identifies areas recommended for industrial development, as well as existing industrial areas located throughout the county. This also includes quarries.

Governmental/Public/Institutional

Identifies existing or planned governmental/public/institutional facilities within the county, including recreational facilities.

Agricultural Areas

Identifies areas to be preserved for the purpose of general crop farming, dairy operations, raising of livestock, or other agricultural uses.

Forestry-Wooded Areas

Identifies areas of large woodlands within the county.

Transportation Corridors

Identifies the existing road network along with the recommendations for improved and safe traffic movement in the county. This also includes rail corridors and airports.

Open Space & Preservation

Contains large open areas and environmental sensitive areas, such as 100-year floodplains as defined by the Federal Emergency Management Agency, DNR wetlands, steep slopes, and open water. This could include endangered species habitat or other significant features or areas identified by the county.

These land use categories are generally consistent with the local town plan categories that have been developed.

Future Land Use Plan Map

The Future Land Use Plan Map is not the same as the Existing Land Use map. The existing land use map categorizes the way land is

being used today, while the intent of the future land use plan map is to identify areas for future development. Often times there are overlaps between the maps, but the purpose of each map is different.

The Future Land Use Plan map is general in nature and was developed as a general guide for future development in the county. Although general, the future land use plan map indicates appropriate future land uses, and as the result shows where rezonings may occur. In many areas the existing zoning districts already reflect the desired future land uses; while in other areas, zoning map or text changes may be required to meet some of the desired future land uses.

It should be noted that the Future Land Use Plan map is not a zoning map. The identification of desired future land use types through the map does not imply that an area is immediately appropriate for rezoning. Given service demands and a desire for controlled growth, careful consideration to the timing of zoning decisions is essential. In some places, it may be desirable to rezone land to reflect the planned land use designations as soon as possible. In other cases, it may be appropriate to wait to rezone the area until an actual development proposal is brought forward. This plan looks out twenty-years.

The original future land use plan map was prepared in 2009. It was created following a process with input from the towns and involvement of county staff, and

approved by the Citizen Advisory Committee and the County Board. Specifically, each group used their broad knowledge of the towns and compared it with the information prepared as part of the planning process, including existing land use maps, ownership and natural resource maps, among other items. In the end, town maps were clipped together, along with the five towns that had prepared their own comprehensive plans, to create a county level future land use plan map. The goal of the process was to produce a generalized land use plan map to guide the county's future growth.

Using the 2009 plan map as a starting point and reviewing the information prepared as part of this planning effort, including the Existing Land Use map, farmland preservation maps, and other information some minor changes and corrections were made. The map was also reviewed by county staff and the Citizens Advisory Committee before finalizing. Any updated town plans would have been incorporated, but there were none. See [Map 7-2: Future Land Use Plan](#).

Farmland Preservation Plan

The county farmland preservation plan was previously prepared as a stand-alone document, but was technically an amendment to the comprehensive plan. For overall ease of planning and future updates these two plans are merged into one document as part of this planning effort. Much of the background

information related to farmland preservation is included in the Natural, Agricultural and Cultural Resources chapter. Critical to land use is both the Farmland Preservation areas and Agricultural Enterprise Areas.

The Farmland Preservation Maps identify areas that should be preserved for agricultural uses in the county. These areas were evaluated based on a variety of factors as the best location for agriculture. [See the FPP Map](#).

Agricultural Enterprise Area Maps identify large tracts of contiguous lands that are existing agricultural areas. There are two AEAs in the county. One is the Antigo Flats, which runs into Marathon County, and the other is the Evergreen – Wolf River, which is located in the Town of Evergreen and the southern section of the Town of Wolf River. [See the AEA Map](#).

Redevelopment Opportunities

The most efficient development utilizes existing public services and infrastructure; these areas are referred to as “*Smart Growth*” areas. Currently, the majority of existing services are located in the City of Antigo and the Village of White Lake. These areas have existing infrastructure and service capacity. The use of existing infrastructure and services is more cost-effective; therefore, new commercial, industrial and higher density residential development should be

located in these areas. The majority of these sites would be located within the City of Antigo. There are some scattered sites throughout the county that may be available for reuse.

Areas where sewer & water and other infrastructure and services are not available should have minimal industrial and commercial development and only scattered residential development, where appropriate.

Adjoining Planning Efforts

All of the seven surrounding counties have adopted comprehensive plans. Below is a review of those plans.

Forest County

Forest County along with eleven of its towns, the City of Crandon and tribal nations of Mole Lake and Potawatomi developed plans between 2009 and 2011. Currently, Forest County is starting to update sections of that plan.

Lincoln County

Lincoln County adopted a plan that included “mini” plans for most of the towns. That plan is in the process of being updated.

Marathon County

Nearly all of the towns in the county completed plans in the early 2000s that helped formed the basis for the 2006 county plan. In 2016,

Marathon County updated its comprehensive plan. Most of the local towns were encouraged to update their own plans, but few did. Following adoption of the comprehensive plan the county developed a strategic plan to help implement the plan.

Menominee County

The County prepared a comprehensive plan in 2009 and completed a revision in 2015. That plan includes a vision and mission statement as well as a very detailed work program around each goal.

Oconto County

A plan was prepared in 2009 and amended in 2015. That plan examines the county in three sub-areas, being north, central and south.

Oneida County

The County adopted a plan in 2013 and is planning to update that plan in 2023. Several towns in the county also have plans. Only some of those have updated them recently. The City of Rhinelander updated its plan in 2015.

Shawano County

The county plan was adopted in 2009. The plan has been amended since, but a full update has not been completed. Much of that plan focuses on natural resources and agricultural preservation.

7.3 Goals, Objectives & Policies

The following section identifies the goals, objectives, and policies of the county related to land use.

Goals:

- 1) Encouragement of land uses, densities, and regulations that promote efficient development patterns.
- 2) Provide adequate infrastructure & public services, and an adequate supply of developable land to meet existing and future demand for residential, commercial, industrial, and agricultural uses.
- 3) Planning and development of land uses that create or preserve varied and unique urban and rural communities.
- 4) Promotion of the redevelopment of lands with existing infrastructure and public services and the maintenance and rehabilitation of existing residential, commercial, and industrial structures.
- 5) Balance individual property rights with community interests and goals.
- 6) Encourage local units of government to prepare and update comprehensive plans and utilize the county plan as a guide.

Objectives:

- 1) Maintain orderly, planned growth which promotes the health, safety and general welfare of county residents and makes efficient use of land and efficient use of public infrastructure and services.
- 2) Assure that the pace of development does not exceed the capacity of utilities, roads, and community facilities and services.
- 3) Discourage sprawling, low-density development where there is no existing infrastructure and service capacity.
- 4) New development should be responsible for paying for the cost of any utility extensions or new services required for that development without unfairly burdening the existing taxpayers.
- 5) All comprehensive plans should strive to be consistent with and seek to minimize conflicts with other levels of government, and implementation tools.
- 6) Local units of government should use the County Comprehensive Plan as a guide for their own planning efforts.

- 7) Encourage local units of government to develop individual comprehensive plans and create or modify implementation tools to reflect the future needs of their communities.
- 8) The County will maintain the Comprehensive Plan, which will serve as a guide for future land use and zoning decisions.

Promote new land development that is compatible with local government comprehensive plans and related plans.
- 9) Development should be discouraged in environmentally sensitive areas, including wetlands and flood plains.
- 10) Prevent residential sprawl in rural areas by encouraging expansion of existing population centers, or identified transition areas that can sufficiently accommodate future local growth needs.
- 11) Conserve and revitalize older neighborhoods and commercial areas.
- 12) Discourage new development that adversely affects the property value or livability of neighboring properties.
- 13) Comprehensive plans and related implementation tools should be used to avoid

conflicts among different uses of land.

Policies:

- 1) Guide the location, mix, and quality of private development to meet both private and public land use objectives.
- 2) Update land use regulations to better guide and manage the location, mix, quality, and impacts of development in the county.
- 3) Land uses should be planned and approved for development that occurs in an orderly manner and avoids land use conflicts.
- 4) Assist local units of government to plan for a compatible land use pattern.
- 5) Strip-type commercial development along high-volume traffic roads will be avoided in order to insure traffic safety and mobility, and to avoid "sprawl".
- 6) Promote and regulate development which minimizes groundwater impacts from on-site septic systems, wells, and other sources.
- 7) The location of new development should be restricted from areas in the county known to be unsafe or unsuitable for development due to flood hazard, potential groundwater contamination,

- loss of farmland, highway access problems, incompatibility with neighboring uses, etc.
- 8) Non-farm and non-forestry-related housing should be discouraged in agricultural and forestry areas.
 - 9) Manage public lands in a manner compatible with land use goals, objectives, policies, and plans.
 - 10) The county may allow higher density development where it is compatible with existing development patterns or as a cluster subdivision.
 - 11) Utilize buffer areas to separate and lessen the impacts of potentially conflicting land use types located in relatively close proximity; i.e. such as a buffer between single-family and agricultural areas.
 - 12) Encourage infill and the reuse of underutilized areas throughout the county.
 - 13) All comprehensive plans should strive to maximize public input in their planning efforts.
 - 14) New development and rezonings will be permitted based on consideration of this Plan.
 - 15) County will incorporate individual officially adopted town comprehensive plan future land use plan maps into the county future land use plan map.

Chapter Eight

Intergovernmental Cooperation

8.1 Background

This is the eighth of nine chapters that comprise the Langlade County Comprehensive Plan. This chapter is based on the statutory requirement for a compilation of objectives, policies, goals maps and programs for joint planning and decision making with other jurisdictions, including school districts and adjacent communities. The comprehensive plan also provides overall recommendations for relationships with local and overlapping jurisdictions to promote cooperative efforts.

Intergovernmental cooperation does not necessarily take the form of written agreements or contracts. Often it is more about informal arrangements and practices. Trust and respect are two crucial components of cooperation between governmental units.

Types of Intergovernmental Cooperation

- Local Governments

Adjoining counties, towns, as well as the City of Antigo and the Village of White Lake presents potential opportunities for government sharing services. Whether this

involves the county agreeing to work with an adjacent county to solve a common problem, or the county contracting with a town to repair a roadway, the goal is to maximize the benefit from the expenditure of public dollars.

The economies of scale that result from a single entity providing service to a number of jurisdictions can benefit all by reducing cost and at the same time improving the quality of services received. A fire district is a good example of how communities can work together to provide services for a number of jurisdictions, while improving service and reducing costs.

- Overlapping Jurisdictions

Local government boundaries do not often coincide with the boundaries of other functional agencies, most notably school districts. This overlapping of service boundaries can often cause problems and be an obstacle to providing services in the most cost-effective manner.

The school districts within the county offer an illustration of how functional boundaries do not always coincide with established units of

government. There are three school districts that operate primarily in Langlade County, the Antigo Unified School District, Elcho, and White Lake districts, as well as three districts from outside that cover parts of the county. Other overlapping jurisdictions include state and federal agencies, as well as other special districts.

In planning for intergovernmental cooperation it is important to

remember that jurisdictional boundaries can present an obstacle to efficient service delivery. There can also be inconsistency between service delivery districts and other entities. All of these overlapping jurisdictions must be taken into consideration when considering how best to effectuate intergovernmental agreements and how best to deliver services to citizens.

8.2 Current & Potential Efforts

Current Levels of Cooperation

This section looks at the existing inter-governmental cooperation agreements in effect in the county.

County Relationships

As per the structure of county government in the State of Wisconsin, there are many relationships established between the county and state as well as the county and towns. The county assists the state in many ways. The county sheriff enforces state laws throughout the county, which includes the local towns. County Highway Departments maintain county and state trunk highways and under agreement some town roads. The county also works with the city and village on various issues. Generally, these are long-standing relationships.

Town Relationships

There are several volunteer fire departments in Langlade County, and others outside of the county that operate within it under joint service agreements with towns. There is also a freestanding fire district that provides service to a number of municipalities, but is independent of them. Mutual aid agreements are critical for providing this service throughout the county as well.

School Districts

As mentioned above, it is not uncommon for school district boundaries not to conform to other local government units. Originally district boundaries were set based on the location of school buildings, where students lived and the efficiency of transporting children to any given school. It is difficult to change district boundaries, but

based on changing demographics state-wide there has been some discussion of school district consolidation. As enrollments decline, school districts are working together collaboratively maintaining programming with constant budget concerns. The quality of schools is a crucial factor in attracting families to a community and is a major factor in creating a competitive workforce. School districts are also major employers in the communities. The location of a school can have a large impact on land use and development patterns as well. In addition, the recreational facilities provided by schools are often available to the general public. These factors argue for cooperation between local governments and the school districts that serve them.

Other Special Districts

There are a variety of other types of districts that the county is involved with, such as the City/County Housing Authority, North Central Health Care, Langlade County Economic Development Corporation. These and many other organizations are dedicated to a specific type of service and are funded by multiple sources, including the county.

Potential areas of Cooperation:

This section looks at the areas where there is the potential for additional cooperation.

Joint Services

There are a number of opportunities for cross-jurisdictional service delivery arrangements in the county. One area where such arrangements can be successful is road maintenance and snowplowing. By making agreements to share the expense of equipment or by contracting out this kind of work substantial cost savings are possible for towns.

As mentioned above, shared services can increase efficiency and reduce cost. These arrangements already exist between many towns in relation to fire and EMS service. Applying these same considerations to such basic town services as snowplowing and road maintenance could yield considerable savings.

Joint Planning

Planning is a critical area for cooperation. This allows multiple communities or other organizations to discuss, develop options and determine policies to address issues. This could relate to long-term planning with adjoining counties related to North Central Health Care or among towns looking at land use issues. Planning is a good way to establish trust and develop partnerships for the betterment of the community.

8.3 Goals, Objectives, & Policies

Goals:

- 1) Encourage coordination and cooperation among all units of government.
- 2) Coordinate activities across jurisdictional boundaries to improve the quality and efficiency of services.
- 3) Encourage countywide and regional planning efforts to address issues that will affect the future of Langlade County.

Objectives:

- 1) Promote communication with other units of government, including adjoining towns, the county, the region, the state, and federal government.
- 2) Work together with other units of government, and others, to provide services in a more cost-effective manner.
- 3) Identify alternative solutions to existing or potential land use, administration or policy conflicts that may hinder inter-governmental cooperation.
- 4) Coordinate the planning effort between the City of Antigo and its surrounding towns, as well as possible discussions with WI-DOA, DOT, and DNR, and any other governmental unit

that can influence the planning process.

- 5) Encourage regularly scheduled meetings and on-going communications between County departments, local governments, state agencies, and surrounding governments.
- 6) Engage in and support processes to resolve conflicts between the plans of governments with overlapping jurisdictions.
- 7) Encourage the sharing of information between departments, local governments and citizens.

Policies:

- 1) Pursue dialogue with and between the towns in the county to seek areas of cooperation.
- 2) At least annually, meet with adjoining units of government to discuss issues of mutual concern.
- 3) Encourage coordination with surrounding counties and the North Central Wisconsin Regional Planning Commission to address issues that cross-jurisdictional boundaries or involve the larger region.

- 4) Encourage cooperative agreements regarding annexation, expansion of public sewer and water services, growth management and boundary agreements between the towns and with the city/village.
- 5) Encourage towns to explore joint service agreements with neighboring towns and municipalities where consolidating and coordinating services will result in better services and/or cost savings.
- 6) Involve all school districts that serve the county in the planning process, to assist them with facility planning and site selection.
- 7) Periodically review existing shared service agreements, and explore additional agreements.

Chapter Nine

Implementation

9.1 Background

This is the ninth and final chapter of the Langlade County Comprehensive Plan. It outlines the various implementation tools available to the county and includes an overview of the process to adopt, amend, update and evaluate the comprehensive plan. This chapter also includes the overall recommendations to implement this plan.

The County Board and its various committees, boards, and commissions, along with county staff, will use this Comprehensive Plan to guide the physical development of the county in the years to come. In addition, developers and landowners will use the document

9.2 Existing Implementation Tools

There are two primary types of implementation tools: Non-regulatory and Regulatory. Non-regulatory approaches generally involve decisions related to policy and about how the county will spend its financial resources. Regulatory approaches involve implementing various rules and regulations, mainly related to land use regulations. In particular, the zoning ordinance and subdivision regulations comprise the principal regulatory devices used to protect existing development and guide future growth and development.

Non-regulatory Tools

There are two common types of non-regulatory tools – the annual budget and the capital improvements budget. Another major policy effort that may be undertaken by the county is the Strategic Plan. In addition, each county department, as well as agencies funded by the county, develop objectives and prepare work plans.

Annual Operating Budget

Langlade County prepares a budget each year and it is one of the most important policy documents prepared. It is a statement of the prioritization and allocation of

financial resources to achieve certain objectives over a specific time period. The budget is based on the needs of county residents, priorities set by the County Board, and the related work plans identified by each county department. The budget and the services provided by that budget are instrumental in achieving the goals and objectives of the plan.

The budget is prepared by the county manager/administrative coordinator in conjunction with department heads. The Administrative & Finance and Committee provides oversight and the budget is adopted by the County Board.

Capital Improvement Plan

A Capital Improvement Program (CIP) is simply a method of planning for and scheduling expenditures for public improvements over a period of several years in order to maximize the use of limited public funds. Typically improvements or expenditures considered in the CIP process include:

- Public buildings (such as courthouse renovations)
- Roads and highways (maintenance and new construction/paving)
- Long-term major equipment
- Park and trail acquisition and development

Each year the CIP is reviewed and extended one year to compensate for the previous year that was completed. This keeps the improvement program current and allows for modifications to meet changing needs. It coordinates community planning, financial capacity, and physical development.

Strategic Plan

The County Board is currently discussing developing its first strategic plan. Strategic planning is an organizational management activity that is used to set priorities, focus energy and resources, strengthen operations, ensure that employees and other stakeholders are working toward common goals, establish agreement around intended outcomes/results, and assess and adjust the organization's direction in response to a changing environment. It is a disciplined effort that produces fundamental decisions and actions that shape and guide what an organization is, who it serves, what it does, and why it does it, with a focus on the future. It usually focuses on a 3 to 5 year time-period.

An effective strategic plan articulates not only where an organization is going and the actions needed to make progress, but also how it will know if it is successful. The strategic plan is a document used to communicate the organizations goals and the actions needed to achieve those goals. The comprehensive plan provides the foundation for the strategic plan process.

Regulatory Tools

There are three basic implementation tools that the county can use to implement this comprehensive plan. These are 1) General & Shoreland Zoning, 2) Land Division Ordinance, and 3) Official Mapping.

These tools apply to different degrees in different areas of the county. General zoning applies only to those ten towns that have adopted county zoning, while Shoreland zoning applies to the entire county outside of the incorporated areas of Antigo and White Lake. Meanwhile, the land division ordinance applies to the entire county (outside of the city and village) unless a town has adopted a more restrictive ordinance. Official mapping applies throughout the entire county, but is a very limited tool. These tools are all detailed more in the land use chapter.

General & Shoreland Zoning

Zoning is used to manage and control how land is used and developed. The general zoning ordinance establishes detailed regulations concerning how land may be developed, including setbacks, the density or intensity of development, and the height and bulk of building and other structures. The general purpose of zoning is to minimize undesirable side effects resulting from development by segregating and/or buffering incompatible uses and by maintaining standards that ensure

development will not negatively impact the community's character or environment.

The zoning map indicates where specific types of development can and should be located. Zoning districts shown on the zoning map should be coordinated with the land use plan and map. While the zoning map and land use map do not need to directly match at the time the land use map is adopted, the intent is that the land use map will serve as a guide indicating how the property should eventually be zoned. Changes to the zoning districts should only be made if they are consistent with the adopted future land use map. However, there may be situations where changing the zoning district boundary makes sense and is in the best interest of the community. If changing the zoning would result in a conflict with the future land use map, the land use map should also be changed.

The future land use map should only be changed if it does not accurately reflect the community's desired land use pattern. Achieving consistency between zoning and land use designation is also discussed in the Land Use chapter. The comprehensive plan, including the future land use map should be periodically reviewed and updated to adjust for unforeseen changes or events that were not considered at the time the initial plan and land use map were developed.

Shoreland Zoning is mandated by state law and is administered by the

county level. The intent of shoreland zoning is to control development near waterways, in the most sensitive environmental areas. The area defined by state law is the area within 300 feet of a stream or river and 1000 feet of a lake or pond. The Shoreland Ordinance may need to be reviewed and updated in the near future.

Land Division Ordinance

Land Division or subdivision regulations serve an important function by ensuring the orderly development of unplatted and/or undeveloped land. These regulations provide the procedures and standards for dividing a large parcel of land into smaller parcels. Land Division ordinances set forth reasonable regulations for lot sizes, road access and design, public utilities, parks and open space, and other improvements necessary to ensure that new development does not conflict with surrounding land uses and/or cause unreasonable burdens on provision of services. The way lands are divided plays a key role in the orderly development of a community. The Land Division Ordinance may need to be reviewed and updated in the near future.

Official Mapping

Counties have limited official mapping powers, however, they may adopt highway-width maps indicating location and width of proposed highways and any highways being expanded.

Consistency Review

The State planning law requires that by January 1, 2010, land use decisions must be consistent with the locally adopted comprehensive plan. Therefore, to meet this deadline, the county should review and update related ordinances, such as zoning (both general and shoreland), land division, and official mapping.

In addition, the planning law requires that the Comprehensive Plan describe how each of the required chapters will be integrated and made consistent with the other chapters of the plan. Since Langlade County completed all planning chapters simultaneously, no known inconsistencies exist. It is noted that some overlap naturally exists between chapters. The Comprehensive Plan also references previous and concurrent related planning efforts to ensure they are considered in planning decisions in conjunction with the recommendations of this document. Recommendations from other plans have been incorporated in this plan as deemed appropriate, to foster coordination and consistency between plans. Some related plans, are incorporated by reference in this plan and are essentially considered appendices of this plan even though they are separate documents.

In the future, as plan amendments occur, it is important that consistency reviews be conducted. These reviews will ensure that the plan is up-to-date. It is also critical that as towns make comprehensive

plan amendments, those amendments are forwarded to the county for inclusion in the Lantada County Comprehensive Plan. This

will ensure that the Land Records & Regulations Department is using the most current information available.

9.3 Plan Adoption, Amendments & Updates

This section overviews the process to adopt the plan, as well as when to amend the plan, and when to update the plan.

Plan Adoption

The adoption process requires that the Plan Commission, which is the Water & Land Use Planning Committee, reviews the Comprehensive Plan and pass a “resolution” (by a majority vote) to recommend the adoption of the plan to the County Board.

That recommendation is forwarded to the County Board who must adopt the Comprehensive Plan by “ordinance”. Prior to the adoption of the Comprehensive Plan, a public hearing is required to be held to solicit public comment. That public hearing must be advertised with at least 30 days notice.

Adoption formalizes the plan document as the framework to guide local development decisions over the next 10 years. The adopted plan should also be recognized as a tool for communicating the county’s land use policy related to growth and development. State statute 66.1001 overviews the adoption process.

Plan Amendments

The plan may be amended at any time upon the recommendation of the Water & Land Use Planning Committee and approval from the County Board following the same statutory process described for initial plan adoption. The procedures are the same regardless of how minor the proposed amendment or change. Amendments may be appropriate throughout the lifecycle of the plan, particularly if new issues emerge or trends change. These amendments will typically consist of minor changes to the plan text or maps. Large-scale change or frequent amendments to meet individual development proposals should be avoided or the plan will lose integrity.

A list of general criteria to consider when reviewing proposed amendments to the comprehensive plan, including:

- ✓ The plan amendment corrects an error made in the original plan.
- ✓ The amendment is consistent with the goals and objectives of the Lantada County Comprehensive Plan.

- ✓ The amendment does not create an adverse impact on public facilities and services that cannot be mitigated.
- ✓ The change does not have a significant adverse impact on the natural environment including surface water quality and groundwater, or the impact can be mitigated by improvements on the site or in the same vicinity.
- ✓ The change does not adversely impact any landmarks or other historically significant structures or properties unless mitigated through relocation, commemoration or dedication.
- ✓ The change allows a more appropriate transition or buffer to the planned uses on adjacent properties than the current land use.
- ✓ The resulting new development would be compatible with the existing land uses and physical character of the surrounding neighborhood or would upgrade and improve the area.
- ✓ The change incorporates a locally adopted town plan, especially related to future land use.
- ✓ There is a significant change in the area's characteristics that would justify a plan amendment.

The Water & Land Use Planning Committee prior to the public hearing and adoption by the County Board must review proposed amendments. The public should be notified of proposed plan changes and allowed an opportunity for review and comment. For major amendments, it may be desirable to solicit public opinion through surveys and/or community meetings prior to the public hearing.

In the future, as plan amendments occur, it is important that county staff conduct consistency reviews. These reviews will ensure that the plan is up-to-date. It is also critical that the plan and/or maps are changed that these changes are made they do not conflict with other sections of the plan or other maps.

Plan Updates

According to the State's comprehensive planning law, comprehensive plans must be updated at least once every ten years. As opposed to the more routine amendments described above, plan updates will involve re-writing entire chapters of the plan document and revising all the maps. A plan update should include a thorough examination of the community's goals and objectives, based upon an analysis of current growth trends and major changes that have occurred since the plan was initially adopted or last amended. Plan updates must be formally adopted following the same procedure described above for initial plan adoption.

It is important that the public be involved in the update process. To ensure that the public is engaged in plan amendments, the same procedure used for initial plan adoption must be followed. Upon Water & Land Use Planning Committee review and resolution to

make recommended changes to the plan, the County Board shall hold a public hearing to allow property owners and citizens time to review and comment on recommended plan changes. The public hearing shall be advertised using a Class I notice. See State Statute 66.1001.

9.4 Plan Evaluation

Members of the County Board, Water & Land Use Planning Committee, county staff, and other local decision-making bodies should periodically review the plan and identify areas that might need to be updated. At least annually the Future Land Use Plan Map should be reviewed and amended if necessary to keep the map current. While at a minimum, the entire plan should be formally reviewed at least every five years, and updated at least every 10 years.

The evaluation should involve first reviewing the goals and objectives to ensure they are still relevant and reflect current community desires. Then the strategies and actions should be reviewed and refined to eliminate completed tasks and identify new approaches if appropriate. Many of the policies identified in the plan are continuous or on-going and should also be monitored to measure the plan's overall success. Thus, many of the objectives and their related actions can be accomplished in the short term, say 1 to 5 years. However,

some will take longer to accomplish, say 6 to 10 or more years.

When implemented these are intended to provide direction to county staff and its committees, as well as the board of supervisors. To measure progress towards meeting these goals, objectives, and policies, a variety of actions need to take place. Therefore, the task to measure plan progress, is as simple as determining if any action was taken or not. That information will provide guidance to the County Board on when specific actions are to be initiated. Based on the targets, measures of progress in achieving implementation of the comprehensive plan can be examined.

A periodic "Plan Status" report could be prepared to summarize the progress toward implementation. This report might be jointly developed by various county departments, as related to their involvement in the implementation of the goals, objectives, and policies developed within this plan.

9.5 Recommended Actions

The Langlade County Comprehensive Plan and the locally adopted comprehensive plans are intended to help guide growth and development in the county. To be effective, this plan should be actively used as a tool to guide decisions concerning:

- The development and implementation of programs and support systems that further the goals and objectives set forth in this plan.
- The implementation of specific actions as identified in this plan.
- The implementation and enforcement of regulatory ordinances based on the goals and objectives identified in this plan.
- The establishment of a continued planning process providing for periodic review and updates to this plan.

The following are some recommendations to implement the goals, objectives, and policies that are contained in the comprehensive plan. These recommendations are:

1. The Water & Land Use Planning Committee should pass a resolution recommending adoption of the Comprehensive Plan.
2. The County Board should hold a public hearing, adopt the plan by ordinance, and use it as a guide for decision-making.
3. Langlade County should consider changes to its Zoning Ordinance and Maps, Land Division Ordinance, and other implementation tools to establish consistency.
4. The Water & Land Use Planning Committee should become knowledgeable of the plan and use it to justify recommendations to the County Board on development and other issues.
5. Langlade County's staff should incorporate the goals, objectives and policies of the plan into annual work plans and budgets.

6. Langlade County should encourage citizen awareness of the plan by having the document hosted on the county website.
7. Langlade County should provide a link for the plan to all communities within the county.
8. The Water & Land Use Planning Committee should review the Future Land Use Map at least annually and make necessary amendment recommendations to the County Board.
9. Langlade County should formally review the plan every five years, and update the plan at least every ten years.

Attachment A

Resolution and Ordinance