

CANOSIA TOWNSHIP COMPREHENSIVE PLAN

2019 Update to 2014 Comp Plan

Adopted
January 2,
2019

Canosia Township

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Effectuation Page

2019 CANOSIA TOWNSHIP COMPREHENSIVE PLAN APPROVAL

This 2019 Canosia Township Comprehensive Land Use Plan Update was unanimously approved by the Canosia Township Board of Supervisors on January 2, 2019. This plan updates the 2014 Canosia Comprehensive Land Use Plan.

Signed,

Chair Daniel J. Golen
Canosia Town Board

Supervisor Kurt Brooks
Canosia Town Board

Supervisor Kevin Cornick
Canosia Town Board

ATTEST:

Clerk Susan Krasaway
Canosia Town Board

Date

Canosia Township Comprehensive Plan 2019 Update

Adopted by the Canosia Township Board January 2, 2019

Canosia Township Town Board

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2014 Plan Prepared for Canosia Township by

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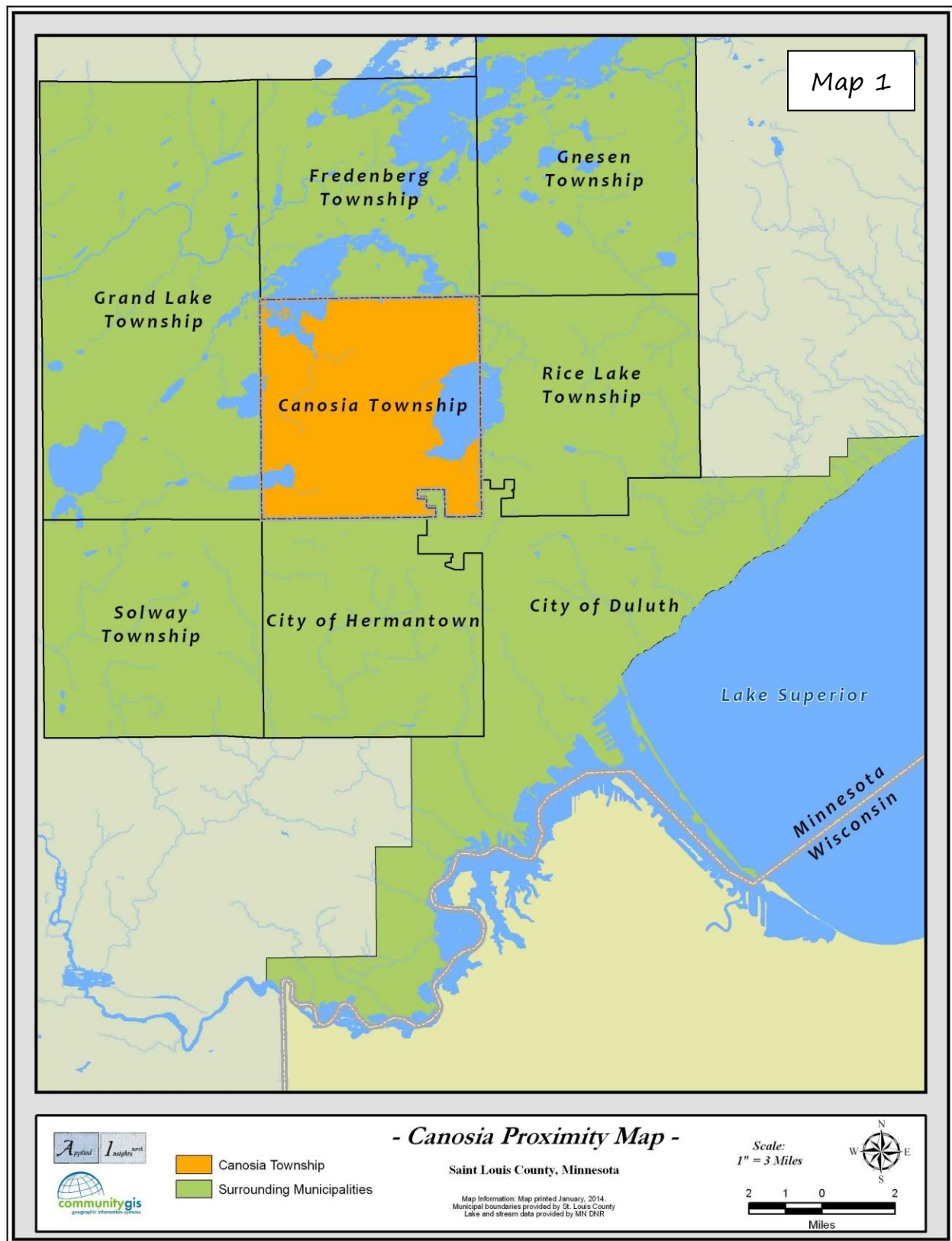
This Plan is a Tool

This plan is a tool the Township will use to guide decisions and investments and assist the Township as it seeks to influence, coordinate and cooperate with other governmental entities that make decisions and investments affecting Canosia Township.¹

Township will use the plan to:

- Invest township funds into community infrastructure including roads, utilities, parks and community facilities.
- Guide the management of services such as fire, emergency medical, police, and recycling.
- Foster cooperation with other townships and units of government.
- Initiate cooperation and coordination with other public and private entities.

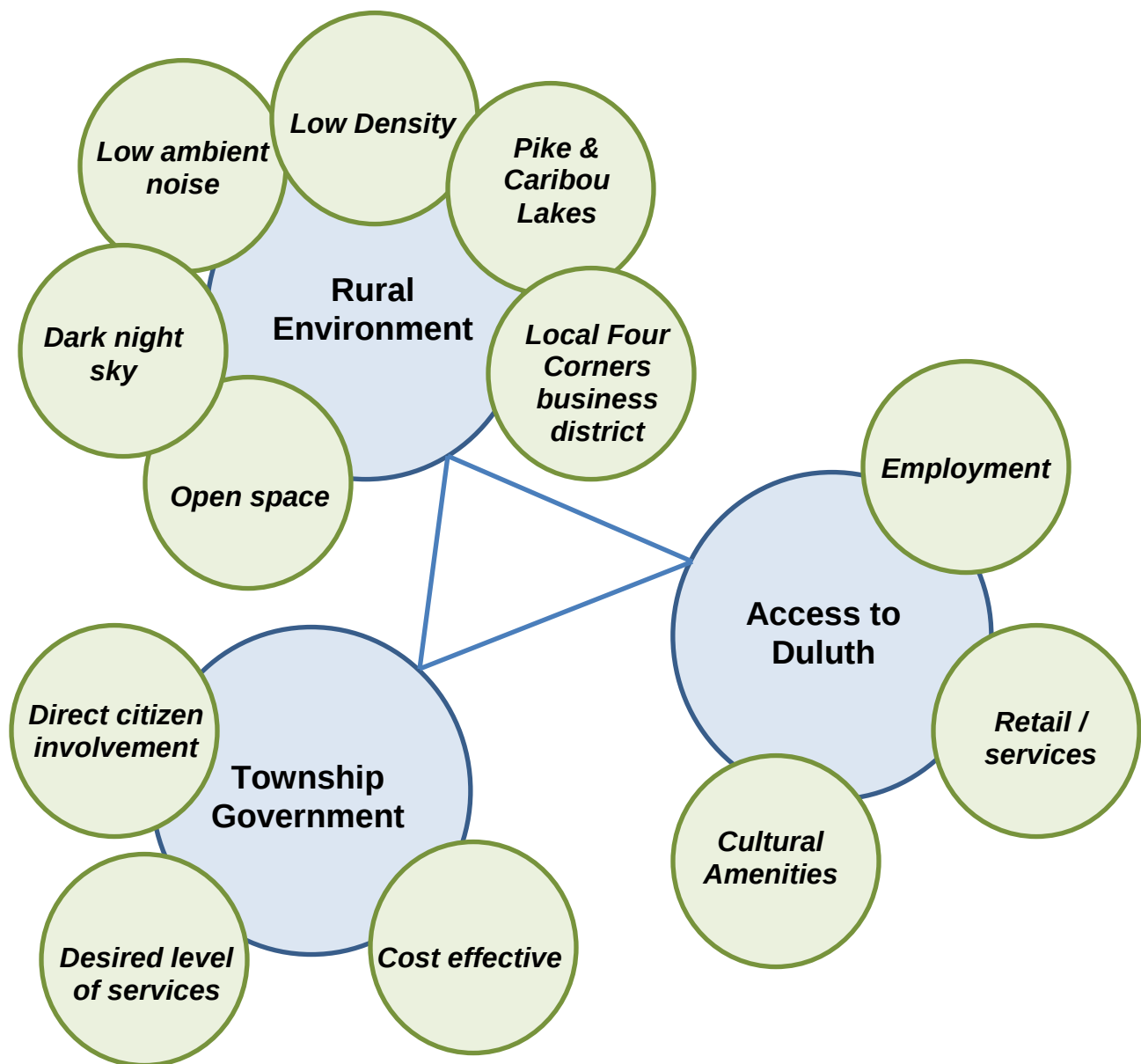
¹ This plan updates the 2014 version of the Township's comprehensive plan.





Sense of Place

What are the values and features that define Canosia Township and contribute to its positive sense of place? What are the factors the comprehensive plan should seek to preserve and enhance so as to protect that essential “something” that makes this place special? The response of the citizens of Canosia is:





Community Context

Community Overview

Location and Setting

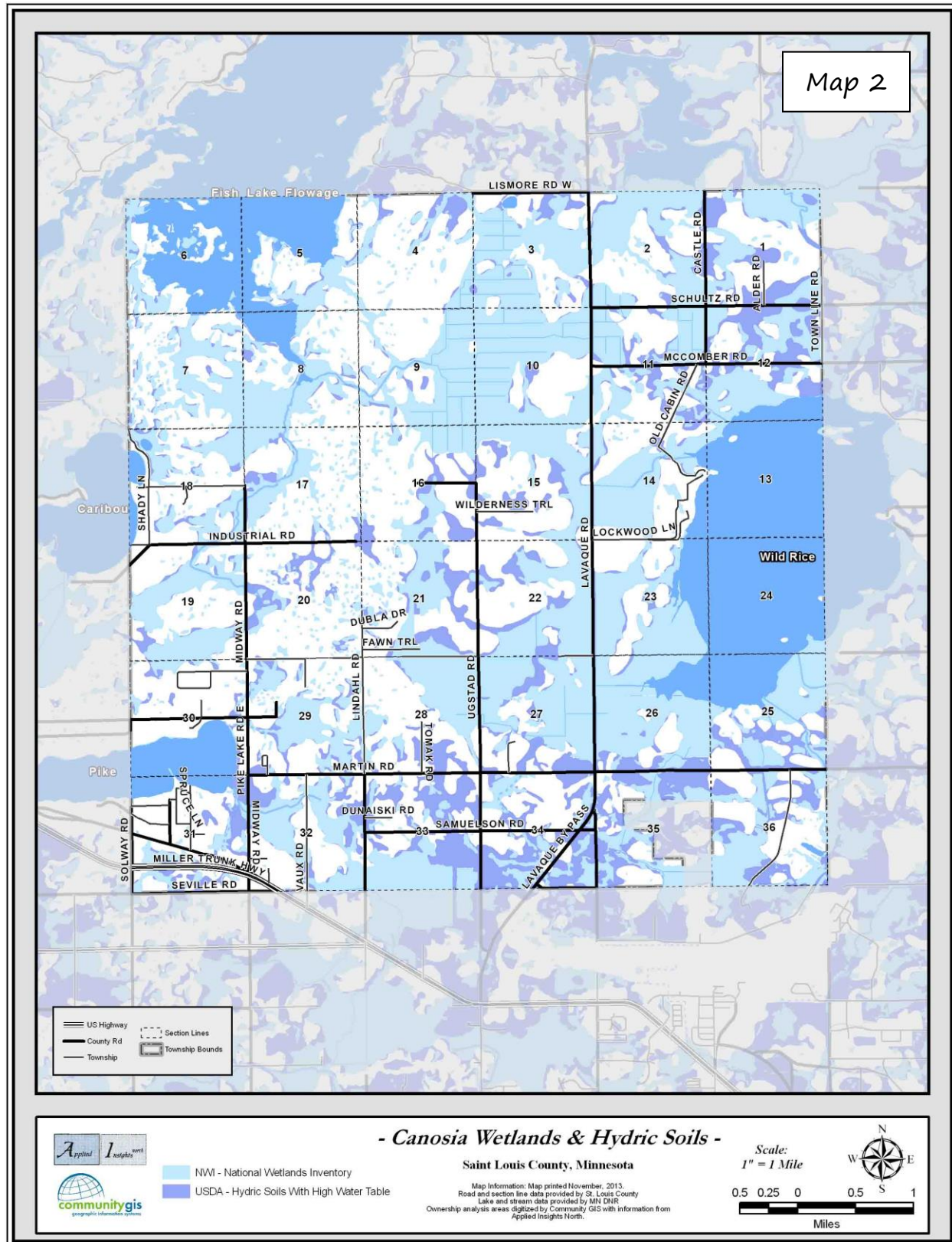
Canosia Township is located within St. Louis County north of and immediately adjacent to the cities of Duluth and Hermantown [see Map 1].

Canosia, whose name is derived from the Ojibwe for pike, *kanoje*, began to be settled soon after it was surveyed in 1856. Railroad workers and lumbermen were among the first settlers. Initially it was part of a much larger Rice Lake Township but in 1887 it separated and became an independent township in its own right. Road improvements brought new settlers including loggers and farmers.

Canosia was one of the victims of the wildfires of 1918. After that disaster, the community slowly grew until the 1950s when the increased affluence and mobility after the war brought families and cabin owners into the community. Then beginning in the 1970s development including commercial enterprises accelerated. Once a rural outpost, Canosia blossomed into a vibrant rural residential segment of the greater Duluth metropolitan area.²

As shown in Map 2, Canosia's landscape is dominated by water either in the form of the four lakes found within its borders – Pike, Caribou, Fish Lake reservoir and Wild Rice Lake reservoir – and numerous wetlands. In fact, water and ponds encompass 12.6% (2,884 acres) and wetlands/hydric soils cover nearly half of the township (10,675 acres or 46.8% of area). Upland accounts for 9,281 acres or 40.6% of the township's area.

² History information is from the Canosia Township website: www.canosiatownship.org .



Population

Along with Hermantown and Grand Lake Township, Canosia occupies the north growth corridor of the Duluth metropolitan area. Since 1980 these have been three of the area's four fastest growing communities. Canosia's 2012 population was estimated at 2,177 by the State Demographic Center (SDC). This is up slightly from 2010 and continues a thirty-year growth period as shown in Table 1.

Table 1. Population for Duluth Area Communities, 1980-2010					
Community	1980	1990	2000	2010	Change 1980-2010
Canosia Township	1,562	1,743	1,998	2,158	38.2%
Grand Lake Township	2,166	2,355	2,621	2,779	28.3%
Rice Lake Township	3,861	3,883	4,139	4,095	6.1%
City of Hermantown	6,759	6,761	7,448	9,414	39.3%
Duluth Township	1,604	1,561	1,723	1,941	21.0%
Lakewood Township	1,680	1,799	2,013	2,190	30.4%
Midway Township	1,656	1,500	1,479	1,399	-15.5%
Solway Township	1,665	1,722	1,842	1,944	16.8%
City of Proctor	3,180	2,974	2,852	3,057	-3.9%
City of Duluth	92,811	85,493	86,918	86,265	-7.1%
Total	116,944	109,791	113,033	115,242	-1.5%

Source: US Census

Table 2. Number of Households for Duluth Area Communities, 1980-2010					
Community	1980	1990	2000	2010	Change 1980-2010
Canosia Township	541	629	751	820	51.6%
Grand Lake Township	669	766	919	1,036	54.9%
Rice Lake Township	1,212	1,373	1,494	1,611	32.9%
City of Hermantown	2,057	2,192	2,726	3,355	63.1%
Duluth Township	535	587	669	750	40.2%
Lakewood Township	523	611	710	798	52.6%
Midway Township	454	462	495	541	19.2%
Solway Township	512	600	672	749	46.3%
City of Proctor	1,170	1,196	1,196	1,268	8.4%
City of Duluth	35,363	34,563	35,500	35,705	1.0%
Total	43,036	42,979	45,132	46,633	8.4%

Source: US Census

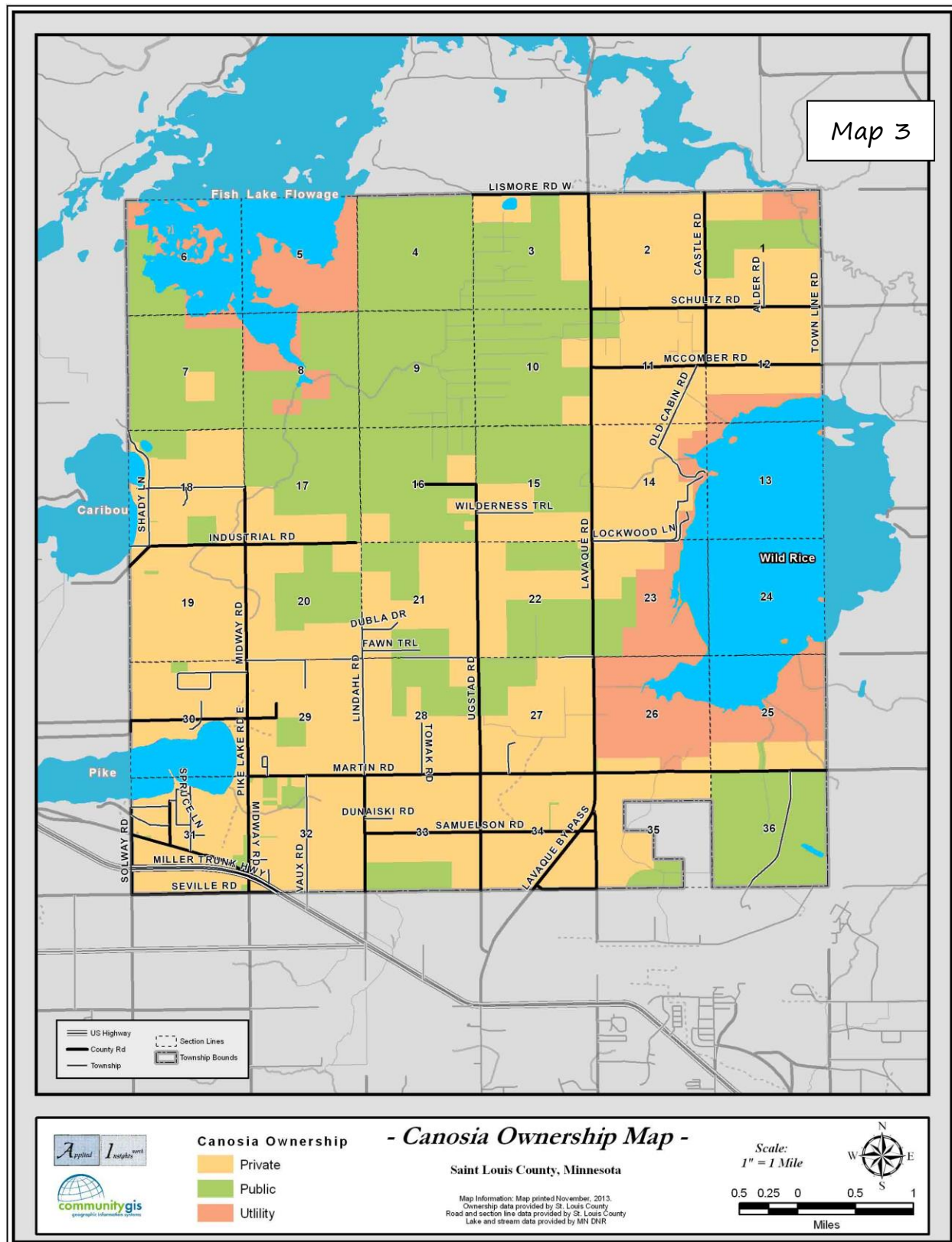
Table 2 depicts the corresponding growth rates for the number of households. Household growth exceeds population growth in every community because the size of the average household has continued to decline over the decades. The number of households in Canosia in 2012 was 830.

As Canosia's total population has grown its composition has changed over the years. As shown in Table 3 between 2000 and 2010 the number of children under age 15 has declined as has the number of people in the prime family-formation ages (20-44). On the other hand, the number of people in every five-year age group over age 45 grew substantially.

Table 3. Canosia Township Population by Age Group, 2000 and 2010				
Age Group	Population		Percent of Total	
	2000	2010	2000	2010
< 5	131	94	6.6%	4.4%
5 – 9	154	132	7.7%	6.1%
10 – 14	155	157	7.8%	7.3%
15 – 19	150	169	7.5%	7.8%
20 – 24	66	91	3.3%	4.2%
25 – 29	84	85	4.2%	3.9%
30 – 34	148	80	7.4%	3.7%
34 – 39	188	130	9.4%	6.0%
40 – 44	185	184	9.3%	8.5%
45 – 49	181	206	9.1%	9.5%
50 – 54	187	214	9.4%	9.9%
55 – 59	121	189	6.1%	8.8%
60 – 64	77	173	3.9%	8.0%
65 – 69	59	97	3.0%	4.5%
70 – 74	57	66	2.9%	3.1%
75 – 79	28	44	1.4%	2.0%
80+	27	47	1.4%	2.2%
Total	1,998	2,158	100.0%	100.0%

Source: US Census

There are no current reliable population projections. The most recent ones by the SDC were made prior to the recession and do not reflect the significant changes in demographic dynamics generated by that event. A general statement that probably holds true for the community is that future growth is probable due to Canosia's general attractiveness including its location in the north growth corridor. Also, the declining size of households, which will likely continue, means that the number of households will increase at a rate faster than that for population.



Maps 4 & 5 were removed with the 2019 Comp Plan Update

Land Use

As shown on Map 3 just over one-half (51%) of the land in Canosia is privately owned. Various public entities, primarily the State and County, own 35% of the township; roughly a third of this is the Canosia WMA. The remaining 14% is owned by Minnesota Power as part of its vast reservoir system encompassing Wild Rice and Fish Lakes.

The distribution of ownership both drives and reflects the land use pattern within the township (see current St. Louis County Comprehensive Plan, Canosia Land Use Map, previously Map 4 in this plan). Public lands, which tend to occupy lowlands, represent both an inability of the land to support private development and a desired public value to retain. The tracts of land owned by Minnesota Power support its reservoir system; some parcels have been leased for year-round and seasonal residential uses but most are undeveloped. Development lies on upland within the matrix of wetlands in the northern half of Canosia, along the lakeshores, and in the rolling forested lands of the township's southern portion.

In addition to the development pattern that is structured around natural features, terrain and ownership, land use is influenced by the Highway 53 corridor which provides easy access into Duluth and is a source of high volumes of through traffic that can contribute to commercial development. The result is a community whose land use pattern can be generally described as follows:

- The northern third and central parts of Canosia are characterized by low density rural residential, agriculture and undeveloped forests, wetlands and shorelands with large tracts of undeveloped publicly and utility-owned lands. A large state wildlife management area occupies much of the central sector of the township.
- The southern half east of the Pike Lake area can be labeled as mid-level density rural residential with a scattering of home businesses and commercial properties.
- The Pike and Caribou Lake areas possess a higher density rural residential development focused on two recreational lakes and nestled into rolling hardwood forest lending an atmosphere of lake country resort and cabin territory. This atmosphere was enhanced by the presence of the AAA Golf Course on the eastern end of Pike Lake.
- The Four Corners business district centered on the intersection of Highway 53 and Midway Road is a long-standing commercial district that serves both local and through traffic. Uses include gas/convenience store, grocery store, three eating establishments, and service (dentist, hair salon) and retail stores (fireplaces, liquor, outdoor sports, auto sales, specialty lumber). In addition, St. Louis County has both its Land and Minerals Department and Public Works Department offices in this area. Adjacent to the business district are the Pike Lake Elementary School, two churches, and the town hall / fire hall complex.
- Scattered throughout the township are a handful of commercial operations and home businesses.

The Canosia Wildlife Management Area (CWMA), owned and operated by the Minnesota Department of Natural Resources (MnDNR), encompasses 2,489 acres or more than 10% of the township. The site contains a “diverse deciduous/coniferous forest and wetland/bog complex with many upland openings and waterfowl impoundments with wild rice. This WMA has remote areas and also offers an extensive trail

system, including a cross-country ski trail and a snowmobile trail that passes through the unit. Carry-in canoe access to the impoundments is available. Forested areas are actively managed for wildlife and there are three water impoundments, which are managed for waterfowl on this WMA.”³

The CWMA is popular among hunters and hikers. Over 80% of the respondents to the Canosia planning survey agreed that the area positively contributed to the township’s quality of life.

Planning & Zoning

Canosia adopted and administered its own zoning ordinances from 1976 to January 31, 2019. On February 1, 2019, St. Louis County began administering township zoning through the county ordinance. The township opted for this transition since it would eliminate administration/legal enforcement costs for the township, offer our residents more experienced full-time resources/technological services and offer the same level of land use regulation. As part of this process, the township ordinance and zoning map were repealed and this comprehensive plan was amended to reflect this change. The Canosia Zoning Map can be found in the current St. Louis County Zoning Ordinance.

Roads

Canosia is well-served by a network of State, County, Township and private roads that provide access throughout the township (see Map 6). Most roads are in good condition and there are few outstanding issues. The following highlights the system:

- State Trunk Highway 53 is the principal arterial providing access to Duluth and the Iron Range. Average daily traffic averages around 12,000 vehicles.
- Midway and Martin Roads are County level arterials. Martin Road provides east/west access through the heart of the township and Midway Road serves north/south flows on the far western side. Midway Road averages about 4,450 vehicles/day north of Hwy 53 while Martin Road averages 4,600 vehicles east of Lavaque Road and 2,800 west of it.
- Lavaque Road / Lavaque Bypass provide north/south access through the center of the township. It is considered a collector route based on its lower average volumes; Lavaque Road averages 2,950 vehicles (north of Martin Road) and Lavaque Bypass 3,150 vehicles.
- Ugstad Road and Vaux Road south of Martin Road both could be considered minor collectors in that they connect Martin Road with Highway 53.
- All other roads, including all Township roads (see Table 4), are local roads providing access to adjoining properties.

³ Source: <http://www.dnr.state.mn.us/wmas/>; accessed 12/31/13.

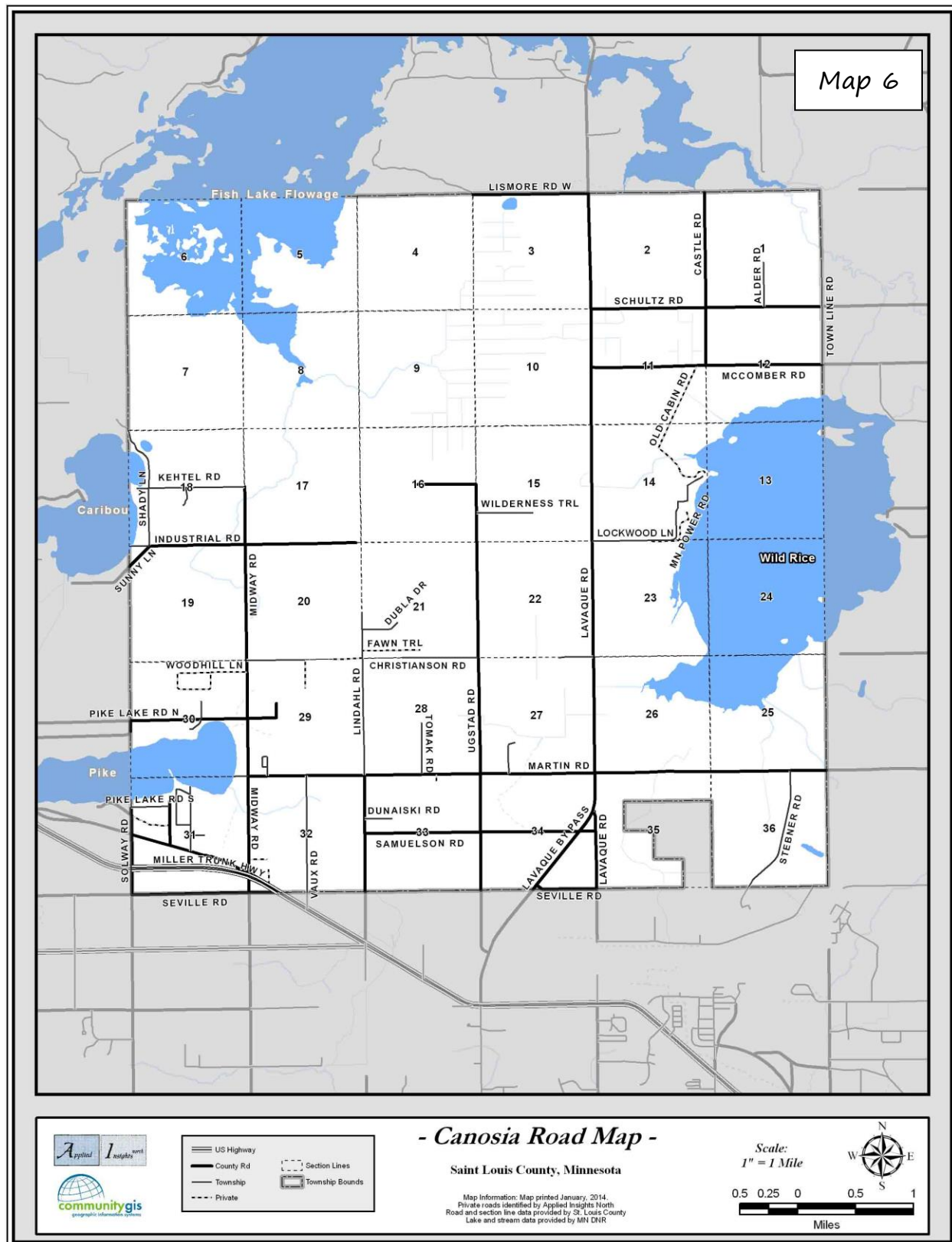


Table 4. Township Roads			
Road Name	Number	Length (mi.)	Surface
Alder Road	5537	0.39	Gravel
Birchway Road	5538	0.16	Paved
Carmens Way	5529	0.13	Paved
Christianson Road	5528	0.50	Gravel
Daniels Road	5535	0.56	Paved
Dubla Drive	5518	0.33	Paved
Dunaiski Road	5520	0.24	Paved
Eckstrom Road	5531	0.31	Gravel
Holly Lane	5539	0.15	Paved
Kehtel Road	5525	0.93	Paved
Lakeway Drive	5536	0.12	Paved
Lindahl Road	5533	1.40	Paved
Lockwood Lane	5540	0.50	Paved
Lorendale Road	5523	0.17	Gravel
Nelsondale Road	5523	0.17	Gravel
Pike Lane	5572	0.16	Paved
Pike Lake Place	5527	0.14	Paved
S. Pike Lake Road	5532	0.52	Paved
Shady Lane	5526	1.06	Paved
Spruce Lane	5536	0.42	Paved
Tomak Road	5521	0.45	Gravel
Townline Road	5515	0.90	Gravel
Vaux Road	5502	1.01	Paved
Wilderness Trail	5519	0.49	Paved

Road condition is generally good to excellent. The State recently upgraded the Highway 53 / Midway Road intersection and considers the highway in good to excellent condition. St. Louis County has upgraded roads such as Lavaque and has other roads slated for improvement; Martin Road from Rice Lake to Midway Roads is scheduled for repaving in 2015. Township roads are in good overall condition.

There are not many urgent road and transportation issues in Canosia. The following highlights topics of concern:

- By all accounts the Highway 53 / Midway Road intersection is not well-designed lacking adequate stacking space and having turning conflicts at the frontage roads. This site was noted by a number of survey respondents. That said, however, the intersection ranks exceptionally low in the County's assessment of unsafe intersections. It seems to be the situation that an intersection that appears confusing and unsafe makes drivers hyper cautious and thus greatly reduces the number of accidents. Neither the State nor the County transportation departments feel the intersection warrants redesign.
- Speeding was cited by survey respondents as the number one transportation issue in the township. No one road was singled out.
- Conflicts between autos and walkers/bikers was noted in the survey as an issue, particularly along Midway Road north of Pike Lake Road.

- There is some concern that many township roads are cul-de-sacs, some more than a mile in length. The most notable is the Caribou Lake Road which is served solely by Midway Road but others with sizeable numbers of residences include Lindahl and Ugstad Roads.
- All new private roads developed through the subdivision process must meet Township standards, which are the same as County standards. However, there are several existing private roads that are substandard and thus cannot be assumed by the Township. Owners of these roads are responsible for road maintenance. The cost to bring these roads up to Township standard, and thus be eligible for the Township to assume ownership, can be expensive; the burden to do this lies with the private owners.

Community Facilities

Canosia Township owns and operates a number of facilities serving residents and visitors. Three of the facilities are co-located just west of the Pike Lake Elementary School and a fourth, the recreation complex, abuts the school to the east. The cemetery is situated west of Midway Road just south of its intersection with Highway 53.

- Town Hall: Originally built in 1888 and upgraded in the 1980's. This building houses town office and meeting space.
- Fire Hall: Adjoining the town hall, the fire hall houses fire and emergency response vehicles and equipment, office and training space.
- Recycling Center: Adjacent to the town hall and fire hall, the center is a recycling transfer station.
- Township Recreation Facility: Situation on land donated by a town resident, this facility contains baseball/softball fields, soccer fields, an ice rink, tennis courts, volleyball court, playground equipment, pavilion and warming shacks. The facility is available for use by the adjoining Pike Lake Elementary School as well as residents.
- In addition, the township owns the public boat accesses on Pike Lake and Caribou Lake. The Minnesota Department of Natural Resources is responsible for the Pike Lake ramp and assists with signage and parking area striping there.
- Cemetery: Established in 1890, the cemetery is located on Midway Road, just south of Highway 53 and is available for a few to residents and non-residents.

Canosia is split between the Hermantown School District which covers the eastern half and the Proctor School District which covers the western half. The latter operates the Pike Lake Elementary School located near the intersection of Martin and Midway Roads. Although it is not a township facility the school is an important community asset. It serves most of the township's young children and provides a community focal and gathering point. The school was recently expanded and upgraded.

Utilities

Every property in the township relies on private wells for drinking water supply. Most of the township uses on-site treatment systems for wastewater with the exception of the Pike Lake area which is served by Pike Lake Area Wastewater Collection System (PLAWCS) which was completed in 2001 [see Map 7]. Wastewater from this system is directed to the Western Lake Superior Sanitary District (WLSSD) plant in Duluth. PLAWCS is a joint venture between Canosia and Grand Lake Township that is governed by a board comprised of town board members from the two communities.

The development of PLAWCS was followed by detailed analysis of options for providing sanitary sewer service to properties around Caribou Lake. Options included creation of a system that would feed into the WLSSD and establishing an independent sewer district with a communal treatment plant. After considerable discussion, no action was taken on the Canosia side but a portion of the Grand Lake side of the lake is developing an independent district.

The community survey conducted as part of this planning effort asked if respondents wanted to consider alternatives to individual on-site treatment systems. Two-thirds (67%) of Caribou Lake property owners favor consideration of either a sanitary sewer system (connected to WLSSD) or a clustered system such as that being developed in Grand Lake.

In 2010 the WLSSD modeled its entire system to determine potential future needs.⁴ The Caribou Lake area was included in this process with these inputs:

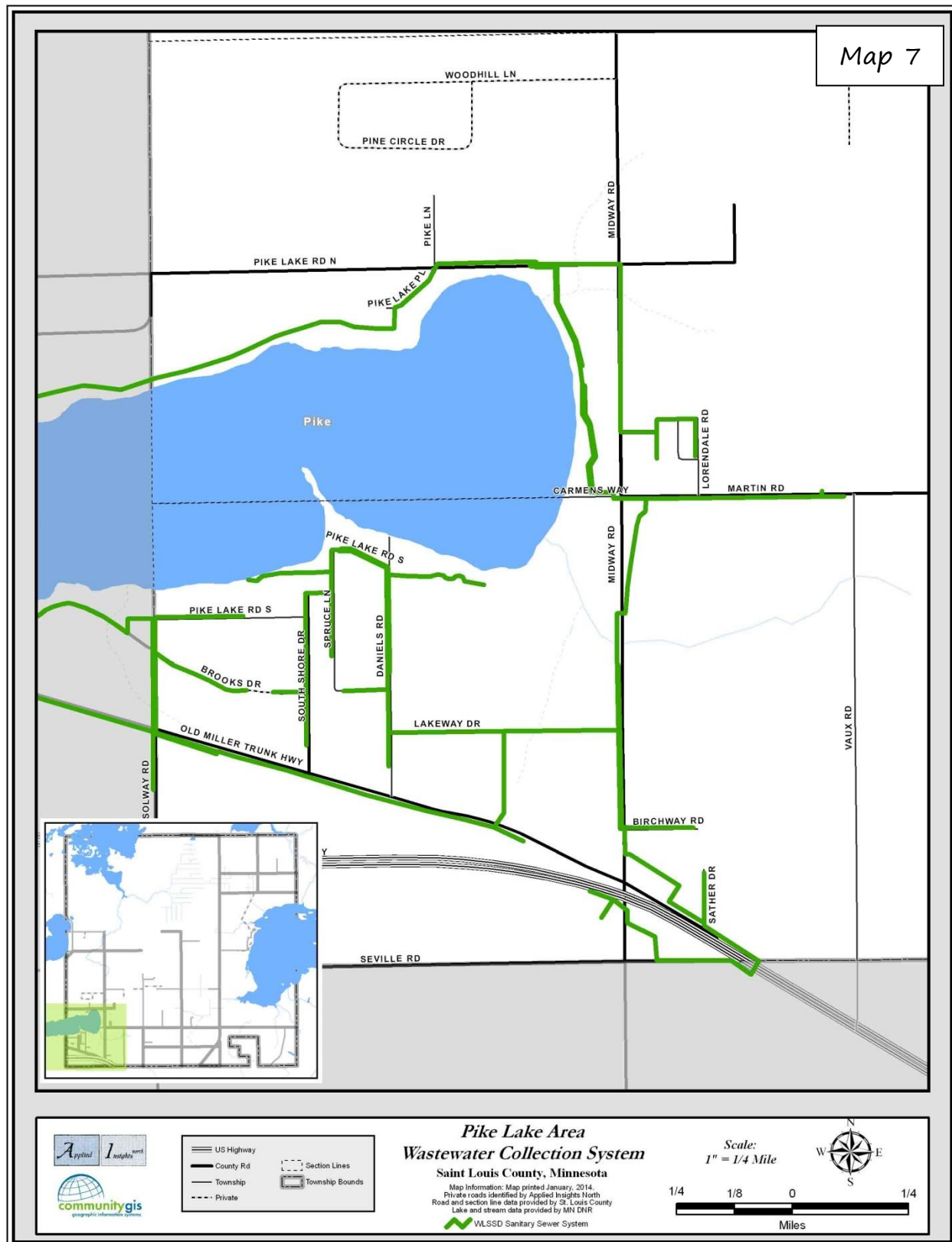
- a. The entire lake area in both Canosia and Grand Lake was included.
- b. The area's 2000 population was 235; the projected 2030 population was 327 (at an estimated 2.6 people per household, this would be about 125 homes worth of flow included in the model).
- c. The model used population data provided by the Metropolitan Interstate Council and was based on Transportation Analysis Zone information, which is a subset of US Census data. This data included estimated and projected employment figures within the area; while these job figures don't actually exist, they provide a cushion or margin of error for the model. The input values were 43 jobs in 2000 and 115 by 2030.

The modeled Caribou Lake flows would merge with those from the PLAWCS and flow through the Hermantown Interceptor to the WLSSD treatment facility. The capacity of the Hermantown Interceptor to handle the additional flow was the subject of this portion of the modeling. Conclusions reached by WLSSD staff included:

- a. Based on the inclusion of this projected future flow from Caribou Lake into the Hermantown Interceptor there is adequate capacity to take on this additional flow from Caribou Lake. Subsequent to the 2010 modeling work, the Birch Point portion of Caribou Lake initiated a clustered treatment system. This removes modeled demand and thus frees up system capacity for any future work in Canosia.
- b. The model does show some restrictions in capacity along a few segments of the Hermantown Interceptor during a 10-Year Flow event, which is a term used in modeling to represent a typical 25-year rainfall event.
- c. If future development of the Caribou Lake area is above and beyond what was projected in the WLSSD's modeling, the district would have to take a closer look at the impacts the projected flow would have on the Hermantown Interceptor.

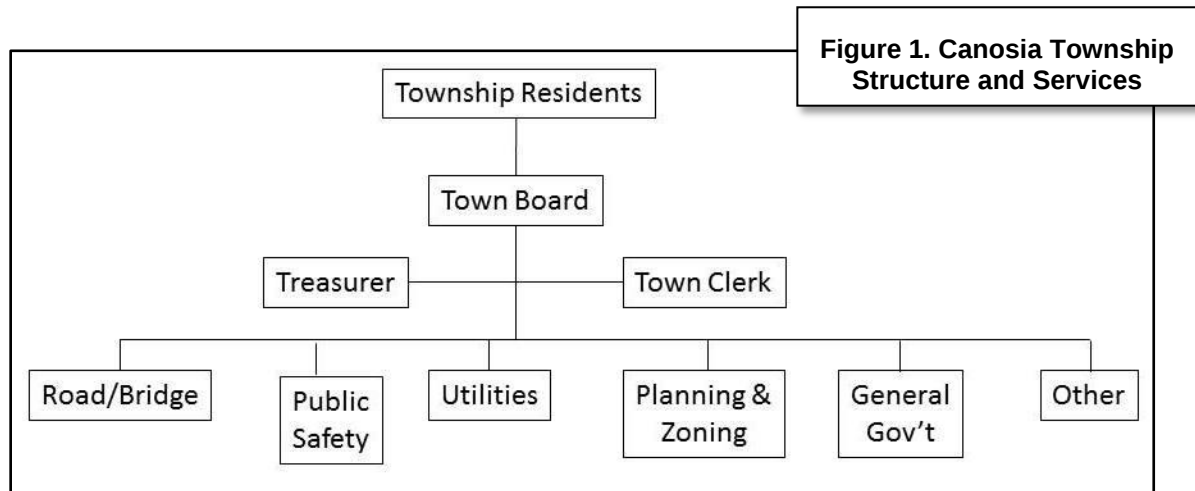
Another area that someday may require wastewater collection system service is the North Airport Development Area along Stebner Road. If and when this area is developed, both water and sewer service may be needed with likely service extensions coming from Duluth via the airport.

⁴ Source: Brandon Kohlts, Senior Planner, WLSSD; personal correspondence 11/18/2013.



Township Government

Canosia Township has the power and authority of an urban town as provided in Minnesota Statutes 368.01. It manages the provision of services to residents, businesses and property through a variety of means including direct action by the township, contracting with firms and individuals, and using the services of other entities such as the St. Louis County Sheriff's office. The following graphic and narrative present how Canosia Township cost-effectively manages the provision of desired services.



Town Board

- Elected by the voters of Canosia Township.
- Policy body for Township.
- Directs day-to-day operations of Township.
- Annual Town Meeting provides guidance to Town Board.

Town Clerk

- Primary administrative staff.

Treasurer

- Handles Township financial affairs.

Road and Bridge

- Road Foreman: township employee who oversees township roads.
- St. Louis County: agreement with County to plow all township roads and grade gravel ones.
- Private contractor: agreement to undertake minor road maintenance, culvert replacements, and ditch brushing/maintenance. Major repairs are contracted out separately.
- Inspections: Town Board conducts annual (and as may be needed during the year) inspection of all town roads.
- Driveway Permits: township issues permits for access to township roads.

Public Safety

- St. Louis County Sheriff: Sheriff provides primary police protection and investigation services; other departments support sheriff through mutual aid agreement.

- Emergency Medical Services: Township owns fire hall and equipment with the Canosia Volunteer Fire Department providing EMS services within township.
- Fire: Township owns fire hall and equipment with the Canosia Volunteer Fire Department providing fire protection services.

Utilities

- Sewer: Town has entered into a joint powers agreement with Grand Lake Township to establish and operate the Pike Lake Area Wastewater Collection System (PLAWCS) to provide sanitary sewer in the Pike Lake area.

Planning and Zoning

- Town adopts its own comprehensive plan to guide town decisions.
- Township zoning is administered by St. Louis County with recommendations from the Canosia Town Board as needed.

General Government

- Elections and all other general activities of the Town are directed by the Town Board and the Town Clerk.
- Legal Services: Town contracts with private attorney.

Other

- Parks: Town maintains Canosia Recreation Facility adjacent to Pike Lake School; town owns and maintains landward side of boat accesses on Pike Lake and Caribou Lake.
- Recreation Director: oversees operation and maintenance of township recreation facilities.
- Cemetery: Town owns and operates cemetery.
- Recycling: Town operates recycling center.
- Town Hall: Houses township offices and town meeting space.

Residents have consistently stated their desire to remain a township. In the survey conducted as part of this updated plan 70% opposed annexation by Hermantown and 80% opposed annexation of any portion of the township by Duluth.

Community Attitudes

In good part this updated comprehensive plan is built around information generated by a survey of residents and property owners. Although not a referendum or “vote” on issues, the survey provides invaluable insight into residents’ opinions on a range of key issues that helps shape plan concepts and policies.⁵

Of 998 surveys that were distributed 429 completed and usable surveys were returned for a response rate of 43%. This is an exceptionally high return rate for a survey of this type given the absence of any highly controversial issues within a community.

⁵ Complete results are found in “Canosia Township Comprehensive Plan Community Attitude Survey”, December 2013, prepared for Canosia Township by Applied Insights^{north}. Report is available from the Township.

The following shows the resident status of the respondents [note: percentages will exceed 100% as people could check multiple categories]:

- 360 (83.9%) are year-round residents.
- 41 (10.0%) own undeveloped land; 18 of them are year-round town residents.
- 29 (6.8%) are seasonal property owners.
- 12 (2.8%) own businesses in Canosia Township; three are town residents.
- 6 (1.4%) own a farm; four are year-round residents.

Table 4 shows where respondents lived or owned property/business in Canosia.

Table 4. Where Respondents Live or Own Property/Business		
Area	Number	Percent
A. Caribou Lake / Fish Lake	87	20.5%
B. Northeast	61	14.2%
C. Martin Road / Southeast	104	24.2%
D. Four Corners / Midway Road	58	13.5%
E. Pike Lake	115	26.8%
No Answer	4	0.9%
Total	429	100.0%

Half of the respondents have lived or owned property in the township for more than 20 years. Over a quarter (26%) has lived there 1-10 years and 23% have been there for 11-20 years.

Most households (71%) do not have anyone under the age of 18 and 21% do; 8% did not answer the question.

Contributors to Quality of Life

Respondents were asked to rate a list of factors that may contribute to a positive quality of life in the township. Highly rated factor can be seen as community attributes to be strengthened and protected through the comprehensive plan.

Table 5. Degree to which Factors Contribute to Quality of Life in Canosia Township.						
Problem	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	No Answer
Rural environment (less intense development, low traffic volumes, openness).	60.1%	31.9%	4.0%	1.6%	0.9%	1.4%
Ease of access into Duluth for jobs, retail, and services.	55.5%	39.4%	2.8%	0.5%	0.0%	1.9%
Lack of noise and man-made light at night.	52.2%	34.7%	6.5%	3.3%	1.4%	1.9%
Feeling of personal safety.	47.1%	44.8%	4.7%	1.9%	0.2%	1.4%
Four Corners business district	45.0%	43.6%	7.2%	1.9%	0.2%	2.1%
Open space and public land including Canosia Wildlife Management Area	41.3%	39.2%	12.6%	3.0%	0.5%	3.5%
Pike Lake as a natural feature and recreational resource	39.2%	42.4%	10.5%	4.0%	0.5%	3.5%
Pike Lake Elementary School	37.5%	38.2%	18.9%	1.9%	1.2%	2.3%
Caribou Lake as a natural feature and recreational resource	31.9%	40.6%	18.2%	3.7%	0.2%	5.4%
Recreation opportunities within the township.	30.1%	48.7%	14.0%	3.3%	0.2%	3.7%
Canosia Township recreation facility	28.2%	42.4%	22.4%	3.3%	0.5%	3.3%

Geography clearly plays a role in people’s opinions of these factors. For instance, the “rural environment” is more highly valued in the three most rural sections of the township – Martin Road/Southeast (69.2% strongly agree), Caribou Lake/Fish Lake (64.4% strongly agree), and the Northeast (59.0% strongly agree). It is lowest, 48.3% strongly agree, in the Four Corners/Midway Road area. While “lack of noise and night light” is valued throughout the township, it is less prized in the Martin Road/Southeast area where less than half strongly agreed with this factor; judging from written comments a major negative factor is the noise generated by the nearby Duluth airport.

Not unsurprisingly, Caribou Lake is most valued by the respondents in that area and the township’s recreation facility is highest rated by Pike Lake and Four Corners/Midway Road respondents. People in the Northeast rate it lowest and just a little more so by those in the Caribou/Fish Lake and Martin Road/Southeast areas.

Land Use and Development

Respondents were asked to rate a selected list of possible land use and development related issues as problems in the township. In Table 5 they are ordered by the sum of the percent ranking the issue as a Minor or Serious problem.

Table 6. Land Use and Development Related Problems in Canosia Township.					
Problem	Don’t Know / Unsure	Not a Problem	Minor Problem	Serious Problem	No Answer
Unsightly blight and trash on private land	7.9%	45.2%	34.5%	10.5%	1.9%
Snowmobile / ATV users crossing private property	7.5%	59.2%	22.8%	8.4%	2.1%
Dogs / livestock running loose.	4.2%	64.3%	23.5%	5.8%	2.1%
Inadequate enforcement of zoning decisions (e.g., variances)	6.1%	67.6%	17.9%	6.8%	2.8%
Discharge of firearms (hunting or target practice)	35.9%	39.2%	15.9%	4.9%	1.6%
Inappropriate uses allowed in rural residential areas	36.6%	43.6%	12.8%	4.2%	4.2%
Poor water quality	14.9%	66.9%	12.6%	3.7%	1.9%
Failing septic systems in my neighborhood	28.2%	54.8%	10.7%	4.9%	1.4%
Density of housing in my area of township.	4.0%	79.3%	11.9%	2.1%	2.8%
Other	4.0%	4.7%	3.0%	6.5%	81.8%

Since many of the issues could be area specific, the responses in Table 6 were cross-tabulated by where respondents lived. Among the findings are:

- Blight and trash is seen as an issue by 52% of the respondents in Caribou/Fish Lake area and 51% of those in the Pike Lake area.
- Snowmobiles and ATVs operating across private land are rated an issue by 37% of people in Martin Road/Southeast and 34% of those in Caribou/Fish Lake area.

- Dogs and livestock running loose (comments suggest this is mainly a dog issue) is most ranked as a problem by people in the Caribou Lake/Fish Lake area (49%).
- Over a third (36%) of the respondents in the Caribou/Fish Lake area view failing septic systems as an issue (versus just 16% overall)

Half the respondents favor expanding the Four Corners business district and one-third support keeping it as it is. On the other hand, there is little support for creating another retail district in the township. And nearly two-thirds (64%) feel home businesses and home occupations should be allowed to continue.

All the non-lakeshore portions of the township are zoned with a 2.5-acre minimum lot size. However, as the parcel analysis indicated substantial portions of the township have ownership patterns where the parcels are much larger than that. In response to a question asking if a larger minimum lot size could be considered for their area 75% of the people in the northeast quadrant supported a 5-acre or larger minimum as did 51% in the Martin Road / Southeast area.

Annexation of townships has been in the news with Proctor seeking to annex Midway Township and Duluth initiating discussions with Rice Lake Township. According to the survey most Canosia respondents are opposed to annexation whether by Hermantown or Duluth.

Roads

Roads are a perennial topic of discussion in any township. While this holds true in Canosia there are no major outstanding issues. Table 7 shows how respondents rate the listed issues, which are ordered by the sum of percent ranking the issue as a Minor or Serious problem.

Table 7. Transportation and traffic related problems in Canosia					
Problem	Don't Know / Unsure	Not a Problem	Minor Problem	Serious Problem	No Answer
Speeding on township or county roads.	8.9%	37.5%	36.8%	12.6%	4.2%
Single access road to Caribou Lake area	11.4%	50.3%	25.2%	8.4%	4.7%
Vehicle/pedestrian-bicyclist conflicts	21.7%	53.6%	14.7%	4.4%	5.6%
Gravel township roads needing to be paved	28.2%	47.1%	13.3%	5.1%	6.3%
Intersections needing lights	11.7%	67.6%	11.4%	3.0%	6.3%

Given the nature of roads in Canosia, the majority of speeding issues as determined from the written comments concerned county roads. In fact, township roads were not cited as an issue. The matter of safe walking/biking lanes along roads, while not a township-wide matter, is a concern for people in the Caribou Lake and Pike Lake areas with particular attention given to Midway Road north of Pike Lake.

Utilities

Most (68%) properties have individual on-site wastewater treatment systems with just the Pike Lake area being served by PLAWCS. For most areas there is no viable option to on-site systems except for the areas along Caribou Lake and just east of the PLAWCS district. In response to a question about optional systems, two-thirds of the people on Caribou Lake supported either a sanitary sewer system or a clustered system. Over a third of the people in the Pike Lake / Midway Road area would consider a sanitary sewer system.

Most respondents prefer to remain on private drinking water wells. There is limited support for a public water supply system in the more densely developed areas being highest in Four Corners/Midway Road (26%) followed by Pike Lake (23%) and Martin Road/Southeast (22%).

Recreation

Use of the township's recreation facility adjacent to the Pike Lake school is driven in good part by where people live. While half of the respondents said no one in their household used the facility, as shown in Table 8 the usage rate increases the closer people live to the site. In addition, households with children are four times more likely to use the facility than households without children (21% compared to 5%). Finally, just 10% of the respondents feel there is a need to upgrade the township's recreation facilities as compared to 43% seeing no need and 47% who don't know.

Table 8. How often someone in household uses township recreation area by where they live/own property in township						
Area	Never	1-2 times	Several times	Many times	No Answer	Total
A. Caribou/Fish Lake	52.9%	27.6%	11.5%	5.7%	2.3%	100.0%
B. Northeast	63.9%	24.6%	9.8%	0.0%	1.6%	100.0%
C. Martin Road / Southeast	52.9%	18.3%	19.2%	8.7%	1.0%	100.0%
D. Four Corners / Midway Road	43.1%	20.7%	15.5%	13.8%	0.9%	100.0%
E. Pike Lake	40.9%	33.9%	12.2%	9.6%	3.5%	100.0%
Total	49.7%	25.4%	14.2%	7.09%	2.8%	100.0%

However, there are recreational needs in the township with walking/biking lanes or trails being the highest rated need. In addition, there is a desire for enhanced connections to regional motorized and non-motorized trail systems. For all of these the level of need is felt most by people living in the Pike Lake, Caribou Lake and Four Corners/Midway Road areas.

Table 9. Recreational needs in Canosia Township (multiple items could be checked)	
Need	Percent
Walking / bicycling / rollerblading lanes along roads.	37.1%
Connections to regional motorized trail systems.	25.6%
Connections to regional non-motorized trail systems.	21.2%
Upgrade Pike Lake boat access.	16.8%
Upgrade Caribou Lake access at Holly Lane.	15.9%
Develop recreational facilities at another location in township.	5.8%
More facilities at town recreation facility.	4.9%

Community Structures and Services

Use of Canosia's recycling center, which is located at the town hall, clearly reflects geography. Table 10 notes that use of the center is highest for the areas closest to it and dramatically lower for those further away. Several comments suggest that people living further from this site may be using more conveniently located facilities in adjoining communities.

Table 10. Household uses Canosia recycling center	
Area	Yes
A. Caribou/Fish Lake	67.5%
B. Northeast	51.7%
C. Martin Road / Southeast	50.0%
D. Four Corners / Midway Road	67.9%
E. Pike Lake	70.8%
All Respondents	59.7%

There is little support at this time for a new community center – just 9% in favor versus 57% opposed; 34% were either unsure or had no opinion.

Similarly, support for a second fire hall in the northeast quadrant of the township, an idea floated in the previous comprehensive plan, was opposed by 39% versus 14% who favored it; 47% were unsure or had no opinion. Not too surprisingly respondents in the Northeast area were more positive towards the idea with 30% favoring it versus 27% against and 43% unsure or with no opinion.

Most respondents (80%) said they receive the township's quarterly newsletter and most found the information useful. Exactly half knew that the township has a website.



Plan Concepts

Goal: A Rural Community

Canosia Township is and intends to remain a rural, predominantly residential community with a viable business center in which a blend of rural lifestyles are enjoyed, where the natural features of four lakes – Pike, Caribou, Fish and Rice, forests and wetlands are essential to the community's character and vitality, and where all of which is sustained through an active, responsive township form of government.

Plan Concepts

The following concepts describe how a Canosia Township that is strongly rooted in its rural nature intends to sustain the community attributes that define the quality of life desired by community residents.

Concept 3: Open space areas and significant natural features enhance Canosia's rural character, sustain features that provide value to the community, encourage low development densities, and protect the ecological function of natural systems.

Concept 1: Canosia reflects a blend of rural development styles within matrix of undeveloped open space.

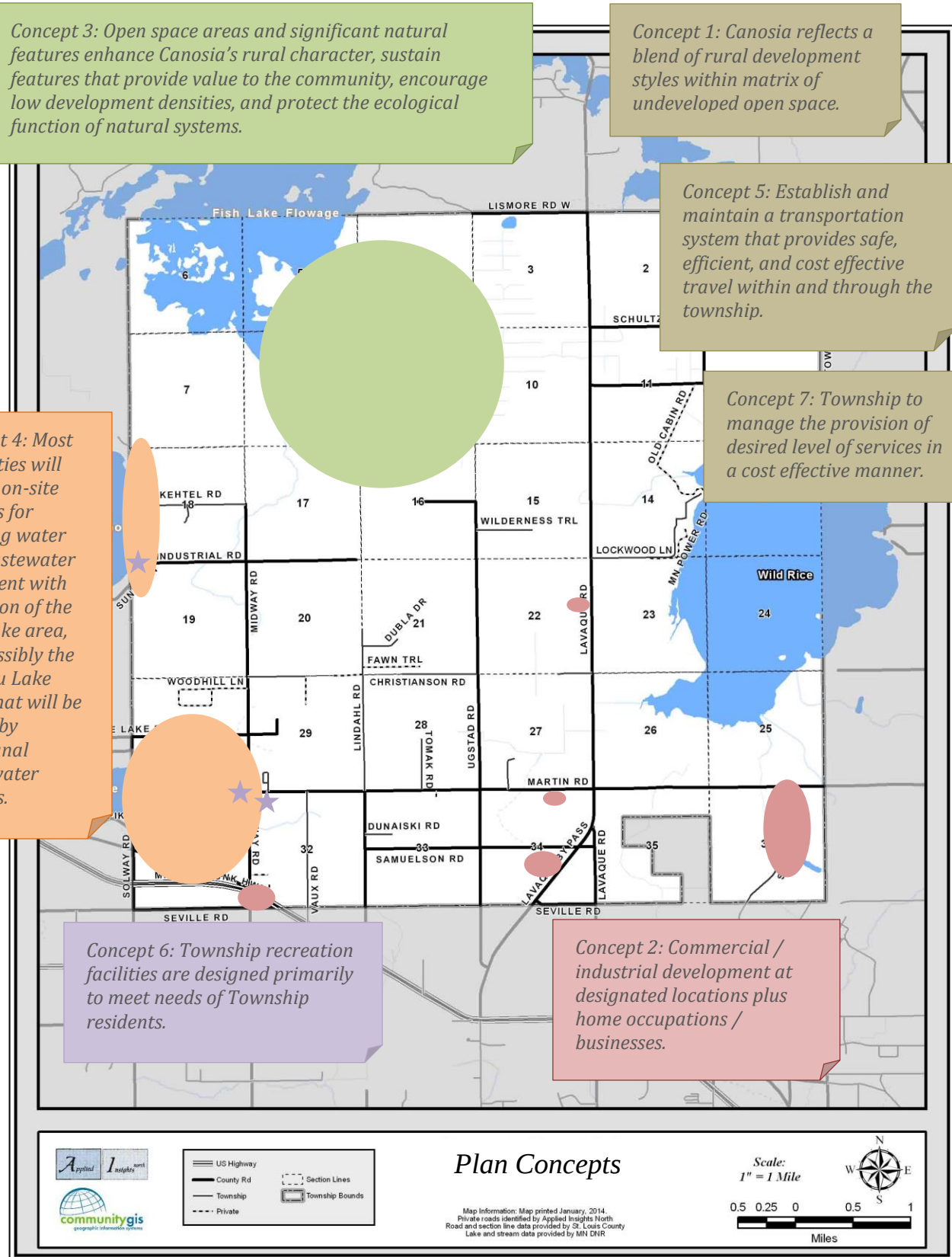
Concept 5: Establish and maintain a transportation system that provides safe, efficient, and cost effective travel within and through the township.

Concept 7: Township to manage the provision of desired level of services in a cost effective manner.

Concept 4: Most properties will rely on on-site systems for drinking water and wastewater treatment with exception of the Pike Lake area, and possibly the Caribou Lake area, that will be served by communal wastewater systems.

Concept 6: Township recreation facilities are designed primarily to meet needs of Township residents.

Concept 2: Commercial / industrial development at designated locations plus home occupations / businesses.



Concept 1:

Canosia is to reflect a blend of rural development styles within a matrix of undeveloped open space

Canosia is defined by rural, primarily residential development clustered around two outstanding lakes and much less intense rural development interwoven across a landscape of extensive wetlands and forests. The regionally significant Highway 53 travel corridor is the basis for a thriving commercial center while proximity to Duluth enhances the attractiveness of the township's rural lifestyle.

Northern and northeastern Canosia features lower density rural residential with a number of small agricultural operations and large amounts of undeveloped forests, wetlands and shorelands. The Canosia Wildlife Management Area dominates a significant portion of this area while large tracts of publicly and utility-owned lands cover much of the remainder.

Central and southeast portions of the township are predominantly mid-level density rural residential along county and township roads.

Around Pike and Caribou Lakes is a higher density rural residential development pattern, one that nestles into the rolling hardwood forest around the lakes and lends an atmosphere of "up north" lake country resort and cabin territory.

Providing commercial retail and services to residents and the surrounding area is the Four Corners business district centered on the Highway 53 / Midway Road intersection. Present from Canosia's earliest years this area well serves the rural area and through traffic. In addition to businesses it includes the Pike Lake Elementary School, two churches and the township cemetery.

Implementation Guidance

Residential and lakeshore development in Canosia should be carried out in a way that maintains the existing rural character of the township. Although township zoning is administered through St. Louis County, the Canosia Town Board will continue to provide recommendations to the County Planning Department to communicate the residents' desire to keep our township's rural character. This includes offering input on variances or conditional use permits and possibly adding township-specific overlays to the zoning map to impose greater restrictions within Canosia if needed.

Concept 2:

Commercial/industrial development is to be located at: Four Corners, Airport North Development Area, Lavaque Bypass Road, Martin Road East, Lavaque Road and home occupations/businesses as appropriate for their respective locations.

Commercial uses are needed to serve resident needs and those of the larger regional community. There are two basic types within Canosia. First, most are retail and service ventures concentrated in areas already so developed or have been designated for such use. Second, home occupations and businesses, which are considered an inherent part of the rural lifestyle, may be located throughout the township as long as they create no adverse impacts on surrounding properties and natural resources.

The Four Corners business district at the intersection of Highway 53 / Midway Roads is the township's long-established primary commercial area. It offers a mix of retail and service operations

generally aimed at serving the local population but also meet the needs of travelers along the highway and the surrounding region. Within the district there is sufficient room for new development; redevelopment options also exist. There is no need to expand the geographic extent of the district in the foreseeable future.

The Martin Road East property is a long-standing commercial site which began as the former Morterud Egg facility. A number of ventures have used this area over the years; given its location it may be best suited for light industry, warehousing or contractor operations although a wide range of uses are allowed.

Along Lavaque Road north of Martin Road is another property historically used for light industry and contracting ventures.

The Airport North Development Area is a designated but as of yet undeveloped industrial area along Stebner Road. It was established in the cooperatively developed Duluth Airport Land Use Plan and is intended to provide space for ventures centered on the region's growing aviation-oriented industrial sector.

The Lavaque Bypass Road commercial / industrial area was designated roughly twenty years ago in response to anticipated commercial activity resulting from the new airplane maintenance facility. While still undeveloped it remains an option along a main road corridor for light industry or commercial ventures.

Implementation Guidance: Offer input when possible to St. Louis County to help sustain current extent of commercial / industrial zoning.

Concept 3:

Open space areas and significant natural features are to be preserved to enhance Canosia's rural character, sustain features that provide value to the community, encourage low development densities, and protect the ecological function of natural systems.

Natural systems and open space are essential valued attributes of Canosia that help define the township's quality of life. Natural resources, most especially wetlands and shorelands, within the township are to be protected through good design, land use, and best practices. Pike and Caribou Lakes are critical ecological and community assets and maintaining high water quality is vital to the township's well-being.

The Canosia Wildlife Management Area provides both outstanding recreational opportunities as well as preserves a valuable suite of natural resources. The public lands around the WMA should be retained to enhance the positive impact of the WMA. Equally important is keeping the large tracts of land owned by Minnesota Power around Rice Lake in a minimally developed condition.

Implementation Guidance

- a. Promote the use of best management practices for shoreland management; Communicate with St. Louis County to ensure awareness of our desires for shoreland management
- b. Periodically communicate with the Minnesota DNR regarding management issues concerning the Canosia WMA.

- c. Periodically communicate with the St. Louis County Land and Minerals Department regarding use of county-owned or administered lands particularly those abutting the Canosia WMA.

Concept 4:

Most properties will rely on on-site systems for drinking water and wastewater treatment with the exception that the Pike Lake area will be and the Caribou Lake area may be served by communal wastewater systems.

Part of being a rurally developed area is the use of on-site drinking water wells and wastewater treatment systems. This is the case for Canosia with the exception of one and possibly a second area where communal wastewater collection is needed to protect water quality of key lakes.

The Pike Lake Area Wastewater Collection System is a collaborative response with Grand Lake Township to address issues generated by historical development in and around Pike Lake. It is possible that protection of Caribou Lake's water quality may require a similar undertaking. In both cases the provision of a wastewater collection utility is solely intended to address issues associated with existing development and is not to be an inducement for further development of a density or nature that would require these services.

The other possible exception to the general rule of using on-site systems may be the North Airport Development Area. The airport master plan calls for utilities in this area although this is not a given. Canosia prefers that on-site systems be considered rather than the extension of utility services.

Implementation Guidance

- a. Continue to participate in PLAWCS, allow additional connections by properties within the existing service area, but oppose expansion of the service area itself.
- b. Undertake a collaborative assessment on the need for and approach to providing wastewater collection and treatment for property around and near Caribou Lake.
- c. Township is committed to work within regional approaches to providing infrastructure.
- d. Cost for infrastructure improvements should be distributed in equitable manner among those who receive the primary benefit of the improvements.
- e. The Township will not pursue the establishment of a public water supply utility.
- f. Township supports the use of on-site utility systems for development in the North Airport Development Area.

Concept 5:

Establish and maintain a transportation system that provides safe, efficient, and cost-effective travel within and through the township.

Canosia's primary role in transportation is to provide and maintain Township roads adequate to provide local access to property. The Township will maintain its current inventory and may add new roads or mileage but only if they meet Township standards. The Township does not envision creating more roads on its own initiative; any new roads will result from new development.

The Township will explore the need and options for converting dead-end cul-de-sacs into loops by providing second accesses. However, actual construction of any such road would most likely result from an associated development activity.

Canosia will interact with St. Louis County and the State regarding their roads, which provide the backbone for the township transportation system.

The Township may extend its role in transportation by being more proactive in the area of trails, which are seen as more than recreational in nature but also as valid people moving systems.

Implementation Guidance

- a. All new private roads must meet Township standards.
- b. All costs for upgrading any existing private road to Township standards for possible acceptance as a Township road must be borne by the owners of the road.
- c. Explore options for providing a second road access to the Caribou Lake area.
- d. Establish a five-year capital improvements program for roads.
- e. Explore options for providing walking and bicycling routes within the Township with focus on connecting Four Corners/Pike Lake/school/recreation area to residential areas. Options may include lanes alongside roads and separate trail corridors.

Concept 6:

Township recreation facilities are designed primarily to meet needs of township residents.

Canosia has made considerable investment in providing quality recreational facilities for its residents and visitors. The Township Recreation Area provides a wide variety of recreational activities for all ages. It is the Township's intent to maintain this facility, ensure that it is accessible to all including people with disabilities, and enhance it as may be desired over time.

In addition, in cooperation with the Minnesota DNR the Township maintains boat accesses on Pike and Caribou Lakes. These accesses, especially the one on Pike Lake serve residents and visitors alike.

The Canosia WMA, which is owned by the Minnesota DNR, is a valuable outdoor recreational facility that enhances living in the township. The Township collaborates with the DNR as may be necessary to ensure that the facility stays in good shape and retains attractive access points.

As noted under Concept 5, biking and walking paths are seen as both recreational and transportation features. Additional dedicated corridors are desired to provide safe travel ways across the township and in particular to its key amenities.

Implementation Guidance

- a. Maintain the Township Recreation Area to a high level of quality. Periodically ask the community if changes or enhancements are needed.
- b. Explore partnerships with groups and corporate sponsors regarding development and maintenance of Township Recreation Area.
- c. Explore options for providing walking and bicycling routes within Township with focus on connecting Four Corners/Pike Lake/school/recreation area to residential areas. Options may include lanes alongside roads and separate trail corridors.

Concept 7:

Township to manage provision of desired level of services in a cost-effective manner.

First and foremost, Canosia is to retain its township form of government. There is neither need nor desire for any part of the township to be annexed into an adjoining municipality.

The Township manages the efficient and cost-effective delivery of services to its residents through a mix of direct and indirect mechanisms. It will do so as follows:

- Road maintenance will be provided directly by the Township and through agreements with St. Louis County and private contractors.
- Fire and EMT services will be provided through the use of Township owned facilities and equipment and the volunteer fire department.
- Police protection will be provided through the St. Louis County Sheriff's Department.
- Zoning and land use controls will be administered by St. Louis County.
- Recycling, recreation and cemetery will be operated directly by the Township.
- Township will provide a variety of general governmental services including the operation of effective communication tools for the distribution of Township information and facilitation of two-way communication between residents and Township officials.

The Township will continually identify and evaluate needs and opportunities to provide additional services and upgrade existing ones.

Implementation Guidance

- a. Establish and update a rolling five-year Capital Improvement Program covering all major investment expenditures (e.g., roads, recreation, facilities).
- b. The township will communicate regularly with the County Planning Dept. as they administer our local zoning to ensure decisions are an accurate reflection of the concepts outlined in this comprehensive plan.
- c. Collaborate with Fredenberg and Rice Lake Townships to evaluate the need for and optional solutions to providing a second fire hall in the township's northeast quadrant.

- d. Conduct annual evaluations with St. Louis County Sheriff's office and residents over policing needs and issues within the township.
- e. Update township's website to provide more information online (e.g., ordinances, meeting notices, minutes, etc.), encourage community communication flow to township leadership and with each other, and make it more useful on mobile devices.
- f. Use newsletter and website to inform residents on way to respond to various issues such as complaints about animals and blight / trash. The township feels there are adequate controls in place through other agencies and no new township ordinances are required.
- g. Work with service providers to ensure high quality internet service to township residents and businesses.



Implementation

In the previous chapter Canosia Township has defined its desired future condition with guidance on how to achieve it. Here the Township identifies the initial round of actions to be taken to realize that desired future.

Land Use

- 1 Communicate regularly with St. Louis County to ensure the concepts outlined in this comprehensive plan are reflected in zoning decisions within Canosia.

Roads & Transportation

- 1 Prepare a 5-year Capital Improvement Program as part of the overall Township CIP.
- 2 Seek assistance to conduct an assessment of possible routes for biking and walking trails throughout the township.
- 3 Produce a map showing Township road jurisdictions to facilitate planning and aid residents in knowing responsible parties for roads within the township.

Community Facilities & Utilities

- 1 Seek assistance to conduct an assessment of need and solutions regarding the provision of wastewater collection and treatment in and near Caribou Lake.
- 2 Evaluate creation of a recreation facility such as a looped system of non-motorized trails on Township owned land in Section 20 on Industrial Road.

Governmental Services

- 1 Prepare a rolling 5-year CIP for all major investment expenditures.
- 2 In collaboration with Rice Lake and Fredenberg Townships undertake an assessment of the need for a second fire hall in the northeast quadrant of the township.
- 3 Update and enhance Township's capacity for communication with residents and property owners utilizing such tools as website, newsletter and social media.
- 4 Conduct annual meetings with the St. Louis County Sheriff's office regarding public safety issues.
- 5 Conduct periodic meetings with the Minnesota DNR regarding the Canosia WMA and with St. Louis County Land and Minerals Department regarding management of county-administered lands.

