

**TOWN OF ORWELL
VISION FOR THE FUTURE**

**Adopted by Town Board
February 13, 2001**

SUMMARY

The Town of Orwell Vision for the Future identifies goals, objectives and strategies for the immediate and long range protection, enhancement and development of the Town's resources. Written by the Planning Board, with input from the Town Board, the Vision for the Future attempts to translate the comments received from a 199x survey of the town's citizens into a shared vision for Orwell's future.

The Vision for the Future is intended to help the Town prioritize decisions and investments, secure grant and loan funding, and negotiate with public agencies interested in development projects in Orwell.

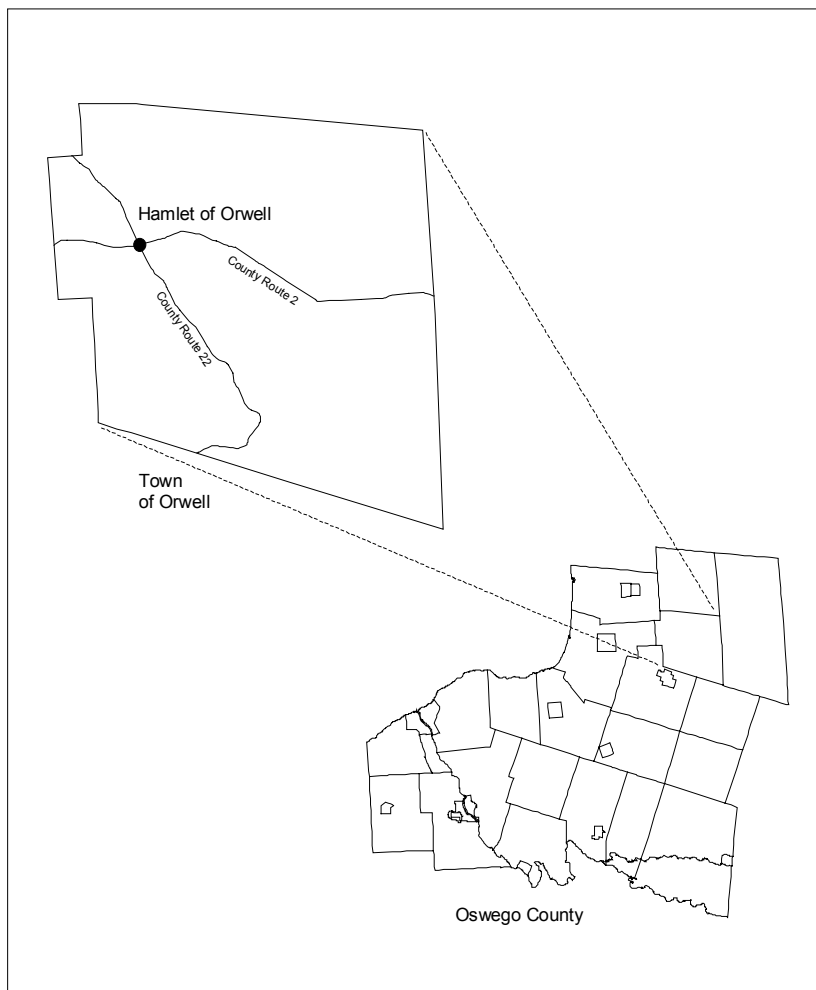
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PART I - COMMUNITY PROFILE

LOCATION

The Town of Orwell is located in northeastern Oswego County on the western flank of the Tug Hill plateau (see map 1). The town encompasses approximately 42.4 square miles or 27,136 acres. Bordering towns include Boylston, Redfield, Williamstown, Albion, Richland and Sandy Creek. Orwell is approximately 24 miles east of the City of Oswego and approx. 33 miles north of the City of Syracuse.

Map 1



HISTORY

Early Settlement (1790-1870)

The land now known as the Town of Orwell was part of an enormous tract of land, comprising most of present day upstate New York, that was ceded to the State of New York by the Iroquois after the revolutionary war. The portion of this territory north of the Salmon River and west of the Adirondack mountains, a tract of approximately four million acres, was purchased from the state in 1791 by Alexander Macomb and several associates. This tract became known as the Macomb tract or Macomb's purchase. The portion of the Macomb tract bounded by the Black River to the north and east was then sold and eventually came to be known as the Boylston Tract after its one time owner, Thomas Boylston. When this tract was surveyed into townships, what is now Orwell became township #11, also called Longinus. On February 28, 1817, the Town of Orwell was officially recognized by the state legislature. It was reportedly named by John Reynolds, the first supervisor, after his former home of Orwell, Vermont. In 1820, 488 people were reported to be living in the town. The population would grow steadily for the next 60 years.

The town's early settlers were lured from New England by the prospect of cheap land and clean water. Hardwood-forested land reportedly sold for \$1.50 an acre and softwood-forested land for \$1.00 an acre. As settlers slowly came to the town, a typical 19th century agrarian economy developed. The land was cleared to accommodate agriculture. Forests were felled, stumps were burned, and stones were removed to become barn foundations, stone walls and bridges. Hamlets began to develop at road intersections and road and stream intersections (flowing water being necessary to power mills). The hamlets of Moscow (now Orwell or Orwell Corners), named for the Russian capital, and Pekin (also called Molino), named for Peking, the Chinese capital, were the first to develop. Moscow developed at the intersection of the road from Rome to Sackets Harbor (now County Route 22) and the road to Pulaski (now County Route 2). Pekin developed where what came to be known as Pekin Brook crossed the Rome - Sackets Harbor Road. Churches, schools, and stores eventually sprang up at these locations providing goods and services to their communities. As new roads were built, other hamlets, including Chateaugay, Vorea, New Scriba and Pine Meadows, developed.

Early industry in the town was based on abundant natural resources. Maple syrup production, a skill brought to the region from New England, and shingle making made use of the forest resource, as did potash and charcoal production. Stream driven mills began to appear along the Salmon River and Pekin Brook in the early 1800's. The first saw mill was built around 1810, allowing the town's logging and lumber industries to grow. The first fully functional gristmill began operation in 1835 - eliminating the need for a trip to Pulaski, which could take up to two days. Early agriculture in the town was wheat and grain based until the Erie Canal opened in 1829. Because the canal allowed farmers from the midwest to flood eastern markets with cheaper grain, the farmers of Orwell turned to the production of dairy products, especially cheese. The first cheese factory was built in 1853 and it is reported that about

ten such factories existed in the town in the 1870s. Cheese was drawn by horse to Port Ontario to be shipped to Canada and then England. Other important industries included tanning (making use of an ample supply of hemlock bark), blacksmithing, ice harvesting and chair and ladder building.

Turn of the Twentieth Century (1871-1930)

The town's population declined significantly during this period after peaking at 1,550 in 1880. This decline was echoed throughout the communities of Tug Hill as residents were drawn to the surrounding cities where employment was plentiful in the nation's newly emerging industrial economy.

Orwell's landscape also underwent a dramatic change during this period with the construction of the Salmon River hydroelectric project, undertaken from 1912 to 1930. The river was dammed at Stillwater and Lighthouse Hill, creating two reservoirs, the larger of which is seven miles in length. Water was diverted from its natural course over Salmon River Falls by a 7,800' long, 12' diameter pipeline or 'penstock' that connected the upper and lower reservoirs, creating an energy producing water drop or 'head' of 285 feet. The Lighthouse Hill facility is capable of producing over 26 million kilowatt hours of electricity per year and the Stillwater facility is capable of producing around 81 million.

The Present and Beyond (1931-)

The mid to late twentieth century has seen the town's population rebound to late nineteenth century levels after bottoming out at 663 in 1960. This period has also witnessed Orwell's transformation from a community where people came to work the land to a community where people come to enjoy the solitude of rural life. This shift is evidenced by a marked decrease in farming activity, a workforce that has become increasingly dependent on employment sources outside the town and the development of second home or 'camp' communities along the town's water bodies.

The decline of agriculture, especially family farming, is a nationwide phenomenon that is particularly evident in Orwell. The 1850 Census reported that 139 farms existed in the town. In 1999, there were less than 20 (several of which were inactive). The majority of this abandoned farmland has reverted back to forest, either naturally or with the help of the New York State reforestation program of the late 1920s. Chateaugay and Salmon River State Forests were created at this time contributing 3,800 acres of forest cover to the town's landscape.

Employment sources within the town are scarce today compared with those available during Orwell's first growth era. Along with farms, commercial operations are also few. Real property data suggests that there were less than ten tax parcels used for commercial purposes in 1995. 1990 Census data indicates that only 17% of Orwell residents with jobs actually worked in Orwell that year. These conditions have negative impacts in that they result in a

somewhat stagnant tax base and force many residents to commute, sometimes long distances, to work. However, these conditions have positive impacts, as well, in that they contribute to the preservation of Orwell's pristine natural setting and rural qualities.

The creation of the Salmon River and Lighthouse Hill Reservoirs, along with the four season recreational resources of Orwell's state forests have made the town attractive for the development of vacation home communities. The construction of Interstate 81 in the late 1960s, which put Orwell's recreational and scenic assets within easy reach of the residents of the Syracuse metropolitan area to the south, helped spur continued development of this nature. The first vacation community in the Town of Orwell was the area known as Little America, which developed in the 1930s on the north shore of the Salmon River Reservoir. Lorton Lake, in the southeastern corner of the town was created by the impoundment of Beaver Dam Brook in the late 1950s. Vacation homes now dot its two mile shoreline. Other developing vacation home communities include the Four Seasons resort on the Lighthouse Hill Reservoir and the Salmon Shores development just west of Little America on the Salmon River Reservoir. The announcement by Niagara Mohawk in the early 1990s of their plans to sell much of the land acquired during the Salmon River hydroelectric project means that substantial amounts of land with frontage on the reservoirs will be available for development in the future.

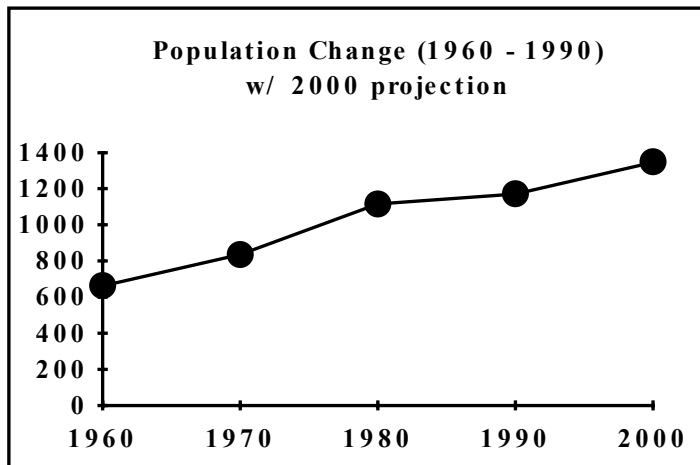
Sources: Crisfield Johnson, *History of Oswego County, 1789 - 1877*
 Betty D. Martin, *Orwell Remembered, volumes I & II*
 Judith Wellman, *Landmarks of Oswego County*

DEMOGRAPHICS

Population

The population of the town has grown steadily over the last 30 years from 663 in 1960 to 1,171 in 1990 (an average increase of 17% every ten years). The most dramatic period of growth during this timespan was between 1970 and 1980 when the population grew from 836 to 1,116 (up 33%). If the average ten year growth rate (17%) were to continue, the town's population in the year 2000 would be 1,370. The Oswego County Department of Planning and Community Development has projected a 2000 population of 1,347 for Orwell.

Figure 1

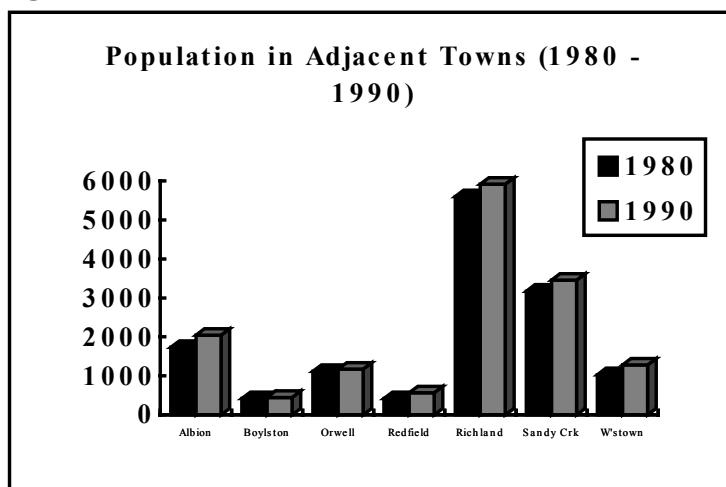


Source: U.S. Census and Oswego Cnty. Dept. of Planning

Regional Population

A comparison of populations and growth rates between Orwell and the six towns surrounding it (Boylston, Redfield, Williamstown, Albion, Richland and Sandy Creek) reveals that Richland had the greatest population in the 'region' with 5,917 (40% of the seven town total) in 1990. Orwell's population of 1,171 ranked fifth (8%) - followed by Redfield (564 or 4%) and Boylston (443 or 3%), the least populated town in the 'region.' During the 1980s, the fastest growing of the seven towns was Redfield, whose population increased 35%. Orwell ranked last with a growth rate of 5%.

Figure 2



Source: U.S. Census

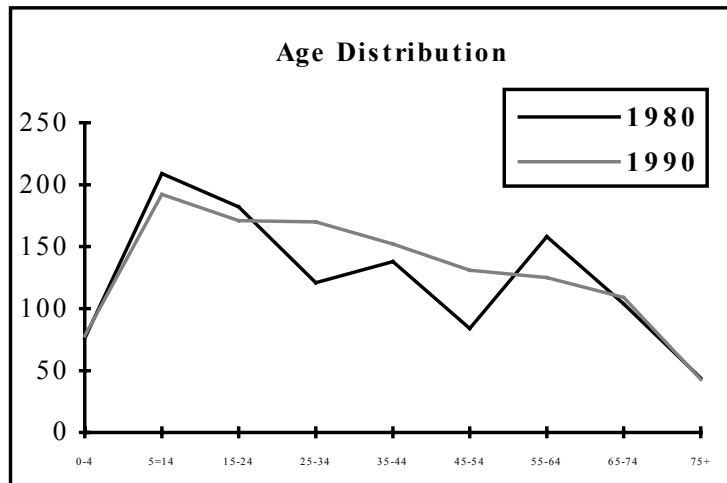
Households

The number of households (persons living together in the same dwelling unit, whether related or not) grew from 322 to 349 (an increase of 8%) between 1980 and 1990. Average household size decreased slightly, from 3.47 to 3.36, during that period. The number of families (a subset of households) grew from 263 in 1980 to 277 in 1990 (an increase of 5%).

Age

A comparison of the size of age groups (or cohorts) between 1980 and 1990 indicates a more evenly distributed population in 1990 (compare the peaks and valleys of the 1980 line in Figure 3 to the smoother profile of the 1990 line). The age groups of 25-34, 35-44 and 45-54 grew while the age groups of 5-14, 15-24 and 55-64 declined. The groups of 0-4, 65-74 and 75+ remained stable.

Figure 3

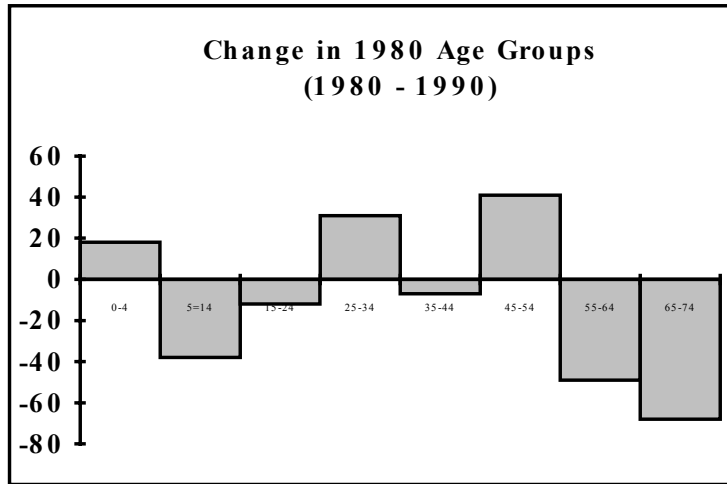


Source: U.S. Census

Net Migration and Deaths

Increases or decreases in age group size due to in and out migrations and deaths can be examined by comparing the size of each 1980 age group with its size, ten years later, in 1990. Figure 4 illustrates these changes. A decline in the 5-14 age group (18%) likely indicates out migrations. The growth of the 25-34 and 45-54 groups (26% and 49%, respectively) probably indicates in-migrations while marked decline in the 55-64 and 65-74 groups (45% and 89%, respectively) may indicate out-migrations and deaths.

Figure 4



Source: U.S. Census

Income

Figure 5 illustrates changes in census-reported income figures for Orwell and Oswego County for 1979 and 1989. The 1979 data is adjusted for inflation using the consumer price index. Median household income in the town decreased during this period from \$22,849 to \$22,400 (down 2%). Median household income in the county increased from \$27,627 to \$29,083 (up 5%). The number of persons living below the poverty level decreased from 272 in 1980 (24% of the population) to 239 in 1990 (20% of the population).

Figure 5

	Median Household Income 1979 figures adjusted by CPI to 1989 Dollars
Town of Orwell	
1979	\$22,849
1989	\$22,400
% Change	-2%
Oswego County	
1979	\$27,627
1989	\$29,083
% Change	+5%

Source: U.S. Census

Educational Achievement

The level of educational achievement within the town escalated between 1980 and 1990. According to census reports, the number of high school graduates increased from 236 in 1980 to 281 in 1990 (up 19%). The number of people

reporting completion of a bachelor's degree grew from 42 in 1980 to 54 in 1990 (up 29%).

Employment

The number of employed people (over 16) in the town grew from 332 in 1980 to 381 in 1990, (up 15%). Oswego County's number of employed people also increased, from 41,761 in 1980 to 51,881 in 1990 (up 24.2%).

The leading sources of employment among Orwell residents in 1990 were manufacturing (durable and nondurable) (21%), professional and related services (21%) and retail trade (18%). Between 1980 and 1990, the town experienced percentage decreases in employment in agriculture, forestry, fisheries and mining (-14%), manufacturing (-20%), professional and related services (-10%), and finance, insurance and real estate (-33%). Within that same period, increases occurred in employment in construction (+6%), transportation (+19%), wholesale trade (+22%), retail trade (+168%), communications and public utilities (+27%), business and repair services (+1,050%), and personal, entertainment and recreation services (+167%). Employment in public administration remained the same.

Figure 6
Employment by Occupation - 1990

Occupation	Number of workers
Agriculture, forestry, fisheries, mining	25
Construction	38
Manufacturing, nondurable	27
Manufacturing, durable	52
Transportation	19
Public Utilities	14
Wholesale Trade	11
Retail Trade	67
Finance, insurance, real estate	2
Professional and related services	72
Public Services	16

Source: U.S. Census

Place of Work

The 1990 census reported that only 17% of the town's workers (55 people) worked within the town's boundaries. The average reported travel time to work was 27 minutes. Figure 7 compares employment location and commuting behavior for towns in the 'region.'

Figure 7

Town	Percentage of Workers with Jobs Located in Town of Residence	Average Travel Time to Work
Albion	14%	27 min.
Boylston	29%	33 min.
Orwell	17%	27 min.
Redfield	6%	30 min.
Richland	77%	21 min.
Sandy Creek	56%	23 min.
W'stown	36%	26 min.

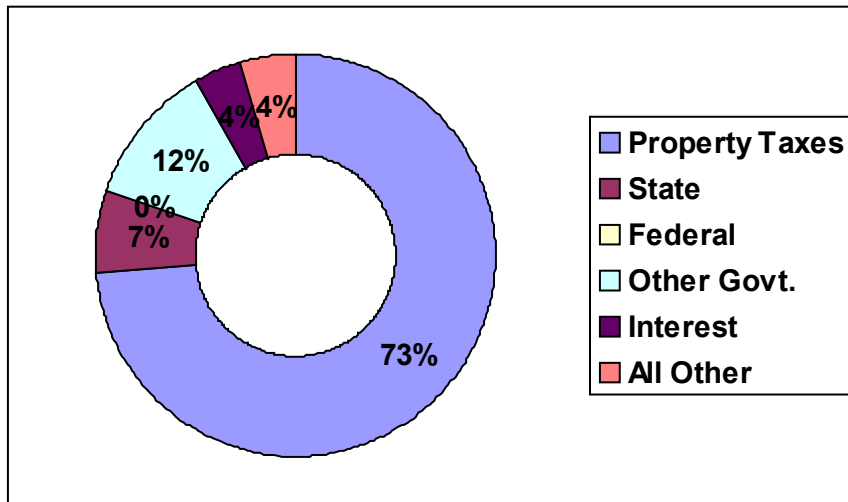
Source: U.S. Census

FINANCE

During the first half of the 90s, real property taxes amounted to about three quarters of the town's revenues (see Figure 8). When spending is broken down by function (see Figure 9), transportation has been the town's major expenditure. When spending is broken down by object, the major expenditures have been for personal services and contractual expenditures (see Figure 10).

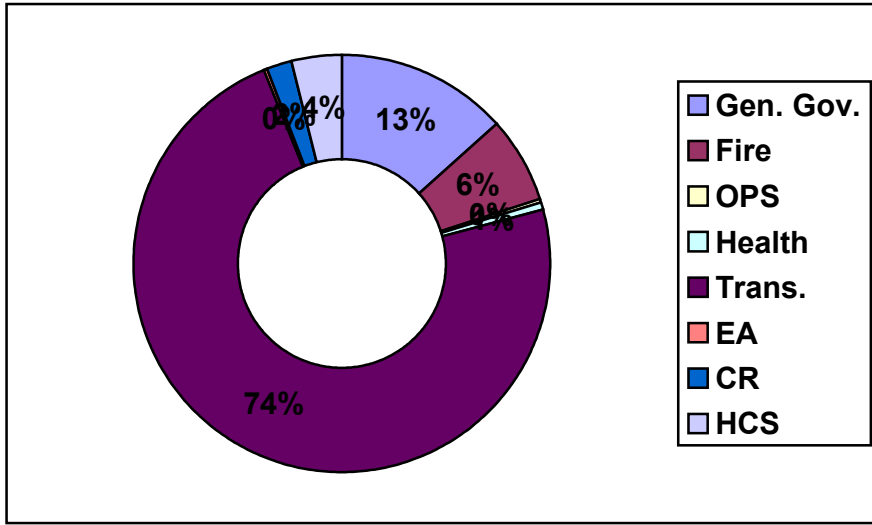
Figure 8

Revenues



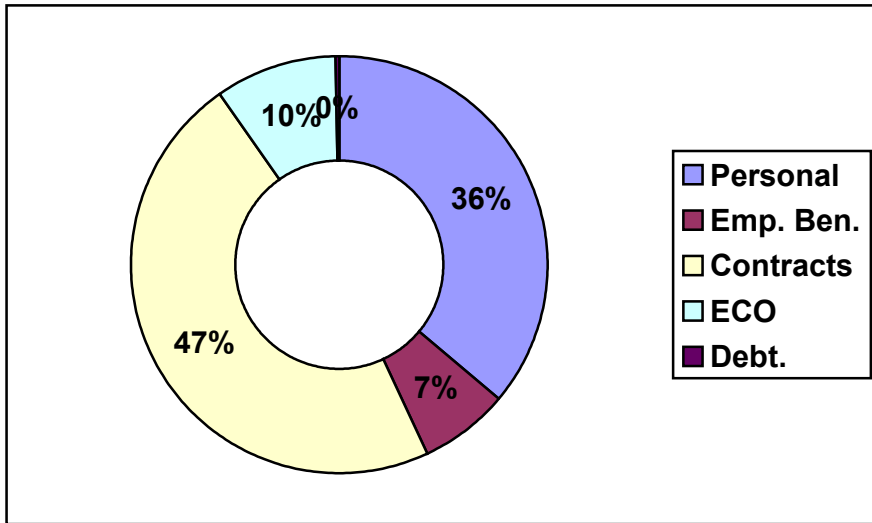
Source: NYS Comptroller's Office

Figure 9
Expenditures by Function



Source: NYS Comptroller's Office

Figure 10
Expenditures by Object



Source: NYS Comptroller's Office

NATURAL RESOURCES

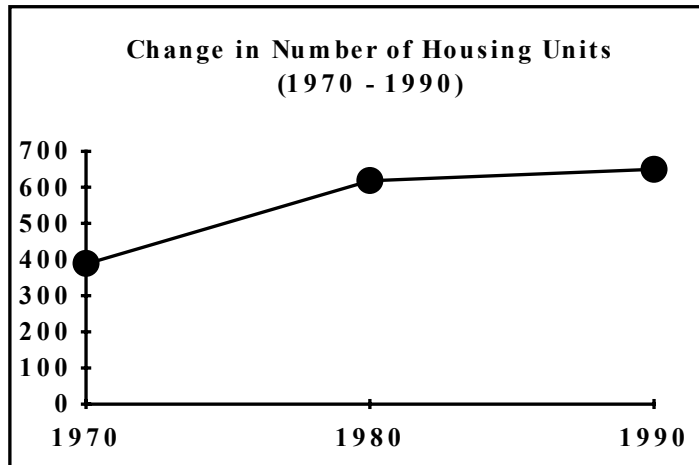
Information about natural resources in the town has been compiled in A Natural Resources Inventory for the Town of Orwell, Oswego County Environmental Management Council and Oswego County Planning Board, January 1984. This report includes inventories and maps of climate, geology, physiography and topography, soils, hydrology, land use, vegetation, wildlife, and significant natural areas. The natural resources inventory is intended to “identify and discuss areas where natural resources pose limits to various types of land use.”

HOUSING

Total Units

According to census figures, the number of housing units in the town grew substantially during the 1970s and 80s from 388 in 1970 to 650 in 1990 (an increase of 68%). Dramatic growth was seen between 1970 and 1980 when 204 units were added. The fastest growing type of housing in Orwell is the mobile home.

Figure 11

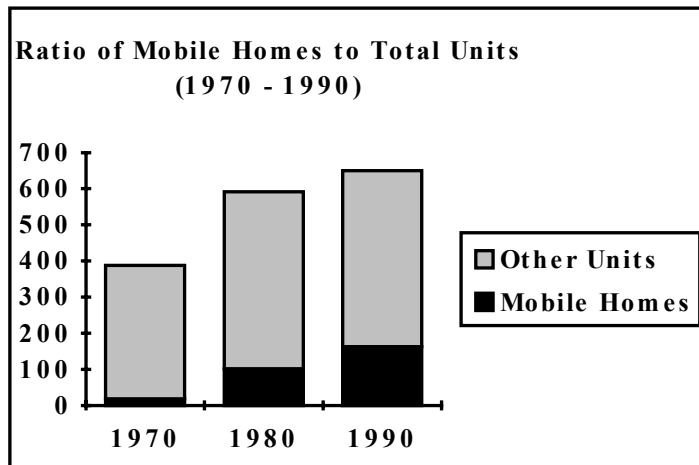


Source: U.S. Census

Mobile Homes

The number of mobile homes in the town grew from 18 to 163 between 1970 and 1990 (up 906%) with a very dramatic increase of 84 units between 1970 and 1980. Mobile Homes represented only 5% of the total housing stock in 1980. In 1990, they made up 25% of the total.

Figure 12

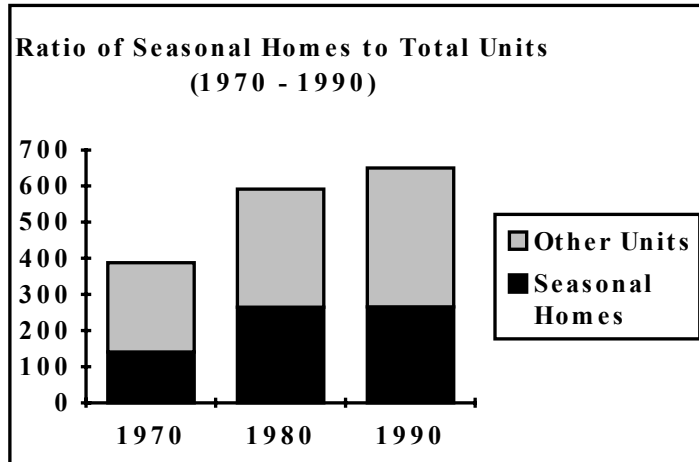


Source: U.S. Census

Seasonal Homes

The last 25 years has also seen a major increase in the number of seasonal, vacation homes from 141 in 1970 to 266 in 1990 with all but one of those units added between 1970 and 1980.

Figure 13

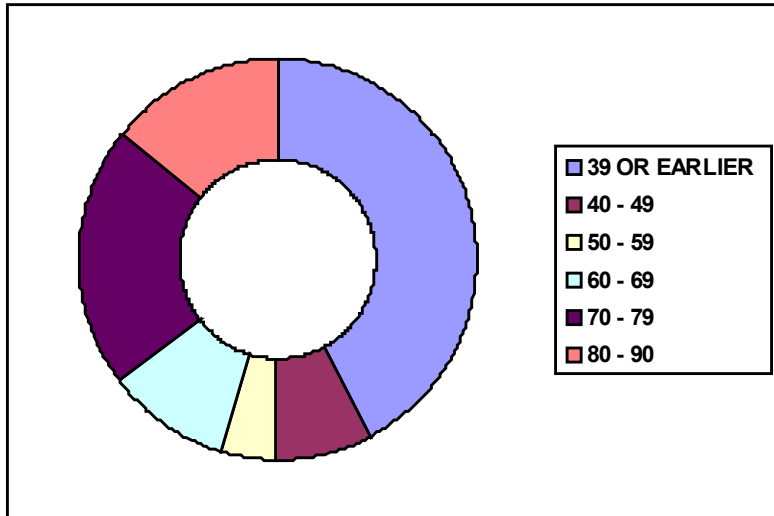


Source: U.S. Census

Age and Value of Housing Stock

The median year of construction for housing structures in the town is 1950. As Figure 14 indicates, the majority of housing structures (42%) were built before 1939. The median housing structure value was \$46,700 in 1990.

Figure 14



Source: U.S. Census

HISTORIC RESOURCES

An inventory of historic structures in the Town of Orwell has been undertaken by the Heritage Foundation of Oswego. Listed here are the included houses, commercial, public, and agricultural sites, churches and cemeteries, and engineering structures.

Figure 15 **HOUSES**

HOUSE	DATE	MAP NO.	LOCATION	DESCRIPTION
Donald H. Clark House	1840	1	C.R. 2, Orwell hamlet	A 1½ story Greek revival house with double wing and an exceptionally wide frieze.
Earl Meeks House	1890	2	C.R. 22, Orwell hamlet	A two story Queen Anne house with decorative barge board and unusual design in a gable point, built by William Lattimer.
Edgett House	1873	3	C.R. 2, opposite Elem. School	A two story wood clapboard Italianate house with a cupola and paired brackets.
George Thomas House	1850	4	C.R. 2, Orwell hamlet	A two story Greek Revival house
James R. Ellis House	1880	5	C.R. 2, Orwell hamlet	A two story, brick Country Queen Anne house built by local mason Victor

				Waggoner.
Richard Potter House	1830s	6	C.R. 52, near Tubbs Rd.	A two-story, five-bay Federal-style residence featuring a Palladian window.
Sabine House	1880s	7	Falls Rd.	A 2½ story Queen Anne residence with decorative barge board, variegated shingles and 'cone' porch roof.

Figure 16 **COMMERCIAL, PUBLIC AND AGRICULTURAL SITES**

BUILDING OR SITE	DATE	MAP NO.	LOCATION	DESCRIPTION
A. E. Olmstead Store	1883	8	C.R. 22, Orwell hamlet	A brick Italianate commercial block with curved brick lintels with keystones.
Beryle Greenfield House	1850	9	C.R. 2 and Beecherville Rd.	A Greek Revival farmhouse, barn.
Charles Hilton Farm	1850	10	C.R. 2	A Federal-style house, dairy barn, silos, and machine shed.
Hugh Hilton Farm Barn	late 19th century	11	Falls Rd.	A board and batten sided barn with a stone foundation.
Herbert Jeanes Store	1860	12	C.R. 2, Orwell hamlet	A two story, clapboard, Italianate house with single brackets (converted to store in 1922).
Orwell Elementary School	1949-1952	13	C.R. 2, Orwell hamlet	A one-story brick school.
Orwell Town Hall	1906-1909	14	C.R.s. 2 & 22	A two-story square building with an impressive clocktower, built by William Lattimer, local carpenter.
Unity Acres	1912	15	C.R. 22, west of Jerry Look Rd.	A former county sanitarium opened as a shelter for homeless men in the early 1970s.
Van Camp Farm	1830	16	C.R. 52	A Federal-style house, along with a dairy barn, silo, smoke house and horse barn.

Figure 17 **CHURCHES AND CEMETERIES**

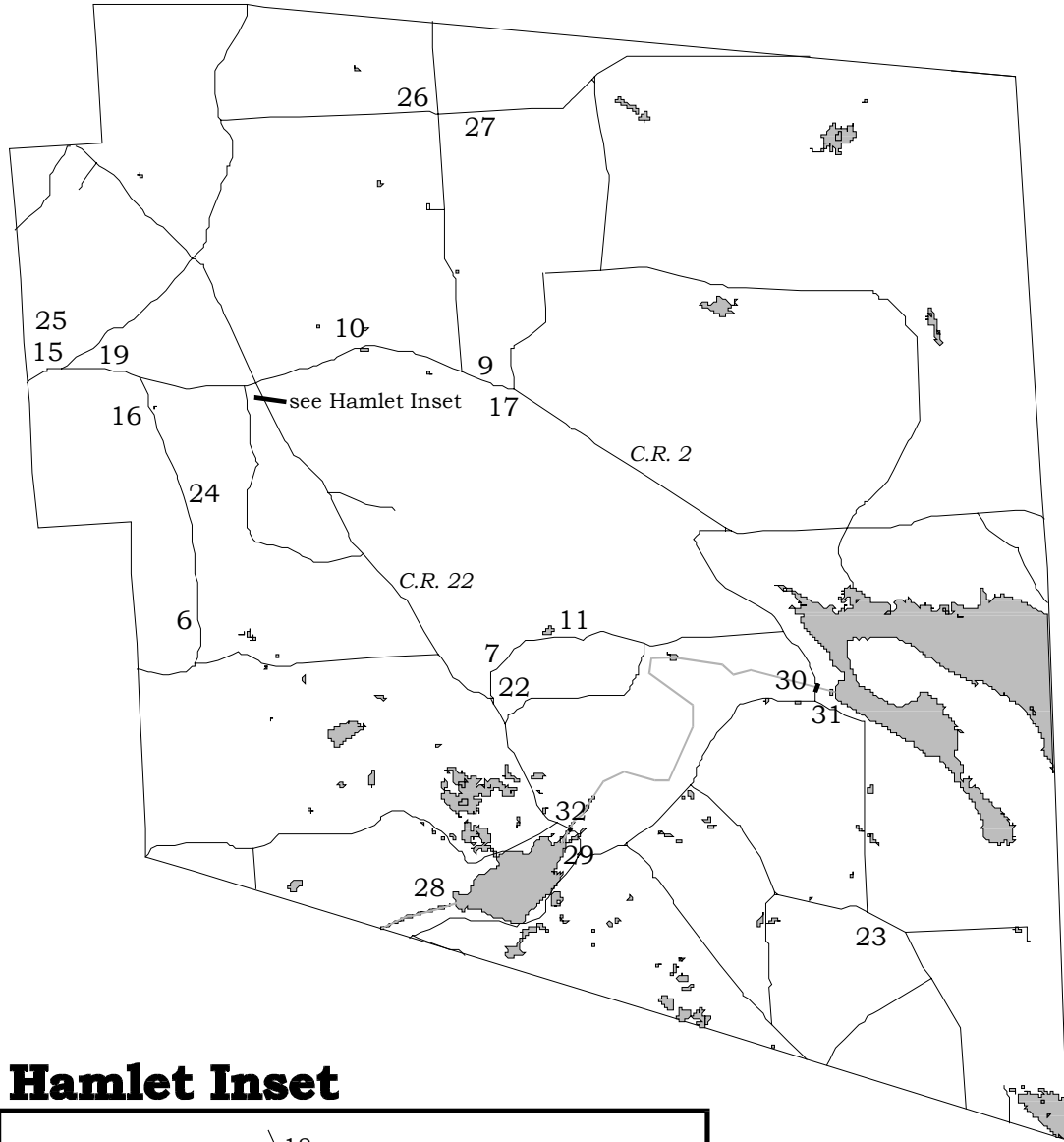
BUILDING OR SITE	DATE	MA P NO.	LOCATION	DESCRIPTION
Chateaugay Cemetery	1830	17	C.R. 2 and Beecherville Rd.	-
Gilbert Hill Cemetery	1810	18	C.R. 22, north of Orwell hamlet	-
Merrill Waggoner Farm Cemetery	1850	19	C.R. 2, west of Orwell hamlet	-
Orwell Cemetery	1875	20	C.R. 2, Orwell hamlet	-
Orwell Union Church	1844	21	C.R. 22, Orwell hamlet	A Greek Revival church with Queen Anne elements.
Pekin Cemetery	1811	22	C.R. 22	-
Pine Meadows Church	1898	23	Pine Meadows Rd. and Gay Dr.	A rectangular shaped church with front entrance and tower at an angle across front corner.
Potter Cemetery	1820	24	off C.R. 52, south of Orwell hamlet	-
St. Martin Deporres Cemetery, Unity Acres	1970	25	C.R. 2, west of Orwell hamlet	-
Vorea Community Church	1897	26	Waggoner Rd. and C.R. 50	A rectangular gable roofed church with vestibule, bell tower and Sunday school annex.

Figure 18 **ENGINEERING STRUCTURES**

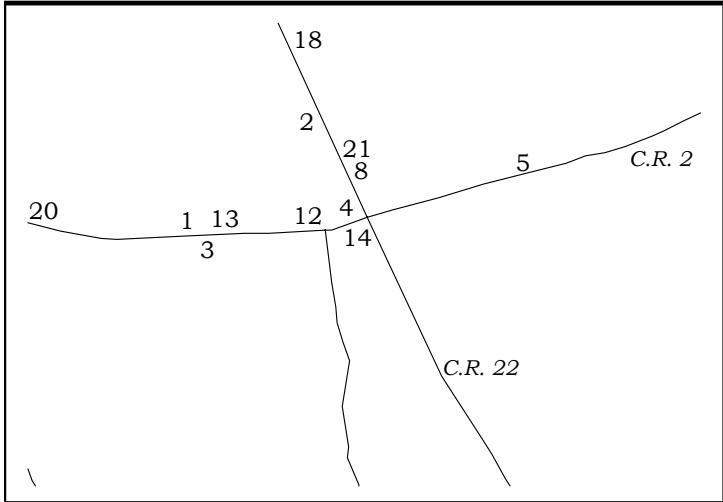
STRUCTURE OR SITE	DATE	MA P NO.	LOCATION	DESCRIPTION
Highway Culvert, New Scriba Dr.	1960s	27	east of C.R. 22	A dry stone wall embankment.

Lighthouse Hill Dam and Hydroelectric Facility	1930	28	C.R. 22, between Altmar and Bennett's Bridges	A hydroelectric complex including a 2500' dam and power plant.
"Bennett's Bridges"	1930s	29	C.R. 22	A concrete bridge over Salmon River
Stillwater Bridge	1913	30	Dam Rd.	An iron truss bridge over Salmon River (closed).
Stillwater Dam	1914	31	Above Stillwater Bridge	A 600' dam and 7,800' penstock
Salmon River Res. Hydroelectric Facility	1914	32	C.R. 22 at Bennett's Bridges	A hydroelectric complex including a wooden surge tank and power plant.

Map 2



Hamlet Inset



PUBLIC WATER SUPPLY

History

The hamlet of Orwell has been provided with public water for over 100 years. A privately owned system served the community from the 1880s to the late 1970s. The system distributed water to the hamlet from a collection basin and a small spring at the base of a gravel slope approximately one-half mile northeast of the hamlet. The town acquired the system in 1979 and created a water district. Modifications to the original system were made in 1985 and 1988, including construction of a new infiltration gallery and well and installation of new treatment and distribution facilities. Water flows by gravity from a standpipe at the original source site to the hamlet's approximately 250 residents.

Source

Three groundwater sources on an 8.42 acre site tap into the Tug Hill aquifer, a 47-mile deposit of sand and gravel that underlies the western and southwestern sides of the Tug Hill plateau. An infiltration gallery (added in 1985) and springhouse (original) are permitted by the New York State Dept. of Environmental Conservation to take 60,000 gallons per day from the ground. A shallow well (installed in 1988) supplements the yields of the gallery and springhouse.

Distribution

Raw water is treated in a pump building on site and stored in a 158,000 gallon standpipe (constructed in 1985). The treated water then flows by gravity through a 10" main to the hamlet water district. As of 1992, there were approximately 100 service connections to the system. Total demand was measured at 20,000 gallons per day.

Quality

Quality of the Orwell water supply has generally been quite good. A water quality violation did occur when the chlorination system failed in 1990, resulting in excess levels of coliform.

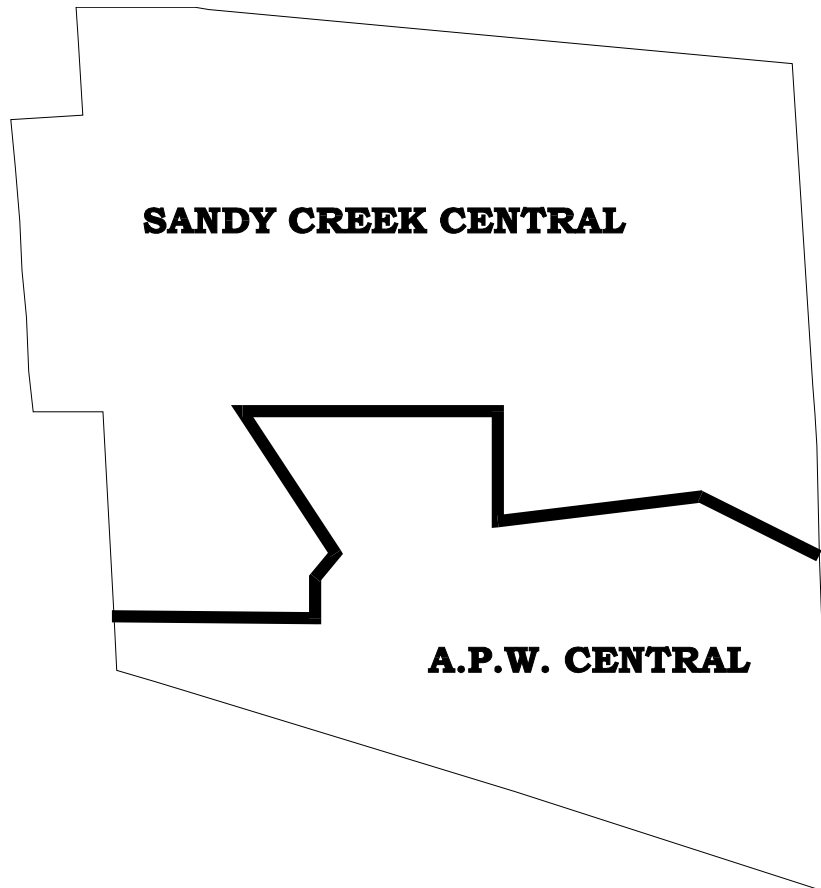
SCHOOL DISTRICTS

The Town of Orwell is served by two school districts, Sandy Creek in the northern half and Altmar-Parish-Williamstown in the southern half.

The Sandy Creek Central School District operates two elementary schools - Orwell and Sandy Creek - and Sandy Creek High School. Total enrollment was 1,227 in 1995/96, with a staff of 154. The district's operating budget was \$8,190,786.

Altmar - Parish - Williamstown Central Schools operates three elementary schools - Altmar, Parish and Williamstown - and Altmar - Parish - Williamstown Middle/High School. Total enrollment was 1,874 in 1995/96, with a staff of 272. The district's operating budget was \$15,147,195.

Map 3



ROADS

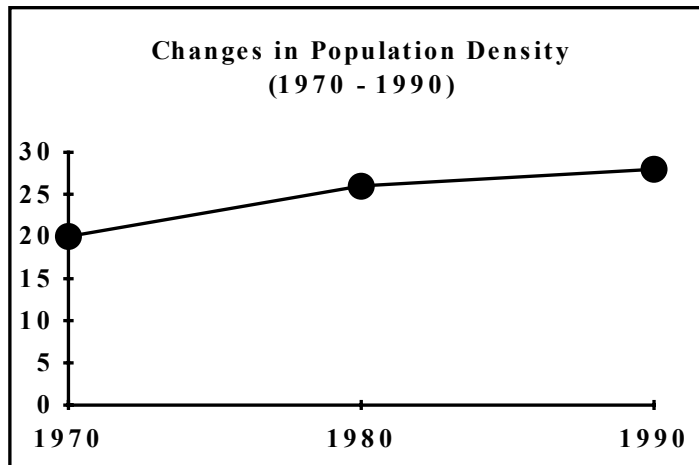
Orwell is serviced by approximately 60 miles of public roads. Of this total, approximately 22 miles (37%) are under county jurisdiction and approx. 38 (63%) are under town jurisdiction (see Figure 19). Orwell joins Boylston and Redfield as one of three Oswego County towns with no state highway mileage.

LAND USE

Population Density

The Town of Orwell is a rural town, based on a generally accepted rural population density standard of 150 persons or less per square mile. Population density has increased from 20 persons per square mile in 1970 to 26 in 1980 and 28 in 1990.

Figure 19

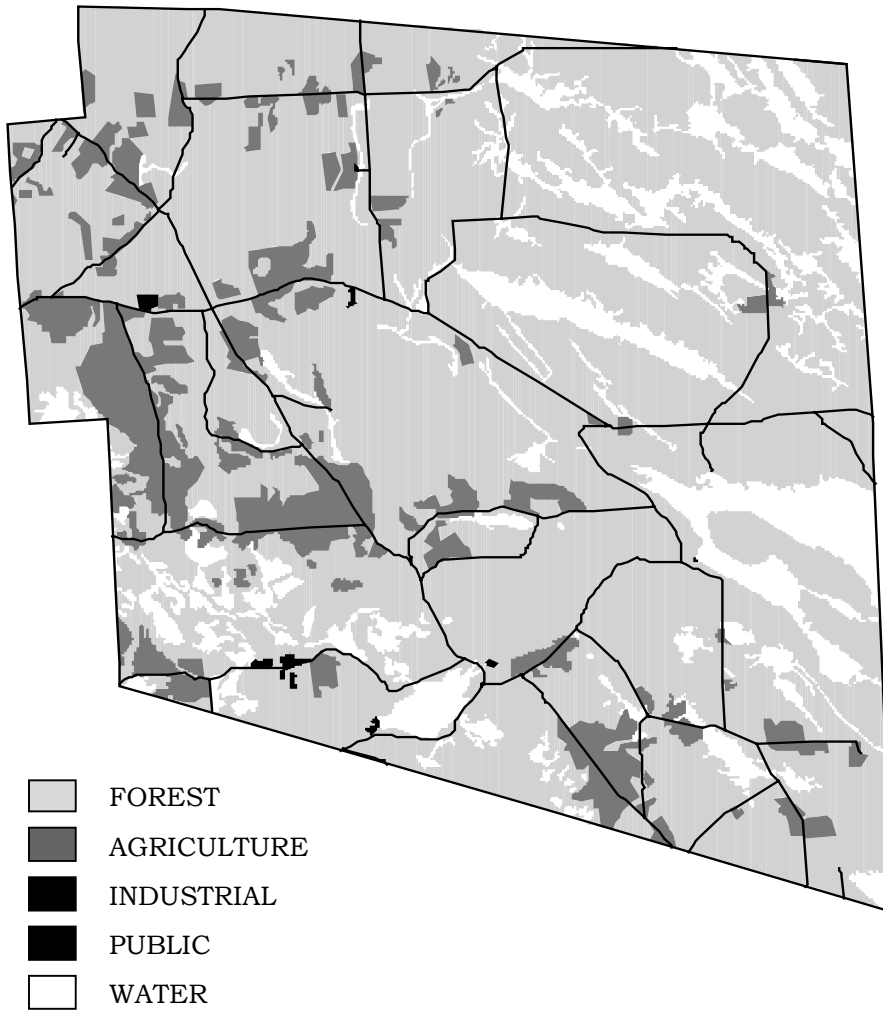


Source: U.S. Census

Land Cover

A land cover analysis completed by the Oswego County Department of Planning in 1984 (see Map 4) reveals that the overwhelming majority of Orwell's land surface is covered by forest and water. Also of note is the location of agricultural land almost exclusively in the western portion of the town.

Map 4



Development Trends

Figure 20 indicates changes in the number of property tax parcels as they are coded for assessment purposes. The data reveals that the number of agricultural properties is diminishing and that the number of residential and vacant parcels is increasing. The total number of parcels has risen steadily from 869 in 1987 to 989 in 1995. These trends are typical in the Tug Hill region.

Figure 20

	1987	1991	1995
Agriculture	40	29	29
Residential	534	581	626
Vacant	145	159	190
Commercial	5	7	7
Recreation	0	0	0
Community Svcs.	19	17	15
Industrial	1	1	1
Public Service	24	25	24
Forest/Conservation	101	94	97
TOTAL	869	913	989

Source: Oswego Cnty. Office of Real Property Svcs.

WILDLIFE

The Town of Orwell's diverse habitats, including agricultural fields, wetlands, shrubland, and dense hardwood and coniferous forests sustain an abundance of wildlife.

Big Game Animals

White tail deer, probably the largest resident wildlife species in the town, inhabit deciduous forests in the warmer months of the year and seek shelter from Tug Hill's rigorous winters in coniferous forests. An important deer wintering area is located just to the north of the town in the Otto Mills area of the Town of Redfield. Orwell's managed forests and abundant wetlands are considered ideal Moose habitats. Moose, the largest member of the deer family, were, at one time, a resident species in the area, but now are only occasionally sighted as they travel between Canada and the Adirondacks.

Fur-bearing Animals

Beaver, a common and frequently bothersome species, dwell in the town's wetland areas, a habitat they help create. Fisher live in coniferous forest areas and travel along streams. Coyotes, also controversial, and red and gray foxes inhabit the town as do mink, muskrat, otter and snowshoe hare.

Birds

The town's wetlands provide occasional homes for a variety of avian species including black duck, mallard, osprey, wood duck, and hooded merganser. The Salmon River Reservoir provides habitat for bald eagles, buffleheads, coots, goldeneyes, loons, oldsquaws and scaups. The town's shrubland and forest may be home to pileated woodpecker, ruffed grouse, turkey and American woodcock.

Fish

Orwell, John O'Hara and Pekin Brooks are home to salmon in the fall and steelhead and rainbow trout in the spring. The Salmon River Reservoir is home to largemouth bass and pan fish. Brook and brown trout can be found in all the town's streams.

Source: *Tug Hill Commission, Tug Hill Working Lands*

STATE FORESTS AND UNIQUE AREAS

The NYS Reforestation Law of 1929 and the Federal Resettlement Program of 1935 led to the creation of numerous state forests in New York. 14 such forests, most of which at one time were active agricultural lands, were created in eastern Oswego County. A 15th state forest, Hall Island was created in the early 1990s from former Niagara Mohawk lands. Hall Island State Forest, along with Chateaugay State Forest and Salmon River State Forest, are located entirely or partially in the Town of Orwell. Their combined size (acreage within the town) of approximately 4,055 acres constitutes about 15% of the town's total acreage. The Salmon River Falls area, formerly owned by Niagara Mohawk was acquired by the Department of Environmental Conservation and designated as a unique area in the early 90s.

Chateaugay State Forest

Chateaugay State Forest is located in the north/central part of the town between County Route 2 and the Boylston town border. The forest's 3,346 acres consist of approximately 450 acres of conifer plantations, approximately 2,760 acres of second growth hardwood and mixed forests and approximately 100 acres of wetland with swamp forests. Chateaugay is used for the cultivation of forest products and recreation, including fishing and hiking and cross-country skiing on seven miles of trails.

Hall Island State Forest

Hall Island State Forest is located along the southern shoreline of the Salmon River Reservoir. The approximately 2,075 acre forest is located in Redfield and Orwell and is made up of land originally acquired by Niagara Mohawk during the Salmon River hydroelectric project. Recreational trails are under development.

Salmon River State Forest

Salmon River State Forest is located north of the Salmon River Reservoir. The forest is predominantly situated in the Town of Redfield, but extends into Orwell, where it meets the reservoir's shoreline for roughly one mile. The forest's approximately 2,033 acres are comprised of approx. 285 acres of conifer plantations, approx. 1,728 acres of hardwood and mixed second growth forest and approx. 20 acres of wetlands. Salmon River State Forest provides for camping, hiking, cross-county skiing and snowmobiling as well as fishing.

Salmon River Falls Unique Area

The Salmon River Falls Unique Area consists of the 76 acre parcel that surrounds the falls. Access to the areas is along Falls Rd. The site features parking, hiking trails and magnificent views of the Salmon River Falls.

Source: *Weeks, John A., Cox, Donald C., Natural Areas of Oswego County*

PART II – GOALS

A. PRESERVE RURAL CHARACTER

The town's rural character is regarded highly by its citizens and should be preserved. The existing development pattern of vast, open acreages of farm and forest land interspersed with compact hamlet communities is an efficient and attractive one. New development should be *encouraged*, but should be carefully planned to fit into and compliment this pattern. Careful development planning is especially important in the town's fragile waterfront areas. A well maintained scenic environment not only improves the quality of residential life for the town's residents, but has economic benefits as well - improving Orwell's marketability as a tourism destination.

Objectives

1. Promote the *orderly* growth of the town while restricting development as little as possible
2. Preserve low population densities in the relatively undeveloped areas of the town and higher densities in the developed areas
3. Maintain the compatibility of neighboring land uses and prevent land use nuisances
4. Encourage development that compliments the architectural character of neighboring structures
5. Preserve open space
6. Prevent overdevelopment of waterfront areas, especially those along the Salmon River Reservoirs and Lorton Lake
7. Protect scenic views

Strategies

The town can best implement the above objectives by the formulation and adoption of rational development laws, in particular land use and subdivision laws. A land use law would allow the town to control the location, density, siting and design compatibility of new development. A subdivision law would allow the town to review proposals for the subdivision of land, ensuring that growth occurs in an orderly fashion and as much open space is preserved as possible. The 200' conservation easement along the Salmon River held by NYSDEC should be supported by the town.

B. PROTECT NATURAL RESOURCES

Orwell is blessed with an abundance of diverse natural features, such as streams, wetlands and forests, that require protection if they are to remain unspoiled. Development and land use activities should be undertaken in a way that minimizes impacts on these resources. On some sites, development should be avoided altogether, as it can create problems such as erosion, flooding and groundwater contamination. It must be recognized that the less natural features, such as slopes and drainageways, are altered, the less expensive development is to undertake and to maintain.

Objectives

1. Protect groundwater from septic system and other contamination
2. Conserve soil resources by preventing contamination and erosion
3. Protect forest lands
4. Protect surface water quality of lakes and streams
5. Protect wetlands and floodplains
6. Protect farmland
7. Protect wildlife habitats

Strategies

The town can best implement the above objectives with land use and subdivision laws that ensure that land is developed according to standards for design and density that protect important natural features, such as quality soils, slopes, forest and farmland, drainageways and floodplains. The town would also benefit from enrollment in the National Flood Insurance Program (administered by FEMA). Participation would make flood insurance available to town residents. It is also worth noting that a variety of state programs aimed to protect natural resources are in effect. NYS Public Health Law Article 75 mandates that soils be suitable for septic system development before such development is allowed on individual lots (note: enforcement of Article 75 is a responsibility of the town). NYS Environmental Law Articles 24 and 36 protect wetlands and floodplains, respectively. The State Environmental Quality Review Act (SEQR) helps to ensure that actions which require discretionary judgments by permitting bodies are evaluated in terms of their environmental impacts. Finally, the town should do everything it can to encourage public education and participation in natural resources stewardship.

C. PROTECT HISTORIC RESOURCES

The town's historic buildings and sites provide a three dimensional history of its past. For example, the proliferation of greek revival farm houses indicates that the town grew rapidly during the early 1800s. Historic resources also contribute greatly to the town's sense of place and identity. As these resources are demolished or abandoned, this identity is slowly chipped away. The burden of protecting these properties lies primarily with individual landowners. However, if such structures and sites are properly maintained, the entire town stands to gain.

Objectives

1. Protect important buildings and sites from demolition or insensitive alteration
2. Promote rehabilitation of buildings and sites through education and technical assistance

Strategies

The town can implement the above objectives by maintaining a detailed inventory of the historic resources within the town. This information can be used in the evaluation of future land use proposals (via the SEQR process) and in possible application for placement on the State or National Registers of Historic Places. The town could encourage the participation of private property owners in historic property preservation by serving as a clearinghouse for historic preservation educational materials. The town could help preserve the history of its historic settlement areas (such as Pekin and Vorea) by erecting roadside "place name" signs in those areas.

D. ENHANCE AND MAINTAIN THE HAMLET OF ORWELL

The hamlet of Orwell has historically been the "urban" center of the town. Its location at the intersection of Rts. 2 and 22, its public water system, school and town buildings, and its development friendly soils make it the logical place to channel residential and commercial growth. This growth should occur in a compact, concentric pattern rather than a sprawling, linear one. This will compliment the historic development pattern, preserve the hamlet's "walkability," and ensure efficient utilization of the town's water system.

Objectives

1. Encourage residential growth in the town to occur in the hamlet
2. Promote the establishment of diverse commercial uses
3. Maintain the traditional development pattern

4. Control signage
5. Encourage infill development on vacant lots at the hamlet's center
6. Maintain and enhance the streetscape, public buildings and public spaces

Strategies

The town can implement the above objectives through a variety of actions. A land use law could help create an incentive for the location of residential and commercial growth in the hamlet by allowing higher development densities there than would be allowed in the more rural parts of the town. Such law could also help the town to assure that new development is of a style and character fitting with the present development pattern. Adoption of a subdivision law could help ensure that new roads are built in a way that best fits the existing townscape. Development of a streetscape improvement plan could provide direction for future public improvements such as sidewalks, street trees and parking facilities. A kiosk located in the vicinity of the Town Hall could be used to advertise upcoming events. Finally, the town can set a positive example of property maintenance and pride by making sure that its buildings, grounds and sidewalks are well kept.

E. ENHANCE HOUSING OPPORTUNITIES

The availability of safe, affordable housing is of utmost importance to the town's future. Decent housing is not only a key contributor to the quality of life of current residents, but is also necessary if the town is to attract new business and industry. While factors that contribute to the cost of housing are largely outside the control of local government, there are measures the town can take to keep costs down.

Objectives

1. Protect the availability of affordable housing by helping to keep lot acquisition and improvement costs low
2. Allow a wide variety of housing options within the town
3. Promote housing maintenance and appearance

Strategies

The town can implement the above objectives in several ways. The town should consider applying for housing rehabilitation and/or homeownership assistance funding from programs such as CDBG (Community Development Block Grant) and HOME (an Oswego County sponsored housing rehabilitation program is currently being implemented in the town). Maintenance of housing

and property can be implemented by consistent enforcement of the NYS Uniform Fire Prevention and Building Code.

F. ENHANCE THE ECONOMIC BASE

The town should seek to improve economic opportunities for its residents. The expansion of job opportunities would allow residents to work closer to their homes and reduce their need to commute long distances. A brighter economic future would also create an incentive for young people to remain in the town. A diverse economic base should be sought as it is more likely to survive the fluctuations in the national economy, such as rising gas prices or falling prices for agricultural products, that can wreak havoc on non-diverse local economies.

Objectives

1. Promote the development of value-added natural resource based industries
2. Promote tourism and related service businesses
3. Protect commercial property values and investments
4. Channel commercial growth to the hamlet area

Strategies

The town can best implement the above objectives by identifying key sites for commercial development and by creating a stable and predictable built environment. An up to date inventory of appropriate vacant land and buildings with commercial development potential can help the town market itself to business investors. Industries that make use of locally produced forest products should be particularly sought. Tourism is also an industry that could make use of the town's existing resources. The town can promote tourism by providing information about recreation opportunities via a brochure and possibly a kiosk in the hamlet that could direct travelers to various sites. Businesses, such as restaurants, inns and campgrounds, that provide services to visiting snowmobilers, fishermen, skiers and boaters should be sought. Because business only thrives in a stable environment, the existence of rational land use controls would help convince potential investors that their environment will be protected. Such controls can also help channel commercial development to the hamlet where the proper infrastructure is in place to service it. With proper direction, the town can absorb the costs of growth with an increased tax base.

G. PROTECT TRANSPORTATION AND INFRASTRUCTURE INVESTMENTS

The town's taxpayers have invested a great amount in the construction of many miles of public roads. The public water system (in the hamlet of Orwell), while funded with federal tax monies, is the result of the investment of large amounts of time and energy from townspeople. Action must be taken to protect these investments and utilize these infrastructures efficiently. Proper functioning of both systems is vital to the economic future of the town. Uncontrolled development along major roads can lead to a proliferation of curb cuts and increased traffic leading to a loss of the roads' proper function. Costs to users of the public water system can be lowered by encouraging new development along or near existing water lines. The water system is worthless, however, if the source groundwater is not protected.

Objectives

1. Preserve highway function by controlling strip development and curb cuts
2. Minimize road development and maintenance costs
3. Ensure that the public water system is protected
4. Expand the number of users on the *existing* lines of the hamlet water system if capacity allows

Strategies

The town can best implement the above objectives by proper land use planning and regulation. Transportation issues can be addressed by controlling the density of development along important roads, particularly County Routes 2 and 22, and discouraging the development of new roads. Also, the ability to review site development plans would allow the town to have a say in how sites are developed in terms of access to important roads. Development should be carefully controlled in the vicinity of low volume, seasonal or abandoned roads where increased density could lead to the necessity of upgrading and reopening them. Public water supply protection can be addressed by prohibiting land uses that have the potential to pollute the supply. The town can also serve as a clearinghouse for good aquifer management information, having recently completed work on watershed rules and regulations. The expansion of users on the existing water system can be accomplished by allowing increased densities in the area served by the system. However, care must be taken to study the capacity of the system and the effects increased use would have on the septic capacity of the soils in the area.

H. ENHANCE AND PROTECT RECREATION RESOURCES

Orwell features a variety of four season recreational resources within its borders. These include forests and trails for hiking, skiing, and snowmobiling

and lakes and streams for fishing and boating. These assets greatly improve the quality of life for residents of the town and also attract people from out of town, either tourists or vacation home buyers. The town's economy can benefit greatly from the marketing of this wealth of recreational opportunity. At the same time, care must be taken to ensure that an influx of tourists doesn't become a negative experience for the town.

Objectives

1. Promote the protection of state forests and unique areas
2. Enhance the appropriate recreation opportunities of the Salmon River corridor
3. Improve group/family oriented active recreation facilities for the community

Strategies

The town can best implement the above objectives by several actions. The town should play an active role in the DEC's development of management plans for the state owned lands that make up such a large percentage of Orwell's total land area. The town should also proactively plan for appropriate development of multi-use recreational opportunities in the Salmon River corridor. Recreation opportunities for groups and families could be enhanced by investigating the development of the town's 25 acre parcel on Rt. 22 or the property opposite the town hall for the development of active recreational (ballfields, playgrounds) facilities.

PART III – DEVELOPMENT DISTRICTS

PLANNING STUDIES

A number of study maps were created to help the planning board identify current development patterns and determine development suitability in different parts of the town. The maps are attached as appendix B and are described as follows:

Land Use – includes tax parcels color coded by Real Property System (RPS) land use code

Land Cover – includes delineation of developed areas, ag land and vegetation

Population Density (Winter) - includes delineation of development intensity

Population Density (Summer) - includes delineation of development intensity

Soil Suitability – includes soil types coded by their suitability for septic systems

Slope – includes delineation of landform slope

Development Constraints – includes features that prohibit development (wetlands, flood hazard areas, public lands, etc.)

DEVELOPMENT DISTRICT DELINEATION

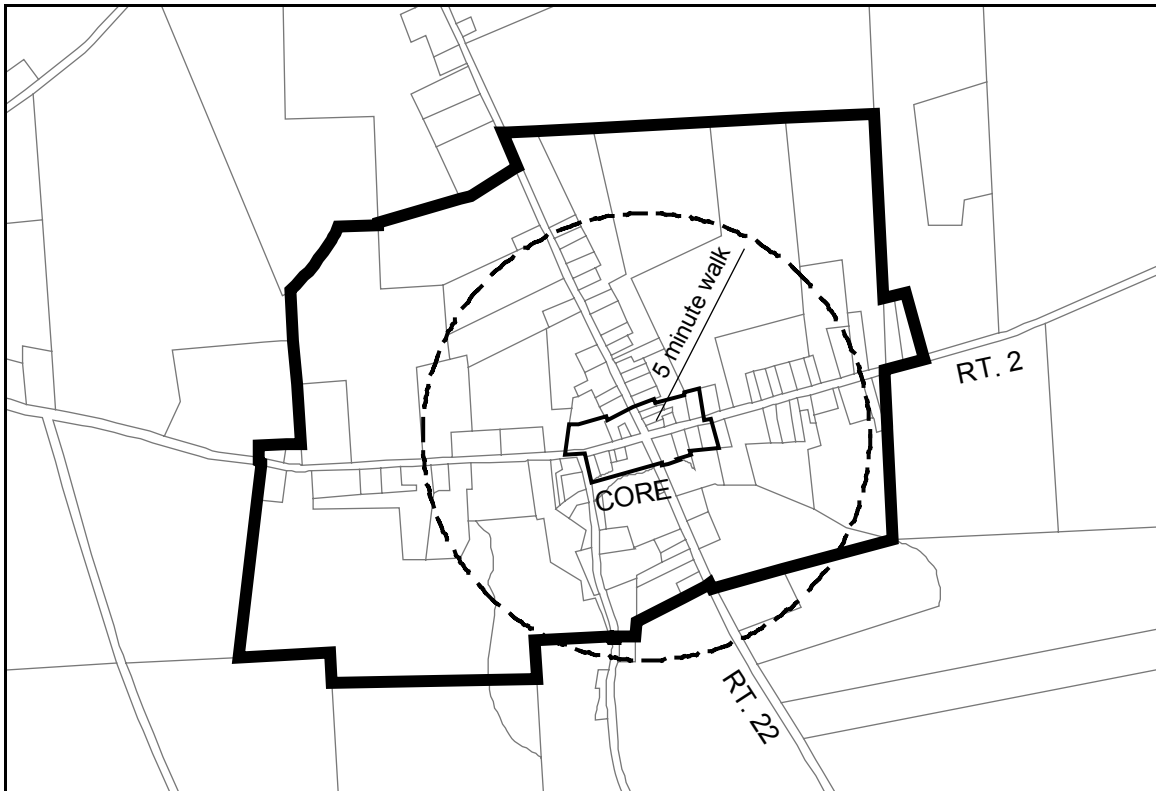
Using the study maps as a reference, the planning board delineated areas of similar character. The board then identified existing conditions in each of these districts and produced recommendations for their future development that are true to the goals stated in Part II.

HAMLET DISTRICT

Location/General Description

The hamlet district is the area roughly within 1500' to 2000' of the intersection of Rts. 2 and 22. This approx. 290 acre area encompasses the public water system's distribution lines and the 35 mph speed zones on Rts. 2 & 22. Most of the district is within about 5 minutes walking distance from the intersection. The hamlet district includes a subdistrict: the hamlet "core" (see illustration 1). The "core" includes the properties with commercial and institutional uses located very near the intersection. The hamlet district is characterized by high density development on small lots (generally about half an acre). Buildings are typically two story structures and are setback about 25' from road right-of-ways creating a strong sense of enclosure along the street.

Illustration 1



EXISTING CONDITIONS

District Size: 290 acres

Land Uses:

agriculture

commercial (retail)

industrial

institutional (church, school, government building)

open space

residential (single-family, two-family, mobile home)

Median Lot Size: 0.4 acres

Building Setbacks:

Front: 10' - 30'

Rear: 50' - 100'

Side: 15' - 45'

Dwelling Units/Acre: 0.35

Net DU/Acre (not including open space at periphery of district): 1.5

Public Open Space/Acre: 0.002

Water: public system

Sewage: private septic systems

RECOMMENDATIONS

The hamlet district's development pattern is a relatively good one. New development should respect and reinforce the existing context. Commercial uses should be encouraged and concentrated in the "core" subdistrict. The rest of the district should remain residential. The existing building density as well as the lot sizes and configurations are considered appropriate for small settlements like Orwell. The pattern of small lot sizes may, however, be a problem in Orwell due to the lack of a public sewer system. Analysis of groundwater recharge and surface water runoff conditions in the town indicates the need for a minimum lot size of approximately 60,000 square feet (in most of the district) to prevent contamination of groundwater by septic system effluent (see Appendix A). In the absence of a public system, development that compliments the existing high density pattern *can* be carefully accommodated on larger lots if buildings are sited in such a way that the lots can someday be subdivided to create smaller lots if a public sewer system is ever put in place (see illus. 2). As the hamlet grows, new development should occur first on vacant lots along existing roads and next along new roads. Any new roads should be carefully planned to create a modified grid pattern consisting of 200' to 900' blocks (see illus. 3).

Illustration 2

60,000 SQUARE FOOT LOT WITH BUILDING SITED TO ALLOW FOR FUTURE SUBDIVISION

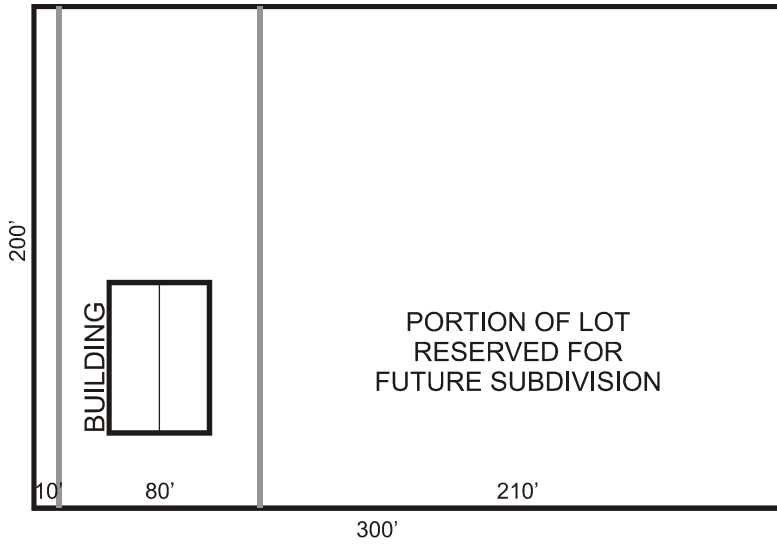


Illustration 3

EXAMPLE OF BLOCK LENGTHS IN BOONVILLE, NY



AGRICULTURE/FOREST DISTRICT

This area includes all parts of the town not in the Hamlet District. The Agriculture/Forestry district is predominantly characterized by open space (much of it in state reforestation areas), agricultural land (active and inactive) and low density residential development. Several churches and small commercial operations are sprinkled throughout the district. Building types include 19th century farmhouses and structures, mobile homes and vacation camps.

EXISTING CONDITIONS

District Size: 25,768 acres

Land Uses:

- agriculture

- forestry

- industrial

- institutional (church, school, government building)

- open space

- recreation

- residential (single-family, two-family, mobile home)

Median Lot Size: 1.8

Dwelling Units/Acre: 0.02

Water: private wells

Sewage: private septic systems

RECOMMENDATIONS

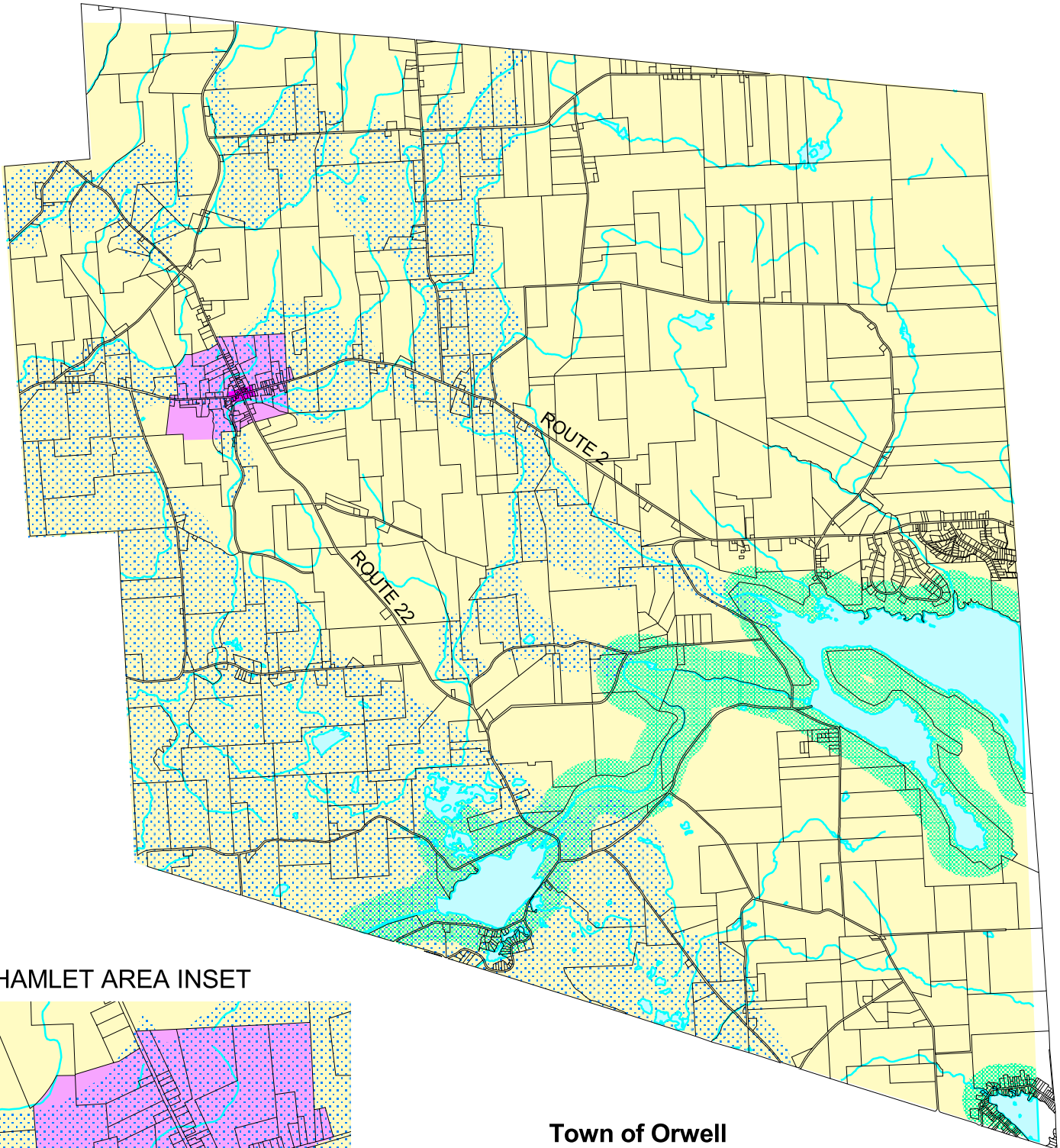
The low density, farm, forest and residential character of the Agriculture/Forest District should be preserved. A wide variety of land uses are appropriate here – however, uses which are detrimental to farm and forestland production should not be allowed. Land subdivision should be somewhat limited in this district. This will accomplish three objectives: 1) the preservation of large parcels of land that are suited for natural resource production; 2) the reduced detriment to road function (increased curb cuts and traffic); and 3) the protection of the rural/open space character of the town. **This is not to say that this district shouldn't be developed – just less developed than the hamlet district.**

WATERFRONT OVERLAY

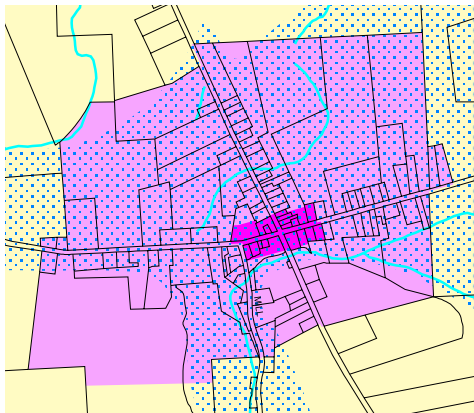
The waterfront overlay district includes the land within 1000' of the shorelines of the Upper and Lower Salmon River Reservoirs, Lorton Lake and the remainder of the Salmon River. Included in this district are pockets of high density second home development. These areas have probably been overdeveloped, especially in terms of lot size (with regard to groundwater contamination prevention). The minimum recommended lot size (approx. 2.0 acres in most of the overlay) has been drastically exceeded here (quarter-acre lot sizes are typical). Since these areas are located in the Agriculture/Forest District, all of the standards of that district apply here, however these areas are unique and require special treatment. Special issues here include protection of the water resource and protection of scenic resources.

AQUIFER OVERLAY






The Aquifer Overlay District includes all land that directly overlays the Tug Hill Aquifer in the Town of Orwell. This area was delineated by a 1988 United States Geological Survey (USGS) study. The study indicates that water on the land surface drains directly into the aquifer due to the presence of sand and gravel surficial geology. The object here is to restrict land uses that may potentially contaminate the aquifer.



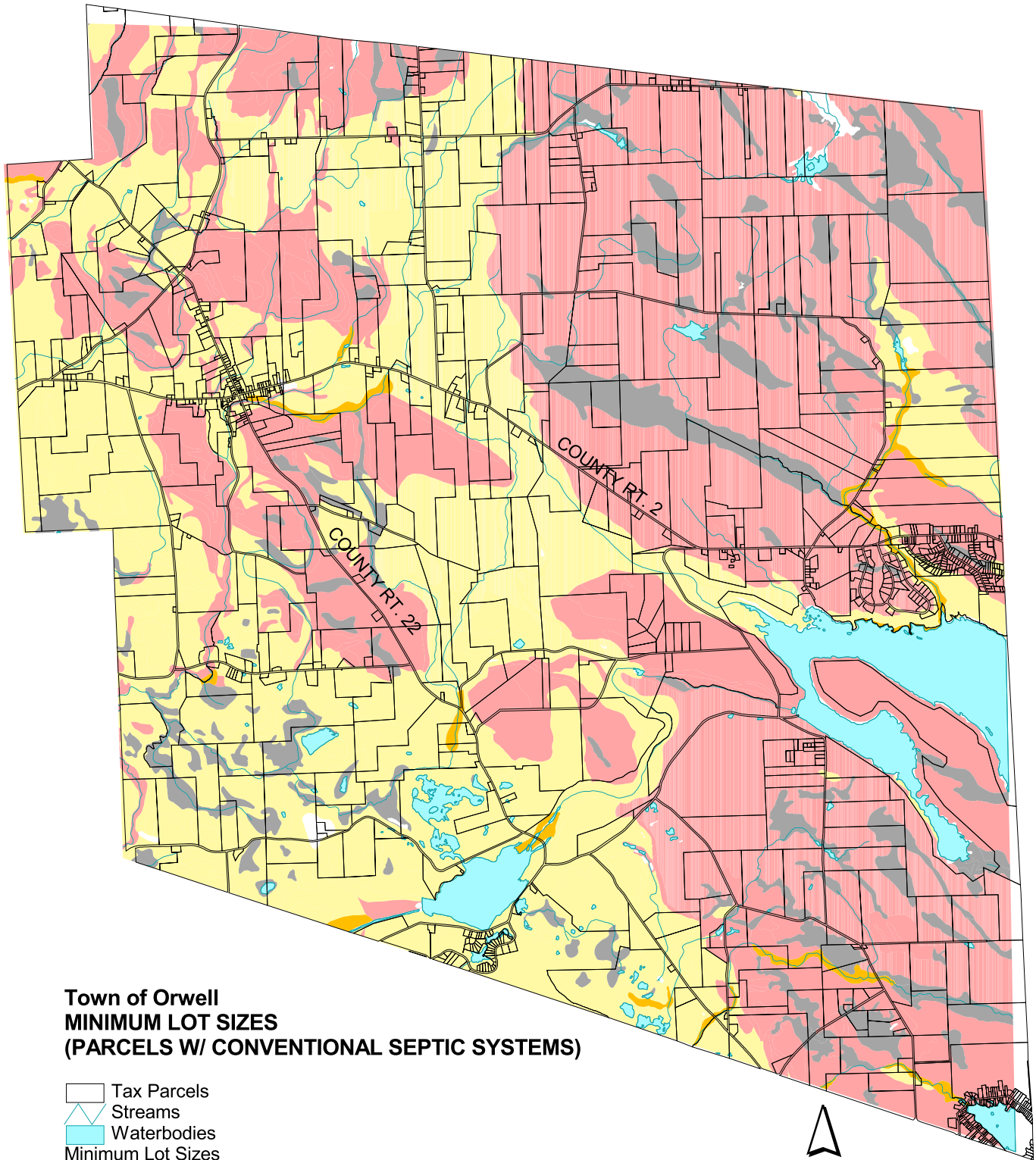
HAMLET AREA INSET











**Town of Orwell
DEVELOPMENT DISTRICTS**

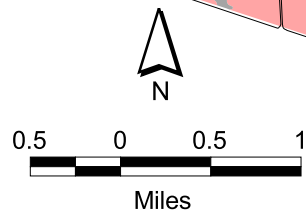
-  Aquifer Overlay
-  Waterfront Overlay
-  Hamlet Core District
-  Hamlet District
-  Agriculture/Forest

APPENDIX A

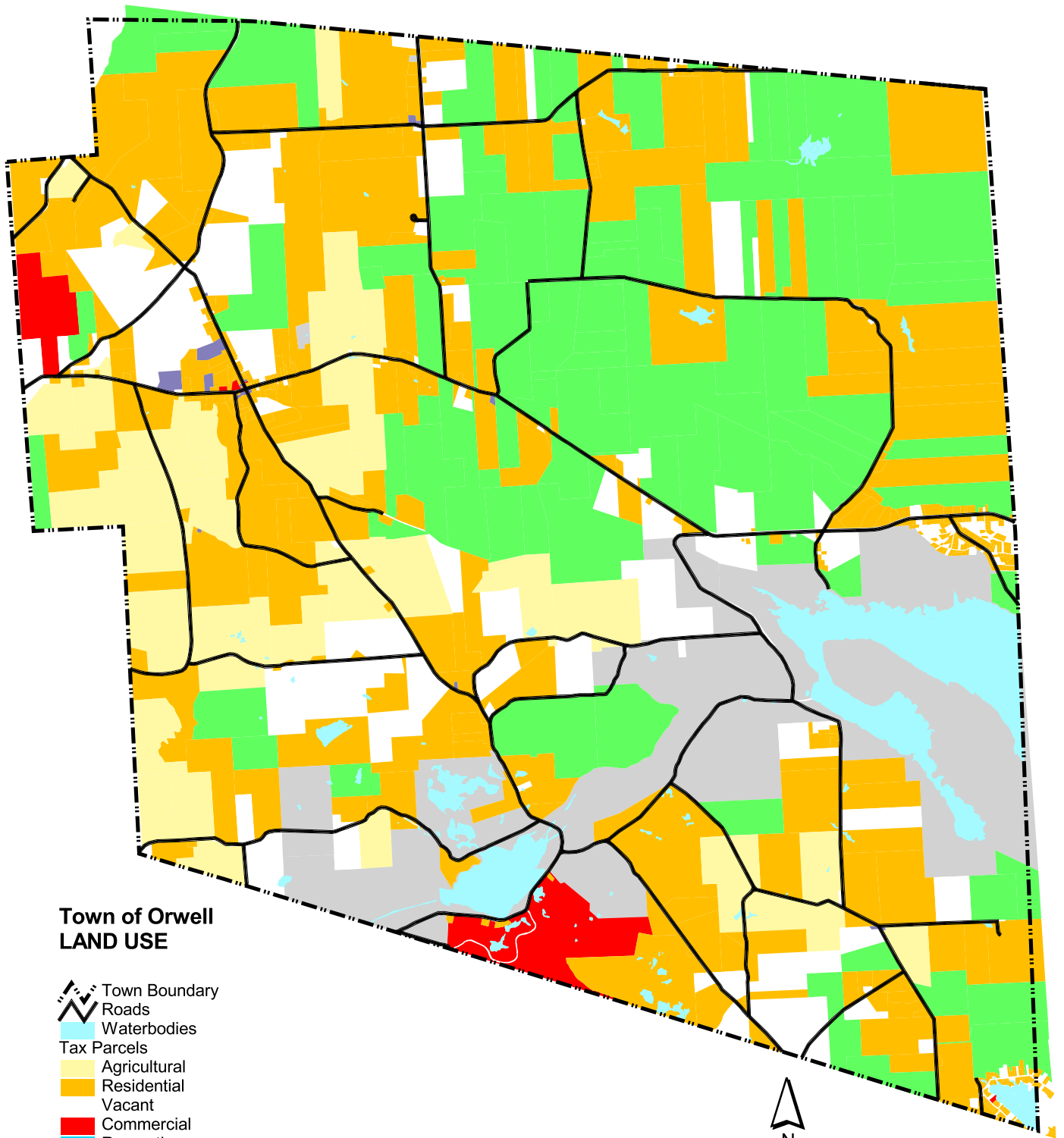


**Town of Orwell
MINIMUM LOT SIZES
(PARCELS W/ CONVENTIONAL SEPTIC SYSTEMS)**

-  Tax Parcels
-  Streams
-  Waterbodies
- Minimum Lot Sizes
-  n/a
-  SOIL GROUP A - 60000 s.f.
-  SOIL GROUP B - 60000 s.f.
-  SOIL GROUP C - 2.0 acres
-  SOIL GROUP D - not suitable

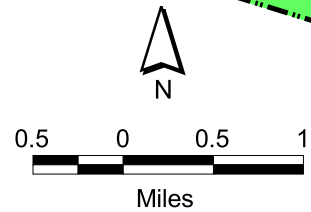


APPENDIX B

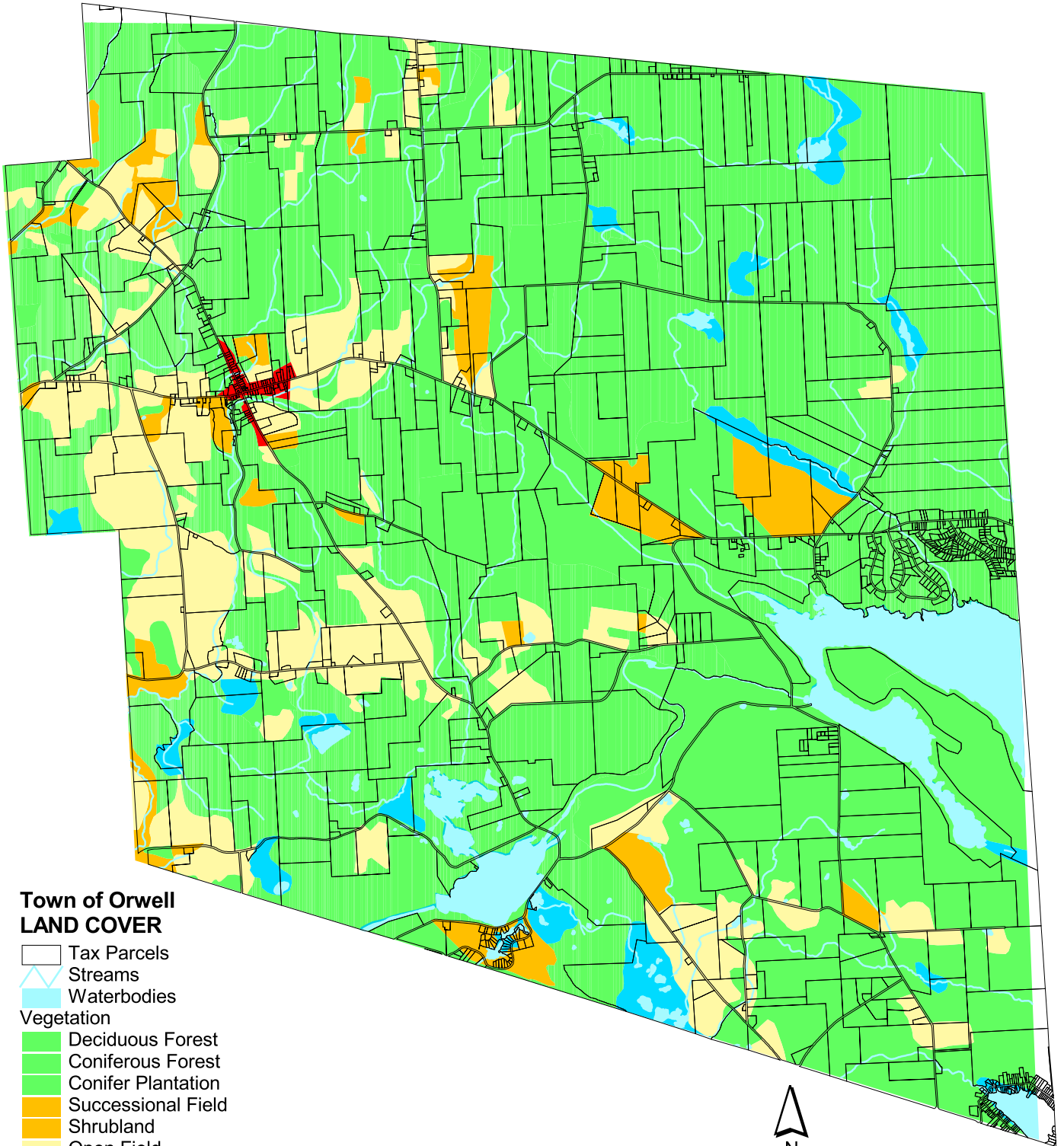


**Town of Orwell
LAND USE**

-  Town Boundary
-  Roads
-  Waterbodies
- Tax Parcels
-  Agricultural
-  Residential
-  Vacant
-  Commercial
-  Recreation
-  Community Services
-  Industrial
-  Public Service
-  Forest/Conservation

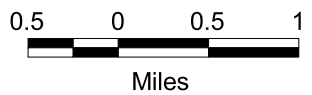


Source: NYS Office of Real Property Svcs.

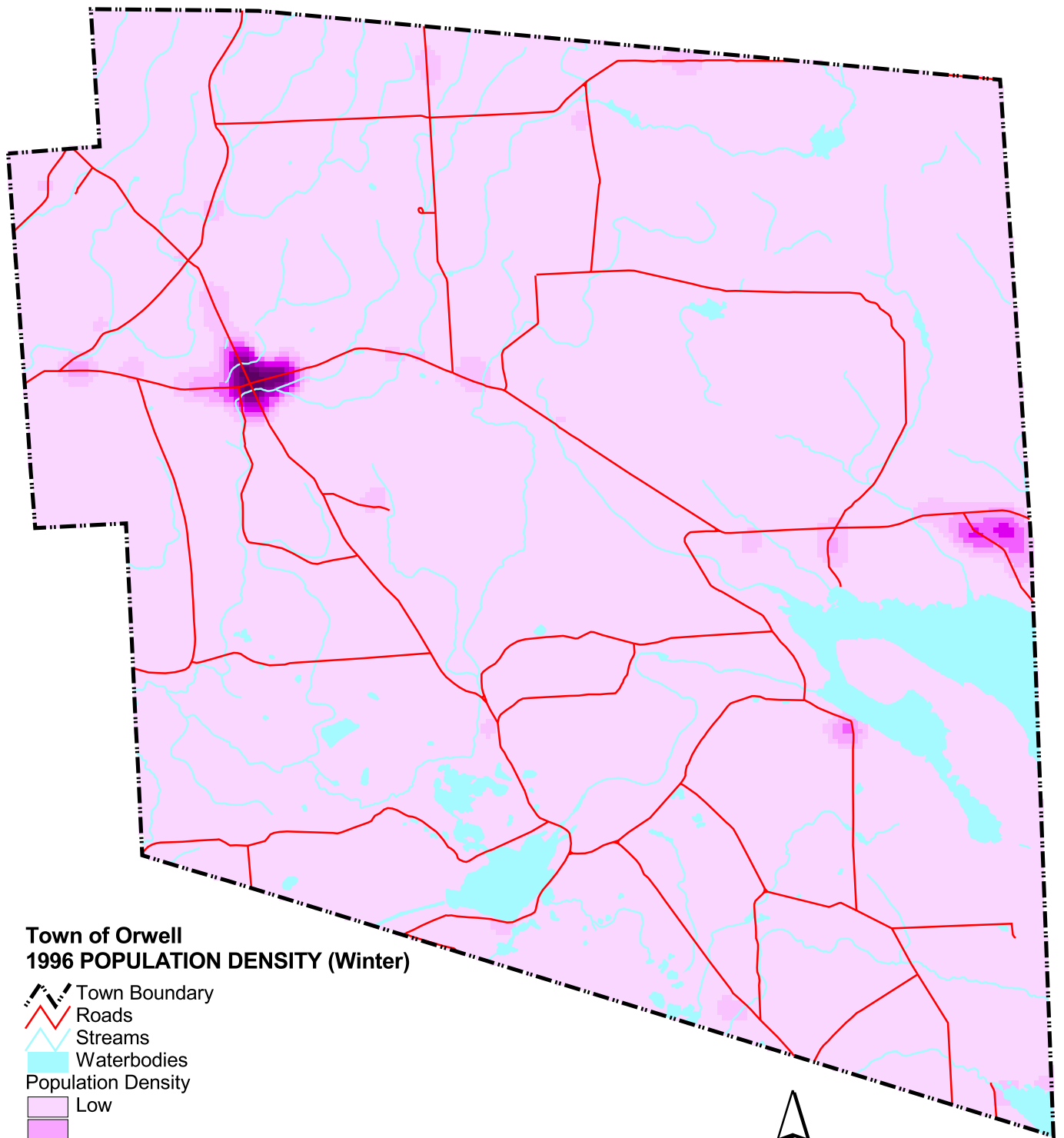


**Town of Orwell
LAND COVER**










-  Tax Parcels
-  Streams
-  Waterbodies
- Vegetation**
-  Deciduous Forest
-  Coniferous Forest
-  Conifer Plantation
-  Successional Field
-  Shrubland
-  Open Field
-  Developed Area
-  Wetlands
-  Water

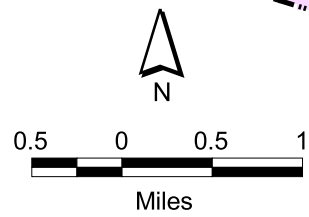


Source: Oswego County Planning Dept.

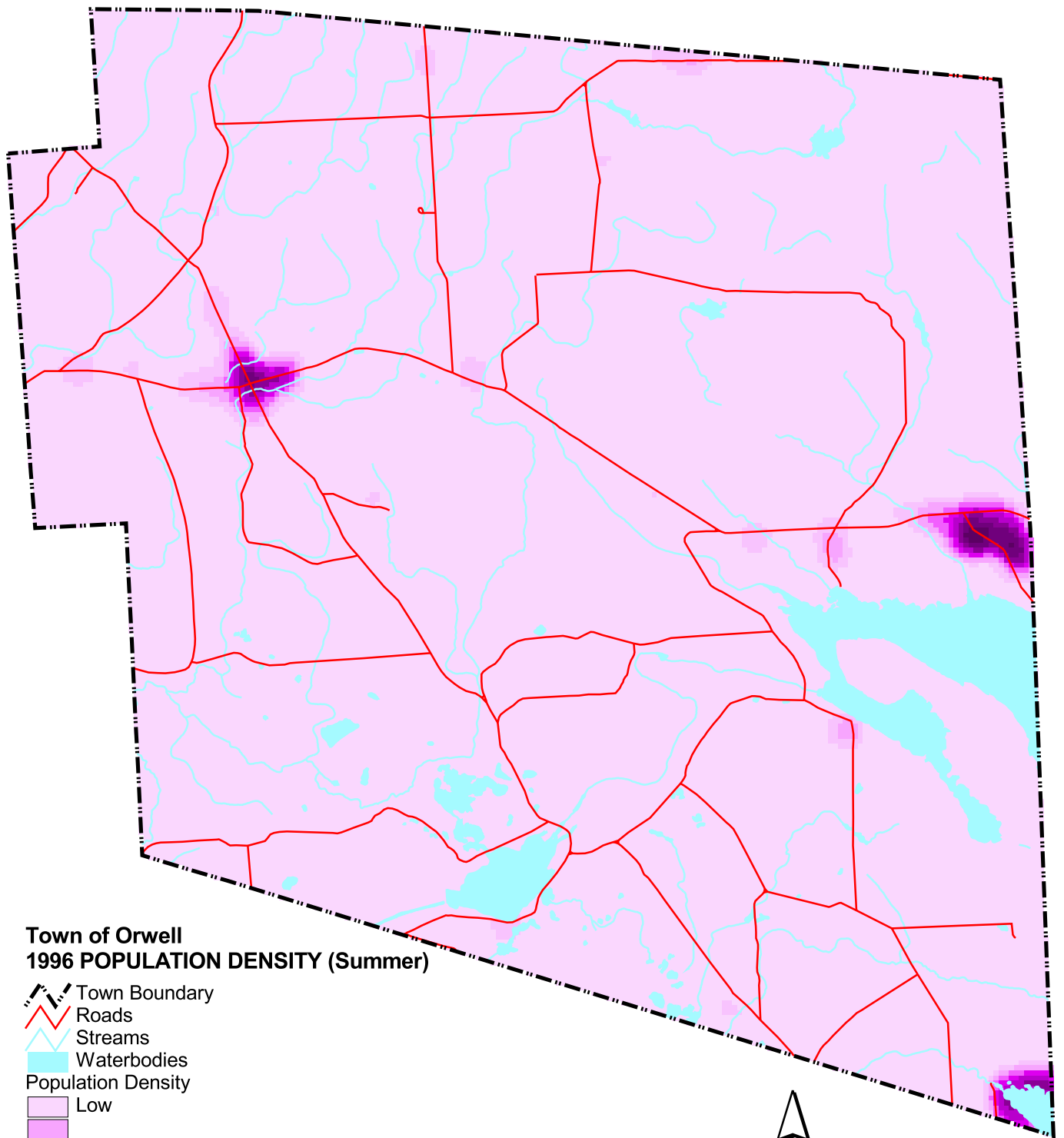


**Town of Orwell
1996 POPULATION DENSITY (Winter)**










-  Town Boundary
-  Roads
-  Streams
-  Waterbodies
- Population Density
-  Low
-  Medium
-  High
-  High
-  High

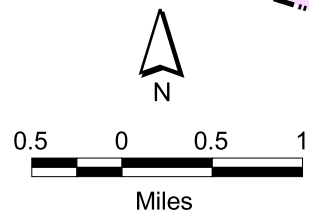


Source: NYS Office of Real Property Svcs.

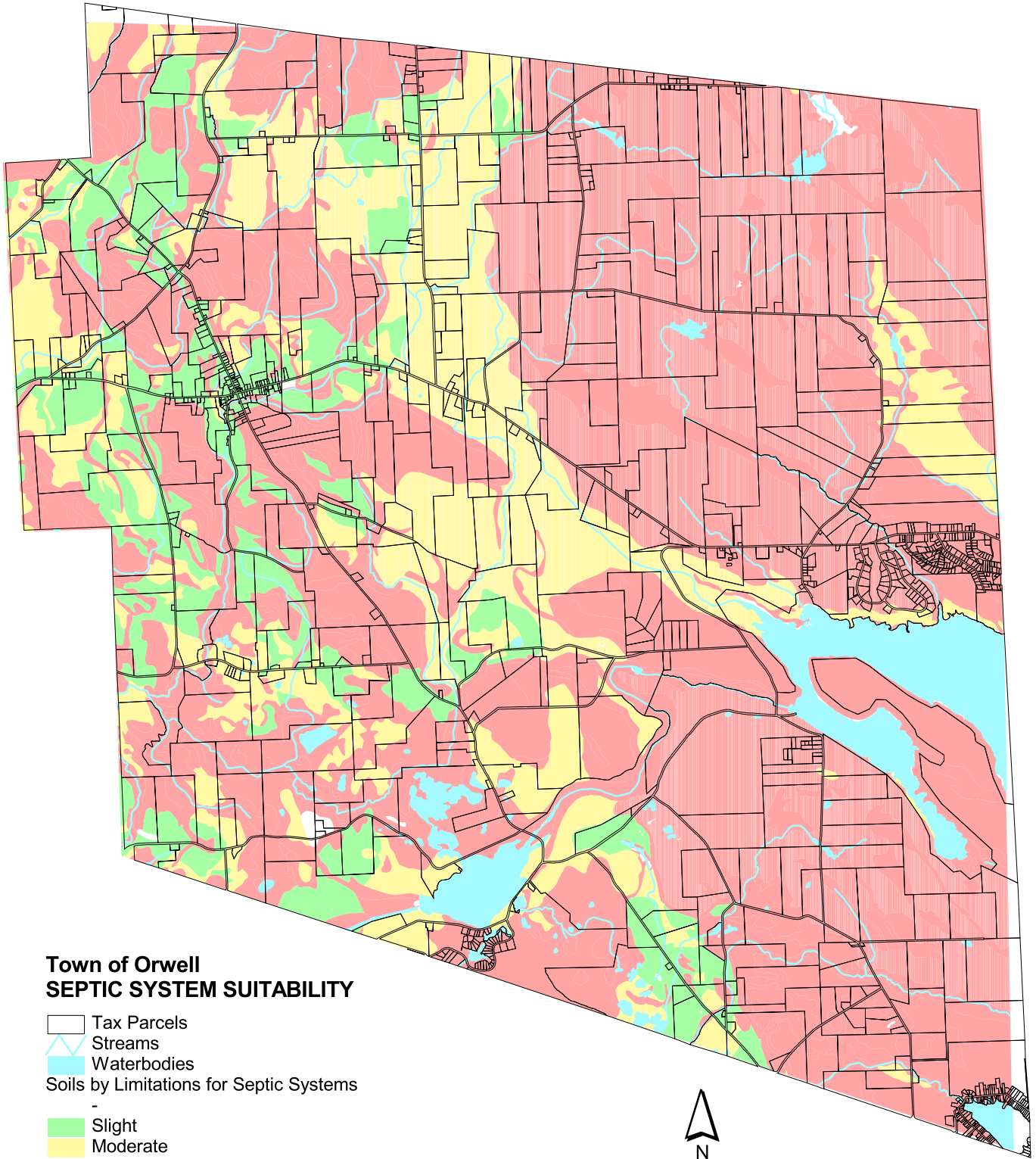


**Town of Orwell
1996 POPULATION DENSITY (Summer)**







-  Town Boundary
-  Roads
-  Streams
-  Waterbodies
- Population Density
-  Low
-  Medium
-  High
-  High
-  High



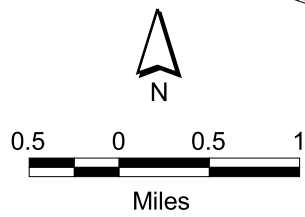
Source: NYS Office of Real Property Svcs.

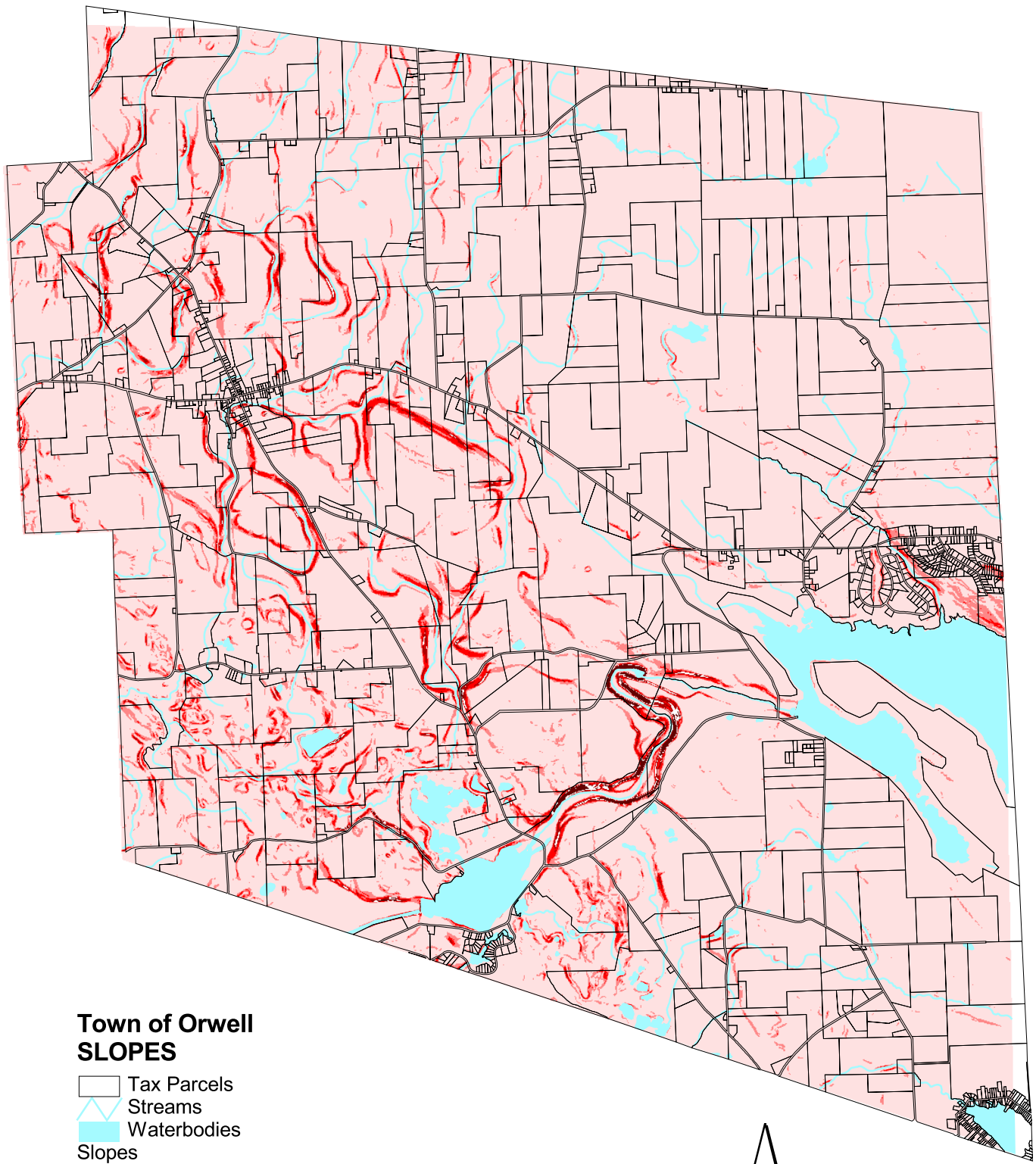


**Town of Orwell
SEPTIC SYSTEM SUITABILITY**










-  Tax Parcels
-  Streams
-  Waterbodies
- Soils by Limitations for Septic Systems
-
-  Slight
-  Moderate
-  Severe

Source: Oswego County Soil Survey

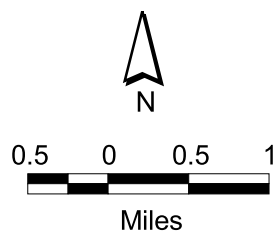


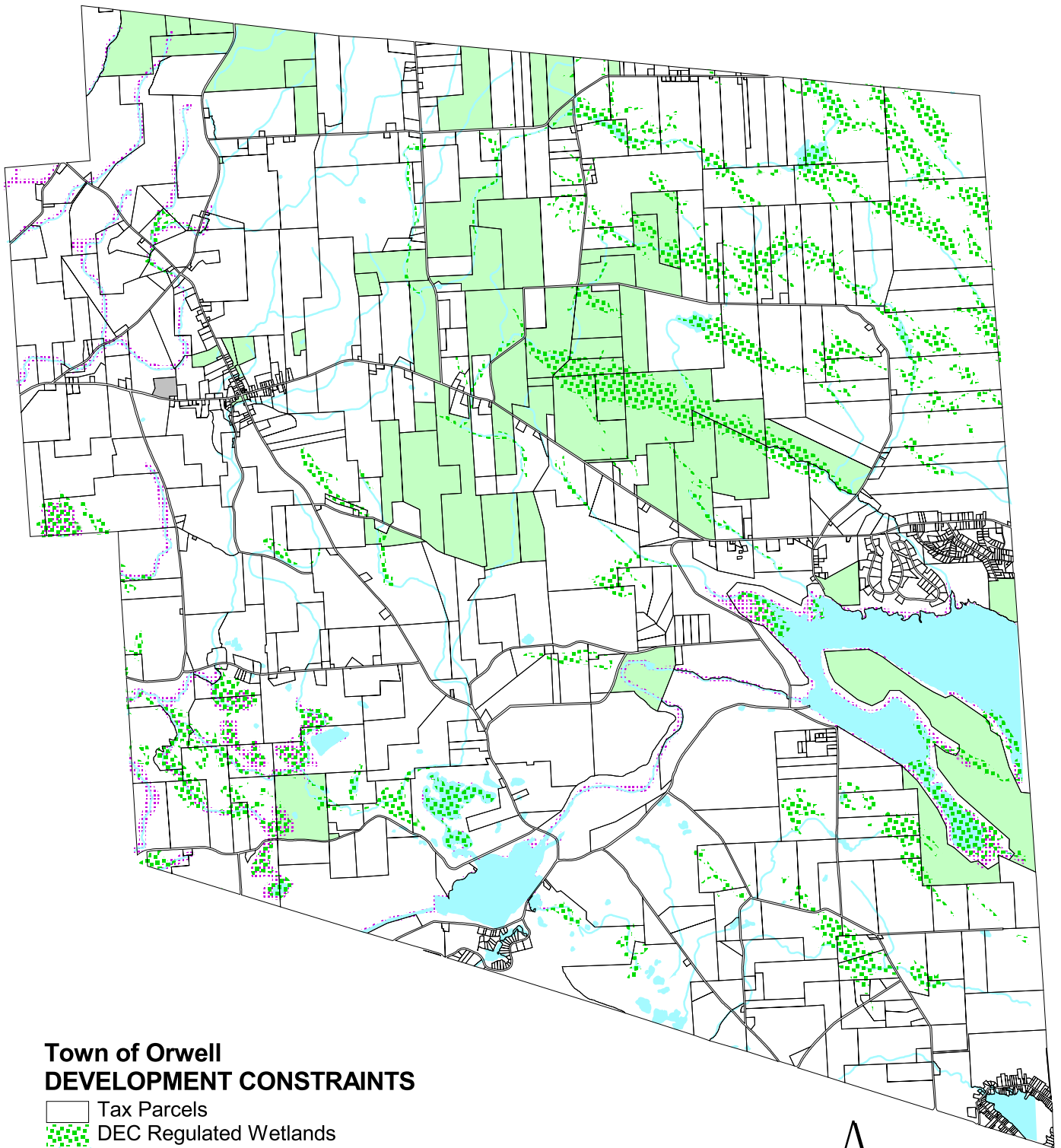


**Town of Orwell
SLOPES**








-  Tax Parcels
-  Streams
-  Waterbodies
- Slopes**
-  0 - 10
-  10 - 15
-  15 - 20
-  20 - 25
-  30 - 90
-  No Data

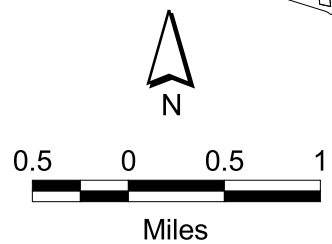
Source: NYS DEC





**Town of Orwell
DEVELOPMENT CONSTRAINTS**

-  Tax Parcels
-  DEC Regulated Wetlands
-  Streams
-  Waterbodies
-  FEMA Flood Hazard Areas
-  Public Lands
-  Cemeteries



APPENDIX C

EXCERPTS FROM CITIZEN SURVEY

Q-9 Towns can use a number of various land use regulations and ownership techniques to help manage where and how development occurs. Would you want to see the Town of Orwell use the following methods to manage future growth?

Subdivision regulations to control division of land

Yes	45%
No	26%
No Opinion	17%
No Response	12%

450 out of 510 respondents answered this question

Cluster development to encourage retention of open space

Yes	37%
No	29%
No Opinion	23%
No Response	11%

453 out of 510 respondents answered this question

Land use regulations for location and type of development

Yes	56%
No	20%
No Opinion	13%
No Response	11%

452 out of 510 respondents answered this question

Mobile home ordinances to control location and types of mobile homes

Yes	63%
No	20%
No Opinion	9%
No Response	8%

472 out of 510 respondents answered this question

Sign control ordinance

Yes	44%
No	18%
No Opinion	26%
No Response	12%

449 out of 510 respondents answered this question

Purchase or donation of conservation easements from willing sellers to restrict development

Yes	51%
No	18%
No Opinion	19%
No Response	11%

454 out of 510 respondents answered this question

Preferential tax assessments to owners of important or sensitive lands to discourage inappropriate development

Yes	49%
No	24%
No Opinion	17%
No Response	10%

458 out of 510 respondents answered this question

Q-10 Is the open storage of junk around the town a problem?

Yes	40%
No	45%
No Response	15%