



**2013**

**COMPREHENSIVE PLAN  
TOWN OF BUTTERNUTS**

**PART II**

**PROFILE AND INVENTORY  
&  
APPENDICES**

## Table of Contents

<b>Population Demographics.....</b>	<b>3</b>
Income of the Population .....	6
Poverty Rate .....	6
Educational Attainment .....	7
Housing .....	8
<b>Land Use .....</b>	<b>13</b>
Building Permits .....	15
Subdivision Activity .....	15
Mining.....	16
Inventory of Local Laws .....	16
Property Values.....	18
Agriculture .....	18
<b>Economic Development .....</b>	<b>24</b>
Business Patterns by Zip Code .....	24
Inventory of Local Businesses .....	25
Employment by Industry and Occupation .....	25
<b>Transportation .....</b>	<b>27</b>
Trips to Work .....	27
Roads.....	27
Bridges .....	30
Pedestrians and Bicyclists .....	30
Public transportation .....	30
Pipelines.....	31
<b>Community Facilities and Infrastructure .....</b>	<b>32</b>
Schools .....	32
List of Community Organizations .....	33
Recreation Resources.....	34
Utilities.....	35
Hospitals and Healthcare Facilities .....	40
Emergency Services .....	40
Town Budgets .....	41
<b>Environment and Public Health .....</b>	<b>43</b>
Bedrock Geology.....	43
Surficial Geology .....	43
Topography and Slopes .....	44
Floodplains.....	44
Water Features .....	44
Ecology .....	46
<b>Historic and Cultural Resources .....</b>	<b>49</b>
<b>Past and Future Planning Efforts .....</b>	<b>52</b>
<b>Map List.....</b>	<b>54</b>
<b>Appendices .....</b>	<b>74</b>
1991 Master Plan .....	74
Water Quality Test Results .....	78
Relevant Studies .....	84
Tompkins County Community Impact Assessment.....	84
Public Input .....	87

## Profile and Inventory

### Population Demographics

According to the US Census Bureau, the Town of Butternuts has land area of 53.83 square miles and water area of 0.04 square miles. In 2010, the population was 1,786, producing a population density of 33.2 persons per square mile. Between 2000 and 2010, the Town's population remained stable but looking at it long-term, it has increased by nearly 25% since 1970. At the same time, the population has not only aged, but has also lost school-aged children (See Figure 3).

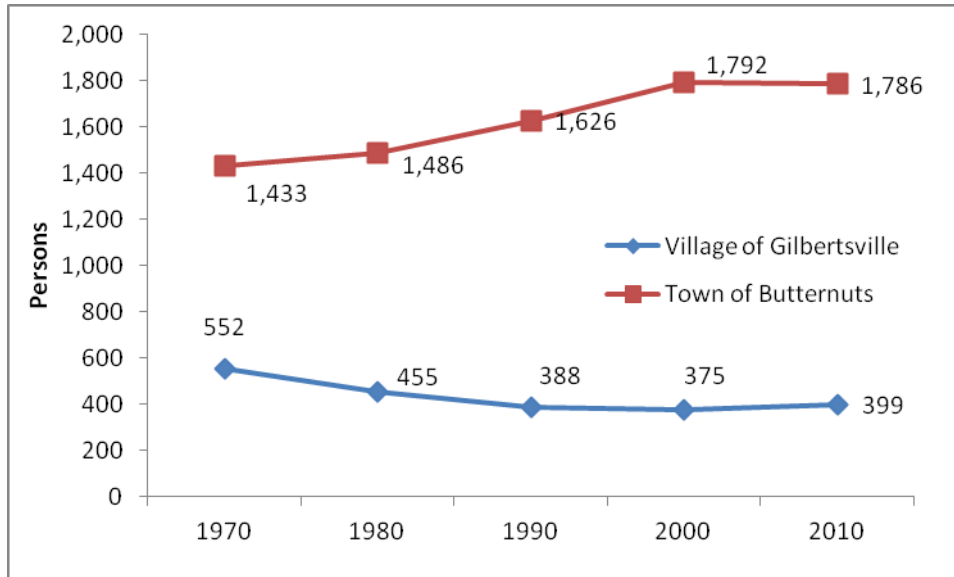


Figure 1. Population size and change, 1970-2010, Town of Butternuts and Village of Gilbertsville. *Source: US Census Bureau and National Historical Geographic Information System*

This population trend is common in rural America: The 1970s and, to a lesser extent, the 1990s were periods of population growth in many places. Otsego County and Butternuts gained population in these periods (See Figure 2). In particular, Butternuts experienced rapid and comparatively high population growth during the 1980s and 1990s. Between 1970 and 2010, the Town added people faster than the County and much faster than New York State as a whole. The Village of Gilbertsville, by contrast, declined by almost 28%. This change could reflect the desirability of the Town as a place to live, coupled with an older population in the Village, as well as a reflection of a common upstate New York trend of loss of population in villages. Between 2000 and 2010, there was very little growth in the Town, but more in the Village.

## Town of Butternuts Comprehensive Plan August 2013

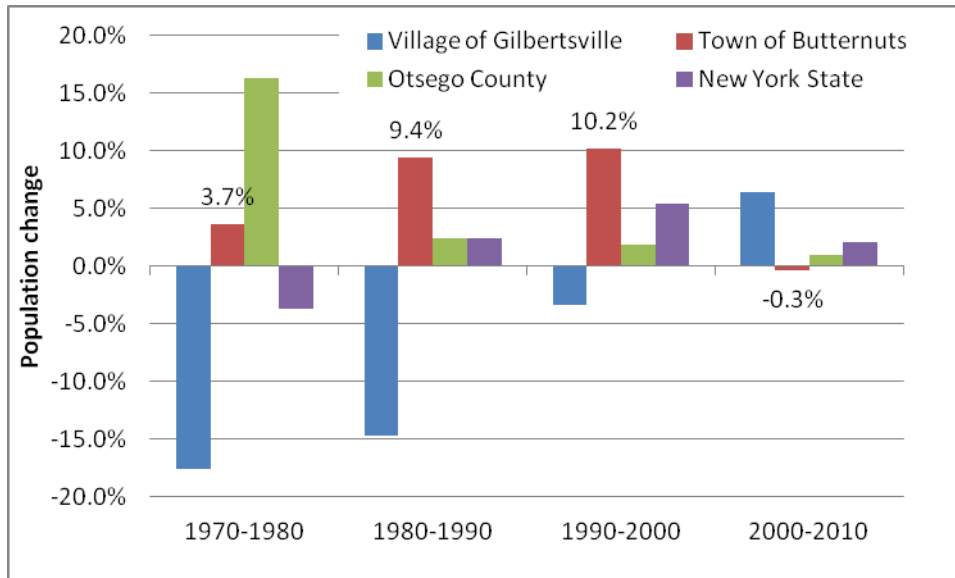


Figure 2. Population growth rate comparison, 1970-2010. *Source: US Census Bureau and National Historical Geographic Information System*

### **Age Structure**

Like many rural communities in Upstate New York and across the US, the population in Butternuts is aging. Median age was 48.2 in 2010, up 10% from 41.4 years in 2000. Over 20% of the population in 2010 (364 people) was 65 years or older. There are likely several reasons for these increases in Butternuts.

As the population pyramid (Figure 3) shows, over the past decade nearly all age groups 19 years old and younger decreased as a percentage of the total population. Since 2000, there are 15.5% fewer people aged less than 5 years, 32.0% fewer aged 5 to 9, and 41.2% fewer people less than 10 to 14 years. At the same time, the opposite is true for groups 50 and older. This shows a large loss of school-aged children. In addition, an analysis of people moving in and out of the Town suggests that, although there is net immigration of people aged 30 to 50, net losses among those aged 20 to 29, more than offset these gains.



## Town of Butternuts Comprehensive Plan August 2013

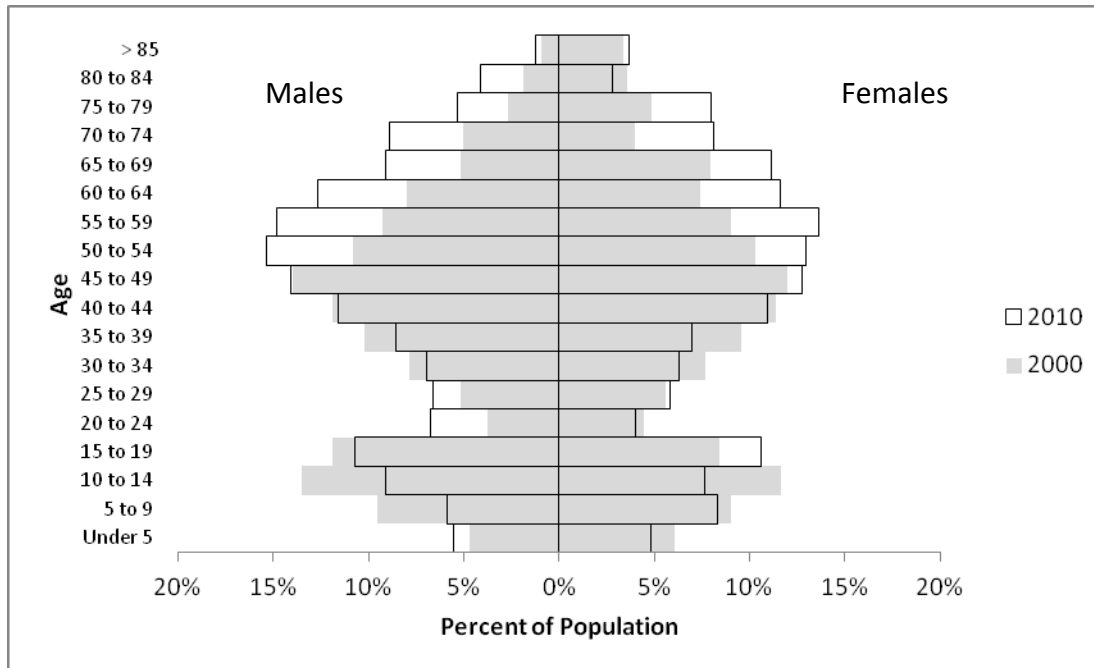


Figure 3. Population structure, 2000 and 2010, Town of Butternuts. *Source: US Census Bureau*

The Town's population is also aging more rapidly than other areas of the state. In 2010, median ages of Otsego County and New York State were 37.0 (unchanged) and 38.0 (up 6%), respectively. An important caveat when comparing these figures to the County is that the latter has a significant population of college students, which means that the County as a whole both retains more residents as well as attracts people aged 15 to 24 at rates much higher than many of its towns.

### ***Households and Families***

Households are the basic unit of census counts. For several decades, household formation has been increasing at the national level. This is due to a variety of factors, including greater divorce rates, slower entry into marriage, and an increasing elderly widowed population. Mirroring these trends, the number of households in Butternuts recently increased.

A key point is that the number of households increased more sharply than the Town's population increase. Between 2000 and 2010, the number of households increased 7.8%. There were similar trends with non-family households. At the same time, the number of persons per household decreased. This means that there is no population growth, but there are more, smaller households. Mirroring a national trend, there are also more single-person households.

The vast majority of family households were married couples. The number of families with children under 18 years was about 24% of all family households in 2010, mostly married-couples. Thirty-five percent of all households had individuals 65 years or older; twenty-six percent had individuals under 18 years of age.

Table 1. Household statistics, 1990-2010.

	1990		2000		2010	
	no.	%	no.	%	no.	%
Persons per household	2.67	-	2.5	-	2.32	-
Total	608	100.0%	715	100.0%	771	100.0%
Family households	448	73.7%	503	70.3%	526	68.2%
Non-family households	160	26.3%	212	29.7%	245	31.8%
Householder living alone	132	21.7%	172	24.1%	195	25.3%
Householder 65+	59	9.7%	78	10.9%	91	11.8%

Source: US Census Bureau

### Income of the Population

The median household income is a number that provides a measure of socio-economic well-being for a broad cross section of the Town's population. When adjusted for inflation, household incomes have increased in Butternuts since 1980, and there was a marked increase between 1990 and 2000. It is important to note that, due to the ACS sampling design, the 2006-2010 data include both pre- and post-recession data points. In turn, any losses in income after 2007 are probably slightly attenuated in this dataset.

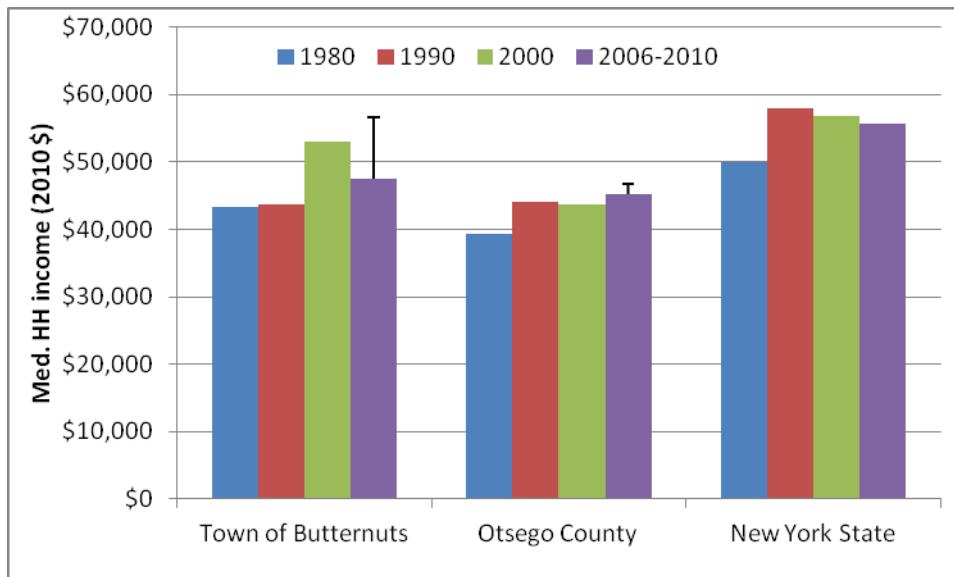


Figure 4. Comparison of median household income, 1980-2010. (Vertical bars represent ACS margin of error.) Source: US Census Bureau and National Historical Geographic Information System

When compared to larger municipalities and regions, with the exception of 2000, the Town and County have generally trended the same since 1980. However, median household incomes in New York State have tended to be higher but, unlike in Butternuts and Otsego County, appear to have decreased steadily since 1990.

### Poverty Rate

The poverty rate for all people in the Town has generally declined since 1990. At 9.1%, it is statistically lower than the Otsego County rate of 14.9% as well as the New York State

rate of 14.1%, The most current data show that poverty is lowest among families and is highest (although quite variable) among children (Figure 5). While not statistically different, estimates for these groups suggest that single-parent households experience elevated poverty rates.

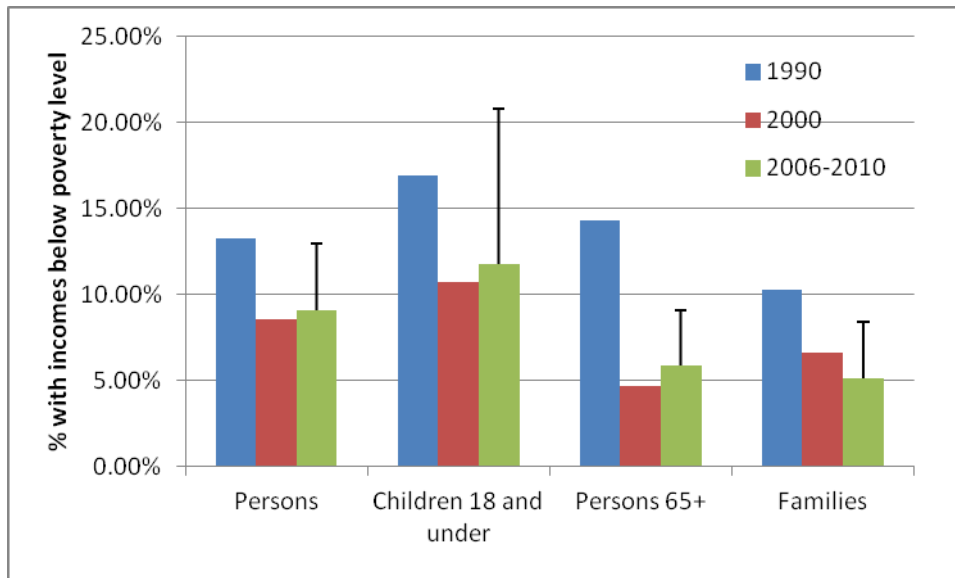


Figure 5. Poverty rates for different groups, 1990-2010, Town of Butternuts. (Vertical bars represent ACS margin of error.) *Source: US Census Bureau*

### Educational Attainment

The Town generally has somewhat higher high school graduation rates when compared to Otsego County and New York State (Figure 6). Thirty-eight percent of residents age 25 and over have a high school diploma, which is ten percent higher than the State proportion of 28.2%. At the same time, more residents in Butternuts made some progress toward, but did not finish, a college degree. The proportion of people with college-level and advanced degrees in Butternuts is similar to Otsego County. New York State however, has a higher level of residents who complete both college and graduate or professional degrees than either the County or Butternuts.

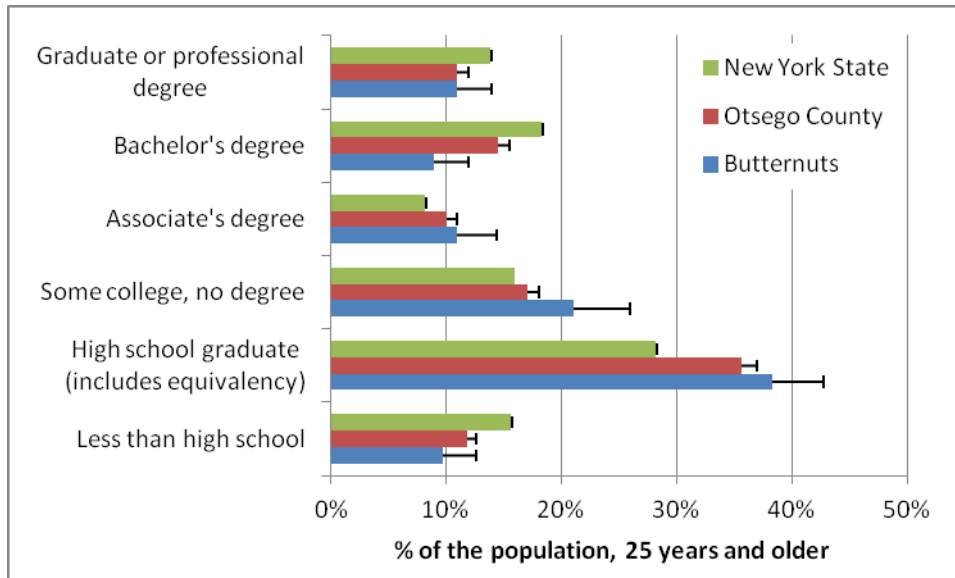


Figure 6. Comparison of educational attainment for the population, 25 years and older. (Horizontal bars represent ACS margin of error.) *Source: US Census Bureau*

### Housing

Increases in the size of the population and the number of households since 1970 have been accommodated by substantial gains in the number of housing units in Town, which in 2010 stood at 1,012. Butternuts added 542 units since 1970, which is an increase of 53.6%. Compared to other rural areas, that is a very high rate of growth. Equally important is that despite flat population growth since 2000, the Town still added 110 housing units, an increase of 12.2%. As Figure 7 shows, the vacancy rate, after declining during the 1970s, increased in 1990 and has remained above 20%. This vacancy rate could reflect seasonal or second homes that may have been counted as vacant.

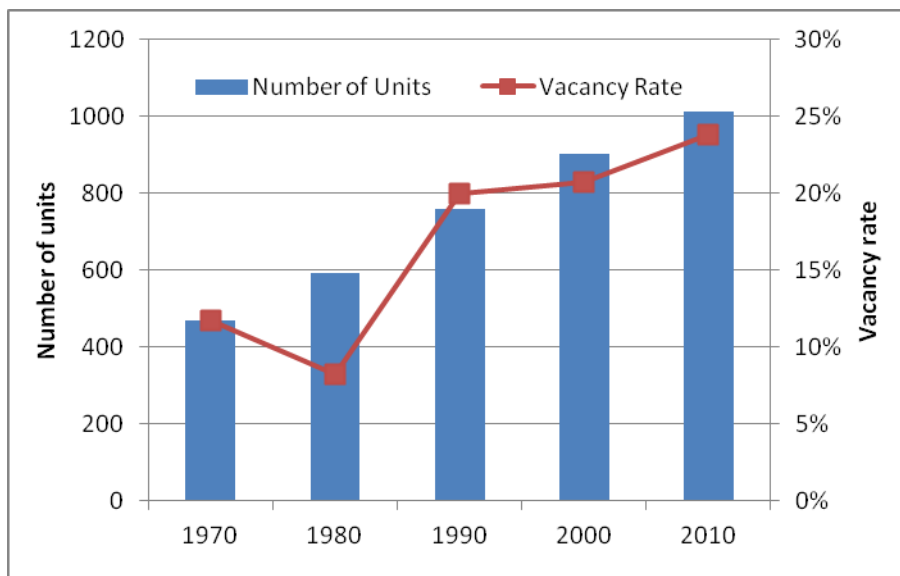


Figure 7. Number of housing units and percent vacant, 1970-2010, Town of Butternuts. *Source: US Census Bureau and National Historical Geographic Information System*

### ***Vacancy and Tenure***

Housing vacancy and tenure characteristics have remained steady over the past 30 years. In 2010, the vacancy rate was 23.8%, and since 1990, seasonal units have generally ranged from between 12% to 17% of total housing units in Butternuts. For comparison, the 2010 Otsego County vacancy rate was 20%. In our town, recent increases in vacancy rates are partly explained by the use of many of these units as seasonal residences or vacation homes. As Table 2 shows, 74% of all vacant units were classified as for seasonal or occasional use in 1990, and 2010 data show a similar level of seasonal units. In 2000, units classified as “other vacant”<sup>1</sup> (data not shown) made up 22.5% of all vacant units; in 2010, the proportion fell slightly to 21.2%. The decrease in percent seasonal vacants between 1990 and 2000 is likely due to greater numbers of buildings listed for sale and sold but not yet occupied.

Table 2. Housing tenure statistics, 1990-2010, Town of Butternuts.

<b>Tenure</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>
Occupied	608	715	771
Owner-occupied	503	603	654
Renter-occupied	105	112	117
Vacant	152	187	241
% seasonal vacant	73.7%	58.8%	70.1%
Total	760	902	1012

*Source: US Census Bureau*

Table 2 also shows that owner-occupied units represent about 65% of all units in 2010. There were comparatively fewer units occupied by renters, and these units as a percentage of all units have declined slowly since 1990, making up just 11% of all units in 2010.

### ***Types of Housing Units***

The most common type of housing in Butternuts is one unit detached, which reflects the preponderance of single-family homes in the Town shown in other data (See Table 3 and Figure 14 and Figure 8). Figure 8 shows the predominance of single family units (blue line indicates data from 2000 and red line indicates data from 2010). In addition, there are a number of mobile homes in Butternuts. Although mobile homes are also single-family dwellings, the US Census inventories these separately from other types of housing. According to Otsego County mapping,<sup>2</sup> 94% of the Town’s 160 mobile homes exist outside of mobile home parks; there is only one commercial mobile home park in Butternuts.

<sup>1</sup> This category includes boarded-up buildings, buildings held off the market by their owners, and buildings held for occupancy by caretakers.

<sup>2</sup> Otsego County, *Integrated Housing Needs & Opportunities Study* (2009).

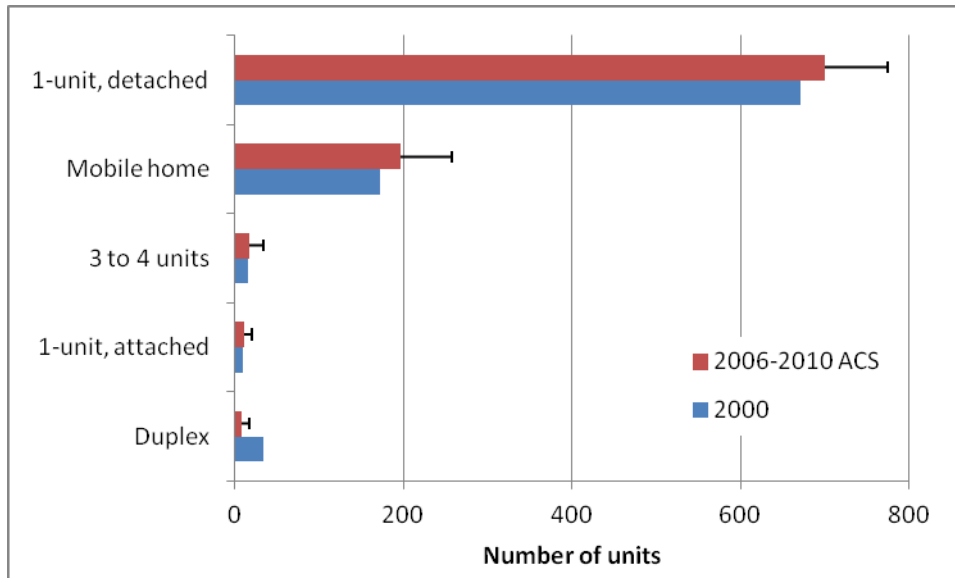


Figure 8. Types of housing units, 2000 (Blue) and 2010 (Red), Town of Butternuts. (Horizontal bars represent ACS margin of error.) *Source: US Census Bureau*

### Housing Age

Historically, the presence of complete indoor plumbing facilities has been used to gauge housing quality. The data available from the 2006-2010 ACS indicate that nearly all units in Town have complete plumbing facilities. Today, age is often used to approximate the quality of the housing stock of an area. The most recent data show that approximately a third of the housing stock was built over 65 years ago (Figure 9). Very little construction occurred between 1940 and 1969, but since 1970, that trend reversed, with significant construction occurring after 2000. However, according to the Town historian, little construction took place between the early 1900's and 1970's. According to census data, approximately 17% of the Town's housing is less than 12 years old.

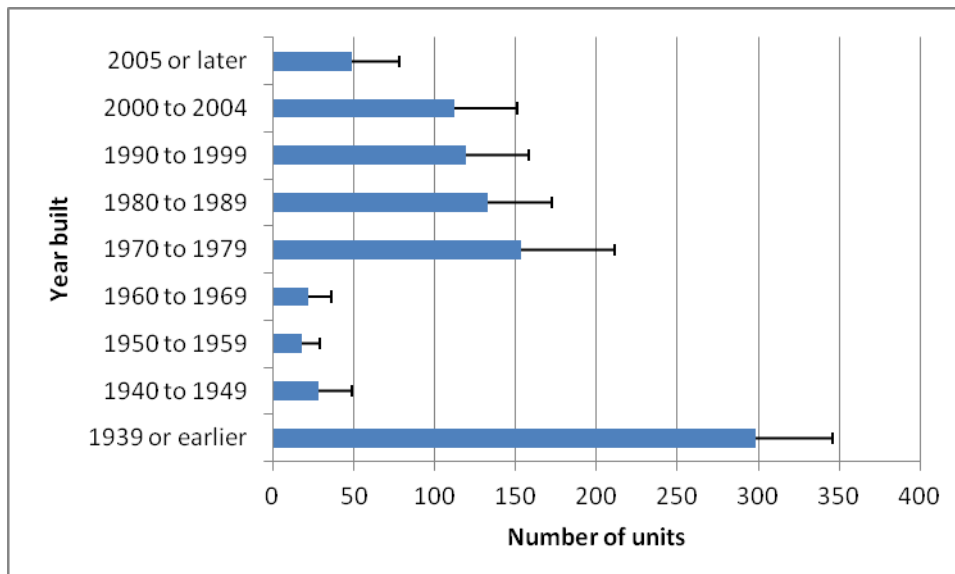


Figure 9. Year structure was built. (Horizontal bars represent ACS margin of error.) *Source: 2006-2010 ACS/US Census Bureau*

### Affordability

Adjusting for inflation, in real dollars, housing has become more costly in Butternuts since 1980. In this period, the median home value increased 60%; rents increased 45%. Yet this increase occurred mainly between 1980 and 1990, after which prices stabilized. The most current estimates show that while median home values in Butternuts track County figures (the ratio is 0.995), rents in Butternuts are slightly lower than in the County (the ratio is 0.88).

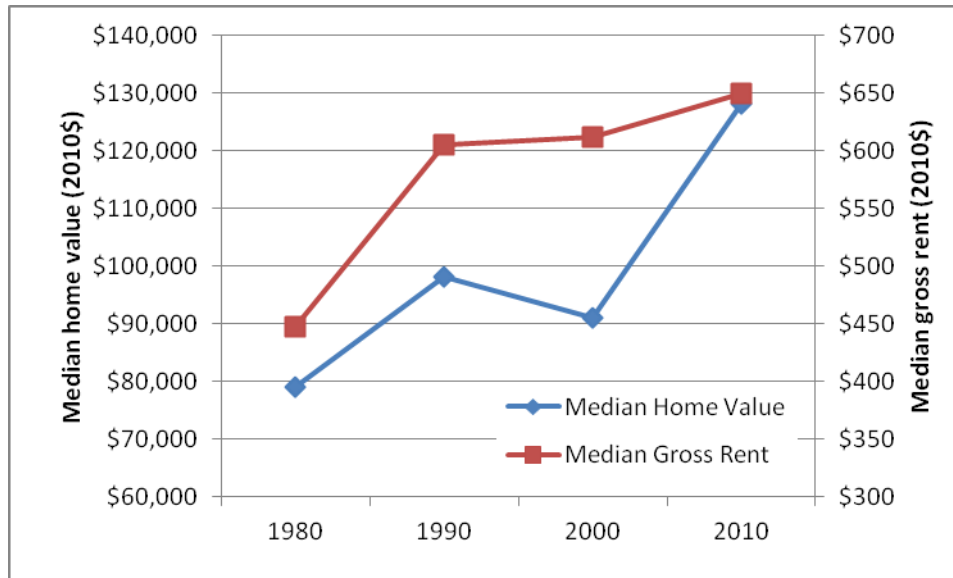


Figure 10. Real median home value and median gross rent, 1980-2010, Town of Butternuts. Source: US Census Bureau and National Historical Geographic Information System.

### Ratio of House Price to Median Income

There are several ways to measure how the degree of housing affordability in an area. In order to determine the affordability of homeowner units, a comparison can be made between the median value of homeowner units and median household income. Nationally, a ratio of 2.0 or less is considered “affordable.” For instance, to purchase a home costing \$200,000, a buyer would need an income of \$100,000 per year, according to this standard. In 2000, the affordability ratio for Otsego County was 2.27; homes in the County therefore exceeded basic affordability standards, but not dramatically.

Housing may be becoming less affordable in Butternuts. According to 2008 estimates from Claritas,<sup>3</sup> the County ratio is 2.78. Regionally, ratios ranged from 3.71 in the Oneonta area to 2.45 in the Route 20 corridor. With a ratio of 3.36, Schoharie County was least affordable, according to this indicator. For comparison, the ratio for New York State was 5.16.

According to the most current Census Bureau estimates, median home value in Butternuts was \$128,300 and median household income was \$47,446, yielding an affordability ratio of 2.70 and an increase of 60% since 2000. Increases over the same period, proportionally, were not as large for either Otsego County or New York State.

<sup>3</sup> These estimates are from the 2009 *Otsego County Integrated Housing Needs & Opportunities Study*.

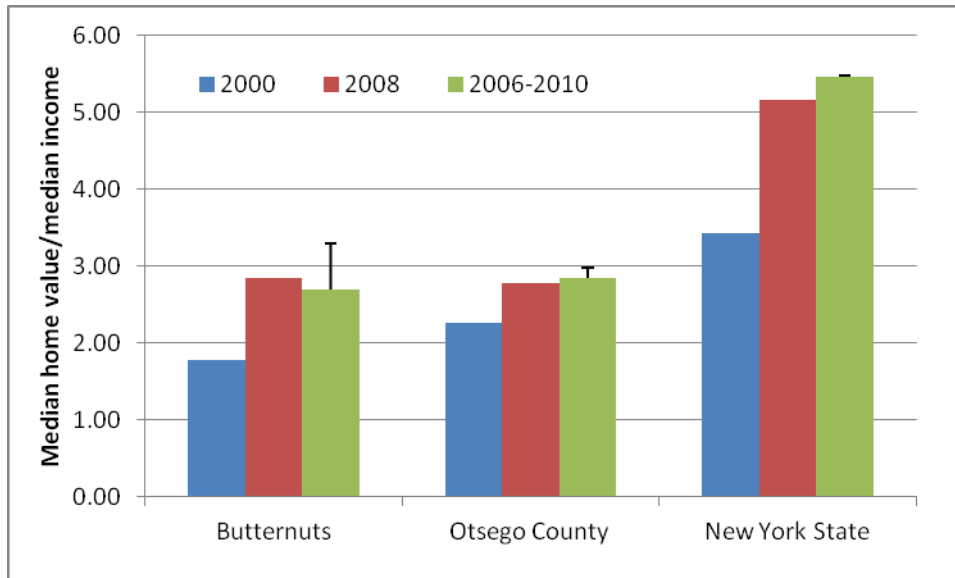


Figure 11. Comparison of housing affordability ratios. (Vertical bars represent ACS margin of error.) *Source: 2000 & 2006-2010, US Census Bureau; 2008, Claritas; 2008 Butternuts value is for the Route 51 Corridor.*<sup>4</sup>

#### Proportion of Income Spent on Housing Costs

A second measure of affordability is offered: the proportion of household income spent on housing costs. It provides several additional pieces of information over the ratios calculated above, including a comprehensive definition of housing costs (e.g. taxes, heating, mortgage interest) as well as data for renters. It is commonly accepted that a household spending 30% or more of its income on housing costs is cost burdened.

Less than 20% of those with or without a mortgage are cost burdened, according to this indicator (Figure 12). While there may be more households without a mortgage that are cost-burdened in Butternuts when compared to Otsego County, the difference is not statistically significant.

<sup>4</sup> The 2009 *Otsego County Integrated Housing Needs & Opportunities Study* defines the Route 51 Corridor to include the following municipalities and/or places: Burlington, Burlington Flats, Butternuts, Edmeston, Garrattsville, Laurens, Gilbertsville, Laurens, New Lisbon, Morris, Mount Vision, Pittsfield, South Edmeston, and West Edmeston.



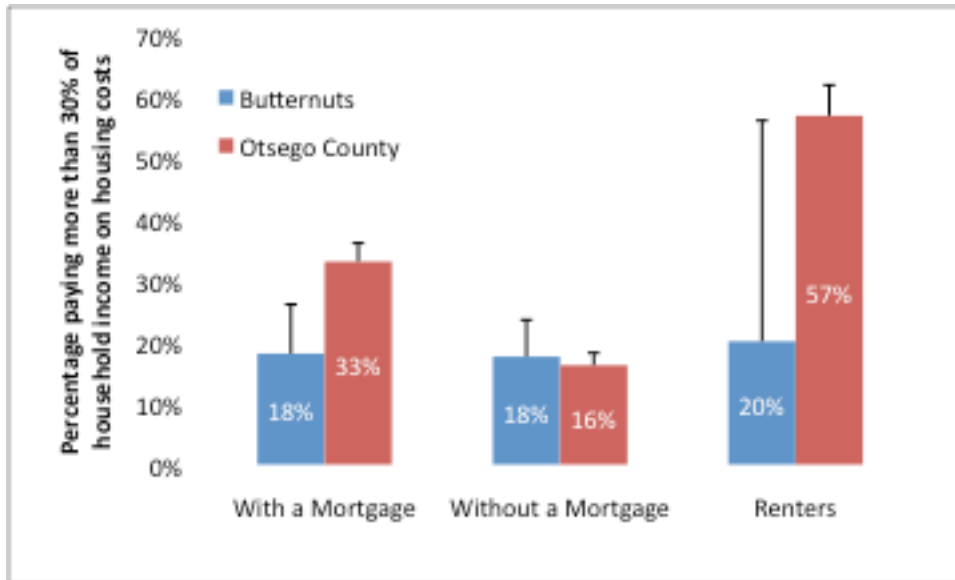


Figure 12. Percentage of households paying more than 30% of household income for housing costs. (Vertical bars represent ACS margin of error.) *Source: 2006-2010 ACS/US Census Bureau*

## Land Use

Residential, agricultural, and vacant land make up the vast majority of land use in Butternuts, and, according to the recent tax assessment data presented in Table 3, account for 39.5%, 29.2%, and 23.4% of our land area, respectively. Residential parcels tend to be smaller and greater in number, while the 144 farm parcels<sup>5</sup> average just over 60 acres in size. Vacant land, which includes those parcels lacking buildings, structures, and/or other uses or improvements, is also a major land use category. On average, vacant parcels are approximately 16 acres in size. Of the 475 total vacant parcels in our town (Table 3), 39% (186 parcels) are rural vacant lots, 10 acres or smaller in size, that are located in residential areas; another 26% (125 parcels) are abandoned agricultural lands.

Some of these vacant lands may be able to be converted back into agriculture at some point in the future. Others may not be developable for residential use due to slopes or other environmental reasons. Still other vacant lands may be areas that could see future residential or business development in the future. Within the parks, wild, forest, and conservation category, 85% are privately-owned, non-hunting club properties. There are comparatively fewer numbers of parcels and acres under other use categories.

<sup>5</sup> For detailed discussion of these parcels, see the Agriculture section, below.

Table 3. Number of parcels and acres for land use classifications, Town of Butternuts.

Land Use Class.	Parcels		Acres	
	no.	%	no.	%
Residential	829	53.3%	13,220	39.5%
Agricultural	144	9.3%	9,771	29.2%
Vacant land	475	30.5%	7,831	23.4%
Parks, wild, forest, and conservation areas	27	1.7%	2,213	6.6%
Commercial	13	0.8%	197	0.6%
Community services	22	1.4%	82	0.2%
Public service properties	37	2.4%	81	0.2%
Industrial	3	0.2%	29	0.1%
Recreation and entertainment	6	0.4%	20	0.1%
Total	1,556	100.0%	33,444	100.0%

Source: NY Office of Real Property Tax Service and Otsego County (2011)

Since 1981, residential and vacant parcels have generally increased while land used for agriculture use has decreased. These are complimentary trends: farms in Butternuts have been converted into lots for housing and at the same time, farmers have abandoned previously-worked land. Between 2001 and 2011, however, this trend reversed. The number of acres of vacant land decreased for the first time in two decades as the number of residential acres continued to increase and the loss of farm acres in Town slowed.

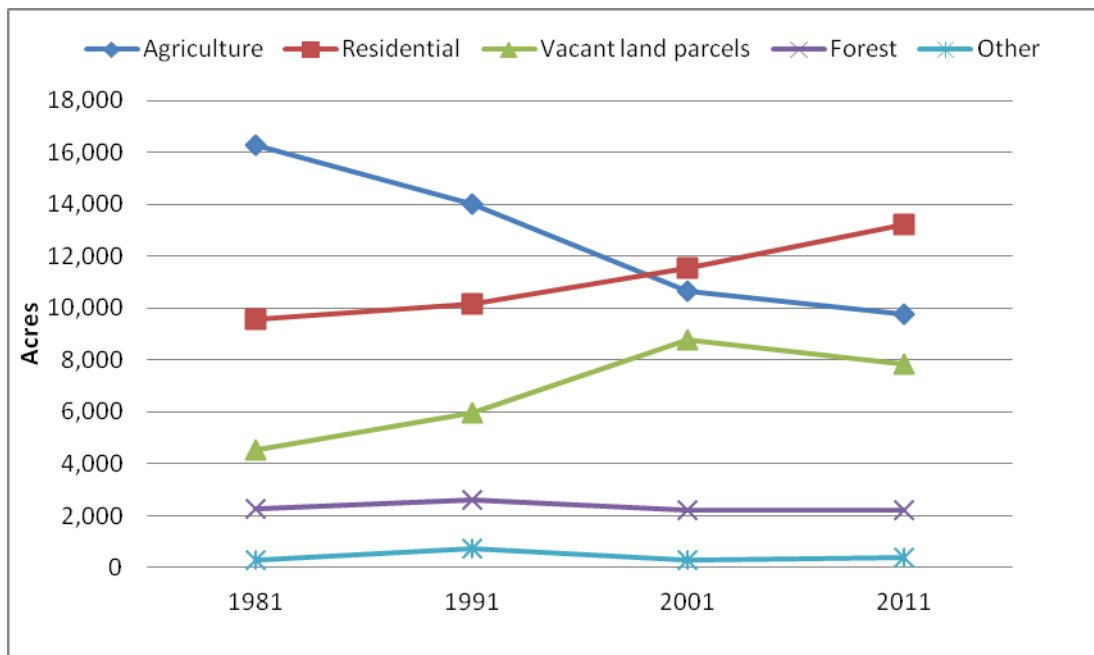


Figure 13. Change in land area (acres) for land use classifications used for tax assessment purposes (i.e. real property data), Town of Butternuts. Source: Otsego County

In the same period, the mixture of the type of residential use has also shifted. Figure 14 shows a breakdown of the land area devoted to different types of the residences. The loss of parcels greater than 10 acres probably reflects some subdivision to single-family uses. Land used for mobile home uses increased by 163% between 1991 and 2001 but decreased thereafter. Finally, the increase and loss of “seasonal” residences (defined here as those parcels with residences not designed—for example, due to lack of insulation—for year-round occupancy) likely reflects conversion of these units to year-round units as well as subdivision.

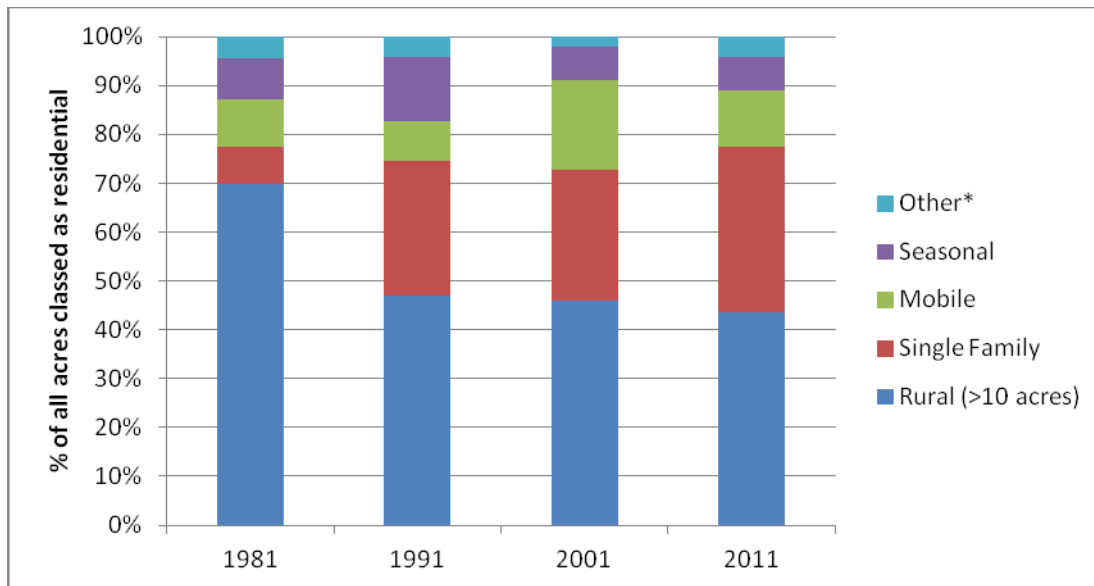


Figure 14. Change in mix of residential land use sub-classification types, Town of Butternuts. (\*Multipurpose, estate, and multi-family classes) *Source: Otsego County*

While agricultural uses concentrate along Butternuts Creek, Route 51, and its tributaries, residential and vacant lands can generally found spread throughout the Town. Many residential parcels border agricultural lands, and subdivisions have generally taken place away from the Village of Gilbertsville. Large forested tracts are found in the western portion of the Town. (See Town of Butternuts Land Use map).

### Building Permits

There have been 46 new residences built in Butternuts since 2007. There were more in 2007 (14 homes) and 2008 (13 homes) than in other subsequent years. Since 2009 there are about 5 homes added per year. About half of the new homes built in Town are some form of manufactured home (manufactured or modular). At the same time, the population growth has been stable (see above demographic discussion). This mismatch between population growth and housing growth is common in rural New York, but reflects a type of rural sprawl (more houses for the same number of people).

### Subdivision Activity

According to Otsego County Real Property Office, there have been 64 lots created due to subdivision activity since 2009. In 2009 there were 11 lots created. There were 44 in 2010, none in 2011, and nine so far, in 2012. The subdivision activity in 2010 included three major subdivisions (two had seven lots each, and one was a 16 lot subdivision).

## Town of Butternuts Comprehensive Plan August 2013

### Mining

NYSDEC information indicates the presence of six mines in Butternuts. Two have active permits (both expire in 2014) while four have been reclaimed and are no longer actively mined. The two active mines are both sand and gravel.

Table 4. Active and reclaimed mines with a State mining permit, Town of Butternuts.

Permitee Name	Mine Name	Status	Current Permit Acres	Acres Life of Mine	Acres Reclaimed	Commodity
Ackley, Robert	1009 County Highway 18	Permitted	5.84	5.84	0.00	Sand and Gravel
Butternuts, Town of	Co.Rt.18 / Bank # 2 Pit	Permitted	12.84	12.84	0.00	Sand and Gravel
Butternuts, Town of	n/a	Reclaimed	0.00	0.00	4.00	Sand and Gravel
E & R Pope's Excavating LLC	River Rd. Pit	Reclaimed	0.00	11.00	6.00	Sand and Gravel
Tompkins Bluestone Co Inc	Ackley Quarry	Reclaimed	0.00	5.00	5.00	Bluestone
Van Houten, Robert E	Morgan Cope Pit	Reclaimed	0.00	11.00	7.00	Sand and Gravel

Source: NYSDEC, 2012.

### Inventory of Local Laws

Relevant land use local laws are shown in

## Town of Butternuts Comprehensive Plan August 2013

Table 5. The 2001 Site Plan Review Law was amended in 2012 and, with exceptions relating to agriculture, maintenance, and minor alterations, requires review for most new land use activities in Butternuts. In addition, as discussed below, the Town developed its first Master Plan in 1991.

## Town of Butternuts Comprehensive Plan August 2013

Table 5. Inventory of local laws with land use implications.

Year of Adoption	Year of Filing	Law Name
1979	1979	Highway Defects
1983	1986	Waiving Local Responsibility for Enforcement of NYS Uniform Fire Prevention and Building Codes
1988	1988	Law Prohibiting Private or Family Cemeteries
1990	1990	Noise Ordinance
1990		Subdivision regulations
1992	1992	Flood Damage Prevention Law
1993	1994	Snow Removal
		Removal of vehicles
	1994	Law Prohibiting the Operation of a Dump
2001	2001	Cell Tower Law
		Site Plan Review Law, amended 2012
	2011	Dog Control and Licensing Law
2012	2012	Road Use Law
		Moratorium on Natural Gas Drilling
2013	2013	Extension of Moratorium on Natural Gas Drilling

Source: Town of Butternuts

The Village of Gilbertsville, wholly contained within the Town, has a zoning law that divides the Village into three zoning districts: Residential, Residential-Hamlet, and Planned Unit Development. The Residential district includes most of the Village's land area. The Residential-Hamlet district, in which a range of higher-intensity commercial uses are allowed via special permit, extends along CR-8, NY-51, and terminates at the intersection of NY-51 and CR-4.

### Property Values

Property forms much of the wealth of many communities. Since 2000, total assessed value has increased 46.5%, after adjusting for inflation; much of this increase occurred in 2006 and afterward, due to generally increased tax assessment valuation.<sup>6</sup> Residential parcels make up nearly three quarters of the total tax base in Butternuts. Agricultural lands and vacant lands make up another 9.0% and 10.5%, respectively.

### Agriculture

#### ***Farm Soils, Farm Parcels, and Ag Districts***

The Town has significant high quality soils supportive of agriculture. Most prime farmland soils are found in the valleys, along the Unadilla River and Butternuts Creek as well as in the southwestern portion of the Town. Outside the Village of Gilbertsville, much of this soil is farmed. Much of the remainder of the Town's land area is classified as soils of statewide importance. Unlike prime soils, however, many of these areas remain unfarmed and have been converted to residential use. (See Town of Butternuts Parcels By Agricultural Enterprise map.)

Tax assessment information, which is collected by the Town assessor for all tax parcels, provides one way to gauge the extent of agriculture in our Town. All parcels are given a

<sup>6</sup> See Town Budget sub-section of the Community Facilities and Infrastructure section, below.

land use classification code that is standardized across the State. It is important to note, however, that these data are limited in the sense that land used for agricultural purposes is typically undercounted. This is because some of it gets classified as residential if that is the primary use of the property. The figures below thus should be viewed as a low accounting of agricultural use in the Town.

Still, these data indicate that agriculture is a significant land use in Butternuts: Nearly a third of the land area of Butternuts is classified as agricultural. Even though agricultural use has declined by acreage, and has been eclipsed by residential uses, it was still the second largest use category by land area and the third largest category by the number of parcels in 2011. As Figure 15, shows, vacant land used as part of an operating farm makes up over 50% of all agricultural parcels, while field crops and dairy remain important on a per-parcel basis.. In terms of land area, vacant agricultural land and dairy farms make up 77% of total agricultural acres in Butternuts. It is possible that some of the dairy farms included in Figure 15 may have now shifted to cattle but is not yet reflected in the New York State Real Property Services data.

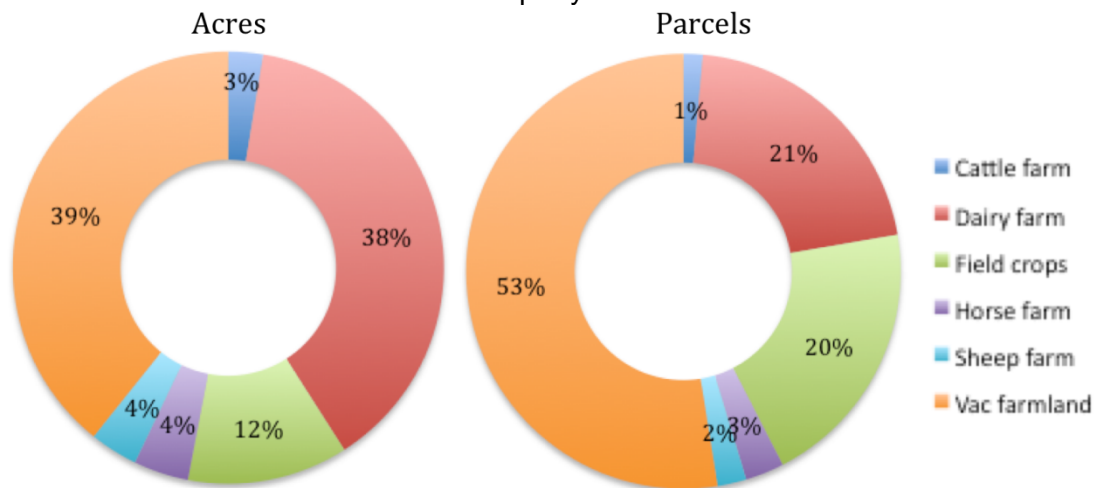


Figure 15. Ag parcels by land use sub-classification type, 2012 (Total acres = 3790.8; total parcels = 139). *Source: New York State Office of Real Property Services*

Many agricultural enterprises are found along the Butternuts Creek corridor, which supports many of the Town's dairy and field crop operations but also contains a number of vacant productive agricultural parcels. A cluster of horse, dairy, and sheep and wool farms are found along the Town's eastern boundary with the Town of Otego. Mapping also shows that many of the Town's agricultural enterprises are found within agriculture districts. (See Town of Butternuts Parcels By Agricultural Enterprise map, above.

There are many agricultural operations in Town. These include maple syrup, timber and forestry, Christmas tree farms, eggs, vegetables, beef (including grass-fed, organic and pastured beef, pork and goat), turkey, dairy heifers and calves, horses, sheep (wool), bees (honey), and field crops. Harvesting of firewood provides an important alternative energy source in addition to contributing to the local economy. Several farms have value added products such as custom butchering, cheese, butter, and yogurt. There is one farm that specializes in therapeutic riding. Hay and corn are the most common field crop. Some farms have multiple agricultural products produced on them. Agriculture in our

town makes possible the sale of fresh produce locally, including at the farmers market in Gilbertsville and, year-round, at Southwind Farms.

NYSDEC information suggests that Butternuts has at least one concentrated animal feeding operation, or CAFO. As defined in the Environmental Conservation Law, this facility is a “medium” CAFO, which means that the number and type of animals fall within certain ranges—200-699 mature dairy cows, or 200-999 cattle, for example. Because they are considered a point source of pollution under State law, these facilities are subject to certain permitting and reporting requirements. In the case of medium CAFOs, a Comprehensive Nutrient Management Plan is part of these requirements.

### Ag Census Data

Ag Census Data can shed light on the status of agriculture in the region. The data presented below are based on the Butternuts region zip codes including 13849, 13843, 13825, 13809, 13808, and 13776.

The number of farm operations in the Butternuts region<sup>7</sup> stood at 268 in 2007. This represents an increase in farms since 1997. The rate of growth of new farms slowed between 2002 and 2007. By contrast, the number of farm operations in Otsego County decreased 5% from 1,028 in 2002 to 980 in 2007; the number of farms in Chenango County experienced similar declines.

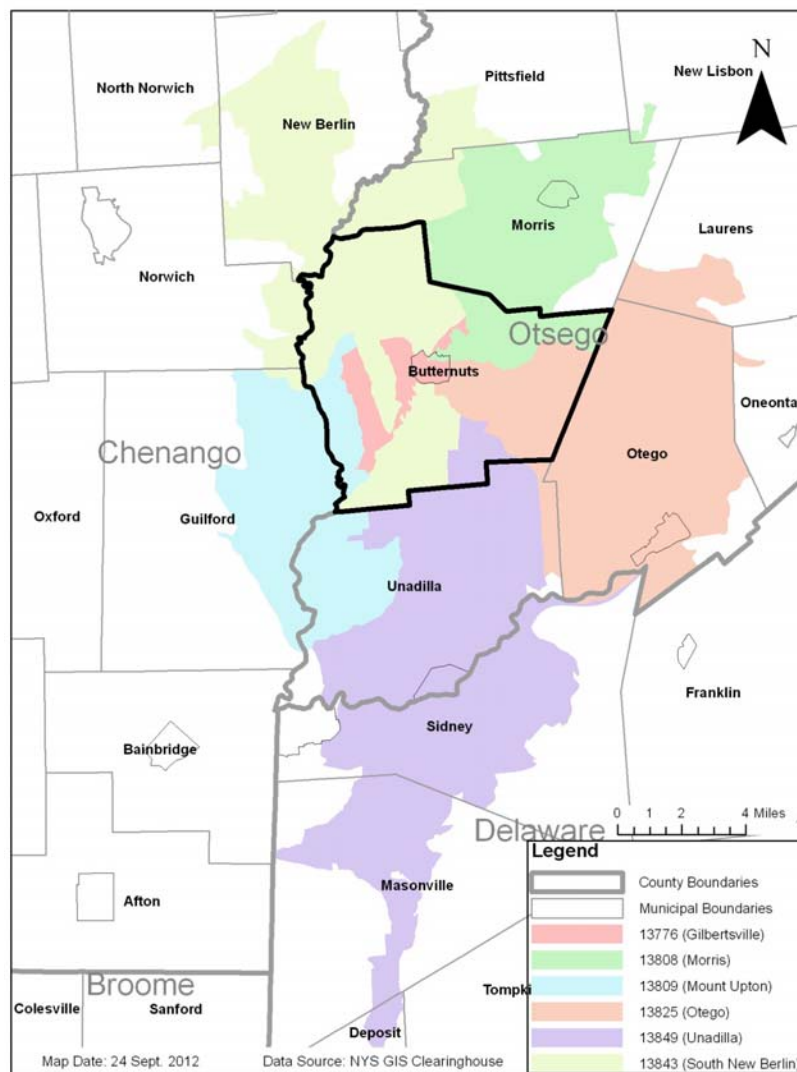


Figure 16. Zip Code Map

<sup>7</sup> The smallest geography for which Ag census information is released is the Zip Code. Only the Gilbertsville Zip Code is wholly contained within the Town of Butternuts; the remaining five areas were chosen based on their proximity and representativeness. Together, these six areas form the “Butternuts region.” See **Error! Reference source not found.**, Zip Code Map.



## Town of Butternuts Comprehensive Plan August 2013

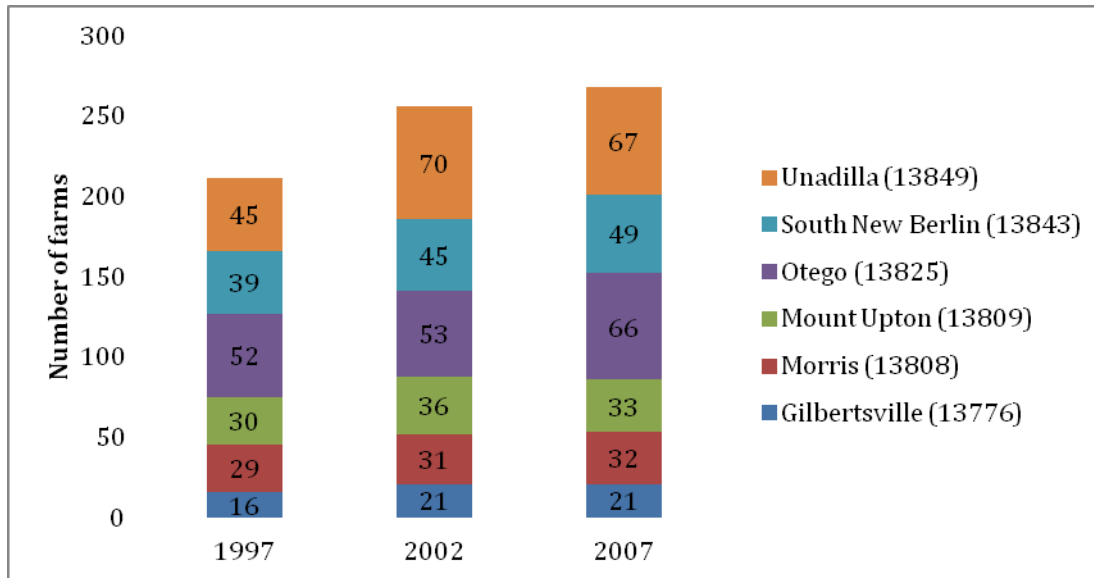


Figure 17. Number of farms by zip code. *Source: US Ag Census*

By area harvested, 75 farms in the region are medium-sized, operating between 50 to 999 acres, and there are only 3 farms operating 1,000 or more acres. By sales, farms in the Butternuts region are mostly small, with sales worth less than \$50,000 each, a category of farms that grew between 2002 and 2007. Throughout New York, there are many more new farms that are small in acreage and in income levels.

There is anecdotal evidence to suggest that, in Butternuts, many farm operations—based in Town as well as in neighboring municipalities—rent farmland. Precise data on this phenomenon are difficult to obtain. However, it likely leads to a situation in which large farms tend to get larger as they add rented acreage to the operation. Rented land may be particularly important to newer operations, allowing them to expand and continue to farmlands that were once a part of older operations.

Table 6. Farm operations by total sales category, 1997-2007, Butternuts Zip Codes.

	1997		2002		2007	
	n	%	n	%	n	%
<i>Farm size by sales</i>						
Less than \$50,000	n/a		199	77.7%	216	80.6%
\$50,000 to \$249,999			49	19.1%	38	14.2%
> \$249,000			*	3.1%	14	5.2%
< \$10,000	112	53.1%	n/a			
\$10,000 to \$99,999	53	25.1%				
> \$100,000	46	21.8%				
<i>Farm size by area harvested</i>						
1 to 49	39	18.5%	54	21.1%	63	23.5%
50 to 999	168	79.6%	195	76.2%	202	75.4%
>1,000	4	1.9%	*	2.7%	3	1.1%
Total	211	100.0%	256	100.0%	268	100.0%

\*data withheld when released *Source: Ag Census*

## Town of Butternuts Comprehensive Plan August 2013

In 2007, Ag Census data show that the most common agricultural practices were related to crop harvesting, haying, and animal sales. Half of all farms in the region had sales of crops, such as corn for silage and other grain production, and over one third of animal sales are related to cattle and calves. Dairy comprises a small share of regional commodity production, yet over half of the farm operations in the Gilbertsville Zip Code had sales of dairy and milk. Nearly a third of all farms have inventories of horses and ponies. Smaller percentages of all farms have sales or are involved in production of vegetables (8%), fruit and tree nuts (4%), berries (4%), maple syrup (3%), and Christmas trees (2%).

Table 7. Farm operations by agricultural practices, Butternuts zip codes.

Farm Type	1997		2002		2007	
	n	%	n	%	n	%
Cropland harvested	181	86%	210	82%	201	75%
Hay and haylage	165	78%	178	70%	176	66%
<i>With sales of</i>						
Animals	160	76%	150	59%	158	59%
Cattle and calves	138	65%	107	42%	94	35%
Poultry, including eggs	10	5%	7*	-	29	11%
Sheep and goats	13	6%	22*	-	31	12%
Hogs and pigs	12	6%	9*	-	9	3%
Crops	90	43%	100	39%	133	50%
Milk and dairy	67	32%	48	19%	43	16%
<i>With inventory of</i>						
Beef cows	74	35%	68	27%	50	19%
Milk cows	72	34%	51	20%	43	16%
Horses and ponies	48	23%	70	27%	83	31%
Layers	19	9%	*	-	23	9%
Total farms	211	100%	256	100%	268	100%

\*Some 2002 data were withheld; counts are thus incomplete for this year. *Source*” US Census of Agriculture, 1997, 2002, and 2007

Table 7 also shows that, since 1997, agricultural practices on farms in the region have diversified. The steepest declines have been in cattle and milk and dairy, while the number of farms with other types of animal sales, especially poultry and sheep and goats, have generally increased or remained stable. The number of equine farms has nearly doubled since 1997, although it still represents less than a third of all farms proportionally. The number of operations with crop sales has also increased.

With a few exceptions, the characteristics of farm operators remained stable between 1997 and 2007. In 2007, about a third of all operators work off their farms for 200 days or more, and 53% listed farming as their primary occupation. A small percentage of operators are tenants (Figure 18). The principal changes are related to ownership: The number of people living on their farm has increased by 68 (93% of all farms), and the number of full owners has increased by 69 (63% of all farms).

According to Otsego County, there are 3,255 acres of prime farmland soils in Butternuts (this includes town and village). 753 acres of prime farmland soil if drained, 16,640 acres of soils of statewide importance, and 13,731 acres containing other kinds of soils.

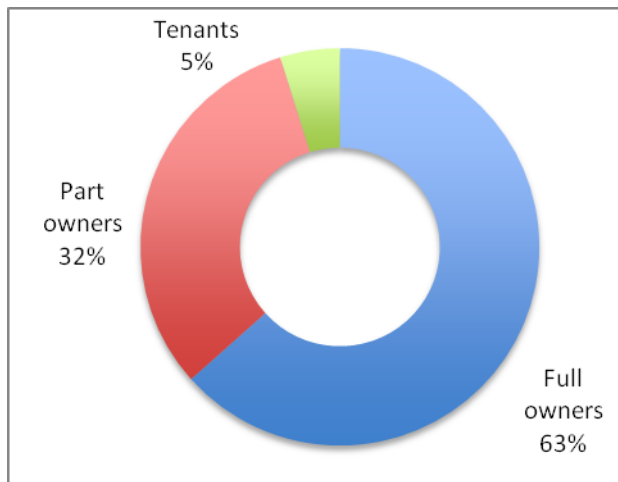


Figure 18. Tenure of farm operators in Butternuts zip codes, 2007.

A local conversation about agriculture (Ag Talk and Wall, see Appendix) resulted in many observations about the current status of agriculture in Butternuts. These include:

1. Agriculture enjoys wide public support.
2. There are fewer dairy farms but those that remain are larger.
3. There is greater production per farm, with larger herd sizes.
4. Highest losses are with mid-sized farms.
5. There are more farms under \$10,000 income
6. There is more rented farmland.
7. More organic farms exist.
8. Larger farms – younger. (Anecdotal evidence tells us that there are fewer farmers, but many existing farms now rent land in and out of Town, from former farms, and that the remaining farmers are part of the next generation of farmers.

## Economic Development

### Business Patterns by Zip Code

A census of all establishments is carried out once every year by the US Census. A review of twelve years of economic data at the zip code level (See Figure 16, Zip Code map) revealed a net increase in the number of firms located in zip codes surrounding Butternuts. In 2010, there were a total of 54 establishments in the South New Berlin, Morris, and Gilbertsville areas. However, since 2008, this region has lost five establishments, and proportionally, this decline has been greatest in Gilbertsville where there were the fewest establishments and Morris, had the most.



Figure 19. Number of firms by zip code, 1998-2010. *Source: Zip Code Business Patterns/US Census Bureau*

In 2010, the region had 241 paid employees, with 27%, 57%, and 16% in South New Berlin, Morris, and Gilbertsville, respectively. While total payroll in 2010 was over \$5.3 million, Gilbertsville accounted for just 5% of this. All firms had less than 40 employees, with 70% employing between 1 and 4 people. Since 2007, the region has added two large employers, one in manufacturing and one in retail.

Many firms are in the “other services” (such as automobile repair and laundries) and retail sectors; there are smaller concentrations in the construction and healthcare and social assistance sectors, too. The Gilbertsville zip code has the lowest diversity in businesses. In general, the region has lost manufacturers, professional service firms, and wholesalers, but has gained establishments in the other service category since 1998. Most recently, the construction sector has experienced the greatest contraction.

## Town of Butternuts Comprehensive Plan August 2013

Table 8. Number of firms by sector, Gilbertsville, Morris, and South New Berlin zip codes.

Industry Code Description	2010				Change	
	13776	13808	13843	Total	2009-2010	1998-2010
Accommodation and food services	1	2	1	4	0	0
Administrative and Support and Waste Management and Remediation Services	0	2	1	3	0	1
Arts, entertainment, and recreation	0	1	0	1	0	1
Construction	0	4	1	5	-4	1
Finance and insurance	0	3	1	4	0	0
Health care and social assistance	1	3	1	5	0	1
Information	1	2	1	4	0	3
Manufacturing	1	1	1	3	0	-2
Other services (except public administration)	4	5	2	11	1	3
Professional, scientific, and technical services	0	0	1	1	0	-2
Real estate and rental and leasing	0	0	1	1	-1	-1
Retail trade	2	5	3	10	0	1
Transportation and warehousing	0	0	1	1	0	0
Wholesale trade	0	1	0	1	0	-2
Total for all sectors	10	29	15	54	-4	4

Source: Zip Code Business Patterns/US Census Bureau

### Inventory of Local Businesses

There are several businesses, and many home-based businesses and services operating within the Town of Butternuts. Many of these are not reflected in the above data (which comes from the US Census). The local inventory of businesses shows a large diversity of businesses and services. These include artists (music, sculpture, pottery, woodwork, writers, art fabricator, and more), auto garage and detailers, contractors (building, plumbing, heavy equipment, gravel, and more), catering and restaurants, and several retail operations. Retail businesses are also varied and include hardware, ice cream, grocery, gun shop, bookseller, etc. Service businesses include consultants, web design and hosting, lawn services, beauty parlor, floor sanding, hauling, accounting, attorney, and veterinarians. Several B & B inns can be found in Butternuts as well as some light manufacturing.

### Employment by Industry and Occupation

Census counts also collect employment information. This data counts employment information for those persons aged 16 and older. This information reveals that a substantial percentage of the population works in the educational services and health care sectors. Manufacturing remains an important sector, and many individuals also work in the retail sector.

## Town of Butternuts Comprehensive Plan August 2013

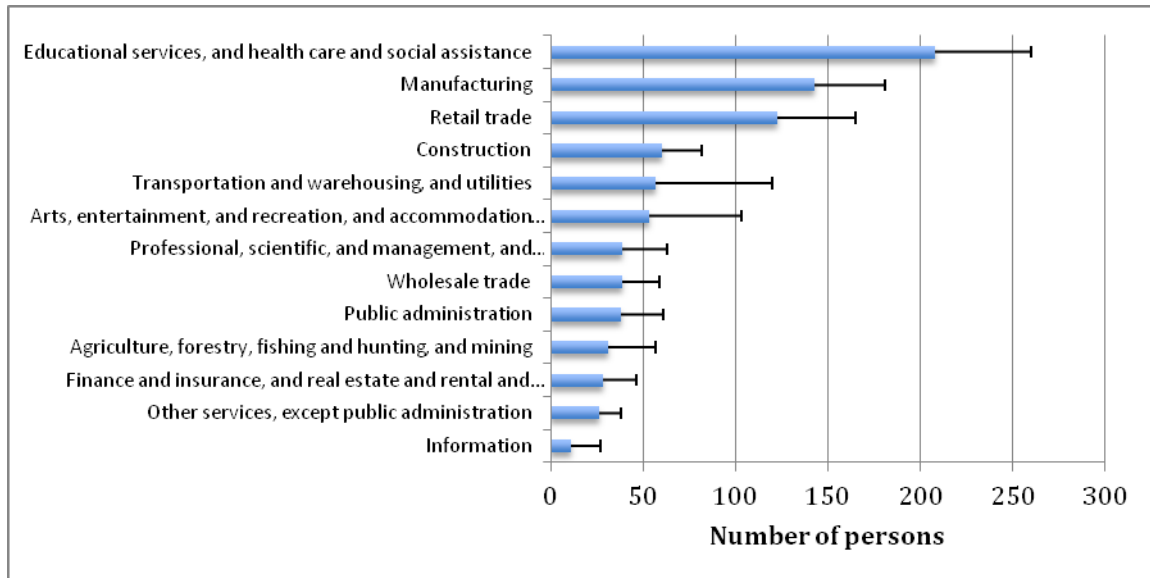


Figure 20. Employment by sector for the population of Butternuts, 16 years and older. (Horizontal bars represent ACS margin of error.) *Source: 2006-2010 ACS/US Census Bureau*

Occupation data indicate that many Town residents are involved in management, sales, and production. Workers with these occupations are found in a fairly diverse subset of industries. Many management and business workers are found in industries as diverse as agriculture, education, arts and entertainment, and public administration, while many people in sales and office occupations are in retail, wholesale, warehousing, and public administration.

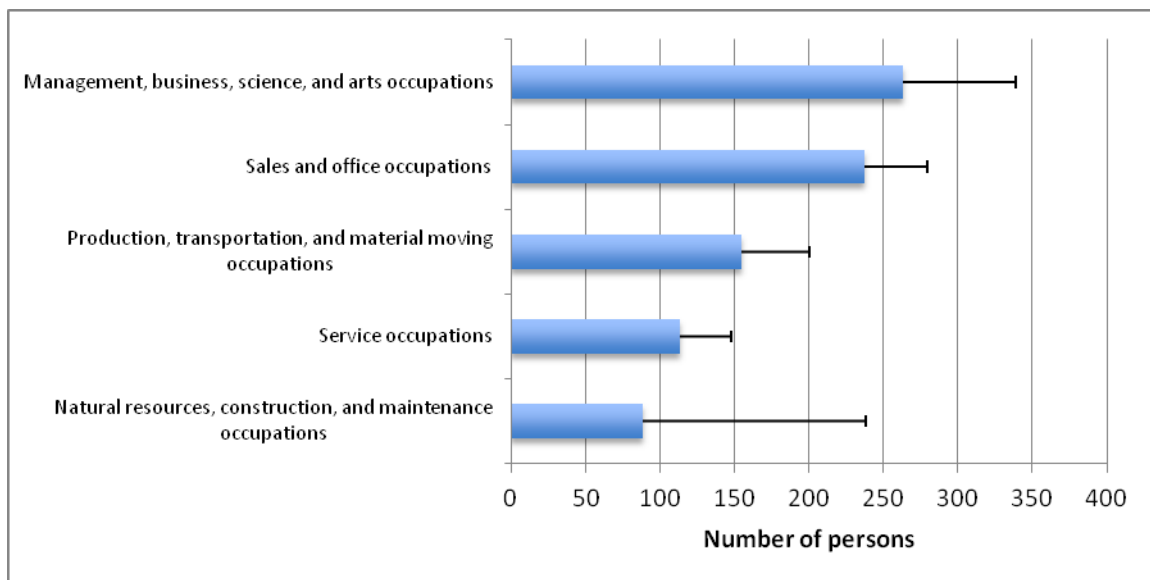


Figure 21. Occupation data for the population of Butternuts, 16 years and older. (Horizontal bars represent ACS margin of error.) *Source: 2006-2010 ACS/US Census Bureau*

## Transportation

Transportation is part of what makes a community function. A robust transportation system facilitates the movement of people and goods: people getting to work, children to school, deliveries to stores, agricultural products to market. A well-designed and maintained system can ensure that this happens with the highest levels of safety and efficiency. (For a map of transportation infrastructure in the Town, see Town of Butternuts Infrastructure Map).

### Trips to Work

The Census is also the best data available to describe what type of transportation residents of Butternuts commonly use. The information is limited to measuring the transportation patterns of those commuting to work. As expected, little has changed over the past decade and automobiles are overwhelmingly used to commute by residents in Butternuts. Smaller numbers of people carpooled and worked at home. Public transportation (discussed below) is likely not used for commuting.

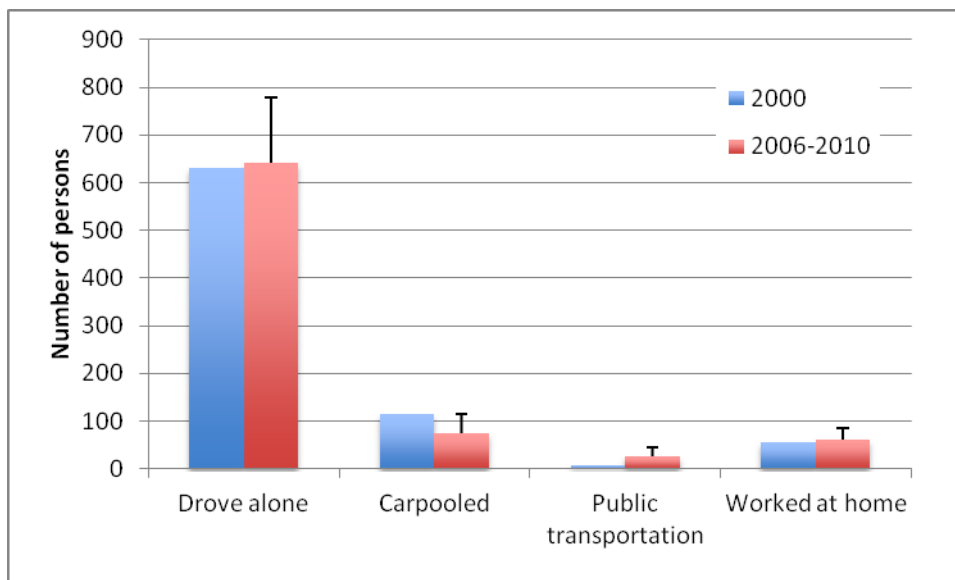


Figure 22. Mode of commuting to work, for the population of Butternuts, 16 years and older. (Horizontal bars represent ACS margin of error.) *Source: 2006-2010 ACS/US Census Bureau*

### Roads

The Town's transportation system can be classified in terms of roads, bridges, facilities for pedestrians and bicycles, and public transportation. The roadway system in the Town of Butternuts consists of one State highway, Route 51; a number of Otsego County roads that provide for interregional travel; and a network of Town roads that provide local access. Based on the New York State DOT Local Highway Inventory, there are 100.8 miles of roads in Butternuts. Most (66%) are Town-owned roads, 31% of which are paved. County roads (i.e. routes 3, 4, 5, 8, 18) and State roads are all paved and represent 27%, and 7% of the road network, respectively.

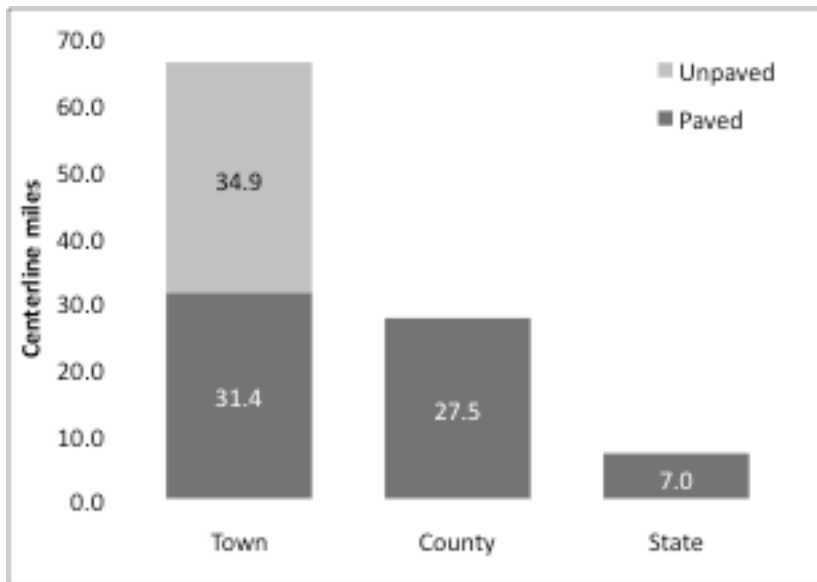


Figure 23. Centerline miles by jurisdiction and surface type. *Source: NYSDOT*

These are all considered 'low volume roads'. According to recent traffic counts, Route 51 has a maximum Average Annual Daily Traffic (daily traffic count adjusted by seasonal and other factors and referred to as AADT) volume of 1,450 vehicles/day. NYSDOT traffic counts since 2005 show that AADT averages 204 on Town roads and 429 on County roads. This is in keeping with the rural nature of the Town, and means that there are not high volumes of through traffic.

The County's infrastructure within Butternuts consists of 54.98 lane miles and the overall conditions of each road are as follows:

- **CR #3:** Asphalt overlay roadway with and average width of twenty (20') feet and varying shoulder width averaging approx. five (5) feet. Overall condition of the roadway is good with no tentative scheduled work.
- **CR #4 South:** Asphalt overlay roadway with and average width of twenty (20') feet and varying shoulder width averaging approx. five (5') feet. Overall condition of the roadway is good.
- **CR #4 North:** Asphalt overlay roadway with and average width of twenty (20') feet and varying shoulder width averaging approx. five (5') feet. Overall condition of the roadway is average with the northern portion of it tentatively scheduled for a 2013 Hot-In-Place Recycle with a double surface treatment overlay.
- **CR #5:** Asphalt overlay roadway with and average width of twenty (20') feet and varying shoulder width averaging approx. four (4') feet. Overall condition of the roadway is good with no tentative scheduled work in 2013.
- **CR #8:** Asphalt overlay roadway with and average width of sixteen (16') feet and varying shoulder width averaging approx. four (4') feet. Overall condition of the roadway is average with no tentative scheduled work in 2013.
- **CR #18:** Asphalt overlay roadway with and average width of twenty (20') feet and varying shoulder width averaging approx. five (5') feet. Overall condition of the roadway is good with no tentative scheduled work in 2013.



## Town of Butternuts Comprehensive Plan August 2013

The average AADT on County roads (Traffic Count) as counted in 1997 by the Otsego County Highway Department are:

CR #3 / 527  
CR #4 / 481  
CR #5 / 480  
CR #8 / 372  
Cr #18 / NC (No Count Recorded)

Traffic is higher on NY-51 south of the Village, where it intersects several County roads. Volume on NY-51 in Butternuts has generally decreased since 1997 (Figure 24). Historical data also show that volumes on most Town and County roads have decreased since the last counts were taken (i.e. between 2004 and 2009).

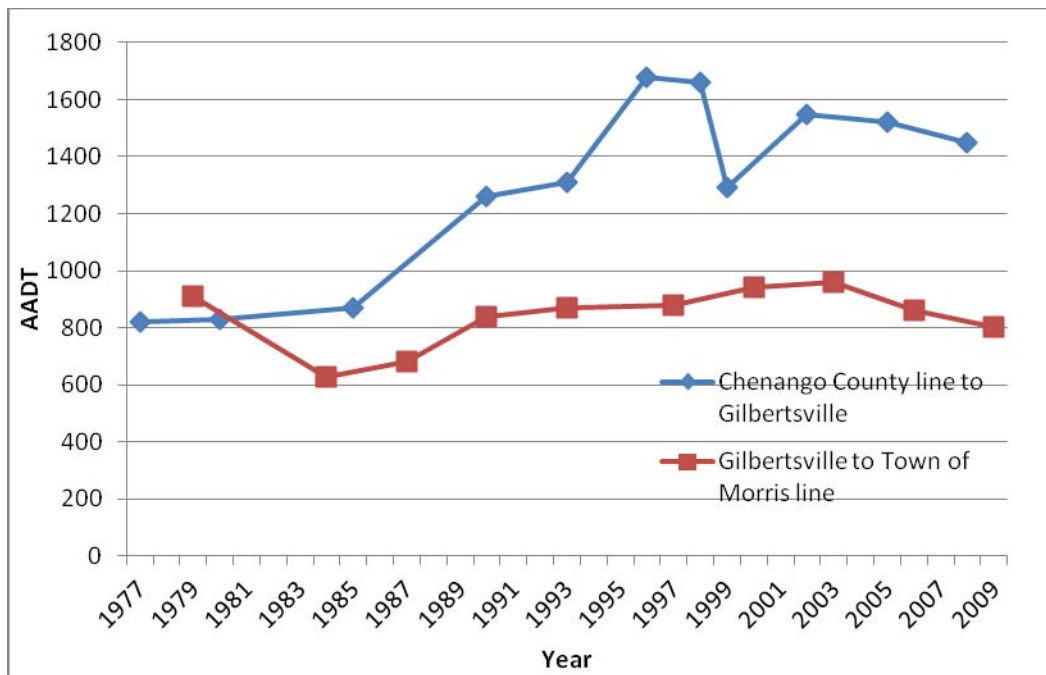


Figure 24. Traffic volume (AADT) change on NY-51, 1977-2009.

A recent analysis<sup>8</sup> evaluated Town roads for exposure to the effects of concentrated traffic, particularly heavy vehicles, as well as damage associated with different types of development. A comprehensive evaluation of the right-of-way characteristics of Town roads conducted as part of this analysis found that Butternuts is at “medium-high risk” for potential right-of-way impacts. This means that our road infrastructure may require modification to accommodate traffic increases, and remain safe and congestion-free. For instance, existing curves and grades on Town roads may require changes to accommodate truck traffic; this, in turn, can require takings, drainage improvements, and other capital improvements. This analysis also concluded that the Town’s road network is at low risk of damage from small-scale site development but at a “high” to “very high” risk from regional commercial development.

<sup>8</sup> Delta Engineers, Architects, and Land Surveyors, *Delta Road Protection Program: Engineers Report for the Town of Butternuts* (June 2012).

## Town of Butternuts Comprehensive Plan August 2013

According to interviews with highway staff, the Town highway department maintains an inventory of equipment that in 2010 was rated mostly good to excellent, needing little but maintenance. The highway department routinely shares services with neighboring municipalities as well as Otsego County. Interviews with the current Town Highway Supervisor indicated that adequate staffing to keep up with the workload may be a challenge in the near term. Given reduction in state money and property tax caps, funding department operations was also considered a challenge.

### Bridges

The cost to maintain, rehabilitate, and replace bridges makes them a focus of concern. The New York State DOT Highway Bridge Data inventory lists ten bridges in the Town of Butternuts (Table 9).

Table 9. Bridge inventory, Town of Butternuts.

Owner	Feature Carried	Feature Crossed	Year Built or Replaced
NYSDOT	Route 51	Copes Brook	1968
	Route 51	Thorp Brook	1969
Otsego County	C.R. 3	Butternut Creek	1960
	C.R. 4	Dunderberg Creek	1989
	C.R. 8	Cahoon Creek	1936
	C.R. 8	Butternut Creek	1996
Town of Butternuts	Clarence Musson Rd.	Cahoon Creek	1940
	Flat Iron Rd	Butternut Creek	1993
	Latham Corners Rd.	Unadilla River	1999
	Spring St.	Butternut Creek	2010
Village of Gilbertsville	Green Street	Dunderberg Creek (closed)	1980

The State is required by law to inspect all bridges at least every two years. Bridges found to have critical problems are inspected annually. All of the bridges in the Town are in fair to good condition based on the most recent inspection, as reported in November 2011.

There are also a number of large culverts that the traveling public may think of as bridges, but which are subject to different requirements. These include a number of crossing that were impacted by the floods of 2006 and 2011 respectively, including Route 51 over Dunderberg Creek in the Village of Gilbertsville, County Road 3 over Shaw Brook and unnamed creek, Lulu Coon Rd over Sand Hill Creek, and others.

### Pedestrians and Bicyclists

Pedestrians will find sidewalks throughout the Village of Gilbertsville. There are wide shoulders on Route 51 south of the Village often used by bicycle clubs. There are limited pedestrian accommodations on County or Town roads: A significant proportion of paved Town roads and many County roads have shoulder widths of 5 feet, which is commonly considered to be the minimum necessary to provide benefits for pedestrians and cyclists.

### Public transportation

Otsego County operates the Otsego Express, which consists of 13 routes throughout the County. Currently, there is daily deviated fixed route service to Butternuts, on Route 9,

which stops twice in Gilbertsville. While this may assist some residents who do not drive in meeting some basic needs, it may leave many transportation needs unmet. There are additional County agencies as well as the ARC that also provide transportation.

### **Pipelines**

There are both intra- and interstate pipelines in the Town of Butternuts. The former are regulated by the State Public Service Commission (PSC) and provide natural gas service to local markets. Dominion Transmission, Inc. operates the DTI pipeline located in Town. This pipeline serves a large portion of the Southern Tier.

Interstate pipelines are regulated by the Federal Energy Regulatory Commission (FERC). According to the National Pipeline Mapping System (See Town of Butternuts Infrastructure map, above), a hazardous liquid pipeline (the Tepco Pipeline shown on the Infrastructure map) carrying an interstate designation traverses the northern portion of Butternuts. It transports liquefied petroleum gas, and the facility has a substation located in Butternuts.

## Community Facilities and Infrastructure

### Schools

The Town of Butternuts is served primarily by the Gilbertsville-Mt. Upton Central School District (GMU). The GMU District has a physical plant that includes a school building and associated athletic facilities situated on a 40-acre parcel located along NY-51, south of the Village. Renovations to the elementary, junior high, and senior high schools, all located on the same campus, were completed in 2010. About 20 non-resident students pay tuition to come to GMU School District. Interviews with the school superintendent indicated that maintenance of district facilities was a goal and indicated that there are no serious infrastructure challenges currently.

The GMU expenditures per pupil are approximately \$9,000 per pupil for general education. Total expenditure per pupil was \$18,128 for 2009-2010 school year. Local revenues (taxes) for the school are:

2012-13 School Tax Levy = \$2,251,215  
Total-Local Effort = \$1,853,685.39  
STAR Reimbursement = \$397,529.61  
True tax rate = \$12.241931 per \$1,000

The school is presently assessed for a total value of \$7,541,200.

GMU shares programs with BOCES programs for technology, music and physical education (Edmeston Family and Consumer Science and Business) and Otselic Valley (Music). Recently, there have also been talks with neighboring school districts about other regional school sharing possibilities.

Enrollments have declined steadily since 1998, standing at 435 students in 2011. Since 1993, the school district has lost over 225 students, or 35%. Projections and demographics suggest that declines will likely continue but will moderate over the next 6 years. District-wide, 32% of students were eligible for free lunches; 14% are eligible for reduced-price lunches.

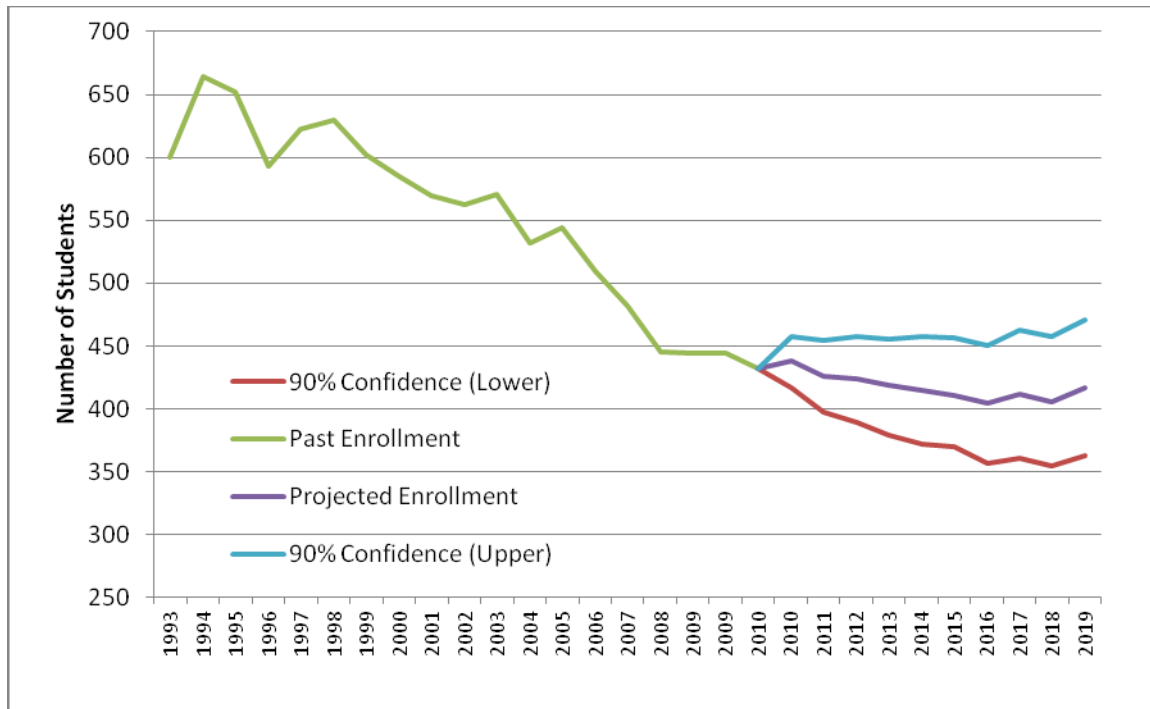


Figure 25. Historical and projected change in enrollments, 1993-2019, Gilbertsville-Mt. Upton Central School District. Source: New York Center for Rural Schools.

Otsego County has numerous opportunities for post-secondary education, from technical and vocational colleges and schools offering two-year degrees to large state and private four-year colleges and universities.

#### List of Community Organizations

- Churches: Baptist, Episcopal, and Presbyterian. As an expression of their faith the churches reach out to the community in practical ways. The Presbyterian Church has a program for seniors, and a “Lamb’s Rack” for free clothes. The Baptist Church has a free or inexpensive summer art week for children. The Episcopal Church is host to a nursery school, the Butternut Valley Nursery. Often the churches work together.
- The Butternut Valley Grange originally was for farmers, but many long time residents especially from farming families still participate. They hold “meet the candidate” nights, and other public service events.
- The American Legion took over the old Masonic Lodge building next to the Fire House on Route 51. Several organizations use this facility including the Food Pantry (operated in cooperation of the three churches), and the Boy Scouts. (The cub scouts usually meet at the Presbyterian Church and Girls Scouts are more likely to meet at private houses).
- Village Improvement Society owns the Gilbert Block and the Post Office (both are historic buildings). It rents out stores at a low rent and artist studios above. Current stores are an ice cream shop, Value-Way Grocery (also a kind of social center) and a bookstore. The VIS has been raising money to restore the beloved Post Office where people meet outside on Saturday mornings particularly. Organizations have their pie sales just outside and in the summer the farmers’ market is nearby on Saturday mornings.

## Town of Butternuts Comprehensive Plan August 2013

- The Major's Inn is a Tudor style building owned by the Major's Inn Foundation, is the Town's 'front parlor' that is rented for weddings and graduation parties as well as community events. The rooms upstairs have been restored and some are filled with things from days gone by. It recently won an award from Otsego 2000 for preservation of an important landmark.
- The Empire House is a gathering place and emergent community center whose owner invites local musicians to play, allows community groups to use his space and occasionally puts local art or crafts on display for sale.
- The Gilbertsville Free Library - the township's only library – is located on Commercial Street in an historic building.
- Emergency service organizations include the Fire Department and Emergency Squad, along with their auxiliary.
- Government Organizations include the Town Board and Planning Board, along with the Village Board and their Planning Board.
- Gilbertsville Mount Upton School is located on Route 51 between Gilbertsville and Mount Upton.
- The Rod and Gun Club is located north of the village.
- 4-H clubs exist throughout Town using mostly private facilities.
- The Butternut Valley Alliance (not physically located within the Town of Butternuts) is a relatively new organization serving the whole Butternut Valley. It is interested in the environment and in promoting agriculture, and preserving cultural heritage.
- The Butternut Valley Garden Club shows each year at the Morris Fair (the Otsego County Fair) and at the state fair.
- Farmers Markets are held Saturday mornings in summer.
- Studio Dionysus, on Route 51, is also used as a gathering place.
- Several other political and citizen coalitions exist in and around Butternuts.

### Recreation Resources

There are several parks and public open spaces located in the Town (See Town of Butternuts Park Lands and Historic Districts map). Copes Corner Park, which was recently shut by the County and whose status is currently in flux, is located in the southern portion of Butternuts along NY-51 and Butternuts Creek. Formerly managed by the County Highway Department, this facility has 18 campsites with water and electric service and 3 pavilions. Wagner Farm State Forest is a 458 acre, State-owned forest with few improvements. It is managed for multiple uses, including forest products, hiking, hunting, fishing, trapping, camping, and open space preservation. There is a short, 0.3 mile trail maintained to provide access for mobility-impaired individuals, and there are some old logging roads and other informal paths. The NYSDEC will be developing a plan for a group of properties, including Wagner Farm, during the next five years. The old Polo Fields, located on County Road 4, are used for soccer and model airplane events. In addition, Village and Centennial Parks are located in the Village.

Butternuts hosts at least two State-funded snowmobile trails and a small portion of a third. These trails are both "secondary" and "corridors" trails. Corridor trails provide a link between communities and attractions. Secondary trails provide access to the corridor trail system. The secondary trails lead to and from parking areas, repair services, food, lodging, fuel, and telephone services and should include the ability to connect with emergency services (police, fire & medical services). Secondary trail location and enhancements of the corridor trail system determine trail-funding eligibility.

These trails are part of the Statewide Snowmobile Trail System managed by the New York State Office of Parks, Recreation, and Historic Preservation. This system includes over 10,000 miles of trails on private and public lands and managed by various entities, public and private.

There is a small State-owned rest area located on the northbound side of NY-51 near its intersection with Copes Corners Road.

Hunting and fishing are also common outdoor recreation activities and take place across the Town on private lands.

### **Utilities**

New York State Electric and Gas  
REA

Time Warner

Frontier

A & A Dish Network

Direct TV

Texas Eastern and DTI (natural gas)

### **Water**

The majority of Town residents rely upon on-site wells and other facilities for water supply. However, the Village of Gilbertsville has a public water supply system, and the Town has recently agreed to form a water district near New South Berlin.

#### **Village of Gilbertsville**

The Village of Gilbertsville operates water supply and distribution system. (See Village of Gilbertsville Potable Water Service map.) Water sources consist of two wells and a reservoir with a construction date of 1896. Wells #1, constructed in 1999, and #2, constructed in 2007, are located on Spring Street and have capacities of 60 gallons per minute and 40 gallons per minute, respectively. The water supply reservoir, recently decommissioned due to turbidity problems induced by sand filter failure, draws water from Dunderberg Creek. Repairs have recently been made to the spillway and a transmission line. Upon additional repairs to the filtration system, the system would become the primary Village water source.

Additional facilities include treatment and an 180,000 gallon concrete storage reservoir. The system serves approximately 399 people via 190 service connections, and daily water production averages approximately 30,000 gallons.

#### **South New Berlin**

The South New Berlin Water District, located in the Town of New Berlin but spans three townships, operates a system serving approximately 400 users via 134 service connections. Water main, water supply, and treatment system improvements were completed in the mid-1990s. According to 2009 State-mandated water quality reporting, the source of their water consists of two drilled groundwater wells.

The Water District is currently undertaking several projects, including mapping of the district, the creation of two additional districts, the addition of 18 connections, drilling a new well, and constructing a new storage reservoir. These improvements are scheduled to be completed in 2013. The Town of Butternuts and the Water District have recently



signed an inter-municipal agreement to establish the Town of Butternuts Water District No. 1. This water district is located in the extreme northwest corner of the Town (Figure 26); it currently encompasses approximately 15 properties.

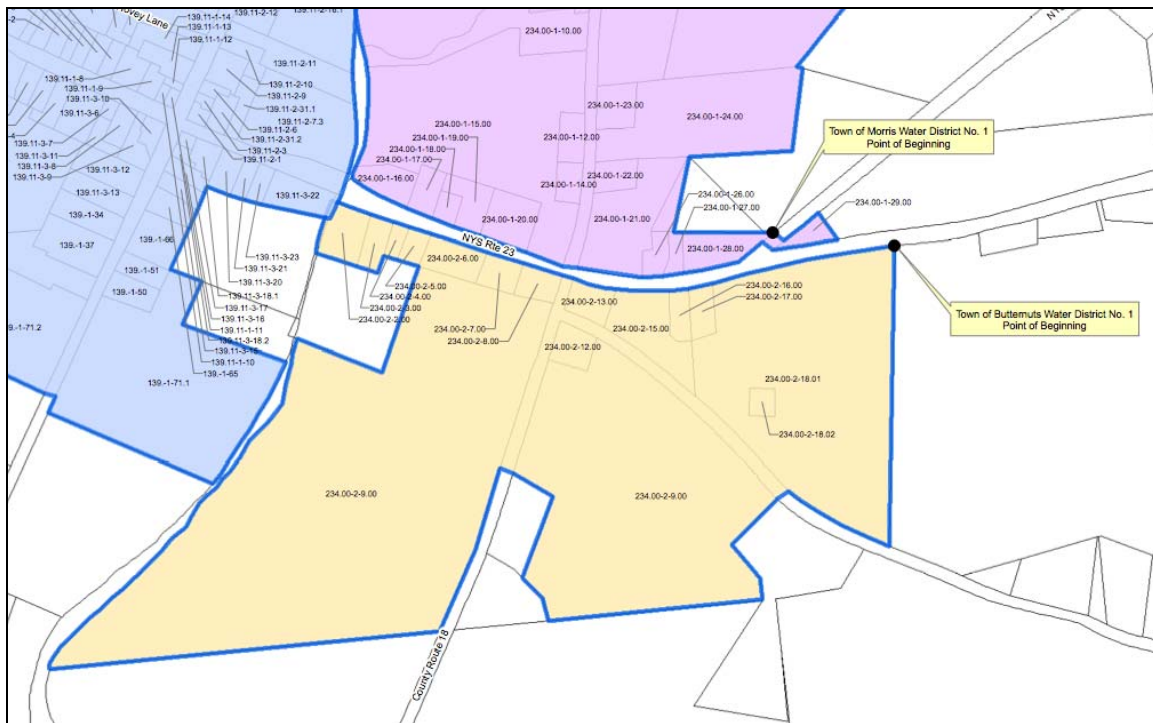


Figure 26. Town of Butternuts Water District 1 (in beige).

### ***Wastewater***

There is no public collection and treatment system. People rely on on-site septic systems throughout both the Town and Village.

### ***Electric and Natural Gas Service***

There are two electric service providers. New York State Electric and Gas provides electric and natural gas service in the Town. The Otsego Electric Cooperative also provides electric service. Its service area covers the western portion of Town. Several area energy companies serve residential homes and businesses with lp gas, oil, kerosene, diesel, and coal.

### ***Energy Use***

Most buildings and homes built in the late 19<sup>th</sup> and early 20<sup>th</sup> century were built in an era of cheap and seemingly abundant fuels. These buildings are often not energy efficient and do not take into account the huge increase of fuel prices.

Today, the costs of energy we use to heat our homes and fuel our vehicles are top concerns. Education and conservation have been incorporated into programs that examine energy efficiency in our everyday life. We are now constructing better-insulated homes, retro-fitting older homes and buildings, making our building stock much more energy efficient.



## Town of Butternuts Comprehensive Plan August 2013

Although older, less efficient appliances and products are still in use, they are being replaced with energy star appliances that greatly reduce electric bills and have less of a negative impact on the environment.

According to the 2006- 2010 American Community Survey for the United States Census Bureau, the following types of energy used were used in Butternuts and are listed by fuel type, number of households, and the overall percentage.

House Heating Fuel	Households	Percent	% Margin of Error
Utility gas	11	1.5	+/- 1.3
Bottled, tank, or L P gas	150	20.2	+/- 7.3
Electricity	39	5.3	+/- 2.6
Fuel oil, Kerosene, etc.	374	50.5	+/- 6.9
Coal or coke	10	1.3	+/- 1.3
Wood	152	20.5	+/- 5.3
Solar energy	0	0.0	+/- 4.6
Other fuel	5	0.7	+/- 0.7
No fuel used	0	0.0	+/- 4.6

### **Telephone and Cellular Service**

Telephone service is provided by Frontier, Time Warner, and AT&T. As Figure 27 illustrates, few parts of the Town likely receive cellular phone coverage. Because the topography of the land can limit cellular service, not all locations in Butternuts may receive service.

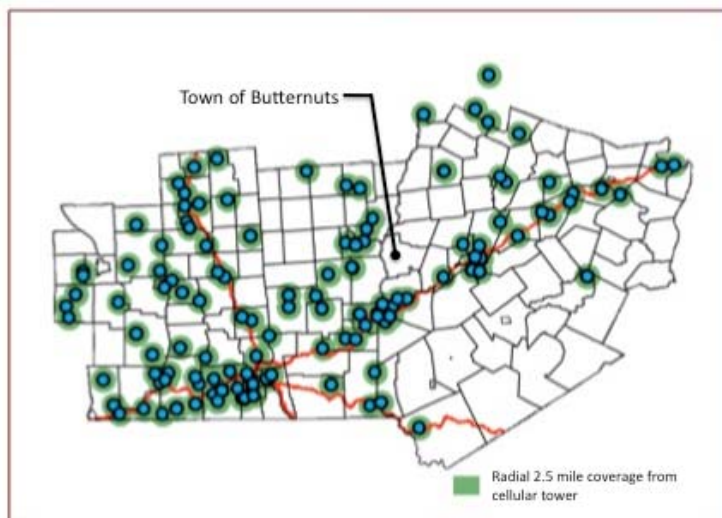


Figure 27. Permitted cell towers in the 5-county Southern Tier Region as of early 2009. Source: Adapted from *Southern Tier East Regional Telecommunications Action Plan* (2009).

### **Broadband**

According to the New York State Broadband Map (Figure 28), a majority of the Town has access to broadband service. Cable broadband is more limited than DSL service. Wireless broadband service is limited to the Unadilla River valley, along the western Town line, and smaller areas in the southern and eastern portions of Town.

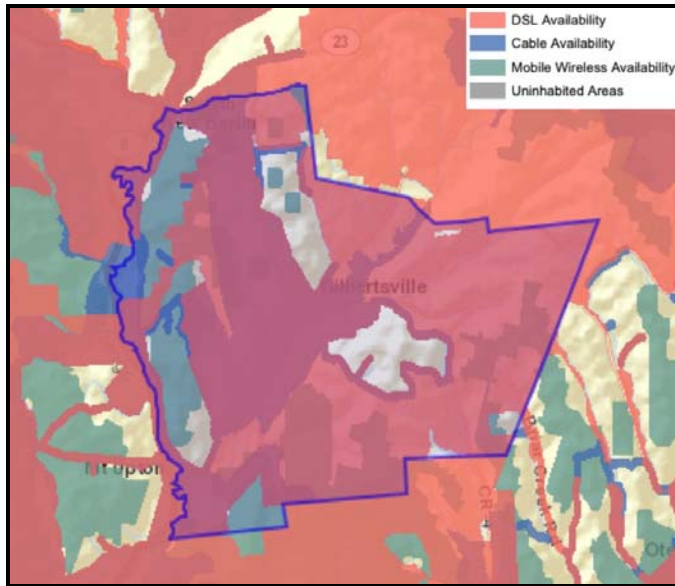


Figure 28. Areas in the Town of Butternuts receiving broadband service. Source: *New York State Broadband Map*

However, this information is subject to two important qualifiers. First, the *quality* of service in our town is uneven. Average connection speeds in rural areas across the county, according to government and other sources, generally lag behind national figures.<sup>9</sup> This is an assertion supported by the 2009 *Southern Tier East Regional Telecommunications Action Plan* (the “2009 STE Telecom Action Plan”), which states that “In theory most of the Region can access the internet, however, especially in rural areas, that access can be at a speed that is too slow to carry pictures, access music files, or download substantial amounts of data.”<sup>10</sup> Slow internet speeds may present difficulties, in particular, for students of all ages taking online courses.

Second, the way cell service to an area (or “market penetration”) is determined, may distort the true amount of broadband coverage. As noted in the 2009 STE Telecom Action Plan, market penetration statistics may overestimate coverage because they extrapolate from one point, which has service, to wider geographies, which may or may not have the same level of service.

This report, using a more conservative methodology,<sup>11</sup> estimated that, for 2008, 48% of Otsego County households were underserved (i.e. have access only to dial-up; also, satellite service, which is widely available, is not included in this figure). Figure 29 shows

<sup>9</sup> See information at [www.broadband.gov](http://www.broadband.gov) and a report entitled *Calix U.S. Rural Broadband: Q1 2012 Report*.

<sup>10</sup> p. 30.

<sup>11</sup> See pp. 22-24 for a description of methods.

these results for Butternuts, clearly depicting that large swaths of our town have limited access to broadband. The report also offers that these results parallel results of the 2007 Census of Agriculture, which asked whether the farm had internet access and whether that access was high speed. It should be noted, however, that, while it serves to outline the general picture of broadband access, this information should be considered dated.

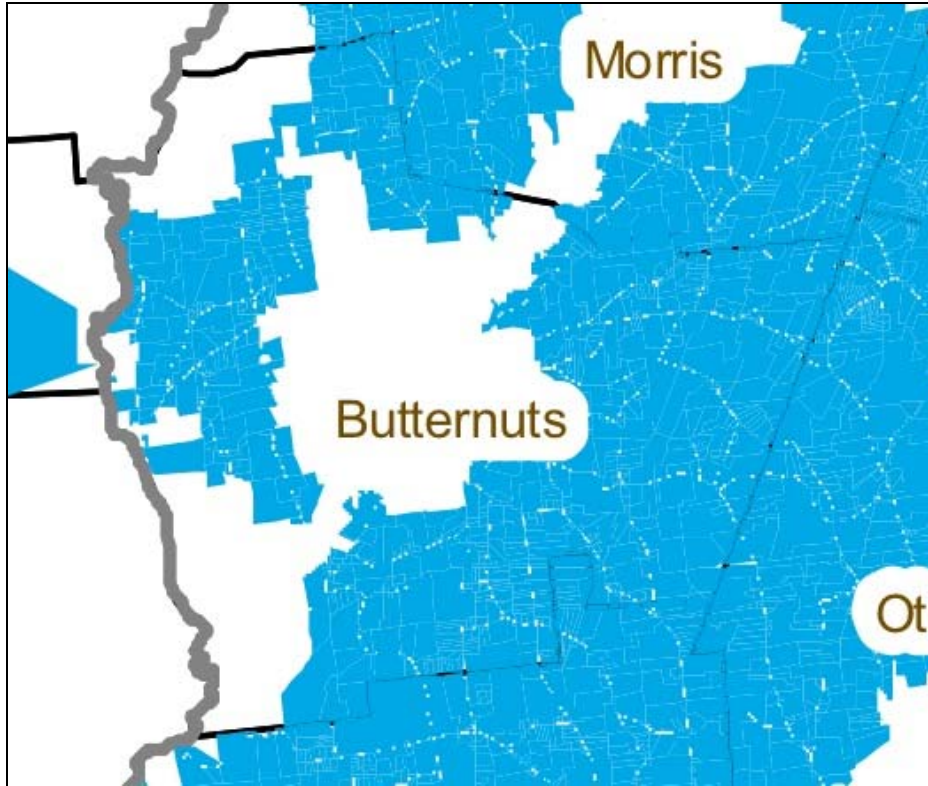


Figure 29. Portion of Butternuts underserved by broadband service (areas in blue, on a per-tax parcel basis). Underserved is defined as: “parcels located 2miles from a telephone company Central Office and more than 500 feet from a fiber line.” *Source: 2009 map entitled “Underserved Broadband Access across the Southern Tier East Region.”*

Finally, there is a town website (<http://www.townofbutternuts.org/>) operated by the Town Clerk on which announcements, copies of official documents, and other local information and announcements are posted.

### **Solid Waste**

The County operates recycling and transfer stations throughout its jurisdiction, and there are several facilities owned by other area municipalities. The closest recycling facilities listed by the County are located in the Towns of Morris and Unadilla. There are several private trash haulers servicing the Town of Butternuts.

Trash in Otsego County is currently taken to facilities operated by the Montgomery-Otsego-Schoharie Solid Waste Management Authority (MOSA), a public-benefit corporation established in 1987. According to MOSA’s 2011 annual report, 90% of what it collects is disposed of at the Seneca Meadows Landfill; 9%, at the Fulton County Landfill; and 1% at the Town of Colonie Landfill.

MOSA operates five transfer stations, the nearest of which is located in the City of Oneonta. On average, MOSA transfer stations have spare permitted capacity of over 1,500 tons/day. The 1989 Service Agreement establishing obligations to MOSA sunsets in 2014, and Otsego County is to begin negotiations to depart MOSA during 2012. It is uncertain as to whether MOSA will continue as a solid waste management authority for the area in the future.

Several trash haulers based in nearby communities serve the Town, including those that take scrap metal.

### **Hospitals and Healthcare Facilities**

The Town has access to several healthcare systems. The nearest hospital facilities are located in the City of Norwich, in Chenango County, and the City of Oneonta. The Chenango Memorial Hospital is a 58-bed offering a range of in- and out-patient medical services and has several extension clinics. The A.O. Fox Memorial Hospital, located in Oneonta, is a 100-bed facility. It also offers a range of medical services. Finally, the Mary Imogene Bassett Hospital, located in Cooperstown, is a 180-bed facility that is part of a much larger network of facilities and providers. All three of these facilities have a Primary Service Area that includes Otsego County. Another primary location for health care is in Morris (Butternut Valley Health Center). An urgent care center is located at Bassett Urgent Care at the former Sidney Hospital. There are several dentists in neighboring towns and an orthodontist in Norwich. Binghamton, Syracuse, and Albany have large medical centers that residents can access as well.

### **Emergency Services**

#### ***Fire and Police***

Police protection is provided by the Troop C of the New York State Police, which has headquarters in Unadilla, and the Otsego County Sheriff's Department. Fire protection in most of Butternuts is provided by the Gilbertsville Fire Department Emergency Squad. Smaller portions of the western part of Town are served by the South New Berlin and Mt. Upton fire districts. The Emergency Squad participates in the Otsego County Mutual Aid Plan.

The Gilbertsville Fire Department Emergency Squad has 25 volunteer fire fighters. An additional 20 volunteers from the ladies auxiliary. Due to the presence of transmission lines in Butternuts, volunteer fire fighters are trained in pipeline safety, and they are trained to handle any problems with NYSEG. All firefighters are required to have completed NYS Fire Service training. The Department maintains the following equipment inventory:

- Class A pumper (1,250 gpm)
- Class A front mount, four wheel drive pumper (1,250 gpm)
- Tanker (1,800 gallons)
- "Brush" truck for fighting grass and brush fires (300 gpm pump capacity)
- Mid-duty rescue, jaws of life, with air bags and breathing apparatus
- 6x6 Polaris Gator (ORV) for brush rescue

#### ***Emergency Medical Service***

Emergency medical service is provided by the Town of Butternuts Emergency Squad. The Squad has mutual aid arrangements with several similar services in South New Berlin, Morris, and Mount Upton. It received 112 calls in 2010, 60 of which originated

outside of Butternuts. It purchased a new ambulance in 2010. Transport services in Town can also be provided by Mercy Flight and CMT medical transport.

### Town Budgets

Assessment of Town budget appropriations provides important information on local expenditures. This information becomes more useful to long-range planning when combined with indicators of fiscal health.

### Appropriations

The distribution of expenditures has changed little since 2008. Appropriations for highways have been the largest share of local budgets, making up over 70% of total appropriations in 2012. Most fire protection funds are received by the Butternuts Fire District. A small and declining appropriation is included for sidewalks—\$400 in 2012. Total appropriations have increased 13% since 2008, which is significantly faster than inflation. Many rural towns in New York have seen increasing highway budgets due to equipment and material cost increases and sometimes, due to increases in staff-related costs.

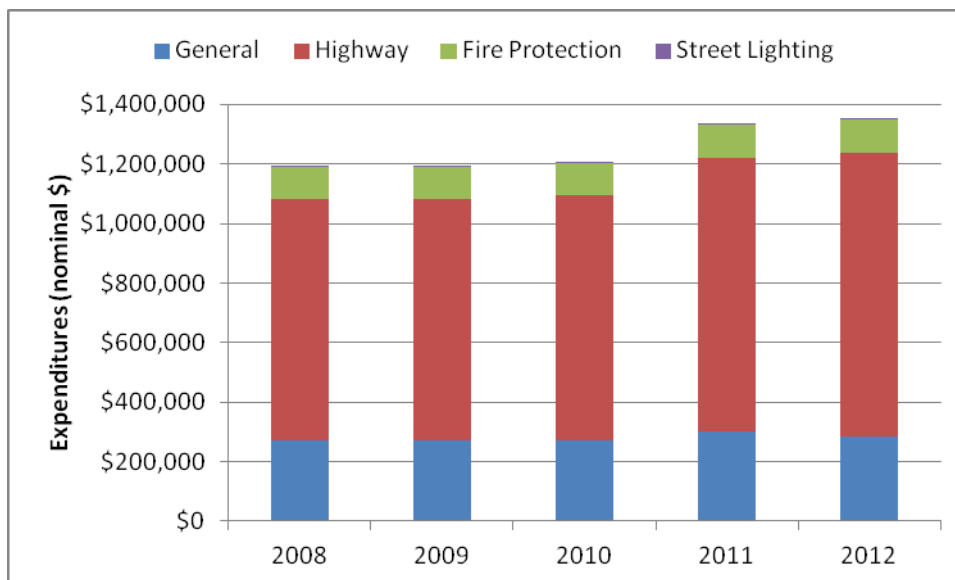


Figure 30. Change in appropriations, 2008-2012, Town of Butternuts. Source: Town of Butternuts.

### Fiscal Health

Property values, which have recently increased in our town, are an important marker of community wealth. These increases have helped to make budget increases possible, and local revenue efforts have kept pace with increases in community wealth. For example, since 2000, total assessed value has increased 47%; likewise, property tax revenue has increased 44% over the same period.

Other common indicators of municipal fiscal health are calculated with population size as a base. The first is market value per capita, which correlates to both local expenditures as well as broader economic activity; it is also used to evaluate debt service capacity. In our town, market value per capita stood at nearly \$75,000, which can be considered

## Town of Butternuts Comprehensive Plan August 2013

high.<sup>12</sup> The second indicator, expenditures per capita, while remaining between \$500 and \$700 (the exception is 2007, when record flooding in 2006 released substantial state aid), have generally increased since 2000, albeit slightly.

When combined (Figure 31), these indicators suggest that increasing levels of wealth (e.g. real total assessed value) have been met by only modest increases in expenditures; appropriations are, therefore, not outstripping local capacity to raise revenues. Moreover, in 2010, debt service constituted only a small percentage of the Town's total budget.

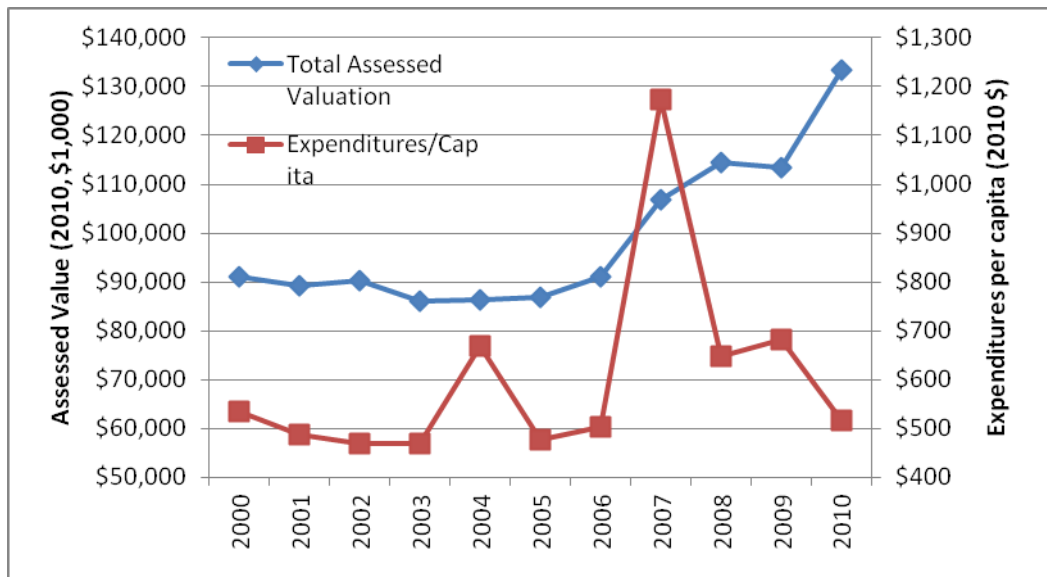


Figure 31. Indicators of fiscal health, 2000-2010, Town of Butternuts. *Source: Calculated from data compiled by the Office of the New York State Comptroller*

<sup>12</sup> This according to rating criteria developed by Standard & Poors.



## Environment and Public Health

### Bedrock Geology<sup>13</sup>

The Town of Butternuts rests on the Appalachian plateau in central New York. The plateau is gently etched with rivers that drain south to the Susquehanna River, and ultimately to Chesapeake Bay. Devonian age sedimentary rocks, (407 to 385 million years old) underlie Butternuts. These sediments were deposited into a mostly marine setting, which started off as a shallow warm sea (Onondaga limestone was deposited), then experienced a large influx of terrestrial mud from erosion of mountains that lay to the east (Marcellus, Panther Mountain, Moscow, Oneonta, and Unadilla formations), and sediments from this event are known as the Catskill delta. The seas gradually waned, and retreated during Oneonta Formation time.

In Butternuts, two main formations are exposed: the Oneonta (younger) and Unadilla (older). The Unadilla commonly shows thin sandstone beds with brachiopod fossil imprints and ripple marks. These features imply a shallow marine setting for the deposition of the layers. The layers of the Oneonta Formation are often reddish, and fossils of tree roots are not uncommon. The reddish (oxidized) character and the presence of trees imply a terrestrial setting. Thus, sea levels were falling, or the continent was rising during Oneonta formation time. There are younger formations that overlie the Oneonta (the Sonyea group of sedimentary layers), but most of the deposition of the bedrock sedimentary units was over by the end of the Devonian, about 360 million years ago.

About 2 million years ago, glaciers from Canada repeatedly advanced over the area, and further sculpted the valleys, and buried much of the lower valley floors during the last glacial retreat, about 13-14,000 years ago. The glaciers scoured depressions into some of the uplands, and these basins were later filled with lakes and bogs after the glaciers retreated.

Numerous geologic faults have been confirmed in Otsego County. These are portrayed on a map developed by geologist Robert Jacobi (see Appendix E). These are faults characterized by very sporadic seismic activity. In Otsego County, numerous northwest-trending magnetic and topographic faults can be found. These kind of fault lines are found throughout the Appalachian Plateau. Jacobi documents the epicenters of three seismic events in easternmost Otsego County as being located on the NE-trending E97 lineament and gravity gradient that mark the Susquehanna. Faults are known pathways for gases and sometimes liquids to move through rock formations.

### Surficial Geology<sup>14</sup>

The surficial geology map (See Surficial Geology of Butternuts Township) shows the depositional environments in the Town. Alluvium consists of modern river deposits and is less suitable for development due to flood potential and a high water table. Kames are sediments deposited in water in direct contact with a glacier. Often these are ponds on the glacier as the ice melts away. Lacustrine sands are usually silt and fine sand deposited into a lake. These lakes often form at glacial margins. Outwash consists of

---

<sup>13</sup> Les Hasbargen, *An Overview of the Geology in the Town of Butternuts* (2012).

<sup>14</sup> This section adapted from Les Hasbargen, *An Overview of the Geology in the Town of Butternuts* (2012).

deposits by melt water streams during glacial retreat. Glacial till consists of sediment deposited directly onto the land surface from ice.

Of the soils mentioned above, kame (mound- or hill-like glacial deposits consisting of stratified sand and gravel) and outwash soils are the most suited to development, owing to favorable characteristics, such as depth to groundwater, compaction, and drainage characteristics. Outwash soils, however, may occur in groundwater recharge areas. Alluvial soils are the least suited to development; these soils have high water tables and usually occur in areas subject to routine flooding. Till soils can present development challenges as well as opportunities, depending upon depth and drainage characteristics.

### **Topography and Slopes**

Elevations in the Town range from 1000 feet near the confluence of Butternut Creek and the Unadilla River, to 2,047 feet in the vicinity of Wilbur Hill along the Town's southern border. Elevations of 1,800 feet are also reached in the northwestern corner of Butternuts, in the vicinity of Nelson Road. The lowest elevations are experienced along the Unadilla River.

Slopes of 15% and greater are encountered across the Town. The steepest grades are located along the Unadilla River, along the western Town line, but slopes of 25% and greater also occur along the Butternut Creek valley and are distributed fairly evenly from this valley south and east. The Butternut Creek valley itself hosts much of the flattest area in Butternuts; other areas where slopes less than 15% predominate can be found in the northwest corner of Butternuts. (See Town of Butternuts Slope and Topography map.)

### **Floodplains**

Flood-prone areas are found predominantly along the Butternuts Creek corridor; smaller portions of the western town boundary, formed by the Unadilla River, are also located in mapped floodplains. Because there are many steep slopes in Butternuts, there are few areas having 100- and 500-year floodplains. (See Town of Butternuts Flood Boundaries and Principal Aquifers map.)

### **Water Features**

#### ***Susquehanna River Basin***

"The Susquehanna River Basin is the second largest river basin – next to the Ohio River Basin – east of the Mississippi River and the largest on the Atlantic seaboard. The 444-mile Susquehanna River drains 27,500 square miles covering portions of New York, Pennsylvania and Maryland before emptying into the Chesapeake Bay."<sup>15</sup> Much of the basin is forested, and many of its river valleys are scattered with small settlements and agricultural operations. An interstate compact commission, the Susquehanna River Basin Commission, is responsible for regulating water quality and quantity in this basin.

The Unadilla River Watershed is among the larger contributing areas in New York State and constitutes 12% of the basin total. Major sources of water impairment in the New York State portion of the basin are atmospheric deposition (i.e. mercury) and agricultural activities. Other sources of impacts are inadequate on-site septic systems and streambank erosion. Butternuts is situated within the Upper Susquehanna sub-basin, which is defined as the area above the City of Binghamton.

---

<sup>15</sup> CITE NYSDEC, WI/PWL document



### ***Aquifers and Groundwater***

The Town of Butternuts has an abundant supply of clean water. The main aquifers in Butternuts occupy the valley floors. The principal aquifer is in a glacial drift centered below the Butternut Creek. This aquifer is partly replenished from the north from run-off. Butternuts has been said to have a “well rinsed landscape.” There is plentiful groundwater and many springs exist. In addition to many natural ponds, there are man-made ponds that also tap into groundwater and springs. (See Main Unconsolidated Aquifers of Butternuts Township map.) Smaller aquifers utilized by private wells are not shown. Recharge of the main aquifers occurs by infiltration of rainfall over the land surface, infiltration of tributaries as they enter the main valley, and from groundwater flow from higher elevations.

The water quality is very high throughout Town. Recent well testing from several locations in Town (see Appendix A) shows pure water with no or extremely low levels of ethane, propane, benzene, barium, arsenic, volatile organic compounds or radioactive compounds or other chemical pollutants found.

### ***Surface Water Bodies and Streams***

Aside from several reservoirs and artificial impoundments, Butternuts has few large surface water bodies. (See Town of Butternuts Surface Water Features map.) The Town encompasses the lower alley of Butternut Creek and its tributary streams, the Susquehanna River and the Unadilla River. Butternut Creek flows centrally through our town. According to NYSDEC regulations, all waters in the State are classified according to their present quality and best use. The following designations are used:

<b>Class</b>	<b>Best Use</b>
AA	Drinking (after disinfection), bathing, fishing
A	Drinking (after disinfection and approved treatment), bathing and fishing
B	Bathing and fishing
C	Fishing (propagation and survival)
D	Fishing (survival)

In addition, “T” or “TS” can be added to Class A, B, or C streams based on whether dissolved oxygen content can support trout (T) and/or trout spawning (TS). Waterbodies designated as “C (T)” or higher—whether trout-designated waters or not—are referred to as “protected streams” and are subject to additional regulations, including requiring a State permit for disturbance of the stream-bed or banks.<sup>16</sup>

In Butternuts, these waters are Class C and C(T). Multiple tributaries along this reach are Class C, C (T), and C (TS). Dunderberg Creek is classified as AA (T); its tributaries are classed AA. It has historically been used for water supply, and the Town’s disused reservoir lies along this water body. The Unadilla River, which forms the western Town boundary, is Class B.

According to the most current information from NYSDEC, water quality is generally good in the Butternut Creek basin. The principal exception is Dunderberg Creek, which joins Butternut Creek in Gilbertsville. In 2008, its status was listed as “needs verification”; its use for water supply was deemed threatened. However, the Otsego County Soil and

<sup>16</sup> See New York Codes, Rules, and Regulations (“NYCRR”), Title 6, Section 608 and 701.

Water Conservation District has done additional testing and has determined that the water quality in Dunderberg Creek is of good water quality.

The Butternut Creek is listed in Otsego County's Non Point Source Strategy as a priority water shed and also listed in the Soil and Water Conservation District's AEN plan (State Program). There have been recent die offs in certain spots of pearly mussels, a species which serves as an indicator of water quality.

The Unadilla River is classified by NYS DEC as 'impaired' from its mouth to New Berlin. However, it is not included on New York State's Priority Waterbodies List any longer because a specific set of new regulations (i.e. the Northeast Regional Mercury TMDL) has supplanted listing since 2007. Among the likely sources of impairment are septic systems, agricultural practices (sedimentation and livestock waste), and acid rain. The Unadilla River is also an important habitat for pearly mussels, species designated by New York State as "species of greatest concern need". See Ecology section for further discussion of this and Appendix E for a map of pearly mussel distribution in the River.

### **Wetlands**

Most wetlands in Butternuts are located along Butternut Creek, with comparatively larger wetlands found to the north of the Village and near the mouth of Butternut Creek. There are many smaller wetlands distributed across the town as well as along the Unadilla River corridor (See Town of Butternuts Surface Water Features map, above). Much of the Wetland area in Butternuts is regulated at the federal level because they fall below the 12.4 acre size regulated by New York State. Most State-regulated wetlands are Class II and Class III; there is a small portion of Class I State-regulated wetland located in the Unadilla River floodplain.<sup>17</sup>

### **Ecology**

In addition to the many streams that provide habitats to a diverse aquatic ecology, other major habitats include 1) the diverse valley bottom of flat and rolling glacial deposits and alluvial fans, extensive white pine and hemlock stands as well as riparian forests and wetlands fringing Butternut Creek; 2) mature upland hardwood forests, some selectively thinned for timber; 3) steep-sided gorges of upland tributary streams, incised into shale bedrock and supporting forests of hemlock and beech; 4) upland pastures and hayfields, some active and some reverting to young forest; [and] 5) streams, bogs, and beaver ponds."<sup>18</sup> Many terrestrial species of wildlife inhabit this landscape, including predators like the black bear, fisher, pine marten, eastern coyote, bobcat, red fox, and river otter. Bird species are discussed below.

The portion of Butternut Creek and the Unadilla River lying within the Town is classified as a warm-water stream. These streams support a native fish fauna that includes small-mouth bass, rock bass, chain pickerel, white sucker, brown bullhead, and bluegill and pumpkinseed sunfishes. Brown trout and possibly brook trout are stocked into these streams, but do not reproduce. Butternut Creek is recorded as supporting small numbers of hellbenders (aquatic salamanders).

---

<sup>17</sup> New York State regulates wetlands 12.5 acres and larger in size; it may also regulate smaller wetlands if these are deemed to "have unusual local importance." According to State law, the classification system (Class I wetlands have the highest rank, which descends through Classes II, III, and IV) is based on coertype, ecological associations, special features, hydrological and pollution control features, and distribution and location.

<sup>18</sup> [CITE RICHARDSON—FROM "ENVRIONMENT SCAN"]

The Town contains at least five upland, cold-water streams that apparently support reproducing populations of native brook trout, as well as smaller streams that may shrink to intermittent pools in dry summers. Both types of streams contain a clean-water fauna of invertebrate insects, crayfish, and small salamanders. Only the streams with perennial flow support fish.

The town contains no standing water bodies of appreciable size, but small natural kettle depressions and beaver ponds are important habitats for frogs, small fish, and water-loving birds such as northern water thrush, common yellowthroat, small flycatcher species, wood ducks, hooded mergansers, spotted sandpipers, and great blue herons. Acid bogs and small “beaver meadows” may contain insectivorous plants such as sundew and pitcher plant, and trees such as black spruce, tamarack and green ash.

Flood plain and riparian forests along Butternut Creek and the Unadilla River also play important ecological roles and are characterized by black willow, butternut trees, silver maple, red maple, and sycamores as well as blue beech and hop hornbeam in the understory. Typical riparian forest birds include cedar waxwing, yellow warbler, common yellowthroat, bank swallow, Baltimore oriole, catbird and grackle. There also are at least two sorts of flood plain forest occupying parts of the valley floor. North of Gilbertsville hemlock/white pine conifer forests flourish on low hummocks and ridges of glacial till interspersed with more swampy “bayous”; and just south of the Butternut/Unadilla junction a silver maple/red maple flood forest serves as a fine, pristine habitat for wood ducks, pileated woodpeckers and water-loving mammals, probably including otters.

Upland forests are of several types, including widespread native forests of the hemlock/white pine/northern hardwoods type, with red oak, sugar maple, red maple, white ash, yellow birch, beech, basswood, black cherry and serviceberry as notable hardwood components. Oak and white pines are probably the most important timber trees in these native forests; hemlock, beech and yellow birch are especially characteristic of north-facing slopes and gorges.

Scattered timber plantations of non-native trees (red and scotch pines, Norway spruce and Japanese larch) are all managed for timber in Wagner Farm State Forest. Naturally reforesting hayfields and pastures also can be found in Town, where the pioneer tree species include white pine, hawthorn, quaking aspen, big tooth poplar, red maple, gray birch, black birch, black cherry and serviceberry. Nesting birds of the upland forests include scarlet tanager, red-eyed vireo, wood thrush, hermit thrush, rose-breasted grosbeak, purple finch, ruffed grouse, woodpeckers, sapsuckers and wild turkey. Hemlock gorges have a special subset of nesting species including black-throated green warblers, blue-headed vireos, and Blackburnian warblers.

There are many open lands in Butternuts. These provide habitats such as hayfields, pastures, orchards, cornfields, and the early stages of natural reforestation. These form when agriculture or mowing stops and the trees re-grow. Hayfields, both in the valley bottom and in the uplands are critically important habitat for such grass-nesting birds as bobolink, meadowlark, savanna sparrow and harrier. Pastures and orchards exist and are relatively open habitats with scattered trees. They boast quite a different bird fauna than pure grasslands; here are found such species as eastern bluebird, American robin, veery, song sparrow, Baltimore oriole, and common yellowthroat. Naturally reforesting pastures and hayfields provide scrubby, semi-open habitats favored by indigo buntings,

field sparrows, chestnut-sided warblers and woodcocks, together with some of the pasture and orchard species listed above.

Birds of prey include broad-winged, red-shouldered, sharp-shinned and Cooper's hawks, that favor upland forests, as do great horned, barred and screech owls. Red-tailed hawks, kestrels and harriers frequent the more open habitats, and bald eagles fish and sometimes nest along Butternut Creek. In winter, rough-legged hawks and occasional golden eagles may be found hunting in pastures, reforesting fields and forest openings.

The various habitats of the Town of Butternuts host many wild mammals, including conspicuous types like white-tailed deer, red fox, coyote, raccoon, skunk, opossum, beaver, muskrat, woodchuck and small rodents, and more reclusive species such as gray fox, fisher, mink, short-tailed weasel, and bobcat. Otter and an occasional, probably transient, black bear may also occur.

### ***Breeding Bird Atlas Data***

New York State has done two statewide bird censuses. This information is helpful to describe the diversity of species and habitats in Town. Portions of Butternuts lie within 13 different survey blocks; seven of these were chosen for this analysis because they fall mostly within the Town itself.<sup>19</sup> Using data from the 2000-2005 survey, 118 individual species were found to occur in the area these blocks define. Most of these species were classified as "Protected," a designation that applies to most non-game avian species. One threatened species was identified, the bald eagle, and three protected-special concern species were identified, Cooper's Hawk, Northern Goshawk, and Sharp-shinned Hawk.

In terms of habitat needs, the Bald Eagle is found in close proximity to lakes, rivers, and marshes. The Northern Goshawk can be found in coniferous forests and winters in farmlands, edges, and open country; it prefers mountainside coniferous forests. The Cooper's Hawk and the Sharp-shinned Hawk have a preference for uninterrupted coniferous forests, especially for breeding.<sup>20</sup> A total of 13 game species were also surveyed.

### ***Significant Natural Communities***

By definition in State law, significant natural communities include rare or high-quality wetlands, forests, grasslands, ponds, streams, and other types of habitats, ecosystems, and ecological areas. According to the NYSDEC, there are no statewide defined significant natural communities mapped for the Town.

However, the Unadilla River holds an important role in the Susquehanna watershed as habitat for species of four pearly mussels: *Alasmidonta varicose* (Brook floater), *Alasmidonta marginata* (Elktoe), *Lasmigona subviridis* (Green floater) and *Lampsilis cariosa* (Yellow lampmussel). These species are deemed SGCN by the New York Department of Environmental Conservation, because of their endangered, threatened or special concern status. In 2006, heavy flooding of the Susquehanna watersheds occurred, removing and relocating enormous quantities of soil and debris and this may have had a detrimental effect on the River's mussel species. Further detrimental effects may have occurred after the 2011 flooding from Hurricane Irene.

<sup>19</sup> These are: 4670B, 4670C, 4670D, 4770C, 4669B, 4769A, and 4669A.

<sup>20</sup> Habitat information from <http://www.audubonbirds.org/species/Birds/>.

## Historic and Cultural Resources

### Overview<sup>21</sup>

Significant historic properties in the Town of Butternuts can be categorized by geographic settlement, meaning the places within the town the people choose to live and work, and by the time period in which they did it.

### Early Settlement

Earliest settlement in our town occurred along the Butternut Creek. Small clusters of pre-Revolutionary houses, mills and workshops dotted the banks of the creek from the Town boundary in the northeast to the Unadilla River in the southwest. Post-Revolutionary population centers emerged around industrial and transportation hubs at places like Frog Harbor, Upton Park, Morris Manor and West Hill, a plateau settlement between the Butternut and Unadilla Valleys on the “Shunpike” between South New Berlin and Morris.

Although many pieces of this early landscape have disappeared with time, a few landmarks survive. Building stock dating to the 18th century has had a remarkable survival rate in these early settlements. Houses of this time period are distinguished by a small, modest presence rising only one-story and facing the road with the gable’s side. Ornamentation is often subtle with light Federal details around the door and in the cornice. Among the surviving examples of this early period are several notable stone and frame structures including the Pedersen and Sloan Houses, the Ford Cottage and the Doug McKee House in the village, the Smith and Cleinman Houses in Upton Park, and #250 County Route 8 in Frog Harbor. When these early houses did not survive in their original state, they were sometimes converted into agricultural outbuildings and, more often, adjoined to a newer, larger house as a rear ell for the kitchen.

### Post-Revolutionary War to Civil War: Economic Integration

Following this initial period of settlement and transition during and immediately after the Revolutionary War, residents and newcomers to the town began building a more sophisticated environment. An integrated agricultural economy emerged with some townspeople pursued sheep and goat dairying while others focused on manufacturing iron, tanning hides and crafting leather products. Structures that survive from this period of new prosperity include houses built in the fashionable Greek Revival style. These houses, which emphasized heavier classical detailing and the temple-form motif, became ubiquitous in both village and rural settings across the town. Notable among surviving examples are the Burgess (Birdsall) House on Route 51, the John and CeCe Rowe House on County Route 51 and Park Place at 5 Bloom Street in the village.



*Federal House, Pedersen House*

---

<sup>21</sup> This section is adapted from a document produced by Anna Blinn Cole and Leigh C. Eckmair.

In the period leading up to the Civil War, Butternuts' architectural landscape entered a period of idealism and renewal. Perpetual fires and the constant movement of ideas provided both the opportunity and the initiative to build new structures in popular styles of the day. Gothic revival and Italianate designs moved through the town's rural and village settings with rapid acculturation. Of note are the McNeil and Cliff Houses in the village and the Rockwell Farm on County Route 8. Other landscape elements embodied picturesque design elements such as Brookside Cemetery.

#### **Late 19<sup>th</sup> Century: Professional Design and Estate Building**

As the 19th century came to a close, more and more buildings were being designed by architects. Again, devastation by fire opened windows for new construction and culturally affluent townspeople sought local and regional architects to design buildings like the Gilbertsville Baptist Church, the Gilbert Block, Gilbertsville Presbyterian Church, the Major's Inn and the New Creamery that is now the Butternuts Town Hall.

One of the last major eras of new growth and construction in the town occurred following the Panic of 1893 when real estate prices crashed leading to the availability of large tracts of land for small sums. Wealthy families, some of which were well-known to the community and others of which were newcomers, began amassing large tracts of cheap land in order to create estate properties. The estate buildings connected with this significant period, in many cases, survive and include Tianderah, Meadowbrook, Village Farms, Quarry Hill and Oxbow.

#### ***National and State Registers of Historic Places***

Both the federal government and the State maintain complementary lists of historic resources. The Parks and Recreation map (See Town of Butternuts Park Lands and Historic Districts map) shows listed sites in the Town of Butternuts. In the Town itself, two sites listed are on the National Register of Historic places: the Upper Section and the Lower Section of the Gilbertsville Water Works. There are an additional 133 inventoried sites for which no determination has been made.

The Gilbertsville Historic District now aligns with the Village boundaries. This District contains a number of contributing properties as well as two individually-listed properties: Tianderah and Major's Inn and Gilbert Block. Historic sites located near Butternuts include the Rockwells Mills Historic District and the Otsdawa Creek Site.

***Archaeological Sensitivity***

Mapping from the New York State Historic Preservation Office (SHPO) indicates that the Unadilla River and portions of the Butternut Creek corridors may be archaeologically sensitive. Outside of these areas (shown in gray on Figure 32), there is scattered potential for culturally significant finds.

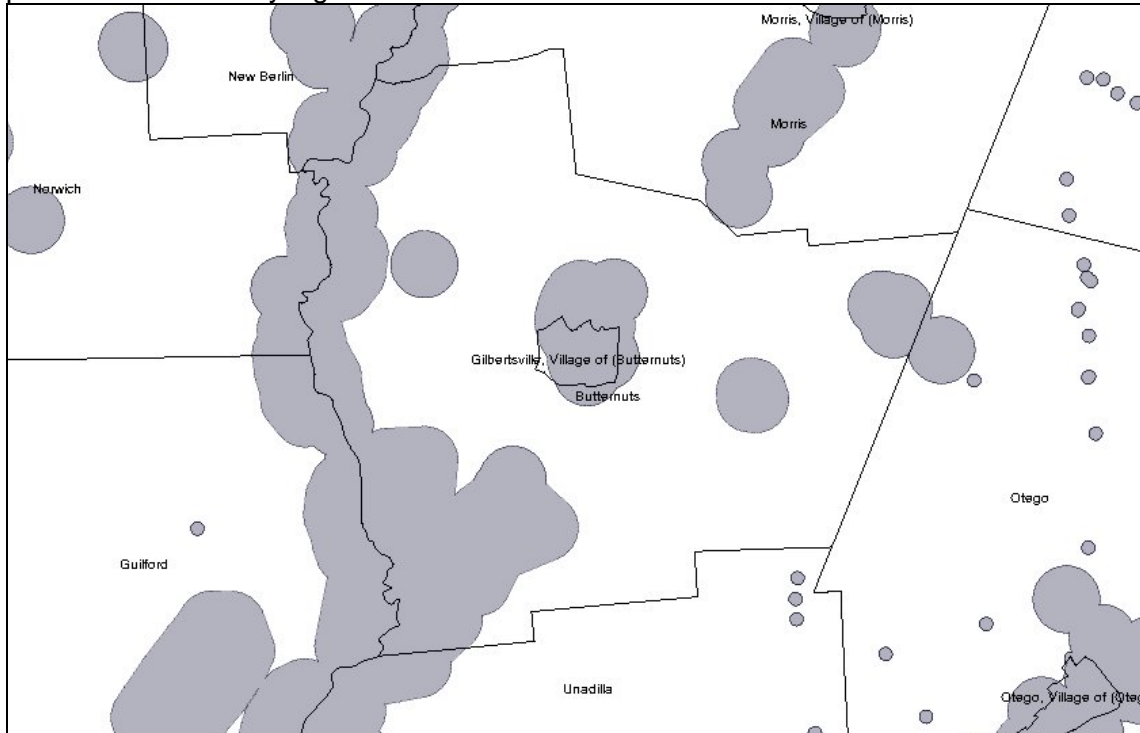


Figure 32. Map showing areas of potential archaeological sensitivity, Town of Butternuts.

## Past and Future Planning Efforts

This section presents an inventory and overview of the planning environment, including other relevant plans, documents, and studies.

### Town

The *Town of Butternuts Master Plan* (the “1991 Master Plan”, see Appendix B) was enacted in March of 1991. Its purpose was to “to summarize the natural and historic assets of the Town of Butternuts, to define its essentially rural and agricultural character, to provide guidelines for the preservation of the Town's natural and historic assets in a manner compatible with orderly economic growth, and to provide a basis for detailed land use ordinances to guide the future development of the Town.”

### Village

The Village of Gilbertsville adopted a comprehensive plan in December 2012.

### County

Otsego County has undertaken a number of planning initiatives relevant to Butternuts.

The *Otsego County Coordinated Transportation Plan* (2008) inventories current transportation, employment, and demographic conditions in the County. It identifies current transportation providers as well as unmet needs pertaining to specific populations as well as employee-based needs of the general public. Action items and an implementation plan are also included.

The *Integrated Housing Needs & opportunities Study* (2009) contains information specific to communities in the Route 51 Corridor, which includes Butternuts. It offers an inventory of housing conditions, develops market analyses for the owner and rental markets, and outlines affordability models based on local income, tax rate, utility cost, and price data. Finally, it presents a detailed Action Plan. Included in this section is a series of actions housing rehabilitation, funding for which can be provided by the New York State Weatherization Program that targets home energy efficiency.

The *Otsego County Agricultural and Farmland Protection Plan* (1999) includes an inventory and profile of agriculture in the County. It also establishes a comprehensive farm and farmland protection strategy and lists a compliment of actions to use to implement the plan.

The *Otsego County Economic Development Planning Initiative* (2005) is an industrial development plan that targets specific sectors and geographies for growth. It presents a summary of economic structure, growth trajectories, and supporting infrastructure. It outlines a growth strategy based on several target opportunities, including technology, specialty foods and beverages, software development, manufacturing, specialty distribution operations, tourism support goods, and education experiences.

Otsego County coordinated with the Town of Butternuts and Village of Gilbertsville in the preparation of the *Otsego County All Hazards Mitigation Plan* (2008). This document presents risk assessments for a variety of natural and human-induced eventualities and uses a ranking system developed at the State level to develop context-specific exposures. The Town's plan was officially approved in April 2012 making the Town



eligible for FEMA mitigation projects and grant programs. The plan lapses and will require revision by April 24, 2017.

In addition, the Initiative for Healthy Infrastructure (iHi) *Healthy Infrastructure Plan* (last updated in 2007) for Otsego County outlines community health data, an infrastructure diagnosis, ongoing initiatives, and a community infrastructure prescription and presents potential funding options.

## Regional

### ***Mohawk Valley Economic Development Council***

The MVREDC *Strategic Plan* (2011) provides an inventory of demographic, environmental, and economic issues in the region, which includes Otsego County. This document also lays out a vision and strategy to guide economic development in this region and discusses priority projects.

### ***Susquehanna River Basin Commission***

While it does not specifically treat the Town of Butternuts, the *Comprehensive Plan for the Water Resources of the Susquehanna River Basin* (2011) is relevant in that it discusses a suite of issues relating to the management of water resources in the SRBC's jurisdiction. It provides an assessment of water resource needs basin wide, sets out priority and special interest management areas, and presents and implementation and action framework. Among the issues discussed are flood control, water quality, and water supply.

### ***Southern Tier East Regional Planning Development Board***

The report *Water Supply and Sewage Disposal Systems in the Southern Tier East Region* (2009) inventories water and wastewater systems in Otsego County and presents an overview of issues and challenges pertaining thereto. The *Telecommunications Action Plan* (2009 Update) inventories telecommunications infrastructure and issues, including those pertaining to Otsego County. The action plan includes several goals relating broadly to providing access directly to homes, businesses, and government (so-called "last mile" access) as well as to the development of a regional "backbone."

## Other

Other relevant plans include the *Conservation Plan* (2004) prepared by the Otsego Land Trust.

## Map List

The following maps support the inventory of resources and features discussed in this Comprehensive Plan:

- Land Use
- Parcels by Agricultural Enterprise
- Park Lands and Historic Districts
- Infrastructure
- Village of Gilbertsville Potable Water Supply System
- Bedrock Geology
- Glacial Geology
- Slope and Topography
- Flood Boundaries and Principal Aquifers
- Main Unconsolidated Aquifers
- Surface Water Features
- Watershed Subbasins
- Aerial Photography
- Soils
- Water Features
- Forests and Threatened Species
- Jacobi Faults
- Pearly Mussels

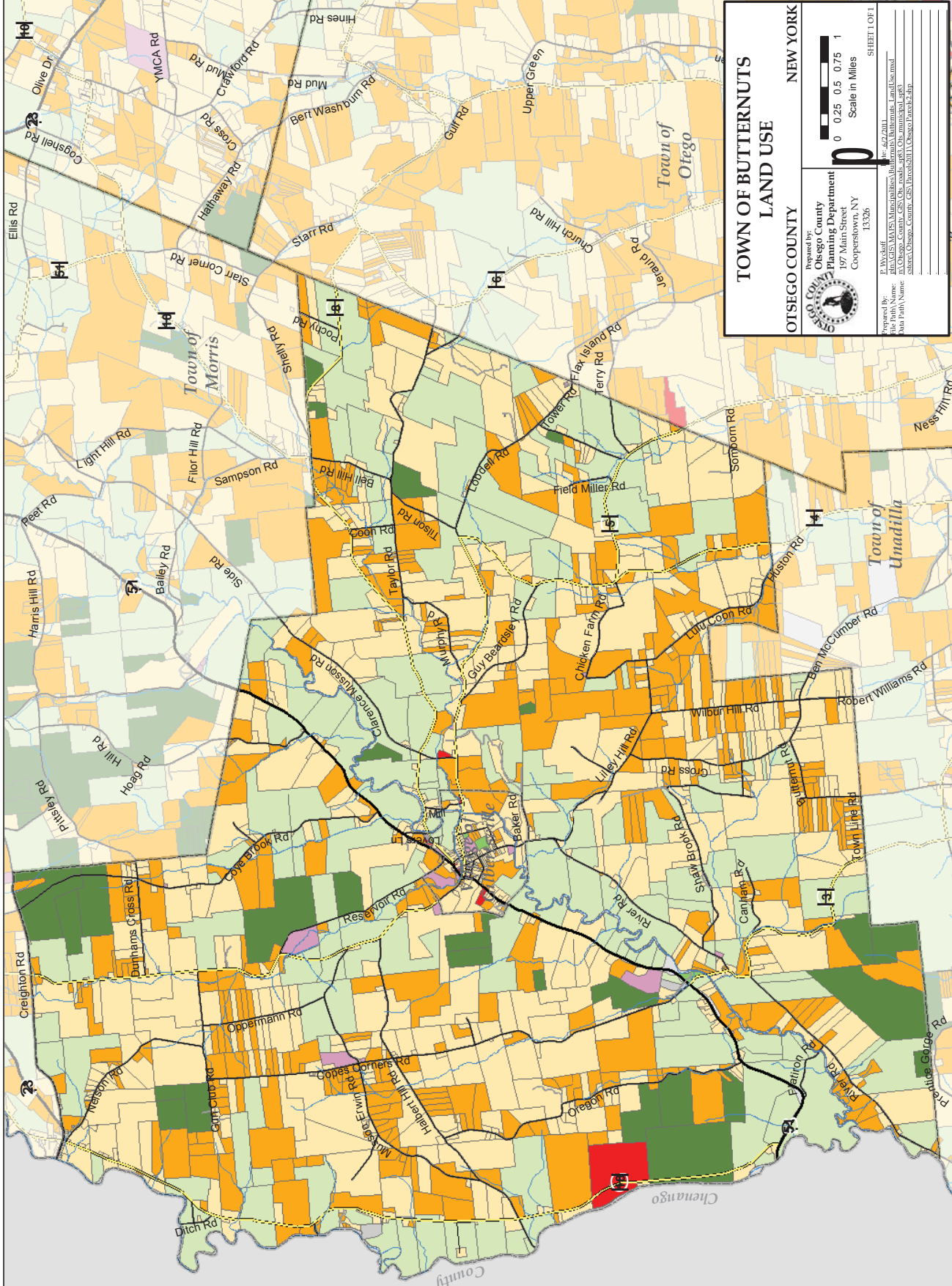
Except where noted on map, all maps created by Otsego County using GIS data from their database.

**Legend**

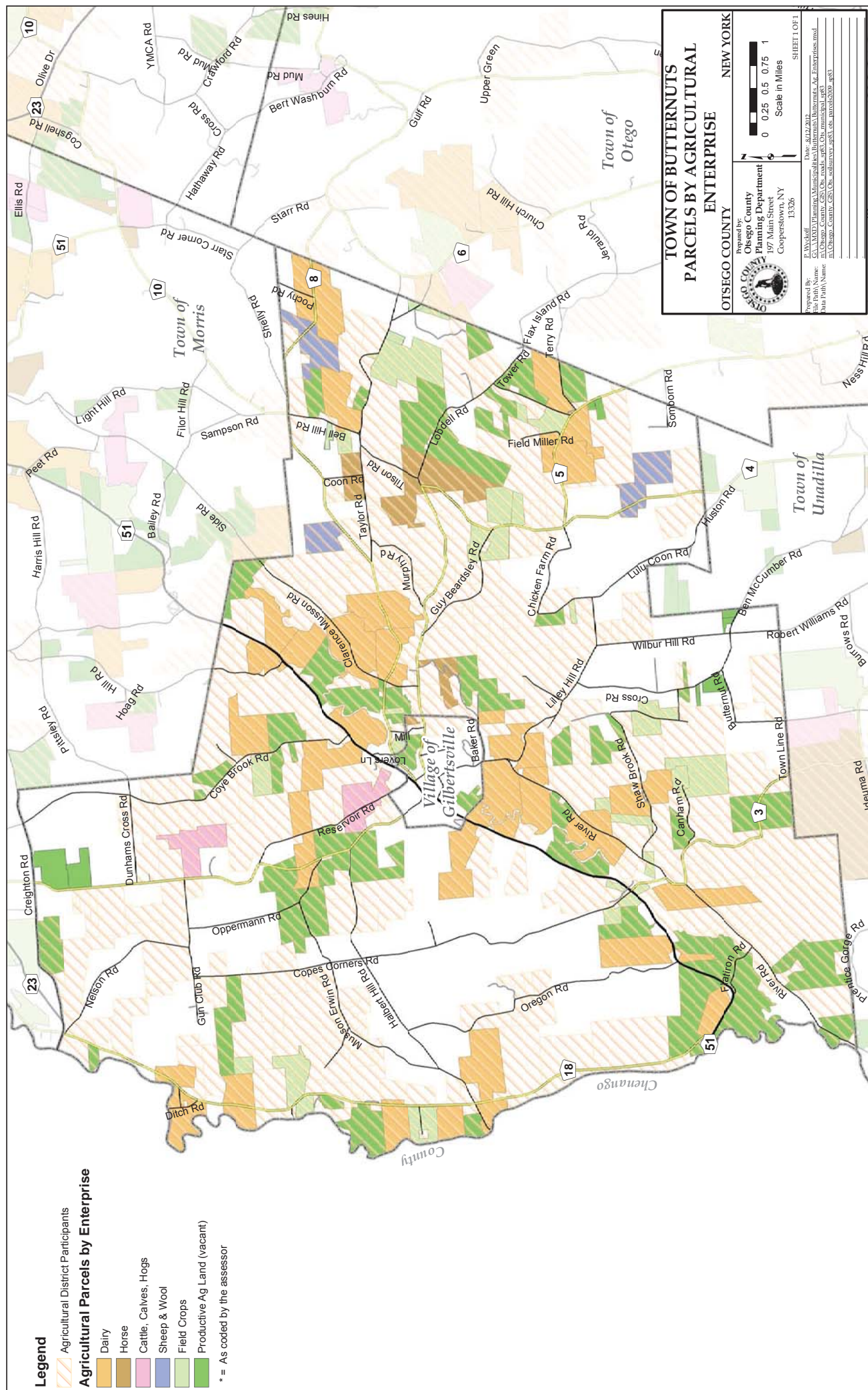
**Property Use (by assessment)**

- Agricultural
- Residential
- Vacant
- Commercial
- Industrial
- Community and Public Services
- Recreation & Entertainment
- Wild, Forested, Parks, and Conservation Land

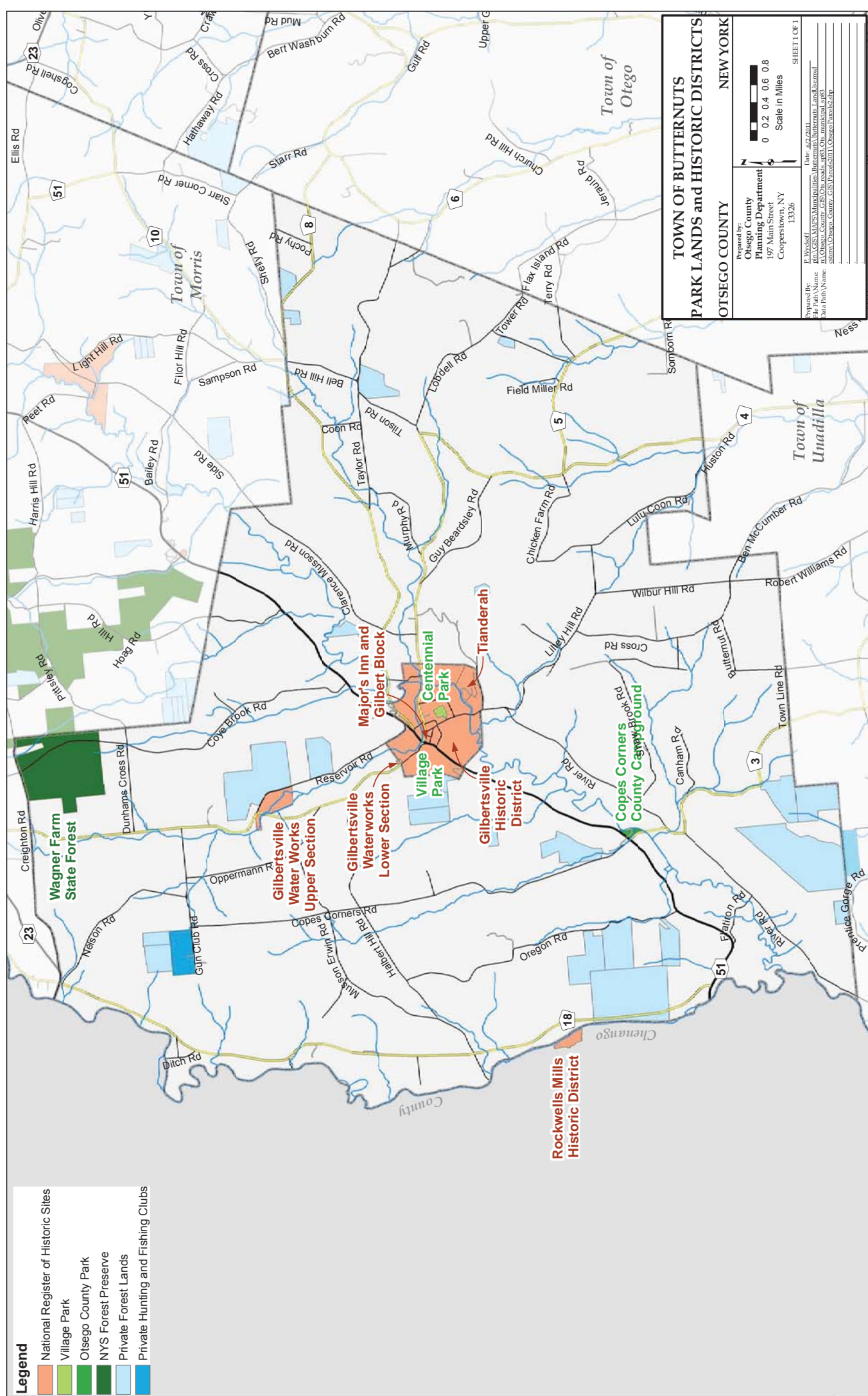
\* = As coded by the assessor



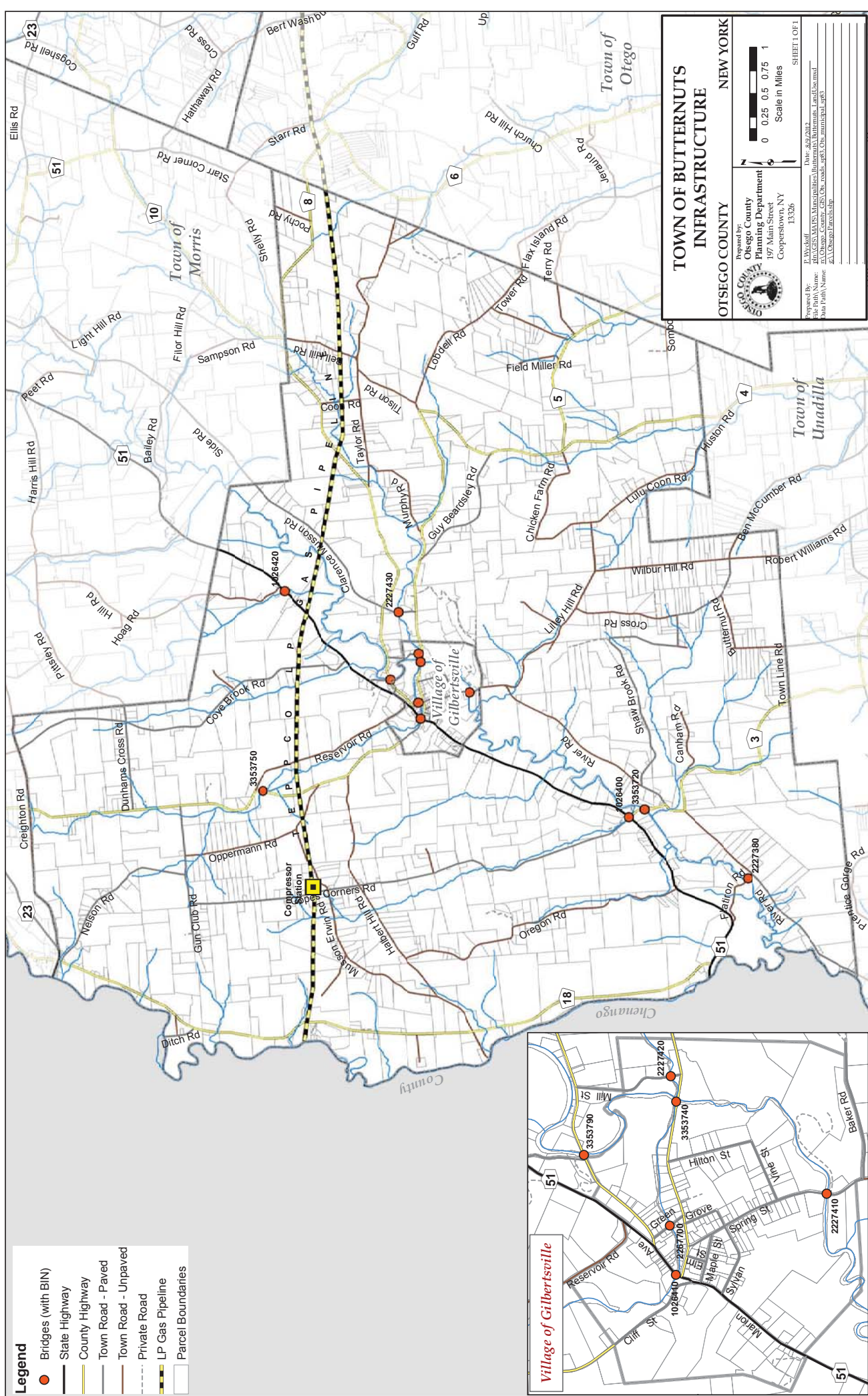


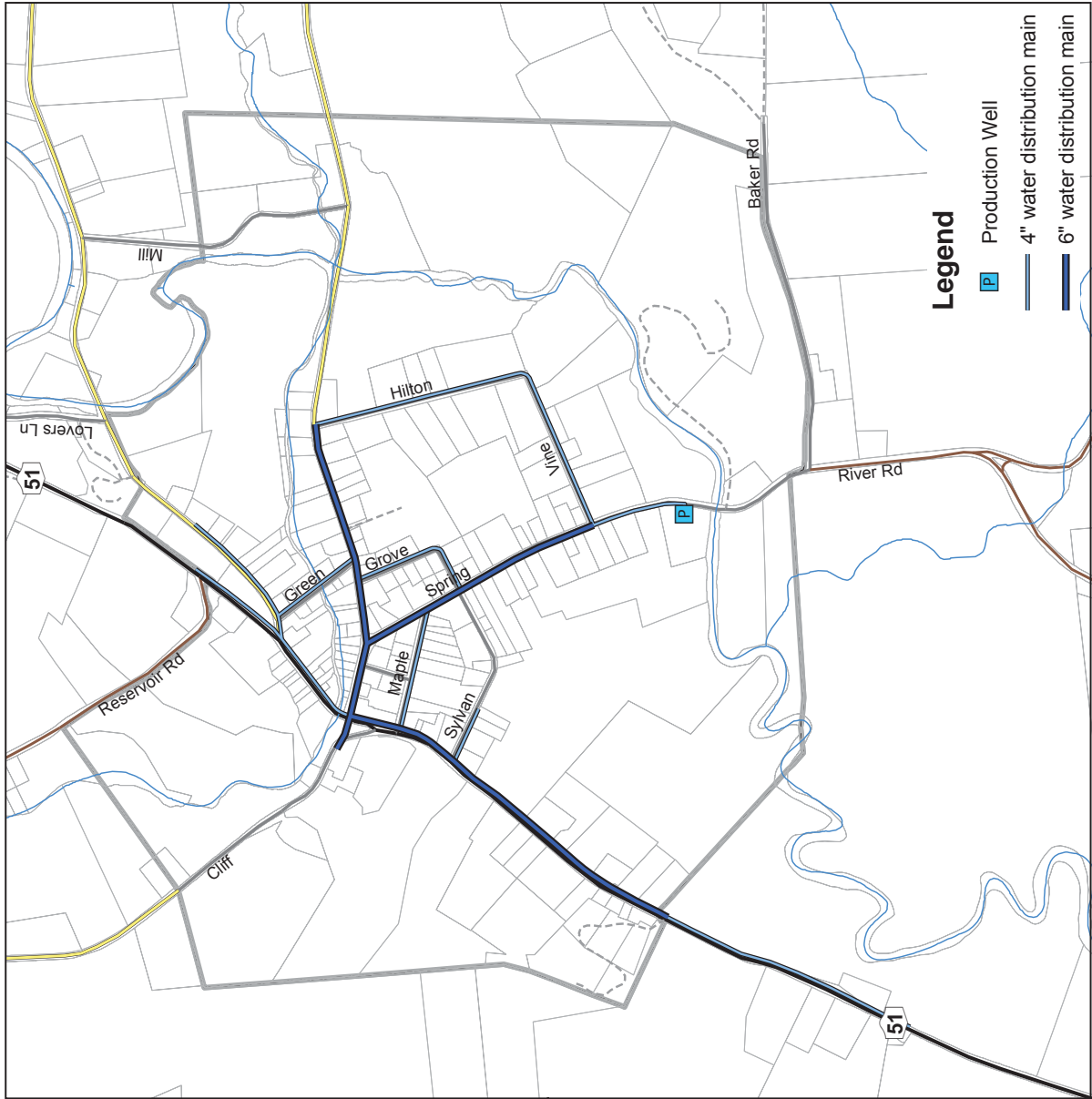












### Legend

- P Production Well
- 4" water distribution main
- 6" water distribution main

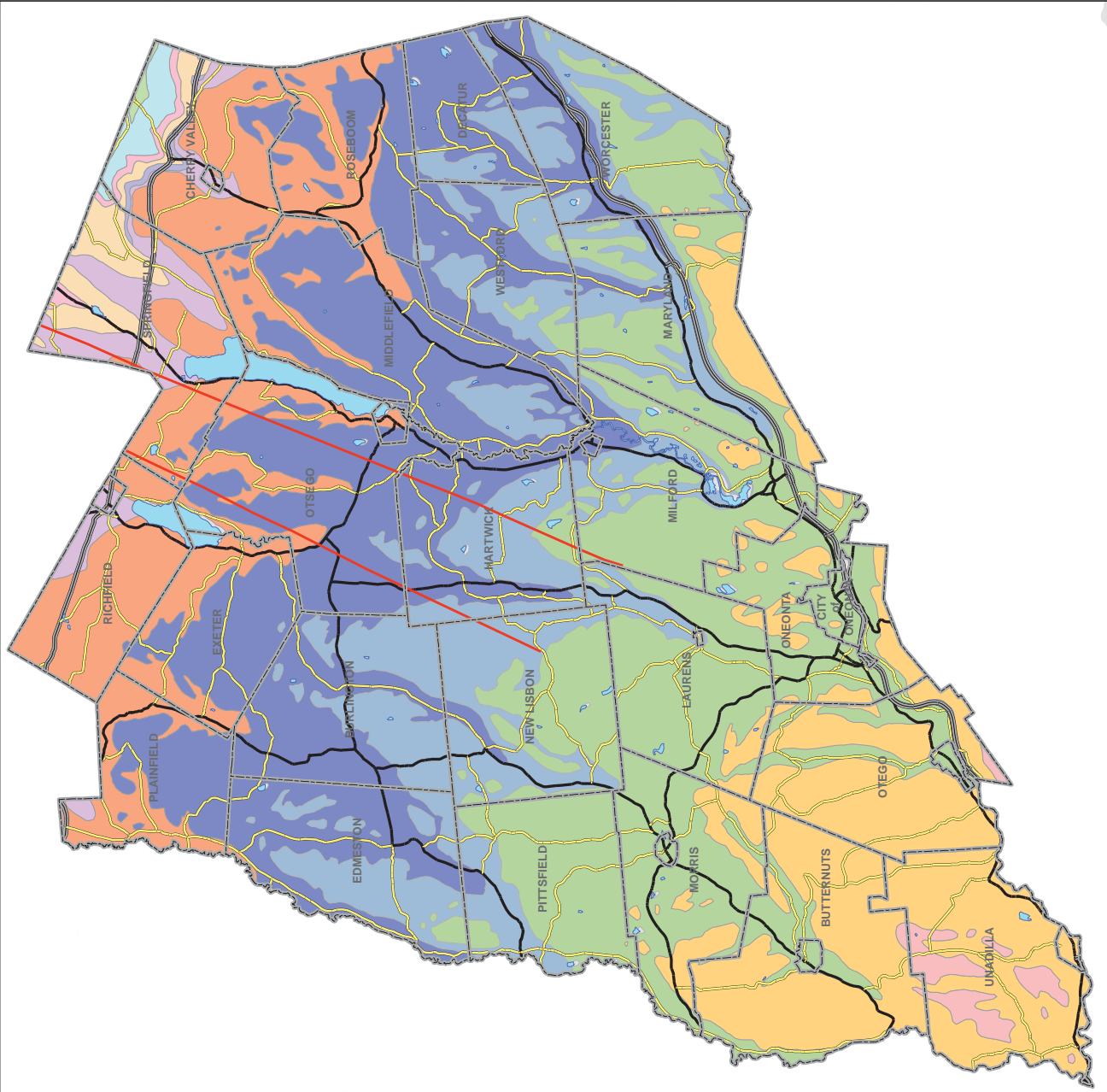
## VILLAGE OF GILBERTSVILLE POTABLE WATER SUPPLY SYSTEM

Prepared by:  
**Otsego County  
Planning Department**  
197 Main Street  
Cooperstown, NY  
13326

PAW  
Date: Aug 9, 2012  
File Path\Name: g:\MXD\Planning\Municipalities\Bathkemps\Gilbertsville\_Water\_Service.mxd  
Data Path\Name: g:\FCGDB\_Otsego\Infrastructure\Water\_Source\_Water\_Distribution  
g:\FCGDB\_Otsego\Parcels\Otsego\_Parcels  
n:\Otsego County GIS\Otsego\_streams\_class.apr83  
n:\Otsego County GIS\Otsego\_roads.apr83  
n:\Otsego County GIS\Otsego\_municipal.apr83

0 500 1,000  
Feet

SHEET 1 OF 1



Data Sources:  
 Bedrock Geology,  
 Hudson Mohawk Sheet  
 NYS Museum Map and Chart  
 Series No. 15  
 Preliminary Brittle Structure Map  
 of New York  
 NYS Museum Map and Chart  
 Series No. 31

- Legend**
- Subsurface Fault
  - Bedrock at Surface**
  - Cashqua Shale
  - Oneonta Formation
  - Unadilla Formation
  - Moscow Formation
  - Panther Mt Formation
  - Ludlowville Formation
  - Marcellus Formation
  - Onondaga Limestone
  - Oriskany Sandstone
  - Port Ewen Formation
  - Cobleskill Limestone
  - Frankfort Formation
  - Ulta Shale

**COUNTY OF OTSEGO**  
**BEDROCK GEOLOGY**

**OTSEGO COUNTY**

**NEW YORK**

Prepared by:  
 Otsego County  
 Planning Department  
 137 Main Street  
 Cooperstown, NY  
 13326

Date: 8/26/2011

Prepared by:  
 J. Wyckoff  
 File Path Name:  
 R:\GIS\DATA\Map\Bedrock\Bedrock\_Agred  
 Map 1 Path Name:  
 R:\GIS\DATA\Map\Bedrock\Bedrock\_Agred  
 R:\GIS\DATA\Map\Bedrock\Bedrock\_Agred

SHEET 1 OF 1

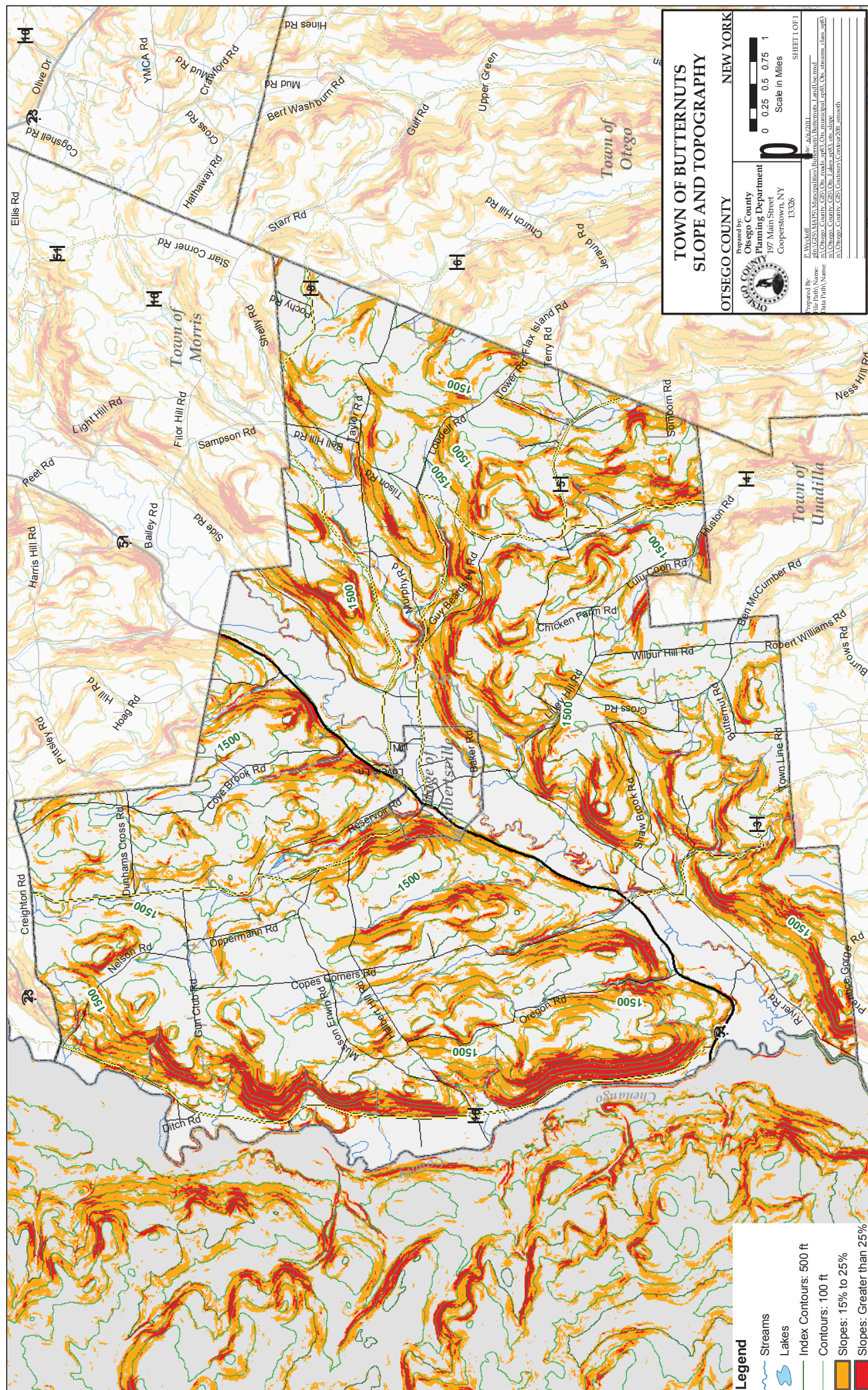
Scale in Miles

0 1 2 3 4 5

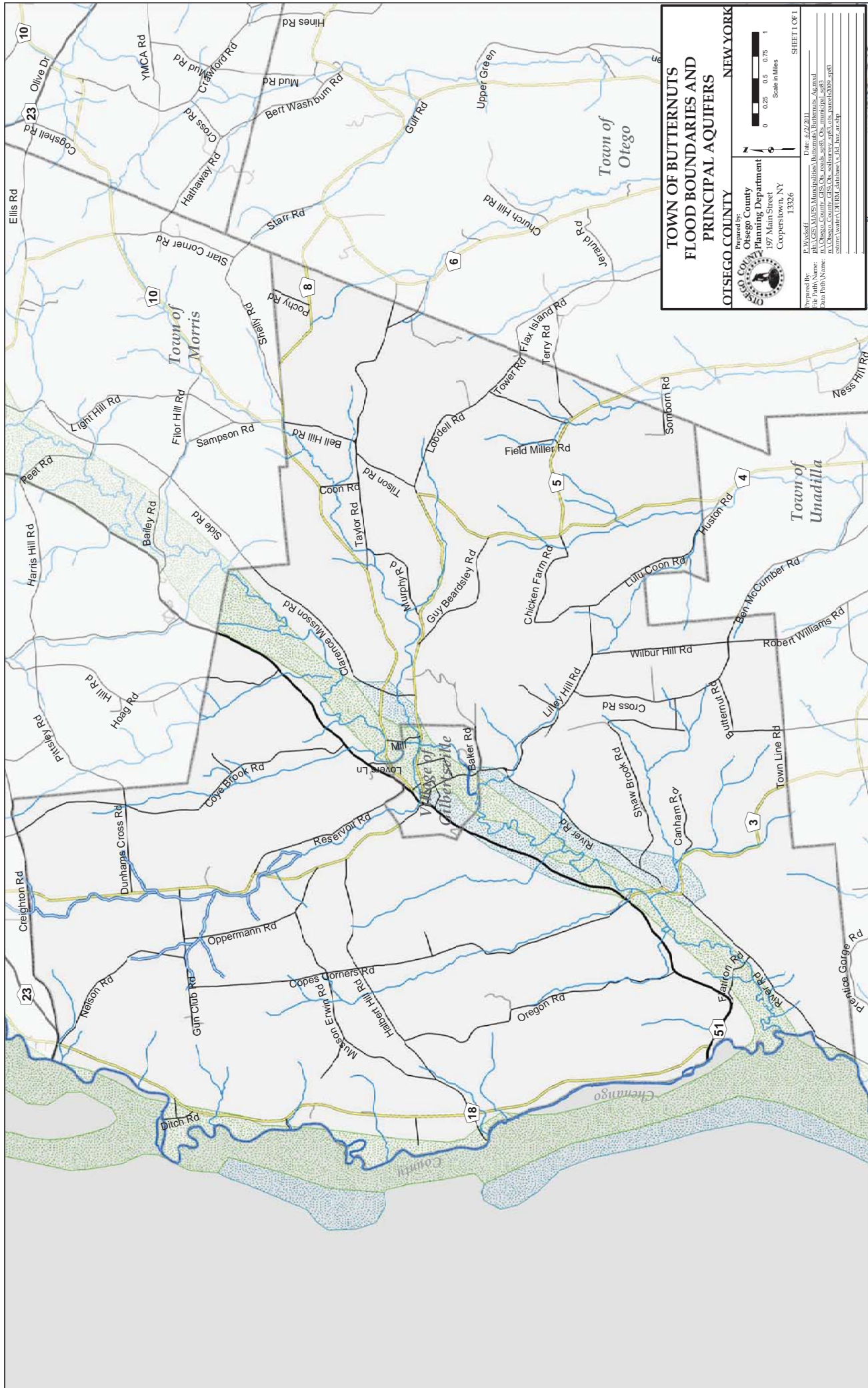
Scale in Miles

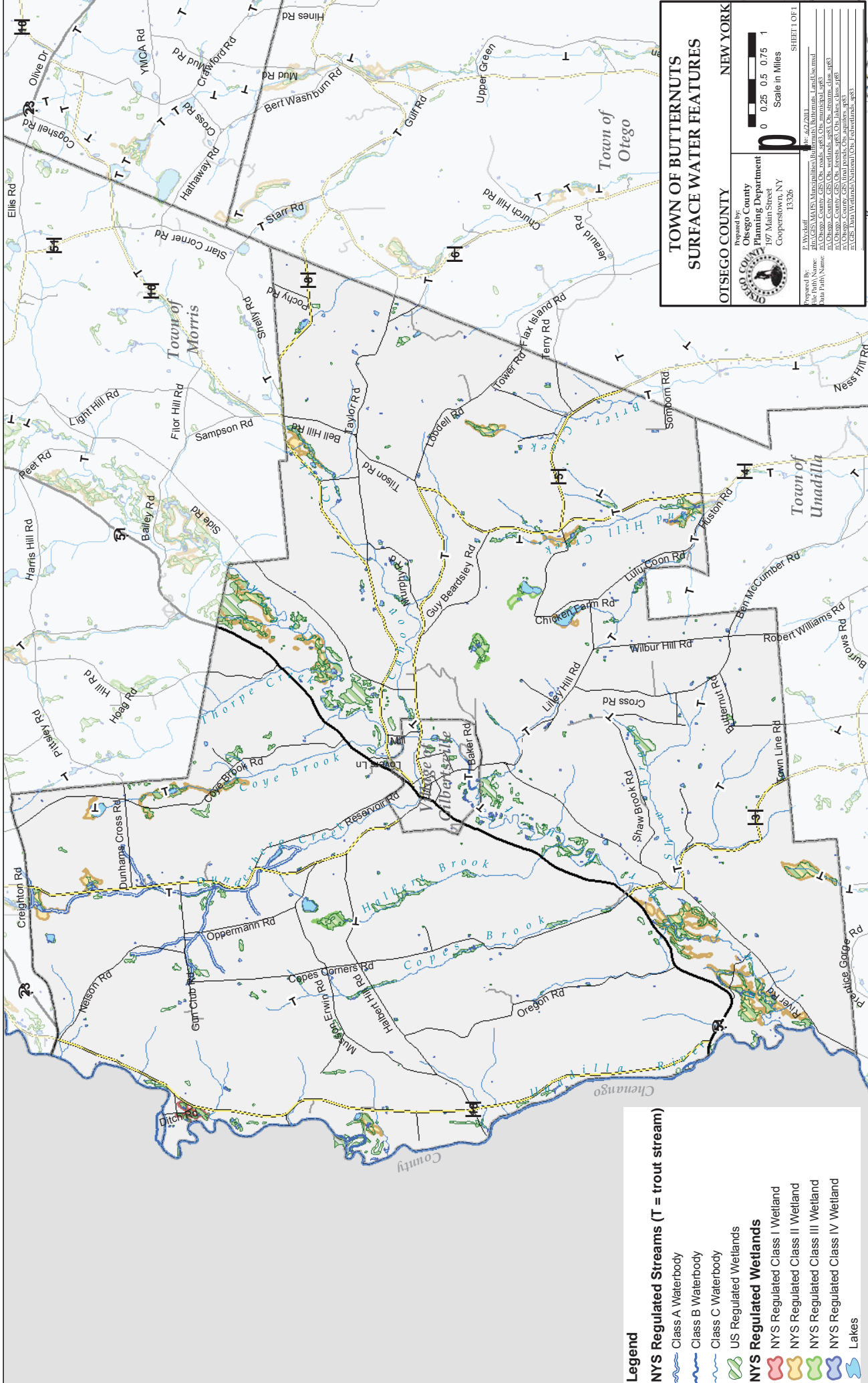
0 1 2 3 4 5











- Legend**
- NYS Regulated Streams (T = trout stream)**
- Class A Waterbody
  - Class B Waterbody
  - Class C Waterbody
  - US Regulated Wetlands
- NYS Regulated Wetlands**
- NYS Regulated Class I Wetland
  - NYS Regulated Class II Wetland
  - NYS Regulated Class III Wetland
  - NYS Regulated Class IV Wetland
  - Lakes









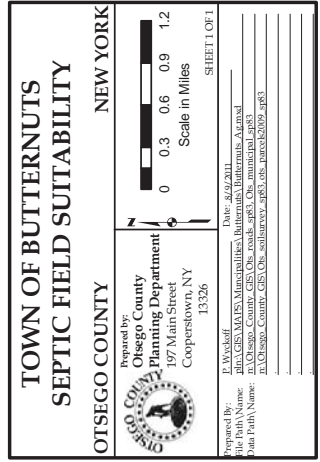






## Septic Absorbion Field Suitability

Very limited











OTSEGO LAND TRUST

# Butternut Valley

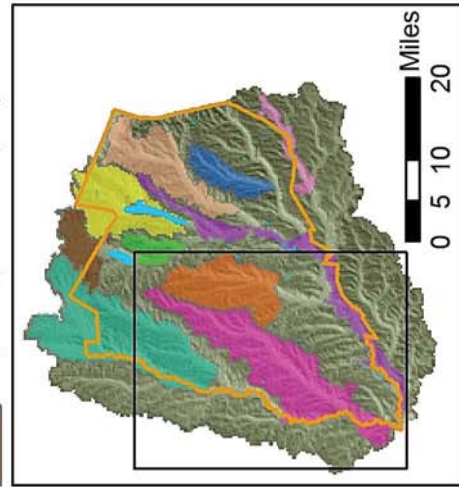
## Terrestrial Resources

### Legend

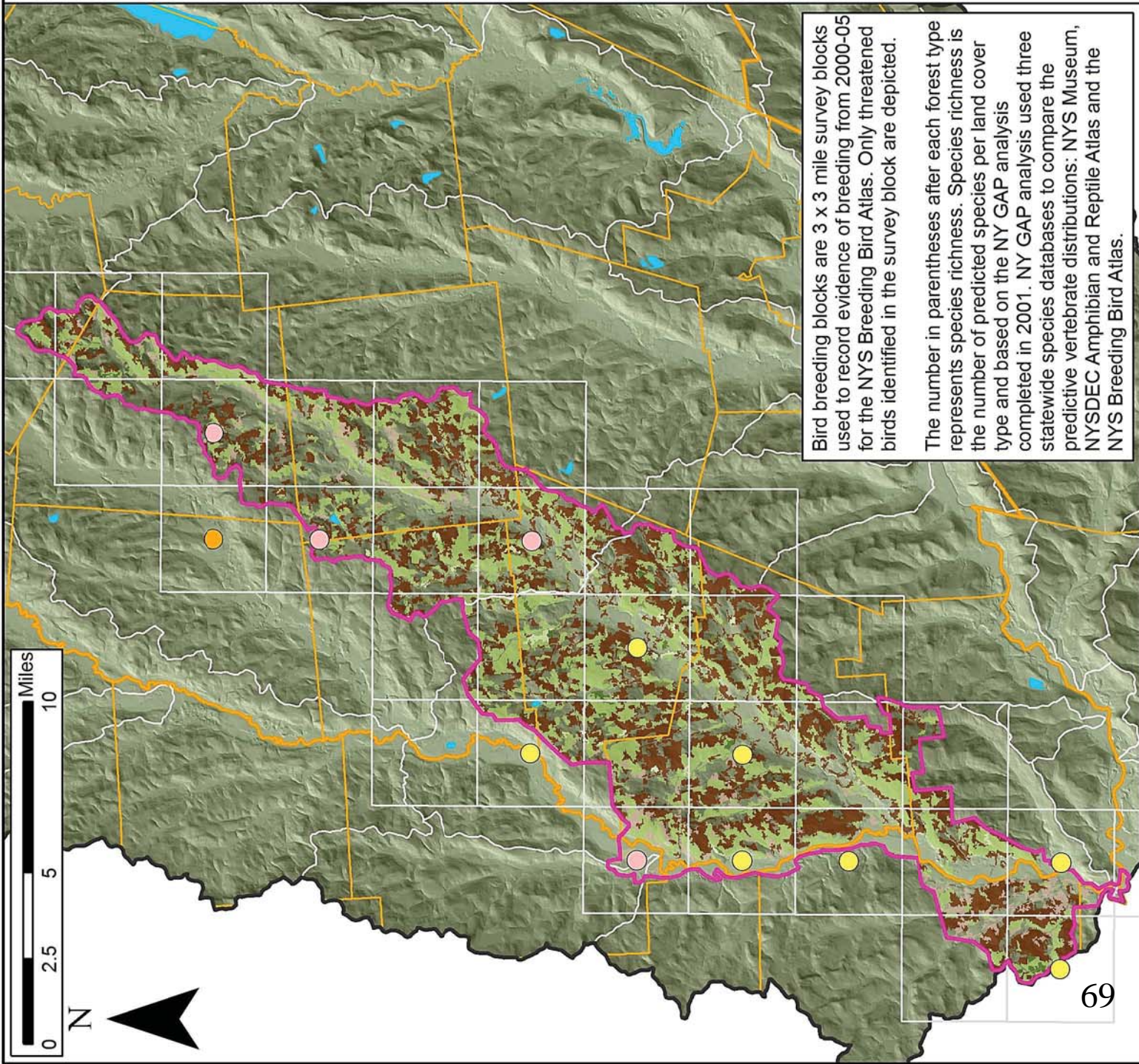
- Butternut Valley
- Bird Breeding Block
- Bald Eagle
- Northern Harrier
- Pied-billed Grebe

### Forest Type (Species Richness)

- Appalachian oak-pine (139)
- Evergreen plantation (80)
- Evergreen-northern hardwood (148)
- Oak (149)
- Spruce-fir (92)
- Successional hardwoods (143)
- Sugar maple mesic (162)



Created by: Kate A. McConnell  
Date: August 2008  
Projection: NY State Plane Central Feet  
Data Source: CUGIR, NYDEC



Bird breeding blocks are 3 x 3 mile survey blocks used to record evidence of breeding from 2000-05 for the NYS Breeding Bird Atlas. Only threatened birds identified in the survey block are depicted.

The number in parentheses after each forest type represents species richness. Species richness is the number of predicted species per land cover type and based on the NY GAP analysis completed in 2001. NY GAP analysis used three statewide species databases to compare the predictive vertebrate distributions: NYS Museum, NYSDEC Amphibian and Reptile Atlas and the NYS Breeding Bird Atlas.



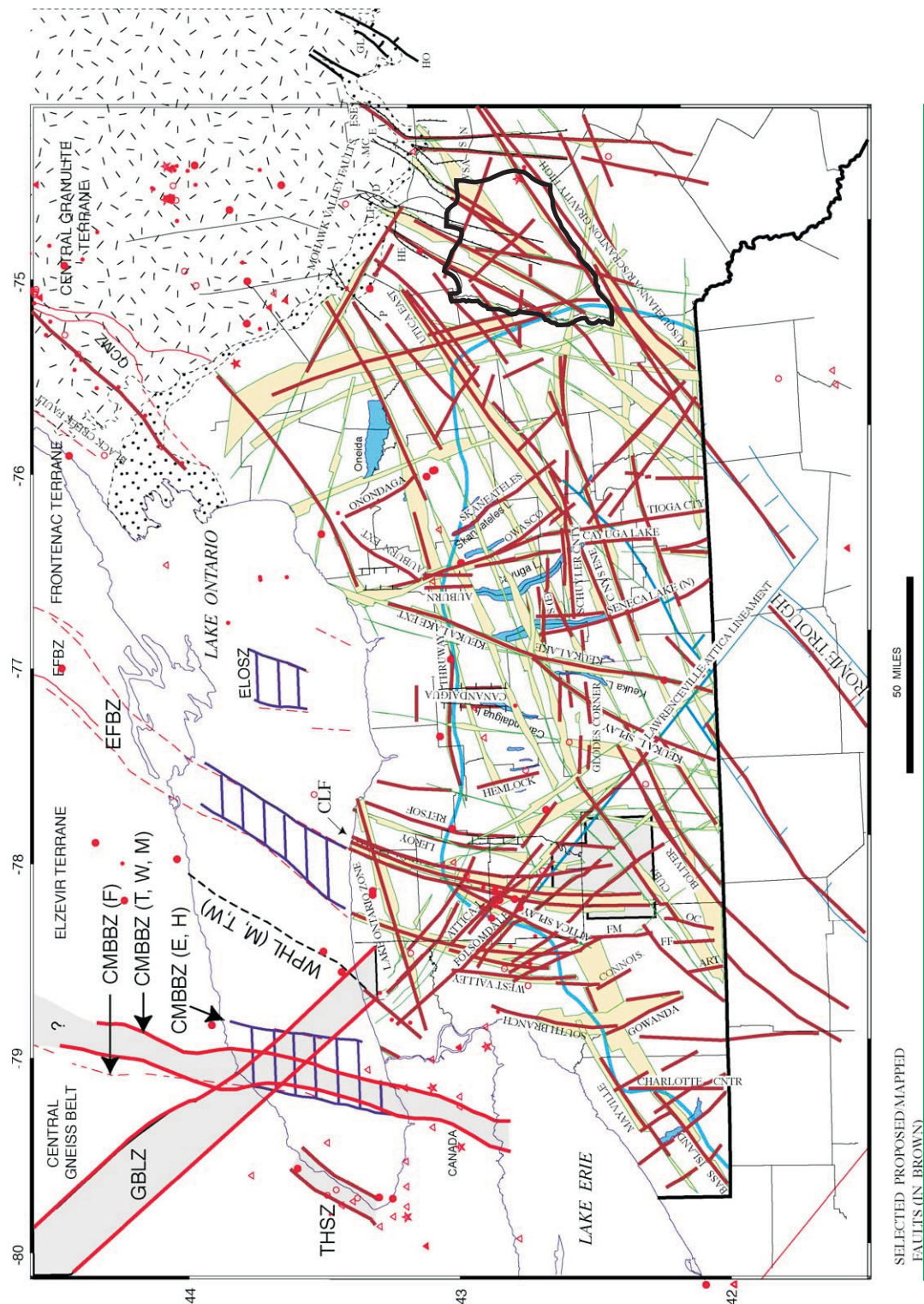
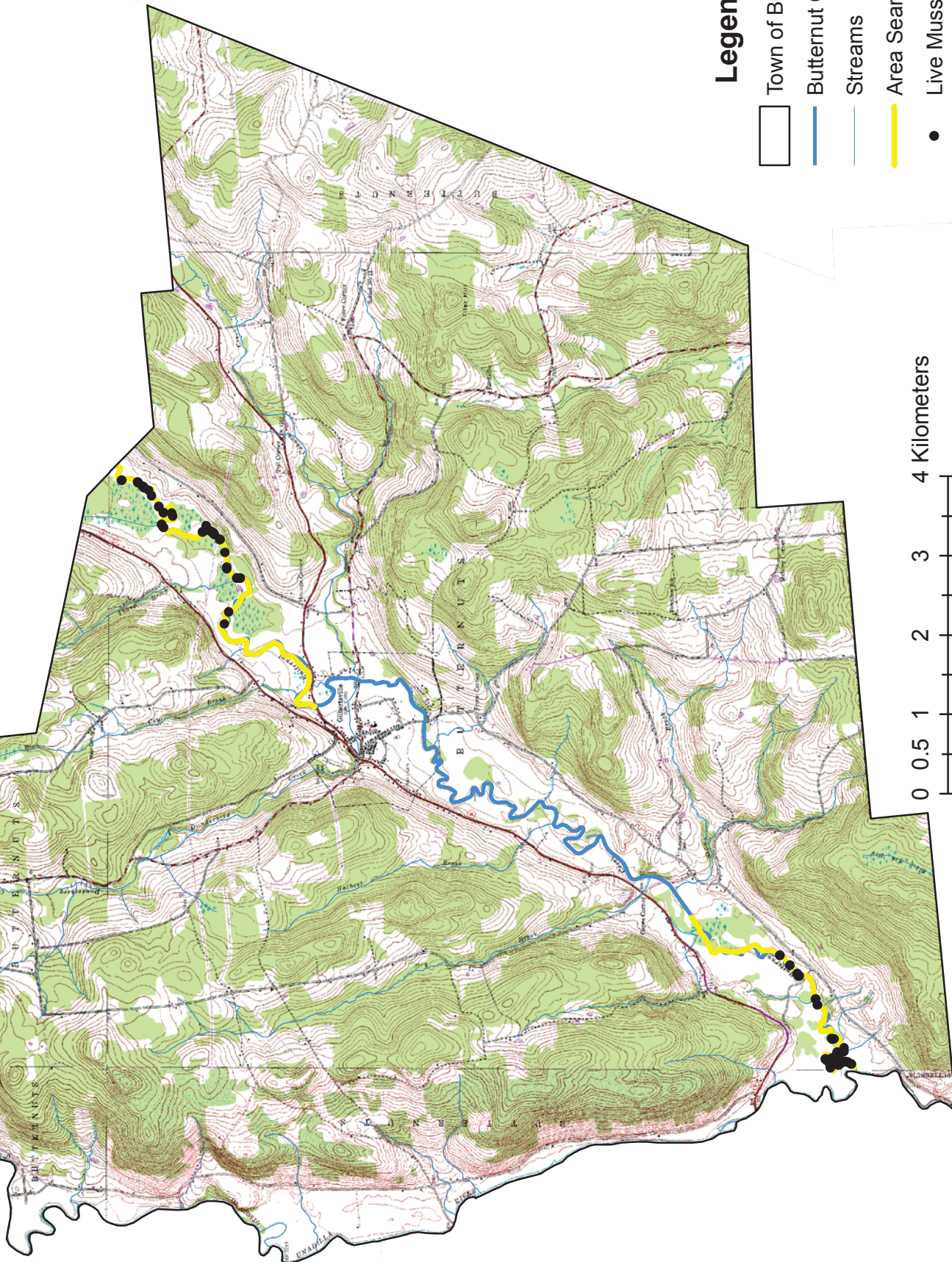


Figure 3: Numerous confirmed faults portrayed by Jacobi (2002, Fig. 5). Otsego County is outlined in black. In Otsego County, northwest-trending magnetic anomalies, E97 lineaments, and topographic map lineaments are all coincident with northwest-striking Fracture Intensification Domains (FIDs) and faulted monoclines (Jacobi and Smith, 2000). Jacobi documents the epicenters of three seismic events in easternmost Otsego County as being located on the NE-trending E97 lineament and gravity gradient that mark the Susquehanna River/Scranton Gravity High faults.



# Pearly Mussels in Butternuts Township 2011

Paul H. Lord & Timothy N. Pokorny



## Legend

- Town of Butternuts
- Butternut Creek
- Streams
- Area Searched
- Live Mussels

0 0.5 1 2 3 4 Kilometers



**Glacial Geology of Butternuts Township**

**LEGEND**

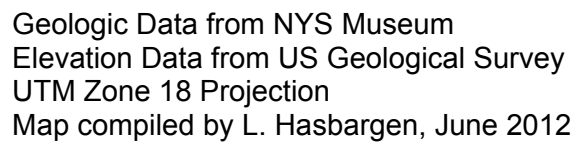
- Geol: Bedrock exposed (<1 m), r
- Geol: Qal Alluvium
- Glacial Kame, k
- Glacial Lacustrine sand, ls
- Glacial Outwash, og
- Glacial Till, t
- Stream

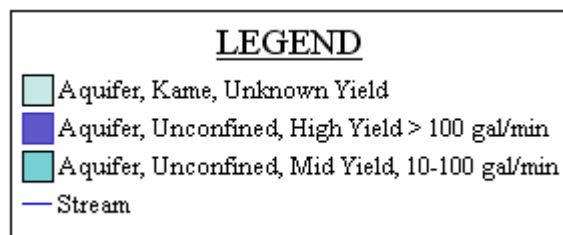
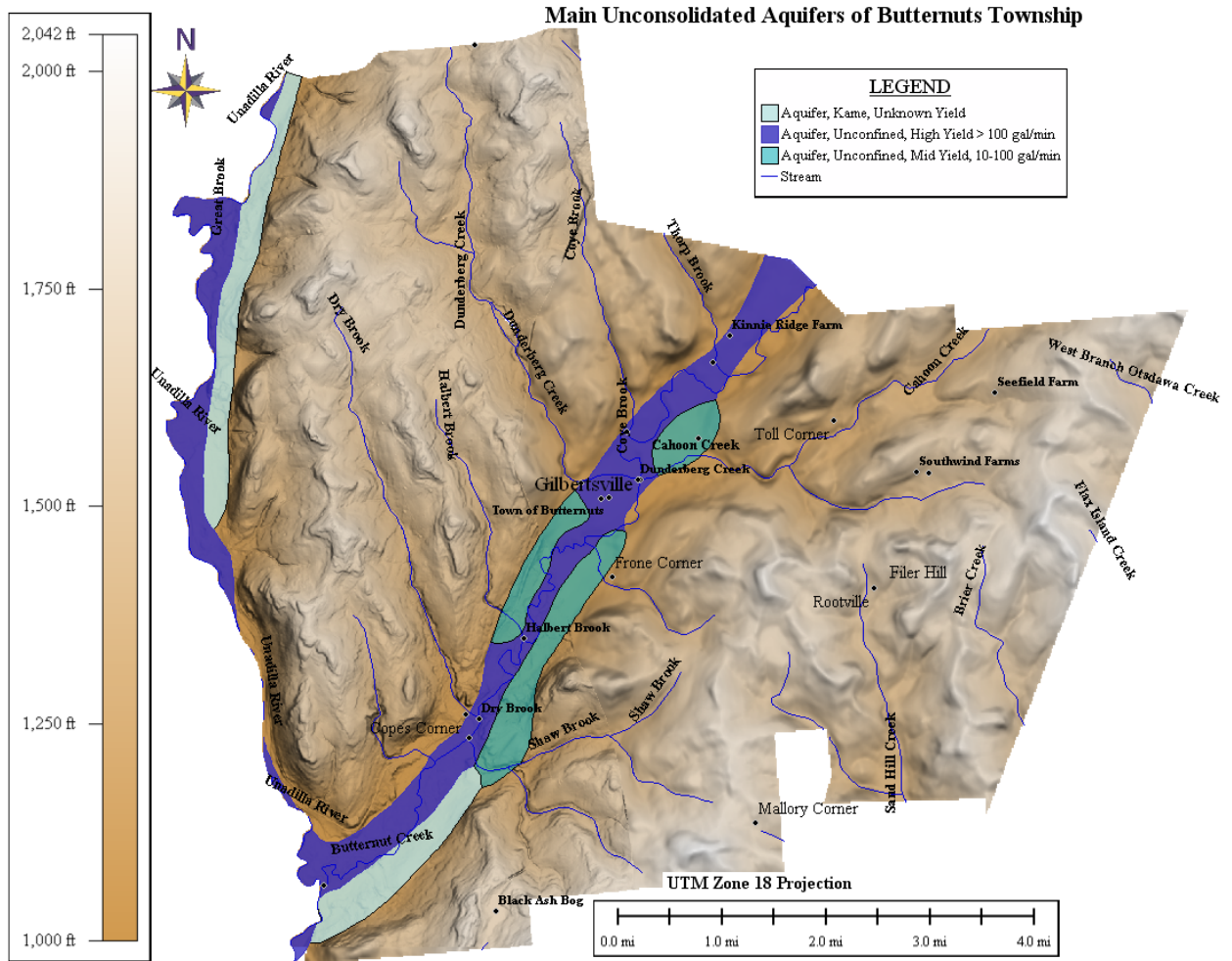
The map displays the following locations and features:

- Locations:** Unadilla River, Dry Brook, Dunderberg Creek, Coye Brook, Kinnle Ridge Farm, Toll Corner, Southwind Farms, Seefield Farm, West Branch Otadawa Creek, Filer Hill, Rootville, Mallory Corner, Shaw Brook, Dry Brook, Copes Corner, Frone Corner, Halbert Brook, Gilbertsville, Town of Butternuts, Butternut Creek, Black Ash Bog.
- Geological Features:** Unadilla River, Dry Brook, Dunderberg Creek, Coye Brook, Kinnle Ridge Farm, Toll Corner, Southwind Farms, Seefield Farm, West Branch Otadawa Creek, Filer Hill, Rootville, Mallory Corner, Shaw Brook, Dry Brook, Copes Corner, Frone Corner, Halbert Brook, Gilbertsville, Town of Butternuts, Butternut Creek, Black Ash Bog.

UTM Zone 18 Projection

Scale: 0.0 mi, 1.0 mi, 2.0 mi, 3.0 mi, 4.0 mi





### Main Unconsolidated Aquifers of Butternuts Township

Geologic Data from NYS Museum  
 Elevation Data from US Geological Survey  
 UTM Zone 18 Projection  
 Map compiled by L. Hasbargen, June 2012

## Appendices

### 1991 Master Plan

#### 1. ENACTMENT, TITLE AND PURPOSE

1.1 Enactment: The Town Board of the Town of Butternuts in the County of Otsego on this 12<sup>th</sup> day of March, 1991, under the authority of Section 272a of Article 16 of Chapter 62 of the Consolidated Laws of the State of New York, hereby adopts the following Master Plan for the Town of Butternuts.

1.2 Title: This document shall be known as the Town of Butternuts Master Plan.

1.3 Purpose: This Master Plan is intended to summarize the natural and historic assets of the Town of Butternuts, to define its essentially rural and agricultural character, to provide guidelines for the preservation of the Town's natural and historic assets in a manner compatible with orderly economic growth, and to provide a basis for detailed land use ordinances to guide the future development of the Town.

#### 2. INTRODUCTION

2.1 The Town of Butternuts: The Town's physical beauty and low population density have made it a location of choice for responsible agriculture for generations. Its primary industry has long been agriculture, and this has helped to maintain a level of physical beauty. Few of the trappings of urban life have been available here, and it has been incumbent upon Butternuts' residents to manage their lives in modes of relative independence. Wide spacings among residences have been more the rule than not, and personal privacy has been available on many properties.

2.2 Pressures on the Town: The Town's natural and historic assets are fragile resources. As in other nearby attractive areas, the decline of farm economics, coupled with an influx of new residents, threatens the very qualities that make it a special place. Not all of the Town's resources have remained intact; some lands have been treated harshly, or ignored. Much quality remains. Without some effective regulation of land use through local control, some forms of growth may occur in an indiscriminate, haphazard manner, marring natural beauty, diminishing historical character, straining local resources, and/or polluting the environment. As growth occurs, measures must be taken to maintain air, water, and soil quality, to insure proper waste disposal, to minimize traffic hazards and congestion, and to protect historic, esthetic and economic values.

### 3. POPULATION DENSITY AND LAND USE

3.1 Density: Part of the essential character of the Town of Butternuts is its relatively low density of population. Density growth can be controlled by land use regulation.

3.2 Land Use: Wherever possible, existing patterns of land use in hamlets and rural areas should be respected to preserve the integrity of the Town. Land removed from use as farmland or woodland cannot easily be returned to such use. Uses consistent with existing patterns should be encouraged when compatible with the characteristics of the land in terms of factors such as drainage, erosion control, water supply, sewage, waste disposal and accessibility.

3.3 High-Impact Uses: Protection of the natural and historical character of the Town must be regarded as a priority matter. Orderly growth of the Town needs to be encouraged. Commercial, industrial, agribusiness, professional, institutional, and possible future multi-residential uses cannot be foreclosed, but should be handled so as to create the least possible adverse impact on the time-honored residential and agricultural uses which have made the Town so desirable in which to live.

3.4 Public Spaces: There exists at present an adequate amount of publicly-owned recreational or open land within the Town. However, builders of multi-family living arrangements should be encouraged to include adequate recreational facilities within their borders, as well as developers of major/minor sub- divisions.

### 4. TRANSPORTATION

4.1 Roads: The Town of Butternuts is presently served by a network of State, County, and Town Roads appropriate to its geography and rural character. These roads provide access to all areas of the Town. The network, if suitably maintained and improved, should be adequate for the needs of the

Town for the foreseeable future. Indeed, substantial new Townroads would be such a major investment (having such impact on tax rates, as to require that the Town give due consideration to avoiding any such need, without substantial compensatory reasons therefor.

4.2 Congestion: Numerous Town roads, especially those which traverse steep terrain, are of limited suitability for handling the traffic flows associated with intensive development. Low population densities should be maintained in areas served by roads of limited capacity, to minimize traffic congestion and hazardous driving conditions.

4.3 Strip Development: Strip development along the major arteries of the Town, in addition to creating traffic hazards and congestion, could seriously diminish the attractiveness of the Town. Therefore, commercial, industrial, professional, and multi-unit residential development along the highways may require restriction to clusters, interspersed with low density residential, agricultural and/or conservation areas.

## 5. ENVIRONMENT AND PUBLIC HEALTH

5.1 Introduction: A major objective of the Town of Butternuts should be to maintain the natural environment so that it may be used and enjoyed by all citizens of the Town. The costs of preventing pollution should be borne by the business, institutions, or individuals which generate it; restoring a resource to a usable condition should not become the burden of the taxpayers.

5.2 Lot Sizes: Lot sizes must be sufficient, given their soil types, to provide on-site sewage treatment and water supply for the proposed use in question. Land use ordinances must require enough land so that each lot can safely contain its own well and sewage disposal system, without adversely impacting neighboring properties. Poorly-drained and impervious soils in some areas of the Town may require larger lot sizes than would be necessary in locations with more favorable soil conditions.

5.3 Lakes, Ponds, and Streams: In order to preserve these important assets, the Town should adopt land use policies which ensure water quality and recreational and scenic values.

5.4 Erosion: Erosion and siltation damage farmland and destroy habitats for fish and game. A land use ordinance should stipulate practices designed to minimize runoff and erosion. Building on steep slopes and/or clear cutting woodlands should be discouraged.

5.5 Wetlands: Groundwater, streams, ponds, bogs, marshes, swamps, and other wetlands should be protected.

5.6 Discharges: State and Federal laws prohibiting many kinds of discharges into surface and ground water or into the air are sometimes inadequate for local conditions. Local ordinances should prohibit pollution of water, air, or soil by toxic and/or noxious materials or conditions. Enforcement and penalties should be local as well as State and Federal responsibilities.

5.7 Natural Features: Valuable natural features, including scenic vistas, should be protected whenever possible.

5.8 Environmental Review: All applications to the Town for approval of actions which have the potential for significant threats to the environment are subject to thorough environmental review in accordance with the procedures prescribed in the New York State Environmental Quality Review (SEQR) Act.

6.1 Property Value and personal nuisance issues include, but are not limited to the following examples illustrating potential conflicts between personal freedom and possibilities for unintentional down- grading of the of the property values of others:

Nuisances – noise

Bright lights after dark

Excessive waste fluids, solids



Blocking others' sunlight  
Commerce in residential areas  
Concentrations of animals in residential areas  
Junkyards (non-conforming w/state laws)  
Interference with cemeteries  
Traffic congestion safety hazards

6.2 It is intended to encourage agriculture, commerce, industries, professions, and residences in the Town. None of this means free license to practices which may in some way infringe on the normally expected, reasonable rights of others. Where one or another lawful use (for example, a species of residential or agricultural use) is established on any site, and other, neighboring uses are to be newly undertaken nearby, the prior use shall generally be considered acceptable to the community. This does not mean that the Town undertakes to accept or condone any illegal or undesirable practice which may have been carried out within its borders.

It is the intent of this Master Plan to provide a framework in which it is possible for everyone who lives or intends to live in the Town of Butternuts to remain happy in that situation, while maintaining respect and consideration for the rights and preferences of others.

## ORDINANCES AND REGULATIONS

Urgencies vary. Some types of control over development appear to be necessary to protect the Town early on. Other needs appear to be difficult to define at present. The goals of the Town and its residents may be best served by the least restrictions and the most freedom practicable.

Subdivision Regulations: The need for Subdivision Regulations has been demonstrated by adverse developments in the Town. The recently enacted Subdivision Regulations are needed to protect the Town from irresponsible development. Local enforcement is required because of inability of the County to prevent registration of deeds in violation of our Subdivision Regulations.

Absent zoning, which may place requirements on all types of development, some intermediate form of protection may be required. One possibility is Site Development Plan Review, in which new land uses are subject to some control by the Town, being subject to a review procedure not unlike that for subdivisions.

## Water Quality Test Results

A variety of water quality tests have been conducted in Butternuts by organizations or private individuals. These tests can serve to establish a baseline of current water quality. All of the testing that has been conducted show the water is of high quality, without pollutions or significant issues.

The tests include:

1. Community Science institute well test – western part of Town by Unadilla River.



Community Science Institute, Inc.

NYSDOH ELAP #11790 www.communityscience.org EPA Lab Code NY01518

### Report

Sample matrix: Drinking Water  
Date & time sampled: 11/7/11, 10:10 AM  
Sampled by: B. [redacted]  
Sampling location: 533 County Highway 18, Butternuts NY 13809. Sample taken from pressure tank in crawl space. Chlorinator system disabled more than 24 hours prior to sample collection. Pressure tank drained for 2 hours prior to sample collection.  
Date and time received: 11/7/11, 12:25 PM

Client Code: Gen Pub

Sample Lab ID: OTS-5

Project Code: Gas wells

Report ID: Gen Pub Gas-202 OTS-5

Test Methods: SM18: 3500-Ca D; SM18: 2320 B; SM18: 2340 C; SM18: 2540 C; SM18: 2540 D; EPA 180.1; SM18: 4500-H B; SM18: 4500-Cl C; SM18: 2510 B; SM18: 5220 D; EPA 900.0; Benchmark SOP OR042; SM18: 5540 C; EPA 200.7; EPA 200.8. EPA 524.2

Test For	Allowed Level*	Result	Units	Test Date, Time	Additional Information
Calcium	- <sup>1</sup>	18.9	mg Ca/L	11/14/11	Temp. 15.5° C
Alkalinity	-	44.8	mg CaCO <sub>3</sub> /L	11/14/11	
Total Hardness <sup>2</sup>	-	59.7	mg CaCO <sub>3</sub> /L	11/10/11	
Total Dissolved Solids	500 <sup>3</sup>	82.5	mg/L	11/8/11	
Total Suspended Solids <sup>3</sup>	-	<2.8	mg/L	11/9/11	
Turbidity	5	0.58	NTU	11/7/11, 1:00 PM	
pH <sup>4</sup>	6.5 - 8.5 <sup>5</sup>	7.42	pH units	11/7/11	
Chloride	250	9.89	mg/L	11/10/11	
Specific Conductance	-	158	µs/cm	11/22/11	
Chem. Oxygen Demand <sup>1</sup>	-	16	mg/L	11/15/11	
Gross Alpha Radioact.	15 pCi/L	0.36	pCi/L	11/15/11	
Gross Beta Radioact.	4 mrem/yr. <sup>2</sup>	1.27	pCi/L	11/15/11	
Methane (natural gas)	-	<0.001	mg/L	11/14/11	
MBAS (detergents)	0.5 <sup>1</sup>	<0.04	mg/L	11/8/11, 9:30 AM	
Barium	2	0.0182	mg/L	11/12/11	
Iron	0.3	0.045	mg/L	11/12/11	
Manganese	0.3	<0.002	mg/L	11/12/11	
Arsenic	0.01	<0.0005	mg/L	11/12/11	
Strontium	-	0.053	mg/L	11/12/11	
VOCs <sup>6</sup>	Depends on VOC	Results attached	mg/L	11/11/11	

284 Langmuir Lab/Box 1044 95 Brown Road Ithaca NY 14850 Voice/Fax 607 257 6606  
2080 Cayuga View Road Trumansburg NY 14886 Voice/Fax 607 387 3820  
director@communityscience.org

2. Community Science Institute well test – southern part of Town.



**Community Science Institute, Inc.**

NYSDOH ELAP #11790    www.communityscience.org    EPA Lab Code NY01518

**Test Report**

<u>Client:</u> [REDACTED]	<u>Sample matrix:</u> Drinking Water <u>Date &amp; time sampled:</u> 11/7/11, 9:15 AM <u>Sampled by:</u> B. Bowen <u>Sampling location:</u> [REDACTED] Unadilla, NY 13849. Samples collected from kitchen sink. Sediment filter present but bypassed. Ran water for 4 minutes prior to sample collection. <u>Date and time received:</u> 11/7/11, 12:25 PM
------------------------------	---

Client Code: Gen Pub

Sample Lab ID: OTS-4

Project Code: Gas wells

Report ID: Gen Pub Gas-197 OTS-4

Test Methods: SM18: 3500-Ca D; SM18: 2320 B; SM18: 2340 C; SM18: 2540 C; SM18: 2540 D; EPA 180.1; SM18: 4500-H B; SM18: 4500-Cl C; SM18: 2510 B; SM18: 5220 D; EPA 900.0; Benchmark SOP OR042; SM18: 5540 C; EPA 200.7; EPA 200.8. EPA 524.2

Test For	Allowed Level*	Result	Units	Test Date, Time	Additional Information
Calcium	-	24.6	mg Ca/L	11/14/11	Temp. 15.5° C
Alkalinity	-	86.7	mg CaCO <sub>3</sub> /L	11/14/11	
Total Hardness <sup>2</sup>	-	79.4	mg CaCO <sub>3</sub> /L	11/10/11	
Total Dissolved Solids	500 <sup>3</sup>	120	mg/L	11/8/11	
Total Suspended Solids <sup>2</sup>	-	<2.0	mg/L	11/9/11	
Turbidity	5	0.33	NTU	11/7/11, 1:00 PM	
pH <sup>4</sup>	6.5 - 8.5 <sup>3</sup>	7.35	pH units	11/7/11	
Chloride	250	<2.0	mg/L	11/18/11	
Specific Conductance	-	205	µs/cm	11/22/11	
Chem. Oxygen Demand <sup>2</sup>	-	<10	mg/L	11/15/11	
Gross Alpha Radioact.	15 pCi/L	2.34	pCi/L	11/15/11	
Gross Beta Radioact.	4 mrem/yr. <sup>5</sup>	0.59	pCi/L	11/15/11	
Methane (natural gas)	-	<0.001	mg/L	11/14/11	
MBAS (detergents)	0.5 <sup>3</sup>	<0.04	mg/L	11/8/11, 9:30 AM	
Barium	2	0.0503	mg/L	11/12/11	
Iron	0.3	0.014	mg/L	11/12/11	
Manganese	0.3	<0.002	mg/L	11/12/11	
Arsenic	0.01	0.0016	mg/L	11/12/11	
Strontium	-	0.094	mg/L	11/12/11	
VOCs <sup>6</sup>	Depends on VOC	Results attached	mg/L	11/11/11	

284 Langmuir Lab/Box 1044 95 Brown Road Ithaca NY 14850 Voice/Fax 607 257 6606  
2080 Cayuga View Road Trumansburg NY 14886 Voice/Fax 607 387 3820  
director@communityscience.org

3. Spring test in southeastern quadrant of Town conducted by Les Hasbargen at SUNY Oneonta/BVA.

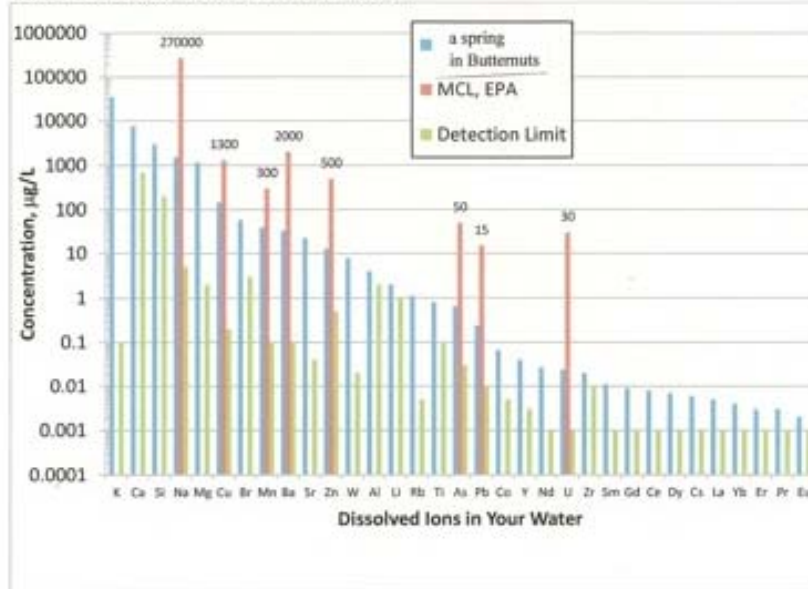


Catskill Headwaters  
Research Institute  
West Dormitory Drive  
SUNY College at Oneonta  
Oneonta, NY 13820  
SUNY Oneonta Water Quality  
Baseline Study

Director:  
Dr. Devin Castendyk, Associate Professor and  
Director Water Resources Program  
Office phone: (607) 436-2741  
Email: Devin.Castendyk@oneonta.edu  
  
Dr. Les Hasbargen, Assistant Professor  
Office phone: (607) 436-2741  
Email: Leslie.Hasbargen@oneonta.edu

## Charts of Chemical Constituents

Chart 1. Cations Detected in Your Water



Of the 66 elements we analyzed for, only 33 were detected in your water. The red bars are maximum contaminant levels (MCLs) set by the US EPA for drinking water. None of the MCLs are exceeded.

Town of Butternuts Comprehensive Plan August 2013

4. Water Test Samples by Scott Fickbohm at Otsego County Soil & Water.

Dunderberg Creek	20501010803c	Date	Conductivity (mS/cm)	TDS (mg/L)	pH_1 (Units)	Temperature (F)
		11/5/2010 15:00	0.102	100.9	7.47	44.6
		11/18/2010 13:57	0.073	111.9	7.87	43.7
		12/2/2010 8:24	0.25	415.8	8.4	39.02
		12/22/2010 9:10	0.065	123.8	7.89	32
		1/20/2011 8:34	0.045	85.1	7.49	32
		2/23/2011 15:17	0.09	171.3	7.88	32
		3/25/2011 13:12	0.051	90.1	7.98	35.96
		4/13/2011 14:31	0.071	105.9	7.53	45.14
		6/2/2011 9:39	0.131	156.4	8.29	61.34
		6/27/2011 10:58	0.09	107.9	7.58	60.62
		7/13/2011 14:37	0.144	149.5	7.81	72.32
		8/2/2011 11:15	0.16	165.3	7.33	72.68
		10/28/2011 14:22	0.078	116.82	7.99	44.5
		12/2/2011 14:45	0.066	70.85	8.19	39.6
		<b>Average</b>	0.101076923	143.8976923	7.863846154	46.99077
		<b>St.Deviation</b>	0.057040134	87.51926399	0.319571027	14.79759
		<b>Minimum</b>	0.045	70.85	7.33	32
		<b>Maximum</b>	0.25	415.8	8.4	72.68

Town of Butternuts Comprehensive Plan August 2013

Cahoon Creek	20501010803d	Date	Conductivity (mS/cm)	TDS (mg/L)	pH_1 (Units)	Temperature (F)
		11/5/2010 15:00	0.103	101.97	7.85	44.9
		11/18/2010 13:50	0.075	114.8	7.58	44.06
		12/2/2010 13:07	0.236	381.15	8.11	40.4
		12/22/2010 9:02	0.064	119.8	7.73	32.54
		1/20/2011 8:34	0.082	153.47	7.76	33.6
		2/4/2011 14:15	0.08	150.5	8.3	32.36
		2/23/2011 15:23			8.04	32.18
		4/13/2011 14:34	0.073	108.9	7.7	44.96
		6/2/2011 9:47	0.126	150.5	7.61	60.98
		6/27/2011 10:25	0.095	114.8	7.69	59.72
		7/13/2011 14:46	0.131	141.6	7.49	69.44
		8/2/2011 11:09	0.139	152.5	7.13	68.18
		10/28/2011 14:30	0.073	110.88	7.7	44.1
		12/2/2011 14:50	0.064	68.25	8.03	39.8
		<b>Average</b>	0.103166667	147.2625	7.759230769	46.33231
		<b>St.Deviation</b>	0.049504515	77.88249507	0.303190302	13.67119
		<b>Minimum</b>	0.064	68.25	7.13	32.18
		<b>Maximum</b>	0.236	381.15	8.3	69.44

5. The Butternut Valley Alliance website also has other water quality test results at <https://sites.google.com/site/butternutvalleyalliance/>.
6. Catskill Headwaters Research Institute at SUNY Oneonta has further information on water quality.

### **Relevant Studies**

Butternuts Geology by Les Hasbargen – This study can be found on the Butternuts Valley Alliance website at:

<https://sites.google.com/site/butternutvalleyalliance/>

### **Tompkins County Community Impact Assessment**

This assessment has information prepared by Greenplan, Inc. for the Tompkins County Council of Government. The executive summary of the Tompkins County Community Impact Assessment of High Volume Hydraulic Fracturing, December 15, 2011 can be found at: [www.tompkins-co.org](http://www.tompkins-co.org). The following pages are excerpted from that executive summary.



Economic Impacts	Community Impacts	Environmental Impacts
<ul style="list-style-type: none"> <li>✓ Short-term construction, trucking, retail and service jobs</li> <li>✓ Long-term maintenance jobs created for well production</li> <li>✓ Some of the new jobs created will pay higher than similar local jobs</li> <li>✓ New York State DEC estimates that Statewide, total direct HVHF construction employment could eventually exceed 4,400 full-time equivalent (FTE) workers and could generate indirect employment in other sectors of the economy exceeding 7,200 FTE workers under the low development scenario</li> <li>✓ The State failed to analyze job losses associated with declines in other industries, such as agriculture and tourism</li> <li>✓ Some businesses, like restaurants and hotels, will benefit</li> <li>✓ Ad valorem taxes based on the income stream from each well would be paid to local governments</li> <li>✓ Demands for local goods and services will increase and providers of such goods and services will benefit</li> <li>✓ Some existing residents and businesses will be affected by inflationary and employment pressures</li> <li>✓ Local rents may increase, potentially displacing local residents</li> <li>✓ Mixed impacts are expected on the value of leased and un-leased land, compulsorily integrated land, and real estate throughout the community</li> <li>✓ Potential disruption to the availability of mortgage financing for leased properties and adjoining properties</li> <li>✓ Future economic development potential, not based on natural gas, may be inhibited on or near wells and pipelines due to their presence</li> </ul>	<ul style="list-style-type: none"> <li>✓ NY State has acknowledged but not quantified the costs of HVHF to local government</li> <li>✓ Increased cost of services, especially for road and bridge construction and maintenance are expected</li> <li>✓ Increased need for police and emergency first responders</li> <li>✓ Rapid population influx creating higher service needs as specialized gas rig workers arrive from other gas regions</li> <li>✓ Increases in social problems such as crime and demands for “man camps” housing temporary out-of-state workers</li> <li>✓ Demands for recreation, health and welfare, housing and solid waste management will increase</li> <li>✓ Demands for additional classroom space will increase</li> <li>✓ Demands for rooms in hotels and motels for more than 30 days may squeeze out tourists and college student’s families</li> <li>✓ Permanent resident exclusion in hotels/motels may mean less tax revenues to support local tourism activities</li> <li>✓ Increased demands for local government administrative needs and equipment</li> <li>✓ Potential for loss in population and smaller increases in real personal income after gas drilling ends</li> <li>✓ Potential explosions, fires, spills, releases and accidents, involving natural gas and hazardous substances may shake public confidence in their own safety and well being and yet, the State did not complete a Health Impact Assessment</li> <li>✓ Both acute and chronic spills and accidents will strain volunteer and paid professional emergency services workers</li> </ul>	<ul style="list-style-type: none"> <li>✓ The heavy industrial characteristics of gas drilling and production are incompatible with the County Comprehensive Plan and with the comprehensive plans and zoning regulations of the four municipalities studied</li> <li>✓ Community character will be adversely affected by the visual unsightliness of new gas infrastructure and heavy industrial nuisances like noise, lighting, odors, high volume heavy truck traffic, compromised health and safety due to accidents, spills as well as air and water pollution</li> <li>✓ Tourist attractions, such as State and local parks, wineries, farms, and scenic landscapes may be impaired by heavy industry</li> <li>✓ GDTF estimated 1,848 acres in the County could be directly transformed from its existing use to gas drilling and production for 60 years or more</li> <li>✓ An estimated 480 acres of farmland could be directly lost due to new gas well development; additional organic and other farms will be indirectly affected</li> <li>✓ Soil erosion and sedimentation of local surface waters will occur due to grading and vegetation removal for gas well development as well as access roads, compressor stations, staging areas and pipelines</li> <li>✓ Potential seismic activity near gas wells; earthquakes have now been attributed to HVHF</li> <li>✓ Groundwater quality may be diminished by contaminants originating from drilling activities as well as spills and accidents with as many as 42 incidents of groundwater contamination projected in Tompkins County</li> <li>✓ Demands for HVHF water supply in 10 years in Tompkins County could equal the total volume of Honeoye Lake, the 10th largest Finger Lake</li> </ul>

Economic Impacts	Community Impacts	Environmental Impacts
<ul style="list-style-type: none"> <li>✓ The State calculated economic benefits but failed to analyze the economic costs to local, county or State government from HVHF; DOT has termed the transportation impacts on State and local government as “ominous”</li> <li>✓ Competition for certain jobs, such as local truck drivers, may create an imbalance affecting dairy farmers and other local businesses</li> <li>✓ Homeowners who lease their land and suffer property damage, such as well water contamination, structural damage or casualty from a gas explosion, won't have coverage from homeowner's insurance and may have no recourse against the gas company holding the lease</li> <li>✓ Signing bonuses will go to landowners who lease their land to gas companies and later royalties to such landowners, provided wells are eventually drilled and are not “dry holes”</li> </ul>	<ul style="list-style-type: none"> <li>✓ After gas development and production cease, the industrial infrastructure and industrial contaminants left may be a detriment to community redevelopment</li> <li>✓ Regardless of whether a community decides to prohibit gas drilling and production or not, regional impacts will create local impacts and costs</li> <li>✓ Absent local land use controls on gas drilling, well sites could be located anywhere and everywhere in a community with only a few exceptions, such as not within 100 feet of a home, 150 of a school, within a floodplain, or 500 feet of a groundwater well unless the landowner consents</li> <li>✓ Municipalities lacking a comprehensive plan and/or land use controls would be at the mercy of the State to determine where and how many wells are drilled in their community</li> <li>✓ HVHF has the potential to divide communities, pitting neighbor against neighbor - those who find adverse environmental, health, community character and economic impacts paramount against those who believe gaining economic benefits are critical</li> </ul>	<ul style="list-style-type: none"> <li>✓ Surface water quality may be diminished by contaminants originating from drilling activities as well as spills and accidents with as many as 336 leaking wells, 252 citations for serious regulatory violations, and 16,800 tons per year of sediment runoff to waterways</li> <li>✓ There are no approved sewage treatment plants available to treat wastewater generated at well sites</li> <li>✓ Wildlife habitats will be fragmented by well, access road and pipeline construction</li> <li>✓ Some wetlands, especially small unregulated ones, will be lost</li> <li>✓ A variety of air emissions will increase affecting local air quality from drilling rigs, venting and flaring of gas, diesel exhaust, volatile chemicals, fugitive emissions from leaks, and use of dehydrators</li> <li>✓ Significant methane releases will occur, a potent greenhouse gas with global warming affects</li> <li>✓ The Finger Lakes tourism “brand” may be permanently damaged by an industrial landscape</li> <li>✓ Heavy truck trips have been estimated in Tompkins County at an additional 5,040,000 over the next 10 years</li> <li>✓ Noise levels within 2,000 feet of a well will exceed the US EPA and HUD standards for outdoor noise</li> <li>✓ Gas wells can be sited as close as 100 feet from a home and 150 feet from a public building like a school</li> </ul>

## Public Input

### 1. June 6, 2011 Community Workshop

BUILDING CONSENSUS FOR SUSTAINABILITY, LLC.  
BUTTERNUTS COMPREHENSIVE  
PLANNING VISIONING  
MEETINGS SUMMARY  
JUNE 6, 2011

#### PROCESS

Building Consensus for Sustainability, LLC. (BCS), was retained by the Town of Butternuts to assist in the design and facilitation of meetings related to the Town's present comprehensive plan amendment process, and to prepare a report documenting the proceedings. The scope of services included the design of one meeting agenda and the facilitation of that same agenda at two separate meetings, so that more Town residents were able to participate. This service was separate and apart from the Town resident survey that was in-process. Note: BCS did not participate in developing that survey, nor have we seen the results of that survey.

BCS facilitated meetings on May 14th and May 18th 2011. The meetings were held at the Grange Hall in Gilbertsville. There were approximately 30 attendees at the first meeting and 40 at the second.

As stated, the agendas for the two meetings were identical. The meetings began in general session for all those assembled.. During this session the agenda for the meeting was laid out as well as draft ground rules (attached in appendix) for how the meetings were to be conducted. Participants were given the opportunity to amend the draft ground rules. After incorporation of amendments to the ground rules, participants were asked to agree to abide by the ground rules.

After the preliminary general meeting, we separated into smaller break-out groups of approximately 10 people each.

Each group was then be charged with discussing the following three questions:

- Where are we now?
- Where are we going?
- Where do we want to be?

For intergroup consistency purposes, the first two questions were divided into strengths and weaknesses and opportunities and threats. Flip charts were utilized to keep an accurate reporting of all responses to all questions for each group. (attached in appendix) These charts were then posted for the entire groups perusal at the conclusion of the breakout sessions, when the entire group reconvened.

Each participant at the meetings was given four "highlight dots". They were instructed to place these dots on the items on the flip charts than they deemed most important or significant to them. If one item was deemed particularly important to them, they were

instructed that they could place all four of their dots on that one item. They were able to place their dots, if they chose, on issues that were identified in another group.

What follows is an overview and compilation of the responses to the above interrogatories and the trends that were evidenced by the placement of the “highlights dots”, as well as by the frequency in which issues were identified across the seven separate breakout groups addressing the same questions.

#### WHERE ARE WE NOW?

##### STRENGTHS:

Although stated in diverse terms in most of the breakout groups a recurring theme abounded; that of a peaceful, quiet, safe, and well-kept rural community with strong community spirit. Another recurring theme was that of a clean environment in terms of clean air and water.

The natural beauty of the area and its history were repeatedly highlighted.

##### WEAKNESSES:

The responses for weaknesses were more diverse but patterns still developed. The following themes were consistently repeated: lack of opportunities for youth including activities, jobs and a strong gravitational pull to return/remain in the area.; quality of schools; lack of public transportation; high property/school taxes; lack of cell phone service; declining/aging population; and disconnections (failures to communicate) within the community.

#### WHERE ARE WE GOING?

##### OPPORTUNITIES:

There was great diversity amongst the responses under this heading. Some recurring themes included: development of renewable energy options; the development and expansion of organic agricultural options, and sustainable agriculture and forestry; the development of safe natural gas drilling; and the promotion of the area including its strong historical assets, beautiful open space and farmland, and a vibrant arts community.

##### THREATS:

Although there were several diverse responses under this heading there was one predominant recurring response: the threat of hydro-fracking and potential related contamination of water, air, and ground, and the associated threats of industrialization, heavy traffic.

#### WHERE DO WE WANT TO BE?

Again there was great diversity amongst the answer is to this question. However, a recurring theme was to maintain the character of the community as it exists now: quiet, peaceful, with historic and rural character maintained.

Self-sufficient, vibrant, and sustainable, a model of sustainable agricultural community for others to follow.

Supportive of youth and seniors, farmers and artists, new and existing businesses

#### POTENTIAL NEXT STEPS

The following suggestions were made at the conclusion of the meetings:

Post the report on the Town website

Have a copy of the report in the library as well as the post office

Post the report on the Ostego County website at [ostegocounty.com](http://ostegocounty.com)

Have a copy of the report at the Gilbert Block Quilt Shop

Solicit feedback on the report from residents who were not able to attend.

#### SUMMARY

It was quite clear in the two meetings that the residents of the Town of Butternuts who attended care deeply about the Town and agree on many of its strengths and assets, and share similar goals for its future.

The potential impacts of the proposed gas extraction industry are believed by many to be the most troubling and powerful threat to the Town, while some perceive it, if done safely, to be an opportunity for the Town.

These meetings represent a beginning of this community conversation about the Town of Butternut's vision for its future and the incorporation of this vision in an amended comprehensive plan. More community conversations are required to reach, if possible, for consensus regarding gas drilling, and to develop the Town's vision in more detail with respect to other issues that were raised.

Citizens were very engaged, enthusiastic, and respectful during the meetings.

It is recommended that the Comprehensive Planning Committee continue to engage more citizens in this process, in a similar open, transparent, and responsive manner, so that the decisions ultimately arrived at have broad, legitimate support across all stakeholder interests within the community

Fred Realbuto  
Buck Moorhead

## 2. Workshop Report

In November, 2012, the Committee hosted a second community workshop. At this time, the community was asked to offer ideas on actions that could be taken to meet the goals expressed in this Comprehensive Plan. The results, by topic are below. Participants were also asked to add a sticker next to the idea that they desired and felt were a priority. Some topics received red stickers which indicated that those ideas were ones that those participants did not desire. Ideas that do not indicate any stickers were given were those that were offered by one person, but no others indicated it as a priority.

### Transportation, and Community Infrastructure topics

- More attention to environmental impacts of salt and calcium use on gravel roads
- Do not allow use of fracking fluid on local roads (3 stickers)
- Have strategies in place to ensure local roads are not compromised by heavy loads, and fracking trucks (1 sticker)
- Murphy Road – address flooding and erosion problems (2 stickers)
- Look at alternative methods of beaver control – regarding flooding of roads (2 stickers)
- All roads need more attention to maintenance and use
- Copes Corners recreation area– Look into town taking control
- Butternuts Creek – Look for public access and uses
- Better cell phone service – Tower (5 stickers)
- Proactive/Preventative measures to address climate change impacts
- Investigate ways to move town “off the grid”, and become energy self-sufficient – hydro, solar, geothermal power plants
- Centennial Park – expand or create another, with trails
- “Exercise Park” for kids, to keep them active (1 sticker)
- Consolidate town and village office space to encourage better communication (1 sticker)
- Town website – make it more “interactive”, more advertising of events (3 stickers)
- Become a “Climate Smart Community” – DEC program (<http://www.dec.ny.gov/energy/50845.html>)
- Better flood control measures
- Set up a car-share car-pool network and advertise on website, with volunteer drivers
- Explore alternative fuel use – school buses, trucks (1 sticker)
- Explore historic transportation modes, such as horse drawn vehicles, as a tourist attraction, and use by the town
- Snowmobile trail system - outside the village (11 no votes)
- Consolidate town and village governments (2 stickers, 1 no vote)
- Address visibility at intersection of 51 and Commercial Street
- Promote the Otsego Express bus service and post the schedule, need more use or we will lose it
- Reverse 911 system – for significant climate events – storms, emergency situations (1 sticker)

- Guy Beardsly Road – bad intersection, sight distance
- Minimize the straightening of curvy local roads to maintain local character (1 sticker)
- Address flooding problems at Route 51 and County route 8
- Multi-use trail along Butternuts Creek (1 sticker)
- Better signage along major highways, pointing to village amenities (1 sticker)
- Town sponsored “van” service (1 sticker)
- Complete overhaul of multi-media communications system – includes internet, and traditional forms, such as posting signs, newsletters, etc. (1 sticker)
- Promote recruitment and retention of emergency and fire service
- Build a facility to promote the arts, performing and otherwise
- Become an equestrian friendly community – interconnected long distance trail system (4 stickers)
- Promote small business opportunities along trail future systems (1 sticker)
- Educate land owners on liability issues when leasing lands for public use (2 stickers)
- Use tax incentives to encourage public use of private lands
- Canoe water trail – Butternuts Creek (1 sticker)
- Habitat for Humanity “style” group, to help with maintenance of existing housing stock
- Job specific/location specific car sharing

### **Economic Development**

- Make a space where locals can sell products (“Made in Butternuts”)
- Invest in transmitter or wi-fi technology in certain locations to allow cell and Internet service (3 stickers)
- Look into smaller cell phone towers
- Create a dairy processing facility in town (3 stickers, 3 RED stickers indicating not desired)
- Establish horse trails/roads linked to existing businesses (3 stickers)
- Organize recreational events to get people here (may require volunteers) (1 sticker)
- Bring in an agri-business specialist to advise farmers on strategies, accessing grants, etc. (3 stickers)
- Seek state funds to assist organic farmers to expand
- Consider developing an agri-tourism program like the one in Madison County
- Hire a Butternuts shepherd and sheep herd to get us on the map (1 sticker)
- Establish an annual event – horse show weekend
- Use art shows to bring people here
- Offer arts, crafts, and cooking classes and workshops
- Hold air show events, with resident input on scheduling (10 RED stickers indicating not desired)
- Expand the farmers market with more vendors and space (5 stickers)
- Establish a local committee to encourage ideas for new businesses through grants and mentoring (3 stickers)



- Create an Internet store for multiple businesses, possibly through the town or village website or Butternut Valley Alliance (1 sticker)
- Coordinate with local colleges [to provide] small business technical assistance and support
- Explore the feasibility of solar and wind farms
- Advocate for a Butternuts zip code (4 stickers)
- Create a Butternuts Store, carrying butternut squash, Butternuts beer, etc.
- Contact yogurt producers about promoting our farms
- Develop a Butternuts logo
- Develop a community newspaper that markets events and meetings going on, etc. (1 sticker)
- Develop an online newspaper
- Support rural broadband development (2 stickers)
- Seek state support for small business development
- Create a Town revolving loan fund for small business
- Implement an energy conservation program to retain wealth (2 stickers)
- Set up cooperative purchase of renewable energy including biomass heating and solar, for economies of scale (1 sticker)
- Develop a marketing plan for Gilbertsville and Butternuts (1 sticker, 1 RED sticker indicating not desired)
- Promote Gilbertsville as the economic hub of Butternuts
- Have performing arts events (1 sticker)
- Create an indoor winter farmer's market (1 sticker)
- Advertise events held by churches, schools, organizations, etc. monthly through a bulletin board, Butternuts News, and the Pennysaver, with collaboration on a master calendar
- Develop a year-round co-op with more than produce, bulk purchases, etc. (1 sticker)
- Recruit medical services to town (1 sticker)
- Recruit a veterinarian
- Research future economic development opportunities
- Research funding opportunities for town-wide Internet
- Recruit retirees
- Establish a Buy Local program (3 stickers)
- Develop brochures with contact information, hours, etc. for the arts & for farms in print and on the web; distribute as far as Cooperstown, through I Love New York (5 stickers)
- Sell local produce as an add-on to an existing business (1 sticker)
- Find a way to "define" the Town/Village for tourism marketing: "Why visit Butternuts?" (1 sticker)
- Develop creek access points with canoe rentals
- Promote horseback riding and trails for hiking and cross-country skiing on state land (1 sticker)
- Develop multi-use trails outside the village
- Develop businesses that use local farm products and resources

## Town of Butternuts Comprehensive Plan August 2013

- Re-energy Art Walks (open studios) on a certain day each quarter (1 sticker)
- Establish a Town-wide swimming pool (1 sticker, 1 RED sticker indicating not desired)
- Promote local events throughout Otsego County, including Cooperstown (2 stickers)
- Get summer residents involved in fundraising and support (1 sticker)
- Create visitation “packages” with things to do, places to dine/stay, etc. in the Butternut Valley
- Create a commercial kitchen/business incubator with processing space and professional business counseling

### Land Use topics

Action or Strategy	No. of Times Mentioned (if > 1)	Number of Stickers	
		Desired	Not Desired
Adopt a zoning ordinance	4	4	
Study the potential for Town management of Copes Corner Park		4	
Explore providing services to seniors at Town level to address gaps and/or retrenchment of County service provision		3	
Adaptive re-use of old school	3	2	
Community gardens-promote through an inventory of suitable sites	2	2	
Encourage Formation of an "elder advocate" to coordinate/provide services to the elderly		2	
Ensure that property maintenance standards are enforced	2	1	1
Promote senior housing that is home-grown in the Town		1	
Explore "creative" ways to finance home purchases		1	
Ensure that zoning carefully considers and controls growth		1	
Use zoning to prevent expansion of Village		1	
Encourage Tiny House Movement in Butternuts		1	
Provide free paint to encourage colorful houses		1	
Open space protection		1	
Affordable family-oriented and senior housing		1	
Consider "granny flats" in relation to existing codes to meet multi-generational housing needs		1	
Site plan law should include consideration and/or ways to preserve environment and historic character		1	
Inventory existing underutilized properties and promote for re-use	2		
Clustered housing developments			11
Promote re-use of existing houses as multi-unit structures			5
Consider affordable housing in adoption of zoning			1
Work with Village to encourage small businesses and arts uses			
Work with Village to ensure that zoning doesn't remove commercial uses from the Village			
Work with County to develop codes that exceed current energy efficiency standards			
Encourage history center/Town museum			
Evaluate site plan law to ensure and promote green building/energy efficient construction/site design practices			

Action or Strategy	No. of Times Mentioned (if > 1)	Number of Stickers	
		Desired	Not Desired
Ensure that regulatory program considers impact of development on community services			
Work with and/or support existing community senior services providers			
Support Butternut Valley Association efforts to make NY-51 a Scenic Byway			
Encourage development of senior housing			
Encourage creation of a community center			
Encourage affordable housing			
Encourage energy audits and retrofits for existing structures			
Work with County codes staff to ensure that energy-efficient practices are supported			
Work with County to develop materials detailing green building practices			
Right-to-Farm law			
Encourage Town-village communication			
Explore conducting a build-out analysis			
Consider screening standards for certain uses, especially commercial			
Work with Village to expand uses at Centennial Park			
Promote conversations that balance individual use of property with community			

### Agriculture topics

1. Sponsor a consultant to work with farmers to help them look into options for diversifying their farms: Need experts to come in and need tools to help the farmers, such as helping them use farms for renewable energy (like solar). Farmers need to know there are alternatives to their farmland other than selling land or rights. Help dairy farmers help find new income
2. Talk to farmers and involve them in solutions. Get farmers together to brainstorm solutions on a regular basis.
3. Develop and expand the Town website to include about and for farming and ag-related activities
4. Support grant writing and find funding to help implement farm related programs (4 stickers)
5. Create an Agritourism map tour or brochure about what farms are here, and what produce they have and when it is available.
6. Visit Madison county to learn what they have done so successfully and reproduce it here
7. Create a Green fund to help people set up gardens ; Need someone to teach people about gardens
8. Encourage micro farming

9. Support and organize programs to help in sharing of equipment (1 sticker)
10. Support plantings for habitat maintenance
11. Make the goal of self sufficiency - the town should promote and organize monthly community workshops using local expertise
12. Promote small animals
13. Encourage organic farming (6 stickers)
14. Start a town shepherd that travels with animals for lawn care; this can involve herding dogs, lambing, using the meat when butchered (2 stickers)
15. Concentrate on setting up CSA's more community supported agriculture needed
16. Find ways to give tax relief and tax incentives to farmers and farmland owners to keep their land in farming
17. Keep pollution out of town, keep soil clean
18. Promote education and communication about agriculture. There is need to increase community support and knowledge about farming through local advertising and marketing programs. Educate people on organic and locally grown produce and help them understand locally grown is good. Promote more communication between town and village too. (1 sticker)
19. Promote eco tourism and agritourism
20. Encourage change in legislations on dairy prices and transportation
21. Place more signs around town to let people know where farms and produce are.
22. Put a brochure box up for local businesses with a farm product map
23. Promote farmers to use environmentally sustainable practices
24. Educate the local assessor on agriculture and agricultural practices so farmers get more tax relief. (1 sticker)
25. Expand farmer market (1 sticker)
26. Plant trees and develop forestry
27. Promote biomass as an important component of local agriculture
28. Encourage BVA to support agriculture and to put more resources into agriculture
29. Start programs that put local produce in the local store (2 stickers)
30. Establish a system or links or networks that connects farmers and buyers especially connecting restaurants with local growers so produce is available year round. Educate restaurants about the local produce that is available. Need to promote more year round farming. Farmers need to be educated about the crops that are needed by local users. (3 stickers)
31. Promote equine farming (2 stickers)
32. Find ways to promote more labor for farmers (1 sticker)
33. Keep roads in a manner that can support ag equipment
34. Have a community green house and local gardens (3 stickers)
35. Promote smaller scale to moderate scale food processing. Not interested in large scale like Chobani, but smaller or modest ones would fit in the area well.

36. Encourage chobani employees to live in town so that there are more people here to buy local products.
37. Develop a cooperative distribution system so that farmers can concentrate on growing and there is a system in place to get their produce to local or distant markets. Get the produce to NYC especially (1 sticker)
38. Create a website that matches growers and buyers and matches those that want to buy farmland for farming and those that are selling it. (1 sticker)
39. Match community with a club that fixes old agricultural equipment – they can use some of the vacant fields.
40. Create hot houses for year round produce growing
41. Fund a nonprofit local news paper
42. Invite Amish to come in (1 red sticker)
43. Grow vegetables for down state
44. Talk to real estate people so they are more educated about farms
45. Local education about agriculture
46. Advertise downstate to attract farmers and new residents
47. Protect farmers from nuisances

**Environmental and Public Health topics**

1. Monitor environmental quality of the town with water testing and make results available. (1 sticker)
2. Investigate environmental effects of road salt; dust control to alternative to salt; Investigate safety and environmental issues of road salting practices
3. Evaluate health issues with village water (lead)
4. Protect existing roadside trees and plant new ones
5. Have a local medical facility - small scale treatment without going to hospital and without calling Ems (2 stickers)
6. Have zoning to protect building sites and open space/ consider real zoning to protect us (2 stickers)
7. As a policy first do no harm
8. We are a polite town let's keep being polite
9. Find a better way to flush water lines
10. Look into expanding public water supply/ sewage treatment system
11. Promote reuse of grey water
12. Public education on septic systems
13. Investigate regulations of pesticide use on farms and private homes
14. Create an alliance with upstream/ regional towns to enforce water and air regulations
15. Can town coordinate regulatory agencies and education regarding land management practices?
16. Create brochures - available from town regarding environmental practices -make them readable

17. Control noise pollution (Lawn mowers and leaf blowers) (1 sticker)
18. Create guidelines for all forms of pollution... planning board or laws
19. Town-led recycling for shredding electronics and composting (4 stickers)
20. Critical environmental area designation for protecting areas
21. Create one source of information on grants for green projects
22. Create goals for energy independence and renewable energy
23. Have guidelines on light pollution
24. Educate people regarding health... health hazards ...news letter or website (1 sticker)
25. Investigate alternative energy sources (4 stickers)
26. Investigate effects of gas pipelines on air quality
27. Forbid gas drilling near reservoir, protect reservoir water shed ( 1 sticker)
28. Public access to creek for swimming and fishing
29. Regulate heavy industry and cell towers
30. Look into smaller scale wind energy
31. Investigate possibility of underground power lines (1 sticker)
32. Address problems of smoke from wood burning stoves and furnaces
33. Look into damage about and rules for logging
34. Have more environmental education at the school in early grades; sponsor fieldtrips to local resources, farms and solar arrays, etc ( 1 sticker)
35. Town participation in large scale treatment for insect infestations
36. Encourage better beaver control practices and educate the public
37. Protect our water supply from industrial pollution and extraction (3 stickers)
38. Address possible problems and effects of extreme weather in the future especially on water supplies and build for it
39. Agricultural practices that ware environmentally safe(fertilizer waste and erosion)
40. Protect the town from environmental degradation from fracking and other heavy industry (22 stickers)
41. Encourage recreational use of public spaces parks and our gorgeous surroundings (copes corners park) (1 sticker)
42. Promote sound forestry practices through permitting
43. Monitor health issues like cancer cases and seek grants and governmental help (1 sticker)

### 3. Community Interviews

The following interviews were conducted and contributed to the profile and inventory of this Comprehensive Plan:

#### INTERVIEW INVENTORY LIST

April 15, 2012

	<u>Interviewer/s</u>
⤴ Charlie Eckelmann, Town Supervisor	CP Committee
⤴ Ed Dibble, Town Councilman (past til 12/11)	CP Committee
⤴ Raymond Musson, Town Board (past)	Nields
⤴ Marlene Brooks, Town Council	Rowe
⤴ Don Hunt, Town Board	Rowe/Nields
⤴ Michele Farwell	Nields
⤴ Heather Covington	Nields
⤴ Chris Hunt, Town Highway Supervisor	Moennich
⤴ Ken Nolan, Justice, Town of Butternuts (past Town Supervisor)	Gallo
⤴ Glenn Hamilton, GMU School Superintendent	Nields/Pinotti
⤴ Annette Hammond, GMU School Principal	Nields/Pinotti
⤴ Gilbertsville Post Office Manager	Harvey
⤴ Heather Eastwood – Chief of TOB Emergency Squad	Rowe/Nields
⤴ Norm Eastwood – former Squad Chief (includes partial Emergency Squad equipment inventory)	Rowe/Nields
⤴ Sue Rowe, Gilbertsville Librarian	Gallo
⤴ Leigh Eckmair, Butternuts Town Historian	Gallo
⤴ Shirley Musson, Mayor, Village of Gilbertsville	Simpson
⤴ Doug Gohde	Pinotti/Nields



#### **4. Survey with Results**

The following pages report the survey questions and full results. Hand-tabulated results (spreadsheets) can be found in the Town Archives with the Town Historian.

##### **A Summary of Community Survey Results**

**About the Numbers: Of the 1823 surveys sent out (plus about 20 picked up from Town Clerk) we received 408 responses (22 %). Many respondents did not answer some essay type questions and the response rate for those questions is provided where needed.**

## Community Character

1. *What are the strengths of the Town of Butternuts? Name three.*

Out of the 330 respondents who answered the question, a total of 880 strengths recorded. Top responses shown below.

Strength	Number of Responses	Percent (of total responses)
Rural Character	126	14.32%
People	86	9.77%
Historic Character	84	9.55%
Natural Environment	75	8.52%
Peace and Quiet	53	6.02%
Community Feel	48	5.45%
Agriculture	43	4.89%
Water and Air Quality	38	4.32%
Small Town Feel	37	4.20%
General Beauty	32	3.64%
For what's not here- big industry, traffic, high taxes	29	3.30%
School	27	3.07%
Services (fire, emergency)	27	3.07%
Amenities (stores, post office)	25	2.84%
Appearance	21	2.39%

2. *What are the weaknesses or challenges of the Town of Butternuts? Name three*

Respondents were asked to name three weaknesses. Out of the 320 respondents who answered the question, a total of 728 weaknesses were recorded. Top responses shown

Weakness	Number of Responses	Percent (of total responses)
Roads and Infrastructure	88	12.09%
Lack of Jobs	61	8.38%
Taxes too high	50	6.87%
Lack of Businesses	47	6.46%
Natural Gas threat	43	5.91%
Environment Damage from industrial development	38	5.22%
Lack of Economic Growth	32	4.40%
Decline of agriculture	25	3.43%
Demographics (aging population, etc)	25	3.43%
Lack of money to do things around the town	24	3.30%
People	21	2.88%
Division in community	21	2.88%
Government	21	2.88%

below.

3. *What things would you like to stay the same in Town of Butternuts? Name Three.* (75.5% response rate) Respondents were asked to name three qualities they wanted to stay the same. Out of the 308 respondents who answered the question, a total of 688 qualities were recorded. Top responses shown below.

Quality	Number of Responses	Percent (of total responses)
Rural Character	111	16.13%
Natural Environment	110	15.99%
Amenities	91	13.23%
Peace and Quiet	53	7.70%
Historic Character	46	6.69%
Agriculture	43	6.25%
Community	30	4.36%
What's not here	30	4.36%
People	29	4.22%
Size	22	3.20%

4. *What would you like to see changed in the Town of Butternuts? Name three things.* (73% response rate) Respondents were asked to name three qualities they wanted to change. Out of the 297 respondents who answered the question, a total of 612 qualities were recorded. Top responses shown below.

Quality	Number of Responses	Percent (of total responses)
Government	65	10.62%
Roads	59	9.64%
Economy/Business	54	8.82%
Amenities	38	6.21%
Taxes	34	5.56%
Zoning	29	4.74%
Employment	27	4.41%
Agriculture	26	4.25%
Nothing	25	4.08%
Telecommunications	22	3.59%

## Community Services and Character

5. How important are the following community resources to you.

	Very Important	Important	Unimportant	No opinion/Blank	
Post Office	61.5%	22.8%	7.8%	3.2%	4.7%
Fire Department	85.3%	10%	0.5%	0.7%	3.4%
Emergency Squad	85.8%	8.8%	0.5%	0.7%	4.2%
Town Highway Crew	68.6%	21.3%	2.7%	1.5%	5.9%
Library	47.1%	31.1%	11.8%	3.7%	6.4%
Town Board	43.4%	35.5%	7.4%	6.1%	7.6%
Planning Board	34.1%	39.2%	12.3%	7.6%	6.9%
Village Board	32.6%	30.6%	17.9%	12.3%	6.6%
Village Planning Board	29.4%	29.4%	19.6%	13.5%	8.1%
Major's Inn	39%	34.6%	13.7%	6.9%	5.9%
Community Churches	46.1%	31.6%	13.7%	6.9%	6.1%
Scouts	36.8%	36.8%	12.0%	7.8%	6.6%
Food Pantry	33.6%	39.5%	10.8%	9.6%	6.6%
Village Improvement Society	25%	34.1%	19.1%	14.2%	7.6%
Empire House	20.6%	33.8%	26.7%	11.5%	7.4%
Rod and Gun Club	14.7%	30.4%	33.1%	15.2%	6.6%
Soccer/Polo Fields	18.9%	42.6%	21.3%	8.1%	9.1%
GMU School	50.5%	28.9%	9.1%	4.9%	6.6%
Centennial Park	31.4%	39.5%	13.2%	8.3%	7.6%
Gilbert Fuel/Gas Pump	23.5%	36.3%	20.8%	12.5%	6.9%
Grange	21.8%	35.5%	20.6%	14.2%	7.8%
Butternut Valley Nursery	18.6%	32.1%	20.3%	19.4%	19.6%
Gilbert Block Art Studios	14.7%	28.2%	32.6%	16.9%	7.6%
Art Galleries	14.5%	29.2%	32.1%	15.9%	8.3%
American Legion	18.9%	39.2%	20.6%	14.5%	7.6%
Old Gilbertsville School	12.3%	21.6%	39.5%	16.2%	10.5%
Value-Way Store	42.6%	35.8%	9.3%	5.9%	6.4%
Hardware Store	47.5%	39.2%	4.9%	3.2%	5.1%
Quilt Shop	23%	35.3%	23.8%	10.3%	7.6%
Bed and Breakfast	19.4%	33.8%	23.8%	15.4%	7.6%
Gus-Bus	19.6%	32.6%	19.6%	19.4%	19.4%
Copes Corners Park	23%	42.9%	16.7%	11.3%	6.1%
4H Club	30.1%	39%	12.7%	9.3%	8.8%
Others( Feel free to name them)					

6. What suggestions do you have for improvements to any of the existing services?  
 (40% response rate) Out of the 163 respondents who answered the question, a total of 177 suggestions were recorded (some respondents offered more than one). Top responses

shown below.

Improvement Category	Number of Responses	Percent (of responses)
Business/Economy	27	15.25%
Roads/Infrastructure	23	12.99%
Government	22	12.43%
Old Schools	20	11.30%
Building a Sense of Community	20	11.30%

7. Are there other services you would like to see developed (for instance public transportation, cell/cable/broadband services)?  
(57.1% response rate) Out of the 233 respondents who answered the question, a total of 283 suggestions were recorded (some respondents offered more than one). Top responses shown below.

Category of Service	Number of Responses	Percent (of responses)
Telecommunications	184	65.02%
Public Transit	50	17.67%

### Economic Development

8. Which of the following commercial businesses would you personally support in the Town of Butternuts? (Check all that apply)

Business	Within village	Outside village	Both	Not at all	No opinion/Blank	
Agriculture	9%	53%	26%	1%	2%	8%
Auto repair	28%	22%	27%	6%	6%	10%
Big box retail (such as Walmart)	4%	10%	3%	68%	6%	9%
Antique/flea market	30%	15%	24%	11%	10%	11%
Art related businesses	35%	15%	24%	13%	14%	11%
Bed and breakfast	32%	8%	36%	7%	7%	11%
Chain Hotel	5%	11%	6%	62%	7%	10%
Construction	8%	27%	20%	18%	13%	14%
Convenience store/gas station	22%	17%	18%	30%	5%	9%
Day-care	33%	5%	26%	7%	17%	12%
Golf course	5%	38%	8%	22%	15%	11%
Grocery store	56.13%	5.64%	17.4%	5.39%	4.41%	11.03%



Business	Within village	Outside village	Both	Not at all	No opinion/Blank	
Hardware store	64.22%	3.92%	14.7%	4.17%	2.21%	0.78%
High Impact Industry	2%	17%	5%	58%	7%	11%
Hotel	18%	11%	9%	37%	13%	13%
Independent retail stores	32%	11%	18%	18%	9%	14%
Laundry	37%	11%	11%	15%	14%	12%
Light industrial/manufacturing	6%	37%	14%	27%	5%	12%
Lumber mill	2%	53%	8%	17%	9%	11%
Motel	5%	23%	8%	40%	10%	13%
Medical/dental offices	41%	9%	24%	6%	8%	12%
Pharmacy	38%	7%	17%	17%	11%	14%
Restaurant/cafe	46%	4%	30%	4%	5%	10%
Riding stable	9%	44%	30%	10%	8%	12%
Strip retail	3.19%	9.8%	5.15%	59.07	10.29%	12.5%
Tourism related business	17.65%	11.76%	27.21 %	15.69%	14.46%	13.24%
Veterinarian/animal hospital	14.46%	33.58%	27.21 %	5.15%	7.84%	11.76%

9. Should the town prohibit any of the above enterprises? Which ones?

A total of 309 respondents (75.7%) answered this question positively; 99 respondents (24.3%) left the question blank. Of the 338 respondents who positively responded, a total of 839 responses were received (some respondents answered with more than one type of prohibited enterprise). Top responses shown below.

Enterprise	Responses	Percentage of Respondents*
Big Box Retail	168	54.37%
High Impact Industry	152	49.19%
Strip Retail	87	28.16%
Motel	81	26.21%
Hotel	44	14.24%
None should be prohibited	38	12.30%
Convenience Store/ Gas Station	33	10.68%
Light industrial manufacturing	28	9.06%
Chain Store	22	7.12%
Chain Hotel	20	6.47%

10. Do you feel the Town of Butternuts should be responsible for reviewing proposed new commercial development so as to reduce any unforeseen visual and environmental impacts associated with the proposed project?

68.4% ----Yes 1

17.4% ----No

14.2% ----No opinion

## Agriculture

11. How important is agriculture in the Town of Butternuts to you?

63% --- very important      24% ---- important      5.2% ---- neutral      7.1% --  
-- unimportant

12. In you opinion should our community promote and preserve agriculture in any of the following ways?

	Yes	No	No opinion
Promote and encourage local agricultural and family farms.	91.7%	0.5%	7.8%
Support local farmers' markets, stores, and local businesses that sell local agricultural products.	92.6%	0.5%	6.9%
Promote and allow small scale processing facilities (small-scale slaughterhouse, milk bottling, yogurt/cheese processing, composting, winery, brewery, community processing kitchens, etc.)	75.2%	11%	13.7%
Promote businesses that support farms (vets, supply companies, processing facilities, machinery dealers and feed stores).	77%	7.8%	15.2%
Offer incentives when farmland is preserved.	70.6%	11.3%	18.1%
Promote maple syrup business.	81.4%	3.2%	15.4%
Education and promotion of woodlot management/logging	73%	8.6%	18.4%
Encourage and allow agri-tourism (B&B's, dude ranches, U-Pick operations, etc.)	66.4%	14.7%	18.9%
Promote responsible stewardship of land and water.	76.5%	7.8%	15.7%

13. Is farming your main occupation?      9.1%\_\_\_ Yes      87.3%\_\_\_No

14.Do you have a vegetable garden?      62%\_\_\_ Yes      31%\_\_\_No

15.Do you have suggestions on how to promote farming?

There are many suggestions here, however many pick up on the ideas in question 12. The top answers were, in order of number of times the idea came up, to give incentives and tax breaks (23 times), promote farmers markets and local opportunities to buy local (13), allow gas drilling (8), and promote organic farms (6).

## Open Space and Natural Environment

16. How important to you are the following environmental resources and issues in the Town of Butternuts?

	Very Important	Important	Unimportant	No Opinion	Blank
Beauty of landscape	67%	18.9%	3.9%	3.4%	5.9%
Peace and quiet	65%	18.9%	4.9%	4.9%	6.4%
Open space preservation	59.3%	16.7%	10.8%	4.7%	8.6%
Hunting, fishing	46.1%	27.5%	14.2%	4.9%	7.4%
"Swimming hole"	34.3%	27%	20.6%	10.3%	7.8%
Streams	63.2%	24.8%	1.5%	2.9%	7.6%
Flood plains	46.3%	28.7%	7.8%	8.1%	9.1%
Wetlands	48%	29.2%	7.8%	6.4%	8.6%
Woodlands	57.8%	29.4%	2%	3.2%	7.6%
Wildlife habitats	60%	25.7%	2.9%	2.9%	8.3%
Steep slopes (Protection of soil on steep slopes)	50.7%	26.5%	6.9%	7.4%	8.6%
Ridgelines/unbroken vistas	43.3%	20.9%	16.3%	8.6%	10.8%
Night sky (natural darkness can be damaged by light shining from adjacent property)	50%	16.4%	17.9%	6.4%	9.3%
Soil quality	63.1%	22.9%	2.2%	4.2%	7.6%
Water quality	72.1%	15.9%	1.2%	3.7%	7.1%
Air quality	71.8%	15.4%	1.2%	4.2%	7.4%

## Cultural and Recreational

17. What are your favorite recreational or cultural activities that you do in the Town of Butternuts?

(77.3% response rate) Out of the 315 respondents who answered the question, a total of 828 responses were recorded.

<b>Activity</b>	<b>Responses</b>	<b>Percent (of responses)</b>
Walking	105	(12.68%)
Hunting	95	(11.47%)
Fishing	58	(7.00%)
Hiking	57	(6.88%)
Biking	45	(5.43%)
Gardening	41	(4.95%)
Village stores/restaurants/Amenities	34	(4.11%)
Swimming	33	(3.99%)
Boating	30	(3.62%)
Art	27	(3.26%)
Major's Inn Events	27	(3.26%)
Enjoy the land	24	(2.90%)
Sports	22	(2.66%)
Wildlife	22	(2.66%)
Festivals, Parades	22	(2.66%)
Community Organizations	22	(2.66%)
Music	21	(2.54%)

18. *If you have children, what are their favorites?*

(34.8% response rate)? Out of the 142 respondents who answered the question, a total of 300 responses were recorded.

<b>Activity</b>	<b>Responses</b>	<b>Percent (of responses)</b>
Hunting	39	(13.00%)
Fishing	31	(10.33%)
Sports	25	(8.33%)
Hiking	22	(7.33%)
Swimming	21	(7.00%)

19. *What facilities or cultural activities would you like offered in the Town of Butternuts?*

A total of 228 respondents (56%) answered this question positively; 180 respondents (44%) left the question blank. Of the 228 respondents who positively responded, a total

of 291 responses were received (some respondents answered with more than one type of cultural activity).

Cultural Activity	Number of Responses	Percentage (as a total of all responses)
Arts and Music	59	20.27%
Recreation facilities	43	14.78%
Community events	36	12.37%
Commerce	27	9.28%
We don't need any more cultural or recreational services	25	8.59%
Athletics	24	8.25%

## Energy

20. *Would you be in favor of a commercial-scale wind facility in the Town of Butternuts? Why?*

*These facilities typically have multiple units with wind turbine heights of 200 feet and above.*

58% --Yes    20.9% --No    15.7% --Undecided    2.9%--No opinion  
2.5% --blank

Responses indicate a favorable environment for the development of wind energy. Of those who responded Yes, many cited clean alternative energy and self sufficiency. Of those who responded No, many said it would disrupt community life in some way.

21. *Would you be in favor of a liquid-biofuel facility in the Town of Butternuts? Such a facility would convert organic materials to ethanol for vehicles. Why?*

25% --Yes    40% --No    25% --Undecided    6.1% --No opinion  
3.2% --blank

Of those who responded Yes, self sufficiency and the economic boost were often cited. Those responding No often cited inefficiency and detriment to the environment as reasons. Many Undecided gave no reason or said not well enough informed.

22. *Would you be in favor of a commercial biomass facility in the Town of Butternuts that produces electricity by burning organic material? Why?*

20.4% --Yes    44.5% --No    25.8% --Undecided    5.9% --No opinion    3.4% --blank

Of those answering Yes many gave no reason or cited economic boost or renewable energy. Of those answering No, many again gave no reason or cited detriment to the environment. Most Undecided again gave no reason or said not well enough informed.

23. *Would you be in favor of a commercial biomass facility in the Town of Butternuts that produces wood or grass pellets for heating? Why?*

37.8% --Yes    25.1% --No    26% --Undecided    5.7% --No opinion    5.4% --blank



Many gave no reasons for their answers. Those responding Yes cited renewable energy and economic boost. Those who responded No most often said detriment to the environment. Not enough information was the main reason for Undecideds.

Summary Note on all Bio-fuel Questions: The high number of undecided responses leaves the question open for all of these technologies. There is some indication that liquid bio-fuel and organic bio-mass burning is leaning toward a negative response and wood/grass pellets is leaning toward a favorable response.

*24. Are you in favor of natural gas drilling (hydrofracking) in the Town of Butternuts? Why?*

27.8% --Yes 60.3% --No 8.1% --Undecided 0.7% --No opinion 3% --blank

Responses indicate a strong opposition to gas drilling. There was a much lower percentage of undecided's to this question and most respondents provided a reason for their decision. Of those answering Yes, the boost to the economy was most often cited. Of those answering No, detriment to the environment was most often cited.

*25. Should the town prohibit any of the above enterprises? Which ones?*

This question generated a response rate of 82.8%. There were a total of 338 responses.

Prohibit Natural gas drilling (hydrofracking) -----	214
Nothing should be prohibited -----	88
Commercial Bio-mass -----	58
Liquid Bio-fuel -----	49
Commercial Bio-mass pellets -----	37
Commercial scale wind -----	33
Anything that damages the environment -----	7
Miscellaneous -----	2

*26a. Should the town encourage the use of alternative energy sources such as solar, wind and geothermal for individual homes and businesses? Why?*

69.6%----Yes 11.8%----No 8.3%Undecided 3.7%----No opinion 6.6%---blank

There is very strong support for alternatives. Of those answering Yes, many said that it is clean and renewable or cited reasons of self sufficiency/ energy independence. Of those answering No, a majority said that this should be an individual decision and not governmental.

*26b. Suggestions for achieving this.*

There was a 41% response rate for this question. There are some specific suggestions, such as tax incentives and calls for further public engagement, however many responses were general statements of support or opposition.

**Housing**

*27. Are any additional types of housing needed in the Town of Butternuts? Include the housing you think might be needed in ten or more years.*

Town of Butternuts Comprehensive Plan August 2013

	Needed in village	Needed in the town	Needed in both	No more needed	Restrict locations with local laws <i>Check if yes</i>	No opinion & blank
Single family dwellings	6.8%	10.78%	11.03%	16.42%	6.13%	45.34%
Two family houses (or houses with elder apartment)	11.52%	11.27	9.31%	14.46%	6% approx	45.59%
Senior citizen housing	20.83%	14.95%	13.97%	6.86%	7.11%	33.09%
Combined townhouse/apartment complex	5.39%	6.62%	3.43%	26.72%	9.80%	46.57%
Assisted Living or continuous care facilities	12.75%	16.91%	9.07%	9.56%	9.07%	39.71%
Existing houses or buildings renovated into apartments or two or more dwellings	12.01%	8.33%	7.84%	17.65%	7.84%	44.36%
Mobile homes	2.7%	8.33%	3.43%	41.18%	12.25%	31.13%
Mobile home park	1.47%	4.90%	1.47%	44.85%	12.01%	29.49%
Affordable housing	7.84%	14.71%	16.67%	15.69%	3.68%	39.46%
Room rentals	7.60%	7.35%	6.86%	24.75%	5.15%	46.32%
Gated community	1.96%	2.94%	2.70%	38.97%	8.58%	43.38%
Housing development	2.45%	6.13%	2.45%	34.80%	8.82%	42.4%
Conservation development/clustering*	2.21%	9.31%	0.74%	26.23%	9.8%	45.15%

\*Conservation development or "clustering" can be used to place houses close together on a fairly large piece of land so that the largest part can be left as open space.

Many left this question blank. Of the responses many indicate a desire to limit mobile homes, mobile home parks, gated communities, and housing developments.

### Land Use Regulation

28. How do you feel about existing land use regulations?

	Satisfied	Too much regulation	Not enough regulation	No opinion
Site Plan Review	29.9%	21.3%	10.0%	38.7%
Subdivision regulation	21.3%	18.1%	10.8%	39%
Zoning within village	25.5 %	15.4%	12.7%	46.3%
Enforcement	24.8%	16.9%	16.2%	42.2%

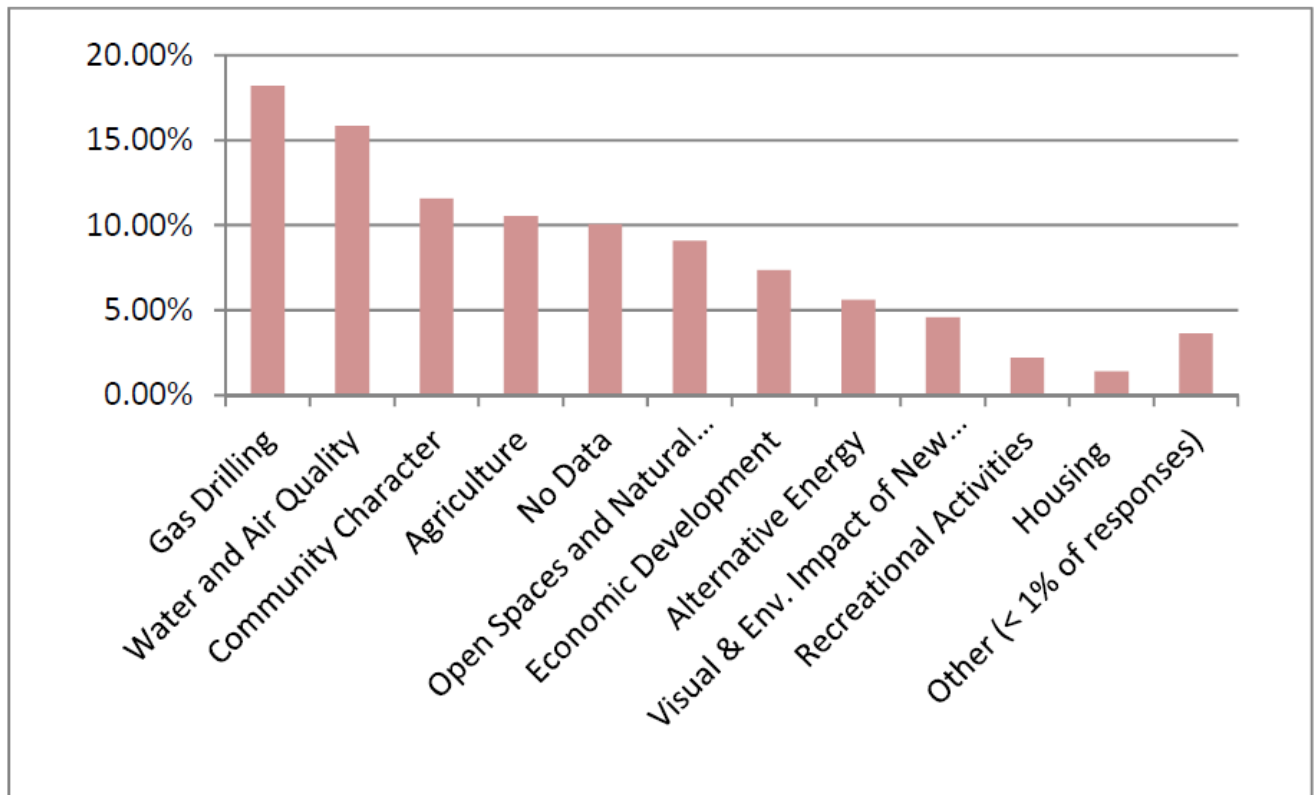
The majority of respondents answered No opinion to all questions, indicating a low level of engagement with the issue. Generally, residents seem to be satisfied with the existing regulations.

### Overall Topics

Respondents listed these topics explored in the survey as being most important to them. The responses do not indicate what positions they take on these issues.

Gas drilling-----	21.67%
Water and air quality -----	13.83%
Community character -----	13.19%
Agriculture -----	12.56%
Open spaces/natural environment-----	10.32%
Economic development-----	8.76%

**Table 1. Topics Listed as a Priority by Percentage**



### About you?

30. Do you live or have property in the Village of Gilbertsville?

Outside village -----	70.6%
Village-----	21.8%
Inside and Outside village-----	3.7%
No Answer -----	3.9%

31. Are you a year-round resident, part time resident, or non-resident property owner in the Town of Butternuts? The Town of Butternuts also includes the Village of Gilbertsville.

Year round -----	77.5%
Part time-----	2.2%
Non-resident landowner ----	10.8%
No answer -----	9.6%

32. *How old are you?*

1%---18-22yrs   11.5%---22-44 yrs   17.2%---45-54yrs   39.5%---55-70 yrs   21.8%---70+yrs  
9.1%---na

33. *The number of other household members that fit into the following categories:*

Pre-school -----	14
Children grades 1-8 -----	27
Children grades 9-12 -----	28
Age 18-22 -----	32
Age 23-44 -----	66
Age 45-54 -----	74
Age 55-70 -----	146
Age70+ -----	99