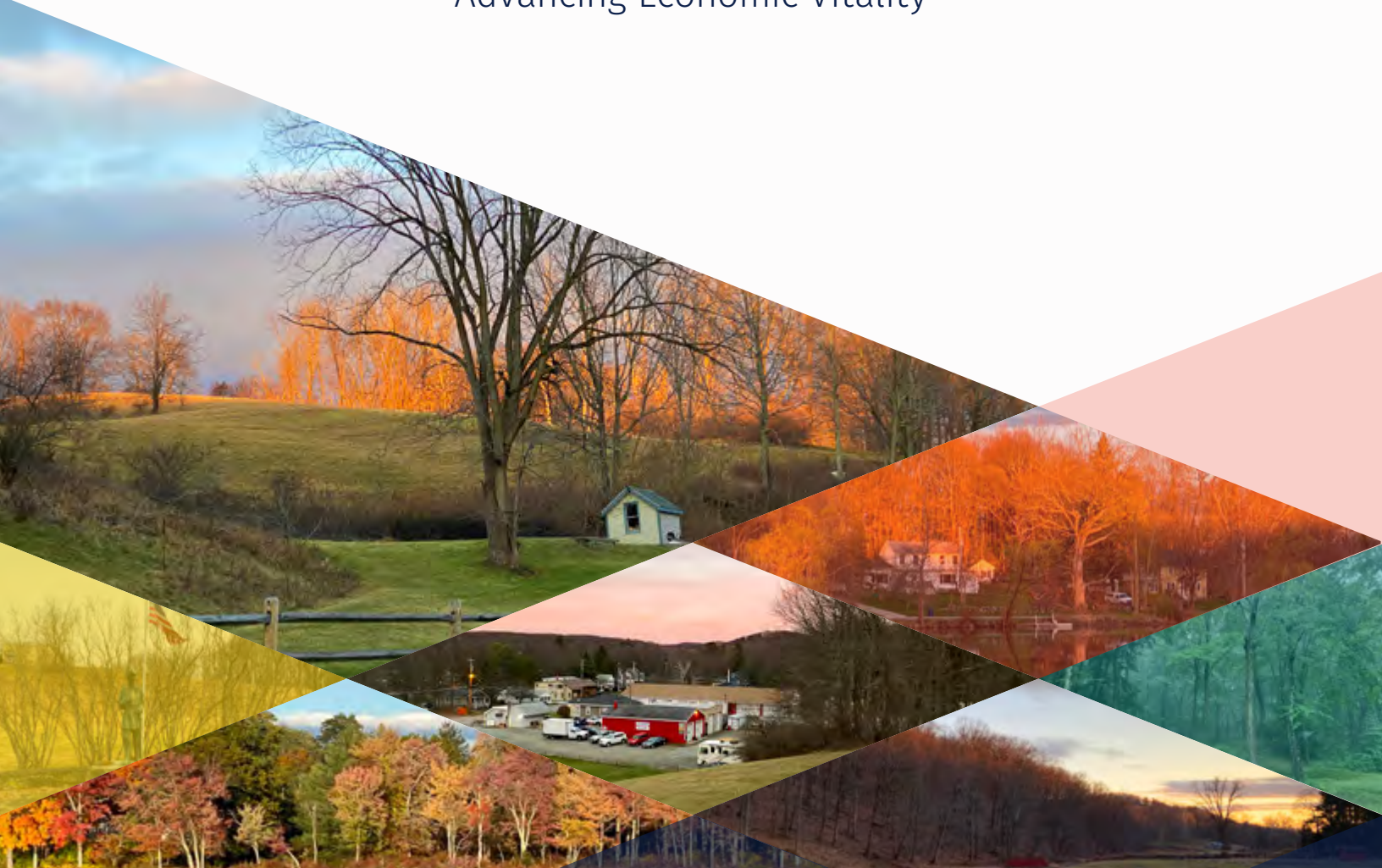




Stanford Comprehensive Plan

September 30, 2021 DRAFT
Preserving Our Rural Character and
Advancing Economic Vitality



Acknowledgments

The Town of Stanford Comprehensive Plan 2021 was produced with the input of elected officials, community leaders and volunteers, business owners and residents, all of whom shaped its goals and recommendations through participation in large and small meetings, telephone interviews, focus groups and other activities.

This Comprehensive Plan is the result of the collective efforts of three successive committees, which first produced a draft plan and then revised that draft to address the concerns of Town residents. The Town of Stanford thanks the members of all three committees for their efforts and contributions.

Stanford Master Plan Committee (2010-2013): Carol Hanlon (Chairperson), Gary Lovett (Vice Chairperson), Tom Angell, Robert Butts, Steve Gotovich, Spencer Hall, Conrad Levenson, John Royall, Jan Weido, and Michelle Turck (Secretary)

Draft Master Plan Review Committee (2013-2018): Mark Burdick (Chairperson), Tom Angell, Richard Bell, Tom Dewhirst, Michele Inzeo, Duffy Layton, Gary Lovett, Larry McKeough, Karen Mosher, James Sansum, Jeffrey Spiers, and Michelle Turck (Secretary)

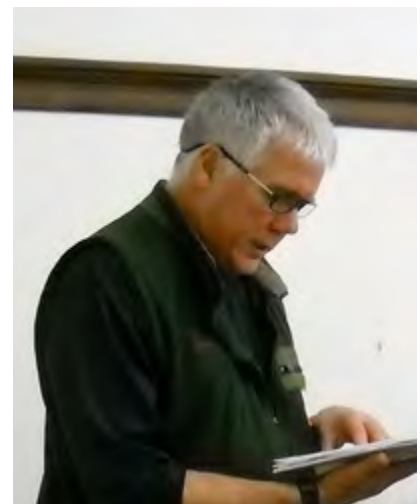
Comprehensive Plan Review Committee (2020-2021): Gary Lovett (Chairperson), Tom Angell, Richard Bell, Conrad Levenson, Karen Mosher, James Sansum, Jeffrey Spiers, and Rosemarie Miner (Secretary)

The current Comprehensive Plan Review Committee (2020-2021) thanks the Town Board of the Town of Stanford for their support and encouragement for the completion of this Comprehensive Plan. In particular, we thank Town Supervisor Wendy Burton for acting as the Town Board liaison to the Committee and providing her valuable perspectives and insights.

2021 – Stanford Town Board: Wendy Burton (Supervisor), Paul Coughlin, Margaret Fallon, Frank Pepe, Mary Weinberger

We thank Nina Peek, AICP and Madeleine Helmer of AKRF, Inc. for their guidance, technical support and patience in the development of this Comprehensive Plan, and we are grateful to the Hudson River Valley Greenway for providing a portion of the funding for the initial stages of this effort.

Finally, the Comprehensive Plan Review Committee wishes to thank all Stanford residents and organizations that participated in this effort through the years and provided insightful comments and feedback throughout the process. Their comments at meetings and in writing have helped guide the Committee in preparing this document, and helped to ensure that the 2021 Comprehensive Plan truly represents the collective vision of the Town of Stanford. This Plan identifies many tasks for the Town in the coming years, and we hope that all residents of Stanford will stay engaged in the process and help Stanford achieve its goals.



In Memory of Jan Weido (1951-2011)

Jan served on the Master Plan Committee with passion, integrity and dedication to the betterment of Stanford, which he loved so well. His memory will live on in the people he touched in Stanford, and his legacy will be strongly felt in this Comprehensive Plan.

Table of Contents

Stanford Comprehensive Plan

01

**Introduction &
Project Overview**

6

02

**Existing
Conditions**

16



**Future Land
Use**

64



**Community Character &
Economic Development**

72



**Natural Resources
& the Environment**

86



**Utilities &
Infrastructure**

114



**Summary of Action
Items & Implementation**

120

Appendix

130



01

Introduction & Project Overview



Contents

What is a Comprehensive Plan?

How do you use a Comprehensive Plan?

Project History & Planning Process

Comprehensive Plan Organization

Vision, Goals and Objectives

What is a Comprehensive Plan?

The Comprehensive Plan is a policy document that guides a municipality's vision and goals for its economic health, natural resource protection and land development. The Plan presents a snapshot of the current state of the Town, and offers guidance for its future. The Plan illustrates a roadmap with directions a community may follow to meet its goals, and may provide options for how to get there, but it does not prescribe specific policies or regulations.

The process of preparing the Plan engages Town residents, business owners and leaders in discussions about what is working, what is not working, and how the Town sees its potential in the short, medium and long term. The Plan presents a vision grounded in the practical reality of a community's natural, financial and physical resources and constraints.

The goals and action items in the Town of Stanford 2021 Comprehensive Plan are based on local priorities for economic growth, resource protection, and community quality of life. These priorities are similar to, and aligned with, regional, state and federal programs, where applicable, so the Town is well-positioned to seek available funding and technical support for implementation of

some of the more capital intensive initiatives. The Plan also recommends coordinating with neighboring communities, regional organizations, and County programs and services to maximize visibility and leverage support.

Unanimous agreement about the future is not the goal of the Comprehensive Plan. Rather it strives to balance the opinions that collectively manage change. The Comprehensive Plan should reflect a coherent vision of a diverse population – senior citizens and children, long-term residents and newcomers. The Town of Stanford 2021 Comprehensive Plan sets forth goals and actions that will enable Stanford to navigate changes in resources, in order to thrive as a desirable place to live, work and play for generations to come.



© Karen Mosher

How Do You Use a Comprehensive Plan?

The Comprehensive Plan is both an action plan and a working document. The Plan presents an overall vision for the future, sets goals to realize that vision, recommends specific strategies, and assigns responsibility for implementing the recommendations. The Comprehensive Plan is a dynamic living document that should evolve with the changing needs of the Town.

In its adoption of a Comprehensive Plan, the Town Board affirms that the Plan is an official policy document. It is therefore critical that the Plan represents the views of the community. The document presents a vision for the future produced and vetted by the community, with achievable action items supported by the Town's residents. The Plan also provides a blueprint for use by Town government, volunteer committees, local residents and business owners to implement

recommendations that promote sustainable growth through policy changes.

On its own, adoption of the Comprehensive Plan does not affect the zoning code with respect to the use of the land as regulated by the Town. Additionally, adoption of this Comprehensive Plan does not restrict existing private property rights. However, applications for development submitted to the Town's reviewing boards must be considered in the context of the policy goals and objectives in the Comprehensive Plan. If the development application is not consistent with Comprehensive Plan goals, an applicant must justify that the project will not be contradictory to overall Town goals. While the Comprehensive Plan may recommend zoning and subdivision code changes to achieve stated goals, those changes would require a separate and distinct process.

Project History & Planning Process

Project History

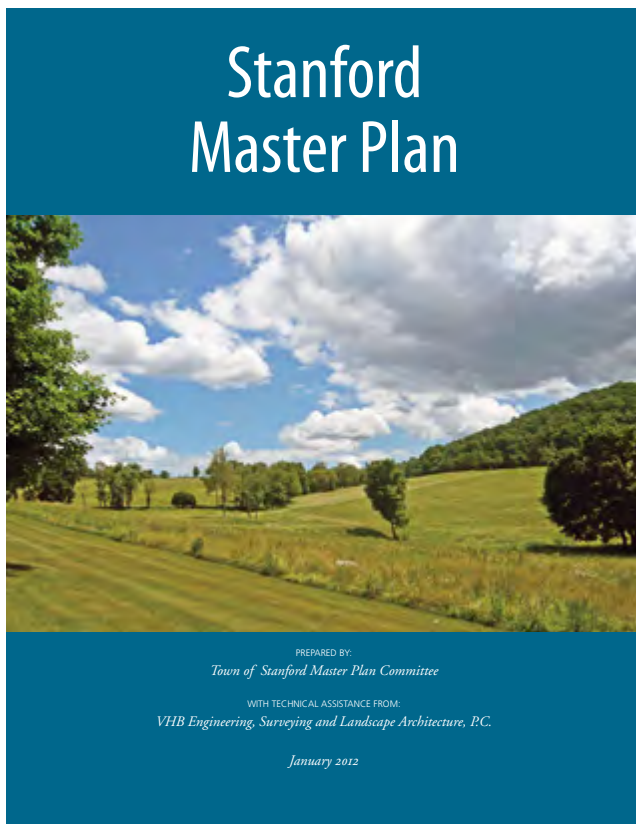
Much like the Town itself, the process to update Stanford's 1980 Master Plan has been a long and winding road. The initial effort kicked off in 2010 when the Town appointed a Master Plan Committee tasked with a broad-based update to the Town's previous Master Plan completed in 1980. The Committee reviewed existing Town planning documents, determined a scope of work for a Master Plan update, selected a consultant to help in the Master Plan, and guided the Master Plan process. To facilitate a free exchange of information, the Master Plan Committee created a website posting meeting minutes, notices, and all relevant maps and documents for download by any interested citizen. Over the course of approximately two

years, the Committee held bi-weekly meetings at Town Hall, which were open to Town residents. In addition, the Committee led a robust public engagement and outreach process. In 2012, the Committee presented the draft 2012 Town of Stanford Master Plan to the Town Board for consideration and adoption. An overview of the process used to prepare the 2012 Draft Master Plan is provided in the **Appendix**.

After receiving written comments on the 2012 Draft Plan, and holding two public informational meetings, the Town Board appointed a Draft Master Plan Review Committee to review the public comments and recommend revisions to that document. This Committee met from 2013-2018, and then after a hiatus was restarted in August 2020. The Committee reviewed and categorized all oral and written public comments, discussed the major issues raised, and recommended how to revise the Draft Master Plan in response to these comments. The Stanford Town Board retained AKRF, Inc. to assist the Committee with these revisions.

Between September 2020 and April 2021, the Committee met bi-weekly to review each section of the Plan. In addition to the Committee members, meetings were attended by the Town Supervisor, as liaison to the Town Board, residents and representatives of various local and regional committees and boards. All meetings were conducted via Zoom platform and open to all residents. Meeting summaries and other relevant documents were posted to the Committee's website (<http://www.townofstanford.org/comprehensive-plan-review-committee/>). The **Appendix** lists documents reviewed by the current Committee during the course of its discussions.

This document includes the 2012 Draft Master Plan with the revisions recommended by this Review Committee. The document has been renamed "Comprehensive Plan" to better align with language in State law and current practice by other municipalities.



2012 Draft Master Plan

Revisions to the 2012 Draft Plan

Some significant revisions to the 2012 Draft Master Plan were suggested in public comments, and the Plan was revised in response to those comments. Substantive changes incorporated into the 2021 Comprehensive Plan include the following:

1. Removal of the recommendation for a public water and sewer system for the Stanfordville and Bangall hamlets. In the event that a public water system may be needed in the future, the Comprehensive Plan acknowledges additional analyses would be necessary.
2. Removal of the recommendation for a “Planned Development District”, which would have allowed increased housing density and commercial space in Stanfordville.
3. New recommendations to foster a more pedestrian friendly Stanfordville hamlet.
4. New recommendations designed to encourage business activity.
5. New recommendations to encourage agriculture and agriculture-related businesses.
6. New recommendations for siting of solar energy development and mining activities.
7. New recommendations for recognition and protection of Stanford’s historical structures and sites.
8. New recommendations to provide a broader array of housing options.

Comprehensive Plan Organization

Plan Organization

The Comprehensive Plan is organized into seven chapters, as follows:

1. Introduction and Project Overview
2. Existing Conditions: A Town-wide inventory of development patterns and conservation lands; key demographics, population and housing trends and projections; mapping and summary descriptions of the Town’s critical natural and historic resources.
3. Land Use: Existing and proposed plans for Town-wide land use and for the Stanfordville and Bangall hamlets.
4. Economic Development and Community Character: Tools and initiatives that promote economic development while protecting and enhancing the qualities that comprise the character of the community, including recreation, historic and cultural resources and the design of the historic hamlets.
5. Natural Resources and the Environment: Recommendations for assessing and protecting the Town’s vital natural resources.
6. Utilities, Groundwater and Infrastructure: An overview of utility infrastructure, and recommendations for groundwater protection.
7. Summary of Next Steps and Implementation: An Implementation Plan with designated timelines.

Plans must be realistic and achievable. Absent a detailed and specific implementation program, plans risk becoming simply a theoretical exercise, rather than a framework for realizing goals. Without implementation, expectations are raised but never realized. Therefore, plans must consider the constraints of government priorities, funding, and

Introduction & Project Overview

regulatory controls. The Plan should provide a context for its recommendations. As such, Chapters 2 through 6 open with a table summarizing specific recommendations. These tables present the Plan's strategies and why

they are important. Chapter 7 of the Comprehensive Plan, Next Steps and Implementation, summarizes the recommendations for actions found throughout the Plan.

Vision

The passage of time inevitably brings change. Many of the characteristics that defined the Town of Stanford forty years ago – the rural agricultural heritage and rolling bucolic landscape – remain the same. However, the economy has changed, and to remain healthy, the Town must adapt.

The key to success is to identify and protect the Town's assets, and improve upon its liabilities. By anticipating and planning for change, the Town can create a sustainable future.

Each person brings a unique perspective to the Town of Stanford's future, and although this lens may vary, many

of the qualities and reference points are shared, especially maintaining the Town's rural character, creating a safe and livable community, protecting the natural environment, and ensuring economic opportunities. Residents want their community to offer services essential to maintaining the partnership between citizens and Town government. Many people also envision a Town that offers housing opportunities for residents of all ages and income groups, with connections to local and regional neighbors.

When preparing the 2012 Master Plan, the Town kicked off the process with vision and goal setting workshops. At that time, survey respondents agreed on a vision that focused on economic prosperity with continued stewardship of Stanford's natural resources and important rural agricultural heritage. Many of the goals and policies presented in the 2012 Master Plan echoed the priorities stated in the 1980 Master Plan and a community survey completed in the early 2000s as part of a previous master planning effort. A review of the previously completed planning documents, and discussions with community residents yielded a clear indication that the Town's overall development and preservation goals have remained consistent for forty years.



From left to right: Forest, Hunns Lake, Interior of Attlebury Schoolhouse, Historic Society Painting at Attlebury Schoolhouse © Wendy Burton

Goals & Objectives

The primary vision for the Town of Stanford rests in the desire for the Town to prosper economically while maintaining and enhancing its natural resources and rural agricultural heritage.

To realize this vision, the Plan presents goals and commitments toward achieving that vision. Many of the goals outlined in the 1980 Master Plan are as important and relevant today as they were forty years ago.

Together, they represent a consistent Town philosophy for its future. To achieve this vision, the Town of Stanford Comprehensive Plan presents four primary goals:

Goal 1

Preserve the Town’s Rural Character and Agricultural Heritage

- Objective 1.1** Safeguard the Town’s rural agricultural character by protecting working farms, adopting more flexible regulations to encourage alternative farm-based businesses and designating Stanford as a “Right-to-Farm” community;

- Objective 1.2** Provide regulatory tools to encourage the use of sensitive siting, cluster subdivision and conservation subdivision techniques;
- Objective 1.3** Protect important scenic roads, ridgelines and viewsheds;
- Objective 1.4** Continue to actively document existing historic resources, and identify ways to protect the Town’s cultural heritage.

Goal 2

Protect the Town’s Natural Resources

- Objective 2.1** Encourage new development to be located outside of ecologically sensitive areas;
- Objective 2.2** Encourage the conservation of significant ecological habitats;
- Objective 2.3** Safeguard the Town’s drinking water resources by implementing recommendations in the Town’s Groundwater Protection Plan;
- Objective 2.4** Protect the Town’s wetlands, streams and lakes.

Goal 3

Plan for and Guide Future Growth and Economic Development

- Objective 3.1** Focus growth and development within the Stanfordville hamlet, and where appropriate within the Bangall hamlet;
- Objective 3.2** Encourage diverse housing options through zoning and other incentives and regulatory changes;
- Objective 3.3** Adopt design guidelines that encourage a pedestrian friendly community and protect the existing character of the historic hamlets;
- Objective 3.4** Encourage the use of renewable energy to attain a more sustainable future.

Goal 4

Promote Economic and Social Vitality

- Objective 4.1** Encourage commercial development within Stanfordville, and where appropriate, the Bangall hamlets;
- Objective 4.2** Encourage and support agri-tourism;
- Objective 4.3** Support and enhance local recreation activities including joint programs with neighboring municipalities;
- Objective 4.4** Encourage smaller-scale and home-based businesses.



02

Existing Conditions



Contents

Summary

Introduction

Land Use

Demographics

Parcel Size Distribution

Agriculture

Historic Resources

Recreation

Wetlands, Waterbodies & Watercourses

Topography, Geology & Soils

Critical Environmental Areas

Water Supply & Sanitary Waste Disposal



Upper Buttercup Sanctuary © Karen Mosher

Summary

This chapter describes the existing conditions of the Town of Stanford. Stanford is a community of approximately 3,800 residents. More than half the land in the Town is farmland. Agriculture serves as an economic driver and provides the pastoral landscapes and scenic viewsheds that characterize the Town. Stanford also contains wildlife preserves, forests, protected streams and wetlands, and historic properties. Communities of single-family houses are distributed throughout Town, and small commercial centers and mixed-use hubs are clustered along the Route 82 corridor.

According to population estimates from the past two decades, Stanford's residents are aging in place while

younger people are leaving Town. Meanwhile, the median household income in Stanford increased significantly in the past two decades as middle-income households decreased and higher income households increased. These data (2018) present a snapshot in time, and they quantify current and projected conditions using the best available resources. While the data were not utilized to make specific Plan recommendations, the Plan does interpret and make inferences about the cause/effect of some trends. For example, where the data indicate the resident population is aging and the number of young people is declining, the Plan notes a potential need to diversify the housing stock to accommodate the changing needs of older residents and attract young families.

Introduction

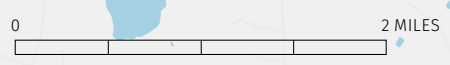
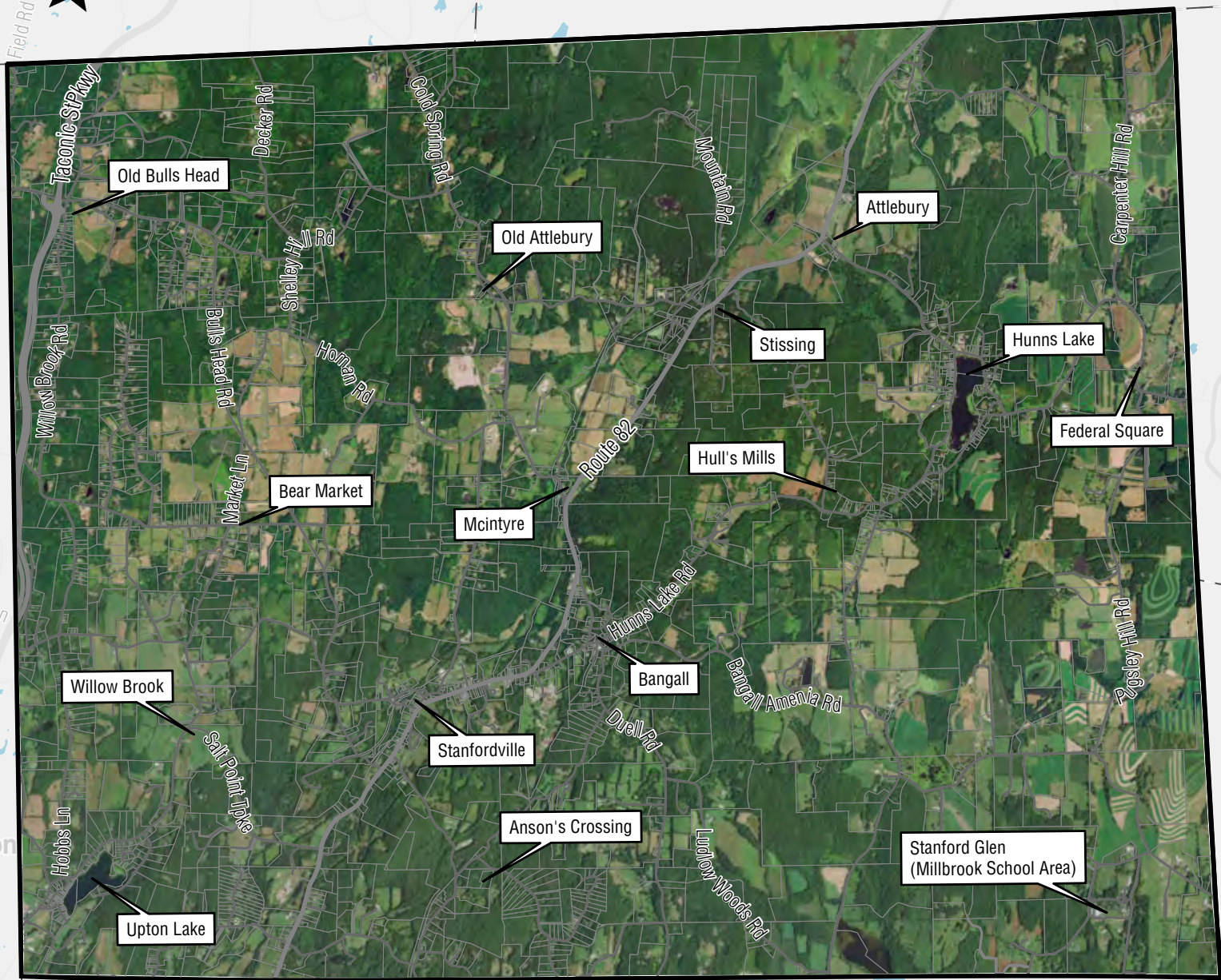
Stanford is located in the northern central portion of Dutchess County. The Town is bordered by the municipalities of Pine Plains and Milan to the north, Northeast and Amenia to the east, Washington to the south, and Clinton to the west. Major roads in Stanford include Route 82, passing through the center of Town, and the Taconic State Parkway, forming the municipality's western edge. Stanford covers approximately 50.3 square miles, of which 50 square miles is land area, and the remainder is water. Upton Lake, located in the southwestern portion of Town, and Hunns Lake, located in the northeastern portion of Town, are the largest bodies of water in Stanford. Wappinger Creek flows through Town in a south/southwest direction.

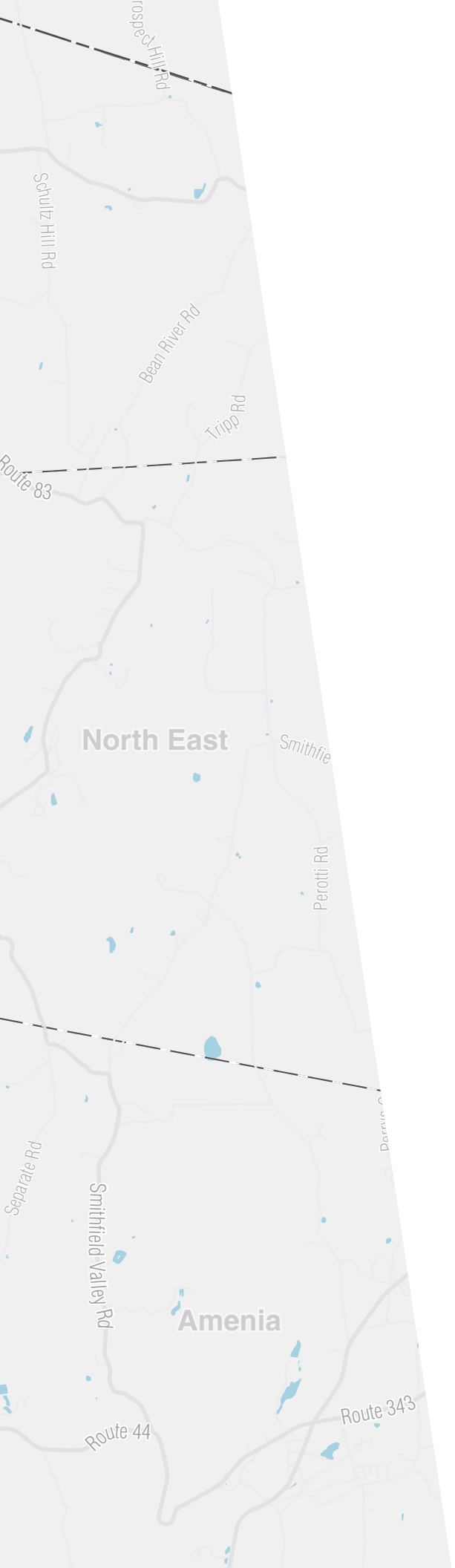
Stanford is characterized by farmland, forests and meadows, horse stables and pastures, residences, and

some commercial uses in the hamlets of Stanfordville and Bangall. The Town does not have a single village center, though it includes fifteen historic hamlets: Attlebury, Bangall, Bear Market, Hunns Lake, McIntyre, Stanfordville, Stissing, Upton Lake, Willow Brook, Old Bull's Head, Old Attlebury, Federal Square, Hull's Mills, Anson's Crossing, and Stanford Glen. The historic hamlets vary in extent and activity and are generally characterized by: rural crossroads in Attlebury, Bear Market, Stissing, and Willow Brook; compact mixed-use hubs in Bangall and Stanfordville; residential lakeside communities of Hunns Lake and Upton Lake; and the largely rural neighborhood of McIntyre. See **Figure 2-1, Aerial Map** for a map of the fifteen historic hamlets in the Town of Stanford.

Tomatoes, Attlebury hamlet © Karen Mosher









Aerial Map

Figure 2-1

-  Town of Stanford
-  Historic Hamlet

Source: USA NAIP Imagery: Natural Color, 2019.

Land Use

The Town of Stanford is a rural agricultural community. Land uses throughout the Town include active farms, forests and meadows, residential communities of single-family houses, and fifteen small historic hamlets of mixed development. The Route 82 corridor is developed with a mix of commercial, residential, industrial, and public/institutional uses.

Stanford is proud of its rural character, with working farms, preserved forests and meadows, and historic properties. However, demographic changes, increasing economic pressures facing long-time farmers, and the lack of local jobs may threaten the rural character of the Town. **Figure 2-2, Existing Land Use** presents current land use patterns throughout the Town. The following section describes the major land use types and their locations in the Town.

Single-Family Residential

Single-family residences are located throughout the Town of Stanford, in the form of large lot estates, smaller lot houses, and modern subdivisions. Single-family residential property is the most common land use category in Town, with over half of parcels under that designation. Smaller residential lots, less than a half-acre, are concentrated in Bangall and Stanfordville, as well as around Upton Lake and Hunns Lake, and in the historic hamlet of Attlebury. Residential subdivisions are located in the western portion of Town, near the Taconic State Parkway, and in the south/southwestern portion of the Town proximate to the border with the Town of Washington.

Two-Family Residential

Two and three-family residences throughout the Town of Stanford are typically comprised of single-family houses that have been converted to duplexes, or single-family residential lots with accessory structures that have been converted for residential use.



Winter at Hunns Lake © Wendy Burton

Multi-Family Residential

Multi-family residential properties are not common in the Town of Stanford, though they are present within the hamlets of Stanfordville and Bangall, as well as several properties in close proximity to Hunns Lake.

Mobile Home Residences

Mobile homes occupy parcels in Town, although there are no mobile home parks within Stanford. Approximately 14 properties contain mobile homes. Most of these properties are located in the center of Stanfordville.

Commercial

Commercial properties in Stanford include a bank, converted residences, a gas station, office buildings, retail, restaurants, garages, and a distillery. Approximately 37 properties in Town are characterized as commercial. Commercial properties concentrated in the hamlets of Bangall and Stanfordville include: offices, restaurants, businesses providing goods and services, local restaurants, and supply stores. Outside the hamlets, commercial properties include: a gas station, a distillery, restaurant, antique shops, and agricultural support businesses that serve additional regional needs.



Stanfordville Hamlet © Nina Peek

Mixed Use

Mixed-use parcels are not common in Stanford, and they tend to be composed primarily of residential properties with a commercial use, such as a residence with an auto-body shop in the garage.

Industrial

One active and two inactive sand and gravel mines are located in Stanford. The single active mine comprising 104 acres, is located near the center of Stanfordville at the junction of Routes 82 and 65. A parcel of approximately 80 acres located behind Town Hall has been reclaimed for use as a solar field. A 57-acre mine in the southern portion of Town on Route 82 is inactive.

Vacant

Vacant land in the Town of Stanford includes large parcels of forest, meadows, and fields. The vacant land category is the second largest land use in Town. Vacant land is located throughout the Town, with a large concentration west of Hunns Lake, and in the northern portion of the Town.

Public/Quasi-Public

Public/Quasi-Public uses generally include institutional uses such as libraries, police and fire stations, religious buildings, cemeteries, and public and private schools (Cold Spring Early Learning Center and The Millbrook School). Public and quasi-public properties are distributed throughout Stanford.



Bangall US Post Office © Nina Peek

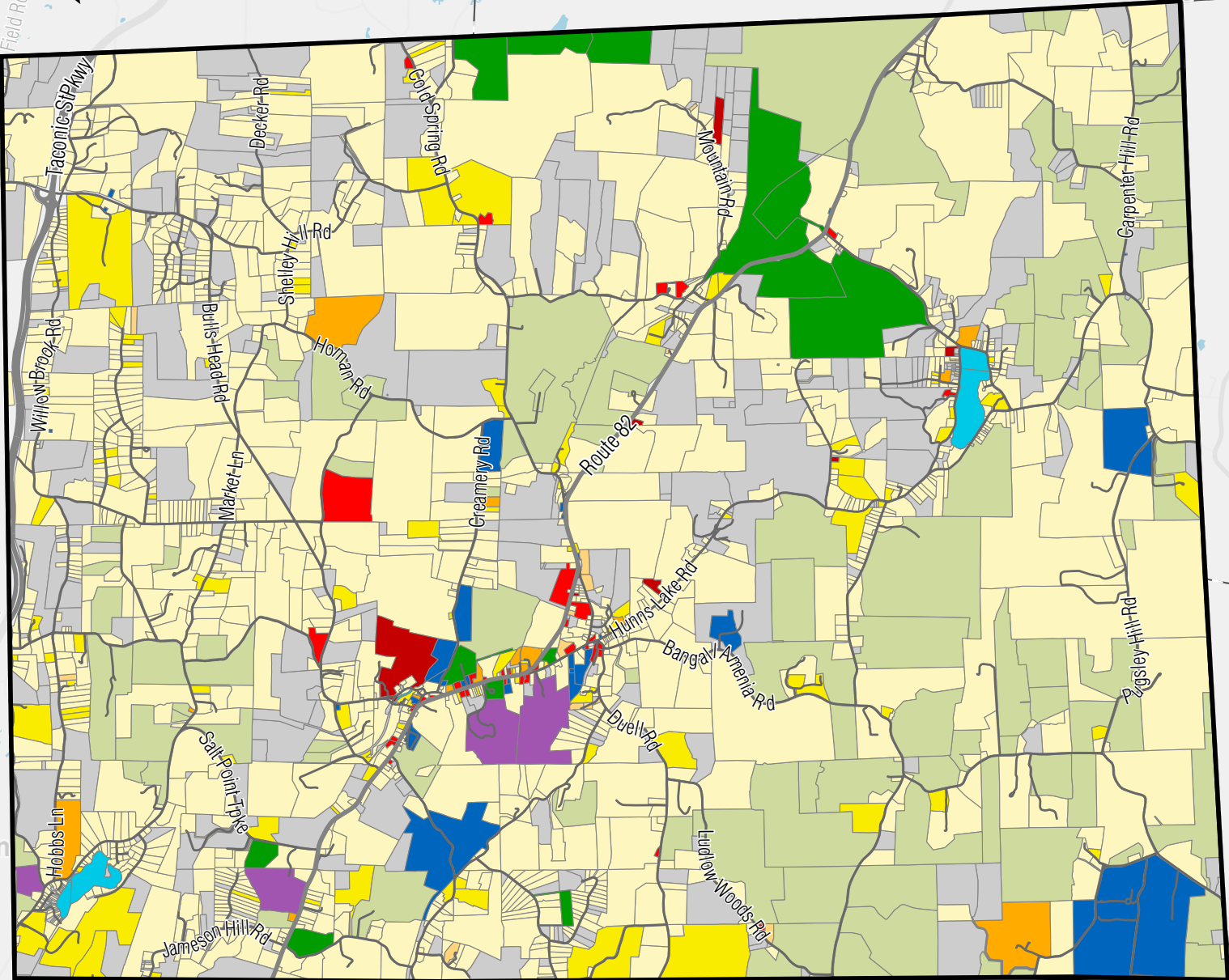
Existing Conditions

Milan

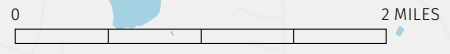
Pine Plains

199

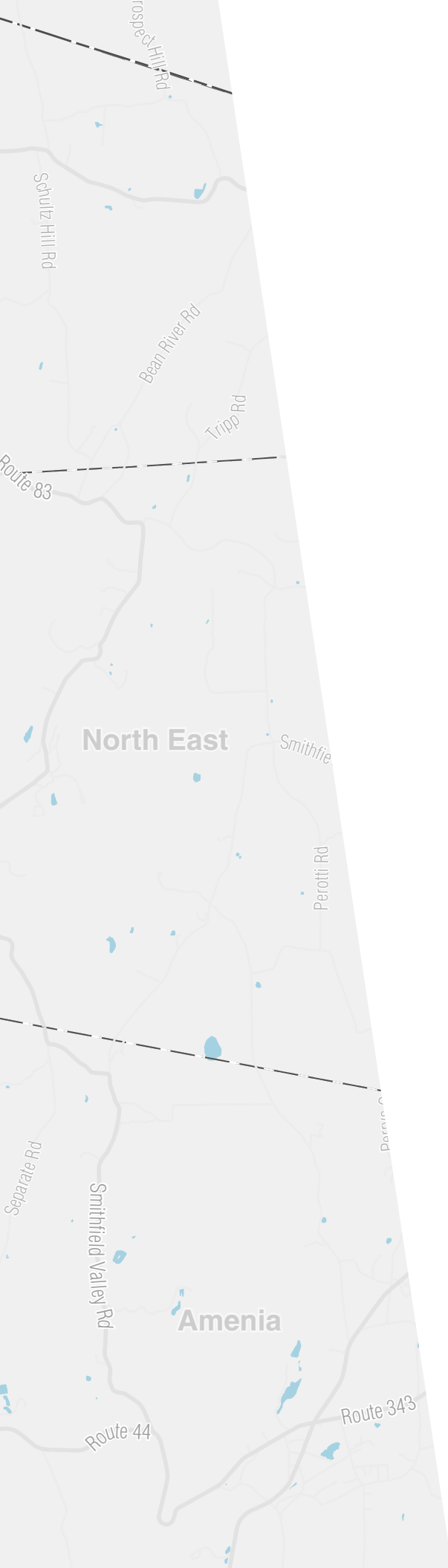
N



Washington

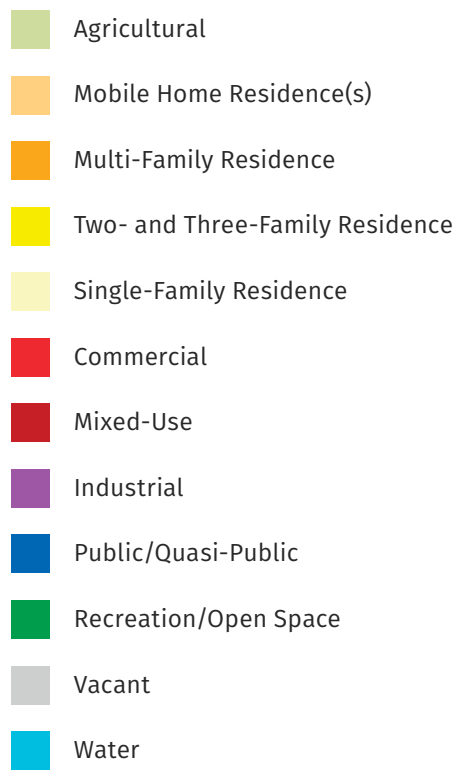


Shunpike



Existing Land Use

Figure 2-2



Source: Dutchess County Real Property Agency, 2020.

Existing Conditions



Wheatley Farm © Conrad Levenson

Recreation

This category includes active and passive recreation space owned by the Town and State, as well as private preserves that are open to the public. The Town of Stanford Recreation Park in the center of Stanfordville is approximately 25 acres, and offers active recreation space with ball fields, courts and playgrounds. Other facilities include the Stanford Wildlife Preserve, the Whitlock Preserve, Stissing Mountain Multiple Use Area, the new Dot and Irv Burdick Park, Bangall Memorial Park, and the Buttercup Farm Audubon Sanctuary.

Agricultural

Agricultural uses are present throughout the Town. The eastern portion of Stanford is almost exclusively agricultural, with large parcels of farmland lining Layton, Bangall Amenia, and Shuman Roads. The largest farm parcels in Stanford, covering over 100 acres, are concentrated in the southeastern portion of Stanford and in the northeastern corner.



Rocky Reef Farm Attlebury hamlet © Karen Mosher



9/11 First Responders Memorial, Town Hall Hill © Karen Mosher

Demographics

It is important to note that statistics presented in this Comprehensive Plan are drawn from existing sources that inventory data through 2018. At the time this Plan is being prepared (2021), the world is in atypical times. Although difficult to measure, the demographic effect of the COVID-19 pandemic suggests the region is witnessing a domestic migration from cities to rural communities like Stanford. This migration is not limited to specific age cohorts, but rather occurring across all age groups, from families with young children to retirees.

Post-pandemic population growth outside cities also may be compounded by an accelerated conversion of second homes to full-time residences, a trend that was beginning to be realized by 2018 (see **Table 2-4, Housing Occupancy**). From 2019 to 2020, home sales in Stanford increased dramatically, suggesting that Stanford's population may be growing. When comparing total sales in the third quarters of 2020 and 2019, Stanford's house sales increased by approximately 100 percent.¹ It will be some

¹ "Home sales in Dutchess boom as prices jump in northern parts of county." Poughkeepsie Journal, October 5, 2020.

time before demographers can accurately estimate the net effect of COVID-19 on population and settlement patterns. However, the population and demographic data presented here represent trends between 2000 and 2018 that provide useful information on the resident composition of the community before the pandemic.

According to 2014-2018 American Community Survey (ACS) 5-Year Estimate data, after a decade of growth from 2000 to 2010, Stanford's resident population decreased almost 2 percent since 2010.² This pattern is consistent with the rate of growth in Dutchess County's population between 2000 and 2010 (6.2 percent, from 280,150 to 297,488) followed by an estimated 1.2 percent population

² The data in this section are sourced from 2000 and 2010 U.S. Census Bureau Decennial Census data, and the 2014-2018 American Community Survey (ACS) 5-Year Estimate data. ACS is a demographics survey program conducted by the U.S. Census Bureau. ACS data are collected each month – via a survey sent to a sample (approximately 3.5 million) addresses in the 50 states, D.C and Puerto Rico. Estimates are period estimates that describe the average characteristics of population and housing over a period of data collection. The 2014-2018 data are statistical estimates that have margins of error (MOE).

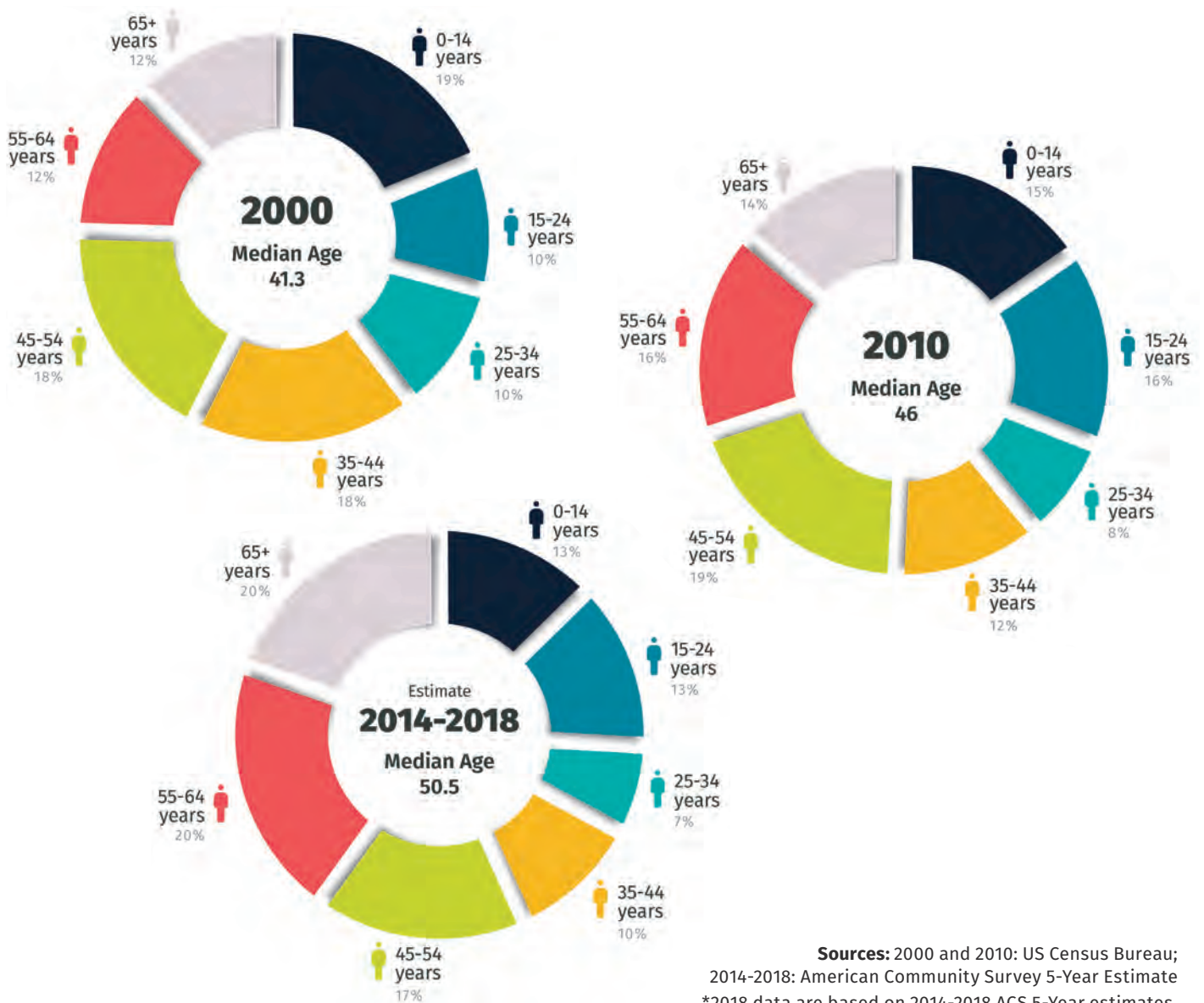
Existing Conditions

decline since 2010. For Stanford, the absolute estimated number (65 persons) representing the decline is not in and of itself significant, though this decline would typically indicate significant shifts in the community, such as a shortage of jobs or a lack of housing options and other amenities that attract young adults and families with children, which could be leading residents to migrate to other communities.

Since 2000, population changes in Stanford did not occur proportionally across all age groups. As shown

in **Figures 2-3, Age of Population and 2-4, Population Trends by Age**, Stanford’s population of young people decreased significantly between 2010 and 2018. In both 2000 and 2010, Stanford’s population aged 34 and under comprised 40 and 39 percent of the Town, respectively. According to 2014-2018 ACS 5-Year Estimate data, this cohort decreased to comprise approximately 33 percent of the total population (a change of approximately 15 percent). As the younger population declined, Stanford’s elderly population increased. In 2000, the number of residents aged 55 and over comprised 24 percent of the

Figure 2-3: Age of Population, Town of Stanford, 2000-2018*



Sources: 2000 and 2010: US Census Bureau; 2014-2018: American Community Survey 5-Year Estimate
 *2018 data are based on 2014-2018 ACS 5-Year estimates.

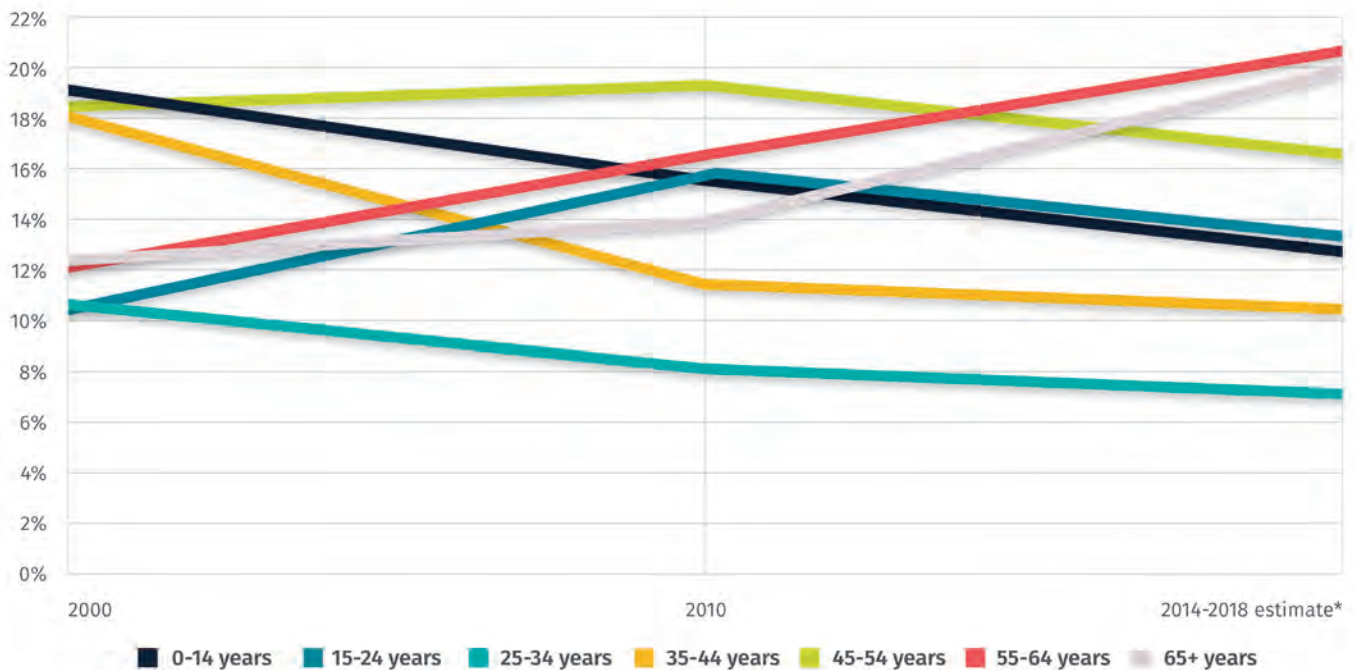
total population; in 2010, this cohort had increased to comprise 30 percent of the population; and in the 2014-2018 estimate, this cohort was estimated to comprise 40 percent of the Town’s population (an increase of approximately 31 percent). The highest rate of growth in Stanford occurred in seniors aged 65 and over, which increased by 40 percent between 2010 and 2014-2018. These statistics indicate the population of Stanford is aging in place while younger people are leaving Town. Some of the population decline of the younger age-cohorts may be attributed to a lack of housing options and proximity to jobs. Within the past decade, Stanford’s only elementary school, Cold Spring Early Learning Center, began serving only Pre-K through First Grade; older students now attend school in Pine Plains, Millbrook or Rhinebeck.

The population of Stanford is aging at a faster rate than Dutchess County, where the median age increased from 36.4 in 2000 to 40.2 in 2010, and approximately 42.0 in 2014-2018 according to ACS 5-Year Estimate data. In 2018, approximately 40 percent of Stanford’s population was over the age of 55. This distribution is significantly higher than Dutchess County, in which approximately 31

According to 2014-2018 ACS 5-Year Estimate data, the median age in Stanford was approximately 50.5 years. This represents an increase over 2000, when the median age in the Town of Stanford was 41.3 years, and 2010 when the median age was 46.0 years.

percent of the population is over 55, as shown in **Table 2-1, Population Trends by Age**. Stanford has always maintained a high seasonal and second-home community. When examined objectively in typical conditions, growth in the older age-cohorts may also be attributed to a shift from seasonal and second-home owners to full-time residents in retirement.

Figure 2-4: Population Trends by Age, Town of Stanford, 2000-2018*



Sources: 2000 and 2010: US Census Bureau; 2014-2018: American Community Survey 5-Year Estimate
 *2018 data are based on 2014-2018 ACS 5-Year estimates.

Existing Conditions

Stanford’s demographics are consistent with general trends in Dutchess County. As shown in **Table 2-1, Population Trends by Age**, Dutchess County’s population aged 34 and under declined by approximately 5.3 percent between 2010 and the 2014-2018 ACS 5-Year Estimate data. The County’s population aged 65 and over increased by an estimated 20.8 percent during that time.

Population projections for Stanford are based on anticipated growth for Dutchess County, as projected by the Cornell Program on Applied Demographics (see **Appendix**). Current projections for 2030 suggest that Stanford will have 3,657 residents, a 2.7 percent overall decline from 2014-2018. Projections for 2030 anticipate that the senior population (those residents over 65) would grow at a slower rate, resulting in a slight increase from 2014-2018 ACS 5-Year Estimate data. According to the projections, in 2030 the age distribution of Stanford residents would remain similar to 2014-2018, with only a decrease in the cohort aged 55 to 64.

Stanford is predominantly White (93 percent). Other racial and ethnic groups including Black or African American, American Indian and Alaska Native, Native Hawaiian or Pacific Islander, persons of two or more races or persons of some other race, all increased by

more than 7.9 percent between 2000 and 2010. As shown in **Table 2-2, Population Trends by Race**, Stanford’s population of Hispanic and Latino Origin individuals of any race increased from 94 to 219 between 2000 and 2010.

As shown in **Table 2-3, Employment Status**, according to 2014-2018 ACS 5-Year Estimate data, approximately 3.1 percent of the labor force in Stanford was unemployed, a rate similar to Dutchess County’s 3.7 percent unemployment rate in the same year. According to 2000 Census Data and 2005-2009 ACS 5-Year Estimate data, unemployment in Stanford increased from 1.3 percent to approximately 3.4 percent. This shift may be explained by the economic recession. American Community Survey estimates for 2014-2018, however, show that unemployment rates in Stanford did not decline to pre-recession levels.

Approximately 31 percent of Stanford residents aged 16 and over were not in the workforce in 2014-2018, according to 2014-2018 ACS 5-Year Estimate data. This category is comprised of individuals who are not actively looking for work. The estimate for Stanford is consistent with the County, which had an estimated 37 percent not in the workforce. The 2000 Census and 2005-2009 ACS Estimate data also reported similar numbers in Stanford.

Table 2-1: Population Trends by Age, Dutchess County, 2000-2018*

Age Range	2000	2010	2014-2018 estimate	% Change (2010 to 2018)*
0-14	20.9%	17.7%	15.5%	-13.4%
15-24	13.6%	15.4%	14.9%	-4.5%
25-34	12.5%	10.6%	11.5%	6.8%
35-44	17.7%	13.4%	11.5%	-14.7%
45-54	14.2%	16.9%	15.3%	-10.5%
55-64	9.0%	12.5%	14.7%	16.4%
65+	12.0%	13.5%	16.6%	20.8%

Sources: 2000 and 2010: US Census Bureau; 2014-2018: American Community Survey 5-Year Estimate

*2018 data are based on 2014-2018 ACS 5-Year estimates. The 2014-2018 data are statistical estimates that have margins of error (MOE).

Table 2-2: Population Trends by Race, Town of Stanford, 2000-2010

	2000	2010	% Change
White	3,365	3,586	6.6%
Black or African American	54	69	27.8%
Asian	39	39	0.0%
American Indian and Alaska Native	7	11	57.1%
Native Hawaiian or Pacific Islander	1	3	200.0%
Some other race	29	50	72.4%
Two or More Races	49	65	32.7%
Hispanic or Latino Origin***	94	219	133.0%
Total Population	3,544	3,823	7.9%

Source: 2000 and 2010: US Census Bureau

*** According to US Census classifications, a person may self-select any race and also Hispanic ethnicity

*2018 estimates are omitted due to insufficient data

Table 2-3: Employment Status, Population 16 years and older, Town of Stanford, 2000-2018

	2000	2005-2009 estimate	2014-2018 estimate	% Change (2009-2018)*
In Labor Force	67.1%	67.5%	69.2%	9.9%
Civilian Labor Force	67.1%	67.5%	69.2%	9.9%
Employed	65.7%	64.0%	66.1%	10.6%
Unemployed	1.4%	3.5%	3.1%	-2.9%
Armed Forces	0.0%	0.0%	0.0%	
Not in Labor Force	32.9%	32.5%	30.8%	1.4%

Sources: 2000: U.S. Census DP-3 and Summary File 3 (SF 3); 2005-2009: American Community Survey 5-year Estimate S2031; 2014-2018: American Community Survey 5-Year Estimate S2301

*2009 data are based on 2005-2009 ACS 5-year estimates. The 2005-2009 data are statistical estimates that have margins of error (MOE).

*2018 data are based on 2014-2018 ACS 5-Year estimates. The 2014-2018 data are statistical estimates that have margins of error (MOE).

Existing Conditions

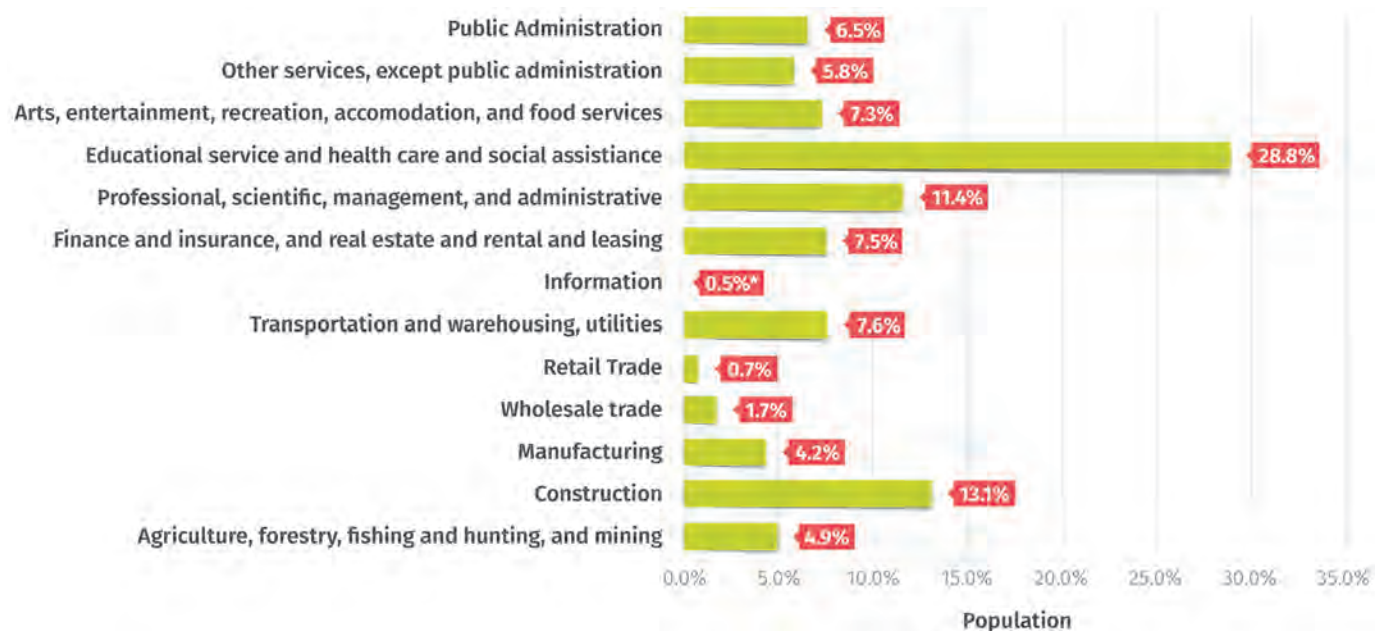
Coinciding with nationwide trends during the COVID pandemic of 2020, unemployment in Dutchess County increased from 2019 to 2020. This category is comprised of individuals who are actively looking for work. According to the Bureau of Labor Statistics, the county unemployment rate grew from 3.8 percent in August 2019 to 9.3 in August 2020. While 2020 unemployment data are not available for Stanford, the Town may have experienced a similar increase in unemployment because of the pandemic.

As shown in **Figure 2-5, Employment Status by Industry**, Stanford’s residents work in a variety of industries and occupations. According to 2014-2018 ACS 5-Year Estimate data, three occupation categories employed a total of approximately 53.5 percent of the workforce in Stanford: education, health care, and social assistance workers (28.9 percent); construction workers (13.1 percent); and professional, science, management, and administrative workers (11.5 percent). Employment in all three of these categories increased from 2010 to 2014-2018, with the greatest increase in the professional, science, management, and administrative category (73 percent overall increase from 2010 to 2018). Many Stanford residents

report employment in the transportation, warehousing, and utilities sectors, as well as finance and insurance, and real estate, rental and leasing categories. According to 2014-2018 ACS 5-Year Estimate data, the number of residents employed in retail declined by more than 90 percent in Stanford, from 2010 to 2014-2018. The greatest increase has occurred in the agriculture, forestry, fishing, hunting and mining category, which experienced a 153 percent increase from 2010 to 2014-2018.

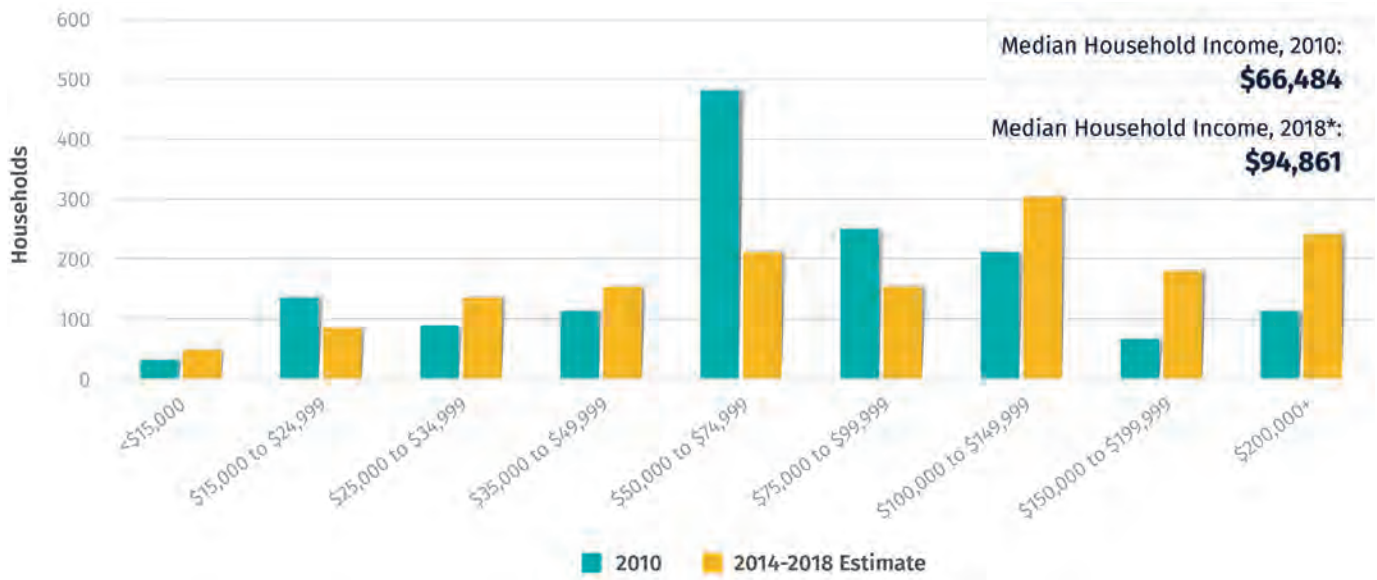
Reported household incomes in Stanford increased from 2010 to 2018. According to 2014-2018 ACS 5-Year Estimate data, the median household income in 2014-2018 was approximately \$94,861, up from \$66,484 in 2010.

Figure 2-5: Employment by Industry, Town of Stanford, 2014-2018*



Sources: U.S. Census; 2014-2018 ACS 5 Year Estimate data

Figure 2-6: Households by Income, Town of Stanford, 2010-2018*



Sources: 2010: U.S. Census; 2014-2018 ACS 5 Year Estimate data
*2018 data are based on 2014-2018 ACS 5-year estimates.

As shown in **Figure 2-6, Households by Income**, the number of households making \$50,000 to \$74,999 decreased by 56 percent, from 32 percent of households in 2010 to only 13.8 percent in 2014-2018. However, the number of households reporting incomes larger than \$100,000 increased by 86 percent. In 2014-2018, an estimated 48 percent of households in Stanford reported an income larger than \$100,000, in contrast to 26 percent in 2010 and 18 percent in 2000. These data show Stanford households are reporting higher incomes, which may be attributed to wealthier residents moving to town and/or seasonal or weekender population moving to the area full time.

The number of households in Stanford has remained much the same but households have gotten smaller. According to 2014-2018 ACS 5-Year Estimate data, average household size in Stanford was approximately 2.33 persons per household, down from 2.57 persons in 2010, and 2.49 persons in 2000. This decline in household size corresponds to the population estimates for Stanford, which show an apparent decrease in young families and a rising senior population.

According to 2014-2018 ACS 5-Year Estimate data, almost one third of Stanford's households (24 percent of owner-occupied houses and 38 percent of renter-occupied houses) pay more than 30 percent of their income on housing costs.

According to the Department of Housing and Urban Development, these households qualify as cost burdened. These households may have difficulty affording necessities such as food, clothing, transportation and medical care.

According to 2014-2018 ACS 5-Year Estimate data, the number of renter-occupied units in Stanford has decreased, while the number of owner-occupied units has increased. As shown in **Table 2-5, Housing Occupancy**, between 2010 and 2014-2018, the number of owner-occupied units increased by approximately 16

Existing Conditions

percent and renter-occupied units decreased by approximately 31.5 percent. The decrease in rental units, from 419 in 2010 to 287 estimated in 2014-2018, is a significant change. The decrease in rental units may be due to the growing popularity of short-term vacation rentals through companies such as Airbnb or HomeAway, where units that would have been occupied full time by renters may now be removed from the traditional rental market in favor of vacation rentals. The market for short-term rentals may have shifted during COVID, though data for this recent period is unavailable. An informal search on one of these vacation rental websites reveals several dozen vacation rentals offered in Stanford.

According to 2014-2018 ACS 5-Year Estimate data, approximately 1,843 housing units were in Stanford, of which 1,513 units were reported as occupied, see **Table 2-4, Housing Tenure**. Rental units comprised approximately

19 percent of occupied housing units in Stanford, and owner-occupied units comprised 81 percent. Rental housing in Stanford had a median monthly cost of \$1,061 in 2014-2018. The median owner-occupied unit in Stanford was valued at \$292,100.

Comparing 2010 to 2014-2018 estimates, fewer units are occupied as occasional or seasonal residences. Housing units that are designated as seasonal, recreational, or occasional use decreased by 18.6 percent between 2010 and 2014-2018. The reduction in these units may be due to more people living in Stanford full time. Between 2010 and 2014-2018 there was a significant increase in the older population in Stanford, as the resident population aged over 65 grew by approximately 40 percent. This influx of seniors may be an explanation for the decrease in seasonal houses, as retirees move into what were previously weekend or seasonal houses.

Table 2-4: Housing Tenure, Town of Stanford, 2000-2018

	2000	2010	2014-2018 estimate	% Change (2010 to 2018)*
Owner Occupied Housing Units	1,006	1,057	1,226	16.0%
Renter Occupied Housing Units	392	419	287	-31.5%
Total Occupied Housing Units	1,398	1,476	1,513	2.5%

Sources: 2000 and 2010: U.S. Census Bureau; 2014-2018: American Community Survey 5-Year Estimate DP04

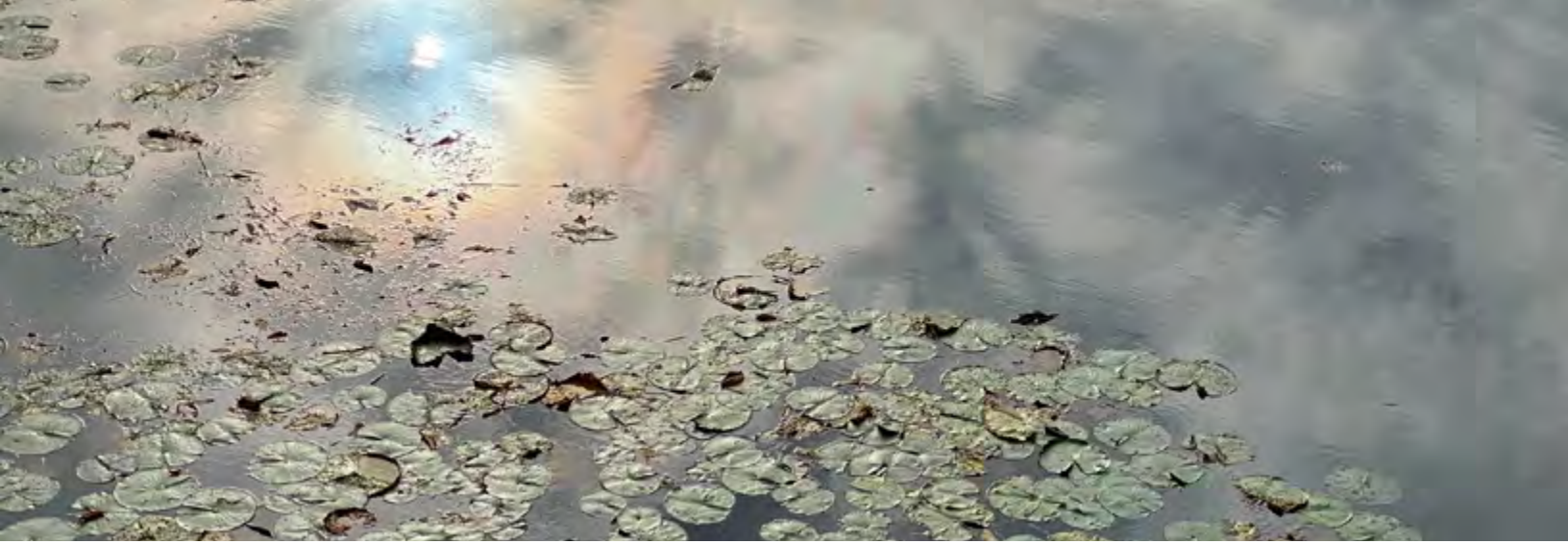
*2018 data are based on 2014-2018 ACS 5-year estimates. The 2014-2018 data are statistical estimates that have margins of error (MOE).

Table 2-5: Housing Occupancy, Town of Stanford, 2000-2018

	2000	2010	2014-2018 estimate	% Change (2010 to 2018)*
Total Housing Units	1,712	1,913	1,843	-3.7%
Occupied Units	1,398	1,496	1,513	1.1%
Vacant Units	314	417	330	-20.9%
Vacant Units: Seasonal, Recreational or occasional use	233	295	240	-18.6%

Sources: 2000 and 2010: U.S. Census Bureau; 2014-2018: American Community Survey 5-year estimates DP04 and B25004

*2018 data are based on 2014-2018 ACS 5-year estimates. The 2014-2018 data are statistical estimates that have margins of error (MOE).



Hunns Lake © Wendy Burton

Parcel Size Distribution

In 2020, the Town of Stanford was comprised of 2,171 tax parcels ranging in size from less than one acre to greater than or equal to 25 acres. Parcels smaller than one acre, and parcels between one and 2.5 acres are concentrated in the Bangall and Stanfordville hamlets, the neighborhoods surrounding Hunns and Upton Lakes and in the subdivisions located on the western side of Town. As shown in **Table 2-6, Parcel Size Distribution**, approximately 41 percent of all Town parcels are smaller than 2.5 acres. Parcels between five and 25 acres are generally

located on the western portion of Town, and immediately outside the hamlets and lake neighborhoods. The large parcels in Town – those equal to or greater than 25 acres - are located outside the hamlets and are concentrated in the eastern portion of Town. The majority of land in Town, approximately 71 percent of Stanford, is comprised of large parcels; these large parcels are used as farmland, residential property, parks, and public land (see **Figure 2-7, Parcel Size Distribution**).

Table 2-6: Parcel Size Distribution, Town of Stanford, 2020

Parcel Size (acres)	Total number of parcels	Total area (square miles)
<1	426	0.34
<2.5	478	1.26
<5	403	2.30
<10	299	3.14
<25	283	6.91
>25	282	34.74

Source: Cornell University Cooperative Extension - Dutchess County

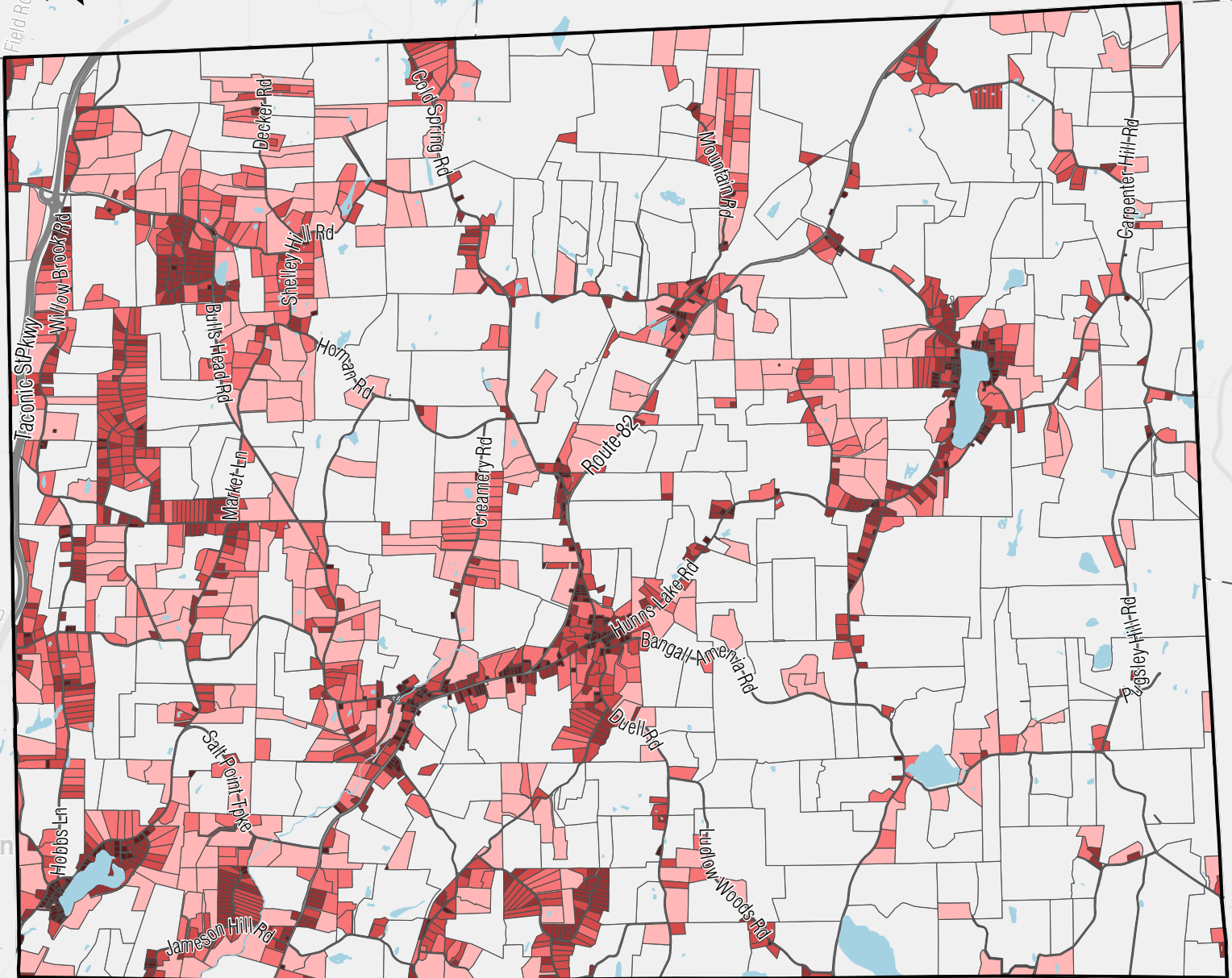
Existing Conditions

Milan

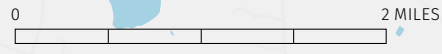
Pine Plains

199

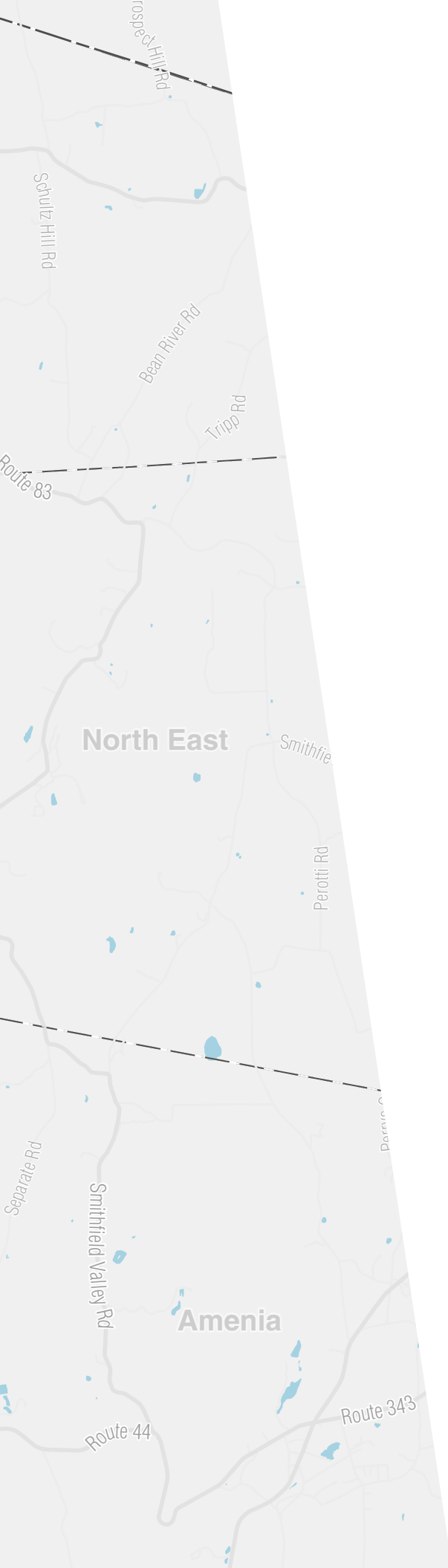
N



Washington



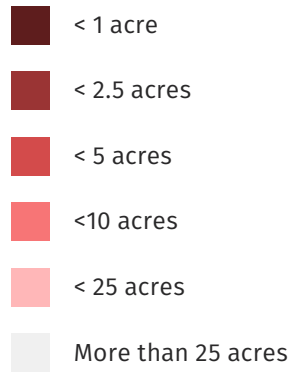
Shunpike



Parcel Size Distribution

Figure 2-7

Parcel by Acreage



Source: Dutchess County Real Property Tax Service Agency, 2020.

Agriculture

Approximately 66 percent of Stanford is farmland. Stanford is proud of its pastoral landscapes, and agriculture has a substantial impact on the local economy. The preservation of Stanford’s farmland has been a priority goal in all planning documents prepared for the Town over the past forty years.

Agriculture in Stanford consists of the cultivation of crops and livestock, and equestrian related activities (see **Figure 2-8, Acreage Distribution by Farm Enterprise Category**). According to the Cornell University Cooperative Extension, in 2019 the leading agricultural enterprises in Stanford were the production of hay, corn and field crops, equestrian related activities, and livestock. Dairy farming has been in decline throughout Dutchess County. According to the United States Department of Agriculture (USDA) Agricultural Resource Management Survey, the number of farms in the County with milk cow operations declined from more than 200 farms in the 1970s, and 126 farms in 1987, to only 38 in 2017. According to Dutchess County Department of Planning and Development, three of these farms produce raw milk and the remainder are conventional dairy farms.

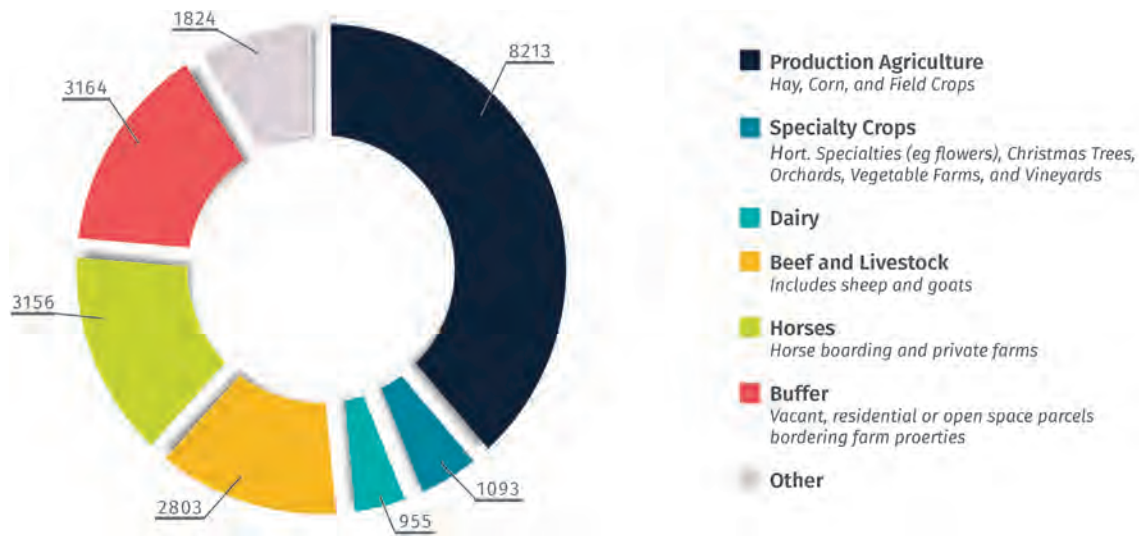
In 2019, there were 464 farm parcels in the Town of Stanford, comprising 21,228 acres. The majority of Stanford’s farms are relatively small operations. The Dutchess County Department of Planning and Development measures the size of farms by tracking their capital investments; that is, annual spending on hard items that a farm needs to operate, such as equipment, buildings, fencing, and irrigation. According to the Cornell Cooperative Extension, 304 farm parcels in Stanford reported less than \$10,000 in annual capital investments. However, this category includes small

farms as well as agricultural “buffer” properties that are not currently in agricultural production, but act as vacant or open space parcels that could potentially be used for farming operations, including those that border farm property. According to the Cornell Study, approximately 137 farms in Stanford reported capital investments over \$10,000 in 2019. Of these, approximately 59 farms reported \$100,000 or more in capital investments. These large working farms have a significant impact on the local and regional economy, as a significant portion of their capital investments go back into the local economy.

Much of Stanford’s farmland is protected by the New York State Agricultural District Program, within Agricultural District 21. Stanford’s Agricultural District acreage increased by 5 percent between 2008 and 2019, to 21,228 acres. Within Agricultural Districts, agricultural operations are the priority land use and are afforded benefits and protections to promote the continuation of farming and the preservation of agricultural land.

A substantial amount of farmland in the eastern portion of Stanford has been placed in conservation easement with the Dutchess Land Conservancy and other conservation organizations (see **Figure 2-9, Land in Conservation**). Preservation of large parcels, whether in active farming operation or protected for conservation, is essential

Figure 2-8: Acreage Distribution by Farm Enterprise Category



Source: Cornell University Cooperative Extension, 2019

to sustained environmental biodiversity. Many larger parcels that were actively farmed in the past have been sold, and this trend continues. The use of conservation easements to protect parcels from development is a crucial tool for preserving farmland. Figure 2-9, Land in Conservation, presents properties with easements held by various land trust organizations.

Figure 2-10, Agricultural Districts and Land in Agricultural Exemption shows the location of farms that are designated for Agricultural Exemption. According to the Dutchess County Agriculture and Farmland Protection Board, to qualify for an Agricultural Assessment, owners must have at least seven acres of land that produces a minimum of \$10,000 annually, or own less than seven acres of land that produces a minimum of \$50,000 annually. The annual production is determined based on the average of the preceding two years. The farms must produce crops, livestock or livestock products for sale. Commercial horse boarding also qualifies for the exemption. Stanford’s qualifying and enrolled farms are primarily located in the eastern portion of Town.

While farming operations generate direct economic benefits to the Town (through employment and sale of goods and services), their indirect - or secondary - benefits cannot be understated. Farm operations are supported by local and regional industries including suppliers of

feed, hay, fertilizer, farm equipment (for purchase or rent) and service providers for manure removal, processing, and fencing generate economic benefit to the Town.

In addition to its economic impact, agriculture in Stanford provides the pastoral landscapes and scenic viewsheds that attract residents, weekenders and visitors to the Town.

The appeal and beauty of Stanford’s farmland is a valuable resource for the Town. Farming thus generates an indirect benefit to the local economy. As such, it is essential from both a local and regional perspective that farms are supported as viable economic revenue generators. They are integral to defining the character of the Town.

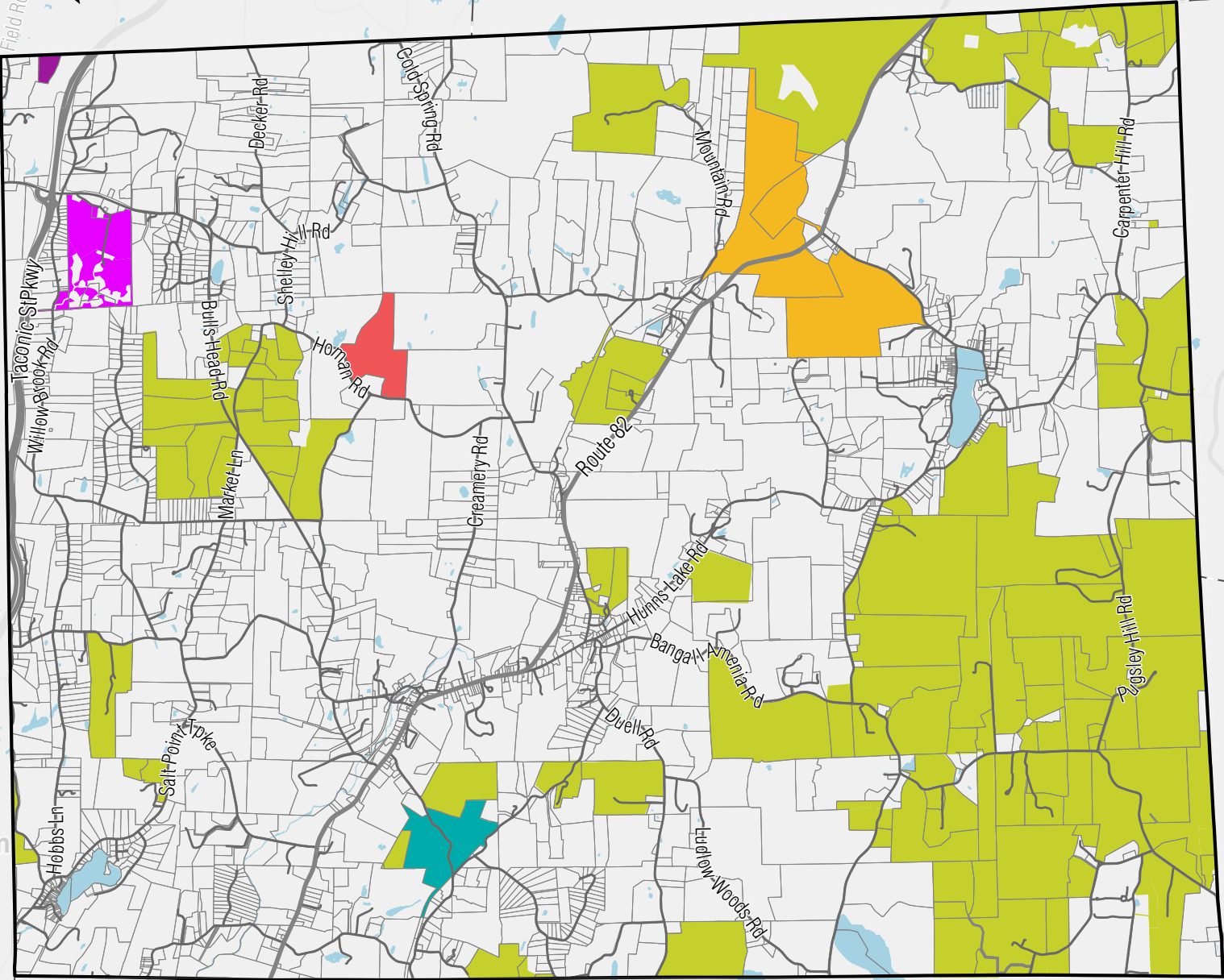
Existing Conditions

Milan

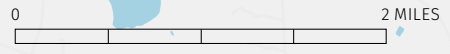
Pine Plains

199

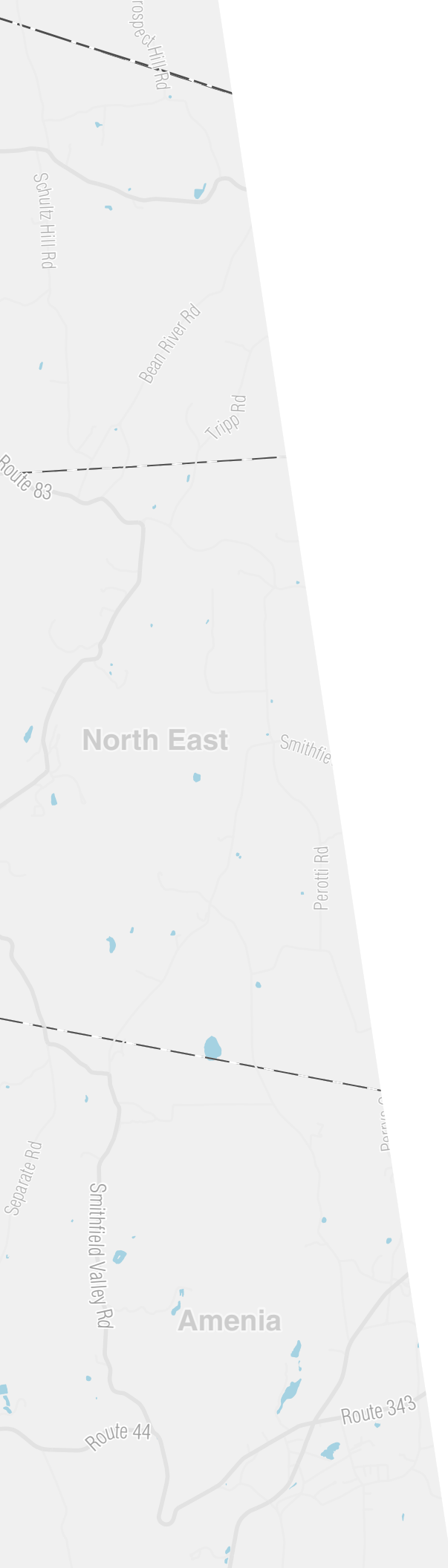
N



Washington




Shunpike



Land in Conservation

Figure 2-9


Private Land


 Dutchess Land Conservancy Conservation Easement


National Audubon Society

 Buttercup Farm Audubon Sanctuary

Winnakee Land Trust

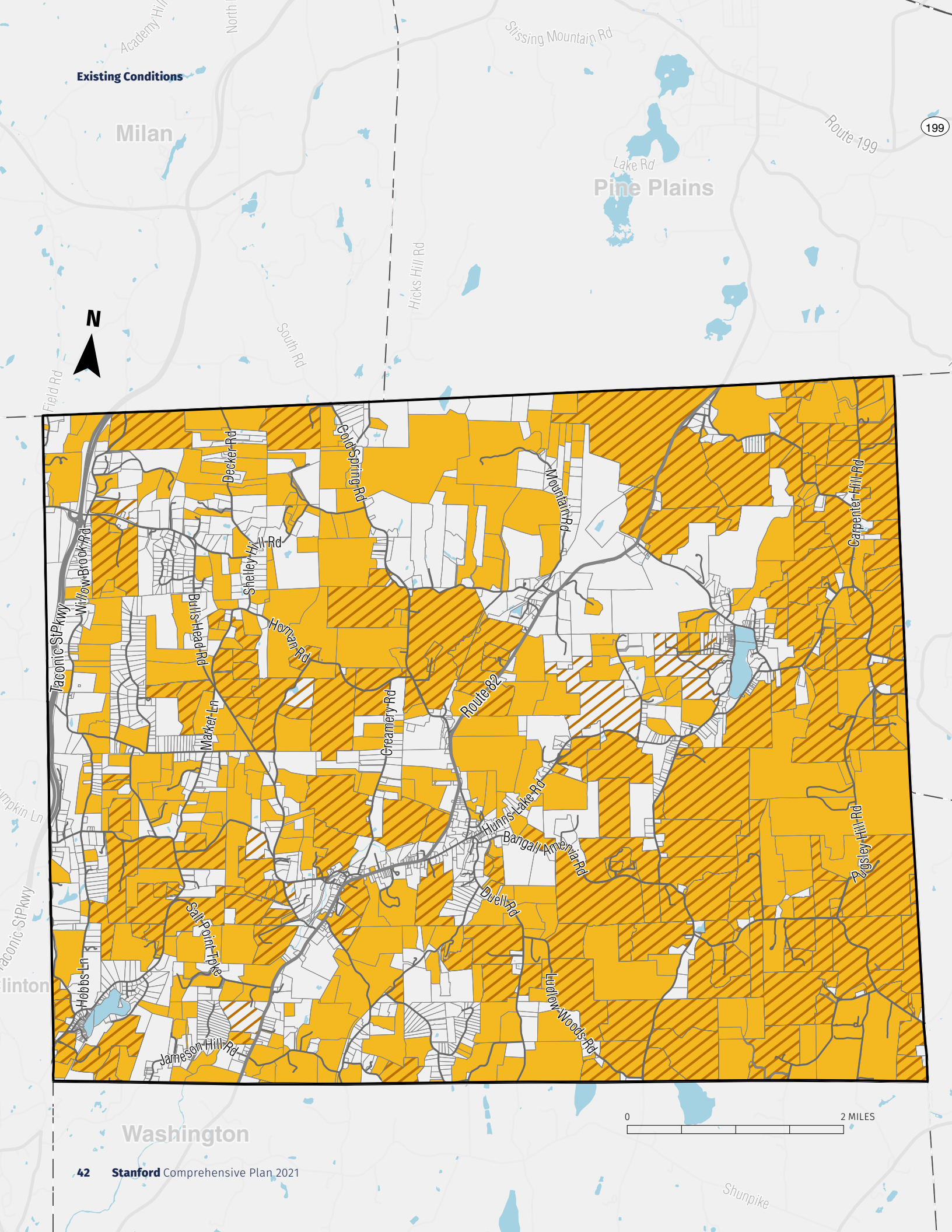
 Sisters of Charity

 Waterlands

 Henkin

 Dutchess Gables

Sources: Dutchess County Real Property Tax Service Agency, 2020. Winnakee Land Trust, 2020. Dutchess Land Conservancy, 2020.



Existing Conditions



Milan

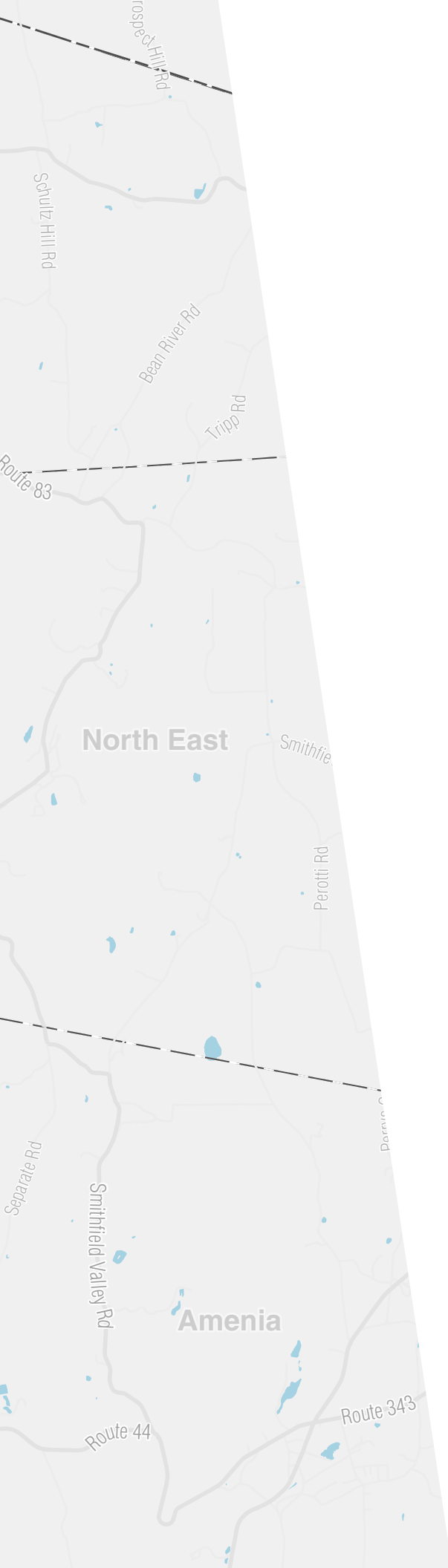
Pine Plains

Washington

Agricultural Districts and Land in Agricultural Exemption

Figure 2-10

-  Agricultural District Parcels
-  Agricultural Exemption



Source: Dutchess County Real Property Tax Service Agency, 2020.

Historic Resources

Prior to Anglo-Dutch settlement, the present-day Town of Stanford was home to the indigenous Wappinger peoples. In 1697, Anglo-Dutch settlers acquired the land as part of the 145,000-acre Great Nine Partners land grant, which encompassed much of central Dutchess County. The land remained sparsely settled until the 1730s, when lots were laid out and divided. Early settlements arose around present-day Hunns Lake, and mills were erected along Wappinger Creek and Hunns Lake Creek. In 1793, the Town of Stanford was formed from the Town of Washington. Stanford retains many significant historic buildings, structures, and sites. Fifteen properties are listed or determined eligible for listing in the National Register of Historic Places and there are numerous other structures and places in Town worthy of documentation and preservation.

In 1986, the Dutchess County Department of Planning and Development compiled an inventory of Stanford's historic properties as part of a countywide survey (see **Figure 2-11, Historic Resources**). The Dutchess County Historical Society historian mapped the historic properties and structures in Town and documented each through photography and with a Building Structure Inventory Form as provided by the New York State Office of Parks, Recreation and Historic Preservation (OPRHP). The Stanford Historical Society is currently working to update the photographs and the approximately 235 Building Structure Inventory Forms. The Society is digitizing the survey material so that it may be more easily accessed by researchers and the public.



Civil War Monument © Wendy Burton

Stanford is composed of historic hamlets, each with a distinctive history and settlement pattern. Local historians in Stanford are in the process of identifying the boundaries and characteristics for each of the fifteen historic hamlets, in an effort to identify, record and protect the hamlets' historic resources and unique characteristics.

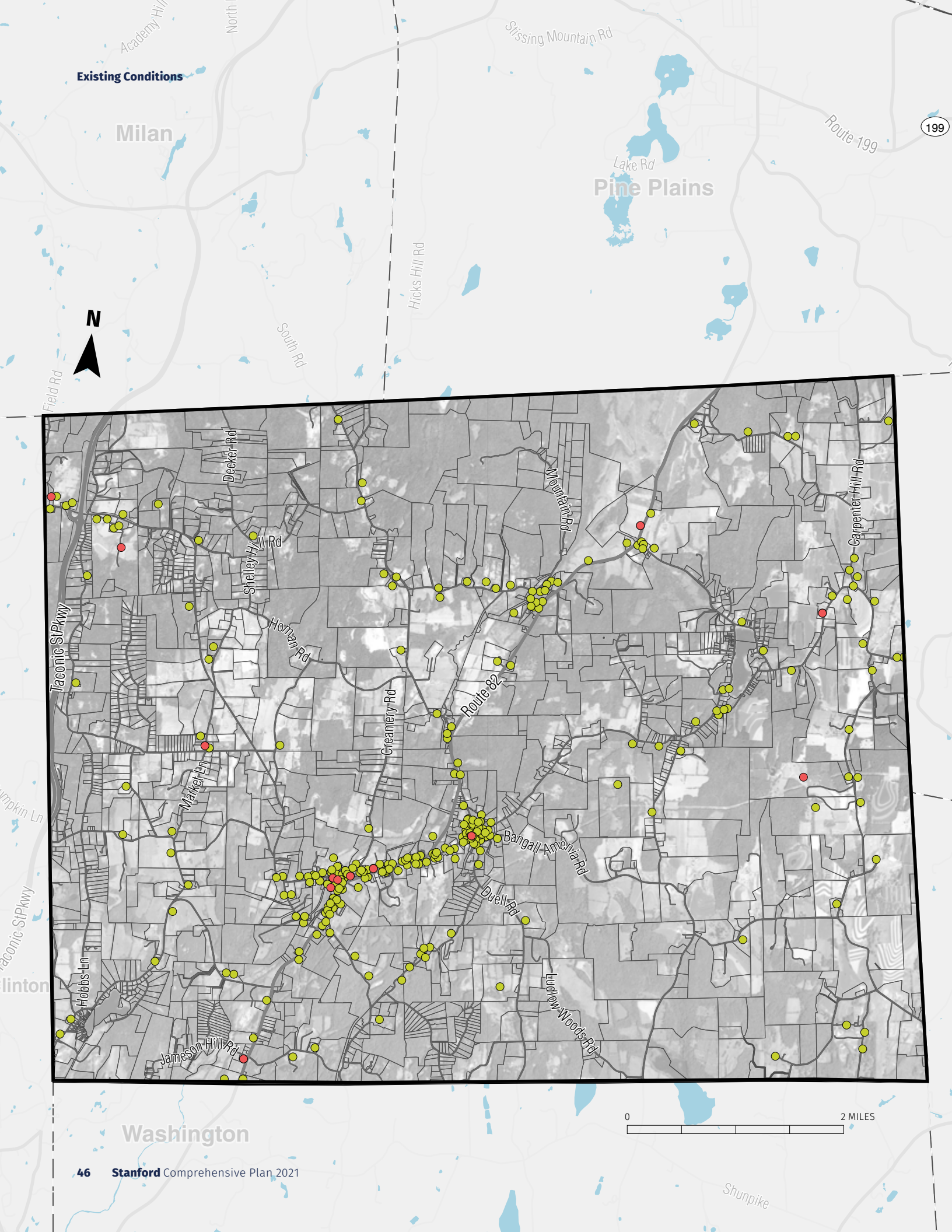
The Town of Stanford does not have local protections for its many historic resources. Thirteen properties in Stanford are listed or determined eligible for listing on the National Register of Historic Places (see **Table 2-7, Properties Listed or Determined Eligible for Listing in the National Register of Historic Places**). However, these historic resources are only protected from demolition or alteration if they are involved in a project that involves state or federal assistance. A property listed or determined eligible for listing in the National Register of Historic Places is protected through Section 106 of

the National Historic Preservation Act of 1966. The Act ensures that all properties either listed in, or determined eligible for listing in, the National Register are considered in the federal planning process. These properties are protected under the New York State Historic Preservation Act of 1980, which requires state agencies to consider whether state projects have an effect on historic resources. Owners of National Register properties may qualify for preservation grants, and may be eligible for tax credits for the certified rehabilitation of income-producing historic structures.

Table 2-7: Properties listed or determined eligible for listing in the National Register of Historic Places, Town of Stanford, 2020

Property	Address	Status
Attlebury School House	6917 NY Route 82	S/NR Listed
Pulver - Bird House/Eagle Acres	983 Hunns Lake Road	S/NR Listed
Converted storage buildings	15 Old Depot Way	S/NR Listed
1197 Bulls Head Road	1197 Bulls Head Road	S/NR Eligible
Cornelius Nase Campbell House	6031 NY Route 82	S/NR Listed
Wheeler-Collin Farm	20 Church Lane	S/NR Listed
Bentley Farmstead	4-54 Bentley Lane	S/NR Eligible
Bangall Post Office	105 Hunns Lake Road	S/NR Listed
Freight House	2238 Bulls Head Road	S/NR Listed
Stanfordville Station	5 Old Depot Way	S/NR Listed
Sutherland Cemetery	305 Market Lane	S/NR Listed
Walter Beckwith House	482 Jameson Hill Road	S/NR Listed
Wethersfield Farm Historic District	257 Pugsley Hill Road	S/NR Eligible

Source: Cornell University Cooperative Extension - Dutchess County
S/NR: (State/National Historic Register)



Existing Conditions

Milan

Pine Plains

199

N

Washington

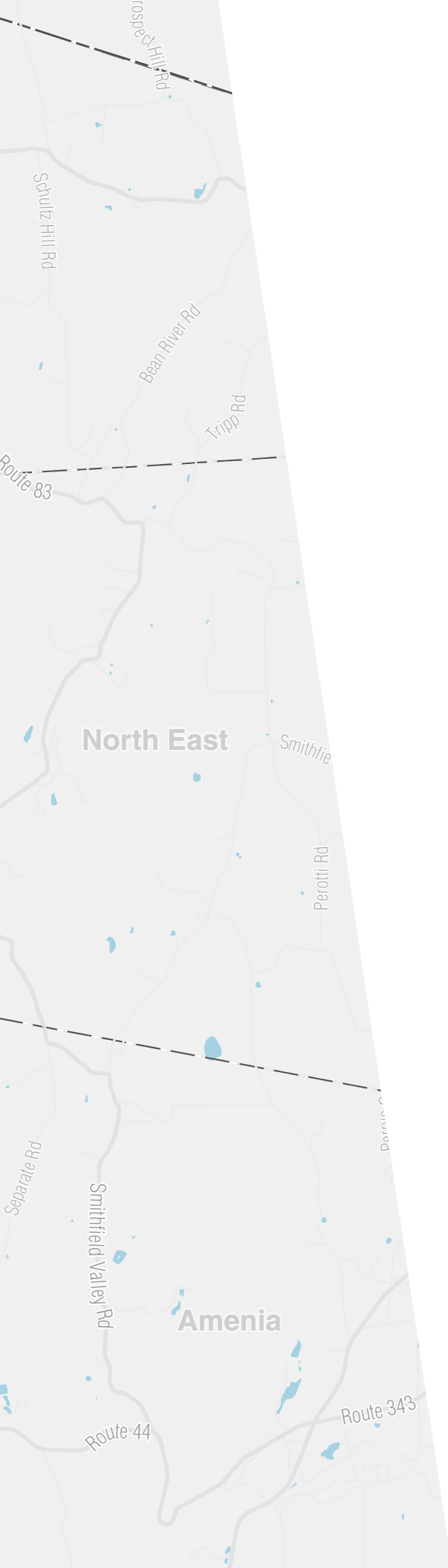
0 2 MILES

Shunpike

Historic Resources

Figure 2-11

- Property Listed or Determined Eligible for Listing in the National Register of Historic Places
- Potential Historic Resources, 1987 Dutchess County Historic Resources Survey



Sources: Dutchess County Department of Planning & Development. New York State Office of Parks, Recreation and Historic Preservation, 2020.



SBA Sponsored Annual Car Show, Stanford Grange Community Day © Karen Mosher

Recreation

The Town of Stanford is served by several recreation areas, including land dedicated to active recreation such as playgrounds and athletic fields, and passive recreation areas offering trails, and natural habitat for plants and wildlife.

Figure 2-12, Recreation shows the location of publicly accessible recreation spaces in the Town of Stanford.

The Town's largest active recreation area is the Town of Stanford Recreation Park, located at the center of Stanfordville on Route 82. This park contains baseball fields, basketball courts, tennis courts, a swimming pond, a skateboard park and a playground. Nearby, a baseball diamond is located behind the Town Hall.

Passive recreational opportunities in Town include the Stanford Wildlife Preserve and Whitlock Preserve. Both wildlife preserves are owned by the Town. They include hiking trails for visitors to view wildlife.

The Stanford Wildlife Preserve also provides fishing access to the Wappinger Creek. Buttercup Farm Audubon Sanctuary is also located in Town, with approximately six miles of scenic trails. At more than 600 acres, the Sanctuary includes open grasslands, woodlands, a former orchard, as well as a flooded woodland. In addition to providing hiking and walking opportunities, the Preserve is one of the top birdwatching areas in Dutchess County.

A portion of the Stissing Mountain Multiple Use Area is located in the northernmost portion of Town. The approximately 595-acre property is owned and maintained by the New York State Department of Environmental Conservation. It contains trails for hiking and mountain biking, and allows hunting in season.

The Town Recreation Department is overseen by a volunteer Recreation Commission, and staffed by a part time director and secretary, as well as seasonal counselors and lifeguards. The Department oversees activities at the Recreation Park, and organizes soccer and open court basketball at Cold Spring Early Learning Center.



Hunns Lake © Wendy Burton

Wetlands, Waterbodies & Watercourses

Wetlands are located throughout the Town of Stanford. The approximately 2,100 acres of wetlands in Town vary significantly in size, with some of the largest located along the northern edge of Town and the southeast corner. Wetlands perform important ecological functions, by retaining floodwater, providing groundwater recharge, maintaining water quality, and serving as important food, shelter, and breeding habitats for fish and wildlife. Wetlands greater than 12.4 acres are mapped and regulated by the New York State Department of Environmental Conservation (NYSDEC), but smaller wetlands are currently unprotected (see **Figure 2-13, Wetlands**).

Until 2001, the ACOE regulated wetlands that were part of “waters of the US” or navigable waterways (lakes, rivers,

streams and ponds) and isolated wetlands. An isolated wetland is one that may be completely surrounded by uplands – with no apparent surface water inlets or outlets. These wetlands are not isolated from an ecological perspective as they help retain floodwater, provide groundwater recharge, help maintain water quality, and are often important habitat for plants and animals. Vernal pools, which can be very small to several acres are considered isolated wetlands and are very important breeding habitat for reptiles and amphibians. In 2001, by decision of the US Supreme Court, ACOE regulation over isolated wetlands was eliminated, thereby transferring the burden for regulating those wetlands to state and local governments.

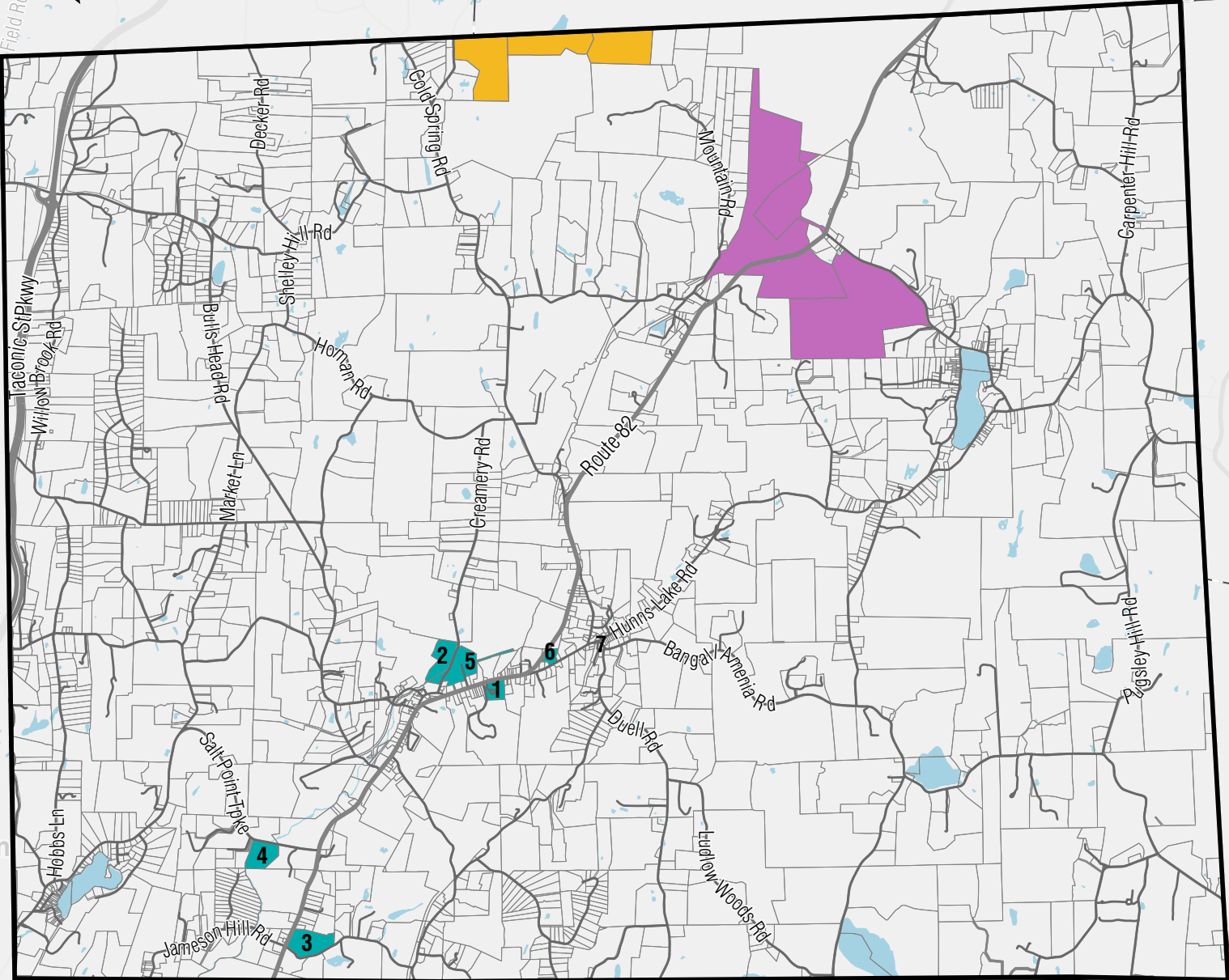
Existing Conditions

Milan

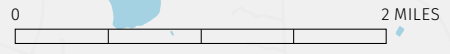
Pine Plains

199

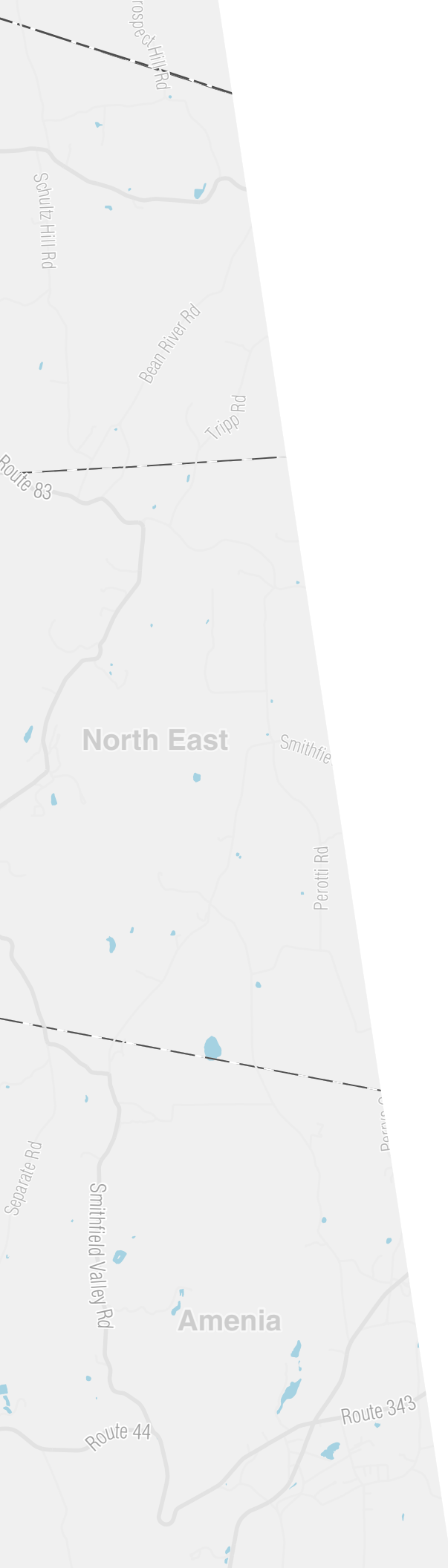
N



Washington





Shunpike






Recreation

Figure 2-12

-  Buttercup Farm Audubon Sanctuary
-  Stissing Mountain Multiple Use Area, NYSDEC

Town of Stanford Property

-  1 Town of Stanford Town Hall
-  2 Town of Stanford Highway and Recreation
-  3 Whitlock Preserve and Trail
-  4 Stanford Wildlife Preserve
-  5 Town of Stanford Recreation Park
-  6 Dot and Irv Burdick Park
-  7 Bangall Memorial Park

Source: Dutchess County Real Property Tax Service Agency, 2020.

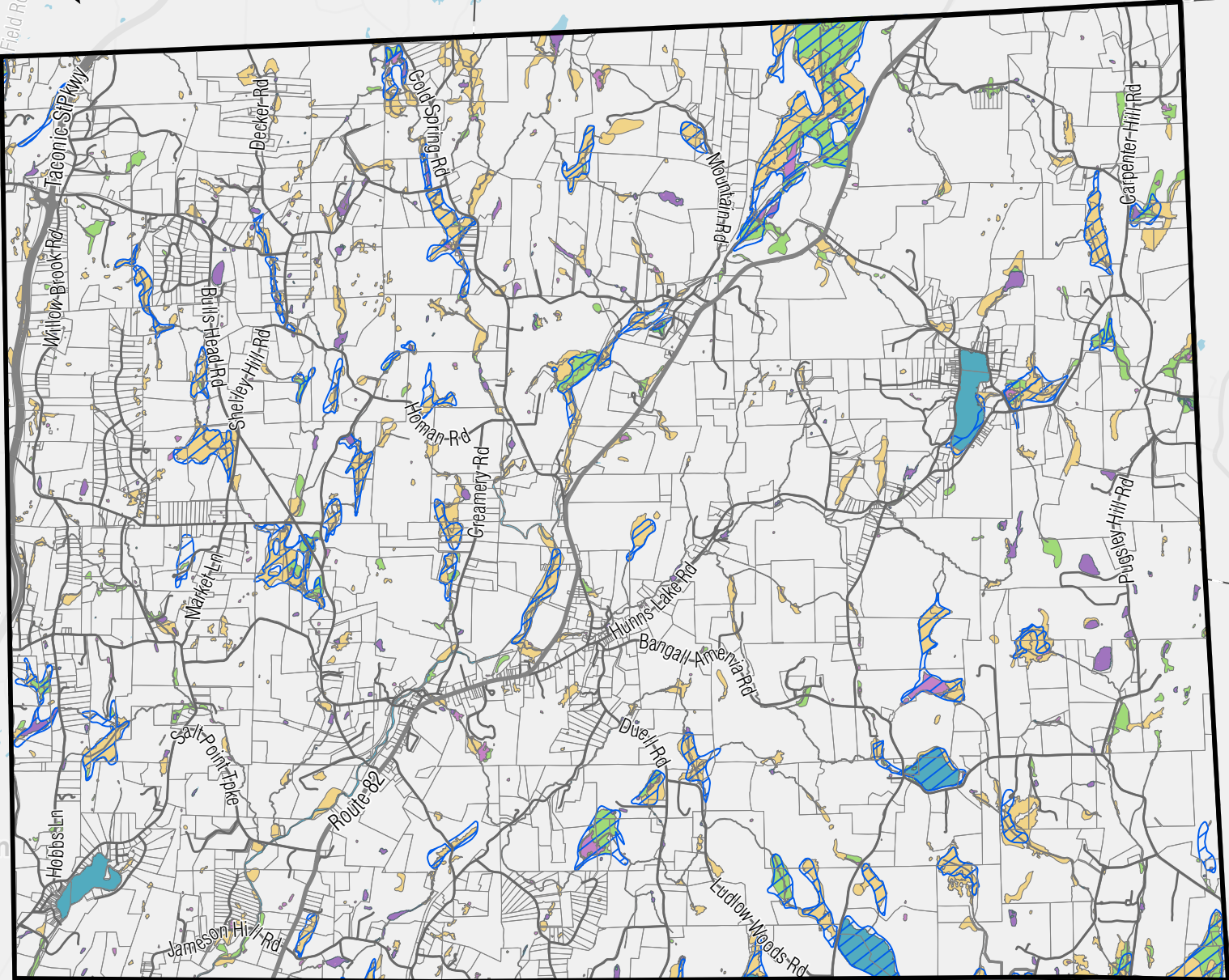
Existing Conditions

Milan

Pine Plains

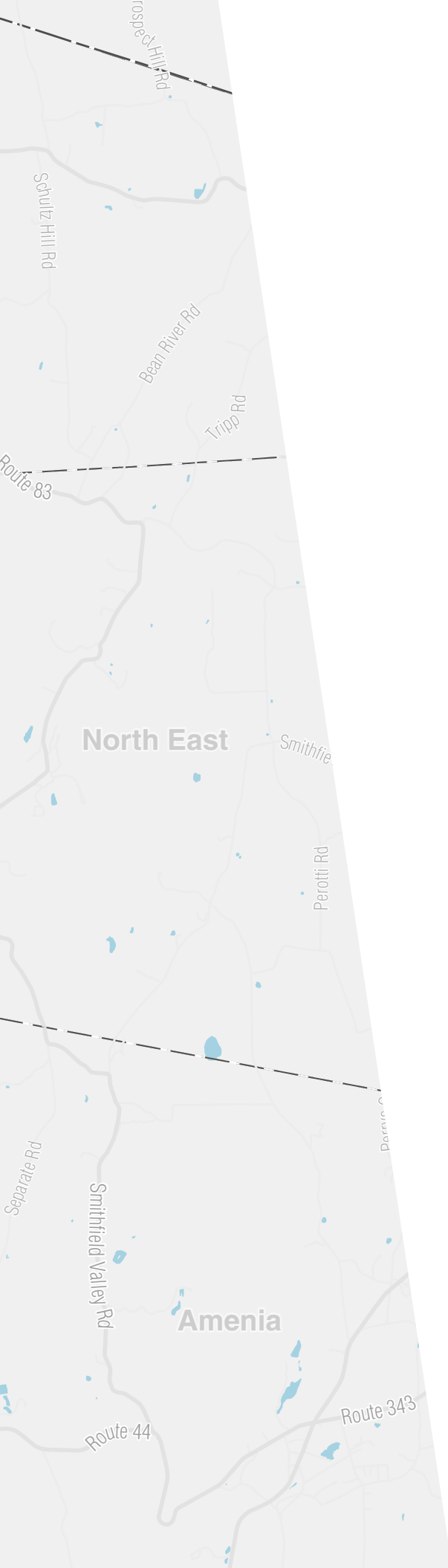
199

N



Washington

Shunpike



Wetlands


Figure 2-13

 NYSDEC Wetlands

National Wetland Inventory Wetlands

 Freshwater Emergent Wetland

 Freshwater Forested/Shrub Wetland

 Freshwater Pond

 Lake

 Riverine

Sources: U.S. Fish and Wildlife Services, 2020.
New York State Department of Environmental Conservation.

Existing Conditions

The New York Department of Environmental Conservation (NYSDEC) regulates wetlands of 12.4 acres or larger under Article 24 of the New York State Environmental Conservation Law (ECL), the Freshwater Wetlands Act, and the Tidal Wetlands Act under Article 25 of the Environmental Conservation Law. Approximately 1,600 acres of wetlands in Town are regulated under these provisions. In addition to regulating activities within the boundaries of the wetlands, NYSDEC regulates an adjacent 100-foot buffer area. For these wetlands to be regulated by DEC, they must be mapped on an official NYSDEC Freshwater Wetlands Regulatory Map. The NYSDEC also regulates watercourse bed and banks, as well as land within 50 feet of the banks of streams with a classification and standard of C (T) or higher, known as protected streams. Protected streams in Stanford

include Wappinger Creek south of Stissing, Cold Spring Creek, and Hunns Lake Creek.

The main waterbodies in Stanford are Hunns Lake, Upton Lake, Bontecou Lake, Shaw Pond and Ryder Pond (see **Figure 2-14, Surface Water Resources** and **Figure 2-15, FEMA Flood Hazard Areas**). The largest watercourse within the Town is the Wappinger Creek, a tributary of the Hudson River. Wappinger Creek generally follows the path of Route 82, heading in a south/southwest direction through Town. Other watercourses in Town include the Cold Spring Creek in the northern portion of Town, Willow Brook in the western portion of Town, and Hunns Lake Creek, which flows west from Hunns Lake. There are several other unnamed watercourses throughout Town.

Topography, Geology & Soils

Located within the Hudson River Valley, the Town of Stanford is characterized by rolling hills and varied topography (see **Figure 2-17 Topography**, included in the **Appendix**). Along Wappinger Creek, running southwest through the Town just west of Route 82, the topography is generally flat and low-lying. Elevations in Stanford range from 270 feet along Wappinger Creek near the southwestern boundary of Town, to 1,210 feet on the hilltops of Pugsley Hill Road near the Town's eastern boundary. Steep slopes are located throughout the Town, but are concentrated in the center and northern portions. Approximately 3,439 acres contain steep slopes of 25 percent and greater. Approximately 6,783 acres contain steep slopes of 15 to 25 percent. Overall, approximately 32 percent of the Town contains slopes of 15 percent or greater.

Stanford's bedrock geology is predominantly phyllite and large areas of schist and meta-graywacke (see **Figure 2-18 Surficial Geology Composition**, included in the **Appendix**). A vein of limestone stretches from the center of Town north along Route 82. Smaller areas of quartzite and granite are located in the northern portion of Town near the Stissing Mountain Multiple Use Area. The surficial material in Stanford is predominantly made up of glacial till, a highly mixed soil that ranges in particle size from clay to silt, sand, gravel, and boulders. Where drainage is good, glacial till serves as valuable farmland. A portion of the center of Town has a surficial geology of glacial outwash sand and gravel, and some areas of town are exposed bedrock. The predominant soil type is Dutchess Cardigan Complex. These soils are very deep, well drained glacial till deposits.

Critical Environmental Areas

One of the Town's primary means of ecological habitat protection is the designation of Critical Environmental Areas (CEAs). To achieve CEA designation, the habitat must have "exceptional or unique character", which is determined through meeting one or more criteria identified by the New York State Department of Environmental Conservation (NYSDEC). The criteria include:

- A benefit or threat to human health;
- A natural setting (e.g., wildlife habitats, vegetation, open space, and areas of important aesthetic or scenic quality);
- Agricultural, social, cultural, historic, archeological, recreational, or educational values; or
- An inherent ecological, geological or hydrological sensitivity to change that may be adversely affected by any change.

Over the course of several decades, Stanford's Conservation Advisory Commission has prepared documents in support of the protection of natural resources and creation of CEAs in Stanford, including: "*A Natural Resources Inventory of the Town of Stanford*" and the "*Open Space Inventory and Conservation Plan*." The Town of Stanford contains six CEAs (see **Figure 2-16, Existing Designated Critical Environmental Areas**):

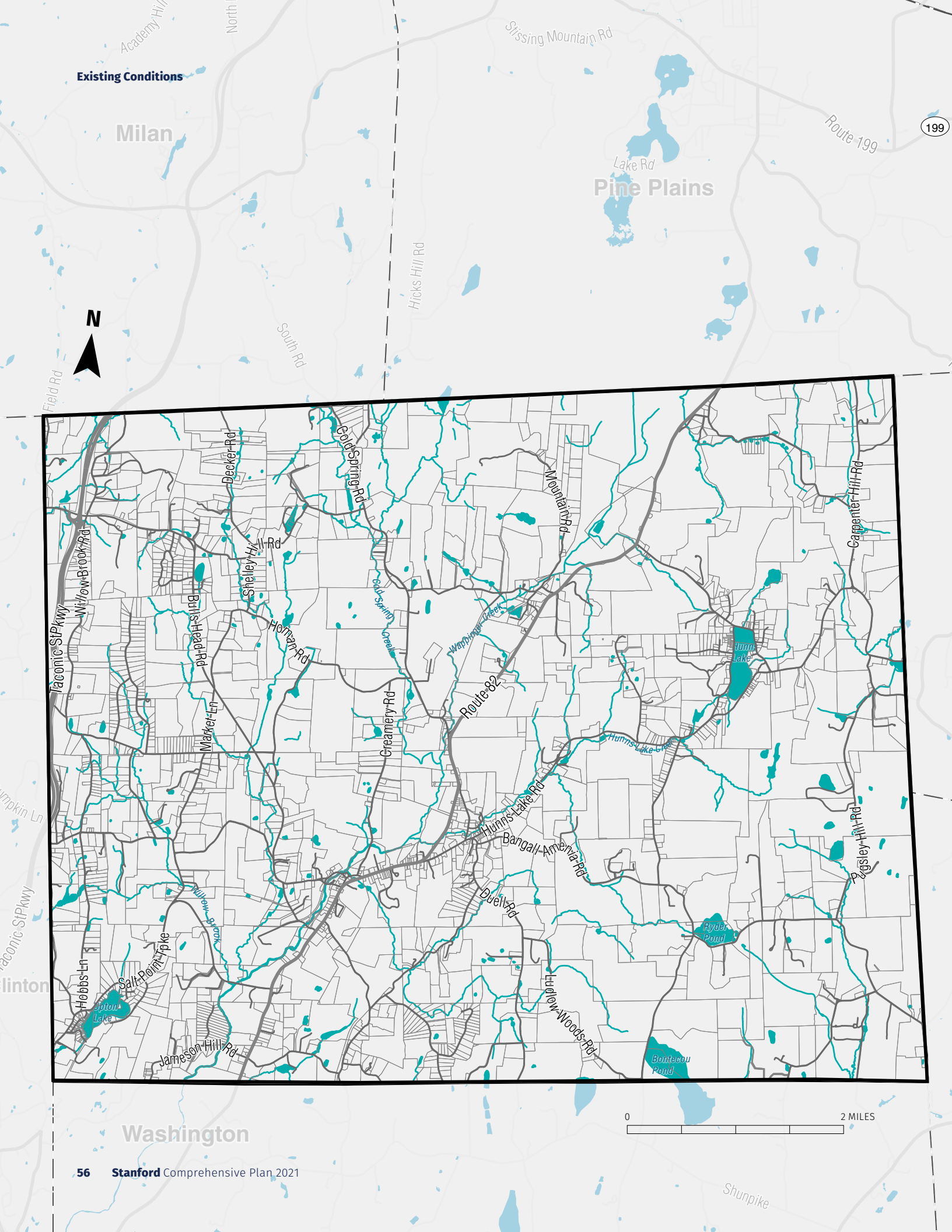
- Buttercup Farm Sanctuary – Designated a CEA for the preservation of farmland, wetlands, and mountain habitat.
- Snake Hill – Designated a CEA for rare plant and animal communities.
- Millbrook Meadow and Associated Wetlands – Designated a CEA for valuable wetlands.

- Bontecou Lake – Designated a CEA for protection of migratory and nesting birds.
- Ryder Pond and Cagney Marsh – Designated a CEA for protection of waterfowl.
- Upper Wappinger Creek – Designated a CEA for unique biological and geological features, scenic views, and water quality.

A CEA designation does not protect an area from development, but it serves to alert a Planning Board of the resource's unique characteristics before development. The CEA is also added to a statewide list of CEAs that must be considered during State Environmental Quality Review.



Buttercup Farm Audubon Sanctuary © Wendy Burton



Existing Conditions

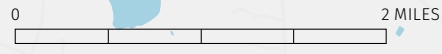
Milan

Pine Plains

199

N



Washington

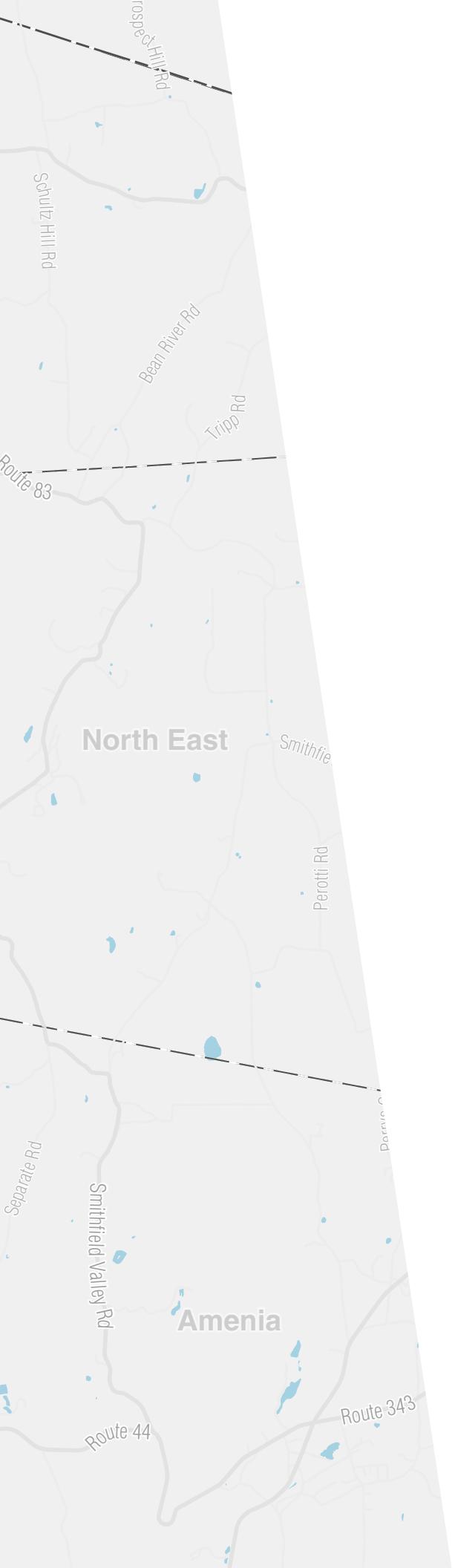


Shunpike

Surface Water Resources

Figure 2-14

-  Waterbodies
-  Streams



Source: United States Geological Survey.

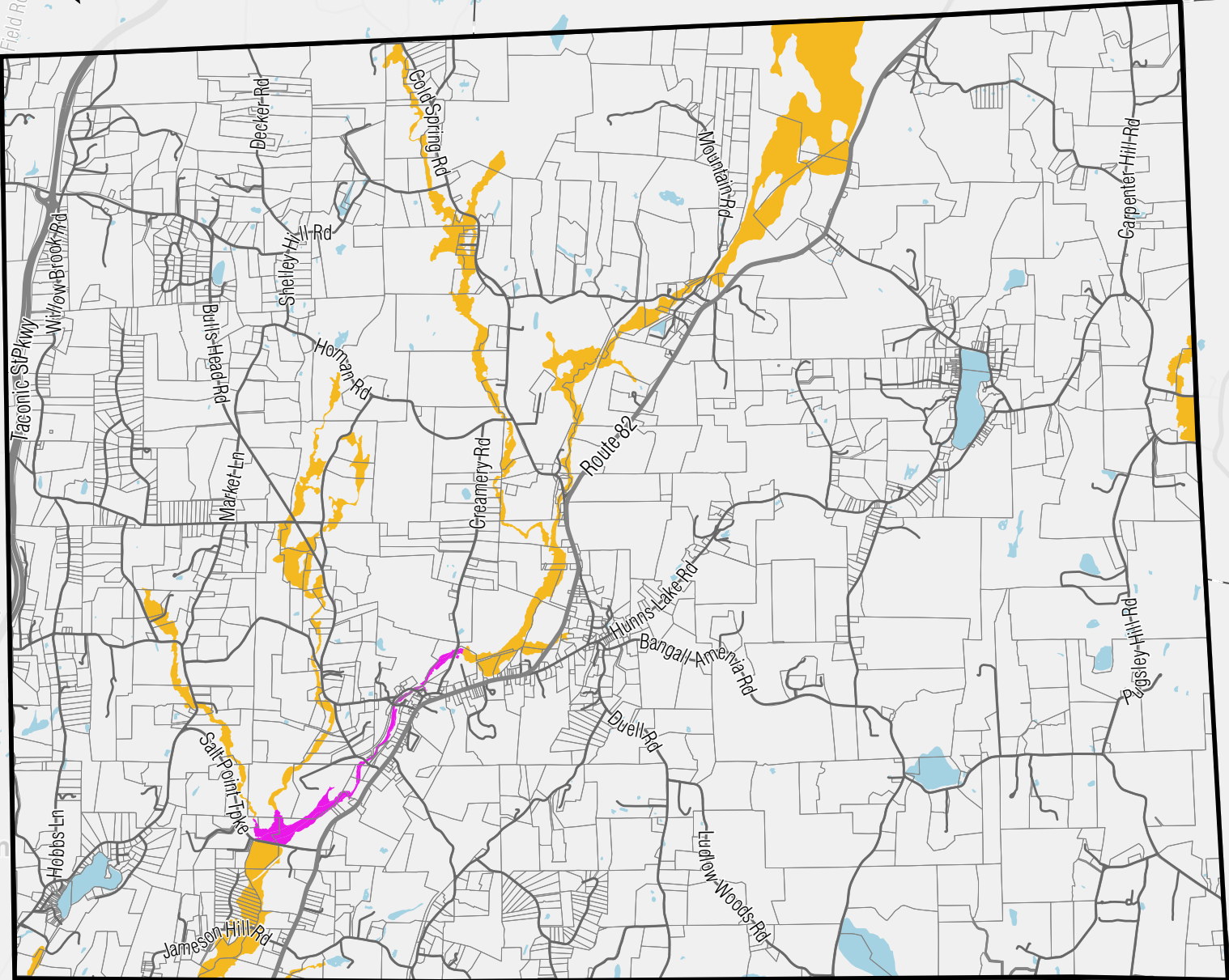
Existing Conditions

Milan

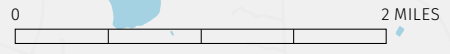
Pine Plains

199

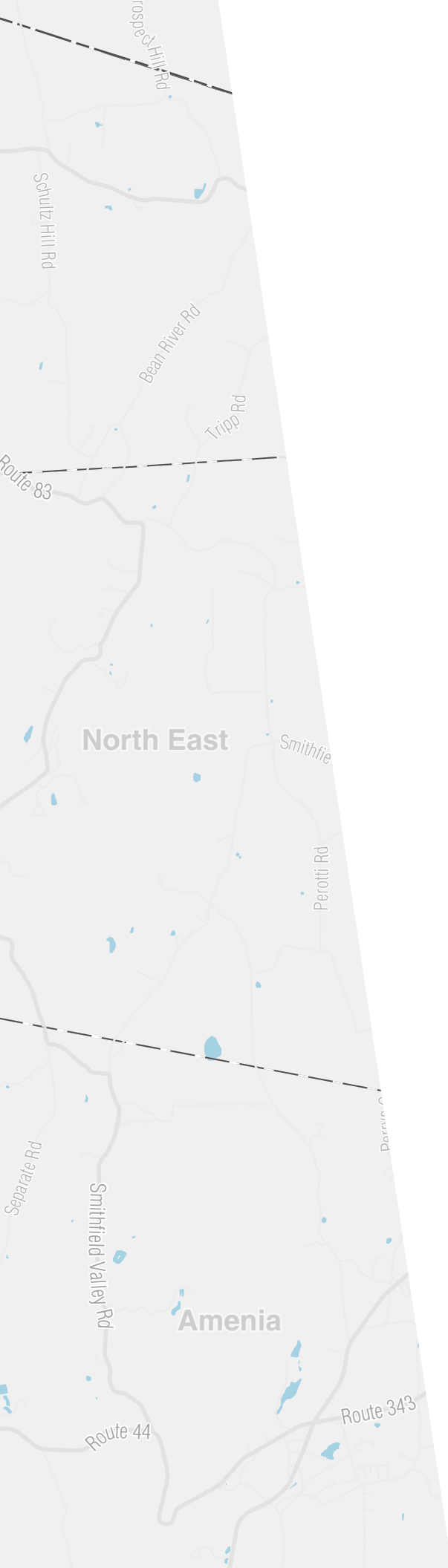
N



Washington





Shunpike



FEMA Flood Hazard Areas

Figure 2-15

-  AE - 100 year flood zone, base flood elevations determined
-  A - 100 year flood zone, no base flood elevations

Areas subject to a one percent or greater annual chance of flooding in any given year.

Source: FEMA, National Flood Hazard Layer, 2020.

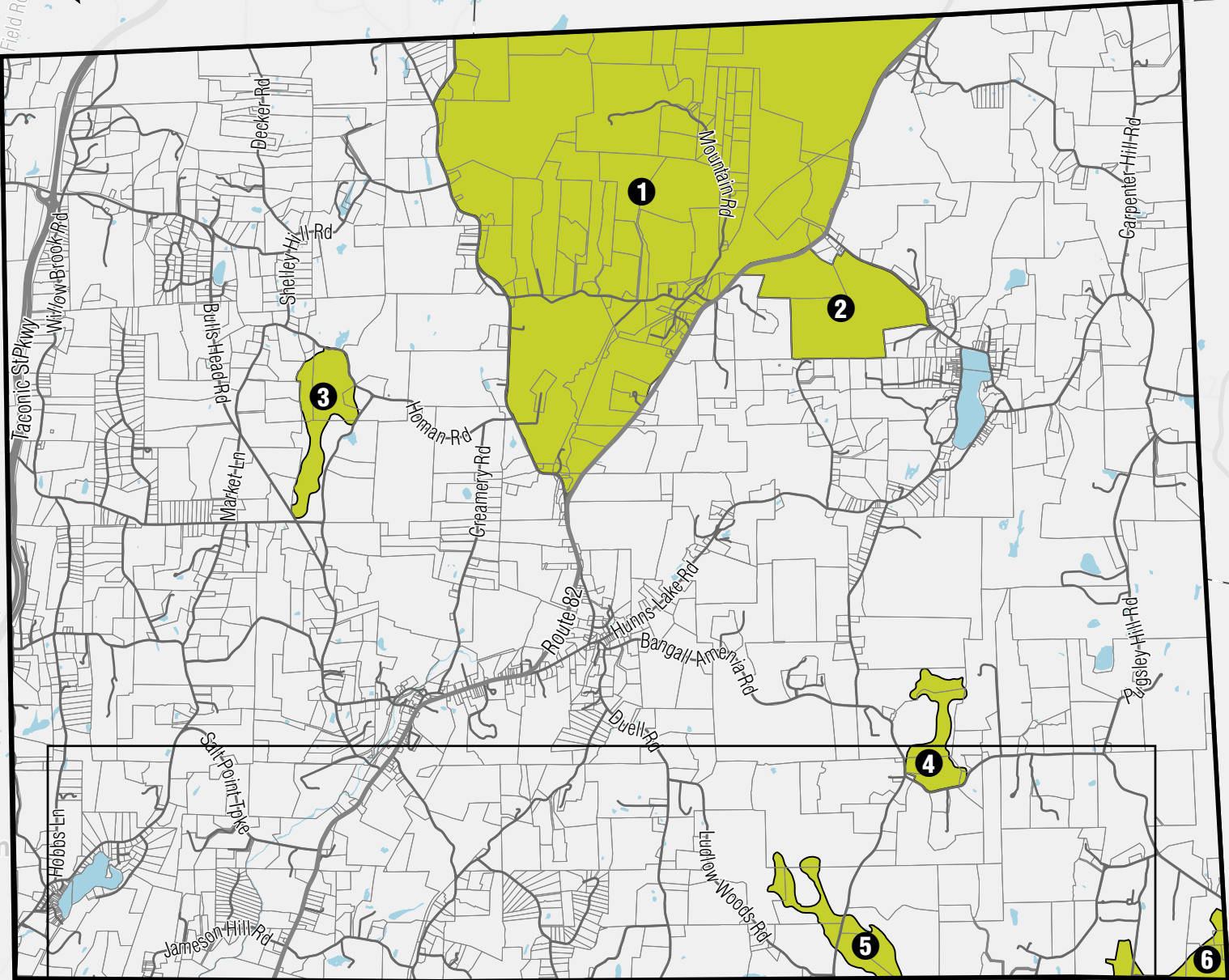
Existing Conditions

Milan

Pine Plains

199

N



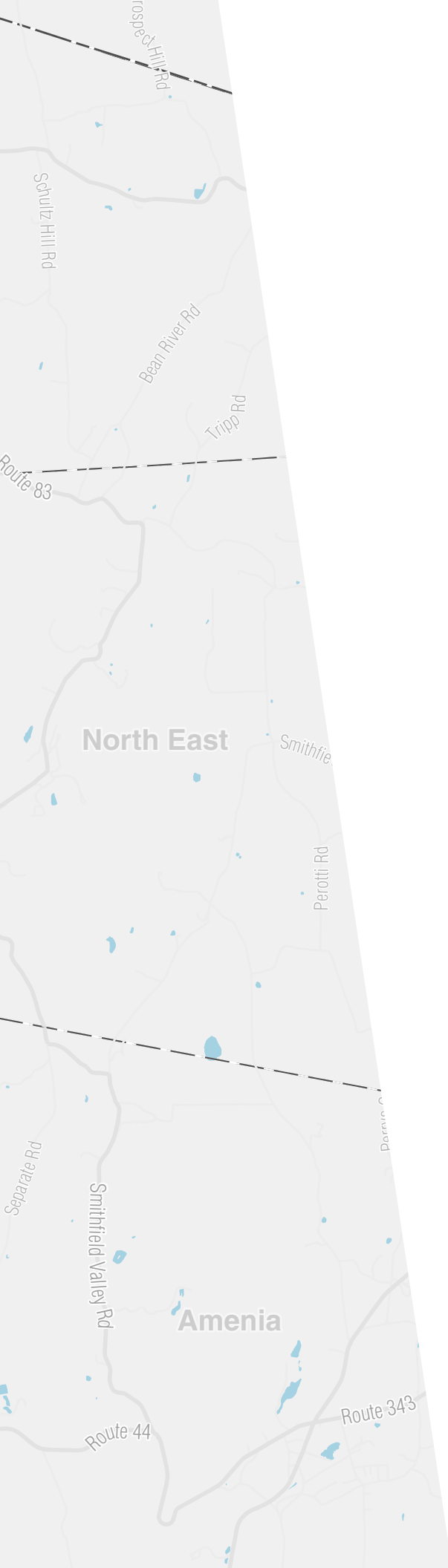
Washington

Shunpike

Existing Designated Critical Environmental Areas

Figure 2-16

-  Town of Stanford Municipal Boundary
-  1 Upper Wappinger CEA
-  2 Buttercup Farm Sanctuary CEA
-  3 Snake Hill CEA
-  4 Ryder Pond & Cagney Marsh CEA
-  5 Bontecou Lake CEA
-  6 Millbrook Meadows & Associated Wetlands CEA



Source: Town of Stanford Critical Environmental Areas Designation Report, 1987.

Water Supply & Sanitary Waste Disposal

The Town of Stanford does not have a central water or sanitary sewer disposal system. The Town draws water from individual wells, and disposes of water by on-site septic systems. In August 2000, a Groundwater Resources Study was prepared for the Town. After testing well water from approximately 50 locations in Town, the Study concluded that the overall quality of water was good, though water quality in some areas has been impacted by septic systems, agriculture, road runoff, or surface water contamination. In October 2000, the Town of Stanford Groundwater Resources Committee prepared a Water Supply Protection Plan.

The Town of Stanford has identified measures to protect water quality long-term. These include implementing zoning controls to limit the density of developments served by individual septic systems, applying best management practices to address agricultural and stormwater runoff, and managing road salting and other road treatment methods to minimize runoff. The Water Supply Protection Plan includes recommendations for well owners and Town departments that assist in the protection of water quality. Also included are potential methods for educating the public, and reviews and regulations that could be required to protect the Town's groundwater.



Future Land Use



Contents

Introduction

Future Land Use



© Nina Peek

Introduction

The goal of the future land use plan is to ensure that residential and commercial growth are sustainable and achieve community vision and goals. This Comprehensive Plan prioritizes protection of active agricultural operations and farms, and economic development through tourism, farm-based businesses, home occupations, and reuse of existing buildings within the Stanfordville and Bangall hamlets.

The Plan supports current land use trends, including renewable energy and mining, by accommodating those uses within the Town's existing development pattern. As

such, the future land use of Stanford will be similar to existing land use patterns.

Future Land Use

Residential Uses

As described in Chapter 2, population trends over the past few decades reveal a need to provide a range of

housing types to accommodate the Town's changing demographics, and encourage young people to consider Stanford as a good place to live.

Comprehensive Plan Recommendations:

The Comprehensive Plan recommends the following housing actions:

- Focus new residential growth within the Stanfordville hamlet, and where appropriate within the Bangall Hamlet;
- Require all major residential subdivision applications to prepare a conservation¹ and/or cluster² alternative;
- Allow average-density subdivisions³ to encourage flexibility in lot sizes and preservation of valuable open space and ecological habitats;

1 A Conservation subdivision allows flexibility in lot layout and lot size in exchange for the permanent conservation via easement or other land conservation mechanism of areas with important natural or cultural resources. The percentage of land required to be protected can vary.

2 Cluster subdivisions are a land development tool generally used to protect open space or environmentally sensitive lands in exchange for flexibility of lot size and lot layout. Lots are "clustered" in areas of the site away from sensitive areas like open space, steep slopes and floodplains.

3 Average density subdivisions allow flexibility in lot size and layout. The maximum number of lots permitted in an average density subdivision is generally determined by dividing the total acreage of the parcel by the minimum

- Allow additional flexibility for converting existing on-site structures (barns, out-buildings) for use as accessory apartments (e.g., an apartment over a garage);
- Eliminate the requirement for "family" occupancy for residence in accessory dwellings;
- Include greater flexibility in defining Bed and Breakfasts, Lodging and Rooming Houses;
- Partner with Dutchess County or a local housing organization to conduct a Town-wide housing needs assessment;
- Incentivize flexible housing options by allowing increased density in subdivision applications provided certain conditions are met (e.g., available parking, sufficient septic capacity, etc.);
- Prepare an inventory of current rental units, and track availability; and
- Create a detailed flow chart illustrating the land development application review process for use by Town staff and development applicants. The flow chart would list reference materials (i.e., maps of historic and ecological resources, ridgelines and scenic viewsheds) that would be considered during the first step of the land development application review.

acreage per dwelling unit allowed by the underlying zoning district.



Duffy Layton Contracting © Karen Mosher

Commercial/Retail Land Uses

The Town's existing land uses are primarily rural, with a mixture of commercial/retail and institutional uses generally located in the Stanfordville and Bangall hamlets.

The Town-wide land use plan reflects the historic rural pattern of development outside the hamlets, including active farming, low- and medium-density residential areas, abundant natural features, wetlands and forests, and limited pockets of commercial/industrial development.

Stanfordville and Bangall Hamlets

The historic hamlets of Stanfordville and Bangall contain the densest concentrations of development in Town. As described in Chapter 2, Existing Conditions, the historic hamlet of Stanfordville centers on Route 82, stretching southwest beyond Bulls Head Road and northeast to the intersection of Hunns Lake Road and Route 82. The existing houses and businesses are sprinkled along the corridor with a tighter cluster of buildings extending from Bulls Head Road heading northeast past the intersection with Hunns Lake Road to Bangall. The hamlet of Bangall is centered on the intersection of Hunns Lake Road, Millis Lane, and Bangall-Amenia Road. The historic Bangall hamlet has a cluster of residential and commercial uses at its center.

Consistent with existing development patterns, future commercial and retail uses should be encouraged to locate within the Stanfordville and Bangall hamlets along the Route 82 and Hunns Lake Road corridor. As density increases, groundwater should be monitored to identify degradation of water quality. To create a vibrant

Town center, infill development and additional pedestrian friendly amenities including bicycle lanes, shared driveways and parking areas; landscaping and lighting can be incorporated incrementally, concurrent with land development applications. Extending the current Rural Center (RC) zone northward along the east side of Route 82 to the intersection with Millis Lane would allow more opportunities for businesses that have larger space requirements, including a nursery.

Comprehensive Plan Recommendations:

This Comprehensive Plan recommends:

- Accommodate additional agricultural-based businesses (farm-stays, tours, and farmers markets) on existing farms;
- Allow home-based businesses that are appropriate and conducive to residential properties;
- Encourage a mix of commercial and retail uses along the Route 82 corridor within the historic Stanfordville and Bangall hamlets; and
- Extend the northern boundary of the Rural Center (RC) zoning district along the east side of Route 82 to the intersection with Millis Lane.

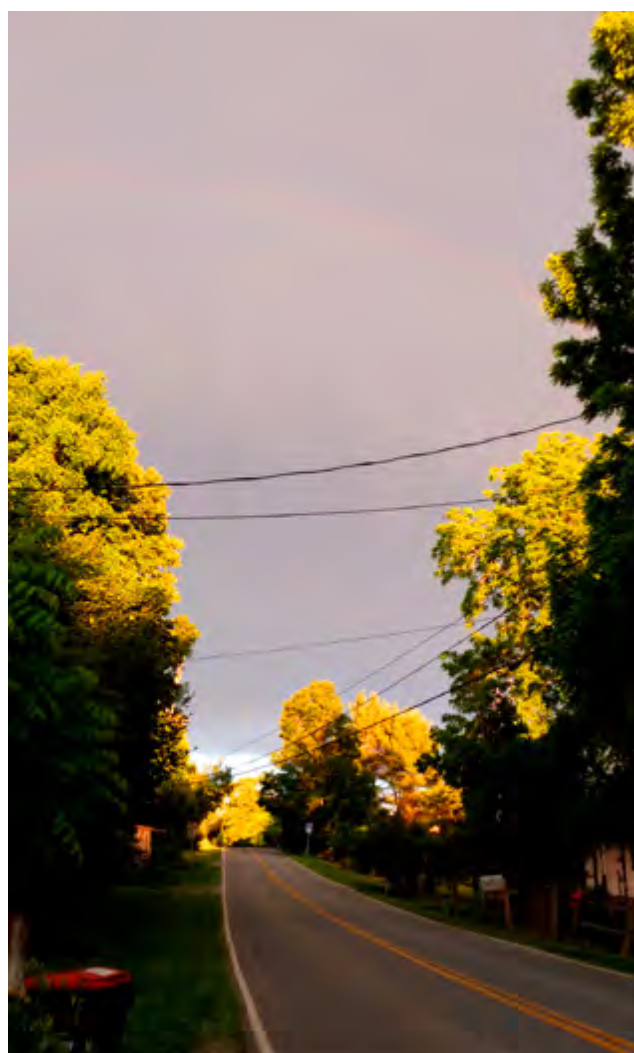
Renewable Energy Land Uses

Clean energy drawn from renewable sources offers substantive environmental sustainability benefits. New York State continues to adopt policies requiring a reduction in the use of energy sourced from fossil fuels, and toward the production and use of energy from renewable sources. In August 2016, the New York Public Service Commission adopted new standards requiring utilities to procure at least 50 percent of all electricity consumed in New York from eligible renewable energy sources by the year 2030. In 2020, the New York State Energy Research and Development Authority (NYSERDA) developed NYStretch - a model code to guide municipalities toward meeting their State's energy and climate goals.

Solar Energy

For residential scale solar energy production, (i.e., roof-mounted or ground-mounted residential systems), the average home requires between 16 and 25 panels to generate energy for home use under current efficiency standards. To that end, a property with a compound of buildings could potentially require a large ground mount installation.

For utility scale solar energy production, a general rule of thumb is 2 MW (Megawatts) of production are needed per 1.5 acres. The New York State Office of Renewable Energy (ORES) recently issued regulations that would exempt solar facilities generating greater than 25 MW from local land use regulations. Facilities generating less than 20 MW would be subject to local land use regulations



Attlebury hamlet © Karen Mosher

Future Land Use

(and review under the State Environmental Quality Review Act, SEQRA). Facilities proposing between 20MW and 25MW could opt into the ORES review requirements, or seek approval via local land use regulations/SEQRA.

At present, the Town of Stanford allows utility-scale ground-mounted solar energy systems in the RC Zoning District via a Special Use Permit granted by the Town Board, or on Town-owned property, with Site Plan review and approval granted by the Planning Board. There is currently one approved utility-scale ground mounted solar photovoltaic installation in Town, a 7.9 MW facility located on a parcel behind the Town Hall.

While current land use regulations do not limit the number of ground-mounted panels for residential use, or the overall size of the facilities, the code applies standards for height and setbacks consistent with the requirements for accessory structures, including:

- Size of the installation must be less than 10 percent of the main home's footprint; and
- Structure must meet setback requirements in the underlying zoning district.



Attlebury hamlet © Karen Mosher

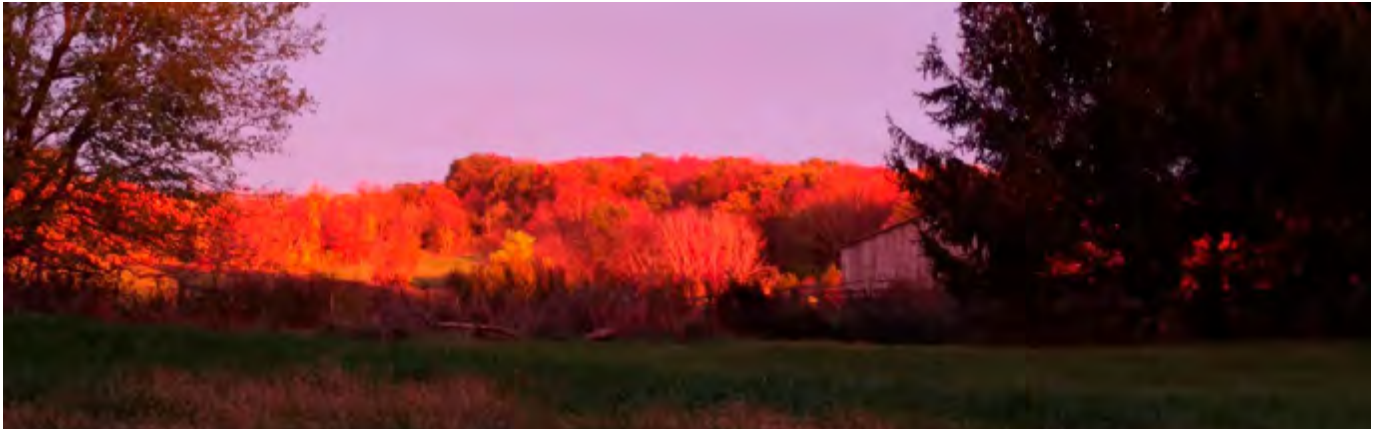
Comprehensive Plan Recommendations:

This Comprehensive Plan recommends the Town of Stanford:

- Revisit and refine existing Town regulations regarding location and requirements for utility/community¹- and residential-scale²- solar energy and battery storage facilities;
- Review the NYSERDA model local laws for solar and battery storage facilities and customize the recommendations to best meet Town goals, including:
 - Providing language that ensures homeowners are able to install adequate ground mount systems to power their home, barns and studios on a single property;
 - Defining residential and utility/community scale solar installation;
 - Requiring additional oversight for community solar installations and battery storage facilities proposed for farms with prime agricultural soil, historic structures, or protected viewsheds and ridgelines; and
 - Requiring visual impact assessment for ground mounted solar systems.
- Identify zoning districts where utility/community scale solar energy and battery storage facilities would be allowed by Special Permit.

1 Utility/community scale solar systems refers to an energy generation facility where solar energy is converted to electricity, whether by photovoltaics, or concentrating solar thermal devices with the primary purpose of wholesale or retail sales of electricity.

2 Residential scale solar systems refer to energy or solar thermal systems that serve the buildings to which they are attached or immediately adjacent.



Rocky Reef Farm © Karen Mosher

Wind Energy

Stanford has not yet been approached to consider a proposal for a large-scale wind power installation, and this seems unlikely given Stanford’s location in the Hudson Valley. However, small-scale, residential and agricultural use wind turbines are a possibility. As the Town’s regulatory documents are currently silent on wind power generation, consideration should be given to getting ahead of this issue by drafting regulations that would apply to the siting, size and area requirements for residential scale wind power generation. The Town may also consider requiring visual, noise and vibration analyses for proposed wind power generation applications.

Comprehensive Plan Recommendations:

This Comprehensive Plan recommends the Town of Stanford:

- Consider drafting regulations regarding location, height and setback requirements for utility and residential wind energy facilities.

Sand and Gravel Mining Uses


While the New York State Department of Environmental Conservation (NYSDEC) regulates the process and operation of sand and gravel mines in NYS through issuance of permits, municipalities can control their location through local land use policies. At present, there is one active gravel mine in the Town, located near the junction of Route 82 and the Bangall-Amenia Road.

Current Stanford Town code allows sand and gravel mining only in the AR District via Special Use Permit issued by the Planning Board. Local land use applications for sand and gravel mining also require environmental impact assessment, under the State Environmental Quality Review Act (SEQRA).

Comprehensive Plan Recommendations:

This Comprehensive Plan recommends the Town of Stanford:

- Create a Soil Mining Overlay District that includes the existing sand and gravel mine in active operation;
- Consider revising use regulations to require a zone change/amendment for any new applications for sand and gravel mines. Only after receiving local approvals could the operator apply to NYSDEC for a mining permit.

A white wooden signpost stands on a grassy roadside. The sign is white with a decorative top edge and is held in place by two black clips. The text on the sign is in a dark, serif font. The background shows a clear blue sky, green trees, and a wooden fence along a road.

TOWN
of
STANFORD

FOUNDED 1793

04

Community Character &
Economic Development



Contents

Introduction

Recreation

Historic Resources

Economic Development



Attlebury School House

Introduction

Through previous planning efforts and community surveys, Stanford residents have consistently prioritized economic prosperity while maintaining and enhancing the local agricultural heritage, and protecting the Town's valuable natural resources. Economic growth is an essential component of the Town's vision for its future. Economic development includes maintaining and growing existing business, attracting new enterprises, contributing to local

jobs, and enabling long-term prosperity for residents. This section reviews Town resources that contribute to the character of the community and attract residents and visitors. It also assesses the Town's local economy, with the goal of planning for future growth and economic development, and promoting economic and social vitality. This chapter identifies the opportunities and challenges that Stanford faces as it strives to meet this goal.

Recreation

Recreation activities in the Town of Stanford are organized and managed by the Director of the Stanford Recreation Department, with support from an Assistant Director and a volunteer Recreation Commission. The Department oversees recreation activities for residents of all ages.

The Department organizes swim lessons, indoor soccer, and Little League baseball. The Department also hosts summer arts & crafts, sports programs for children, and community events including a summertime concert

The Stanford Recreation Park offers various recreation facilities, including a chlorinated swimming pond, basketball courts, tennis courts, volleyball court, baseball fields and the SPARC Park children's playground.

series, the annual Community Day, and the Haunted Fortress each October. Residents are welcome to contribute suggestions for other recreation activities.

The Town of Stanford Recreation Commission maintains a 5-year blueprint prioritizing recreation projects and planning for capital costs. As projects are completed, plans for new investments are evaluated to determine future priorities. The Commission has identified a set of potential improvements that it would like to include in future fundraising efforts. These capital improvements include resurfacing two tennis courts, replacing nets and posts, and installing new fencing surrounding the tennis court area. Other initiatives include two soccer goals, new swimming docks, a baseball scoreboard, toddler playground equipment, and adult cross training equipment. In addition, the Commission has identified the need for a 1/2-mile paved walking path, which also may be targeted in a potential fundraising effort.

As noted in Chapter 2, Existing Conditions, Stanford's population of children has been declining steadily for the past two decades. A by-product of this trend is decreasing participation in youth recreation activities. Enrollment in recreation programs has seen a significant decline over the past 10 to 15 years, though from 2017 to 2019 annual enrollment had remained steady.

In addition to Town recreation facilities and programs, Stanford is rich in natural resources that provide passive and active recreational opportunities, including: fishing in the Wappinger Creek; hiking and camping in the Stissing Mountain Multiple Use Area; bird watching in the Audubon Buttercup Farm Preserve; walking in Whitlock Preserve, Stanford Wildlife Preserve, Bangall Memorial Park and the new Dot and Irv Burdick Park; and cycling along the Town's scenic roads. Residents also swim and paddle in Upton and Hunns Lakes.

Comprehensive Plan Recommendations:

The Comprehensive Plan recommends the following actions for implementation by the Town with the assistance of the Stanford Recreation Commission:

- Maintain and enhance current recreation activities and facilities to promote social vitality and health.





Attlebury Schoolhouse © Karen Mosher

Historic Resources

Historic properties in Stanford convey the Town's rich history, and these buildings, structures and sites also contribute to the Town's bucolic landscapes and character. Historic resources in Stanford include former public buildings, such as the Attlebury schoolhouse, Bangall Post Office, and the Poughkeepsie and Connecticut Stanfordville Stations; early 19th century farmhouses, such as the Pulver-Bird House and the Dr. Cornelius Nase Campbell House; and historic cemeteries including Sutherland Cemetery and Briggs Cemetery.

Thirteen properties in Stanford are listed or eligible for listing on the State and National Register of Historic Places (see **Table 4-1**). State and National Register designation does not prevent owners from modifying their structure/property; nor does designation prevent future actions that may adversely affect a site or structure.

Nominating and listing sites and structures can help educate the public about their historical significance and provide the opportunity for grants and tax credits from a variety of sources that may incentivize sensitive rehabilitation and renovation of structures.

Table 4-1: Properties listed or determined eligible for listing in the National Register of Historic Places, Town of Stanford, 2020

Property	Address	Status
Attlebury School House	6917 NY Route 82	S/NR Listed
Pulver - Bird House/Eagle Acres	983 Hunns Lake Road	S/NR Listed
Converted storage buildings	15 Old Depot Way	S/NR Listed
1197 Bulls Head Road	1197 Bulls Head Road	S/NR Eligible
Cornelius Nase Campbell House	6031 NY Route 82	S/NR Listed
Wheeler-Collin Farm	20 Church Lane	S/NR Listed
Bentley Farmstead	4-54 Bentley Lane	S/NR Eligible
Bangall Post Office	105 Hunns Lake Road	S/NR Listed
Freight House	2238 Bulls Head Road	S/NR Listed
Stanfordville Station	5 Old Depot Way	S/NR Listed
Sutherland Cemetery	305 Market Lane	S/NR Listed
Walter Beckwith House	482 Jameson Hill Road	S/NR Listed
Wethersfield Farm Historic District	257 Pugsley Hill Road	S/NR Eligible

Source: Cornell University Cooperative Extension - Dutchess County S/NR: (State/National Historic Register)

In 1986, the Dutchess County Department of Planning and Development and the Dutchess County Historical Society conducted a historic resources survey that established the most complete inventory to date of Stanford's existing historic properties. The inventory includes historic structures, sites, and cemeteries. The County recorded each property, and prepared a Building-Structure Inventory Form provided by the New York State Office of Parks, Recreation and Historic Preservation. Dutchess County has digitized the survey and made it available through its website (<https://gis.dutchessny.gov/hrs/>). The Stanford Historical Society is currently updating the 1986 survey by photographing each property, and updating the Building Inventory forms. Since the 1986 survey was conducted, some historic properties in town have been demolished, and others are now eligible as historic properties.



Sutherland Cemetery

Community Character & Economic Development

The Town of Stanford includes fifteen historic hamlets: Attlebury, Bangall, Bear Market, Hunns Lake, McIntyre, Stanfordville, Stissing, Willow Brook, Upton Lake, Old Bulls Head, Old Attlebury, Federal Square, Hull's Mills, Anson's Crossings and Stanford Glen. The central historic hamlets of Stanfordville and Bangall are characterized by mixed-use developments and local institutional buildings, including the Post Office, the Town Hall, and other civic and religious structures. Areas such as the Hunns Lake and Upton Lake historic hamlets are developed, with primarily residential uses in small pockets within a larger landscape of open and forested land. The current characteristics of the remaining historic hamlets range from undeveloped crossroads to locations with a cluster of houses. **Figure 4-1 Historic Hamlets**, locates the Town's fifteen historic hamlets within the Town. Preservation by documentation and inventory helps preserve the rich history that resulted in the modern development blueprint. At present, the historic hamlets lack defined boundaries, which would differentiate these areas from each other and from the rest of the Town.

Creating and adopting these boundaries would enable the Town to seek additional resources for promoting and protecting these historic hamlets.

The Stanford Historical Society has created six markers to recognize local historic sites. The Society collaborated with the William G. Pomeroy Foundation to create the plaques. To date, plaques have been placed to identify Sutherland Cemetery, Stissing Depot, James Haight's Mills, Briggs Cemetery, Attlebury Schoolhouse, and Bangall Post Office. The Stanford Historical Society plans to add several plaques each year that will identify more of Stanford's significant historic sites.

The Stanford Historical Society has identified historic cemeteries and the locations of former schoolhouses, using historic maps. The Town of Stanford owns seven abandoned cemeteries. The Historical Society has recently restored two of these cemeteries, and is in the process of assisting at more of these sites.

Clockwise from upper left: Stanfordville Train Depot; Sutherland Bullis House; Bangall Train Depot; Stanfordville Armory, World War I



Comprehensive Plan Recommendations:

The Comprehensive Plan recommends the following actions for implementation by the Town with the assistance of the Town Historian and the Stanford Historical Society and other interested parties:

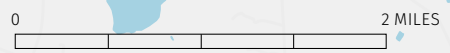
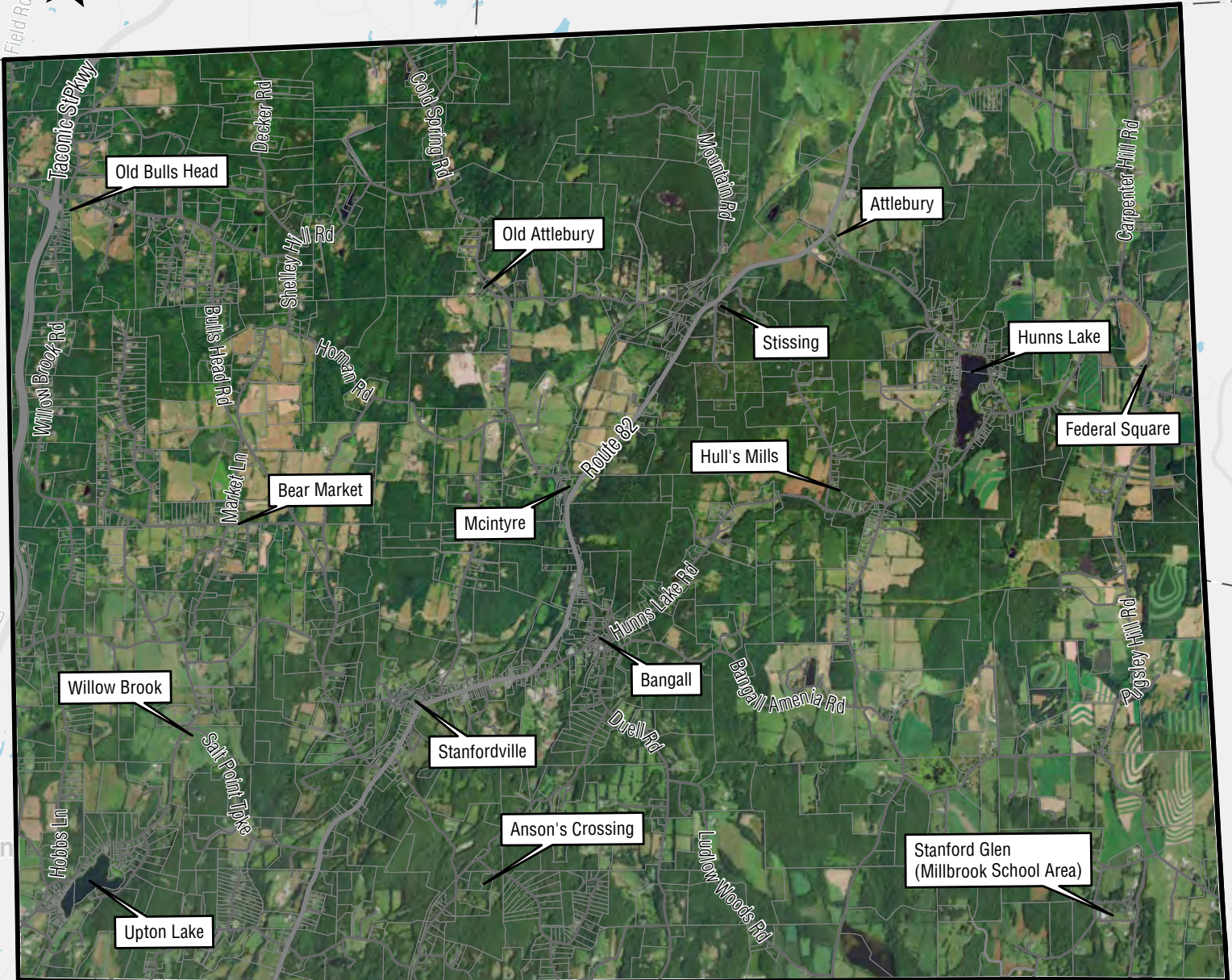
- Update and digitize the 1986 Survey of Historic Resources prepared by Dutchess County Planning and Dutchess Historical Society. This update could be a written document or an database prepared in Geographic Information Systems (GIS);
- Create a local inventory of sites and structures of historical significance;
- Create a historic resources tourism map that would be available on the Town's website. The map would include the historic hamlets, cemeteries, railroad routes, State/National Register-listed properties, old school buildings, mills, and other sites of historical significance;
- Amend the Town Historian's designated responsibilities to include implementation of the recommendations proposed in this Comprehensive Plan;
- Participate in and support the Stanford Historical Society's Historical Marker Program (Pomeroy Markers) throughout the Town. The Town has its own sign program to identify the 15 historic hamlets through the use of road signs;
- Establish a Historic Advisory Commission that would work with the Town Historian and the Stanford Historical Society to identify historic homes and hamlet locations. The Town Board would appoint the Commission members. The Commission would be a separate entity from the Historical Society, and a resource to the Town Board, Planning Board, Zoning Board, and the Building Inspector for land development application review, and matters pertaining to Stanford's historic and archaeological resources. The Historic Advisory Commission could include members of the Stanford Historical Society, the CAC, the Planning Board, and the Town Historian, in addition to members of the community with relevant professional training and/or strong interest in historical preservation, archaeology, or architecture. Among the items to be considered by the newly formed Historic Advisory Commission:
 - Establish criteria for identifying locally significant historic sites and structures, and local historic districts and boundaries for the Town's 15 historic hamlets;
 - Consult with the Town Board on matters related to local and S/NR listed historic resources including code amendments, SEQRA requirements, building demolition permits;
 - Consult the Planning Board and Building Inspector via an official referral for land development applications and demolition permits for sites designated with local, State or National historic significance;
 - Consider proposing amendments to the zoning ordinance to include hamlet overlay districts;
 - Review nominations for State and National Registry, and provide assistance to residents in the preparation of proper paperwork;
 - Develop voluntary guidelines for renovation and rehabilitation of historic structures;
 - Consider participation in the Certified Local Government Program (CLG), through the New York State Historic Preservation Office (NYS SHPO). Towns with both a Historic Commission and Historic Preservation Ordinance are eligible to participate in the CLG program, which provides technical assistance and access to grants;
 - Promote public awareness of the Town's rich history.

Community Character & Economic Development

Milan

Pine Plains



N

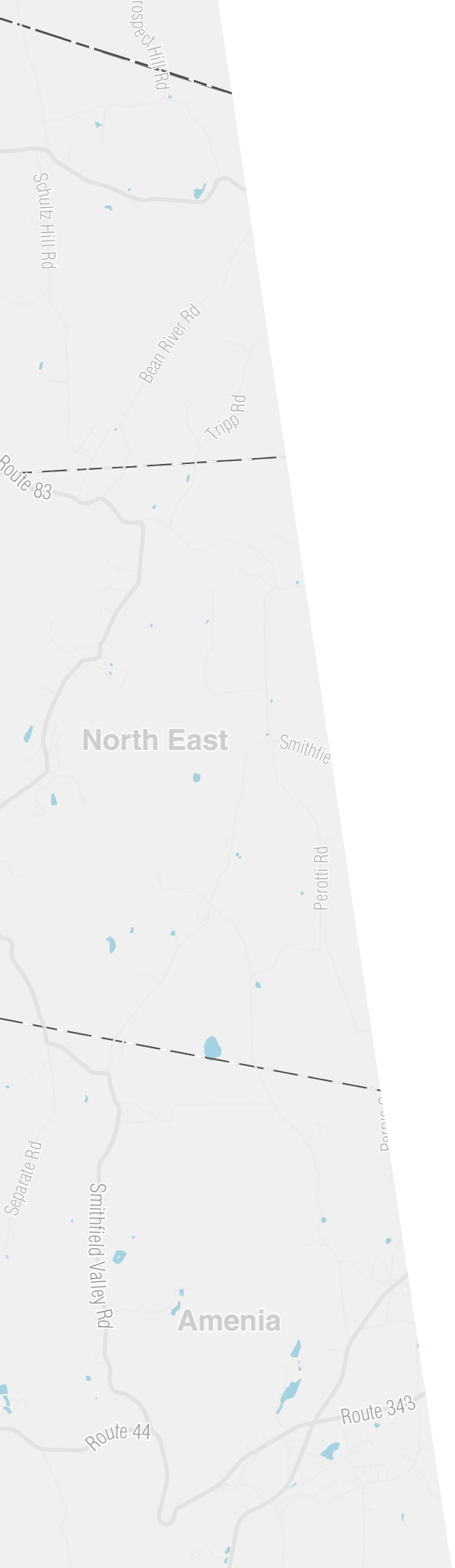


Washington

Historic Hamlets

Figure 4-1

-  Town of Stanford
-  Historic Hamlet



Source: USA NAIP Imagery: Natural Color, 2019.



Stanford Plaza © Nina Peek

Economic Development

The Town of Stanford wishes to support existing businesses, attract new business and business opportunities, and encourage a vibrant residential and commercial mix in the Stanfordville and Bangall hamlets.

Business Development and Tourism

The Stanford Business Association (SBA) supports and promotes businesses in the Town. The SBA builds the connections between business owners, and provides guidance and expertise to help businesses grow and thrive. The Town maintains a list of Stanford businesses on the Town Web site (<http://www.townofstanford.org/stanford-town-businesses>), and the SBA maintains a list of their members. The Dutchess County Chamber of Commerce also provides opportunities for business promotion and tourism.

Tourists and new residents are drawn to Stanford for its natural beauty, rural character and rich history.

Cyclists pass through Town as they enjoy the scenic views that Stanford and the region have to offer. Hikers and naturalists come to Town to visit the Buttercup Farm Audubon Sanctuary, Stissing Mountain Multiple Use Area, Stanford Wildlife Preserve, and Whitlock Preserve. Route 82 is a busy thoroughfare that also brings visitors through the center of Town. Mapping historic resources and organizing local and regional history tours can attract history buffs to Stanford.

In addition to tourists, Stanford is attracting new residents. As described in Chapter 2, the Town's demographics are shifting, presumably as new residents move to Town. During the COVID-19 pandemic, home sales in Stanford increased significantly.

At the center of Stanfordville, the Town's library and hamlet businesses are attracting more activity by diversifying their goods and services. The new Stanford Free Library opened in this new location in 2019. Although the hamlet does not have a walkable village center, it does retain a diverse array of buildings, including residences, new commercial buildings, as well as older buildings that have been adapted for retail. This area of Town could be a flourishing hub.

Accommodating the needs of today's workers, entrepreneurs, and start-ups is smart business. Regulations that limit or prohibit home-based businesses are difficult to enforce and, can be amended to encourage entrepreneurship while still protecting neighborhood residential character. Stanford also can modify regulations to allow

temporary gatherings and events and provide opportunities for businesses to sell their goods. These events also can serve as attractions to visitors who may shop at other local businesses.

Encouraging tourism through outreach and incentives also requires a reexamination of the Town's hospitality regulations. At present, the Town zoning code allows Bed & Breakfasts via special permit. However, the Town does not currently regulate or otherwise oversee short-term rentals (AirBnB, VRBO, etc.).

The appeal and beauty of Stanford's farmland is a valuable resource for the Town and, as such, another key tourism opportunity that capitalizes on the Town's agricultural heritage.

Accommodating agri-tourism through farm-stays, farm markets and tours benefits the local economy and helps support farmers.

Community Character and Place Making

The Stanfordville hamlet offers a mix of commercial and residential uses that attract activity. The new library and Recreation Park serve as anchors for activities in Stanfordville. The Town can target this part of Stanfordville for streetscape improvements such as lighting and landscaping, dedicated bike lanes, pedestrian connectors, and traffic calming measures.

Balancing parking supply and demand is essential for creating a vibrant business hub. For the Stanfordville hamlet, the Town could create flexible off-street parking requirements by allowing shared parking, or reducing minimum off-street parking requirements.



Stanford Free Library © Conrad Levenson

Comprehensive Plan Recommendations:

The Comprehensive Plan recognizes that economic development opportunities may be achieved through three avenues: outreach and incentives; regulatory measures; and design improvements. These strategies support economic development throughout the Town, and target improvements in a localized area of Stanfordville.

Outreach and Incentives

- Create a “Welcome to Stanford” tourism committee that would:
 - Create and maintain a “Welcome to Stanford” website;
 - Collaborate with the Stanford Business Association to develop a Downtown Business Plan;
 - Ensure that the Stanford business directory is complete and maintained with current information;
 - Collaborate with the Dutchess County Chamber of Commerce and neighboring communities to cross-promote existing tourism opportunities, existing and new businesses.
- Pursue grants to support conversion of existing structures, streetscape improvements, and façade improvements;
- Identify vacant or under-utilized properties in the Bangall and Stanfordville hamlets, and create a Town fund to incentivize adaptive revitalization of existing buildings for commercial activities;
- Promote Stanford as an agricultural community with farm markets, tours, and agriculture based businesses;

- Promote Stanford’s natural resource attractions; and
- Promote existing businesses and attractions.

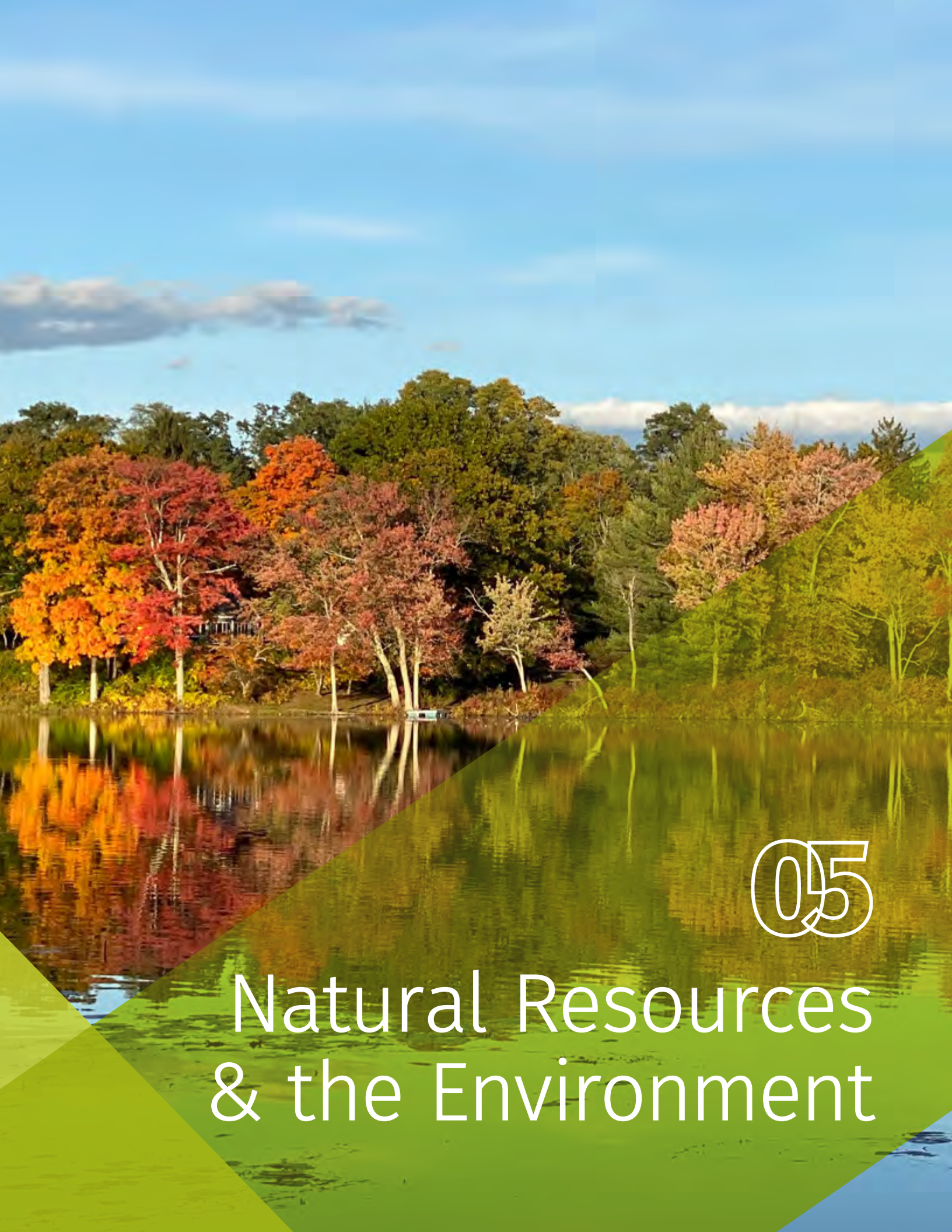
Regulatory

- Consider revisions to the zoning code that would:
 - Establish home-based businesses by special permit or by right;
 - Allow farm-stays and other agri-tourism based businesses;
 - Encourage temporary outdoor gatherings of merchants such as farmers markets, crafts fairs, flea markets, food trucks;
 - Establish criteria for evaluating and permitting event venues;
 - Amend existing zoning regulations, and/or create new regulations to support renewable energy projects including solar, wind and battery storage;
 - Ease requirements to allow flexible off-street parking in Stanfordville and Bangall hamlets, including shared parking.
- Prepare an inventory of short-stay residential properties and require a registration permit.

Community Character and Place Making

- Consider pedestrian-scaled lighting and streetscape improvements that are consistent with the current character of the hamlets, dedicated bicycle lanes, pedestrian crosswalks, and traffic calming measures;
- Identify opportunities for shared parking in the Bangall and Stanfordville hamlets.





05

Natural Resources & the Environment



Contents

Introduction

Critical Environmental Areas & Priority Habitats

Wetlands, Watercourses & Waterbodies

Floodplains

Steep Slopes

Scenic Viewsheds

Agriculture



Buttercup Sanctuary © Karen Mosher

Introduction

Natural resources contribute to the health, safety, economic well-being, and quality of life of Stanford residents. Natural resources not only include birds, wildlife, and forests, but also the water that we drink and the soil in which we grow our food. Stanford’s natural areas also form the landscape that so many Stanford residents and visitors treasure.

Ridgelines, valleys, wetlands, streams, agricultural fields, and forest represent the varied natural features found throughout the Town. The entire Town receives its drinking water from private wells, which draw water from the Town’s groundwater. The Wappinger Creek flows roughly through the center of the Town, forming a spine connecting Stanford to Pine Plains to the north and Pleasant Valley to the south. Large wetland complexes are located along Wappinger Creek at the northern boundary of Town, and surrounding Bontecou Lake on the Town’s southern border.

The Comprehensive Plan recognizes that natural resources must be protected to provide a healthy place to live and a vibrant economy.

This chapter provides an overview of the Town’s natural resources, including their importance, existing threats to the vitality of these resources, and opportunities for their protection and enhancement.

Critical Environmental Areas & Priority Habitats

Critical Environmental Areas (CEAs) are places recognized and designated for protection due to their “exceptional or unique character”. CEAs are designated by local or state agencies to recognize a specific geographic area with one or more of the following characteristics:

- A feature that is a benefit or threat to human health;
- An exceptional or unique natural setting (e.g., fish and wildlife habitat, forest and vegetation, open space and areas of important aesthetic or scenic quality);
- A feature of exceptional or unique social, historic, archaeological, recreational or educational value;
- An inherent ecological, geological or hydrological sensitivity to change that may be adversely affected by physical disturbance.

When a municipality designates a CEA, the community recognizes the area as an important environmental resource. Typically, a local or regional environmental group, such as a Conservation Advisory Commission or Board, leads the nomination process, which includes a public hearing, and filing requirements with NYSDEC Commissioner and other agencies. Because designation is a discretionary decision by the designating agency, the action is subject to SEQRA.

Once the CEA is designated, projects proposed in/around designated CEAs require review under the requirements of SEQRA. Designation does not prevent development that could affect the CEA; rather it provides an extra layer of protection because the action will be reviewed by the Lead Agency according to SEQRA.

The Town of Stanford has recognized the importance of protecting its significant environmental areas by designating six CEAs (see **Figure 5-1, Existing Designated Critical Environmental Areas**):

- Buttercup Farm Sanctuary
- Ryder Pond and Cagney Marsh
- Bontecou Lake
- Millbrook Meadow and Associated Wetlands
- Snake Hill
- Upper Wappinger

Biodiversity is the multiplicity of genetic variety, species, and ecosystems in a given region, including plants, animals, fungi, and microorganisms. Native biodiversity is essential to maintaining healthy, functioning ecosystems that provide numerous benefits including maintaining clean and abundant drinking water supply, moderating climate, producing oxygen, purifying water and air, and decomposing organic matter. The disappearance of native species can be an indication of environmental deterioration.



Attlebury hamlet © Karen Mosher

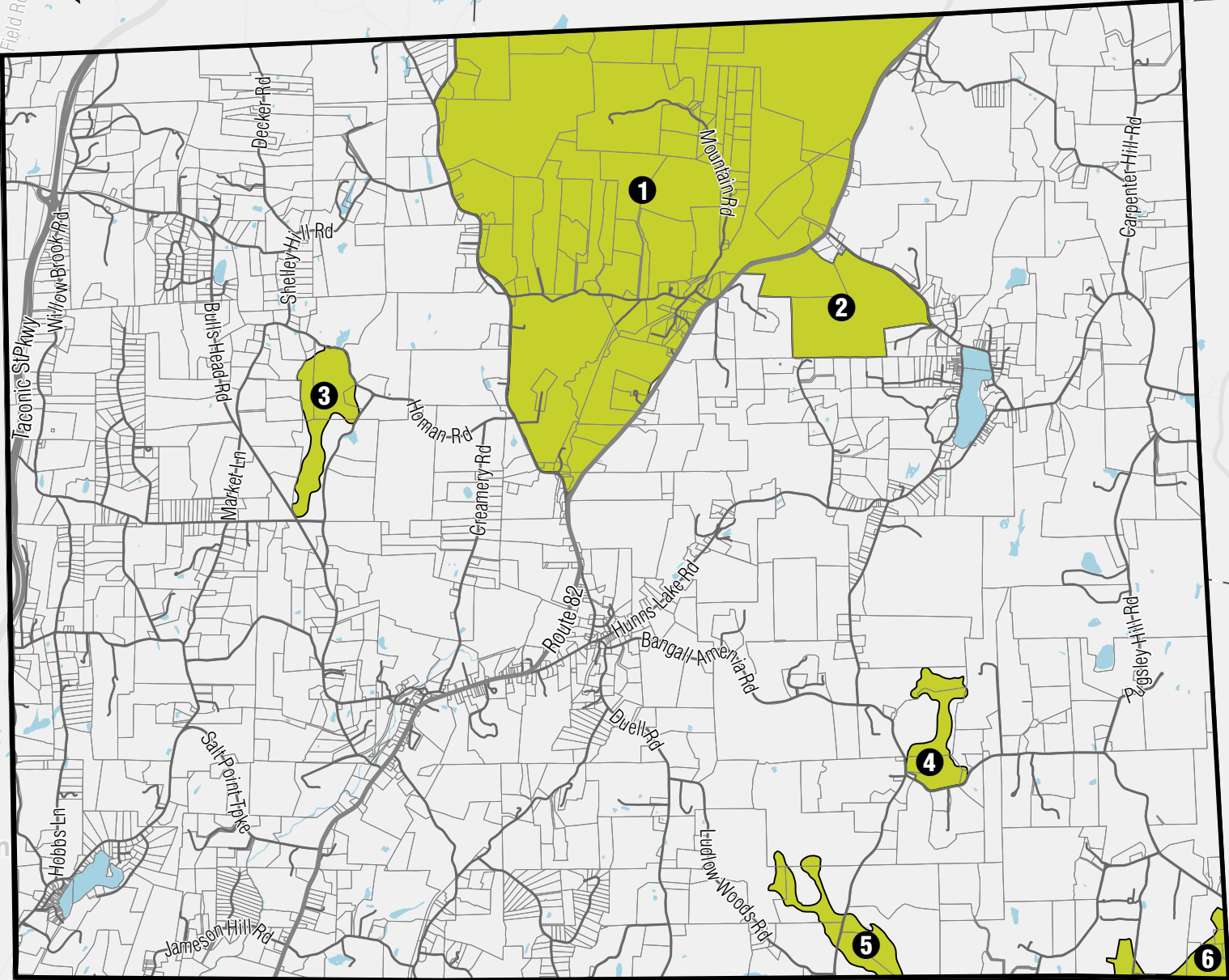
Natural Resources & the Environment

Milan

Pine Plains

199

N




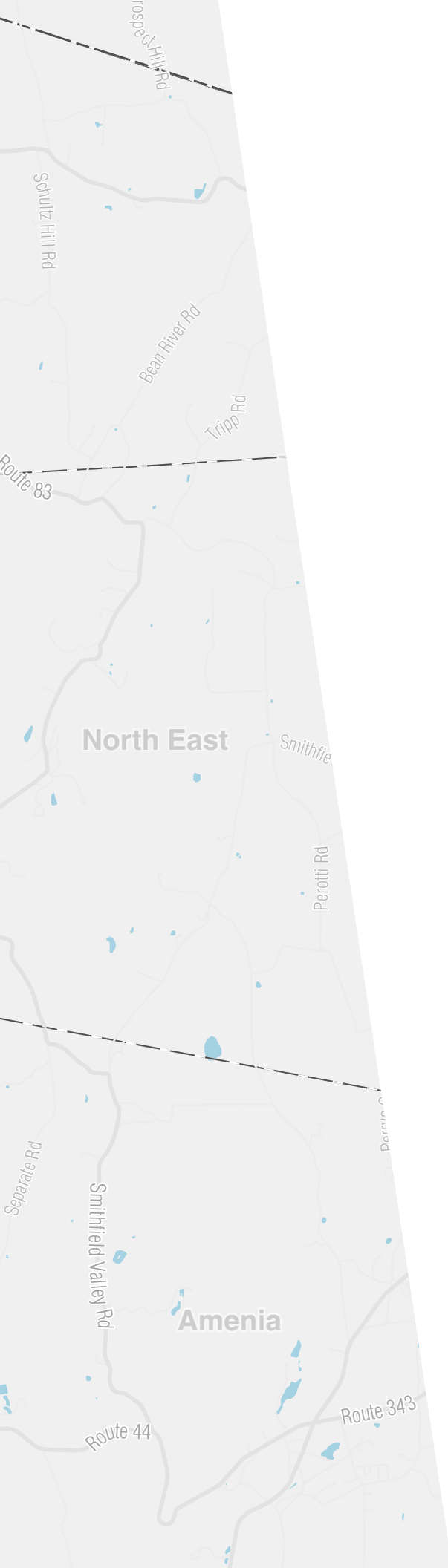
Washington

Shunpike

Existing Designated Critical Environmental Areas

Figure 5-1

-  Town of Stanford Municipal Boundary
-  1 Upper Wappinger CEA
-  2 Buttercup Farm Sanctuary CEA
-  3 Snake Hill CEA
-  4 Ryder Pond & Cagney Marsh CEA
-  5 Bontecou Lake CEA
-  6 Millbrook Meadows & Associated Wetlands CEA



Source: Town of Stanford Critical Environmental Areas Designation Report, 1987.

Natural Resources & the Environment

Habitat is the area and the resources that support species. Throughout the Hudson Valley, farmland, forests, and other important habitats are threatened by residential and commercial development as the region's population continues to grow.

The rapid transformation of rural landscapes is leading to greater fragmentation of habitat, road hazards to wildlife, and more opportunities for invasive species to colonize new areas.

In a Town-wide habitat ecological inventory project conducted in 2004-2005, the nonprofit group Hudsonia, Inc. identified 25 different kinds of habitats of significant ecological importance in Stanford (See **Figure 5-2, Hudsonia Priority Conservation Areas**). At that time, Hudsonia, calculated approximately 53 percent of the Town as forested, 30 percent open meadow, and 9 percent wetlands.

Forests are important habitats for wildlife. Forest habitats in Stanford are threatened by fragmentation due to roads and development. Degradation also occurs due to

clearance of the forest understory, thereby destroying habitats for animals that nest in the forest floor or in dense understory vegetation. Improper or unregulated logging also degrades forest habitat by causing erosion, sedimentation, soil compaction, and the removal of dead and downed wood and debris. In 2004-2005, Hudsonia estimated approximately 90 percent of Stanford was undeveloped (that is, without structures, paved roads or similar development) but that these natural areas were highly fragmented into discontinuous patches, thereby threatening local biodiversity. Hudsonia also identified two large forest blocks (>1,000 acres) in Stanford (see **Figure 5-3, Contiguous Forest Patches**). One of these blocks is contained entirely within the Upper Wappinger CEA, however, as shown in Figure 5-3, the other is currently not protected.

In their report, Hudsonia listed seven Priority Conservation Areas, which contain concentrations of various important habitat types, generally in a relatively unfragmented landscape. The identified Priority Conservation Areas include:

- Stissing Mountain Area
- Bloodstock Farms Area
- Homann-Bowen Area
- Millbrook Marsh Area
- Ryder Pond
- Shaw Pond
- Wappinger Creek

Comprehensive Plan Recommendations:

The Comprehensive Plan recommends the following measures be implemented by the Town Board through a coordinated effort with the Conservation Advisory Committee (CAC):

- Expand several existing CEA's including Snake Hill, Millbrook Meadow and Ryder Pond to include the surrounding Priority Conservation Areas identified by Hudsonia, Ltd;
- Designate additional CEAs including: Shaw Pond, Stanford Wildlife Preserve, Whitlock Preserve,

the Town Landfill area, and once determined, the potential wellhead protection area;

- Protect the two Large Forest Blocks (areas > 1000 acres of contiguous forest, **Figure 5-3**) from further fragmentation. Protection could be achieved by implementing incentive programs including Purchase of Development Rights (PDR); and
- Continue to use all available habitat assessment materials, guidance documents, and mapping as evaluation tools during the site plan and subdivision review process.

Conservation Easements

A conservation easement is a voluntary, legal agreement that protects the conservation value of land by permanently limiting its use. Landowners retain ownership of the land (and the right to sell it or pass it on to heirs), but voluntarily sell or donate certain property rights – including development and subdivision – to a private organization (land trusts) or a public agency. The organization agrees to hold the right to enforce the landowner's promise not to exercise those rights.

All conservation easements must provide public benefits, such as water quality, farm and ranch land preservation, scenic views, wildlife habitat, outdoor recreation, education, and historic preservation.

In most cases, conservation easements "run with the land," meaning that the original owner and all future owners are subject to the easement. A few conservation programs use temporary easements -- but only permanent conservation easements qualify for income and estate tax benefits. Figure 2-9, Land in Conservation presents properties with easements held by various land trust organizations.

In many cases, private landowners donate property for conservation easements. However, if a piece of land has a very high conservation value, a land trust may be willing to raise funds to purchase the easement. Federal, state, and local programs provide funding to purchase easements on farms.

Purchase of Development Rights

Purchase of Development Rights (PDR) programs help local governments preserve and protect land to further community goals including protecting farmland and wildlife habitat. PDR programs are voluntary and incentivize already willing landowners to sell development rights to the municipality. Local governments create a fund to compensate landowners in exchange for development restrictions on their property. Once the purchase is final, the land is encumbered by a conservation easement or other development restriction recorded on the title.

To administer PDR programs, local governments usually create a committee or board to oversee setting priorities for land preservation and expenditure of public funds. The committee/board may also be responsible for enforcing development restrictions. Local government PDR programs may be funded through tax levies, grants, foundations, land trusts, and public donations. Landowners interested in protecting their property from development sell their development rights to the local government. Landowners may also donate their development rights to the program and take advantage of state and federal tax credits.



© Nina Peek

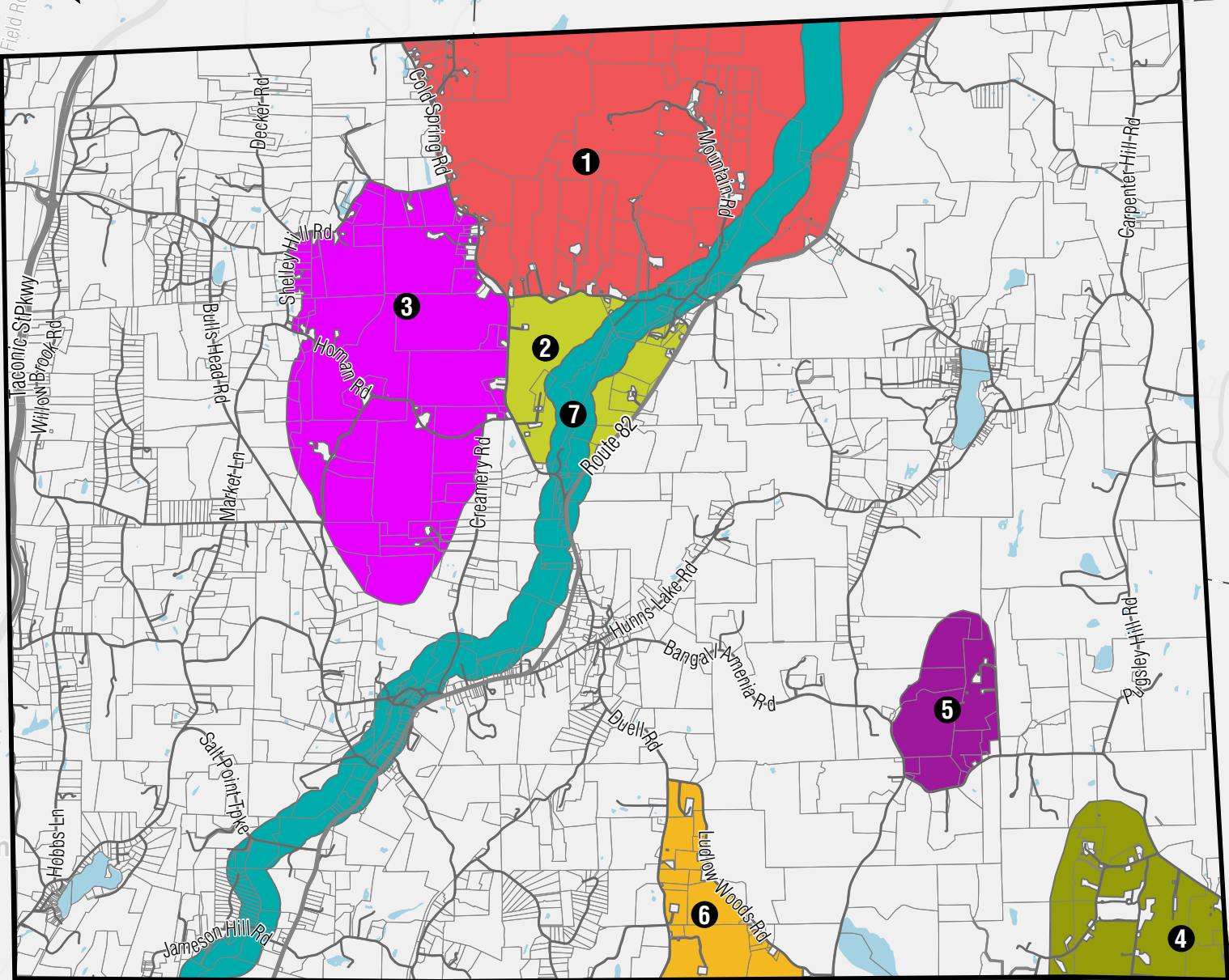
Natural Resources & the Environment

Milan

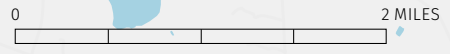
Pine Plains

199

N



Washington

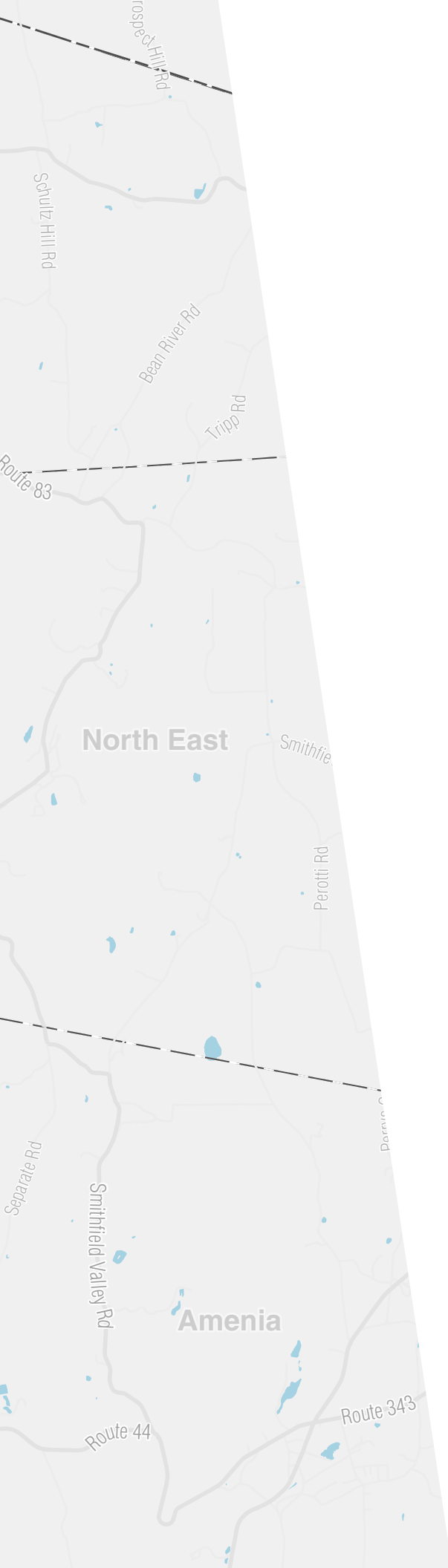


Shunpike

Hudsonia Priority Conservation Areas

Figure 5-2

- 1 Stissing Mountain Area
- 2 Bloodstock Farms Area
- 3 Homann-Bowen Area
- 4 Millbrook Marsh Area
- 5 Ryder Pond
- 6 Shaw Pond
- 7 Wappinger Creek



Source: Hudsonia, Ltd. 2005

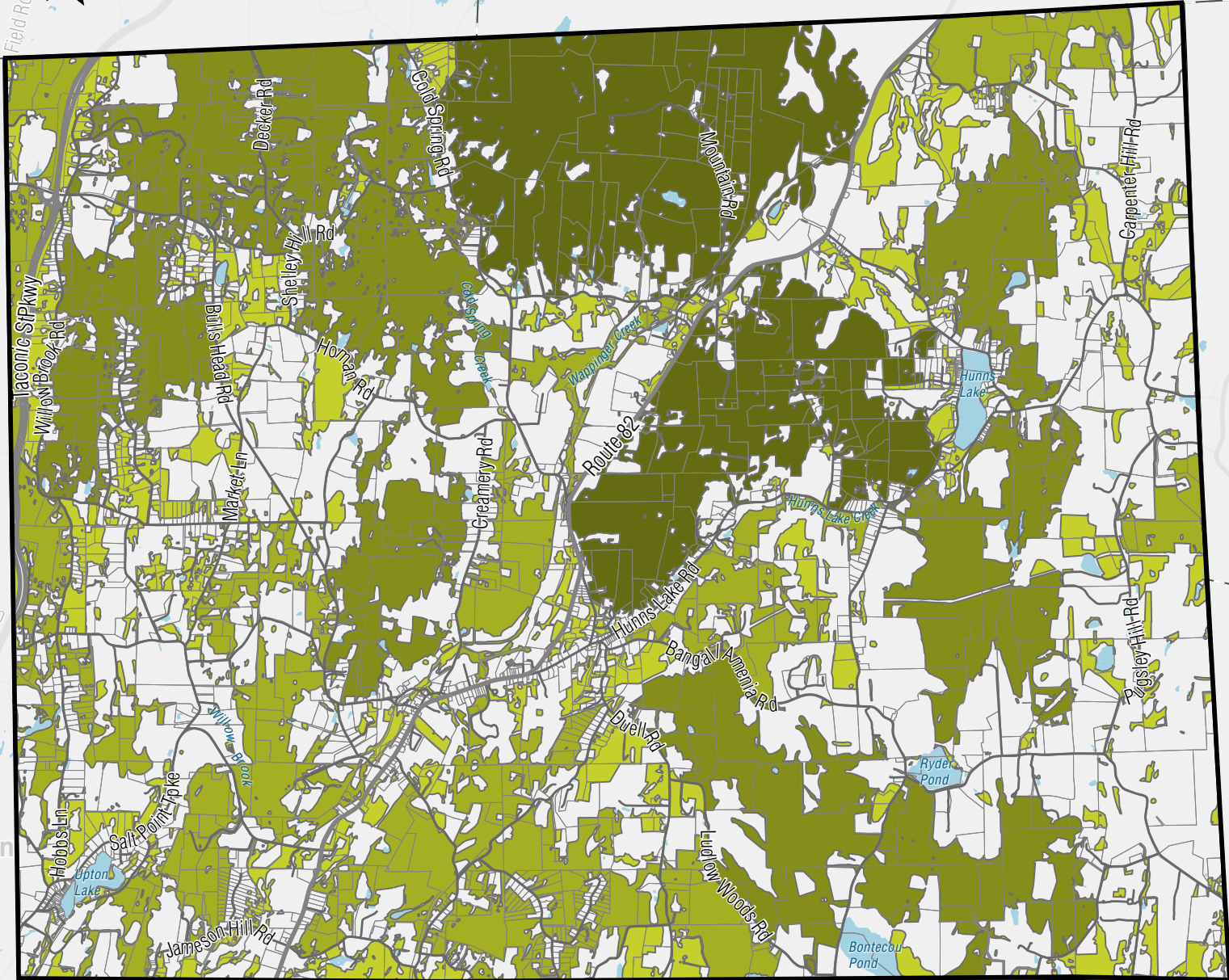
Natural Resources & the Environment

Milan

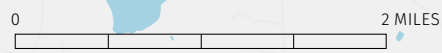
Pine Plains

199

N



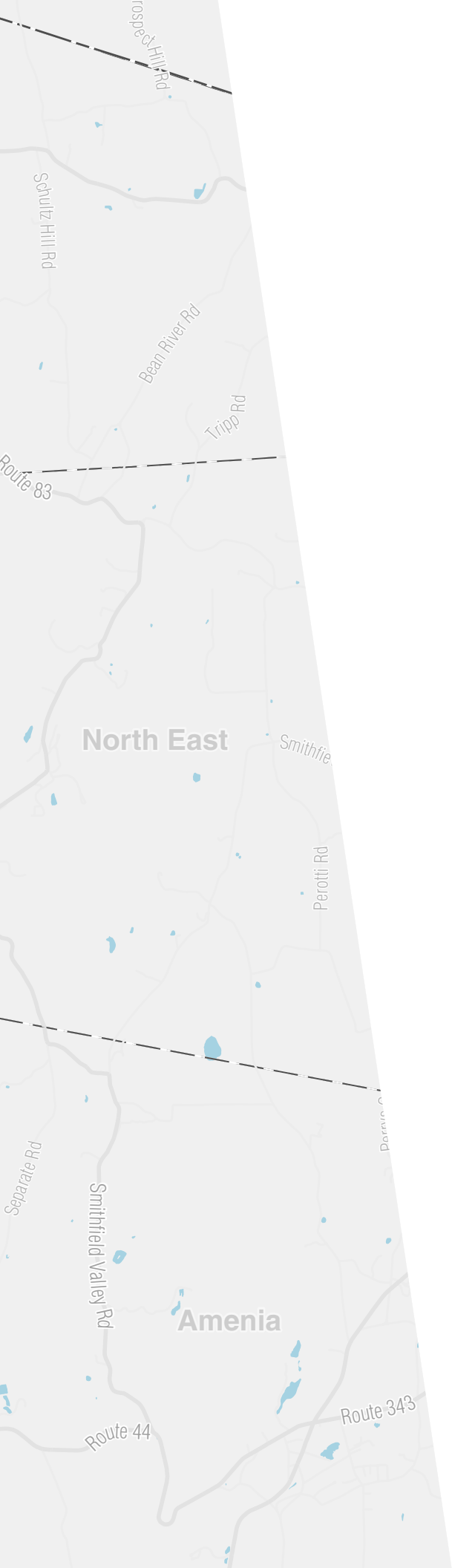
Washington



Shunpike

Contiguous Forest Patches

Figure 5-3



Source: Hudsonia, Ltd. 2005



Buttercup Sanctuary © Karen Mosher

Wetlands, Watercourses & Waterbodies

Approximately 80 percent of Stanford is within the Wappinger Creek watershed.

The Wappinger Creek is a major tributary to the Hudson River, draining approximately 134,871 acres in 11 towns. Of the sixteen sub-watersheds to the Wappinger Creek catchment area, nine are within Stanford: Wappinger Creek Headwaters, Cold Spring Creek, Little Wappinger Creek, Hunns Lake Creek, Grist Mill Creek, Willow Brook, Tamarack Swamp Creek, Upton Lake Creek, and East Branch. Other watersheds in Stanford include those of Shekomeko Creek, a tributary of the Roeliff Jansen Kill beginning near the eastern border of Town, and a

tributary of Wassaic Creek, which drains the southeast corner of Stanford, see **Figure 5-4, Watershed Map**.

A watershed is the geographic area through which water flows across land and drains into a common body of water. Water within the watershed generally comes from rainfall and storm water runoff. Activities within the watershed affect the water quality downstream. Land use practices affect the quality and quantity of storm water runoff. Development around a creek may diminish the riparian buffer, the vegetation surrounding a stream or lake. The riparian buffer filters agricultural drainage and storm water runoff, removing pollutants and sediment, to help maintain water quality.

Septic systems are another land use practice that may threaten water quality. Septic systems that are malfunctioning or improperly installed may cause bacteria and nutrient loading in nearby waterbodies. Construction and mining also may affect the watershed by causing erosion and increasing sediment runoff to streams or lakes.



Heron at Hunns Lake © Wendy Burton



Buttercup Sanctuary © Karen Mosher

According to the Natural Resources Management Plan for the Wappinger Creek Watershed (2001), streambank erosion and septic systems are common land use practices in Stanford's sub-watersheds that may have an impact on water quality. Mining practices, currently active around the Hunns Lake Creek sub-watershed, may also cause impairment. In 2001, diminished riparian buffers were reported in the Wappinger Creek headwater, Hunns Lake Creek, and Willow Brook sub-watersheds. Other impairments in Stanford included impoundment (dams), lake impairment, and channel/bank manipulation.

NYSDEC regulates watercourses to protect undesirable activities on water bodies. NYS classifies all waters, and assigns a standard designation based on existing or expended best usage of each water or waterway segment. Waterbodies and streams that are classified as among the least impaired are subject to NYSDEC's stream protection provisions, with regulations that apply not only to the streambed, but also the streambank within 50 feet of the mean high water line.

Wetlands are important habitats, providing food, cover and breeding grounds for waterfowl and other wildlife. Wetlands also regulate flooding by acting as natural sponges that trap and slowly release surface water, groundwater and floodwaters. Wetlands also remove pollutants in the water by trapping sediment, removing nutrients, and detoxifying chemicals.

NYSDEC regulates wetlands that are 12.4 acres or larger, limiting activities within the wetland boundaries and in the 100 foot buffer adjacent to the wetland. As described

in Chapter 2, Existing Conditions, these larger NYSDEC regulated wetlands are located along Wappinger Creek at the Town's northern edge and around Bontecou Lake near the Town's southern boundary. A Supreme Court decision in 2001 eliminated federal regulation of smaller, isolated wetlands, thereby transferring the burden for regulating those wetlands to local governments. Wetlands that are less than 12.4 acres in the Town of Stanford are currently not afforded any local protection. These smaller wetlands help retain floodwater, provide groundwater recharge, help maintain water quality, and are important habitat for plants and animals, especially reptiles and amphibians. Current practice in the Town of Stanford is to review impacts to wetlands on a case by case basis as development proposals are submitted to the Planning Board. At present, it is at the Planning Board's discretion to require additional mapping and analysis for non-regulated wetlands.

Comprehensive Plan Recommendation:

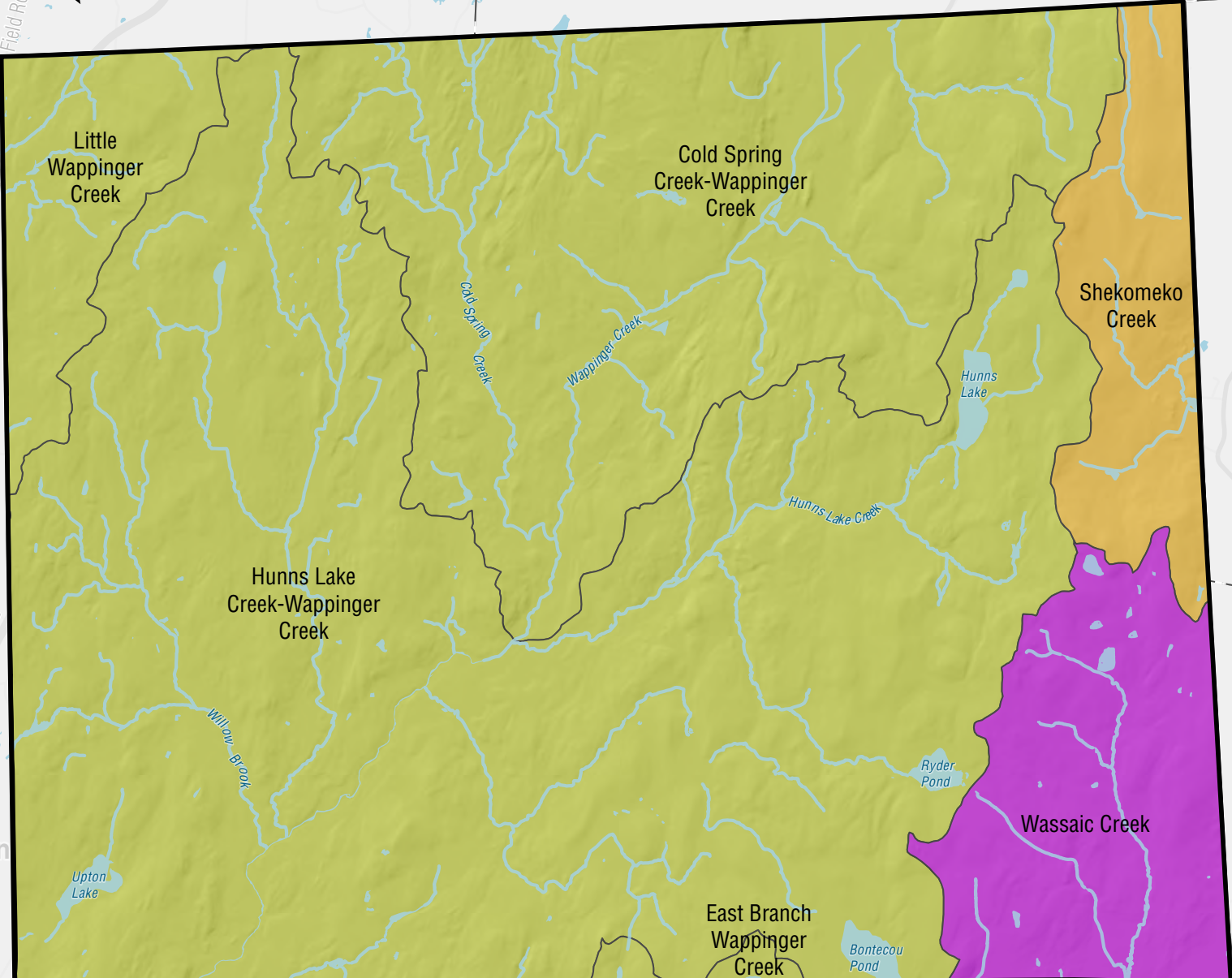
- Consider a local wetlands ordinance that would require additional oversight for disturbance to wetlands smaller than 12.4 acres, isolated wetlands and stream corridors. The ordinance could incorporate a buffer around these wetlands and streams, which might vary according to the size of the wetland in question.

Natural Resources & the Environment

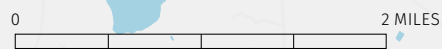
Milan

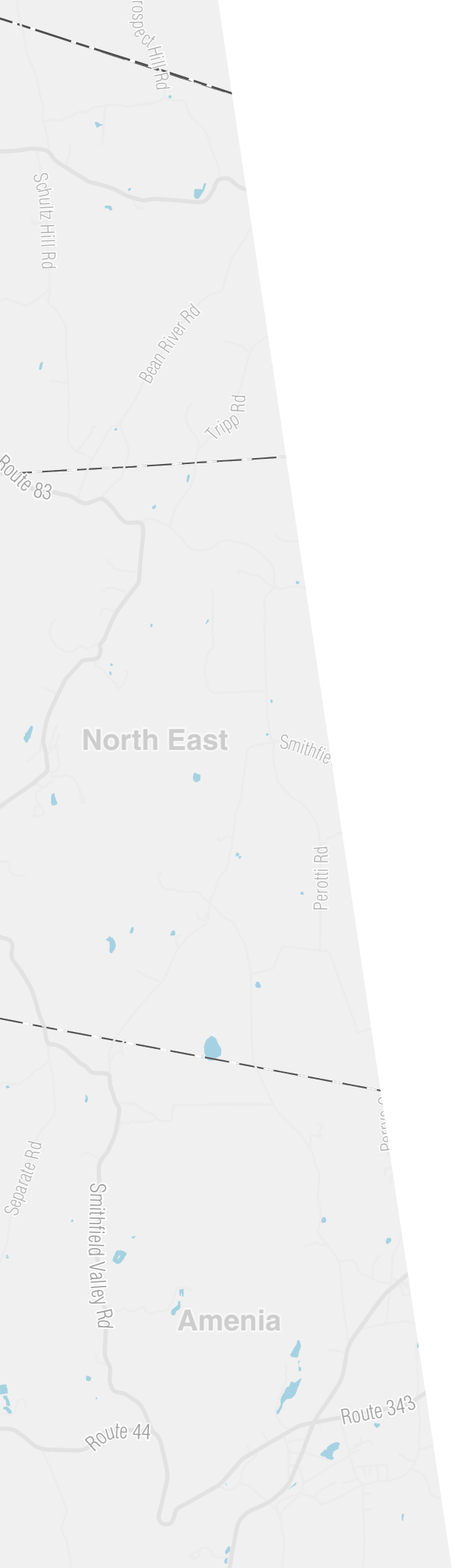
Pine Plains

N



Washington





Watershed Map

Figure 5-4

-  Roeliff Jansen Kill
-  Tenmile River
-  Wappinger Creek

Source: Hudsonia, Ltd. 2005

Floodplains

Floodplains in Stanford are located on both sides of Wappinger Creek, as well as along Cold Spring Creek and Willow Brook. According to the Natural Resources Management Plan for the Wappinger Creek Watershed (2001), approximately 977 acres of Stanford is located within the floodplain.

Floodplains are low-lying areas adjacent to a stream or a river that become inundated in times of heavy rain or severe snow melts.

Floodplains provide important temporary storage space for floodwaters. Floodplains also can serve as recharge areas for the groundwater.

The Federal Emergency Management Agency (FEMA), a division of the United States Department of Homeland Security, maps flood zone areas according to varying

levels of flood risk. Flood zones are depicted on Flood Insurance Rate Maps (FIRM) or Flood Hazard Boundary Maps. FEMA generally defines floodplains as areas adjacent to waterbodies that may be inundated during flooding (see **Figure 5-5, FEMA Flood Hazard Areas**). FEMA strictly regulates any development in high-risk flood areas, including within the 100-year floodplain (Zone A), defined as areas with a one percent chance of flooding each year. The National Flood Insurance Program (NFIP) provides insurance to communities that adopt and enforce floodplain management ordinances to reduce future flood damage. In communities that participate in the National Flood Insurance Program, FEMA's regulations are generally reinforced through insurance requirements. To obtain a government secured mortgage for a property located within a floodplain, a homebuyer must purchase flood insurance.

Comprehensive Plan Recommendation:

- Current FEMA regulations are sufficient to regulate building in floodplains.
- The Town of Stanford should consider participating in the NFIP to obtain flood insurance coverage.

Steep Slopes

Varied topography is one of the key defining components of the rural character of the Town of Stanford (see **Figure 2-11 Topography**, included in the **Appendix**). Establishing protections for the Town’s hillsides and steep slopes will guide development, helping to preserve the natural scenic beauty of the landscape, secure and increase property values, and preserve the watershed and habitats.

Development on hillsides and altering steep slopes presents environmental challenges, including:

- Increased soil erosion and sedimentation;
- Access challenges for emergency and maintenance vehicles;
- Disruption of the natural ecological habitat; and
- Potential visual degradation of viewsheds.

Topographic maps, such as those prepared by the U.S. Geological Survey, and field surveys prepared during the subdivision and land development process are the most common sources of slope information available to municipalities. County soil surveys produced by the U.S. Department of Agriculture (USDA) also contain valuable topographic information. These surveys categorize soil types, in part, based on slope, with typical classifications occurring in the following ranges: 0–3 percent, 3–8 percent, 8–15 percent, 15–25 percent, and 25–50 percent.



© Karen Mosher

Defining what constitutes “steep” for the purposes of slope regulation is at the discretion of each municipality. Some communities regulate slopes starting at 15 percent to correlate with USDA soil survey slope classifications. Others communities limit development on slopes exceeding 25 percent, another USDA soil survey threshold.

In general, land with slopes in excess of 25 percent is considered unbuildable; slopes between 15 and 25 percent require special consideration, and slopes between 5 and 15 percent are considered to be buildable. Land with slopes between 0 and 5 percent is considered level and suitable for development. Road grades should generally not exceed ten percent for town roads and 10-15 percent for driveways.

Management of steep slopes requires the Town to recognize that they require special treatment. At present, the Town of Stanford Planning Board requires an applicant to provide a breakdown of steep slopes on all site plan applications, and the protection of steep slopes is evaluated on a case by case basis at the discretion of the Planning Board.

Comprehensive Plan Recommendations:

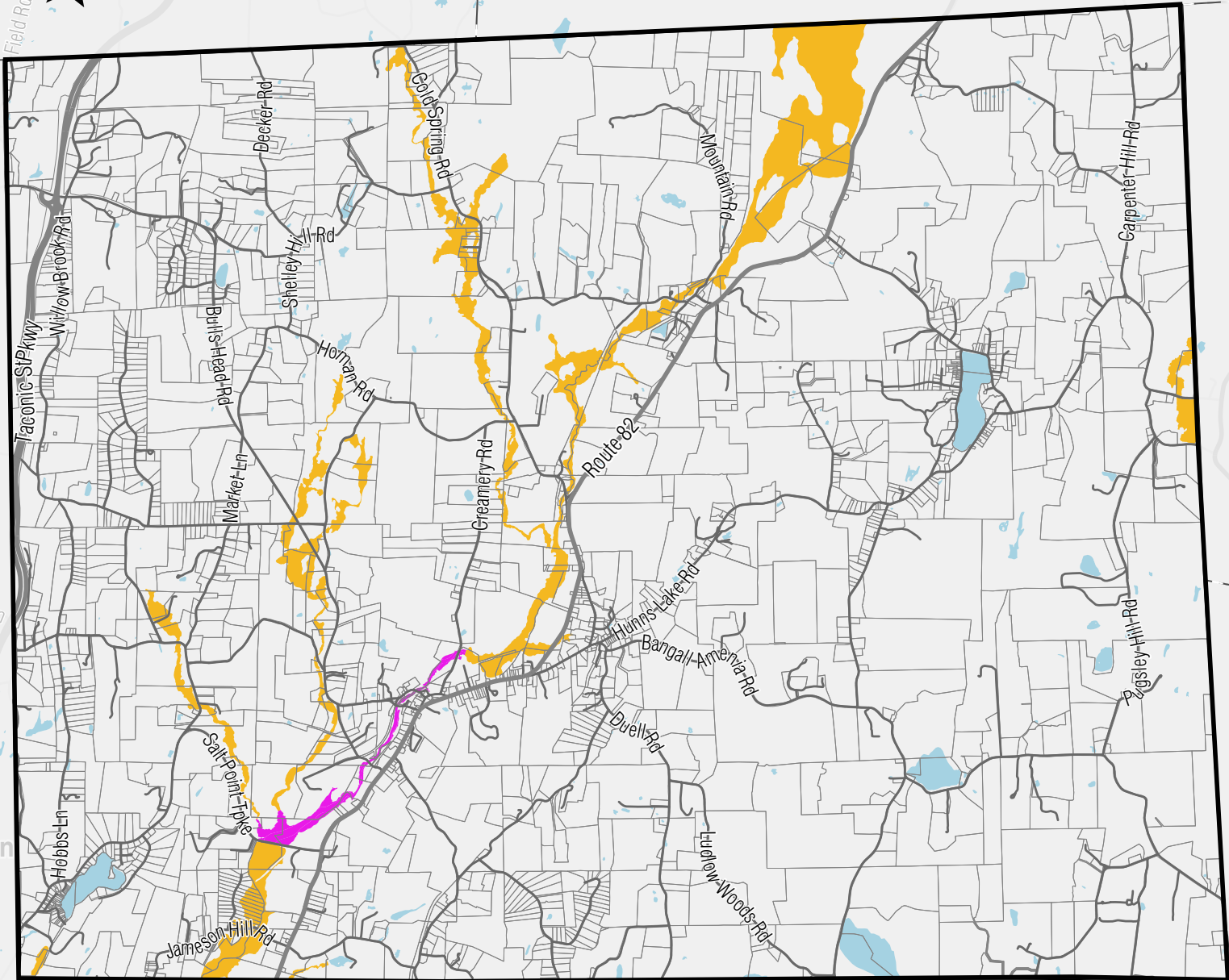
- Consider code revisions that preclude development on slopes in excess of 25 percent, except in cases where disturbance would be minimal.
- For proposed development applications with the potential to significantly impact steep slopes between 15 and 25 percent, consider amending the code to:
 - Require a steep slope analysis/assessment to confirm no practical alternatives; and
 - Require a special permit for development on slopes between 15 percent and 25 percent.

Natural Resources & the Environment

Milan

Pine Plains



N



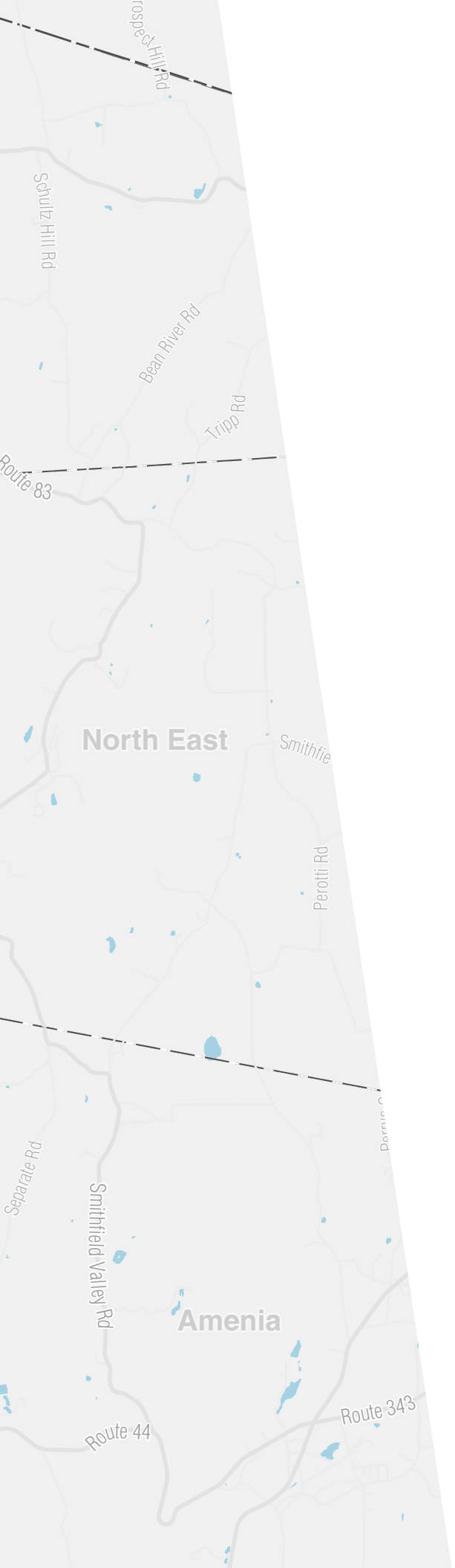
Washington

FEMA Flood Hazard Areas

Figure 5-5

-  AE - 100 year flood zone, base flood elevations determined
-  A - 100 year flood zone, no base flood elevations

Areas subject to a one percent or greater annual chance of flooding in any given year.



Source: FEMA, National Flood Hazard Layer, 2020.

Scenic Viewsheds

Ridgeline Protection

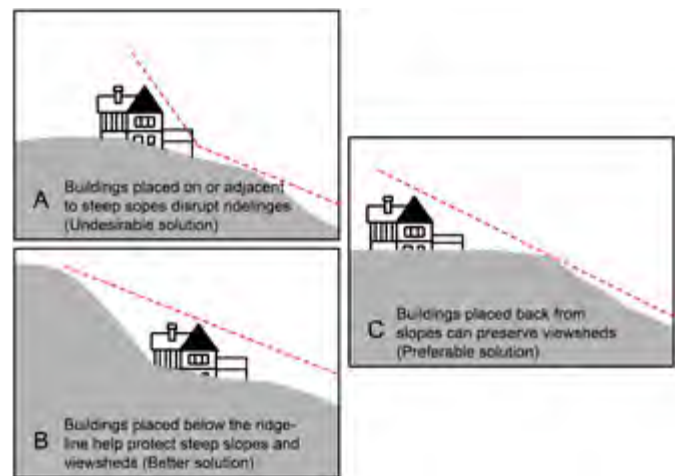
Stanford is characterized by rolling hillsides and prominent ridgelines that are visible from miles away. These ridgelines and hills significantly contribute to the Town's rural character, and are recognized as important natural and scenic resources. **Figure 5-6 Ridgeline Protection** presents preferred alternatives for siting buildings atop a ridgeline.

By creating guidelines that define ridgeline development and delineate areas of protection, Stanford can provide property owners with clear information, streamline the review process, and protect local ridgelines.

By protecting ridgelines, the Town will preserve the important viewsheds enjoyed by residents and visitors, thereby contributing to local tourism, securing property values, and maintaining a high quality of life for residents. The protection effort should begin by carefully

delineating the important ridgelines in the Town so that both Town officials and potential developers are aware of the areas that are of concern.

Figure 5-6 Ridgeline Protection



Comprehensive Plan Recommendations:

- Consider establishing a definition of “ridgeline” and protection standards and guidelines, and incorporating them in the Town’s Zoning Code;
- Consider identifying and mapping the Town’s significant ridgelines;
- Consider establishing siting guidelines to locate buildings and other structures below the ridgeline.

Guidelines might include locating structures to prevent rooflines from extending above the existing tree line;

- Consider undertaking a siting analysis to identify locations for cell towers, antennae, and wind turbines, and identifying potential locations; and
- Consider specifying design criteria to minimize the impact of these types of uses on the visual environment.



© Nina Peek

Scenic Roads

The Town of Stanford recognizes the importance of its scenic roads, as they preserve the Town’s rural character. The Town of Stanford Zoning Code establishes criteria, and a detailed process for designation and maintenance guidelines for Scenic Roads. The Town has previously designated five Scenic Roads for protection:

- North Anson Road (designated 12/9/99);
- Conklin Hill Road (designated 7/13/00);
- Old Conklin Hill Road (designated 3/8/01);
- Knight Road (designated 8/9/01); and
- Shuman Road (designated 7/12/01).

The Scenic Road Advisory Committee is composed of five Town residents appointed by the Town Board. The Committee is tasked with advising the Town Board and the Planning Board, preparing applications for Scenic Roads, and reviewing compliance with the Town Scenic Roads Law, Article XIV of the Town’s Zoning Code. The Town’s Scenic Roads law “strives to preserve the visual quality of some of the town’s roads while ensuring the safety of the users of these roads. The roads deemed important to remain in rural condition may be designated scenic roads by the Town of Stanford Town Board for the purpose of controlling any future changes to them.”

Activities proposed within a designated Scenic Road are submitted to the Planning Board for approval (except for routine road maintenance or emergency repair).

Regulated activities include road widening, grade changes, removal or alteration of stonewalls or mature trees, drainage improvements, and paving.

Comprehensive Plan Recommendations:

- Continue to implement and oversee local protection laws for existing scenic roads;
- Consider preparing applications for New York State or National Scenic Byway designation for currently designated local scenic roads;
- Identify additional rural and scenic roads for local, state or national designation.

Scenic Viewshed Protection

Scenic viewsheds significantly contribute to quality of life in Stanford, but also create important economic development opportunities by bringing visitors to the Town. These long views often include historic properties, agricultural land, and natural areas. It is important to distinguish between ridgeline protection, which prioritizes the visible topographical highpoints in the Town, and viewshed protection, which incorporates land uses as a prominent factor in the view.

Natural Resources & the Environment

The 1980 Master Plan mapped and inventoried significant views in the Town, and provided descriptive text regarding the specific viewsheds as follows:

- Views from Pugsley Hill, looking south toward Ryder Pond, Millbrook School and Lithgow, and looking north toward Carpenter Hill and the Shekomeko Valley;
- Views from Carpenter Hill, looking south toward Pugsley Hill, down the valley to Smithfield, and looking north toward Bethel and Pine Plains;
- Views from Tamarack Pond, looking to the east and south;
- Views from Conklin Hill, looking north toward Pine Plains and the valley;
- Views from Layton Road, looking west towards the Catskill Mountains;
- Views from Attlebury Hill, looking west to the valley;
- Views from Attlebury Hill on Route 82, looking northwest and north;
- Views from Prospect Hill Road;
- Views from Bulls Head Road and Ridge Road;
- Views from Haight Hill Road, looking north;
- Views from Charwill Drive and Fancor Road;
- Views from Hicks Lane, looking south.

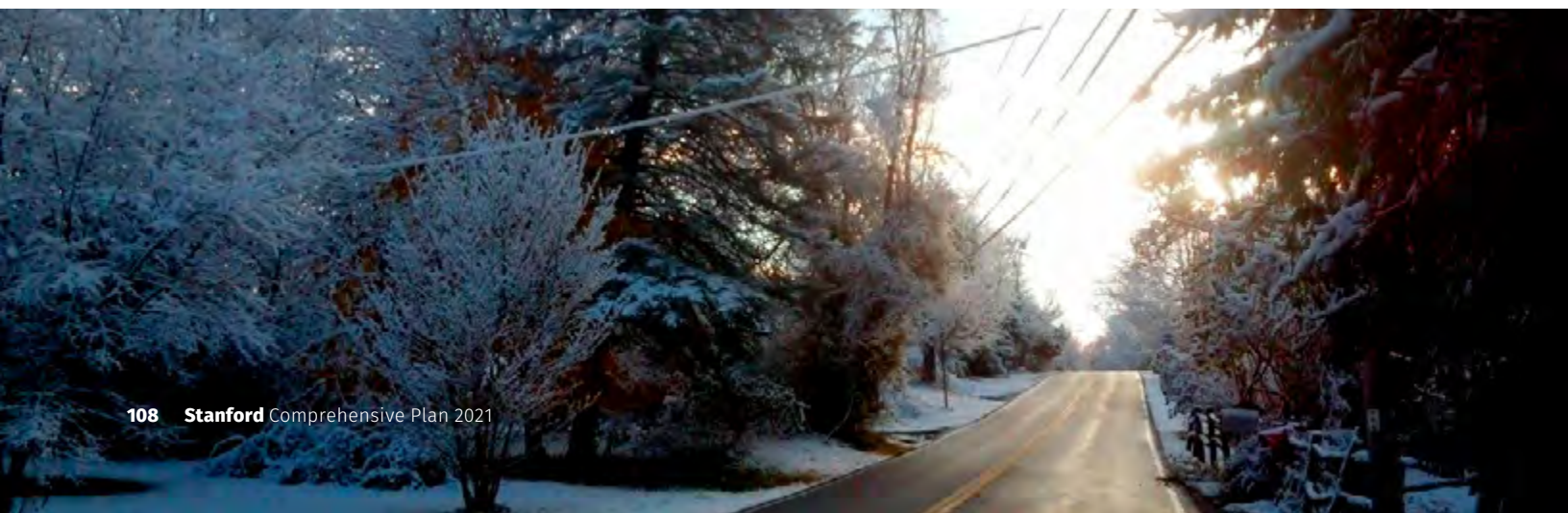
While the 1980 Master Plan recognized these views as significant, it did not include recommendations for measures to protect them. The Town can consider several tools to protect scenic viewsheds, including providing incentives to landowners that encourage preservation of compatible land uses, including farming, within the viewshed. Some incentives already exist through private non-for profit land trust organizations, which may hold

easements on properties to conserve the land and protect future development. Other incentives may include flexibility in density for proposed residential developments within designated areas, including use of clustering.

The Town may also consider incorporating additional oversight into the Town's Code to help preserve the Town's natural beauty and the scenic value of the land, and limit certain activities that may impact the view. Activities that could be limited may include: conventional residential subdivision, the building of roads into areas that are too steep, tree harvesting, and logging.

Comprehensive Plan Recommendations:

- Create a Scenic Viewshed Map to identify important viewsheds, including those identified in the 1980 Master Plan;
- Require visual impact analyses for land development applications;
- Encourage voluntary compliance with the NYSDEC guidelines for assessing and managing visual impacts of development; and
- Consider providing incentives to landowners with properties located within the designated Scenic Viewsheds to preserve and/or conserve their land and/or locate any additional proposed structures with minimal impact on the viewshed.





Attlebury hamlet © Karen Mosher

Agriculture

Stanford is proud of its rich agricultural heritage, and the Town is committed to preserving, protecting, promoting, and expanding current and future farming activities.

There is an essential symbiotic relationship between farming operation as a commercial enterprise, creating products and jobs, and the economic benefits associated with supporting agriculture as a way to preserve the Town's rural character. Farms represent Stanford's heritage, influence land development patterns, and contribute to important scenic viewsheds. This Comprehensive Plan seeks to protect and enhance this relationship. Farms should be supported by the community to maintain viable businesses, which are mutually beneficial to the farmer and to the Town through open space preservation and tourism potential.

The USDA's Natural Resources Conservation Service (NRCS) classifies the best and potentially most

productive soils as Prime Soils. These soils are considered prime because they are suited to a wide variety of farm crops with relatively few limitations, and represent an irreplaceable agricultural resource. Prime soils are well-drained, nearly-level, fertile, stable, and deep. These characteristics make them ideal for farming, but also easy to develop for residential and commercial uses. Soils that are designated by the NRCS as "Statewide Importance" are those soils that "support good crop fields, but unlike prime soils they have limitations that require special conservation measures and are suited to a smaller variety of crops.

The Agricultural Assessment program is one of two components of the Agriculture and Markets Law (Article

Natural Resources & the Environment

25-AA) enacted by New York State in 1971 to help local governments keep land in agricultural production. The Agricultural Assessment Program provides property tax relief for landowners by requiring that eligible farmland is assessed on the basis of actual agricultural production value rather than its full market value. According to the Dutchess County Agriculture and Farmland Protection Board, to qualify for an Agricultural Assessment, owners must have at least seven acres of land that produces a minimum of \$10,000 annually, or own less than seven acres of land that produces a minimum of \$50,000 annually. The annual production is determined based on the average of the preceding two years. The sale of crops, livestock and livestock products, and commercial horse boarding, are eligible for the Agricultural Assessment. As of December 2010, approximately 7,000 acres in the Town of Stanford had qualified to receive an Agricultural Assessment.

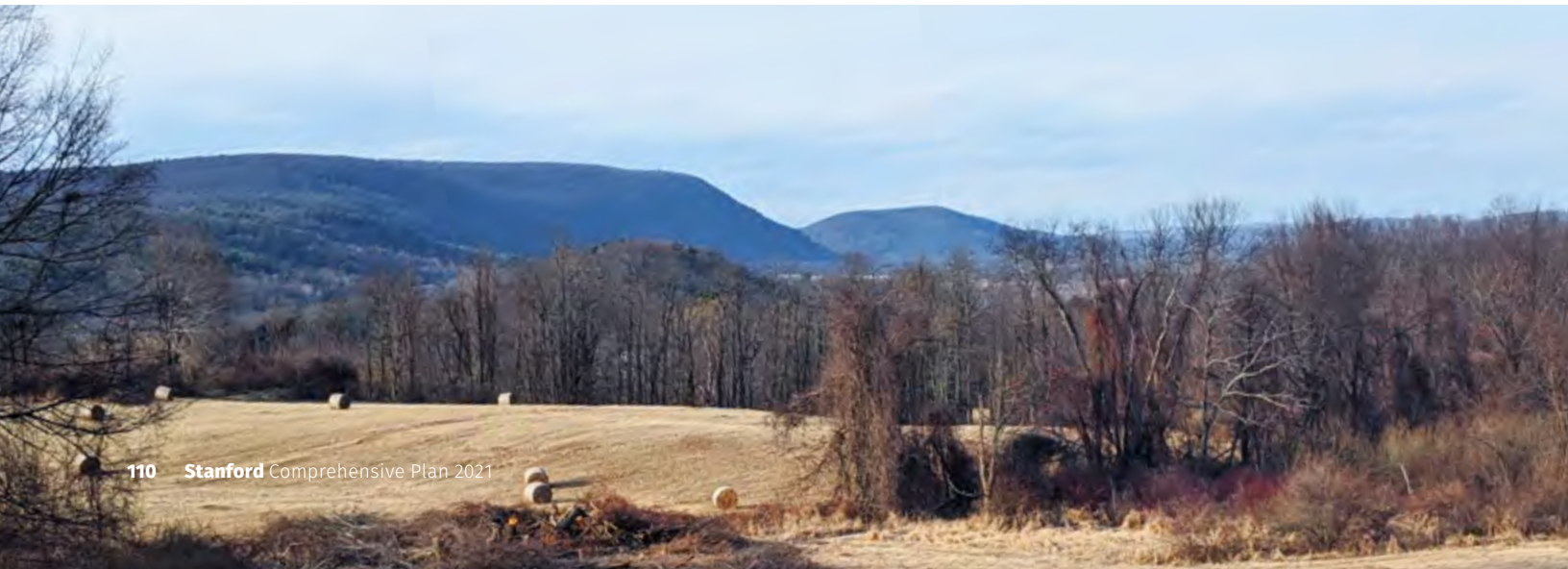
The other component of New York State's Agriculture and Markets Law that aids local government support of farming is the Agricultural District program, established under the New York State Agriculture and Markets Law. The program provides agricultural landowners a number of benefits and protections not associated with property tax relief. The program is overseen by the Dutchess County Agriculture and Farmland Protection Board on behalf of the Dutchess County Legislature. There are four Agricultural Districts comprising approximately 197,000 acres within Dutchess County. The Town of Stanford is included in District 21, which also includes the Towns of Washington, Amenia, Northeast and Pine Plains.

To be eligible for the Agricultural District program, property owners submit an application to the Dutchess County Soil and Water Conservation District (DCSWCD), which analyzes soils, acreage, and other related conditions to determine the land's current or potential viability either as farmland or in support of a farm operation. An agricultural district is a geographic area that is predominantly viable agricultural land, and may include land that is actively farmed, idle, forested, as well as residential and commercial uses. Every eight years the Dutchess County Agriculture and Farmland Protection Board (AFPB) reviews the Agricultural Districts within the county.

Article 25AA of New York State Agriculture and Markets law includes a Right-to-Farm provision that protects farm operations from private nuisance lawsuits and local ordinances that may be restrictive to agricultural operations, unless it can be shown that public health or safety is threatened. The protections are fully described in the NYS Department of Agriculture and Markets Guidelines for Review of Local Zoning and Planning Laws. In cases of dispute, where farming operations are in conflict with municipal land use and/or zoning, the Right-to-Farm provision provides an option for the Commissioner of Agriculture and Markets to resolve disputes. However, many of these disputes can be resolved more quickly and less expensively at the local level through local Right-to-Farm legislation.

Dutchess County adopted a Right-to-Farm law in 2019 that recognizes farming as an essential enterprise in

Upper Buttercup Sanctuary © Karen Mosher



the County. The law works to complement the New York State Right-to-Farm Law, and applies only to property in State-certified Agricultural Districts. Towns in Dutchess County may also enact measures to protect local food systems via local Right-to-Farm regulations.

A local Right-to-Farm law recognizes farming as an essential enterprise in Town.

The law may also provide parties the ability to file disputes locally with a dispute resolution committee, a non-binding mediation group that serves as a facilitator between farmers and their neighbors. The Dutchess County Agricultural and Farmland Protection Plan (March 2015) provides a Model Right-to-Farm Law.

Following suit with both the County and State that recently passed “Right-to-Farm” laws, Stanford should consider adopting a “Right-to-Farm” law. The “Right-to-Farm” Law would declare that the Town is in support of protecting local food systems, farming and agriculture.

Agriculture in Stanford is evolving. The leading agricultural enterprises in Town include the production of hay, corn and field crops, and equestrian-related operations. According to the “State of Agriculture in Dutchess County” released by Dutchess County in 2017, Dutchess County was ranked number one in New York State for

inventory number and sales value of horses. Since the 1980s, Dutchess County has ranked as one of the top four counties in the state for inventory, number and sales value of horses.

As is the case throughout New York State, Stanford has experienced a decline in dairy farming. Stanford retains many farms devoted to equestrian-related activities, and an increased consumer interest in local foods has created new markets, and products. For example, farms in Dutchess County are growing hops, barley, and other fruits and grains to fuel farm breweries, distilleries and cideries. The New York State Agricultural Districts Law has been amended to include more farming operations, such as beekeeping, agri-tourism, and equine riding academies.

As with the rest of the County, farming practices and commodities in Stanford will continue to change. The Town may monitor these changes to develop regulations that support and encourage these enterprises.

Local municipalities can support local agriculture by hosting farmers markets. New York State does not regulate farmers markets but local municipalities may have local laws that pose a challenge to farmers markets, such as local zoning and permitting requirements. The Farmers’ Market Federation of New York provides guidance for local municipalities, as well as an online curriculum to train and certify farmers’ market managers.

Farms can increase their income by expanding their operations to offer agri-tourism. Agri-tourism activities may include educational experiences such as tours for school children, hospitality services including farm stays and guided tours, recreation such as hunting and fishing, and entertainment including festivals and barn dances. Article 25AA of New York State Agriculture



Rocky Reef Farm © Karen Mosher

Natural Resources & the Environment

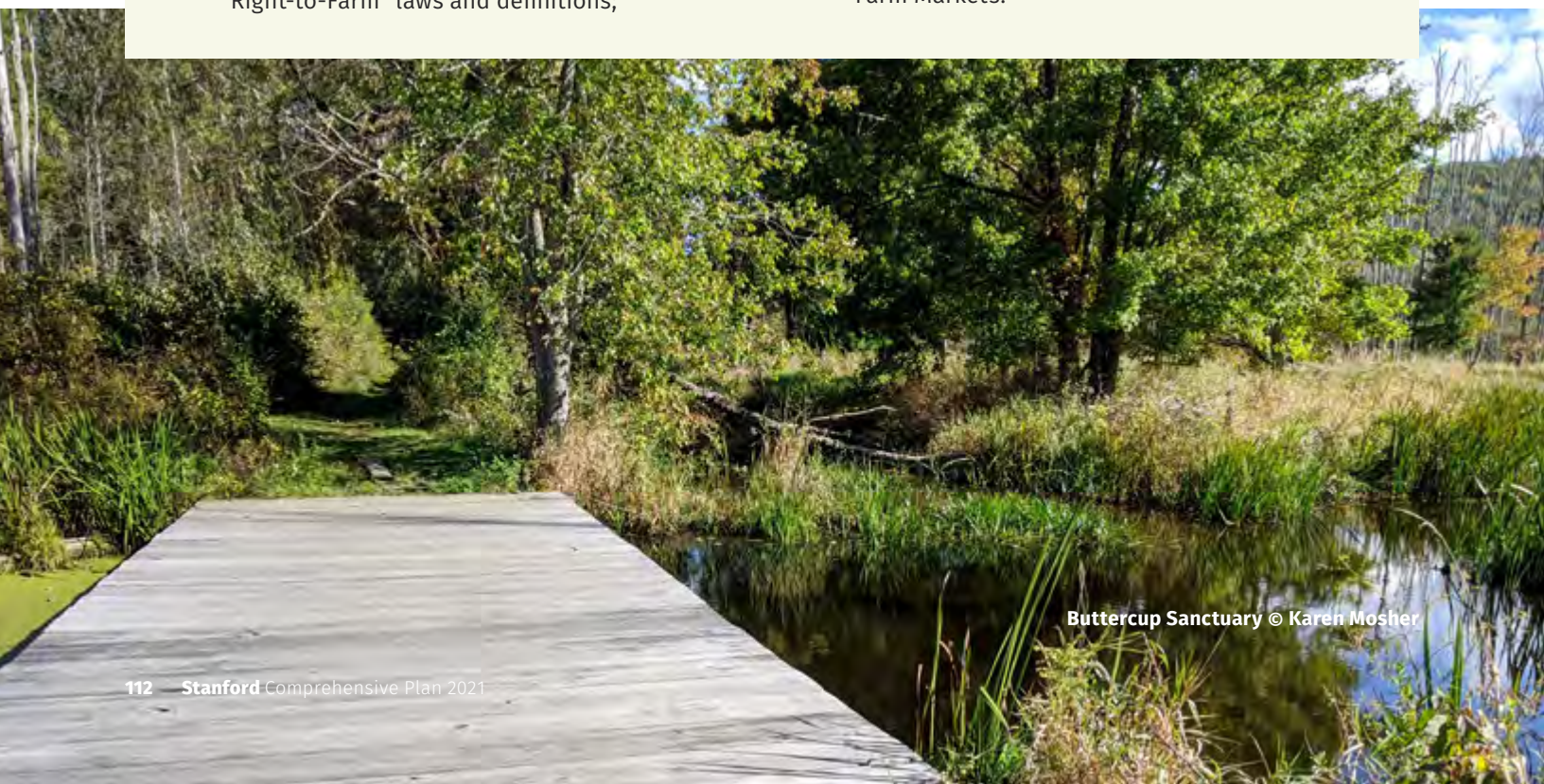
and Markets law protects most agri-tourism activities in agricultural districts within certain thresholds. The Cornell Cooperative Extension provides resources for farmers and local legislators considering agri-tourism.

At present the Town's code allows farmers to host farm stands on their property, however the requirements for locating/hosting collaborative farmers' markets are onerous. The Town should consider updating the zoning code to allow farmers' markets with multiple vendors.

The code could require the farmers' markets to be located on private property, or the Town could consider offering a municipally owned parcel to accommodate these uses – or both. The Town may also consider allowing farmers to host “farm-stays” defined as short-term rentals where visitors are put to work on the farm. Farm-stays can provide an important revenue source and labor supply to farms, and bring valuable economic development and tourism dollars to the Town.

Comprehensive Plan Recommendations:

- Adopt a “Right-to-Farm” Law establishing Stanford as a “Right-to-Farm” community;
- Prepare an Agricultural and Farmland Protection Plan;
- Collaborate with the Dutchess County Department of Planning and Development to assess the “farm-friendliness” of current regulations;
- Review the Town's Zoning Code for the following specific initiatives to promote the development of local food systems:
 - Expand the list of allowed home small agri-business operations;
 - Ensure consistency with State and County “Right-to-Farm” laws and definitions;
- Ensure that local laws are consistent with NY State Agriculture and Markets Law (section 305-b), which requires an agricultural data statement for any application for a special use permit, site plan, use variance, or subdivision that occurs on property within an agricultural district or within 500 feet of a farm operation located in an agricultural district;
- Allow “farm-stays” that would provide farmers with an opportunity to rent rooms (limited stay) either in the farmhouse or in a separate structure on the property;
- Increase flexibility for employee housing on land used for agriculture;
- Revise setback requirements to allow flexibility in siting of accessory farm buildings; and
- Provide more flexible permit requirements for Farm Markets.



Buttercup Sanctuary © Karen Mosher



06

Utilities & Infrastructure



Contents

Groundwater, Aquifer & Wellhead Protection

Broadband/High-Speed Internet Service



Hunns Lake © Wendy Burton

Groundwater, Aquifer & Wellhead Protection

Residents and businesses in the Town of Stanford receive their drinking water from private wells, which draw groundwater stored in sand and gravel and bedrock aquifers.

In August 2000, the Town completed a *Groundwater Resources Study* to establish a framework for protecting the Town's drinking water supply. The Study noted that the hydrogeology of the Stanford area is "composed of a complex structure of bedrock and sand and gravel

aquifers, which are probably interconnected via faults, fractures and solution channeling. Based on the data provided, most existing private drinking water supply wells are in bedrock and of those, most are in the shale, sandstone, and greywacke of the Normanskill Formation."

The Town's wastewater is treated through individual septic systems. The *Groundwater Resources Study* tested water quality conditions at 48 wells throughout the Town and determined that groundwater nitrogen levels were consistent with levels that would be expected for areas with "simultaneous on-site wastewater disposal and individual on-lot private drinking water supply wells." Water quality data for areas with active agricultural operations indicated the highest concentrations of nitrate/nitrogen in the Town. It is important to monitor nitrogen levels in the drinking water supply because high levels of nitrogen fertilizer leaching into the groundwater/

wells can result in overstimulation of aquatic plants and algae, and concomitant harmful biological effects of drinking contaminated water. Generally, septic tanks, application of nitrogen-rich fertilizers, and agricultural processes are the highest generators of nitrogen. The highest incidence of leaching generally occur in rural private wells. Several wells located near major roads indicated elevated levels of chloride, probably resulting from accumulation of road salt.

The Study concluded that already densely developed areas (in the existing Stanfordville and Bangall hamlets) “appear to be experiencing density driven water quality problems...[including] “short-circuiting” problems between septic systems and wells located in glacial overburden aquifers, [which] begin to develop when the housing density exceeds one home per acre (Horsley Witten Hegemann, Inc., 1990).”

In addition, the Study noted: “although a sand and gravel aquifer underlies the Town center, it has a limited capacity to supply water because of its generally shallow depth. Further study would be required to determine if this aquifer is capable of supporting a public water supply in Stanford.” That is, if the Town were to consider a central water supply system, additional investigation into alternative sources of water would be required.

Subsequent to the completion of the Groundwater Resources Study, the Town of Stanford prepared a *Water Supply Protection Plan (2000)* that evaluated the groundwater quality Town wide. The Plan concluded that Town-wide groundwater quality was relatively good, but if residential or commercial density were to increase, water quality would need to be reexamined. The plan identified several potential contaminants sources that “have or may cause problems in the future.” These potential sources included:

- Malfunctioning or poorly designed septic systems;
- Poor manure, fertilizer, or pesticide-management on farms; and
- Leaking underground storage tanks, improper disposal of hazardous chemicals, spills, and road salt.

This Comprehensive Plan recognizes that the Town’s goals to focus future commercial development in the

hamlets of Stanfordville and Bangall and to create a vibrant, walkable town center may be constrained by the lack of infrastructure. As the hamlets grow, the Town should carefully monitor the groundwater quality and revisit water supply options. The Water Supply Protection Plan, the entire text of which is included in the Appendix, recommended measures the Town could implement to protect its groundwater resources. Among those recommendations were:

- Proper maintenance of Town facilities such as the salt shed and the highway garage to ensure that no groundwater contaminants are released;
- Education of well owners;
- Review of proposed projects as to the potential impacts on groundwater;
- Incorporating additional regulations into the Town Code, including requiring Special Permits for any proposed activity that represents a potential contamination source, and prohibiting new underground fuel storage tanks;
- Initiating a well monitoring program to track groundwater quality;
- Preparation of a detailed hydro-geologic analysis to identify future sites for Town wells, should they be needed.



© Karen Mosher

Comprehensive Plan Recommendations:

Because protecting the Town's groundwater supply is critically important, this Comprehensive Plan recommends following through on the recommendations proposed in the Water Supply Protection Plan with the following actions:

- Form a Groundwater Protection Committee, which would be tasked with advancing the recommendations of the Water Supply Protection Plan and recommending associated changes to the Town's procedures and codes;
- Establish an on-going groundwater monitoring program to continue to track groundwater quality;
- Review policies and procedures at Town-owned facilities (garage, salt-shed, transfer station) to ensure that no hazardous substances are escaping to the groundwater;
- Reduce road salting to the minimum necessary for safe driving by following State guidelines for efficient salt application and using up-to-date equipment for salting and plowing.
- Evaluate and map the potential wellhead location identified in previously completed reports and other potential wellhead locations for protection; and
- Consider adopting controls to regulate land uses around potential wellhead locations.

Broadband/High-Speed Internet Service

In the pandemic and post-pandemic environment, access to reliable high-speed internet connectivity has become even more important to communities throughout the Hudson Valley.

Fixed broadband is a necessary part of everyday life. Education, healthcare, employment, and civic engagement all require reliable access to broadband services.

The ongoing national consensus supports the need to consider universal broadband service¹ as a public

¹ The terms "broadband" and "high-speed internet" are essentially synonymous. "Broadband" means bandwidth that is broad enough to manage significant amounts of data. All high-speed internet service is provided through some type of broadband technology – a Digital Subscriber Line (DSL), cable, satellite, wireless mobile internet service or fiber-optic cable.

utility because it is essential to both domestic and economic productivity.

Internet service providers (ISPs) provide different levels of broadband service. The lowest level of service will offer the lowest speed to be considered broadband. Even higher broadband services do not guarantee high speeds. Heavy internet traffic at peak times can slow uploads and/or downloads, much like rush hour traffic on the highway. These “bottlenecks” are apparent when many users are on the same “band” at the same time. Bandwidth and speed are not the only issues recognized by residents in more rural communities. Some residents in the Town do not have any broadband service.

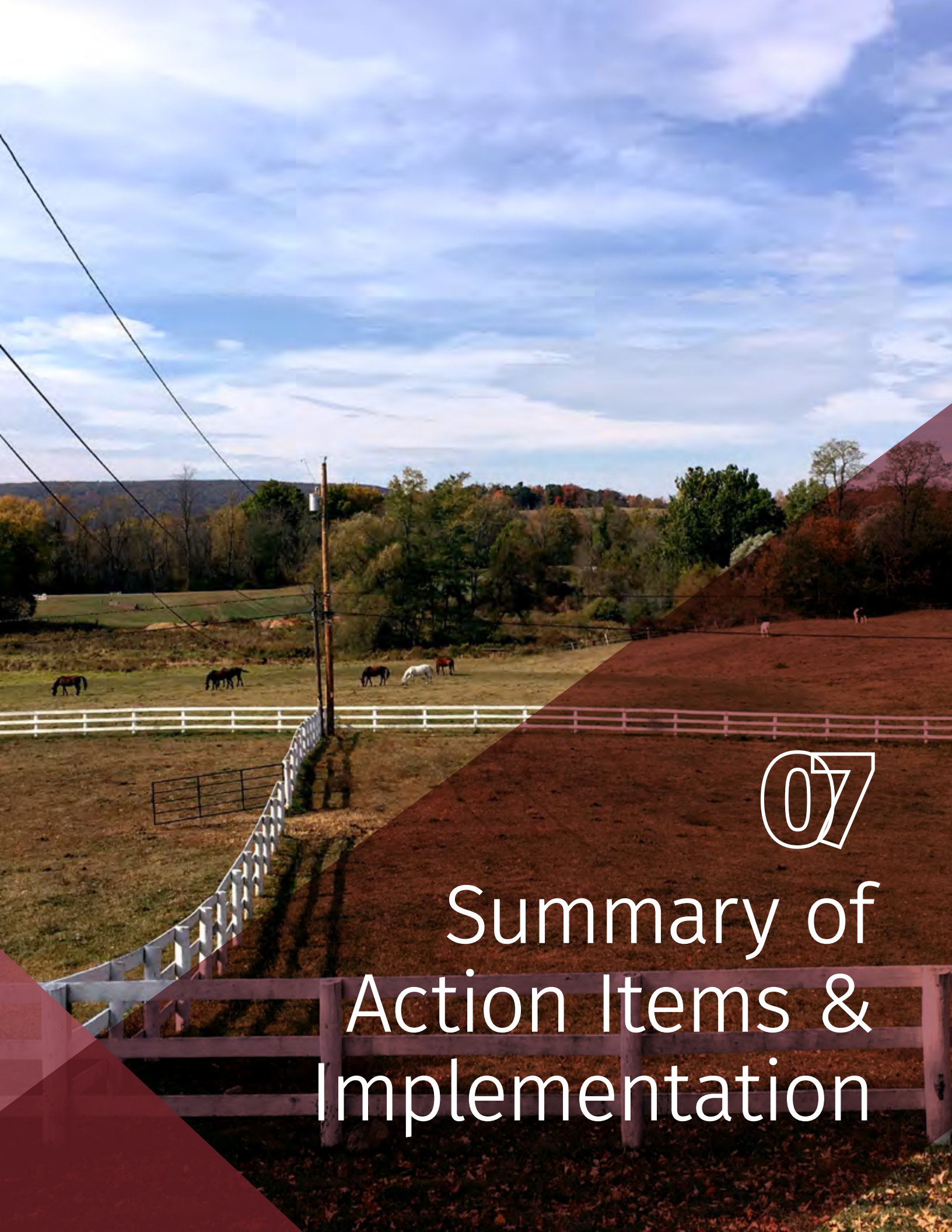
Finding permanent solutions to address last-mile connectivity and reliable service has become a priority for the Town. To that end, the Town is currently investigating a collaborative initiative with adjacent Towns

to investigate options for upgraded services, reduced costs, and 100 percent connectivity. The Comprehensive Plan identifies the following key goals toward ensuring broadband service to all residents.

Comprehensive Plan Goals:

- Identify and map Stanford homes and businesses without current access to broadband service;
- Collaborate with adjacent communities to attract additional providers and create a competitive environment; and
- Investigate access to Round III of the New NY Broadband Program that provides last-mile funds for high-speed internet access.





07

Summary of Action Items & Implementation



Summary of Action Items & Implementation

The following table presents recommendations presented in each chapter of this Comprehensive Plan and a potential implementation timeline.



Buttercup Sanctuary © Wendy Burton

Recommended Action	Implementation	
	Short Term: 1-3 years	Medium Term: 3-5 years
Future Land Use		
Residential Land Uses		
Focus new residential growth within the Stanfordville hamlet, and where appropriate within the Bangall Hamlet		●
Require all major residential subdivision applications to prepare a conservation and/or cluster alternative		●
Allow average density subdivisions to encourage flexibility in lot sizes and preservation of valuable open space and ecological habitats		●
Allow additional flexibility for converting existing on-site structures (barns, out-buildings) for use as accessory apartments (e.g., an apartment over a garage)	●	

Recommended Action	Implementation	
	Short Term: 1-3 years	Medium Term: 3-5 years
Eliminate the requirement for “family” occupancy for residence in accessory dwellings	●	
Include greater flexibility in defining Bed and Breakfasts, Lodging and Rooming Houses	●	
Partner with Dutchess County, or a local housing organization to conduct a Town-wide housing needs assessment	●	
Incentivize flexible housing options by allowing increased density in subdivision applications provided certain conditions are met (i.e., available parking, sufficient septic capacity, etc.)		●
Prepare an inventory of current rental units, and track availability	●	
Create a detailed flow chart for use by Town staff, illustrating the land development application review process. The flow chart would list reference materials (i.e., maps of historic and ecological resources, ridgelines and scenic viewsheds) that would be considered during the first step of the land development application review	●	

Commercial/Retail Land Uses

Accommodate additional agricultural-based businesses (farm-stays, tours, and farmers markets) on existing farms	●	
Allow home-based businesses that are appropriate and conducive to residential properties	●	
Encourage a mix of commercial and retail uses along the Route 82 corridor within the historic Stanfordville and Bangall hamlets	●	
Extend the northern boundary of the Rural Center (RC) zoning district along the east side of Route 82 to the intersection with Millis Lane	●	

Renewable Energy Land Uses

Revisit and refine existing Town regulations regarding location and requirements for utility/community- and residential-scale solar energy and battery storage facilities	●	
Identify zoning districts where utility/community scale solar energy installation would be allowed by Special Permit	●	
Review the NYSERDA model local laws for solar and battery storage facilities and customize the recommendations to best meet Town goals	●	
Identify zoning districts where utility/community scale solar energy and battery storage facilities installation would be allowed by Special Permit		●

Summary of Action Items & Implementation

Recommended Action	Implementation	
	Short Term: 1-3 years	Medium Term: 3-5 years
Sand and Gravel Mining Uses		
Create a Soil Mining Overlay District that includes the existing sand and gravel mine in active operation		●
Consider revising use regulations to require a zone change/amendment for any new applications for sand and gravel mines. Only after receiving local approvals could the operator apply to NYSDEC for a mining permit		●

Community Character and Economic Development

Recreation		
Maintain and enhance current recreation activities and facilities to promote social vitality and health	●	

Historic Resources		
Update and digitize the 1986 Survey of Historic Resources prepared by Dutchess County Planning and Dutchess Historical Society. This update could be a written document or a database prepared in Geographic Information Systems (GIS)	●	
Create a local inventory of sites and structures of historical significance	●	
Create a historic resources tourism map that would be available on the Town's website. The map would include the historic hamlets, cemeteries, railroad routes, State/National Register listed properties, old school buildings, mills and other sites of historical significance		●
Amend the Town Historian's designated responsibilities to include implementation of the recommendations proposed in this Comprehensive Plan	●	
Participate in and support the Stanford Historical Society's Historical Marker Program (Pomeroy Markers) throughout the Town.	●	
Establish a Historic Advisory Commission that would work with the Stanford Historical Society. The Town Board would appoint the Commission members. The Commission would be a separate entity from the Historical Society and a resource to the Town Board, Planning Board, Zoning Board, and the Building Inspector for land development application review, and matters pertaining to Stanford's historic and archaeological resources	●	

Recommended Action	Implementation	
	Short Term: 1-3 years	Medium Term: 3-5 years
Economic Development		
Outreach and Incentives		
<p>Create a “Welcome to Stanford” tourism committee that would:</p> <ul style="list-style-type: none"> • Create and maintain a “Welcome to Stanford” website • Collaborate with the Stanford Business Association to develop a Downtown Business Plan • Ensure that the Stanford business directory is complete and maintained with current information • Collaborate with the Dutchess County Chamber of Commerce and neighboring communities to cross- promote existing tourism opportunities, existing and new businesses 	●	
Pursue grants to support conversion of existing structures, streetscape improvements, and façade improvements	●	
Identify vacant or under-utilized properties in the Bangall and Stanfordville hamlets and create a Town fund to incentivize adaptive reuse of properties for commercial activities		●
Promote Stanford as an agricultural community with farm markets, tours and agriculture based businesses	●	
Promote Stanford’s natural resource attractions	●	
Promote existing businesses and attractions	●	
Regulatory		
<p>Consider revisions to the zoning code that would:</p> <ul style="list-style-type: none"> • Establish home-based businesses by special permit or by right • Allow farm-stays and other agri-tourism based businesses • Encourage temporary outdoor gatherings of merchants such as farmers markets, crafts fairs, flea markets, food trucks • Establish criteria for evaluating and permitting event venues • Amend existing zoning regulations, and/or create new regulations to support renewable energy projects including solar, wind and battery storage • Ease requirements to allow flexible off-street parking in Stanfordville and Bangall hamlets, including shared parking 	●	
Prepare an inventory of short-stay residential properties and require a registration permit.	●	
Community Character and Placemaking		
Consider pedestrian-scaled lighting and streetscape improvements that are consistent with the current character in the hamlets, dedicated bicycle lanes, pedestrian crosswalks and traffic calming measures		●

Summary of Action Items & Implementation

Recommended Action	Implementation	
	Short Term: 1-3 years	Medium Term: 3-5 years
Identify opportunities for shared parking in the Bangall and Stanfordville hamlets	●	

Natural Resources and the Environment

Critical Environmental Areas and Priority Habitats

Expand several existing CEA's including Snake Hill, Millbrook Meadow and Ryder Pond to include the surrounding Priority Conservation Areas identified by Hudsonia, Ltd	●	
Designate additional CEAs including: Shaw Pond, Stanford Wildlife Preserve, Whitlock Preserve, the Town Landfill area, and once determined, the potential wellhead protection area		●
Protect the two Large Forest Blocks (areas > 1000 acres of contiguous forest, Figure 5-3) from further fragmentation. Protection could be achieved by implementing incentive programs including Purchase of Development Rights (PDR)		●
Continue to use all available habitat assessment materials, guidance documents, and mapping as evaluation tools during the site plan and subdivision review process	●	

Wetlands, Watercourses and Waterbodies

Consider a local wetlands ordinance that would require additional oversight for disturbance to wetlands smaller than 12.4 acres, isolated wetlands and stream corridors. The ordinance could incorporate a buffer around these wetlands and streams, which might vary according to the size of the wetland in question	●	
--	---	--

Floodplains

Consider participating in the NFIP to obtain flood insurance coverage	●	
---	---	--

Steep Slopes

Consider code revisions that preclude development on slopes in excess of 25 percent, except in cases where disturbance would be minimal	●	
---	---	--

Recommended Action	Implementation	
	Short Term: 1-3 years	Medium Term: 3-5 years
<p>For proposed development applications with the potential to significantly impact steep slopes between 15 and 25 percent, consider amending the code to:</p> <ul style="list-style-type: none"> • Require a steep slope analysis/assessment to confirm no practical alternatives • Require a special permit for development on slopes between 15 percent and 25 percent 		●

Scenic Viewsheds

Ridgeline Protection

Consider establishing a definition of “ridgeline” and protection standards and guidelines, and incorporating them in the Town’s Zoning Code	●	
Consider identifying and mapping the Town’s significant ridgelines	●	
Consider establishing siting guidelines to locate buildings and other structures below the ridgeline. Guidelines might include locating structures to prevent rooflines from extending above the existing tree line		●
Consider undertaking a siting analysis to identify locations for cell towers, antennae, and wind turbines, and identify potential locations		●
Consider specifying design criteria to minimize the impact of these types of uses on the visual environment		●

Scenic Roads

Continue to implement and oversee local protection laws for existing scenic roads	●	
Consider preparing applications for New York State or National Scenic Byway designation for currently designated local scenic roads		●
Identify additional rural and scenic roads for local, state or national designation		●

Scenic Viewshed Protection

Create a Scenic Viewshed Map to identify important viewsheds, including those identified in the 1980 Master Plan	●	
Require visual impact analyses for land development applications		●

Summary of Action Items & Implementation

Recommended Action	Implementation	
	Short Term: 1-3 years	Medium Term: 3-5 years
Encourage voluntary compliance with the NYSDEC guidelines for assessing and managing visual impacts of development	●	
Consider providing incentives to landowners with properties located within the designated Scenic Viewsheds to preserve and/or conserve their land and/or locate any additional proposed structures with minimal impact on the viewshed		●

Agriculture

Adopt a “Right-to-Farm” Law establishing Stanford as a “Right-to-Farm” community	●	
Prepare an Agricultural and Farmland Protection Plan	●	
Collaborate with the Dutchess County Department of Planning and Development to assess the “farm-friendliness” of current regulations	●	
<p>Review the Town’s Zoning Code for the following specific initiatives to promote the development of local food systems:</p> <ul style="list-style-type: none"> • Expand the list of allowed home small agri-business operations • Ensure consistency with State and County “Right-to-Farm” laws and definitions • Ensure that local laws are consistent with NY State Agriculture and Markets Law (section 305-b), which requires an agricultural data statement for any application for a special use permit, site plan, use variance, or subdivision that occurs on property within an agricultural district or within 500 feet of a farm operation located in an agricultural district • Allow “farm-stays” that would provide farmers with an opportunity to rent rooms (limited stay) either in the farmhouse or in a separate structure on the property • Increase flexibility for employee housing on land used for agriculture • Revise setback requirements to allow flexibility in siting of accessory farm buildings • Provide more flexible permit requirements for Farm Markets 	●	

Utilities and Infrastructure

Groundwater, Aquifer and Wellhead Protection

Form a Groundwater Protection Committee, which would be tasked with advancing the recommendations of the Water Supply Protection Plan and recommending associated changes to the Town’s procedures and codes	●	
Establish an on-going groundwater monitoring program to continue to track groundwater quality	●	

Recommended Action	Implementation	
	Short Term: 1-3 years	Medium Term: 3-5 years
Review policies and procedures at Town-owned facilities (garage, salt-shed, transfer station) to ensure that no hazardous substances are escaping to the groundwater	●	
Reduce road salting to the minimum necessary for safe driving by following State guidelines for efficient salt application and using up-to-date equipment for salting and plowing	●	
Evaluate and map the potential wellhead location identified in previously completed reports and other potential wellhead locations for protection		●
Consider adopting controls to regulate land uses around potential well-head locations		●
Broadband/High-Speed Internet Service		
Identify and map Stanford homes and businesses without current access to broadband service	●	
Collaborate with adjacent communities to attract additional providers and create a competitive environment	●	
Investigate access to Round III of the New NY Broadband Program that provides last-mile funds for high-speed internet access	●	



Appendix

Image Credit: © Nina Peek

Appendix

Appendix Table 1: Population Trends and Projections by Age, Stanford NY: 2000-2030

Age Range	2000	2010	2014-2018*	2030 Projection
0-14	668	590	479	535
15-24	366	594	497	483
25-34	372	310	264	262
35-44	626	441	387	454
45-54	644	735	621	659
55-64	432	625	767	492
65+	436	528	743	771
Total Population	3,544	3,823	3,758	3657

Source: 2000 and 2010: US Census Bureau; 2018: American Community Survey 5-Year Estimate; 2030: ACS 5-Year Estimate for Dutchess County and Step-Down projection

*2014-2018 data are based on ACS 5-year survey data

Appendix Table 2: Employed Civilian Population 16 Years and Over - By Occupation

Age Range	2010	2014-2018*
Agriculture, forestry, fishing and hunting, and mining	39	99
Construction	245	263
Manufacturing	104	85
Wholesale trade	43	35
Retail Trade	179	14
Transportation and warehousing, utilities	141	153
Information	109	**
Finance and insurance, and real estate and rental and leasing	82	151
Professional, scientific, and management, and administrative	133	230
Educational service and health care and social assistance	532	579
Arts, entertainment, recreation, accommodation, and food services	88	146
Other services, except public administration	139	116
Public Administration	88	131

Source: 2010: U.S. Census; 2018: American Community Survey 5-Year Estimate

*2014-2018 data are based on ACS 5-year survey data

** Data unavailable due to high margin of error

Appendix Table 3: Households by Income, Stanford, NY: 2000-2018

	2000	2010	2014-2018*
<\$15,000	109	36	46
\$15,000 to \$24,999	112	136	82
\$25,000 to \$34,999	180	90	133
\$35,000 to \$49,999	231	114	156
\$50,000 to \$74,999	318	480	209
\$75,000 to \$99,999	168	251	154
\$100,000 to \$149,999	184	206	303
\$150,000 to \$199,999	26	70	182
\$200,000+	70	114	242
Total Households	1513	1497	1506

Source: 2000 and 2010: U.S. Census; 2018: American Community Survey 5-Year Estimate
 *2014-2018 data are based on ACS 5-year survey data

Appendix

Milan

Pine Plains

199

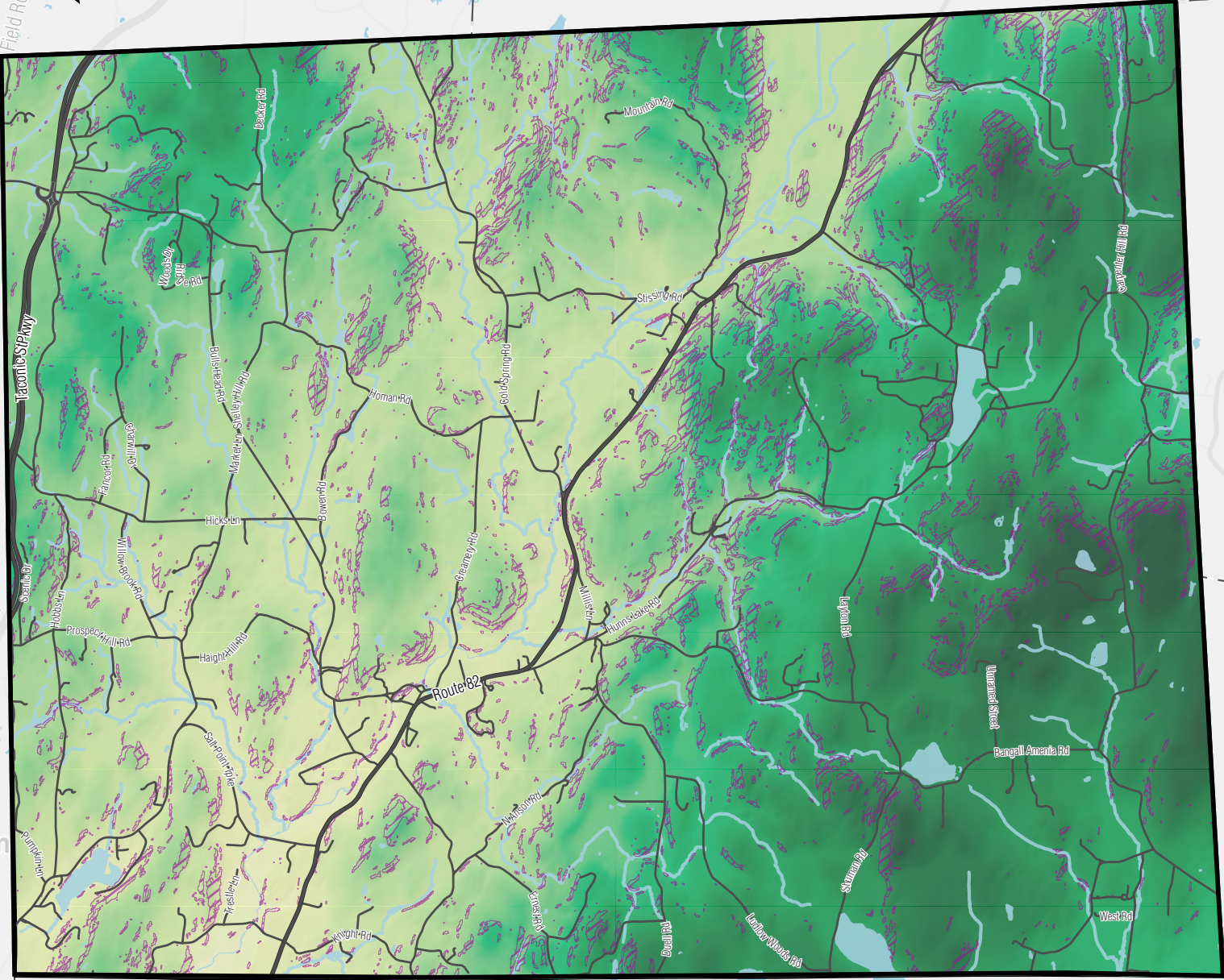
Route 199

Strissing Mountain Rd

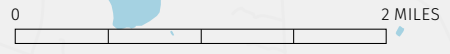
Lake Rd

Hicks Hill Rd

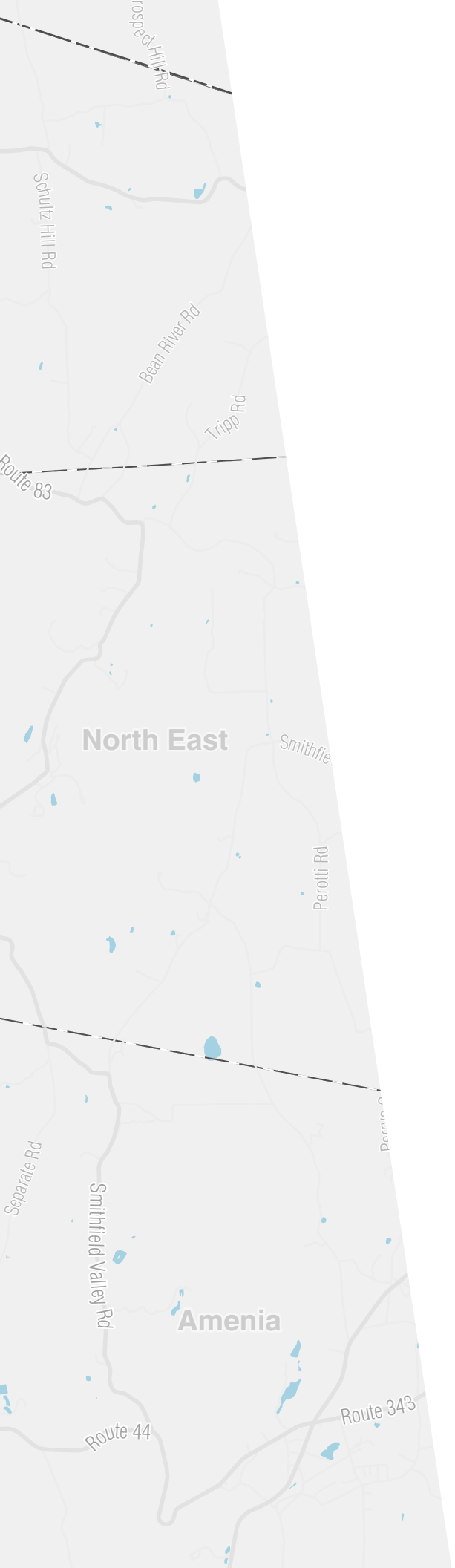
South Rd



Washington




Shunpike

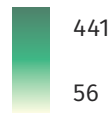


Topography

Figure Appendix-1

 >25% Slope

Shaded by Elevation (feet)



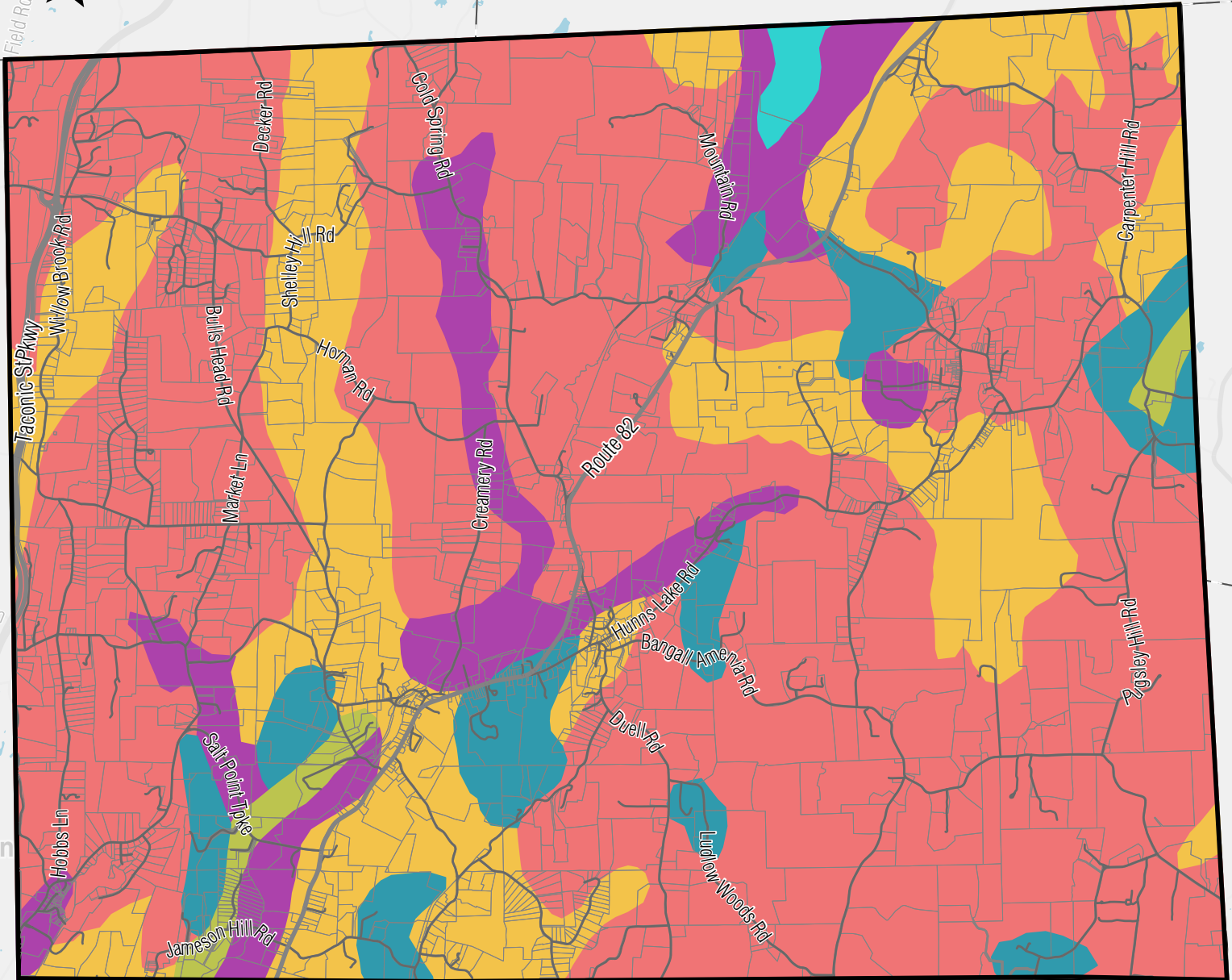
Source: Dutchess County Department of Planning & Development, 2020.

Milan

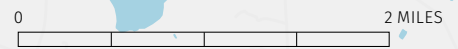
Pine Plains

199

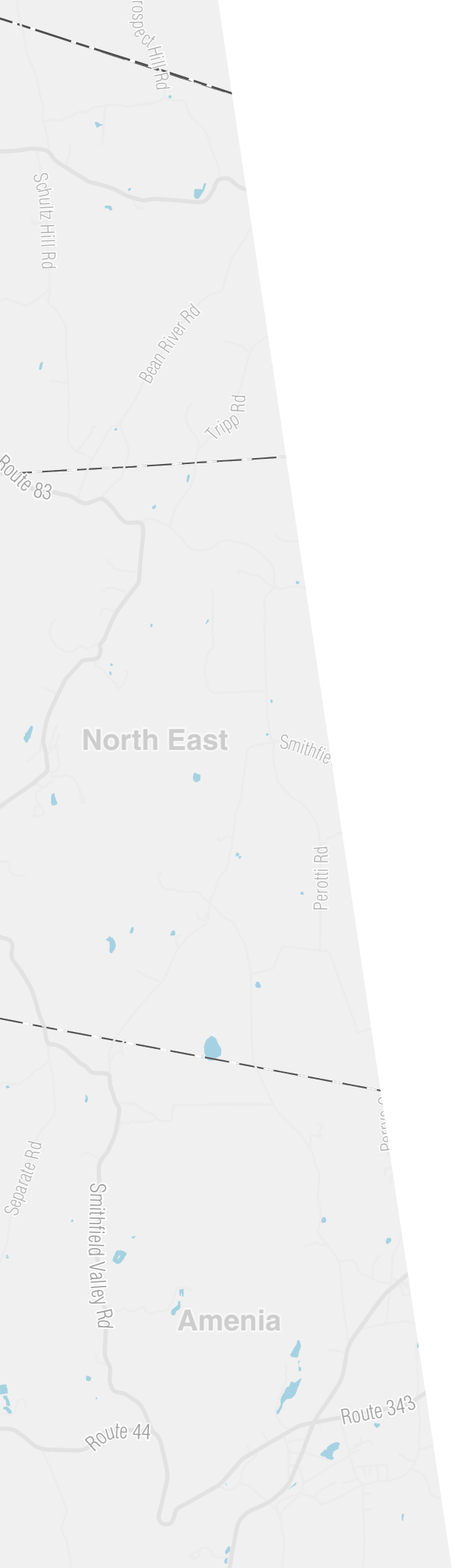
N



Washington



Shunpike



Surficial Geology Composition

Figure Appendix-2

Composition

- Recent Alluvium
- Kame Deposits
- Outwash Sand and Gravel
- Swamp Deposit
- Bedrock
- Till

Sources: Statewide Bedrock Geology, NYS Museum / NYS Geological Survey.



Appendix

Image Credit: © Nina Peek

Appendix

Appendix Table 1: Population Trends and Projections by Age, Stanford NY: 2000-2030

Age Range	2000	2010	2014-2018*	2030 Projection
0-14	668	590	479	535
15-24	366	594	497	483
25-34	372	310	264	262
35-44	626	441	387	454
45-54	644	735	621	659
55-64	432	625	767	492
65+	436	528	743	771
Total Population	3,544	3,823	3,758	3657

Source: 2000 and 2010: US Census Bureau; 2018: American Community Survey 5-Year Estimate; 2018: ACS 5-Year Estimate for Dutchess County and Step-Down projection

*2014-2018 data are based on ACS 5-year survey data

Appendix Table 2: Employed Civilian Population 16 Years and Over - By Occupation

Age Range	2010	2014-2018*
Agriculture, forestry, fishing and hunting, and mining	39	99
Construction	245	263
Manufacturing	104	85
Wholesale trade	43	35
Retail Trade	179	14
Transportation and warehousing, utilities	141	153
Information	109	**
Finance and insurance, and real estate and rental and leasing	82	151
Professional, scientific, and management, and administrative	133	230
Educational service and health care and social assistance	532	579
Arts, entertainment, recreation, accommodation, and food services	88	146
Other services, except public administration	139	116
Public Administration	88	131

Source: 2010: U.S. Census; 2018: American Community Survey 5-Year Estimate

*2014-2018 data are based on ACS 5-year survey data

** Data unavailable due to high margin of error

Appendix Table 3: Households by Income, Stanford, NY: 2000-2018

	2000	2010	2014-2018*
<\$15,000	109	36	46
\$15,000 to \$24,999	112	136	82
\$25,000 to \$34,999	180	90	133
\$35,000 to \$49,999	231	114	156
\$50,000 to \$74,999	318	480	209
\$75,000 to \$99,999	168	251	154
\$100,000 to \$149,999	184	206	303
\$150,000 to \$199,999	26	70	182
\$200,000+	70	114	242
Total Households	1513	1497	1506

Source: 2000 and 2010: U.S. Census; 2018: American Community Survey 5-Year Estimate
 *2014-2018 data are based on ACS 5-year survey data

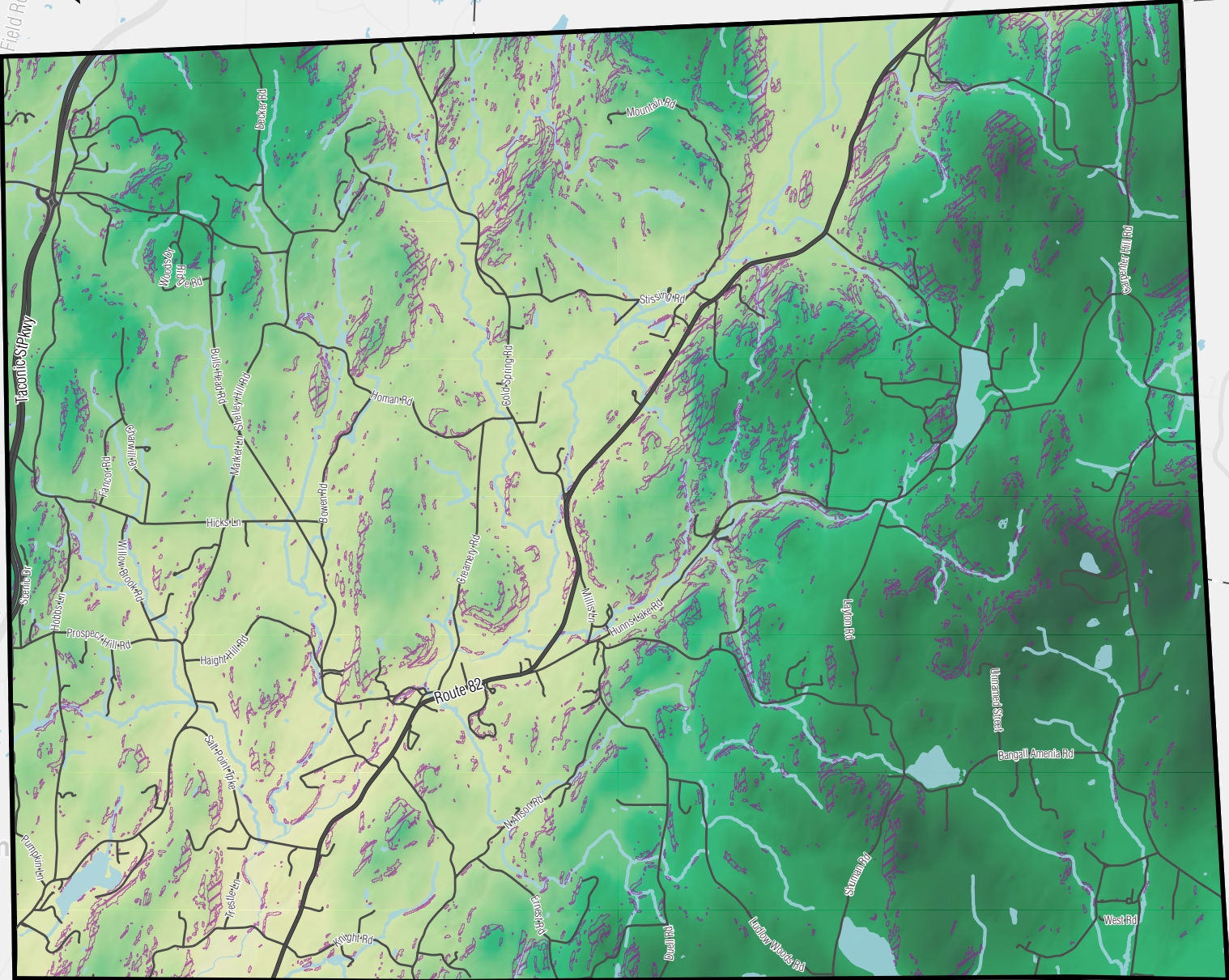
Appendix

Milan

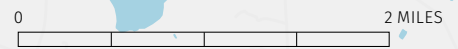
Pine Plains

199

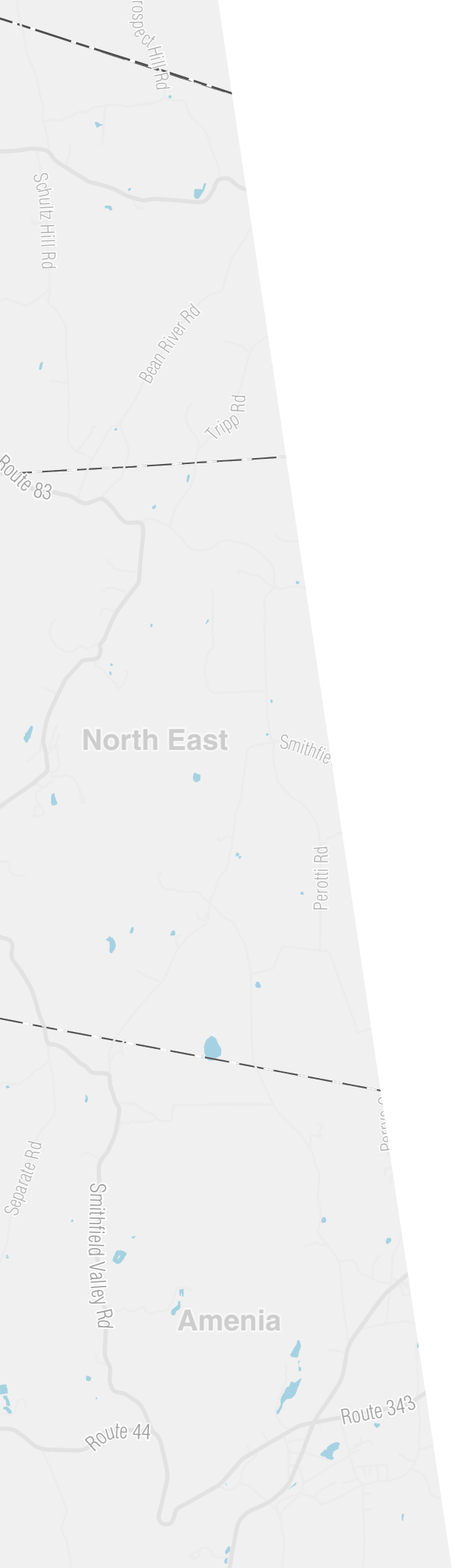
N



Washington




Shunpike

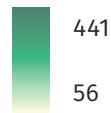


Topography

Figure Appendix-1

 >25% Slope

Shaded by Elevation (feet)



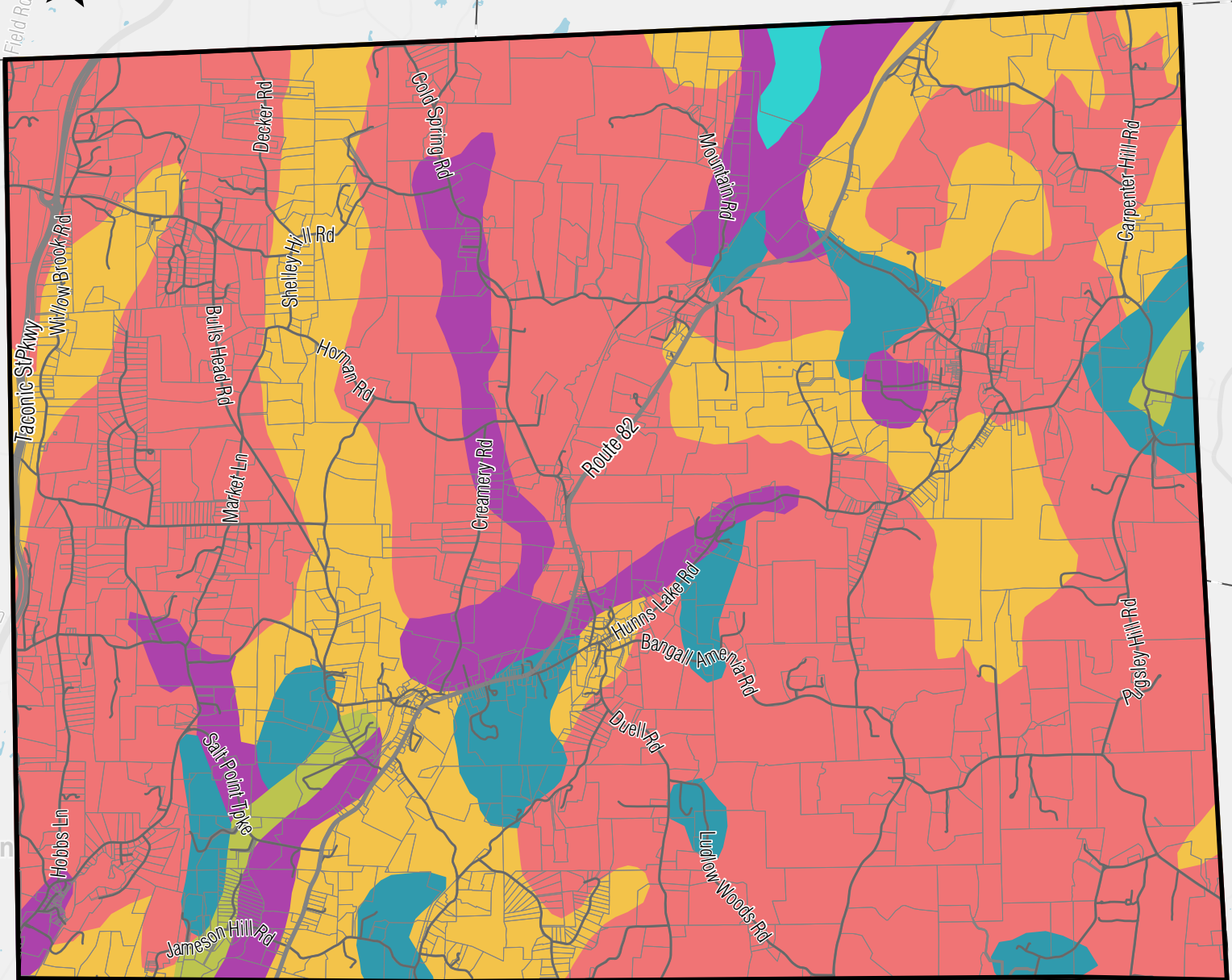
Source: Dutchess County Department of Planning & Development, 2020.

Milan

Pine Plains

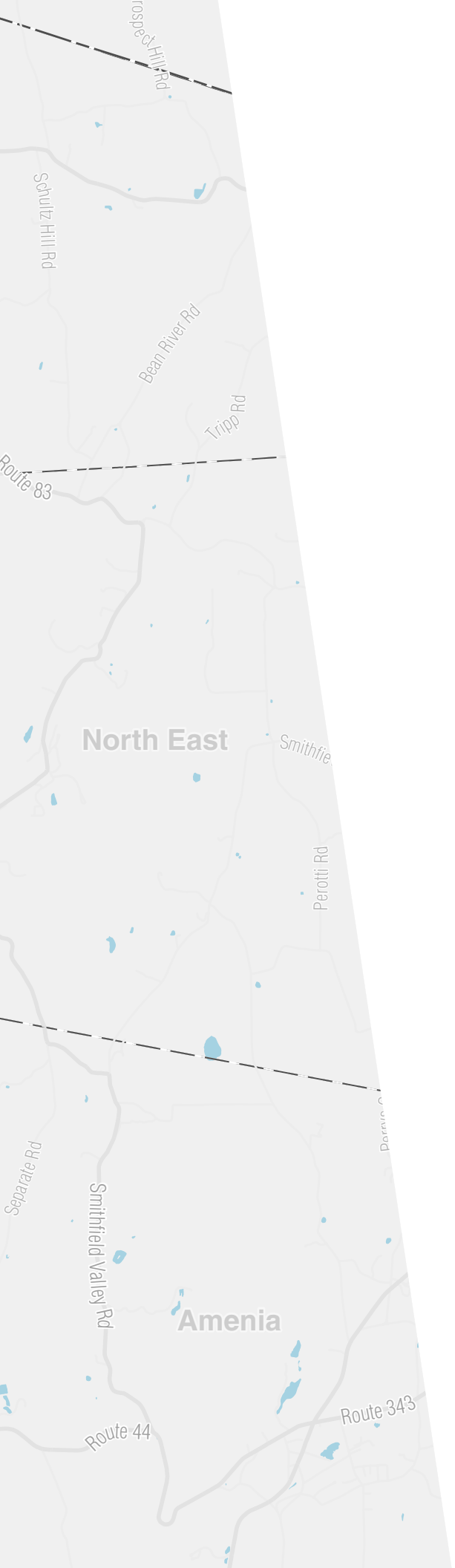
199

N



Washington

Shunpike



Surficial Geology Composition

Figure Appendix-2

Composition

- Recent Alluvium
- Kame Deposits
- Outwash Sand and Gravel
- Swamp Deposit
- Bedrock
- Till

Sources: Statewide Bedrock Geology, NYS Museum / NYS Geological Survey.

Town of Stanford Master Plan Update Interactive Polling

HOSTED BY
The Town of Stanford Master Plan Committee

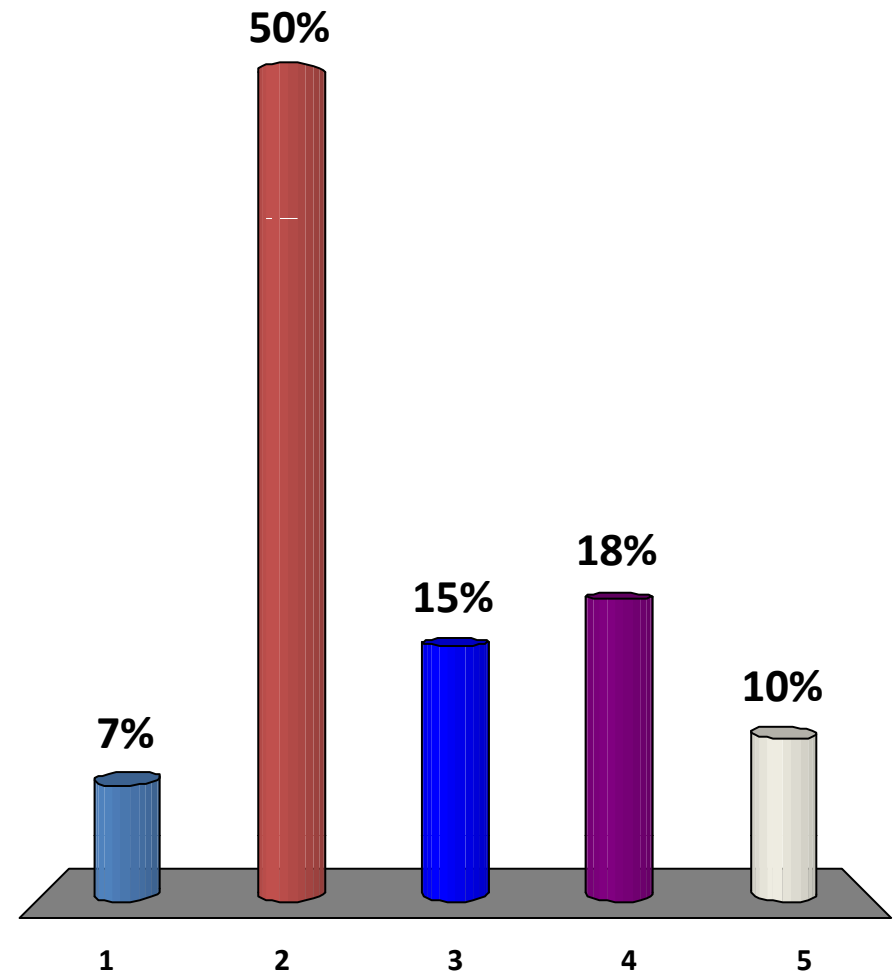
February 26, 2011





How long have you lived in the Town of Stanford?

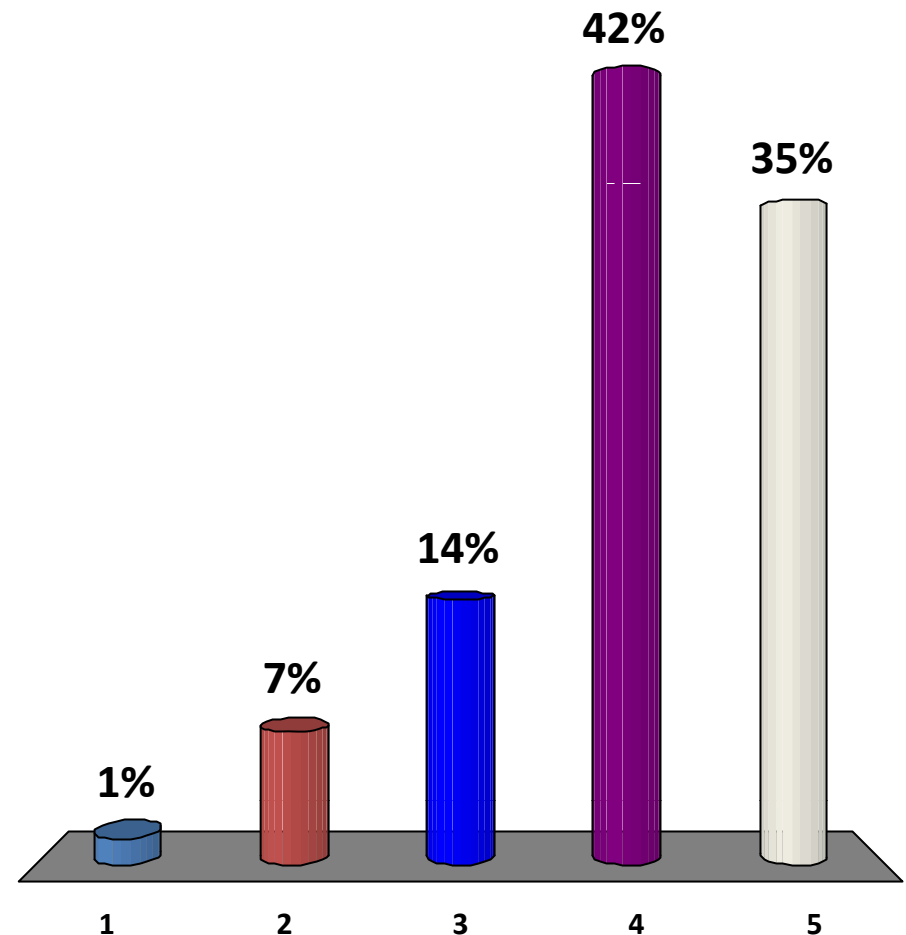
1. All my life
2. 20+ years
3. 10 to 20 years
4. Less than 10 years
5. Not a full time or part time resident





How old are you?

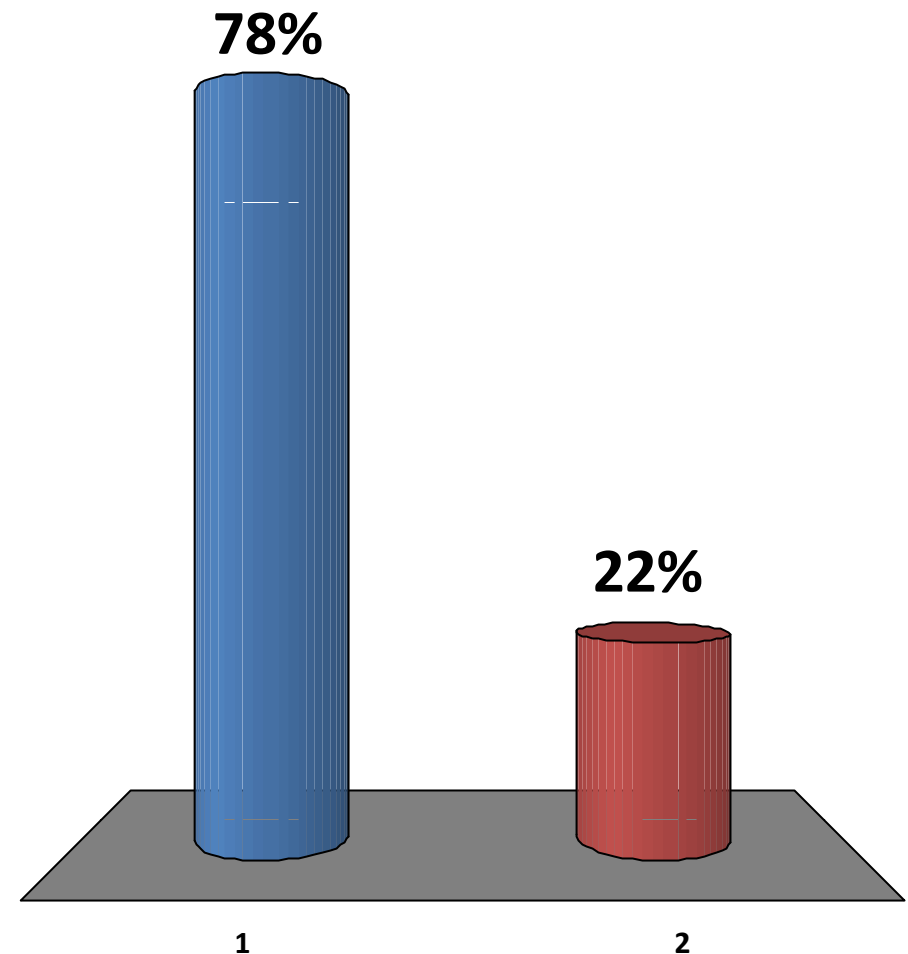
1. 0-24 years old
2. 25-34 years old
3. 35-49 years old
4. 50-64 years old
5. 65 years and older





Is Stanford your primary residence?

1. Yes, Stanford is my primary residence
2. No, Stanford is not my primary residence





If some residential growth were to occur in the Town of Stanford, where should it be encouraged?

- 32% 1. Hamlet of Stanfordville
- 3% 2. Hamlet of Bangall
- 35% 3. Both Stanfordville & Bangall
- 24% 4. Distributed throughout the Town
- 5% 5. Only along major roadways



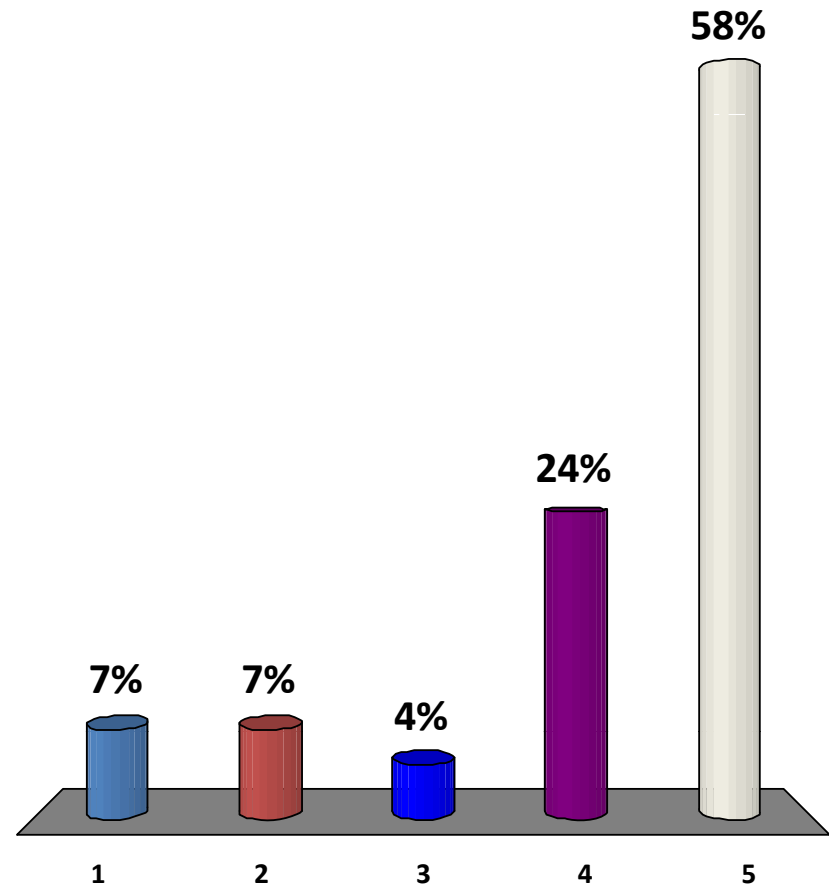
If some commercial growth were to occur in the Town of Stanford, where should it be encouraged?

- | | |
|-----|------------------------------------|
| 49% | 1. Hamlet of Stanfordville |
| 0% | 2. Hamlet of Bangall |
| 34% | 3. Both Stanfordville and Bangall |
| 8% | 4. Distributed throughout the Town |
| 8% | 5. Only along major roadways |



Rate your support for Town adoption of design guidelines to encourage pedestrian friendly hamlets. (rate on a scale of 1 to 5)

1. No Support
2. Limited Support
3. Neutral
4. Moderate Support
5. Enthusiastic Support





Rate your support on a scale of 1 to 5 for the Town offering incentives (for example, allowing more units) to developers willing to construct senior and/or workforce housing.

8% 1. No Support

15% 2. Limited support

6% 3. Neutral

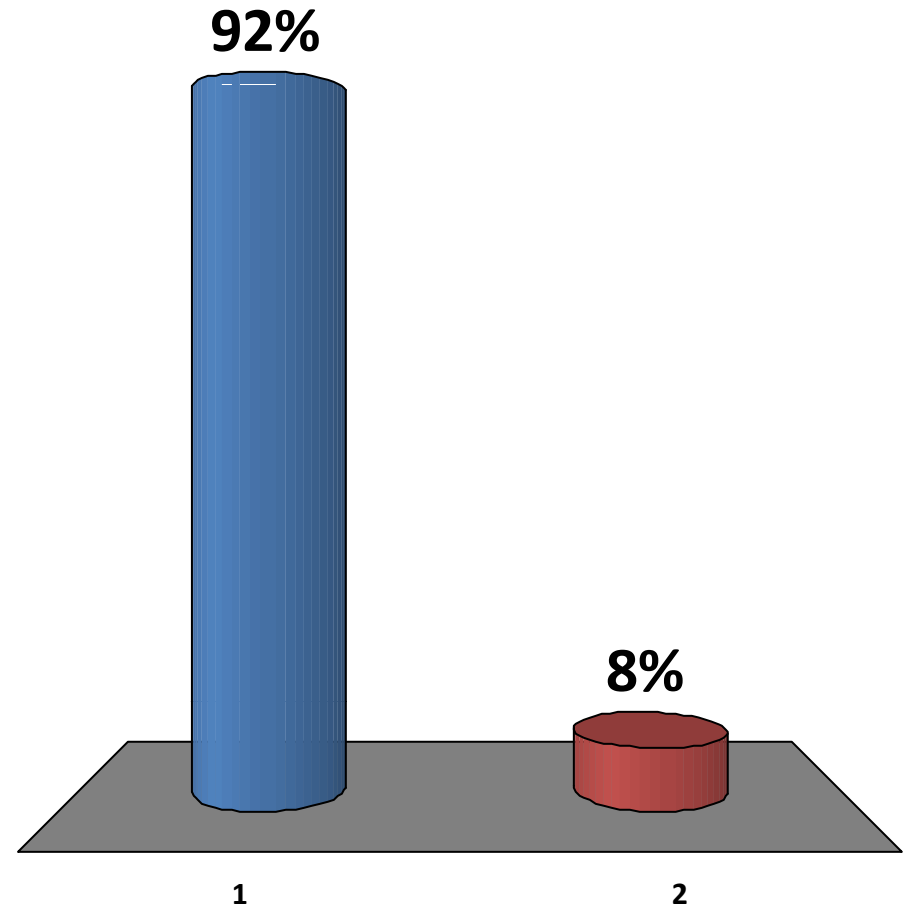
31% 4. Moderate support

39% 5. Enthusiastic support



Would you support the Town making zoning changes to encourage agricultural and livestock farming activities?

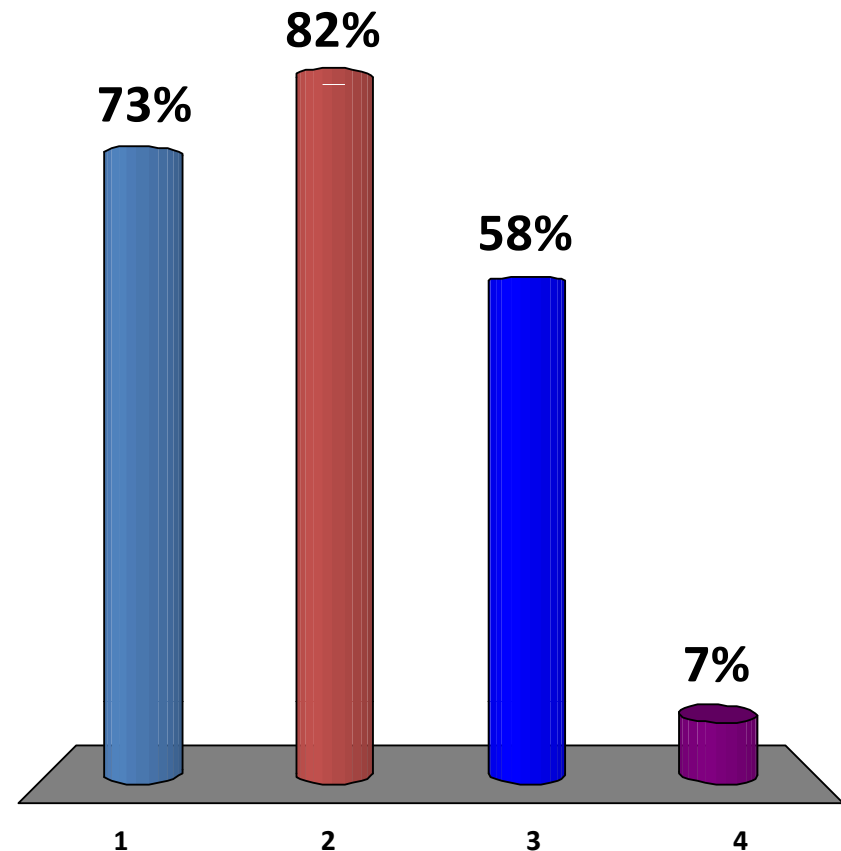
- 1. Yes
- 2. No





Which of the following measures would you support to encourage historic preservation in Town? (choose up to 3)

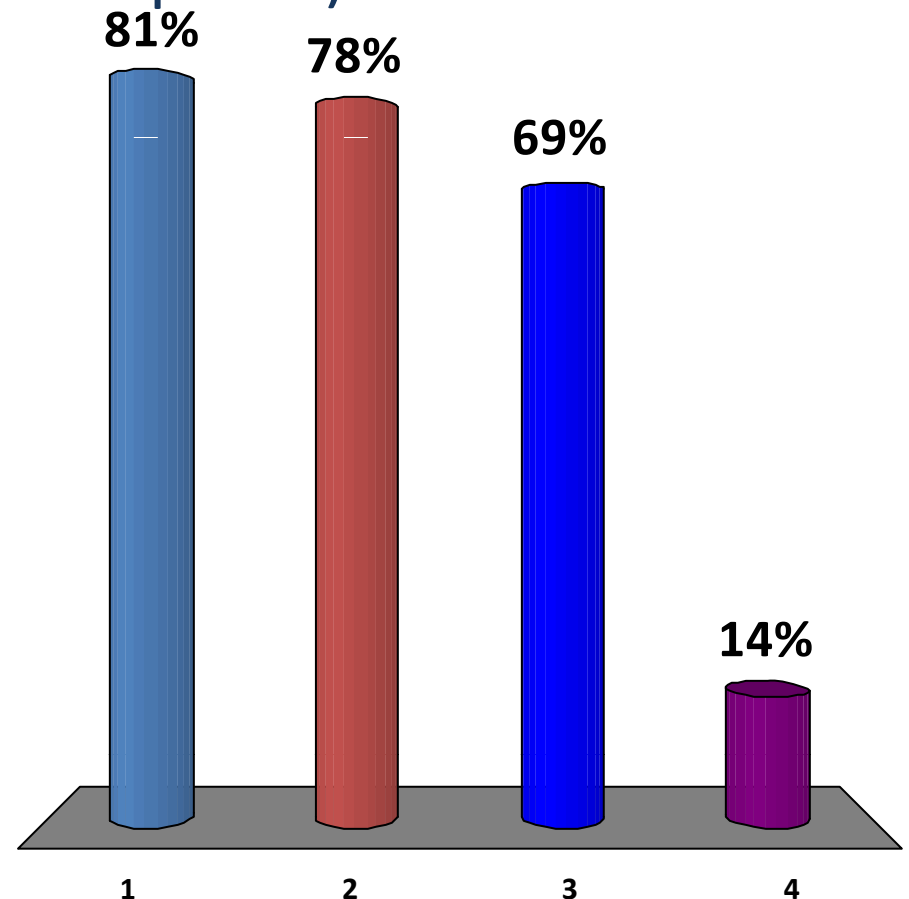
1. Town Historical Review Committee
2. Local inventory of historic resources
3. Nomination of buildings/districts to State/National Register
4. None of the above





Which of the following measures would you support to encourage the conservation of natural resources in Town? (choose up to 3)

1. Wetland Protection Law
2. Ridgeline and Steep Slopes Protection
3. Scenic Viewshed Identification
4. None of the above



Town of Stanford Master Plan Update Public Discussion and Conversation

HOSTED BY
The Town of Stanford Master Plan Committee

February 26, 2011





Who We Are

- Nine member Master Plan Committee
- Formed by Town Board in March 2010
- Given mission to create a new stand-alone draft Master Plan document



Open Process

The Committee is dedicated to an open planning process, inviting input from the entire Stanford community.

- How have we done this?
 - Created a Master Plan website (www.stanfordmasterplan.org) that includes:
 - Maps and documents
 - Meeting agendas and minutes
 - Project schedule
 - Conduct open, advertised meetings
 - Occur on the 2nd and 4th Tuesday of each month
 - Privilege of the floor extended to all citizens
 - Meetings are audio recorded and available in the Town Clerk's Office



Accomplishments to Date

- Completed an extensive RFP process to hire a planning consultant
- Set an aggressive 10 month schedule for completion of Master Plan
- Created and maintained our own website
- Developed consensus on preliminary goals of the Master Plan
- Received Greenway Connection Grant



Our Tasks

- Review previous Town studies (from 1980 to present) and identify common themes
- Develop goals and objectives
- Develop priority focus areas
- Prepare conceptual plans and strategies for key focus areas
- Identify action items for each focus area
- Prepare Draft and Final Master Plan
- Guide document through SEQRA Process and Plan Adoption



Our Schedule

- **December 22, 2010:** Kick-off meeting with Town Board and Master Plan Committee
- **January – February, 2011:** Meet with committees, groups, boards and Community Conversation #1
- **March – April:** Prepare Draft Plan
- **April – May:** Community Conversation #2 and meetings with Town Board; Revisions to Draft Plan
- **June – July:** Develop Implementation Measures and Prepare Final Plan; Present Final Plan to the Public
- **August – September:** Initiate SEQRA Process
- **October 2011:** Adopt Master Plan



Progress – We have talked with:

- Three meetings with the Master Plan Committee
(Town Board Member(s) attended)
- Conservation Advisory Council
- Farm & Agriculture Committee
- Historical Society
- Recreation Commission
- Forever Young Club
- Representatives of the Business Community
- The Grange



What we Learned

- Preserve the Rural Character
- Protect Natural Resources
- Plan and Guide for Future Growth
- Promote Economic and Social Vitality



Interactive Workshop

- Live/Work Mapping
- Breakout Sessions
 - Environmental Issues
 - Growth and Development Issues
- Priority Goals & Objectives
- Interactive Polling



Agenda

Presentation – Auditorium	10:15 – 10:30
Breakout Session #1	10:35 – 11:05
10 minute break	11:05 – 11:15
Breakout Session #2	11:20 – 11:50
Breakout Summary – Auditorium	11:55 – 12:10
Interactive Polling	12:15 – 12:40
Thank you and Next Steps	12:45 – 1:00



Breakout Sessions

- Breakout Session 1 – Environmental Issues
 - RED NAME TAGS – Town Board Meeting Room
 - BLUE NAME TAGS – Secondary Meeting Room

- Breakout Session 2 – Growth and Development Issues
 - RED NAME TAGS – Town Board Meeting Room
 - BLUE NAME TAGS – Secondary Meeting Room



Ground Rules

- Limited time
- Every opinion is valid
- Everyone gets to talk
- Keep the conversation positive and constructive
- Keep the discussion moving – don't get hung up on points of disagreement
- Try to think of potential solutions as well as problems



Meet your facilitators

- TOWN BOARD MEETING ROOM – RED NAME TAGS
 - Table 1: Carol Hanlon (MPC) and Bob Butts (MPC)
 - Table 2: Gary Lovett (MPC) and Michelle Turck
 - Table 3 – John Saccardi (S&S/VHB) and Jan Weido (MPC)
-
- SENIOR ROOM – BLUE NAME TAGS
 - Table 1: Conrad Levenson (MPC) and John Royall (MPC)
 - Table 2: Nina Peek (S&S/VHB) and Tom Angell (MPC)
 - Table 3: CJ Hoss (S&S/VHB) and Spence Hall (MPC)



Report Back

- Preserve the Rural Character
- Natural Resource Protection
- Plan and Guide for Future Growth
- Promote Economic and Social Vitality



Next Steps

- On-going Input
- Master Plan Committee meets 2x/per month
- Visit the project website for updates:
www.stanfordmasterplan.org

Water Supply Protection Plan

for

**Town of Stanford
Dutchess County, New York**

Prepared for:

Town of Stanford
Town Hall
P.O. Box 436, Route 82
Stanfordville, New York, 12581

Prepared by:

Town of Stanford
Groundwater Resources Committee
Roy Budnik
Mark Burdick
Mark Germond
Gary Lovett
Jan Weido

Report Date:
October 12, 2000

Table of Contents

1.0 EXECUTIVE SUMMARY.....	1
2.0 INTRODUCTION	1
2.1 PURPOSE	1
2.2 GROUNDWATER RESOURCES STUDY	2
2.3 ACKNOWLEDGMENTS.....	3
3.0 POTENTIAL THREATS TO WATER QUALITY.....	3
3.1 INTRODUCTION	3
3.2 SEPTIC SYSTEMS.....	4
3.3 AGRICULTURE	5
3.4 UNDERGROUND STORAGE TANKS	5
3.5 DISPOSAL OF HAZARDOUS CHEMICALS	5
3.6 SPILLS	6
3.7 ROAD SALT	6
4.0 PROTECTION MEASURES.....	6
4.1 WELL OWNERS	6
4.2 TOWN GOVERNMENT.....	7
4.3 OTHER AGENCIES	9
5.0 COMMUNITY WATER SYSTEM.....	10
6.0 CONCLUSIONS AND RECOMMENDATIONS	11
6.1 CONCLUSIONS	11
6.2 RECOMMENDATIONS.....	11
7.0 APPENDICES	
7.1 GROUNDWATER RESOURCES STUDY (EXCERPT)	
7.2 LIST OF POTENTIAL CONTAMINATION SOURCES	

Water Supply Protection Plan Town of Stanford

1.0 Executive Summary

The groundwater quality in the Town of Stanford is relatively good. A study of selected wells in the Town identified only a few problem areas, primarily from elevated coliform levels. Evidence at present indicates that continuing use of individual wells and septic systems seems viable, even in the Rural Center with complete future build-out under current zoning.

There are, however, several potential contaminant sources that have or may cause problems in the future. These include malfunctioning or poorly designed septic systems, poor manure-, fertilizer-, or pesticide-management on farms, leaking underground storage tanks, improper disposal of hazardous chemicals, spills, and road salt. These threats will probably increase with increasing development in the Town.

Individuals bear the greatest responsibility for the protection of their own wells and those of their neighbors. However, there are steps that the Town can also take to protect the groundwater resources of the community. These include the proper maintenance of Town facilities, the education of well owners, review of proposed projects as to the potential impacts on groundwater, and the promulgation of regulations. Other agencies, including those at the County and State level, should be informed as to the importance of groundwater to the residents of the Town. Actions of such agencies should be reviewed to insure that groundwater protection is given a high priority.

Although the water quality is currently good, an increase in density may result in the degradation of that quality; the current areas of high density (hamlet and lake districts) are especially sensitive to future problems. Several steps should accompany any proposal to increase densities. These include sophisticated modeling of the groundwater to verify that water quality would not degrade under proposed zoning rule changes. This is especially critical in the current areas of high density, such as the hamlets and lake districts. In addition, it may be necessary in the future to provide a central water system to the hamlet area and lake districts. Accordingly, a detailed hydrogeologic investigation should be conducted to identify possible well sites, if a significant increase in density is proposed or if a trend in increasing water quality problems is noted. These trends could be detected through an ongoing monitoring program in selected areas of the town. Finally, the current "Density Increase" areas should be evaluated as there appear to be no rational bases for these designations.

2.0 Introduction

2.1 Purpose

The residents of the Town of Stanford depend entirely on individual wells for the supply of clean drinking water. The Town Board recognized the need to protect this

precious resource and appointed a Groundwater Resources Committee (GRC) to investigate the current status of groundwater quality in the community and to recommend what, if any, measures should be taken to protect water quality in the future.

The results of the first phase, evaluation of current groundwater conditions in the Town, has been completed with the preparation of the *Groundwater Resources Study*. These results are discussed below. In this *Water Supply Protection Plan*, the GRC reports on the results of the second phase of its work, which includes an evaluation of the primary problems with and threats to the Town water supply. Possible measures are identified to improve existing water quality in the Town and to protect the water supply in the future.

2.2 Groundwater Resources Study

The *Groundwater Resources Study*, which was produced by Horsley & Witten, Inc., identified the sources of groundwater in the Town and reported on the results of a testing program of 48 selected wells. The study also enumerated potential threats to the water supply and possible changes in water quality in the future. The *Executive Summary* of that *Study* is contained in Appendix 7.1 of this *Plan* for ease of reference. The complete study is available in the Town Clerk's office for public review.

The *Study* identified two primary sources of water for the Town. These are a bedrock aquifer, which underlies the entire Town, and sand and gravel aquifer, which is locally utilized, especially in the hamlet of Stanfordville.

Sampling of 48 residential wells was conducted by the GRC and tested for nitrates, coliform, and chlorides by the Dutchess County Department of Health. The *Study* reports that six of the water samples had coliform levels above the State standards and one well exceeded the standard for chlorides. Other wells had levels of the tested constituents that were elevated but were within State standards. The conclusions of this *Plan* are based, in part, on this limited water sampling program; however, as recommended in the *Study*, retesting of wells with elevated pollutant levels is warranted before any statistical weight is given to the results.

Nitrogen levels in the groundwater were modeled in the *Study* under current and permitted build-out conditions in the Stanfordville hamlet area. This model predicted nitrogen loading within acceptable levels under all currently allowed scenarios within the Rural Center zoning district. However, even though conservative inputs were used in model, the GRC believes that there is considerable uncertainty in the predictions because of the simplistic assumptions in the model. In addition, the Horsley model did not include other pollutants which may increase with increasing development.

2.3 Acknowledgments

This *Plan* was produced by the Town of Stanford Groundwater Resources Committee; members of the committee include: Gary Lovett, Chairman, Jan Weido, Mark Burdick, Mark Germond, and Roy Budnik. Dr. Budnik was principal author of the *Plan*.

The *Groundwater Resources Study* was funded by the Town of Stanford and by a grant from the Dutchess County Water and Wastewater Authority. The Dutchess County Department of Health provided well logs for recently drilled wells in the Town, the results of prior water testing in the Town, and testing services for water samples from 48 wells that were collected as part of that study. The Committee would also like to thank those homeowners who participated in the study.

The Dutchess Land Conservancy conducted the build out analysis for the Town, the Environmental Management Council provided GIS mapping services, and the Dutchess County Soil and Water Conservation District supplied information on agricultural land uses.

3.0 Potential Threats to Water Quality

3.1 Introduction

The GRC identified six categories of potential sources of contamination to the water supply in the Town. These include: septic systems, agriculture, underground storage tanks, use and storage of hazardous materials, spills of petroleum products and hazardous materials, and road salt. It is likely that these threats will increase as development increases in the Town.

Table 1 summarizes, by land use, the results of the testing conducted for nitrate and coliform as part of the *Groundwater Resources Study*. A threshold level of 1 ppm was used in the preparation of the table as an indicator value; the State standard for nitrates is 10 ppm and 0 coliform. Eighty per cent (4 out of 5 of those tested) of the wells in the agricultural areas of Town had nitrate levels higher than the selected threshold (1 ppm) but none had revealed coliform contamination. On the other hand, only 8.7% of the wells in the non-agricultural rural parts of Town had elevated nitrate levels, but 13% had indications of coliform contamination. These results are subject to confirmation by retesting.

Table 1 - Comparison of nitrate and coliform levels by land use¹.

LAND USE	# OF WELLS	NITRATE > 1	COLIFORM
agriculture	5	80.0%	0.0%
rural	23	8.7%	13.0%
lake	5	60.0%	40.0%
hamlet	15	33.3 %	6.7%

¹ Of the 48 wells tested as part of the *Groundwater Resources Study*

As discussed below, septic systems are probably the greatest ongoing threat to water quality from coliform and nitrate contamination and the most difficult with which to deal because of their use throughout the Town, because each system is under private ownership, and because there is a lack of economically viable alternatives. Nutrient and biological contamination from agriculture and chemical pollution from leaking underground storage tanks, spills, and inappropriate use, storage, and disposal of hazardous materials pose the greatest local threats to individual wells. These threats can greatly be reduced through the use of pollution prevention measures and best management practices.

3.2 Septic Systems

The residents of the Town rely on individual sanitary disposal systems (SDS) for the treatment of sewage. These systems typically result in the discharge of minimally treated waste to the ground. In general, properly designed and functioning SDS's pose no threat to the groundwater quality. However, the *Groundwater Resources Study* identified septic systems as the possible sources of contamination in several wells in the Town. Approximately 15% of the 48 wells tested for the *Study* exceeded drinking water standards for total coliform counts, which may be indicative of contamination from septic systems.

Many of the SDS's in the Town were installed prior to the promulgation of Department of Health regulations on system design and construction. These older systems may have been installed too close to a water well, have an undersized disposal field, or have inadequate spacing between the water table and the field. It is not uncommon for the location of this older systems to be unknown to the owner; as a result, maintenance of the systems may be non-existent until a problem is identified.

A number of formerly single-family dwellings in the Town have been converted into multi-family dwellings without concomitant expansion of the septic system to accommodate higher flows. Higher water usage and increased sewage discharge rates increase the likelihood of elevated levels of coliform and nitrates in the drinking water of these dwellings and neighboring residences.

The GRC suspected that wells in areas of the Town with relatively high densities of residences, such as Hunns Lake, Upton Lake, and the Stanfordville/Bangall rural center, may be prone to contamination from septic system effluent. The well sampling program conducted as part of the *Groundwater Resources Study* confirmed this suspicion (Table 1). Many wells and septic systems in these areas are relatively old and were installed prior to modern requirements. The close spacing of wells and SDS's in these areas provides inadequate filtering capacity in the soils.

Although the well-sampling program in *Groundwater Resources Study* did not test for the presence of hazardous chemicals, studies elsewhere have revealed septic

systems are also common sources of such contamination in groundwater. It is not unusual for homeowners to dispose of old or excess household chemicals, such as solvents and cleaners, down the toilet or sink. These chemicals thus enter the septic system and are discharged to the ground. In addition, chemical septic system conditioners are available on the market which may also contaminate the groundwater.

3.3 Agriculture

A significant portion of the Town's population lives on or in close proximity to livestock and horse farms. In studies elsewhere, improper handling and storage of manure have been identified as sources of nitrates in groundwater. High levels of nitrates can cause health problems in humans. Most farm wells tested for the *Groundwater Resources Study* had elevated nitrate-nitrogen levels, but none exceeded the drinking water standards (see Table 1).

Although not tested as part of the study, agricultural chemicals used on crops and orchards have been found elsewhere in drinking water wells nearby such lands. Horticulture also utilizes fertilizers and chemicals on lawns and ornamental plants, commonly at application rates higher than that for agricultural production. Misuse and improper disposal of these chemicals may contaminate drinking water supplies.

3.4 Underground Storage Tanks

The well-sampling program did not include the testing of well water for petroleum contamination. However, nationwide, leaking underground petroleum storage tanks have been identified as significant sources of groundwater contamination. As a result, the US Environmental Protection Agency has promulgated regulations regarding the construction, installation, and monitoring of such tanks. The NYS Department of Environmental Conservation requires the registration of all facilities that store 1,100 gallons or more of petroleum products. Many farms and businesses are unregulated because their storage capacity is under the 1,100-gallon threshold.

Household heating-oil tanks are typically not regulated. Many of these tanks were installed years ago without any spill-prevention or leak-detection capability. Studies elsewhere have shown that corrosion of buried steel tanks can become significant after about 15 years; poorly installed tanks can begin to leak much sooner.

Historically, there have been several leaking underground storage tanks discovered in the Town. At least some of these have impacted the water supplies at residences.

3.5 Disposal of Hazardous Chemicals

The release of hazardous and toxic chemicals to the environment can cause significant local groundwater contamination. However, the cost of testing for such constituents is prohibitive on a large scale, so the well-testing program did not analyze

the water samples for chemical pollutants, other than nitrates and chlorides. The matter of the disposal of household chemicals to the septic systems has been discussed above.

Although a less common disposal method now, old farm and household dumps may still exist in the community and pose a threat to groundwater. Monitoring at the Town landfill has shown that the facility is not a source of hazardous contamination.

3.6 Spills

The uncontrolled release of petroleum products or hazardous chemicals can occur in a variety of ways, including highway accidents involving tank trucks, over-filling of storage tanks, or during routine maintenance activities. Delayed response to these situations may allow the chemicals to seep into the soil and contaminate nearby surface- or groundwater.

The Town is traversed by one State Highway, along which large tank trucks pass through the community; smaller tank trucks travel Town and County roads to transport heating oil to residences. Heating oil tanks are located at most residences and businesses in Town; vehicle maintenance facilities are operated by the Town and several private individuals. As a result, there is ample opportunity for spills throughout the community.

3.7 Road Salt

Groundwater contamination related to the storage and application of road salt has been identified in the Northeast. To determine the significance of such pollution in the Town, chloride, an indicator element of such pollution, was included in the list of analytes tested as part of the well-sampling program. Elevated chloride levels were detected in several wells in the Town; in one case, the level exceeded the drinking water standard.

Although no groundwater problems have been identified with the Town road salt storage facility on Cold Spring Road, a new, enclosed, storage building is currently under construction to reduce the potential for future contamination. The building will be roofed, paved, and drained to prevent the uncontrolled release of salt to the immediate environment.

4.0 Protection Measures

4.1 Well Owners

Homeowners and businesses have the greatest opportunity to protect their own wells from pollution. Neither the Town nor other governmental agencies have the responsibility for the protection or maintenance of individual wells. As discussed above, septic systems and agricultural activities have been identified as significant potential sources of coliform and nitrogen contamination in drinking water. Home heating-oil tanks have been found nationwide to contribute to the pollution of wells by petroleum products.

Homeowners should have their septic tanks maintained regularly and repaired at the first sign of problems. Chemical septic conditioners should be avoided. Excess or waste petroleum products or hazardous materials should be properly disposed of, at an approved facility. Homeowners should have a spill kit on hand to control accidental spills and leaks of heating oil. Underground storage tanks should be removed and replaced with above-ground tanks. The application of lawn and garden pesticides and fertilizers should be minimized and always done in accordance with manufacturer's recommendations.

Farmers should insure that the storage of manure is done in such a way so as to prevent the leaching of nutrients into the ground. Buried fuel-storage tanks without modern leak- and spill prevention and detection equipment should be removed and replaced with appropriate above-ground tanks. The application of agricultural pesticides and fertilizers should be minimized and always done in accordance with manufacturer's recommendations.

Many businesses routinely handle petroleum products and hazardous and toxic substances. Businesses should use, store, and dispose of all such materials in accordance with all regulations and manufacturer's recommendations. Buried fuel-storage tanks without modern leak- and spill prevention and detection equipment should be removed and replaced with appropriate above-ground tanks. Spill containment should be provided at sites that store petroleum products and hazardous and toxic substances. All businesses should be equipped for the emergency response to accidental spills and chemical releases.

4.2 Town Government

The Town can facilitate the preservation of groundwater quality through maintenance, education, and regulation.

Maintenance - The Town of Stanford Highway Department operates one of the largest equipment storage and repair facilities in the community. As such, this represents a significant threat to the groundwater resource of the community. Fuels, lubricants, and waste oil are stored and handled at the Town Garage on Creamery Road. The Highway Superintendent should insure that the *Fuel and Spill Management Plan* is up to date and that all Town employees are trained to properly handle and dispose of petroleum products and other hazardous materials. Spill containment should be provided where petroleum products and hazardous and toxic substances are stored.

The Town operates a Solid Waste Transfer Station on Bangall-Amenia Road. The employees of the facility should be trained to identify and manage hazardous waste that may be brought deliberately or inadvertently to the site.

The new Town salt shed, on Creamery Road, is designed to minimize the release of road salt to the environment. The facility and operations should be inspected and

maintained to insure that runoff from the site does not reach the adjacent stream nor groundwater. The Town employees should be trained to minimize spillage at the site.

Several wells, located near major roads, were found during the well-sampling program to have elevated chloride levels indicative of road salt. Ice-control operations should be conducted on Town roads with the minimum required rate of application needed to maintain safe conditions. Alternative chemicals should be evaluated as possible replacements for chloride-based salts.

The Town recreation park and Town Hall are located in the hamlet center, an area of dense development and older, shallow wells. Maintenance activities should focus on minimal use of pesticides and fertilizers to protect water quality.

The NYSDEC has jurisdiction over spill management. However, the Town Highway Department and the Town Fire District should be equipped for the emergency response to petroleum spills, especially those related to vehicular accidents. It may be possible to limit the extent of a spill through a rapid response, while awaiting the arrival of the State Spill Team.

Public Education - The Town is in the position to provide information to its Boards, to well owners, and to others about the need and opportunities to protect the groundwater resource. Residents of the Town should receive the message that the community depends on groundwater for its drinking water, that other options are limited, and that individuals bear the greatest responsibility of protection of the water supply.

Educational posters and signs should be placed at the Recreation Center, Town Hall, Transfer Station, and elsewhere as appropriate. The Building Inspector should distribute water-protection pamphlets with building permit applications. The schools, public functions such as Community Day, and the local newspaper could be vehicles for public education. The Town should designate a contact individual or organization to respond to questions from the public regarding best management practices to protect groundwater quality. The Conservation Advisory Commission should play an important role in this effort.

Reviews and Regulations - The Town already has regulations that provide some level of protection to groundwater of the community; these include zoning, subdivision, and building codes. However, the codes will only be protective if they are enforced with only the limited granting of variances.

The Town should review its existing regulations to determine those that need strengthening. The Special-Use Permit and Site-Plan review processes should be used to provide opportunities to evaluate measures to protect the Town water supply. Any proposed activity that comprises a potential contaminant source (see Appendix 7.2 for partial listing) should require a special permit. The renewal of Town permits (for

example, for operation of junkyards) should be preceded by an inspection to verify that best management practices are followed to protect the groundwater.

Although the authority of the Town over existing agricultural operations is limited by the State Right-to-Farm laws, new livestock and horse farms should require a special use permit prior to operation of concentrated livestock operations. Also, it may be possible to add provisions to the Building Code to include manure management and the control of runoff in barnyards.

Prior use of a parcel should be considered in the subdivision review process. Gravel mining may result in reduced distances to the water table, former orchards, vineyards, and industrial sites may pose contamination threats.

The so-called "Density Increase" provisions in the Rural Residential District are of special concern. The Density Increase Zones appear to have been based on obsolete soil information and on an erroneous understanding of the properties of soils. A review of the information on which the zones are based shows that increases are allowed on steep slopes, and on soils that have severe limitations due to poor filtering abilities. The construction of septic systems in these conditions could lead to the contamination of groundwater under increased densities. The concept of the zones should be re-evaluated as part of the Master Plan review process. Further, any proposed increase in the density of development in the hamlet- and lake-districts of the Town should be preceded by groundwater modeling to insure that the increase will not result in a degradation of water quality.

The Town should require the use of above-ground storage tanks at new sites and encourage the replacement of underground storage tanks at existing sites. The Town should also require that spill-response equipment be available on all commercial, agricultural, and municipal sites where petroleum is stored; such equipment is recommended for residences as well.

4.3 Other Agencies

The Dutchess County Department of Health bears significant responsibility to protect the water resources of the Town. The Town Building Department should work closely with the County Department of Health to insure that all Health Department regulations are enforced in Town. The staff of the Health Department should be made aware of the special importance of groundwater to the Town and that an additional level of vigilance is needed to protect that resource.

The Dutchess County Soil and Water Conservation District (DCSWCD) works with farmers to implement best management practices for manure management to protect surface water resources. The Town, perhaps through the Conservation Advisory Commission, should work with the staff of the DCSWCD to emphasize the importance of also protecting the groundwater in the Town.

The NYS Department of Transportation and the Dutchess County Department of Public Works maintain the major roadways in the Town. The Town Highway Department should work with the other agencies to minimize the use of chloride salt on roads near residences, while maintaining safe conditions.

The Dutchess County Resource Recovery Agency has jurisdiction over the collection and disposal of household hazardous wastes. The Town should work with the DCRRA to provide more convenient opportunities for the disposal of this waste, either through frequent collection days at the Town Transfer Station, or through the development of a regional, full-time collection center that is accessible to the residents of the Town. This would encourage the proper handling of common hazardous wastes and reduce the likelihood of improper disposal.

5.0 Community Water System

Although the water quality in the Town is relatively good, an increase in the density of development could degrade that quality to a point where individual wells are no longer viable in certain parts of the Town. Significant degradation may necessitate the construction of one or more community water supplies, or the connection to another supply outside of the Town. Such degradation would be expected to occur first in the areas of highest density within the Town, as discussed previously. Separate systems would likely be needed for the hamlet and for the areas around Hunns and Upton Lakes; it would be impractical to serve the entire Town, because of low population densities and because of physical constraints to construction. The small number of users in even the high-density areas would result in a high per-user cost for the construction and maintenance of the systems. However, in the absence of other factors, the availability of public water supplies tends to encourage even higher densities of development, which can offset some of these costs.

Both the *Dutchess County Water Plan*, developed by Horsley and Witten in 1989 for the County, and the *Town of Stanford Groundwater Resources Study* mentioned the possibility of developing a central water system in the hamlet area, but neither identified appropriate sites. The *Groundwater Resources Study* discussed the relative merits of wells in a gravel aquifer versus a bedrock aquifer. In general, wells in a gravel aquifer are higher yielding and allow greater flexibility in siting; they also are more prone to contamination. The *Dutchess County Groundwater Protection Plan* characterizes the gravel aquifer in the hamlet area as possibly lacking sufficient saturated thickness to provide a significant water supply for the Town. No similar analysis has been conducted of the surficial aquifer in the lake districts. Bedrock wells are generally lower in yield than those in gravel aquifers, although wells sited in fracture zones may have high yields; bedrock aquifers are also less prone to contamination. The suitability of the bedrock aquifer for the development of one or more community supplies in the Town has not been assessed.

The cost of the investigation to locate well sites in the hamlet and lake districts would be relatively high, involving detailed hydrogeologic investigations and test drilling. Once the investigations are completed, the confirmed sites should be purchased and protected from incompatible development. Obviously, once the funds are expended for securing the property, there would be momentum to complete the system and connect the service area to the system. None-the-less, it is advisable to conduct the initial assessment to identify the feasibility and location of well fields in advance of need.

6.0 Conclusions and Recommendations

6.1 Conclusions

The *Groundwater Resources Plan* found the level of contamination in the Town to be low; the water quality should still remain good even under permitted build-out conditions in the high-density hamlet. The continued use of individual wells and septic systems seems viable throughout the Town under current zoning. However, threats do exist locally which could render a well unusable due to contamination from chemical or biological pollutants.

Individuals bear the greatest responsibility for the protection of their own wells and those of their neighbors. There are also steps that the Town can take to protect the groundwater resources of the community. These include the proper maintenance of Town facilities, the education of homeowners, the promulgation of regulations, and cooperation with other agencies.

6.2 Recommendations

Table 2 provides a summary of the recommendations of the Groundwater Resources Committee for well owners, the Town, and other agencies. Although it is recognized that the Town is not responsible for maintaining the wells of individual owners, the Committee also recommends consideration of an ongoing monitoring program to track changes in water quality in high-risk areas. At a minimum, wells that showed either an exceedance of groundwater quality standards or had levels of contamination significantly higher than background, should be retested to verify water quality in those wells. The testing could only be done, obviously, with the cooperation of the well owners and would be funded either by the owners or by the Town.

Areas of increased density (hamlet and lake districts) appear to be most prone to contamination. Monitoring of these areas (either using existing wells or dedicated monitoring wells) would provide a method of recording changes in water quality within those wells. One would have to assume that the selected wells were representative of the area as a whole.

Testing for a fuller suite of analytes, including petroleum and hazardous chemicals) would better characterize water quality in those areas. The cost of testing can

be significant for such a monitoring program; implementation of a program should be subject to the availability of funds.

Action levels should be determined prior to the commencement of this expanded monitoring program. Responses to deteriorating water quality should also be assessed, before instituting the program. One response, for example, could be the installation of a central public water supply in the impacted area, as discussed in Section 5.0.. The monitoring program should be ongoing and designed so as to provide useful information; it should not be a study or investigation that merely becomes an academic exercise.

Table 2

Summary of Recommendations.

Well Owners

- Homeowners should have their septic tanks maintained regularly and repaired at the first sign of problems.
- Chemical septic conditioners should not be used.
- Petroleum products and other hazardous materials should be disposed of properly and not dumped on the ground, into water bodies, or down the drain.
- Farmers should insure that the storage of manure is done in such a way so as to prevent the leaching of nutrients into the ground.
- Buried fuel-storage tanks, without modern leak- and spill prevention and detection equipment, should be removed and replaced with appropriate above-ground tanks.
- The application of pesticides and fertilizers should be minimized and always done in accordance with manufacturer's recommendations.
- Spill containment capability should be provided at sites that store petroleum products and hazardous and toxic substances
- Businesses should use, store, and dispose of all petroleum products and hazardous and toxic substances in accordance with all regulations and manufacturer's recommendations.

Town Maintenance

- The Highway Superintendent should insure that the *Fuel and Spill Management Plan* for the Town Garage is up to date.
- All Town employees should be trained to properly store, handle, and dispose of petroleum products and other hazardous materials.
- Spill containment capability should be provided at sites that store petroleum products and hazardous and toxic substances
- The employees of the Transfer Station should be trained to identify and manage hazardous waste that may be brought deliberately or inadvertently to the site.
- The new Town salt shed should be inspected and maintained to insure that runoff from the site does not reach the adjacent stream nor groundwater. The Town employees should be trained to minimize spillage at the site.
- Ice-control operations should be conducted on Town roads with the minimum required rate of application needed to maintain safe conditions. Alternative chemicals should be evaluated as possible replacements for chloride-based salts.
- Maintenance activities at Town facilities should focus on minimal use of pesticides and fertilizers to protect water quality.

- The Town Highway Department and the Town Fire District should be equipped for the emergency response to petroleum spills, especially those related to vehicular accidents.

Public Education

- Educational posters and signs should be placed at the Recreation Center, Town Hall, and Transfer Station.
- The Building Inspector should distribute water-protection pamphlets with building permit applications.
- The schools, public functions such as Community Day, and the local newspaper should be vehicles for public education.
- The Town should designate a individual or organization to respond to questions from the public regarding best management practices to protect groundwater quality. The Conservation Advisory Commission should play an important role in this effort.

Reviews and Regulations

- The Town should review its existing regulations to determine those that need strengthening.
- The Special-Use Permit and Site-Plan review processes should be used to provide opportunities to evaluate measures to protect the Town water supply. Any proposed activity that comprises a potential contaminant source should require a special-use permit.
- The renewal of relevant Town permits should be preceded by an inspection to verify that best management practices are followed to protect the groundwater.
- New livestock and horse farms should require a special use permit prior to operation.
- It should be determined if it is possible to add provisions to the Building Code to include manure management and the control of runoff in barnyards.
- Prior use of a parcel should be considered in the subdivision review process.
- The so-called "Density Increase" provisions in the Rural Residential District should be re-evaluated.
- Any proposed increase in the density of development in the hamlet- and lake-districts of the Town should be preceded by groundwater modeling to insure that the increase will not result in a degradation of water quality.
- The use of above-ground storage tanks should be required at new sites and the replacement of underground storage tanks should be encouraged at existing sites.
- The Town should require that spill-response equipment be available on all commercial, agricultural, and municipal sites where petroleum is stored; such equipment is recommended for residences as well.
- A well-siting investigation should be conducted in advance of the need for a central water system.

Other Agencies

- The Town Building Department should work closely with the County Department of Health to insure that all Health Department regulations are enforced in Town. The staff of the Health Department should be made aware of the special importance of groundwater to the Town and that an additional level of vigilance is needed to protect that resource.
- The Town, perhaps through the Conservation Advisory Commission, should work with the staff of the DCSWCD to emphasize the importance of protecting the groundwater in the Town from agricultural sources of pollution.
- The Town Highway Department should work with the other agencies to minimize the use of chloride salt on roads near residences, while maintaining safe conditions.
- The Town should work with the Dutchess County Resource Recovery Agency to provide more convenient opportunities for the disposal of this waste, either through frequent collection days at the Town Transfer Station, or through the development of a regional, full-time collection center that is accessible to the residents of the Town.

7.0 Appendices

7.1 Groundwater Resource Study (Excerpt)



Horsley & Witten, Inc.
Environmental Services

**GROUNDWATER RESOURCES STUDY
FINAL REPORT**

TOWN OF STANFORD, NEW YORK

August, 2000

Prepared for:

**Town of Stanford, New York
and
Dutchess County Water and Wastewater Authority**

EXECUTIVE SUMMARY

This Groundwater Resource Study was prepared to provide the framework to protect the Town of Stanford's drinking water supply. Currently, the Town utilizes on-site private wells to obtain drinking water and on-site septic systems for wastewater disposal.

The hydrogeology of the Stanford area is composed of a complex structure of bedrock and sand and gravel aquifers, which are probably interconnected via faults, fractures and solution channeling. Based on the data provided, the majority of the existing private drinking water supply wells are in bedrock and of those, most are in the shale, sandstone, and greywacke of the Normanskill Formation.

To evaluate existing water quality conditions Horsley & Witten reviewed data from numerous private wells. Twenty-one of the forty-eight sampled wells (44%) exhibited at least one compound at a concentration significantly above background levels. For this purpose, background levels have been qualitatively defined as those realistically expected to occur in the absence of anthropogenic contamination. In addition, seven of the forty-eight sampled wells (15%) exceeded New York State maximum contaminant levels (MCLs) for at least one of the sampled parameters (New York State Sanitary Code, 1993). Six of those exceedances are accounted for by the presence of coliform bacteria in the well sample and the seventh exceedance is due to the presence of chloride in excess of the MCL. In addition, seven samples for nitrate-nitrogen and ten samples for chloride exhibited concentrations below the respective MCL but elevated over the average concentrations observed in the majority of the sampled wells

A nitrogen loading model was used to estimate the nitrogen concentration in groundwater below the hamlet area of Stanford under various scenarios. The results show that, under current conditions with full lawn fertilization, the nitrogen concentration within the groundwater will be 1.52 mg/l (Scenario 1). This is close to the actual measured average concentration of 1.87 mg/l.

The predicted groundwater concentration decreases to 0.98 mg/l if no lawn fertilization is considered (Scenario 2). Under modeled conditions representing maximum residential buildout (Scenario 3), a predicted groundwater nitrogen concentration of 2.27 mg/l was reached. Adding a maximum agricultural fertilizer application to that scenario produced the worst-case value of 4.56 mg/l (Scenario 4). The recommended planning guideline for maximum nitrogen concentrations is 5.0 mg/l.

In summary, groundwater nitrogen concentrations in the hamlet area of Stanford – whether measured in various field samples, predicted under current development conditions, or predicted under buildout development conditions – seem generally conducive to the continued use of simultaneous on-site wastewater disposal and individual on-lot private drinking water supply wells.

Zoning controls on development density can help protect groundwater quality in areas that currently remain minimally developed. Limited areas of town that are already densely developed, however, already appear to be experiencing density-driven water quality problems. It is likely that “short-circuiting” problems between septic systems and wells located in glacial overburden aquifers begin to develop when the housing density exceeds one home per acre (Horsley Witten Hegemann, Inc., 1990). To a certain extent, the short circuiting effect can be minimized by careful mapping of groundwater flow directions and siting septic systems such that a minimum 300-foot downgradient separation is maintained between septic systems and wells in areas underlain by highly-permeable sand and gravel. The use of alternative septic system technologies that limit nitrogen output may also be utilized to minimize short circuiting problems.

Agriculture also represents a significant source of nitrogen. Available water quality data indicate that these areas exhibit the highest concentrations of nitrate-nitrogen in the town. A broad range of best management practices (BMPs) is available and should be explored to minimize the source of nitrogen. Although a sand and gravel aquifer underlies the town center, it has a limited capacity to supply water because of its generally shallow depth. Further study would be required to determine if this aquifer is capable of supporting a public water supply in Stanford.

7.2 List of Potential Contamination Sources

Table 7-2. COMMERCIAL/INDUSTRIAL LAND USES - HAZARDOUS WASTE GENERATION

Business Category (SIC)*	Hazardous Materials/Wastes/Disposal Practices (if known) Potential Large-Scale Generators
Communications Equipment sludges, Manufacturer (366)	Nitric, hydrochloric, and sulfuric acid wastes, heavy metal copper-contaminated etchant (e.g. ammonium persulfate), cutting oil and degreasing solvent (trichloroethane, Freon, or trichloroethylene), waste oils, corrosive soldering flux, paint sludge, waste plating solution
Electric and Electronic Equipment Manufacturer (especially circuit boards) (367)	Cyanides, metal sludges, caustics (chromic acid), solvents, oils, alkalis, acids, paints, calcium flouride sludges, methylene chloride, perchloroethylene, trichloroethane, acetone, methanol, toluene, PCBs, paint sludge
Fabricated Metal Products (344)	Paint wastes, acids, heavy metals, metal sludges, plating wastes, oils, solvents, explosive wastes
Machinery (354) = metalworking & machinery (359) = miscellaneous machinery electrical)	(354) - oils, solvents (359) - metals, miscellaneous organics, sludges, oily metal (except shavings) Tool & die shops: lubricant & cutting oils, degreasers (TCE), metal marking fluids ("blueing"), mold release agents Oils and solvents may be reclaimed in shop or sold to recyclers, scrap metal sold to dealer
Plastic Materials and Synthetics (282) = plastic materials & synthetics (2821) = plastics, synthetic resins, and nonvulcanized elastomers	(282) - solvents, oils, miscellaneous organics (phenols, resins), paint wastes, inorganics, cyanides, acids, alkalis, wastewater treatment sludges (2821) - organic liquid wastes containing acids and alkalis, cellulose esters, surfactants, glycols, phenols, formaldehyde, peroxides, etc. May be treated on-site or hauled to a hazardous waste facility
Primary Metal Industries (3312) = blast furnaces, steelworks, rolling mills	Heavy metal wastewater treatment sludge, pickling liquor, waste oil, ammonia scrubber liquor, acid tar sludge, alkaline cleaners, degreasing solvents, slag, metal dust
Trucking Terminals or Fleet Vehicles	Fuel tanks, repair shop wastes (chemical substances may be (4231) hauled

NOTE: Up to four digits are used in the SIC codes; codes that contain only two or three digits represent less specific categories and, therefore, should be treated with more caution.

SOURCE: Wellhead Protection Tools for Local Government by Horsley Witten Hegemann, Inc. and U.S. Environmental Protection Agency, 1989.

Business Category (SIC)*	Hazardous Materials/Wastes/Disposal Practices (if known) Potential Moderate-Scale Generators
Printing, Publishing, & Allied Industries (27, 731)	Solvents, inks, dyes, oils, miscellaneous organics, photographic chemicals (note that solvents with ink in them may be collected by solvent recovery firms; ink contains heavy metals and may be returned to ink supplier for recovery and reuse; silver in photographic chemicals is recoverable)
Public Utilities (phone, electric power, gas) (481, 491, 492)	PCBs from transformers and capacitors, oils, solvents, sludges, acid solution, metal plating solutions (chromium, nickel, cadmium)
Sawmills and Planing (2421)	Treated wood residue and containers (use copper quinolate, mercury, sodium bazide to control stains and fungus) (use tanner gas to prevent lines from freezing. Paint sludges, solvents, creosote, coating and glueing wastes
Stone, Clay, & Glass Products (32)	Solvents, oils and grease, alkalis, acetic wastes, asbestos, heavy metal sludges, phenolic solids or sludges, metal-finishing sludge
Agriculture (01)	Pesticides (containers and residues), gasoline, motor oil, welding equipment, etc. for farm machinery
Auto Repair (7538)	Waste oils, solvents, acids, paint, waste hydraulic fluids, miscellaneous cutting oils
Local & Interurban Passenger Transit (41)	Waste oil, solvents, miscellaneous wastes, gasoline storage
Gasoline Service Stations (554)	Oils, solvents, miscellaneous wastes (ask if they take back used motor oil and what is done with it)
New and Used Car Dealers (especially those with service departments)	Waste oils, solvents, miscellaneous wastes
Welders (7692)	Oxygen/acetylene tanks
Dry-Cleaning (7216)	Solvents: perchloroethylene, petroleum solvents, Freon-1,1,3 - used in machines in large quantities, distilled solvent, reused spotting chemicals: trichloroethane, methylchloroform, ammonia, peroxides, hydrochloric acid, rust removers, amyl acetate (Residues from distillation put in garbage)
Landfills, Dumps, & Junkyards	Small quantities of chemical wastes, oils, etc. (ask whether the operation has a policy on hazardous wastes if collected by mistake)
Other (Because of information found in inventory)	

Business Category (SIC)*	Hazardous Materials/Wastes/Disposal Practices (if known) Potential Small-Scale Generators
<p>Special Construction Trades</p> <p>(1711) = plumbing, heating, air conditioning</p> <p>(1721) = painting, paper hanging, decorating</p> <p>(1742) = plastering, drywall, acoustical insulation</p> <p>(1751) = carpentry</p> <p>(1752) = flooring</p> <p>(1761) = roofing and sheet metal</p> <p>(1795) = wrecking and demolition</p> <p>(1799) = other special construction trades</p>	<p>(1711) - solvents, asbestos, miscellaneous (empty containers, etc.)</p> <p>(1721) - paints, solvents, glues, miscellaneous</p> <p>1742) - solvents, adhesives, miscellaneous (waste insulation)</p> <p>(1751) - solvents, lacquers</p> <p>(1752) - paint, glues, miscellaneous</p> <p>(1761) - tars, sealants, miscellaneous</p> <p>(1795) - asbestos, miscellaneous chemicals, miscellaneous</p> <p>(1799) - epoxy waste, solvents, asbestos, miscellaneous</p>
<p>Swimming Pool Cleaning & Maintenance (7399)</p>	<p>Free and combined chlorine, bromine, iodine, algicides (mercury-based, copper-based, or quaternary), cyanuric acid, calcium or sodium hypochlorite, muriatic acid, sodium carbonate</p>
<p>Miscellaneous Repair Service</p>	<p>Solvents, acids, alkalis, paint sludges, metals, organics, miscellaneous chemicals</p>
<p>Medical Facilities (8071)</p>	<p>X-ray developers and fixers (fixers and x-ray film contain reclaimable silver. Developer contains glutaldehyde, hydroquinone, phenedone, potassium bromide, sodium sulfite, sodium carbonate. Fixer has thiosulfates and potassium allum. Infectious wastes, radiological wastes, biological wastes, miscellaneous chemicals, disinfectants, asbestos, beryllium, acids (from dentists)</p>
<p>Veterinary Services</p>	<p>Solvents, infectious materials, vaccines, drugs, disinfectants (0742) (quaternary ammonia, hexachlorophene, peroxides, chlorhexadene chlorox)</p> <p>X-ray developers and fixers (fixers and x-ray film contain reclaimable silver)</p>
<p>Schools (821)</p>	<p>Solvent, chemicals, pesticides, acids, alkalis, waste oils</p>
<p>Furniture & Fixtures (Manufacture & Repair) (2512, 7641)</p>	<p>Paints, sludges, solvents, empty containers, degreasing sludges, solvent recovery sludges</p>
<p>Funeral Services and Crematories (7261)</p>	<p>Formaldehyde is the main preservative used. Also use wetting agents, fumegants, solvents</p>
<p>Government Offices (919)</p>	<p>Machinery/vehicle servicing, gasoline or heating oil tanks</p>
<p>Home Heating Oil (5183)</p>	<p>Underground storage tanks, truck maintenance garage</p>
<p>Photo Processing Laboratory (7333, 7395)</p>	<p>Biosludges, silver sludges, cyanides, miscellaneous sludges</p>

Business Category (SIC)*	Hazardous Materials/Wastes/Disposal Practices (if known) Potential Minor Generators
Apartment and Condominium (6513)	Swimming pool cleaning and maintenance chemicals, landscaping chemicals such as pesticides and fertilizers, on-site sewage treatment plant (hazardous household wastes)
Pharmacies (591)	Spilled and returned products
Hardware Stores (525) & Carpet (5713)	Hazardous chemical products in hardware and parts stores' Stores inventories. Carpet stores use glues and similar adhesives that are hazardous products returned to stores by customers. If forklift is used at lumber, hardware, or carpet store, there may be fuel tank or repair shop. Wood products, if stained or treated on-site, require hazardous chemicals (such as creosote)
Construction Materials (521)	Asbestos
Car Washes (7542)	Miscellaneous chemicals: soap, detergents, waxes
Beauty Shops (723) and Barber Shops (724)	Miscellaneous chemicals in rinses, perm solutions, dyes
Sports Shops (5941) and Hobby Shops (5945)	Gun powder and ammunition, rocket engine and model airplane fuel
Country Clubs (7997)	Pesticides, fertilizers, swimming pool chemicals, vehicle maintenance shops
Bowling Alleys (7933)	Epoxy, urethane-based floor finish
Miscellaneous	

DOCUMENTARY RESEARCH

The following documents were reviewed in the context of the 2012 Master Plan Update.

- The Town of Stanford in History, Elinor C. Beckwith, Town Historian, 1973
- “Stanford, NY – A Plan for Environmentally Sound Growth”, November 1980
- Significant Habitats and Habitat Complexes of the New York Bight Watershed, Dutchess County Wetlands Complex, Complex #27 Dutchess County Natural Resources, Dutchess County Planning, 1985
- Dutchess County 1986 Survey of Historic Resources
- Town of Stanford Critical Environmental Areas Designation Report, 1987
- Upper Wappinger Creek Critical Environmental Area, Conservation Advisory Commission, November 1991
- Open Space Inventory and Conservation Plan, Stanford Conservation Advisory Commission, January 1992
- Stanford’s Memories, A Compilation of Letters, Interviews, New Clippings and Excerpted Articles, Compiled and Edited by Donald Spiers, 1993
- Critical Environmental Area Designation, A Handbook for Local Government, Dutchess County Environmental Management Council in Cooperation with Cornell Cooperative Extension of Dutchess County, January 1998
- Dutchess County Agricultural and Farm Protection Plan, May 1998
- Town of Stanford Water Supply Protection Plan, Town of Stanford Water Resources Committee, 2000
- Stanford Groundwater Resources Study, Final Report, Horsely & Witten, Inc. Environmental Services, 2000
- Implementing Stanford’s Master Plan: A Diagnostic Report – February 25, 2002
- Spill Prevention and Response Plan for Municipal Facilities in the Town of Stanford, Roy T. Budnik & Associates, Inc., May 2003
- Significant Habitats in the Town of Stanford – Prepared by Hudsonia, Ltd. December 2005
- Dutchess County Aquifer Recharge Rates & Sustainable Septic System Density Recommendations (DC W& WWA, April, 2006)
- Update Supplement to the 1980 Town Master Plan – Public Review Draft - October 13, 2009
- Natural Resource Protection in the Town of Stanford – Report by the Concerned Citizens Group – April 2009
- Town of Stanford Sewer and Water Feasibility Reports, various, David Clouser & Associates (April/July 2010)
- Town of Stanford Sewer Layout, David Clouser & Associates, July 16, 2010
- N.Y. Agriculture & Market LAW § 308 : NY Code - Section 308: Right to Farm
- Form of Agreement between Dutchess County Water and Wastewater Authority and Town of Stanford, 2009
- Bangall Hamlet Proposal, Bangall Historic Hamlet Group, 2011

Data sources consulted for the 2021 Comprehensive Plan include the following:

- Dutchess County Planning Federation, “Plan On It: Agricultural Districts vs. Agricultural Assessments” – May 2011
- NYCRR Title 10. Department of Health. Chapter II, Part 75, Standards for Individual Water Supply and Individual Onsite Wastewater Treatment Systems. Appendix 75-A. Wastewater Treatment Standards – Residential Onsite Systems (Statutory Authority: Public Health Law, 201(1)(l)). Effective Date of March 16, 2016.
- Model Solar Energy Local Law, NYSERDA Solar Guidebook for Local Governments.
- New York Wind Energy Guidebook for Local Governments, NYSERDA
- Dutchess County Department of Planning & Development, 2020
- Dutchess County Real Property Tax Service Agency, 2020
- Town of Stanford Tax Assessor’s Office, 2020
- Dutchess Land Conservancy, 2020
- Winnakee Land Trust, 2020
- United States Geological Survey
- NYS Museum/NYS Geological Survey, Statewide Bedrock Geology, 2020
- United States Department of Agriculture, Web Soil Survey, 2020
- United States Fish & Wildlife Services, 2020
- New York State Department of Environmental Conservation, 2020
- New York State Office of Parks, Recreation and Historic Preservation, 2020
- United States Federal Emergency Management (FEMA) National Flood Hazard Layer, 2020
- “*Molinaro Focuses on Homelessness Prevention in 2021 Executive Budget*” Press Release
- Miscellaneous Meeting Summaries, Public Correspondence, Presentation materials to various committees.
- Written correspondence on the 2012 Draft Master Plan submitted to the Town and oral comments from the Town Board Special Meetings on March 11 and May 13, 2013.

The Planning Process

The approach for the Stanford Master Plan differed from a traditional community master planning study in that it did not begin with the assumption that there is no consensus on a collective community vision or that such an overall vision needs to be newly established.

The previously completed planning studies have made it abundantly clear that overall land use and visions for the community's future have not varied significantly from the 1980 Master Plan and subsequent draft updates, namely the "Update Supplement to the 1980 Town Master Plan". These prior documents and a recent community survey provide a solid basis for building an updated Master Plan document.

The Stanford Master Plan focuses on critical issues and makes specific recommendations to address these issues. Finally the Plan includes a schedule with short and medium term recommendations and assigns specific responsibility for following through on these items. The Town can implement its Master Plan in the form of zoning and other appropriate legislation.

Master Plan Committee

Although the Master Plan has not been updated since 1980, the Town of Stanford has undertaken several efforts to review the Master Plan and recommend changes. In March 2010, the Stanford Town Board appointed a Master Plan Committee (MPC). This Committee was tasked with reviewing previously completed Town planning documents, determining a scope of work for a Master Plan update, selecting a consultant to help in the Master Plan and guiding the Master Plan process.

To facilitate a free exchange of information, the MPC created its own website and posted meeting minutes, notices, all relevant maps and documents for download by any interested citizen. The MPC held bi-weekly meetings at Town Hall, which were open to Town residents. Citizens were encouraged to voice their concerns and opinions regarding the progress and content of the Master Plan. Throughout the almost two year process, meetings with the Master Plan Committee and the Master Plan consultants were held regularly to provide guidance on project coordination, plan recommendations, and strategies for implementation actions that will result from this plan.

Schedule and Meetings

The Master Plan was developed over a two year period. In 2010 the Master Plan Committee began its work of reviewing all previous documents available and defining the goals of the Master Plan, and setting its budget. It also prepared and executed an RFP to hire a planning consultant, which it accomplished in November 2010.

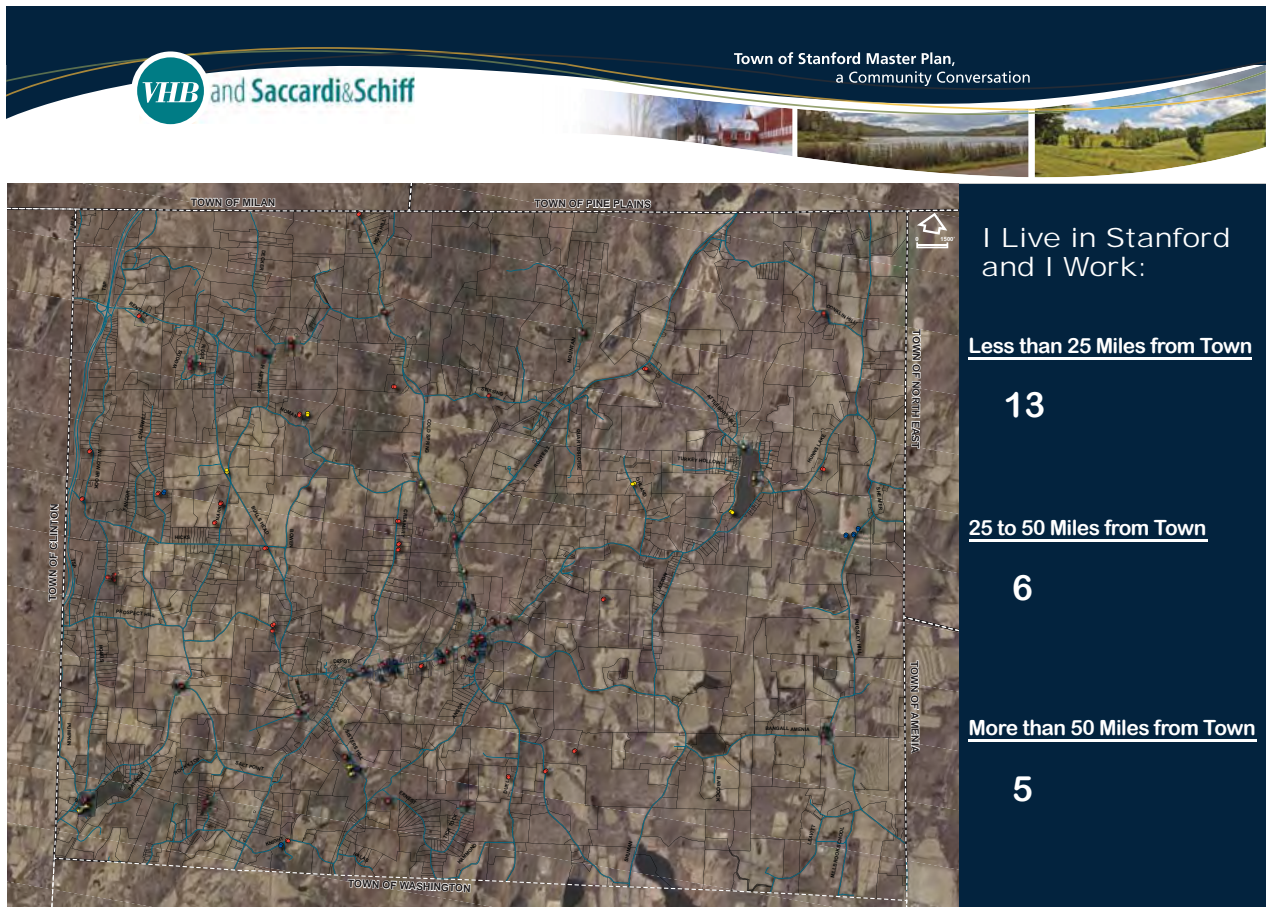
The Master Plan work with the planning consultant, Saccardi & Schiff/VHB, began in January 2011, and involved an initial meeting with the Master Plan Committee and several members of the Town Board. Subsequent meetings were structured around stakeholder interviews, biweekly meetings with the Master Plan Committee, and community conversations, each organized to gain input about issues and opportunities, goals and objectives and future priorities. Over the months that followed, the Master Plan Committee held sessions with the following Town committees and community groups to gather information and develop specific goals and objectives:

- Town of Stanford Farm and Agriculture Committee
- Town of Stanford Business Owners
- Town of Stanford Conservation Advisory Council
- Town of Stanford Recreation Commission
- Town of Stanford Historical Society
- Forever Young Club
- Stanford Grange

Stakeholder discussions were generally held at Town Hall, with follow up communications via email and telephone. The discussions were organized by Master Plan topic area and included representatives from the business, environmental, recreation, historic preservation, senior and youth groups. At least one – in most cases two - Master Plan Committee members attended every stakeholder meeting. The stakeholders were asked to provide the Master Plan Committee with their key goals and objectives and to highlight priority issues to be included and addressed in the Master Plan. Stakeholder groups were provided with the proposed Master Plan recommendations for their review and comment. It is these refined recommendations that have been included in this Master Plan.



Community Conversation
Poster (Top)
Live/Work Board (Bottom)



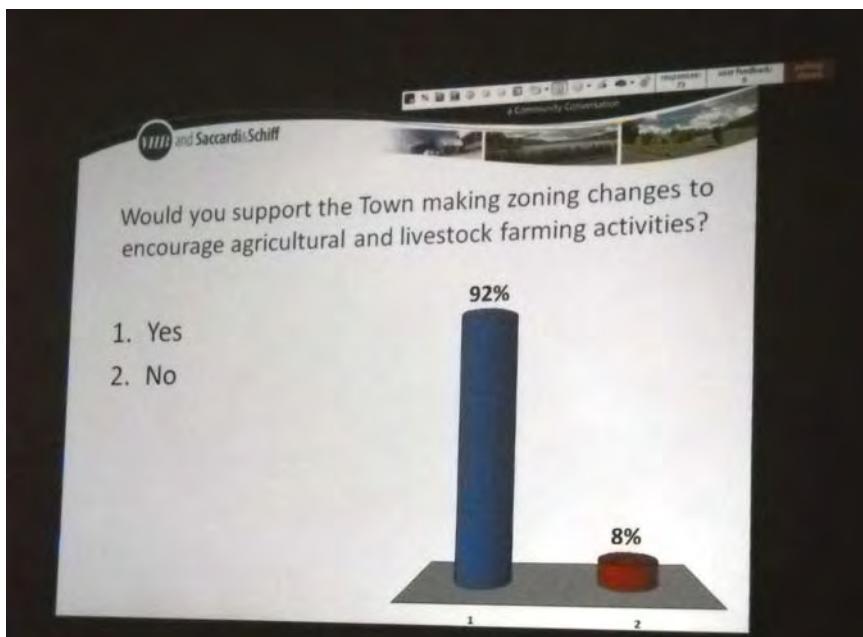


*“Break-out”
group discussions*

Public Conversation

On February 26, 2011, the Master Plan Committee held a community outreach meeting. The purpose of the meeting was to solicit community input for the mission, goals and objectives of the Master Plan and to gain insight on the issues and opportunities that were relevant to Town residents. The ideas expressed and information gathered at this Community Conversation, combined with interviews and discussions with the various Boards and Committees formed the foundation of this Master Plan.

The “Community Conversation” was advertised through the local media. Postcards were mailed to every Town resident, and flyers and posters were available at Town Hall, the library, the post offices and several stores throughout Town. The extensive outreach efforts led to an average turnout of over 100 people for the sessions, which lasted up to four hours.



Interactive polling

The agenda for the meeting included “break-out” group discussions of approximately ten to twelve persons facilitated by Master Plan Committee members. The “break-out” sessions focused on two general topics: environmental issues and growth and development issues. The meeting also included an interactive polling exercise.

Interactive Polling Survey

The final activity at the February 26th Public Conversation involved a polling exercise intended to identify priority initiatives to be included in the Master Plan. Many of the responses mirrored ideas and concepts seen in previously completed planning documents. In addition, these concepts were repeated over and over again in conversations and discussions with Town residents, Committees and Boards throughout the Master Planning process. It is clear that these ideas have been and will continue to be a mainstay of the Town’s philosophy toward its preservation, conservation and growth efforts. A brief summary of the results of the interactive polling exercise is presented below, and the entire presentation is included in the Appendix to this Master Plan.

In total, approximately 75 attendees took part in the polling exercise. The majority (42 percent) were between the ages of 50 to 64, and 35 percent were 65 years or older. Half of the respondents (50 percent) have lived in Stanford for more than twenty years and 78 percent consider Stanford their primary residence.

When asked where the focus for future residential growth should be, responses were as follows: 32 percent believed residential development should be focused in Stanfordville, 35 percent supported development in both Stanfordville and Bangall, but only three percent believed residential development should focus exclusively in Bangall. Approximately 24 percent supported residential development throughout Town. Seventy percent of respondents supported (31 percent moderately supported, 39 percent reported enthusiastic support) for the Town to offer incentives, such as the provision of additional density, for developers to construct senior or workforce housing.

In terms of commercial growth, 49 percent of respondents felt commercial growth should be focused in Stanfordville, with 34 percent supporting growth in Stanfordville and Bangall. No respondents supported commercial growth directed only in the Hamlet of Bangall, and only a small percentage favored growth throughout Town or only along major roadways (8 percent each).

The survey indicated strong support (58 percent enthusiastically supported, 24 percent indicated moderate support) for adopting design guidelines to encourage pedestrian friendly hamlets.

Perhaps the most resounding resident support (92 percent) was for the Town to initiate zoning changes to encourage agricultural and livestock farming.

Survey results clearly indicated that preservation of the Town’s history and culture as a priority. Eighty two percent indicated support for a local inventory of historic resources, 73 percent of respondents supported the Town forming a Historical Review Committee and 58 percent supported nomination of buildings to the State and/or National Register of Historic Places.

In terms of preserving the Town’s natural resources, 81 percent of respondents indicated support for a local wetland protection law, 78 percent supported protection of ridgelines and steep slopes and 69 percent supported scenic viewshed protection measures. Fourteen percent of respondents would not support any of the aforementioned natural resource protection measures.

It is interesting to compare the results of the Interactive Polling with the previously completed Town of Stanford Master Plan Review Community Survey Results, 1999. While the breadth of the Community Survey was much greater than the interactive polling, many of the responses are similar indicating a consistency in the overall Town attitudes and goals between 1999 and 2011. The demographics of respondents were similar to those seen in the interactive polling survey, with the majority in the 40 to 65 years age group. In the 1999 survey, the top three responses for what residents liked most about the Town were: its rural character, the friendly people and the fact that it is quiet. The primary concern expressed was overdevelopment, followed by high taxes and overpopulation. The overwhelming majority (95 percent) supported forming a “small town center” in Stanfordville and Bangall with a mix of housing and small shops. Further, the respondents supported concentrating development to a town center area rather than allowing future development to spread. In 1999, a small majority of residents (56.1 percent) expressed no current need for more appropriate housing for young families or seniors (53.6 percent). Ninety seven percent of survey respondents indicated support for protection of critical natural features and resources; and 96 percent supported preservation of open space and agricultural lands.



Stanford Town Hall

26 Town Hall Rd,
Stanfordville, NY 12581

Phone: (845) 868-1310
www.townofstanford.org/

*Front Cover Images: ©Wendy Burton
Back Cover Images: ©Karen Mosher*