

2012

Town of Highland Comprehensive Plan



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### ***Technical Assistance Provided by:***

Sullivan County Division of Planning & Environmental Management

### ***Date Adopted:***

March 13, 2012

*Cover picture by Dorene Warner*

**Town of Highland, Sullivan County, New York  
Comprehensive Plan – 2012**

**Foreword**

The 2012 Comprehensive Plan looks forward another 10 years with the policy framework for the Town of Highland. Its specific purposes – to the fullest extent of our power and control -- are as follows:

1. To preserve and extend the enjoyment of peace and tranquility to residents and provide an improved quality of life for the Town.
2. To preserve the high quality and quantity of our fresh water sources, including surface and groundwater supply, drinking water, and the Delaware River and its tributaries, as resources vital to our health, safety, economy, and recreation.
3. To conserve the quality and quantity of land, air, water, forest, wildlife, mineral, historic and scenic resources for the use and enjoyment of both residents and visitors.
4. To encourage the development of housing, business, and community facilities that are energy efficient and utilize sustainable materials and technologies.
5. To ensure that every dwelling and place of work is supported by an adequate and untainted water supply, sewage treatment and disposal system or septic system, solid waste disposal, electricity, telephone, broadband and mobile telephony.
6. To promote the safe, quiet, efficient and sustainable circulation of people and goods throughout the Town and to sustain a strong road infrastructure.
7. To preserve and enhance the Town's rural character, cultural assets and historical heritage, including its longstanding commitment to hunting, hiking, fishing and outdoor recreation as a source of enjoyment and a foundation of the local economy.
8. To maintain a balanced and equitable tax base.
9. To protect residents and their property from the harm of flood, fire, detrimental land use, air and water pollution, noise and light pollution, water degradation and depletion, and other impairments of their natural resources and property values.
10. To encourage the development of environmentally responsible economic opportunities that uphold the values expressed in this plan.

## **Planning Process & Plan Development**

The purpose of this comprehensive plan is to identify the Town of Highland's principles, goals, policies and strategies for growth and development, and to provide a coherent basis for the Town's zoning regulations, building code, and policies relating to land use. It reflects the expressed desires of the community, collected through community visioning workshops and scoping sessions, and involves the active participation of interested citizens. The Comprehensive Plan is not a law or regulation, but rather a road map and foundation for planning, and is subject to change over time.

The Town of Highland implemented its first Comprehensive Plan in 1990, and the plan is updated every ten years. The Town Board appointed a Comprehensive Plan Task Force in April 2011 to update the 2001 document. The Task Force held 16 work sessions between April 22 and September 26, 2011. Meetings were open to the public, and brief reports were delivered at Town Board meetings as the work progressed. The Task Force has been advised and assisted by Jill Weyer, Assistant Commissioner of the Sullivan County Division of Planning.

The 2012 Comprehensive Plan draws upon ideas and comments gathered in four separate community-wide visioning opportunities:

- July-August 2004: A series of community visioning workshops sponsored by the Greater Barryville Chamber of Commerce; facilitated by Helen Budrock of The Catskill Center and Jill Weyer of the Sullivan County Division of Planning.
- January-March 2006: Barryville Charrette, a community-wide planning workshop sponsored by Highland Renaissance and the Greater Barryville Chamber of Commerce; facilitated by Helen Budrock and Jill Weyer.
- July 2008: Community visioning workshop, entitled Hamlet and Village Design, facilitated by Heather Jacksy and Ethan Cohen of the Sullivan County Division of Planning and Buck Moorhead of Building Consensus for Sustainability. A portion of the session was devoted to developing a plan for Eldred – a vision and conceptual design that preserves the rural character of the Town.
- April 2011: Comprehensive Plan Scoping Session, facilitated by the Town Board of the Town of Highland

The 2012 Town of Highland Comprehensive Plan incorporates key goals and objectives identified in the course of these various workshops and scoping sessions, as well as updated data from the 2010 US Census. The public will have the opportunity to review and comment upon the draft document, which will be revised based upon the comments and feedback received prior to its adoption by the Town Board. The Town Board officially adopted the 2012 Comprehensive Plan by resolution on March 13, 2012.

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## Background Studies

### *Regional Location and Setting*

The Town of Highland is located at a Latitude of 41°20' 39" N and a Longitude of 74° 53' 39"W in the southwest portion of Sullivan County along the Upper Delaware River. Adjoining municipalities include the Towns of Bethel, Lumberland and Tusten in Sullivan County and Lackawaxen and Shohola Townships in Pennsylvania. The Upper Delaware Scenic Byway, NYS Route 97, follows the Town's southwestern border and links it to other portions of Sullivan County, Route I-84 and, via Route 434 and the Roebling Aqueduct, with Pennsylvania. This portion of the Upper Delaware River Corridor is designated as a National Wild and Scenic River by the National Park Service. The Town consists of approximately 32,232 acres or 51.5 square miles of land.

### **History**

The Town of Highland was taken from the Town of Lumberland by an act of the Sullivan County Board of Supervisors on December 17, 1853. The town was organized the following year, and John W. Johnston was the first Supervisor.<sup>1</sup>

Highland comprises lots number two, three and four of the First Division of the Minisink Patent, and lots 14 through 25 inclusive of the Seventh Division. The town takes its name from the highlands east of the Delaware River, upon which it is situated.

Long before the official formation of the town, the Native American tribe calling itself Lenape, usually translated as "original people" or "ordinary people," spent the warm weather months in the area, hunting, fishing and farming. Attracted by the magnificent natural beauty, they revered the upper Delaware River, which they called *Lenapewihittuck*, meaning "river of the Lenape." The tribe was called the Delaware by the British and that name has survived to this day.<sup>2</sup>

As European settlers began to arrive and the Iroquois tribes of the north encroached more and more on their land, the Lenape began moving on, and by 1730 or so there was little or no regular Native American presence in the region.<sup>3</sup>

### *Early Development – "the pathway to riches"*

Virtually every significant economic or historic milestone in Sullivan County's history has been the result of a major breakthrough in transportation, and the Town of Highland is no exception.

This correlation began in 1764, when the Delaware River became the pathway to riches for those engaged in the timber industry, the region's first great industry. While at first timber was rafted on the river only from above Cochecton, soon the entire upper Delaware was abuzz with activity. Timber was

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<sup>1</sup> Quinlan, James Eldridge; *History of Sullivan County*; G.M. Beebe & W.T. Morgans, Liberty, NY, 1873; pp. 302, 325

<sup>2</sup> Ibid. p. 68. Rutenber. E.M.; *History of the Indian Tribes of Hudson's River*; J. Munsell, Albany, NY, 1872; p.45

<sup>3</sup> Grumet, Robert S.; *The Munsee Indians: A History*; University of Oklahoma Press, Norman, OK, 2009; p. 230

rafted to Philadelphia and other points downriver, where it was used in ship building and other industries.<sup>4</sup>

In his chapter on the town of Highland, James Eldridge Quinlan writes in his *History of Sullivan County* (1873) that in “early times the population consisted of lumbermen, who were employed by non-resident owners to strip the town of its valuable timber and convert it as expeditiously and cheaply as possible into cash. If the profits of the business had been retained in the town, and expended for improvements, the value and importance of Highland would have been enhanced in a degree which we cannot now estimate.”<sup>5</sup>

The region was still mostly wilderness, in fact described by one historian as “a place where wolves gathered by night but men were seldom seen,”<sup>6</sup> when the Colonial militia confronted a band of Mohawks and Tories under the command of Captain Joseph Brant at the Battle of Minisink on July 22, 1779. The battle, fought on a desolate hilltop overlooking the Delaware at what has become known as Minisink Ford, was one of the bloodiest of the war when one considers the number of men killed in proportion to the number who took part. The militia was soundly defeated, and the remains of the 44 patriots killed that day were left on the battlefield for 43 years until what was left was finally collected and buried. The battlefield, known today as Minisink Battleground Park, is administered by the Sullivan County Division of Public Works.

It is believed that John Barnes, who settled at Narrow Falls sometime around or just prior to 1784, was the first permanent settler of the town, followed shortly thereafter by John Carpenter, William Seeley, William Randall and a man named Patterson, all of whom lived at Beaver Brook, and Benjamin Haines, who resided at Handsome Eddy. John Carpenter hired Nathaniel Wheeler to teach the first school. Phineas Terry opened the first store in the town in 1828.<sup>7</sup>

What was known as Halfway Brook or Halfway Brook Village, and is today called Eldred, was settled about 1814. Its post office, established in 1831, was originally called Lumberland, but was changed to Eldred in 1873. James Eldred was the original postmaster of the Lumberland Post Office, while Charles Eldred was the first postmaster under the new name.

#### *Barryville and the D&H Canal – “a major breakthrough”*

Barryville, named for William T. Barry, postmaster general under Andrew Jackson, came into existence because of the Delaware & Hudson (D&H) Canal, which was completed in 1828. Barryville received its post office in October of 1831, with Gardner Forgeron as its first postmaster. Other Highland post offices over the years have been established at Beaver Brook, in 1839, at Yulan in 1889, at Venoge in

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<sup>4</sup> Quinlan; p.192. Wood, Leslie C.; *Rafting on the Delaware River*; Livingston Manor times, Livingston Manor, NY 1934; pp. 6-15.

<sup>5</sup> Quinlan; p.302.

<sup>6</sup> Kelsay, Isabel Thompson; *Joseph Brant 1743–1807: Man of Two Worlds*; Syracuse University Press, Syracuse, NY 1984; p. 250.

<sup>7</sup> French, J.H.; *Gazetteer of the State of New York*; R. Pearsall Smith, Syracuse, NY 1860; p. 645. Quinlan; pp. 304, 320

1897 (changed to Highland Lake in 1911), and Minisink Ford (1908). Barryville, Eldred, Highland Lake and Yulan remain active in 2012.<sup>8</sup>

The D&H Canal, built to transport coal from the Moosic Mountains of Pennsylvania to the Hudson, was another major breakthrough in transportation, and it brought much activity to the town, including early industry. By 1870, Barryville was home to a dry dock for building and repairing canal boats, a grist mill, a stone quarry, four stores, two hotels, three blacksmith shops, one wagon shop, two churches, and a school. The canal company's superintendent's office was also located there. There were also three canal locks, number 68 through 70, located in and around Barryville.<sup>9</sup>

When the D&H Canal expanded in 1848, aqueducts were constructed at four locations, including across the Delaware River at Minisink Ford. The aqueducts were designed and built by John A. Roebling, who later designed the Brooklyn Bridge. The Delaware Aqueduct, more commonly known as the Roebling Bridge, still stands, and is believed to be the oldest surviving wire rope suspension bridge in North America. Following the close of the canal in 1898, it became a privately-owned vehicular bridge, and a toll house was erected at the NY side. Today, the structure is operated as a historic landmark by the National Park Service and the toll house serves as a small interpretive center.

Largely because of the presence of the canal, Barryville had become significant enough that when the Sullivan County Court House and Clerk's Office in Monticello burned in 1844, it was one of the communities seriously considered for relocation of the County Seat. Residents pledged ten acres of prime land and \$3,000 towards the construction of the new county buildings if their community was selected, but a sharply divided Board of Supervisors finally voted to continue with Monticello as the County Seat.<sup>10</sup>

#### *The Railroad Era and the Rise of Tourism – “a sportsman's paradise”*

When the New York & Erie Railroad arrived in Shohola, PA, across the river from Barryville, in 1848, it was another advancement in transportation that added to the community's importance. Barryville was first connected to the railroad by a rope tow ferry, which operated until a suspension bridge was built by Chauncey Thomas in 1856.<sup>11</sup>

When first the timber industry began to decline, and then the D&H Canal ceased operation in 1898, the Town of Highland, and Barryville in particular, suffered a severe double-barreled economic blow. Stripped of its principal industries and otherwise economically and socially stagnant, the community's future looked bleak.

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<sup>8</sup> On July 26, 2011, the U.S. Postal Service released a list of 3,700 rural post offices it was considering closing. Highland Lake was among seven Sullivan County post offices on the list.

<sup>9</sup> Child, Hamilton; *Gazetteer and Business Directory for Sullivan County, NY for 1872-3*; Syracuse, NY 1872; p.151.

<sup>10</sup> Quinlan; pp. 592-604.

<sup>11</sup> Dale, Frank Talbot; *The Ferry Boat Business on Our Delaware River*; Xlibris Corp., 2008; pp. 173-176. Dale, Frank T.; *Bridges Over the Delaware River: A History of Crossings*; Rutgers University Press, New Brunswick, NJ; 2003; pp.141-148.

“Barryville is a small poor village now, but at one time supported an active business,” wrote the town’s first Supervisor, John W. Johnston sometime around 1900. “The lumber of the region being exhausted, the business of canalling declining and now abandoned, it has for the last 25 years been waning, until now it seems to have reached a bottom of hardpan. It has been subject to the evils which followed the old town and its lumber interests—every man who has been successful in making money in it, removing to larger fields of operation and carried with them the products of their wealth.

“Human imagination can hardly reach anything in (the) future likely to improve it; but it will probably remain indefinitely the small poor place it now is.”<sup>12</sup>

Johnston obviously did not foresee the growth of the tourism industry, which even as he penned his prognostication, was beginning to take root in the region.

The Erie Railroad had begun to heavily promote the Upper Delaware as a tourist destination in the late 1870s, and after a slow start, tourism became the number one industry.

Largely through the promotional efforts of the railroad, the entire Delaware Valley eventually began to receive notice as a "sportsman’s paradise," as thousands of people travelled by train to dozens of resorts in the approximately 60 mile long valley from the Delaware Water Gap to Narrowsburg. These people were drawn largely by the river, lakes and streams. They came to fish and to boat, to hunt for sport, and to enjoy the fresh air, clean water, and natural beauty the area offered.

The *New York Times* reported in July, 1879 that while the portion of the Delaware Valley from the Water Gap to Milford had been popular with tourists for some time, it was only within the last few years that the area north and west of there had been noticed. Resorts in Lackawaxen and Shohola were especially noted, as were the Delaware River, the waterfalls at York Lake, and the beauty of Highland Lake. The article concluded that because of the "wild mountain scenery, tumbling trout brooks, and fresh mountain air," it appeared as if the Delaware Valley might soon be as popular with tourists as the (northern) Catskills had long been.”

Tourism, of course, has always had its ups and downs, and in July of 1880, the *Times* sounded an ominous warning with an article headlined: "Neglected Summer Resorts," which noted that the Delaware Valley was nearly devoid of visitors that summer. The article noted that there were good reasons why people weren’t traveling to Pond Eddy, Barryville, Minisink Ford and Narrowsburg. They weren’t being given access to the best hunting and fishing areas, the *Times* claimed, grimly noting that "it looks very much as if the Delaware Valley as a place of summer resort is destined to soon be forgotten."

Yet by 1882, the *Times* had reversed itself, reporting on a particular weekend that the mountain and lake scenery had attracted 600 people to the Upper Delaware. In July of 1884 the *Times* was touting

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<sup>12</sup> Johnston, John Willard; *Reminiscences*; unpublished manuscript completed 1901; published by Town of Highland, 1987; p. 321

the number of new resorts being built along the Erie north of Port Jervis, and specifically mentioned Sand Pond, "a few miles back of Barryville" as one of the "finest sheets of water in the world, with crystal clear water and sandy shores and bottom."

In 1885 the *Times* called the area a "sportsman's paradise" and singled out Eldred as the center of a growing resort industry offering accommodations for "from \$5 to \$9 per week, less for children and servants." Eldred, the *Times* noted, "is a great resort for fishermen and hunters, with four lakes within easy reach and many trout streams."

In July 1889, the *Times* reported that the tourism industry had continued to grow over the previous ten years and included some 15,000 New Yorkers who had second homes in the Delaware Valley and Catskills. Specific mention was made of wealthy men such as Leon DeVenoge, whose large summer estate was located in Highland Lake.

At the dawn of the 20<sup>th</sup> century, places like the Bodin Cottages on Bodin Lake in Yulan were advertising accommodations for 40, and claimed to feature superior cuisine, fishing on a private lake, and a "refined patronage."

Among other notable industries that once existed within the town was the Barryville Cut Glass Shop, built on Halfway Brook (which supplied the power for the cutting and polishing wheels) around 1910 by William H. Gibbs & Company and purchased by the Krantz & Sell Company in 1912. The Libbey Glass Company supplied the shop with blanks for punch bowls, salt and pepper shakers, nappies, stemware, and many other types of glassware. The cut glass business suffered a severe decline in popularity in the 1920s and the Barryville operation was closed.<sup>13</sup>

The Robinson Saw Mill Works operated on Hillside Road from 1976 to 2000, and grew to be the Town's third largest employer. Robinson's sold oak flooring, furniture blanks and other milled products made from Highland's world-class hardwoods, as well as specialized industrial wood cutting equipment.

#### *The Automobile Transforms the Tourism Industry – "ideal for your vacation"*

By the 1920s, the automobile had made the average tourist less dependent upon the railroad, and boarding houses and small hotels began to spring up farther away from the train stations. The *Times* reported in 1928 that fishing was the chief sport in the area and noted that "such well-known places as Greeley, Lackawaxen, Shohola, Barryville, Yulan, Eldred, and Highland Lake" were popular driving destinations for New York City travelers that year. The construction of State Route 97, which opened in 1930, improved access to the region, and made the railroad even less significant. Inns, boarding houses and cottages flourished, advertising their excellent food, modern accommodations, lake views, dancing, swimming and a range of sports and recreational activities including tennis, handball, boating, and fishing.

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<sup>13</sup> Revi, Albert Christian; *American Cut and Engraved Glass*; Thomas Nelson, Nashville, TN, 1965; p. 299. Conway, John; *Retrospect: An Anecdotal History of Sullivan County*, New York; Purple Mountain Press, Fleischmanns, NY 1996; pp. 44-46.

Among the most notable were the Highland Lake Inn, the Lake Shore Hotel, Bertram's Cottage, and The Pinehurst, all in Highland Lake; The Lake View Inn, Pine Grove Cottage, and Sunset Cottage in Yulan, as well as Jack Hensel's Colonial and Lewis Hazen's Sunset Cottage, both on Washington Lake; and the Glendella in Barryville. Prices ranged from \$15 to \$20 per week. Even into the 1980s, the Tallwood Lodge in Barryville advertised itself as "Shangri La in picturesque Sullivan County. Unwind or do your own thing in a friendly and relaxing atmosphere. Modern rooms, international cuisine, lounge, swimming pool, pond, tennis, fishing, etc., canoe on the Delaware." <sup>14</sup>

Canoeing on the Delaware, as well as rafting and kayaking, has proven to be the primary tourist attraction in the town in the later part of the 20<sup>th</sup> and early part of the 21<sup>st</sup> Centuries. Canoe liveries and campgrounds line the river corridor along State Route 97, a 70-mile long stretch of which, including the segment in Highland, was legislatively designated the Upper Delaware Scenic Byway in 2002, and they do a thriving business in the warm weather months, contributing greatly to the town's economy.

#### *Eco-Tourism and Heritage Tourism – "key elements in the town's economy"*

While hunting and fishing continue to be significant components of the tourism industry, eco-tourism and heritage tourism have also become key elements of the town's economy.

The bald eagle is the core of the eco-tourism trade in the Town of Highland, with a growing resident population as well as 150 to 200 that migrate to the Upper Delaware each winter. Eagle watching typically peaks in January and February, when tourism in general is relatively dormant. The Eagle Institute, a not-for-profit organization dedicated to protection of the species and habitat preservation, was organized in Barryville more than two decades ago and continues to sponsor several educational programs and guided excursions each year. <sup>15</sup>

Popular historic landmarks in the town include portions of the D&H Canal, including Roebling's Delaware Aqueduct, that have been restored by the National Park Service, and the Minisink Battlefield. The old Congregational Church in Barryville, now a private residence, was built in 1903, but abuts a much older churchyard that contains the burial site of two Confederate soldiers killed in the Great Shohola Train Wreck of July 15, 1864, in which a train carrying more than 800 Confederate prisoners of war to a federal prison at Elmira collided with a coal train, killing 19 guards and 51 soldiers.

Other interesting historic structures in the town include the Barryville schoolhouse, a reasonably intact Greek Revival building that was used as a school from 1867 to 1960 and then re-purposed as the town Justice Court.

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<sup>14</sup> Much of the information on tourism is reprinted from *A Brief History of Sullivan County's Upper Delaware Valley*, copyright 2010 by John Conway, Sullivan County Historian.

<sup>15</sup> Eagle Institute website; [www.eagleinstitute.org](http://www.eagleinstitute.org).

***Historical and Economic Trends***

Throughout its history, the Town of Highland has seen a number of boom and bust cycles in which natural resources such as timber have been exhausted. By contrast, the natural beauty and superb setting of the town have consistently offered opportunities for the development of both tourism and the second home market as sustainable drivers for the local economy.

From the beginning, tourism in the town of Highland was built on the extraordinary natural landscape, notably the Delaware River and the numerous lakes and streams. This trend has only strengthened in recent years. The Delaware River has immense recreational potential, while also supporting a healthy ecosystem for wildlife, including the American bald eagle, and providing drinking water for 17 million people. This potential been enhanced by the official designation of the Upper Delaware Scenic and Recreational River under the auspices of the National Park Service, and by the designation of State Route 97 as a Scenic Byway. As in the past, successful bed and breakfast establishments, restaurants, specialty shops and river outfitters are capitalizing on the peaceful rural character of the region.

The Town's population has risen in the decade following the New York City terror attacks of September 11, 2001. In addition, the Internet has made telecommuting possible for numbers of second home owners who have relocated permanently to Highland. Among visitors and residents, there is a revived interest in local history, including the D&H Canal, a renewed appreciation for vernacular architecture, vintage roadside buildings and surviving examples of 19<sup>th</sup> and 20<sup>th</sup> Century inns and boarding houses, and nostalgia for small town atmosphere.

## Natural Features

### *Geology*

The relief of the Town was formed by glaciers and is therefore characterized by both steep slopes and depressions. The glacial deposits of stone and debris contribute the great variety of soils present in the area and account for their limited suitability for on-site sewage disposal in some instances. The Town is part of the glaciated low plateau section of the Appalachian Plateaus Province and the geologic formations include sandstones, shales, and conglomerates. They typically produce very good quality water in moderate supplies.

The depth to bedrock throughout the town is generally within three to nine feet of the surface and sporadically crops out and is exposed, which is visibly evident at Cliff Pond, Highland Lake, Beaver Brook Pond, and on County Route 21.

According to the New York State Museum, the Catskill Region has inferior sand and gravel making it unsuitable for certain industrial uses. As stated in the *Glacial Geology of the Catskills*: “The glacial sand and gravel in the Catskill region is rather inferior in its qualities because it is made up of mixtures of shale and sandstone pebbles, instead of pure quartz sand. Shale pebbles in the gravel, on account of their weakness, make it unsuitable for some purposes such as high-grade concrete or road surfacing.”

The regional geology is comprised of geologically brittle structures that lie within the Town’s watersheds, wetlands, lakes, ponds, streams and rivers. Disruption of this geology, whether naturally occurring or man-made/caused, can compromise existing natural flows.

These vertical fractures can be seen in local rock outcroppings (*Figure 1: Outcroppings near Eldred*) and serve as evidence of the delicate nature of the fractured geology and its potential for compromise by disruption and interference due to development. This was demonstrated when the NYC water system tunnels were built and natural pathways in the bedrock were discovered that have the ability to move fluids through them. While these tunnels are not within the Town, they are less than 40 miles away and, since geology doesn’t change much within such short distances, it is anticipated these same natural pathways exist in the bedrock throughout the town and neighboring municipalities.

These faults or brittle structures “serve as conduits that facilitate migration of contaminants... potentially impacting aquifers and subsurface infrastructures.” (Hazen & Sawyer, Dec 2009) Existing fractures and new

**Figure 1: Outcroppings near Eldred**



fractures caused by these disruptions can create hydraulic pathways that can lead to contamination of shallow groundwater, surface water and subsurface infrastructure. In 1977, Isachsen and McKendree mapped faults, shear zones and other brittle structures (*Figure 2: Geology*). “Given that the process relied upon by Isachsen and McKendree to identify the brittle structures concentrated on a large-scale area and recognized only those observable at the land surface, a reasonably conservative assumption is that even more such features and intersections with infrastructure are present.” (Hazen & Sawyer, Dec 2009) Consideration should be given to establishing buffer distances from known fault lines and fractures to ensure disruption and contamination are minimized.

**Rock Types**

**Shale** - A laminated, indurated rock having more than 67% clay-sized minerals.

**Sandstone** - A medium-grained clastic sedimentary rock composed of abundant sand-sized fragments, which may have a finer-grained matrix (silt or clay), and which is more or less indurated by a cementing material

**Conglomerate** - A coarse-grained clastic sedimentary rock, composed of rounded to subangular fragments larger than 2 mm in diameter typically containing fine-grained particles in the interstices, and commonly cemented by calcium carbonate, iron oxide, silica, or hardened clay. Source: USGS

*Bedrock Geology*

As noted above, the depth to bedrock is relatively minimal throughout the Town. According to the mapped Bedrock there are three distinct formations identified, as well as known water areas within the Bedrock. All geology within the Town is part of the West Falls Group which has a mapped depth of 1500-2100 feet and is part of the Upper Devonian. The largest group present in the Town is the Upper Walton Formation (Dww) which contains shale as the primary rock type, sandstone as the secondary rock type, and also has conglomerate rock types present. The Slide Mountain Formation (Dws) is classified with the primary rock being sandstone with shale being the secondary but also includes conglomerate rock types. The smallest Bedrock classification is the Honesdale Formation (Dwh) which is the same as the Slide Mountain Formation but does not contain conglomerates.

Since surface water is present in the Town and is designated on geologic maps, if disruption of the Bedrock occurs and pollutants are introduced into the areas of disruption it may be possible for contaminants to travel the natural pathways and contaminate both surface and ground water. Water is a precious resource and must be protected; therefore, disruption of the geology should be minimized, controlled and monitored.

*Surficial Geology*

Surficial Geology is basically defined as the material lying on top of the bedrock. The Town’s surficial geology can be broken down into three distinct groups: Recent alluvium, Bedrock and Till, as defined in the box on this page. This level of geology can be further broken down into more specific soil classifications, which are discussed in the next section.

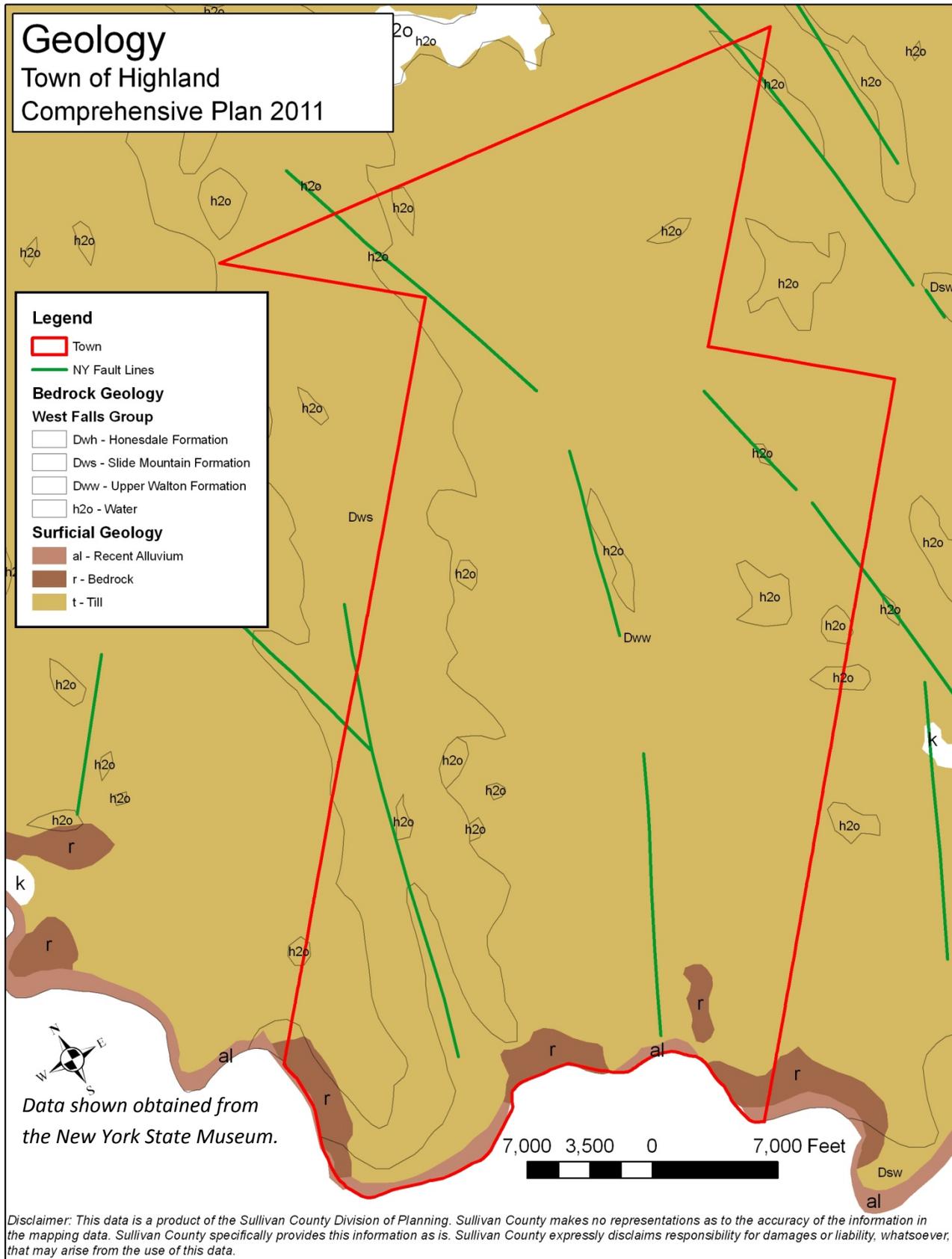
**Surficial Geology Classifications**

**Recent Alluvium (al)** - Oxidized fine sand to gravel, permeable, generally confined to flood plains within a valley, in larger valleys may be overlain by silt, subject to flooding, thickness 1-10 meters.

**Bedrock (r)** - Exposed or generally within 1 meter of surface, in some areas saprolite is preserved.

**Till (t)** - Variable texture (boulders to silt), usually poorly sorted sand-rich diamict, de position beneath glacier ice, permeability varies with compaction, thickness variable (1-50 meters)

Figure 2: Geology



### Soils

Like much of Sullivan County, the majority of Highland's soils are not suitable for intensive development. There are more than 80 (82) different soil classifications throughout the Town, however 61 of them each account for less than 1% of the entire town. Five soil types account for approximately 42% (42.37%) of the town with the (WIC) soil type covering 21% of the Town. These five major soil types are generally rocky with slopes varying from moderate (WeB) to severe (WIC). Almost 9% (8.9%) of the Town is classified as W, or water, and therefore has no specific soil classification.

#### Major Soil Types

**WIC** – Wellsboro & Wurtsboro soils, strongly sloping, extremely stony

**WeB** – Wellsboro gravelly loam, 3-8% slopes

**AIC** – Arnot-Lordstown complex, 0-15% slopes, very rocky

**AoC** – Arnot-Oquaga Complex, 0-15% slopes, very rocky

**AIE** – Arnot-Lordstown complex, 15-35% slopes, very rocky

Other common soils such as Arnot and Oquaga are often very steep and include many outcrops, rock ledges, cliffs and large boulders. Depth to bedrock is shallow. These soils have severe limitations for the construction of dwelling units (with and without basements), roads and streets, septic tank absorption fields and campsites. Soils such as Mardin and Wellsboro face seasonal high water limitations of a similar nature. Some of the other soil types found in the Town include Lackawanna (LaB and LaC) and Swartswood (SrB and srC). These soils also have moderate limitations for the construction of dwelling units (with and without basements), roads and streets, septic tank absorption fields and campsites.

Soils within the Town are susceptible to frost action when building local roads and streets – according to the USDA-NRCS Soil Survey, the majority of soils in the Town rate from .5 to 1.0, with 1 being the greatest negative impact on the use. Both the WIC and the WeB soil classifications rank frost action as 1.0 for local roads and streets, showing that the soil type has the greatest negative impact on this type of development. Soil classification should definitely be taken into account when planning road construction and maintenance.

Since the depth to bedrock is minimal and the predominant soils in the town are of rocky and stony nature, development must be cognizant of stormwater run-off and infiltration. The soils along with increased impervious surfaces from development will likely increase the amount of run-off during peak rain events, so stormwater management should be adequately planned for during development.

While currently there are very few farming operations in the Town, small scale niche farming is on the rise and the soils in the Town are beneficial to this land use. Approximately 6-7% of the soils in the Town are designated as Prime Soils by New York State Ag & Markets, while 20% are considered Statewide important. The current trends of knowing where your food comes from, buying local food, buying organic produce and meat, and minimizing long distance transport of fresh food all further support efforts to encourage this type of land use in the Town.

### ***Terrain***

Slope is one of the most important factors that determine where development may take place. Some constraints on development usually become necessary when the land exhibits a slope of over 15% and become severe over 25%. The extent of problems with slope depends upon soil types, depth to bedrock, rock strata and the level of the water table. Mitigation measures can be used to develop land with a slope of over 15%, but such actions can become costly and threaten public health and safety. The Terrain Map (*Figure 3*) depicts these areas of slope.

Based on the soil classifications, almost 50% of the town is classified as having a slope of 15% or more, with almost 10% having a slope over 35%. While this classification conveys a general feel for the terrain, it is not a completely accurate depiction of the actual slope. The best way to document slope is by topography; however in comparing the topography map with the soil classification map, it appears they are complementary and steep slopes are prevalent in the Town.

The steeper slopes are generally found situated along portions of the Delaware River and in the river valleys along Halfway Brook and Beaver Brook. Other areas in the Town that are steeply sloped include land directly west of Barryville and along the southern portion of Beck's Hill Road.

The range in elevation within the Town is about 900 feet. The lowest point is just under 560 feet above mean sea level and is located where the Upper Delaware River leaves the town and enters Lumberland. The highest point is overlooking Sunrise Lake is 1,440 feet above sea level.

### ***Water Resources***

The Town of Highland is endowed with numerous water resources, including the renowned Delaware River and more than 25 large and small lakes, streams, brooks, ponds and wetlands, depicted on the Hydrology Map (*Figure 4*). All the water resources in the Town of Highland are part of the Delaware River Basin, and designated by the Delaware River Basin Commission as lying within the Drainage Area of Special Protection Waters. Highland has been a member of the Upper Delaware Council (UDC) since 1990, when the Town's land use regulations were found to be in substantial conformance with the Land and Water Use Guidelines in the Council's River Management Plan (*Figure 5*).

Water, waterfront properties and water view properties are the centerpieces of the Town, attracting both residents and travelers to live, vacation and sojourn here.

Although the Town of Highland is heavily wooded, it also contains many streams, rivers, lakes and ponds. Many of these streams originate outside the Town; therefore, the Town has somewhat limited control over the quality of its waters. The largest and most important body of water is the Delaware River. Major free flowing streams include Beaver Brook, which flows in a southerly direction from west of Yulan to the Delaware River; Halfway Brook, which flows from the Town's northern line with Town of Bethel southward all the way to the Delaware River; and Hickok Brook which flows westward into Halfway Brook just south of Eldred. The majority of the brooks and streams in the Town of Highland

Figure 3: Terrain

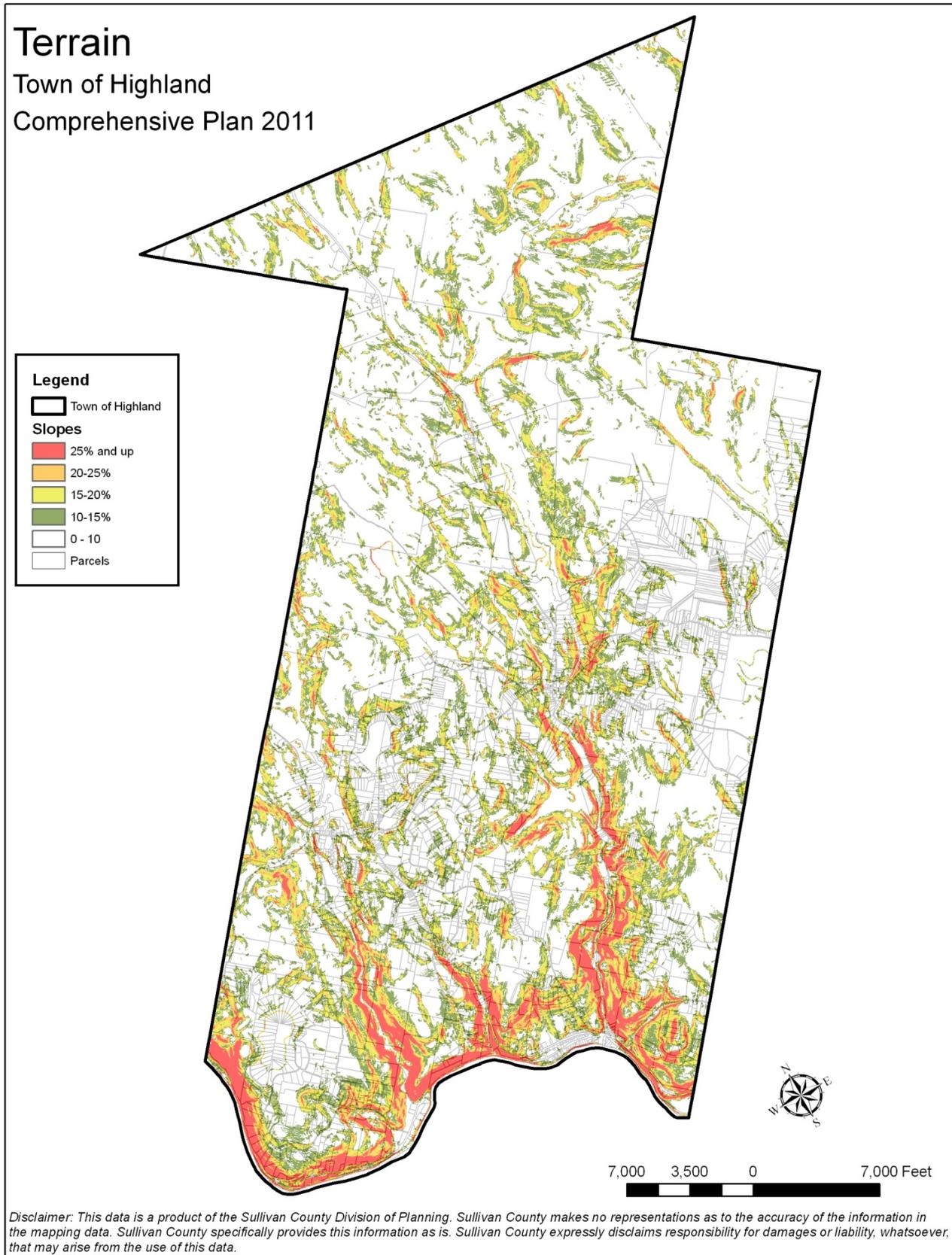


Figure 4: Hydrology

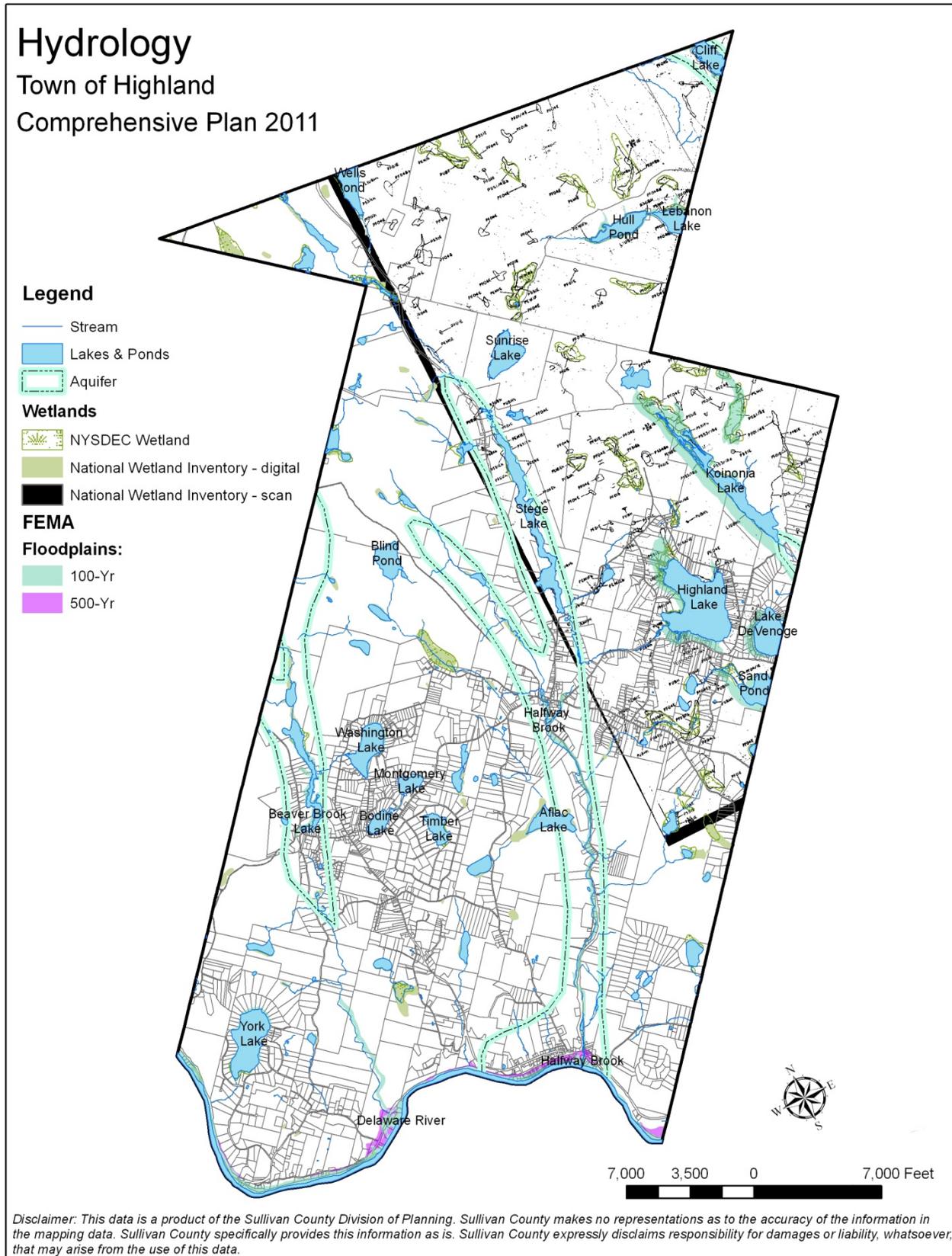
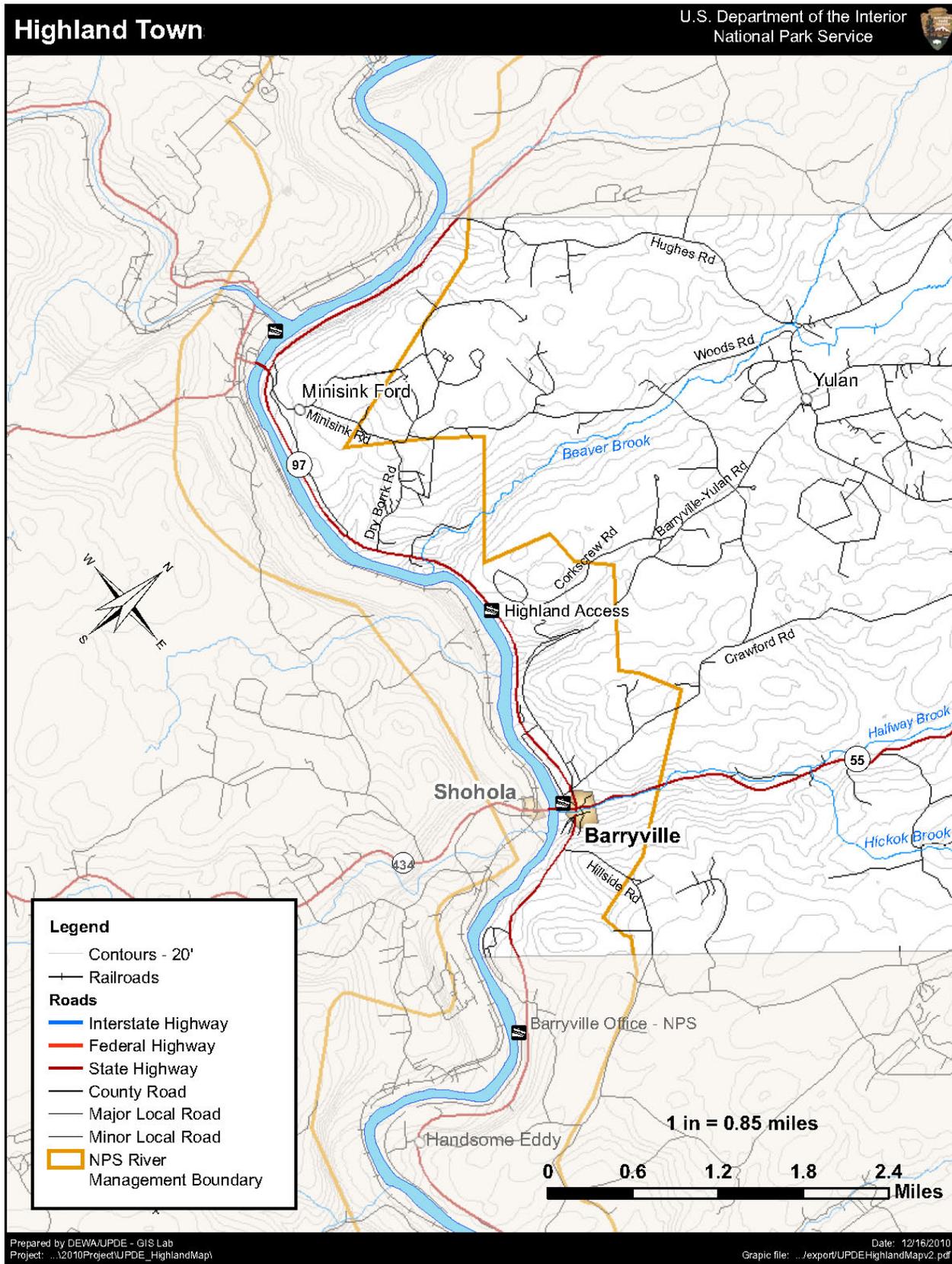


Figure 5: NPS River Management Boundary



have been classified by the New York State Department of Environmental Conservation (DEC) as "Class B." Class B waters are best used for primary contact recreation - swimming, boating and fishing. Most of these waters also support trout, another important designation that the DEC makes in its classification system.

The economic and assessment values of water in the Town of Highland cannot be overstated. Residential and commercial properties located on and deriving a significant part of their value from their proximity to these waters represent 29% of the tax base in the Town of Highland. Out of 51.5 square miles of surface area in the Town, 2.8 square miles (5.4%) are water. The assessed value of the land parcels adjoining or contiguous to that water is 29% of the total assessed value for the entire town.

### *Groundwater*

Groundwater from individual wells is the source of virtually all of Highland's water supply. Although annual rainfall is sufficient to provide bedrock aquifers with enough recharge to support widespread withdrawals for domestic consumption, groundwater shortages may occur with excessive pumping, decreased recharge (induced by increased runoff) or periods of low annual precipitation. The retention of rainwater is necessary to replenish local groundwater supplies. It is thus important to protect the Town's wetlands, as they act as recharge basins for subsurface water supplies. Highland's steep slopes and relatively impermeable soils produce naturally high rates of runoff. Reducing runoff serves to increase recharge and should also be encouraged.

### *Surface Water*

#### The Delaware River

The Delaware River is on the southwestern-most part of the Town, and forms a natural border that separates the Town from the State of Pennsylvania. The River is the backbone of the Delaware River Drainage Basin. The River has a NYS DEC water classification of "A," the highest classification given by NYS DEC. Class A waters are suitable as a source for a water supply for drinking, culinary or food processing purposes, primary and secondary contact recreation, and fishing. The waters are suitable for fish, shellfish, and wildlife propagation and survival.

There are approximately 7 miles of riverfront in the Town of Highland. The Town owns a small parcel on River Road in the Hamlet of Barryville and seeks to develop a plan for its use by town residents. Additionally, the Town maintains an observation post on the river in the Hamlet of Minisink for year round bird watching, especially the Bald Eagle winter migration period.

The River has two class II rapids in the Town, one at Cedar Rapids and the other at the Shohola Rapids just below the Barryville-Shohola Bridge. There are currently five seasonal canoe and raft livery businesses on the River that offer river adventure outings for both domestic and international customers. The Town's section of the River is noted for its excellent fishing. Anglers throughout the

world come to the banks of the River in search of shad, trout, small mouth bass, striped bass, muskelunge, walleye, pickerel, perch and eels. Avid fisherman and writer Zane Grey detailed the excitement of fishing the River in his 1902 article, "A Day on the Delaware." Numerous homes and businesses are situated in close proximity to the Delaware River in the Town of Highland.

### Lakes, Ponds and Streams

The Town of Highland has numerous lakes, ponds and streams, including Washington Lake, Highland Lake, York Lake, Lake Devenoge, Steges Lake, Bodin Lake, Montgomery Lake, Sunrise Lake, Hull Pond, Wells Pond, Sand Pond, Blind Pond, Halfway Brook and Beaver Brook, within the Town's borders. These are integral to the Town's residential, economic and recreational activities. The following discusses the most noteworthy lakes and streams in the community:

1. Washington Lake: This 68-acre spring-fed lake is located in the Hamlet of Yulan, at approximately 1,100 feet above sea level. The lake has a NYSDEC water classification of "B," defined as waters suitable for primary and secondary contact recreation and fishing. These waters are suitable for fish, shell fish and wildlife propagation and survival. Washington Lake has large population of secondary homes and one seasonal resort. Recreational activities on Washington Lake include boating (including motor boating), canoeing, fishing, sailing, water skiing and swimming. The lake has approximately 56 homes along its shoreline. One section of the lake includes a residential community, the Washington Lake Homeowners Association (WLHA), with approximately 14 homes located on the lake or in close proximity to the lake. The WLHA maintain a common beach area for the enjoyment of its members.
2. Highland Lake: This 214-acre spring-fed lake is located in the eastern part of the Town in the Hamlet of Highland Lake, at approximately 1,280 feet above sea level. According to the NYSDEC, the lake's water classification is "B," defined as water quality that is suitable for primary and secondary contact recreation and fishing. Class B waters are suitable for fish, shell fish and wildlife propagation and survival. Highland Lake has large population of secondary homes and one commercial business. The lake's recreational activities are boating, including motor boating, canoeing, fishing, sailing, water skiing and swimming. The lake has approximately 95 homes along its shoreline. Highland Lake has excellent fishing, particularly bass fishing. Additionally, there is a long established family-owned business on the lake, Sand Beach Resort. This is a seasonal business that offers to the public cabin rentals, boat rentals, boat slips, boat launching, swimming, fishing and bar/restaurant services.
3. York Lake: This 130-acre spring-fed lake is located in the Hamlet of Minisink Ford, in the southwest part of Town, at approximately 1,140 feet above sea level. According to the NYSDEC, the lake's water classification is "B," defined as water quality that is suitable for primary and secondary contact recreation and fishing. Class B waters are suitable for fish, shell fish and wildlife propagation and survival. York Lake was developed in the last 25 years as a second home resort community. The lake's recreational activities are boating, canoeing, fishing, sailing

and swimming. The community has two common beach areas on the lake and an access area on the Delaware River for use by its members. The York Lake Community has approximately 36 homes on or near the lake. There are no commercial properties on this lake, or uses permitted, by deed restrictions.

4. Lake Devenoge - This 78-acre spring-fed lake is located to the east of Highland Lake, and is approximately 1,300 feet above sea level. According to the NYSDEC the lake's water classification is "B". This is defined as water quality that is suitable for primary and secondary contact recreation and fishing. Class B waters are suitable for fish, shell fish and wildlife propagation and survival. Lake Devenoge has large population of secondary homes. Most home owners belong to the Lake Devenoge Homeowners Association (LDHA). LDHA maintains a common beach area for the enjoyment of its members. The lake's recreational activities are boating, canoeing, fishing, sailing and swimming. The Lake Devenoge community has approximately 70 homes on the lake or in close proximity to the lake. There are no commercial properties or uses permitted on this lake, by deed restrictions.
5. Timber Lake – Timber Lake is a 65-acre man-made lake located south of Town Road 33 between the Hamlets of Yulan and Eldred. The lake is 1,100 feet above sea level. According to the NYSDEC the lake's water classification is "B," defined as water quality that is suitable for primary and secondary contact recreation and fishing. These waters are suitable for fish, shell fish and wildlife propagation and survival. The lake's recreational activities are boating, canoeing, fishing, sailing and swimming. The Timber Lake community includes approximately 35 homes on or near the lake. A common beach area is maintained for property owners. There are no commercial properties or uses permitted on this lake, by deed restrictions.
6. Halfway Brook flows from the Town's northern line with Bethel southward all the way to the Delaware River; Beaver Brook flows in a southerly direction from west of Yulan to the Delaware River. These brooks capture the overflow of water from the Town's lakes and streams, and are the Town's main tributaries to the Delaware River. According to the NYS DEC, the brooks' water classification is "B," defined as water quality that is suitable for primary and secondary contact recreation and fishing. These waters are suitable for fish, shell fish and wildlife propagation and survival. Both of these brooks have excellent fishing and are stocked yearly by the DEC. There are approximately 80 homes that provide the tranquility of living on these mountain streams.

### *Wetlands*

According to the Freshwater Wetlands Maps (*Figure 4: Hydrology*), Highland has 52 New York State Department of Conservation (NYSDEC)-designated wetlands comprising approximately 1,657.7 acres, or 5% of the Town's land area. These wetlands are at least 10 acres in size and are defined by vegetation and soil types from aerial photographs, soil maps and field work. The NYSDEC wetlands in Highland range in size from 11.1 acres to 140 acres, the average wetland being approximately 32 acres. There are additional wetlands that are delineated through the National Wetland Inventory (NWI)

within the Town. While over 50% of the Town has digital data representing federal wetlands, the remainder of the Town is incomplete. Therefore from the digital data, federal wetlands range in size from .2 acres to 30.4 acres and account for 585.2 acres, representing 91 Federal wetlands delineated in the Town. These can be further broken down into categories, Freshwater Emergent Wetlands (14) and Freshwater Forested/Shrub Wetlands (77). Since the remainder of the NWI wetlands are not digitized and both NYSDEC and NWI wetlands may overlap, a comprehensive figure for the amount of land area wetlands account for cannot be computed for the Town.

Wetlands aid in flood and storm control, absorbing large amounts of water during periods of heavy rainfall. Erosion activity is considerably reduced by wetlands that hold suspended particles and reduce the velocity of flowing water. Wetlands recycle organic and chemical nutrients, serve as habitat for a wide range of wildlife and fish, and provide hunters, fishermen, hikers and birdwatchers with recreational opportunities. Finally, wetlands are educational and scientific research areas and serve an important role in open space preservation.

The New York State Freshwater Wetlands Act protects all wetlands of 12.4 acres or greater as identified by the DEC. Anyone wishing to dam, dredge, or build on or within 100 feet of a State wetland must first obtain a permit from the DEC. Federal wetlands restrictions offer additional protection.

### *Storm Water Management*

Storm water management is important to control flooding from increases in the amount of impermeable cover resulting from land development. Related problems include erosion and sedimentation on land that flows into streams due to improper runoff. Most local storm drainage problems are caused by undersized culverts, ditches, and drains, inadequately protected embankments, sediment and debris-blocked channels. The most beneficial and least expensive strategies to control runoff are to preserve natural cover, prevent clear cutting, and avoid excessive impervious surfaces. A combination of prudent zoning and subdivision regulations and site plan review procedures is necessary to prevent such problems. These problems are further exacerbated when improper run-off from certain uses results in non-point source pollution, such as pesticides, fertilizers, chemicals, and petroleum-contaminated runoff from parking lots, affecting the quality of the water. Non-residential development that produces non-point source pollution requires the implementation of special measures, restrictions and specific best management practices.

The Town of Highland joined the regular phase of the Federal Emergency Management Agency's (FEMA) Flood Insurance Program on March 4, 1987. The purpose of the program is to allow persons purchasing homes or businesses in designated flood zones to receive low-cost flood insurance. The history of flooding within the Town of Highland indicates that major flooding can occur at any time of the year. Major flooding along the Delaware River within Highland has occurred in all seasons, from such causes as ice jams, spring rains, snow-melts, and hurricanes. Other areas in the town may be subject to flooding as well. While Sedimentation, Retention/Detention, and Holding Ponds are designed to hold water, during times of peak rain events these ponds may be inundated with run-off

which causes them to overflow and pollute adjacent water bodies. For this reason, vulnerable land uses that may compromise our precious water resources should be avoided. FEMA updated its flood insurance study for the Town in January 2011 and a set of Flood Insurance Rate Maps (FIRM) is available for inspection at the Town Hall. For additional flood-related data, consult Sullivan County's All-Hazard Mitigation Plan.

### ***Vegetation and Wildlife***

The Town is for the most part heavily wooded, as it was when the region was first settled. Highland, indeed, has one of the highest percentages of wooded land in Sullivan County. Of the Town's 34,611 acres, some 88% are forestland. The average percentage of forested land in the County is 79%. Evergreens and mixed forest predominate throughout the central area of the Town. The northern portion of the Town is mostly deciduous, as is the western section of the Town.

The wide variety of deciduous hardwood and other trees makes for both an economical and recreational asset. It is part of what is special about the area. Many residents use local firewood as a renewable fuel for home heating and hot water. Woodlands provide wildlife habitat. Hunting and fishing are very popular due to the abundance of fish and game and the wooded environment has attracted a large number of second homes as a result. This is likely to continue and be even more of an economic resource in the future.

Timbering is an economic activity that should be encouraged, provided best management practices are applied. There is a strong need to create economic incentives for land to remain under sustained forestry management programs. The New York State §480-a program offers landowners forestry tax benefits. However, because the remaining taxpayers have to pick up the costs of any tax benefits given to woodlot owners, the burden of this program is squarely upon municipalities, and this does not encourage the Town to promote the program. The Town is, in fact very opposed to the §480-a program as presently written. Amendments to this legislation are needed to spread the burden Statewide, in the manner of the Farmer's School Tax Refund, so that all taxpayers who benefit from the open space preserved can help to pay the costs. Then the Town can safely promote the program without fear of weakening its tax base.

Highland is fortunate in possessing an unusual variety of wildlife species. Mammals found in the Town include whitetail deer, chipmunks, bobcats, black bear, eastern gray squirrel, red squirrel, eastern cottontail, weasel, varying hare, common porcupine, gray fox, red fox, mink, otter, beaver, woodchuck, raccoon, skunk, muskrat, coyote and fisher. It is important to preserve wildlife habitat.

Bird watching is a year round ecotourism opportunity in the Town of Highland. Approximately 200 species of birds have been identified in the Highland area as part of a natural resource study for the Upper Delaware Scenic and Recreational River. The Audubon Society has determined that the Upper Delaware River is an Important Bird Area (IBA), a designation based on the variety and uniqueness of birds and critical nature of the habitat. Migratory species include woodcock, Canada geese, redhead

duck, ring-necked duck, canvasback duck, greater scaup and lesser scaup. Other waterfowl that nest in the area are the American merganser, green-winged teal, blue heron, black duck, mallard and wood duck. In addition, rails and snipe are found nesting in the area. A variety of hawks including the goshawk, redtailed hawk (classified as threatened by the NYS-DEC), red-shouldered hawk and sparrow hawk are found in Highland and the surrounding area. Several species of owls, including the barn owl, are known to make their home in the Town, along with the wild turkey, ruffed grouse and turkey vulture.

The Town of Highland is a popular eagle viewing location, especially since community volunteers joined with the Eagle Institute to construct an observation blind on Route 97 at Minisink Ford. Open year-round for bird watching, the blind is particularly popular for eagle watching during the winter months. Headquartered in the Town at Barryville, the Eagle Institute is a nonprofit volunteer organization dedicated to the protection of the bald eagle and other birds of prey. Its volunteers report that the blind is a popular stopping point for dedicated eagle watchers, and attracts many new enthusiasts as well because of its high visibility on Route 97. There are regular sightings at the viewing pull-off in Barryville, by travelers along Route 97, and by residents who live along the Delaware River.

Winter eagle sightings from the observation blind and other vantage points in the Town of Highland are frequent because of the open water caused by rapids and tributaries. The NYS aerial mid-winter count in January 2009 recorded 199 bald eagles in Southeast New York State. Preliminary totals for the same area in January 2010 saw a noticeable drop, to 71, but these totals do not include ground counts and are unofficial. Of the 71 eagles counted, 26 were sighted in the Delaware River valley.

Eagle watching continues to be a popular eco-tourism activity in the Town of Highland. Each winter Eagle Institute volunteers assist 4,000-6,000 visitors at the viewing locations and at education events such as the annual EagleFest in nearby Narrowsburg. In 2010, volunteers intercepted 6,636 visitors on weekends in a 10-weeks period; 444 of those at the Minisink Ford blind. The majority of the 2,679 visitors intercepted across the river in Lackawaxen, PA, traveled through the Town of Highland along Route 97 to also visit the Mongaup Falls reservoir in nearby Lumberland.

In the last 10 years, the number of year-round breeding eagles in the Upper Delaware River valley has increased, providing eagle sightings year-round. The peaceful quiet of Highland's wooded landscape is an important factor in having a resident population. There are at least three active eagle nests along the Delaware River either within the boundaries of the Town of Highland or across the river in Pennsylvania. At least three additional nests are located on lakes in the Town. Additionally, eagles nesting in adjacent towns regularly utilize bodies of water in Highland for feeding, especially those private lakes that are stocked with fish.

Loss of habitat is the primary reason for species decline. While the amazing success of the eagle population is to be celebrated, communities need to remain vigilant when balancing development and wildlife habitat. The eagle's main food source is fish and it relies on clean water and healthy large stands of trees to perch, roost and nest in. Activities that contribute to the degradation of water

quality, tranquil woodlands, riparian buffers and healthy forests should be avoided if the Town wants to continue to support this unique resource.

***Natural Features Protection & Trends***

Based on the analysis above, the natural resources found throughout the town – Geology, Hydrology and Vegetation and Wildlife – are of significant importance to the Town. It is in the best interest of the Town to continue to protect these important resources. The result will be a continued economy that builds on these natural assets and creates a quality of life for residents and visitors that will be cherished for years to come.

## Land Use

### Existing Land Use

The Town of Highland encompasses over 30,000 acres, of which the majority is made up of large tracts of forested land. Residential development is interspersed throughout the town with almost all commercial development located in four hamlet centers. These four hamlet centers, from largest to smallest, are Eldred, Barryville, Yulan and Highland Lake. According to Property Classification Data through the Office of Real Property Services for Sullivan County, almost 14,000 acres of the town are classified as Wild, Forested, Conservation Lands and Public Parks. Residential classification accounts for over 10,000 acres, but one must keep in mind that due to the significantly large intact parcels, one house may sit on over 100 acres alone. Thus the image is clear; the Town of Highland remains largely intact with forests with minimal disturbance and sprawl development. The intent of this plan is to ensure that the future land use of the town continues this pattern by working to preserve the large tracts of forested land and concentrating development to the hamlet centers.

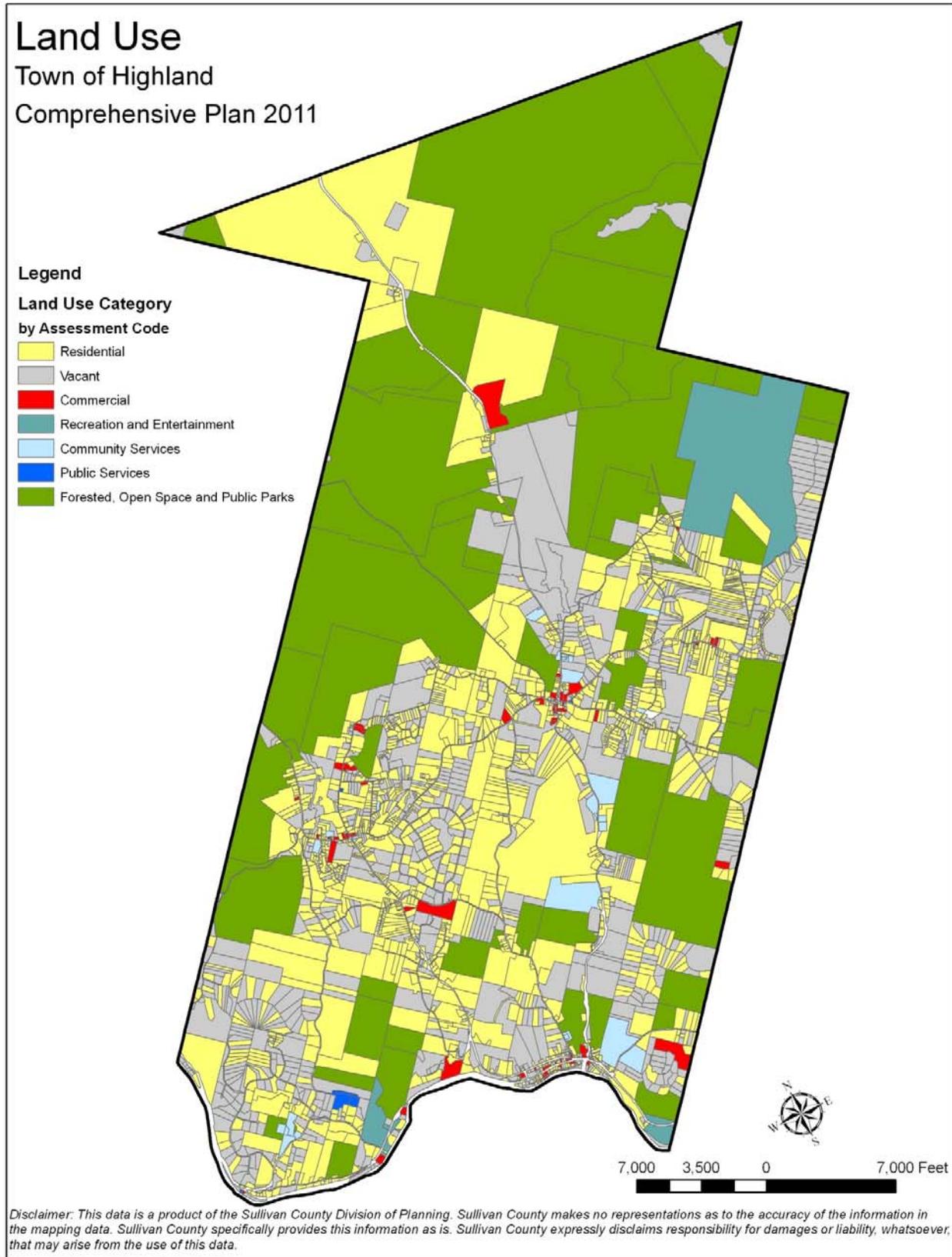
As stated before, most of Highland is in residential or forestry use. (*Figure 6: Land Use*). While commercial development is currently limited, with a large portion of businesses being seasonal, there currently exist no industrial businesses or uses in the Town. With more and more second home owners and visitors flocking to the Upper Delaware region, the Town would like to see more businesses take advantage of this tourism industry and encourage new businesses that protect and support the preservation of the Town’s natural assets and resources. It is the intent of the Town to continue the development of businesses that complement the cultural and recreational opportunities that exist because of our natural beauty.

Presently, there are no industrial properties in the Town of Highland. Commercial properties are limited to commercial housing and retail businesses that service primary and second home residents, visitors and tourists. The towns businesses are summarized in the table below. The business activity in the town expands dramatically during the spring and summer months when visitor season peaks. Second home residents open up their houses and local camps begin operations. Anglers fish the Delaware River for shad and trout. Campgrounds begin rafting and canoeing operations along the Delaware. The fuel for the economic activity in the town is the beauty and accessibility of the Town’s rivers, lakes and streams.

Commercial properties in the Town are assessed at approximately \$16,770,000 compared to the total assessed value of the Town of \$136,445,000. Commercial properties are approximately 12% of total assessed value.

<b>Commercial Classification</b>	<b>Total Assessed Value</b>
Food & Drink Establishment	\$5,018,625
Service & Offices	\$2,370,900
Apartments	\$2,273,100
Lodging	\$2,257,875
Camping Facilities	\$1,478,400
Supermarket & Mini Marts	\$1,436,100
Auto Related Service	\$1,059,563
Vacant Potential	\$489,950
Retail & Cultural	\$385,000
<b>Total Assessed Value of Commercial Property in the Town</b>	<b>\$16,769,513</b>

Figure 6: Land Use



High impact uses are defined as enterprises or operations that engage in the basic processing and manufacturing of materials or products predominately from extracted or raw materials, or a use engaged in storage of or manufacturing processes using flammable or explosive materials, or storage or manufacturing processes that potentially involve hazardous or commonly recognized offensive conditions. Such uses are incompatible with most other land uses, including residential, educational, open space and recreational opportunities. The location of enterprises of this type also has an adverse effect on property values, and the quality of life and character of the Town. Thus, high impact uses as defined pose adverse impacts and are incompatible with the Town's current land uses.

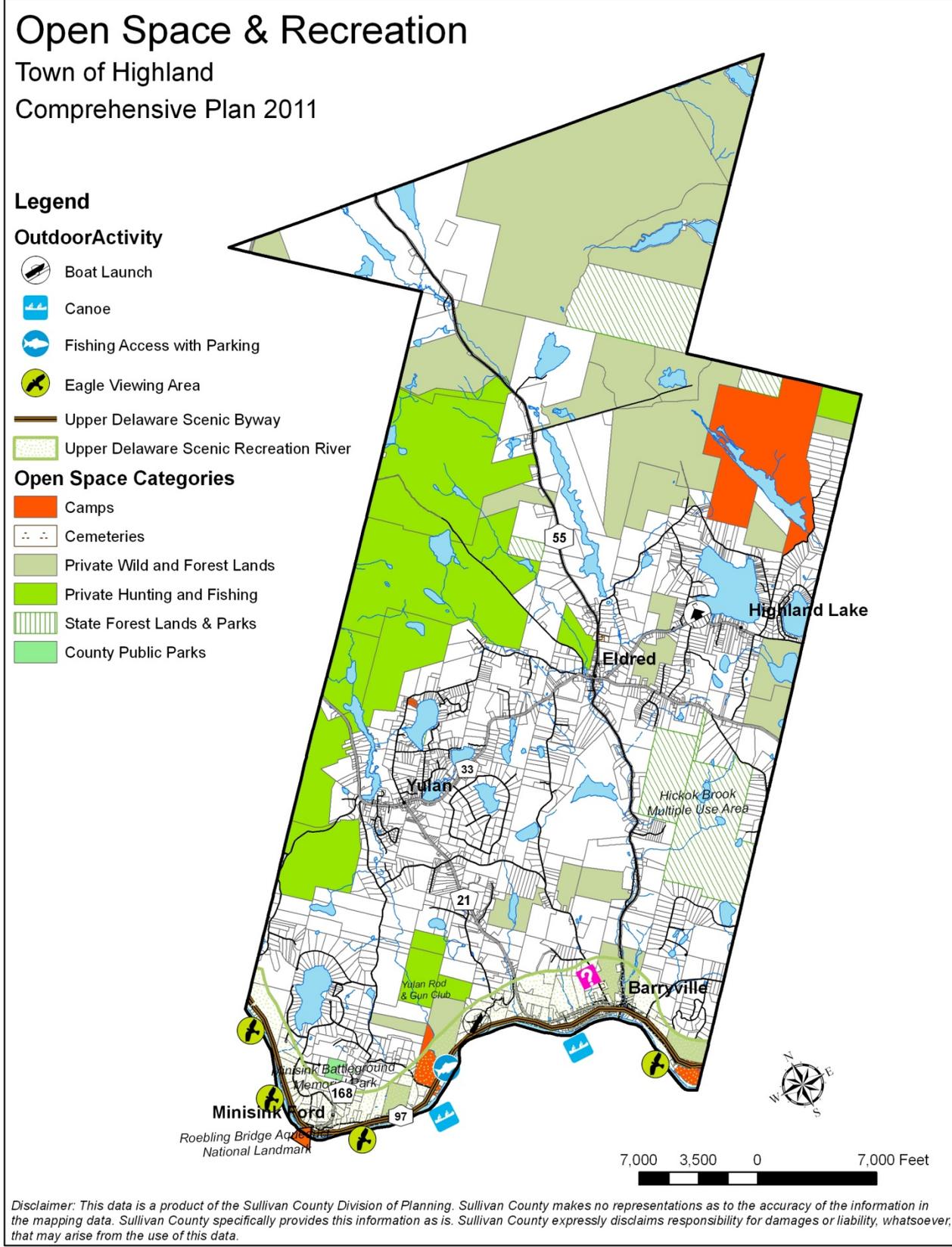
The Town also has large amounts of open space. (*Figure 7: Open Space*) There are three types of park and recreational resources found in the Town - public, quasi-public, and private facilities and land. Open space and recreational land in the Town totals almost 14,000 acres and accounts for approximately 5.5 acres per resident. Public recreational lands are available throughout the Town and are provided by governmental entities. The New York State Department of Environmental Conservation owns the underutilized Hickok Brook Multiple Use Area in the central eastern portion of the Town as well as a smaller Forest Preserve north of Eldred and a portion of Washington Lake. Sullivan County owns Minisink Battleground Park which is located on the highlands above the National Park Service's Roebling Aqueduct Park, both of which are listed on the National Register of Historic Places. The Town has acquired a riverfront parcel on the Delaware River and is exploring ways to develop it.

The largest land holders in terms of total acreage are Highland Field and Stream (3,196.92 acres), Ozdan Development, LLC (2,579.64), New York State (1,864.58), Eldred Preserve, LLC (1736.23), Excelsior Sportsmen's Club (1,649) and Martin Luther Camp Corporation (1,124 acres).

The Town of Highland is also home to many hunting and fishing clubs which own large tracts of forested open space to the west and north. Almost all of the private and quasi-public recreational land holders pay taxes on their property. The State of New York pays a portion of the otherwise due tax on Department of Environmental Conservation land holdings in the Town. Some of that property, however, is completely tax exempt. Sullivan County's property is also tax exempt.

The table below identifies the largest landowners of recreational lands as identified by Real Property Class Codes. It is these large forested tracts that make up a significant portion of the town and the continued preservation of these parcels is something the Town wishes to encourage.

Figure 7: Open Space



**Town of Highland Recreational Land**

<u>Landowner</u>	<u>Acres of Land</u>
Highland Field and Stream	3,196.92
Ozdan Development, LLC f/k/a Woodstone	2,579.64
New York State	1863.44
Martin Luther Camp Corporation	1,123.00
Pfeifer Realty Corp	892.00
Eldred Preserve	886.76
Beaver Brook Rod & Gun Club	583.31
McKean, Gibson E.	510.02
Orange & Rockland	594.30
O R Corporation	462.79
Bethel Sportsman's Club	389.90
Sand Pond Corporation	288.90
Yulan Rod & Gun Club	253.70
Jones Partners, LP	203.50
Highland Lake Rod & Gun Club	158.22

***Existing Land Use Controls***

There is a body of local laws now in effect that serve to guide development in the Town of Highland. This legislation includes the following:

- Subdivision Regulations (Subdivision Local Law)

The Town Board adopted a resolution on April 13, 1979 giving the Town of Highland Planning Board the authority to approve subdivision plans pursuant to Section 276 of the Town Law. Regulations were developed by the Planning Board and have been used effectively over the last two decades. These were updated and incorporated into a Subdivision Local Law adopted by the Town Board in 1997. The Law is comprehensive and consistent with current Town Law and SEQRA requirements. It includes a lot improvement or boundary line adjustment exemption, soil testing requirements, storm drainage provisions, open space standards and street specifications. The Town Highway Law is established as the basic standard for all road construction although private streets are anticipated and, wisely, there is no attempt to encourage public dedication.

- Zoning Law

The Town adopted a Zoning Ordinance pursuant to Section 261 of the Town Law on July 24, 1989 in implementation of the original Master Plan. That Ordinance was amended in 1993 and on August 3, 1999 was replaced with a Zoning Law adopted under the authority of the Municipal Home Rule Law. It establishes four basic zoning districts (*Figure 8: Zoning Map*) as follows:

*H-C Hamlet-Commercial District*

A one acre minimum lot size zone where various residential, neighborhood commercial and other commercial uses are permitted. This District encompasses the five hamlets of Eldred, Yulan, Minisink Ford, Highland Lake and Barryville.

*R-1 Residential District*

A two acre minimum lot size zone where low density residential development, multiple family dwellings, hotels, restaurants, recreational and agricultural uses are all allowed. This District includes areas surrounding or adjacent to H-C Districts in Eldred, Yulan, Minisink Ford and Barryville.

*R-2 Residential-Agricultural District*

A three acre minimum lot size zone that allows for a very similar group of uses as the R-1 District, excepting for the density. However, multiple dwellings are not allowed and sawmills are added as a permitted Special Use. This District represents the bulk of the Town of Highland, as much as 90% of it, and all of the land outside the hamlets and their environs.

*WLRD Washington Lake Resort District*

A three acre minimum lot size zone that permits single, double and multiple dwellings, hotels and various other accommodations, resort/recreational uses, retail stores, business and professional offices and service establishments. This District adjoins Washington Lake.

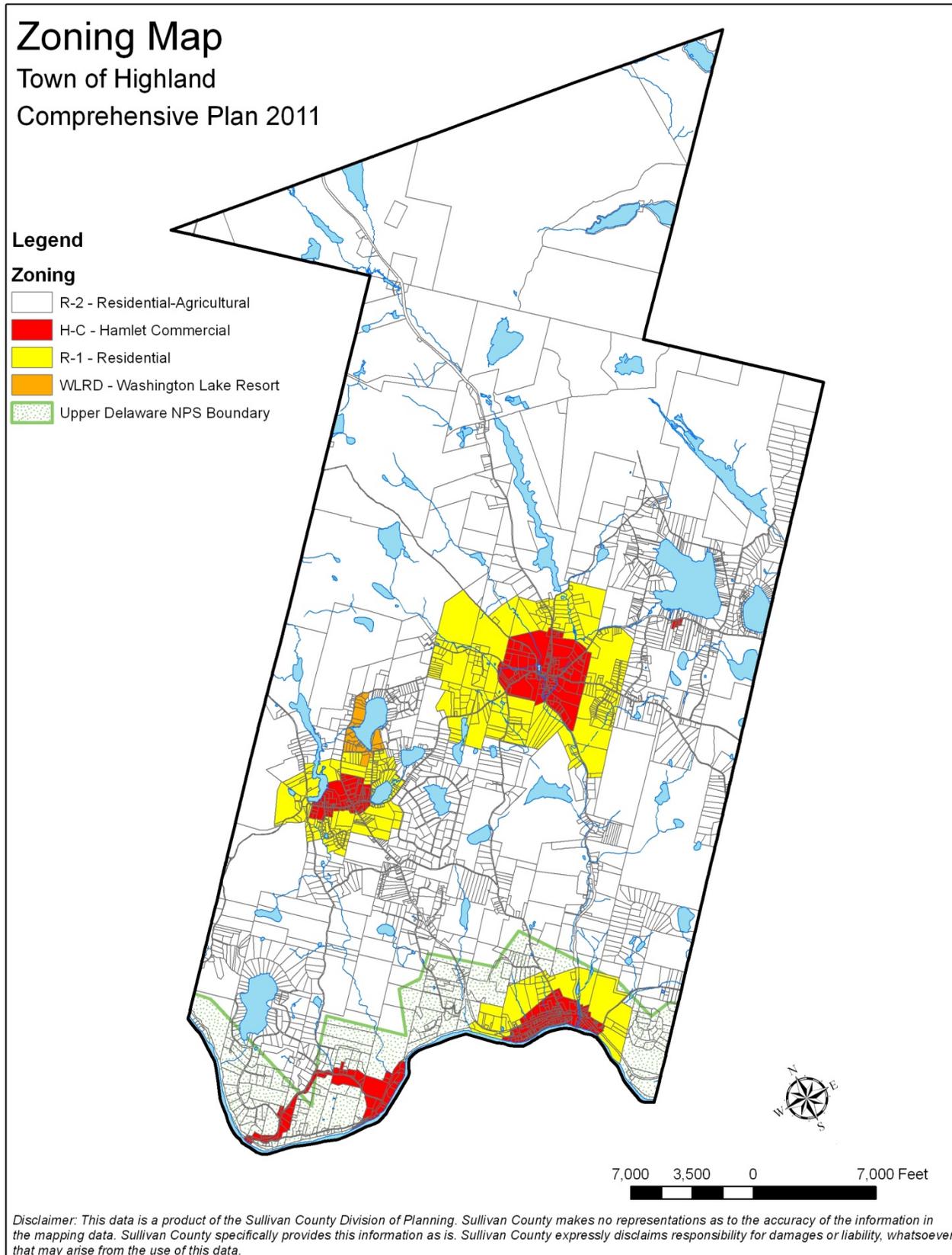
The Zoning Law also addresses flood plain regulation waterfront lot development, landscaping, mobile homes, cluster development, Planned Unit Developments, clear-cutting of land, campgrounds, home occupations, noise, quarrying and a number of other common zoning issues. It is comprehensive, well thought out and reasonable. It incorporates Special Use/Site Plan Review criteria that give the Town a combination of flexibility and control that permits development while ensuring it is high quality – the only practical approach for a rural community such as Highland.

- Highway Law

The Town adopted a Highway Law in 1997 to establish requirements for new roads, driveway and highway occupancy permits and dedication of roads to the Town. The standards and procedures are appropriate. They protect the Town from having to take over sub-standard roads. They also ensure that activities within the right-of-way, including installation of new driveways, are conducted in a safe manner that does not damage Town roads.

The road construction standards apply by reference to new private subdivision roads but are primarily directed at new roadways proposed to be dedicated to the Town. There is no requirement that roads be dedicated. Moreover, the Subdivision Law allows the use of different standards for private streets with the approval of the Town Board. This is important because requiring them to be built precisely to the same standards as public streets in all circumstances gives developers every incentive to dedicate

Figure 8: Zoning



the roads, having had to construct them to that standard anyway. Private streets typically get far less use than public roads and do not necessarily require the same type of construction. Allowing for their use is wise public policy that helps to avoid future tax increase on the general population for road maintenance.

- Other Local Laws and Ordinances Related to Land Use

The Town has enacted a number of other local laws and ordinances to deal with specific forms of land use development, including the following measures:

1. An Unsafe Building Law providing for the demolition of dangerous structures.
2. A Sign Ordinance later incorporated in and superseded by the Zoning Law (§ 5.3).
3. A Noise Ordinance later incorporated in and superseded by the Zoning Law (§ 5.23).
4. A Litter Ordinance establishing penalties for littering and collection procedures for solid wastes.
5. A Sewage Disposal Ordinance regulating the disposal of sewage and installation of facilities for that purpose.
6. A Parking Ordinance controlling parking in the context of traffic regulations.
7. An ordinance regulating peddlers and solicitors in the Town of Highland.
8. A Dog Control Ordinance addressing the control, confinement and leashing of dogs.
9. A Flood Plain Management Law as required to implement the National Flood Insurance Program in the Town of Highland.
10. Regulations on the operation of "games of chance" within the Town.
11. An ordinance regulating the operation of motor boats on Highland and Washington Lakes.
12. A Building Ordinance complementing implementation of the New York State Uniform Fire Protection and Building Code.
13. Town of Highland Emergency Plan, revised July 2010
14. Sullivan County All-Hazard Mitigation Plan, revised January 2011
15. Communication Tower Ordinance
16. Alternative Energy ordinances

These various local laws and ordinances operate together with subdivision and zoning regulations to provide the Town of Highland with an effective land use management system that also respects private property rights and accommodates growth.

***Land Use Development Trends***

The Town of Highland's land use patterns have stayed relatively intact and in order to preserve this pattern we hope the following continues:

- Increased ownership by second home owners.
- Recreation and tourism based businesses that rely on the preservation of our natural and cultural assets, and uphold the values and objectives expressed in this plan.
- The prohibition of enterprises or operations that engage in the basic processing and manufacturing of materials or products predominately from extracted or raw materials, or engage in storage of or manufacturing processes using flammable or explosive materials, or storage or manufacturing processes that potentially involve hazardous or commonly recognized offensive conditions.

With the continued rising costs of fuels and the falling value of the dollar, more and more people are searching for vacations and activities to do that are close to home. The Town is conveniently located and accessible from the largest metropolitan area, New York City. Future business development that taps into these markets will lead to expanding seasonal businesses to year round which in turn will require more service businesses to be needed. All future business development will help bring in additional tax revenue and help to balance the tax base making it affordable for taxpayers.

## Population and Economic Base

### Population Trends

The following table illustrates the growth of Highland as compared to surrounding communities:

Western Sullivan Population Patterns, 1960 - 2010

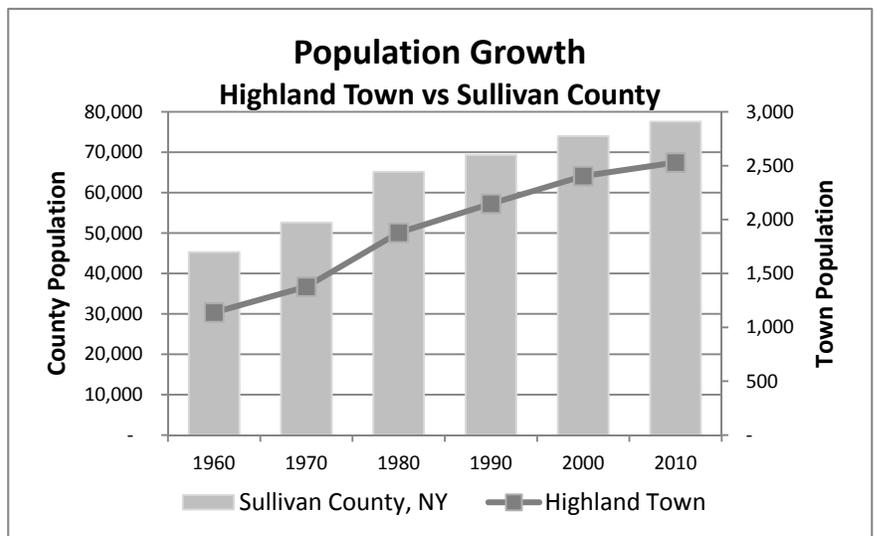
Municipality	1960	1970	% Change 1960-1970	1980	% Change 1970-1980	1990	% Change 1980-1990	2000	% Change 1990-2000	2010	% Change 2000-2010
<b>Sullivan County, NY</b>	<b>45,272</b>	<b>52,580</b>	<b>16.1%</b>	<b>65,155</b>	<b>23.9%</b>	<b>69,277</b>	<b>6.3%</b>	<b>73,966</b>	<b>6.8%</b>	<b>77,547</b>	<b>4.8%</b>
<b>Highland Town</b>	<b>1,138</b>	<b>1,377</b>	<b>21.0%</b>	<b>1,878</b>	<b>36.4%</b>	<b>2,147</b>	<b>14.3%</b>	<b>2,404</b>	<b>12.0%</b>	<b>2,530</b>	<b>5.2%</b>
Bethel Town	2,366	2,763	16.8%	3,335	20.7%	3,693	10.7%	4,362	18.1%	4,255	-2.5%
Tusten Town	1,087	1,224	12.6%	1,424	16.3%	1,271	-10.7%	1,415	11.3%	1,515	7.1%
<b>Pike County, PA</b>	<b>9,158</b>	<b>11,818</b>	<b>29.0%</b>	<b>18,271</b>	<b>54.6%</b>	<b>27,966</b>	<b>53.1%</b>	<b>46,302</b>	<b>65.6%</b>	<b>57,369</b>	<b>23.9%</b>
Lackawaxen Township	1,068	1,363	27.6%	2,111	54.9%	2,832	34.2%	4,154	46.7%	4,994	20.2%
Shohola Township	413	574	39.0%	986	71.8%	1,586	60.9%	2,088	31.7%	2,475	18.5%
Westfall Township	838	1,348	60.9%	1,825	35.4%	2,106	15.4%	2,430	15.4%	2,323	-4.4%

Population, Housing Units, Area and Density, 2010

	Population	Housing Units	Area in Square Miles			Density per Square Mile of Land Area	
			Total Area	Water Area	Land Area	Population	Housing Units
<b>Sullivan County</b>	<b>77,547</b>	<b>49,186</b>	<b>996.4</b>	<b>35.6</b>	<b>960.8</b>	<b>80.7</b>	<b>51.2</b>
<b>Bethel Town</b>	4,255	3,954	89.8	5.3	84.5	50.3	46.8
<b>Highland Town</b>	2,530	1,766	51.5	2.8	48.7	52.0	36.3
<b>Tusten Town</b>	1,515	1,138	49.6	1.8	47.9	31.6	23.8

Source: Population & Housing Date - U.S. Census Bureau. Area units - SC Real Property TaxService

The Town of Highland is tied for fifth as one of the fastest growing towns in Sullivan County (5.2%). It is slightly above the overall rate of population change from 2000 for the entire County (4.8%). Again, as in 2000, the cause of this growth can be related to second-home growth (see Section 1.5), conversions of these homes to permanent residences and proximity to Orange County and Pennsylvania. The chart illustrates the growth pattern



Note: The following sub-sections rely upon 2000 Census data in certain cases because it was the latest available at the time of this update, complete detailed 2010 Census data having not yet been released. It is anticipated that once new data becomes available it will be added to this Plan.

### **Age**

The population of the Town of Highland is somewhat older than Sullivan County as a whole, with a very high 17.9% of the population over 65 years of age in 2010 (up from 17.1% in 2000). The County proportion, by contrast, was 14.8% (up from 14.3% in 1990). Both numbers are relatively high compared to the New York State average of 13.5% in 2010.

The largest age-cohort, the 45-54 year age group, accounted for 14.8% of Highland residents slightly lower than the County (16.5%), where the 45-54 age group was also the largest. The proportion of children 19 years old or younger was 24.1% for the Town but 25.3% for the County in 2010.

One interesting statistic to note is that the 20-24 age group grew by 63.5% from 2000 to 2010, a potentially positive transition as historically this age group typically moved away after high school and did not return. Also interesting is the number of children between the ages of birth and 14 has decreased on average by almost 13% since 2000.

**Town of Highland Population by Age, 2000 - 2010**

	2000		2010		Change 2000-2010		Sullivan County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<5 Years	114	4.7%	101	4.0%	-13	-11.4%	4,356	5.9%
5-9 Years	143	5.9%	126	5.0%	-17	-11.9%	5,133	6.9%
10-14 Years	168	7.0%	142	5.6%	-26	-15.5%	5,576	7.5%
15-19 Years	156	6.5%	166	6.6%	10	6.4%	5,203	7.0%
20-24 Years	85	3.5%	139	5.5%	54	63.5%	3,574	4.8%
25-34 Years	240	10.0%	229	9.1%	-11	-4.6%	8,647	11.7%
35-44 Years	380	15.8%	342	13.5%	-38	-10.0%	12,121	16.4%
45-54 Years	408	17.0%	435	17.2%	27	6.6%	10,928	14.8%
55-59 Years	176	7.3%	213	8.4%	37	21.0%	4,342	5.9%
60-64 Years	124	5.2%	183	7.2%	59	47.6%	3,503	4.7%
65-74 Years	207	8.6%	253	10.0%	46	22.2%	5,856	7.9%
75-84 Years	159	6.6%	132	5.2%	-27	-17.0%	3,622	4.9%
85+ Years	44	1.8%	69	2.7%	25	56.8%	1,106	1.5%
<b>Totals</b>	<b>2,404</b>	<b>100%</b>	<b>2530</b>	<b>100%</b>	<b>126</b>	<b>5.2%</b>	<b>73,966</b>	<b>100%</b>

**Educational Attainment**

The 2000 Census indicated 78% of the population aged 25 years or more had a high school diploma. Some 17% possessed a college degree (Associate or higher). The drop-out rate for the Town was 22.1% as of 2000, decreasing over 6% from 1990 showing a positive turnaround. The number of residents receiving an Associate Degree or higher increased more than 30% (30.5%) from 1990, further demonstrating that the educational attainment of Town residents is improving.

**Town of Highland Education Levels**

	1990	2000	% Change 1990-2000	2010	% Change 2000-2010
Persons 25+ Years	1,495	1,733	15.9%		
% Under 12 Years Education	28.3%	22.1%	-21.9%		
% 12 Years or more	71.7%	77.9%	8.6%		
% 2+ Years College Degree	18.7%	24.4%	30.5%		
% 4+ Years College Degree	14.2%	17.0%	19.7%		

*Note: 2010 data will be added as soon as it is available.*

**Income**

Census data gathered during the 2000 Census indicates per capita income for the Town of Highland increased 70.4% from 1990 (\$13,445) to 2000 (\$22,908). This is 20% higher than the increase for the entire County (50.3%) whose per capita income was \$18,892 in 2000. Median household income in the Town, moreover, was \$40,676 compared to \$36,998 Countywide. Per capita income Statewide was \$23,389, again proving a positive change is occurring in the Town since 1990.

**Income of Residents, 1990 - 2010**

	1990		2000		% Change 1990-2000		2010		% Change 2000-2010	
	Highland	Sullivan County	Highland	Sullivan County	Highland	Sullivan County	Highland	Sullivan County	Highland	Sullivan County
Per Capita	\$ 13,445	\$ 12,567	\$ 22,908	\$ 18,892	70.4%	50.3%				
Median Household	\$ 27,805	\$ 27,582	\$ 40,676	\$ 36,998	46.3%	34.1%				
Median Family	\$ 35,329	\$ 33,884	\$ 50,134	\$ 43,458	41.9%	28.3%				

*Note: 2010 data will be added as soon as it is available.*

**Employment Status**

The Town of Highland had a population of 16 years and older of 1,944 persons in 2000. Of this 56.4%, or 1,097 were in the labor force. A little over 50% (50.9%) were employed, with almost 10% (9.8%) of the civilian labor force of the Town unemployed. 43.6% of the Town were not in the labor force which is surprising since the majority of the town population above 16 years is well below retirement age.

**Town of Highland Employed Persons by Class, 1990 - 2000**

	1990	2000	% Change	
			1990-2000	2010 2000-2010
Private for profit wage & salary workers	524	483	-7.8%	
Employees own corporation		40		
Private not-for-profit wage & salary workers	115	142	23.5%	
Self-employed workers	102	132	29.4%	
In agriculture, forestry, hunting & fishing		9		
Unpaid family workers	6	0	-100.0%	
<i>Sub-total (private industry workers)</i>	<i>747</i>	<i>757</i>	<i>1.3%</i>	
Local/county government workers	126	172	36.5%	
State government workers	30	27	-10.0%	
Federal government workers	19	34	78.9%	
<i>Sub-total (government workers)</i>	<i>175</i>	<i>233</i>	<i>33.1%</i>	
<b>Total (all employed persons)</b>	<b>922</b>	<b>990</b>	<b>7.4%</b>	

*Note: Figures from 2010 census will be added as soon as they are available.*

Government represents approximately 23.5% of all employment for Highland workers. However, this is to be expected considering the Eldred School and County Department of Public Works facilities are both located in the Town.

***Employment by Industry and Occupation***

The tables below provide a breakdown of the employed Town population aged 16 years or more in 1990 by industry and occupation. Several industries had a dramatic change from 1990 to 2000, specifically agriculture and mining, manufacturing and transportation and utilities which decreased over 50% (52.9%). This, coupled with the improving educational attainment, shows those occupations in the Health, Education and Public Administration sectors are growing, resulting in a 50% increase from 1990. This further confirms that the Town is moving away from industrial related economy to a more diversified economy.

**Town of Highland Employment by Occupation, 2000 - 2010**

Occupation	% of Employed		% Change 2000-2010
	2000	2010	
Managerial/Professional/Related	30.4%		
Sales and Office	26.8%		
Service	18.6%		
Farming/Fishing/Forestry	0.8%		
Construction/Extraction/Maintenance	12.2%		
Production/Transportation/Material Moving	11.2%		

*Note: Figures from 2010 census will be added as soon as they are available.*

**Town of Highland Employment by Industry, 1990 - 2000**

<b>Industry</b>	<b>% of Employed</b>		<b>% Change</b>	<b>2010</b>	<b>% Change</b>
	<b>1990</b>	<b>2000</b>	<b>1990-2000</b>		<b>2000-2010</b>
Agriculture/Forestry/Mining	3.60%	1.3%	-63.9%		
Construction	11.90%	13.2%	10.9%		
Manufacturing	11.30%	6.7%	-40.7%		
Transportation/Utilities	5.70%	1.7%	-70.2%		
Trade	17.00%	14.5%	-14.7%		
Finance/Insurance/Real Estate	7.40%	6.8%	-8.1%		
Business/Personal/Entertainment Services	11.70%	8.5%	-27.4%		
Health/Education Services	17.60%	25.1%	42.6%		
Professional Services	7.60%	4.6%	-39.5%		
Public Administration	6.00%	10.3%	71.7%		
Information	-	1.6%	-		
Other services	0.20%	5.7%	2750.0%		

*Note: Figures from 2010 census will be added as soon as they are available.*

There are large numbers of persons in lower paying trade and business service occupations within the Town. Nevertheless, there are also large numbers of higher paid managers and professionals.

***Place of Employment***

Of the 958 workers 16 and over in 2000, 56.6% worked within Sullivan County, or 542 persons. This is almost a 10% increase from 1990 (8.6%). 34.9% worked outside Sullivan County, with 8.9% working outside New York State. The average travel time to work was 33.5 minutes according to the 2000 Census.

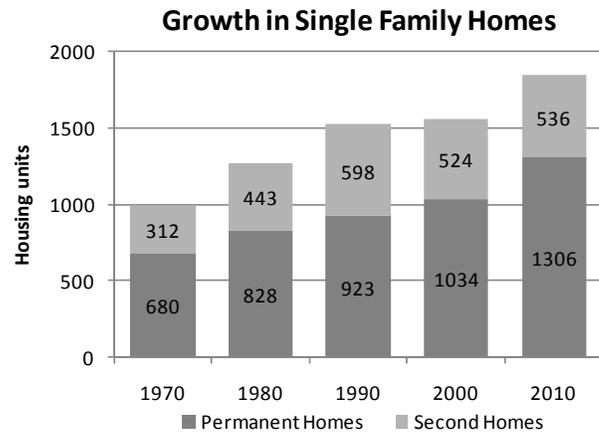
***Population and Economic Trends***

While Highland continues to be an aging population there was a 5% rise in the 20-24 age group. Encouraging younger generations to locate to Highland and raise families will continue to foster community development and pride for the area. This will also lend itself to preserving the Quality of Life of the area that residents and visitors cherish. The Town is also trending to a more educated population and a higher family income, with number of people employed in manufacturing, mining and the utility sector significantly decreasing. The Health and Education industries saw a rise over the last decade and it is anticipated to continue increasing. While the numbers don't show the Tourism dependent businesses in the Town, this is a significant portion of the local economic base. The continuation of these businesses and the expansion and creation of additional businesses that rely on the protection of our natural assets is key to improving the local economy and establishing a sustainable economic base.

## Housing

### Housing Stock

The 2010 U.S. Census indicated Town of Highland had 1,766 housing units, over 200 more than it had in 2000, resulting in a 13.4% increase. There were 1,049 occupied units, a decrease of 98, and 717 vacant units, an increase of 110, indicating a large number of second homes. The number of vacant units represents 40.6% of the town and an 18.1% increase from 2000. Of the 717 vacant units, 591 or 33.5% are classified as being for seasonal, recreational or occasional use. In 2010, there were 817 owner occupied units, up from 785 in 2000, representing a modest increase of 4%. . The number of renter occupied units increased from 166 units in 2000 to 232 in 2010, representing an almost 40% (39.8%) increase. Renter-occupied units account for 22% of the occupied housing units in the Town, accounting for almost a quarter of the Town. Of the roughly 1,300 single-family residential parcels (80 classified as seasonal), it is approximated that 536 of these are second homes, representing almost 45% of the town (44.66%). This number (536) was derived by parcels with zip codes of primary mailing address being outside of the Town of Highland. This is very similar to the pattern of adjoining portions of Sullivan and Pike Counties where seasonal housing is still strong but is also converting to permanent housing with associated impacts on schools and costs of government. The chart below depicts growth in both permanent and second homes:



Housing Units, Town of Highland, 1990-2010

	1990		2000		2010		Percent Change	
	#	%	#	%	#	%	1990-2010	2000-2010
<b>Occupied Units</b>	820	53.9%	951	61.0%	1,049	59.4%	27.9%	10.3%
<b>Vacant Units</b>	701	46.1%	607	39.0%	717	40.6%	2.3%	18.1%
<b>Total Units</b>	<b>1,521</b>	<b>100%</b>	<b>1,558</b>	<b>100%</b>	<b>1,766</b>	<b>100%</b>	<b>16.1%</b>	<b>13.4%</b>

### Number of Persons Per Household

The average number of people living in each household was 2.49 in 2010, up from 2.38 in 2000 and 2.46 persons in 1990. This is consistent with the 2010 County average of 2.45 persons, however the County average has declined from 2.5 persons in 2000 and 2.60 persons in 1990.

### Housing Values

The 2000 Census revealed a median housing value of \$106,800, up from 103,000 in 1990, for owner-occupied housing units within the Town. Countywide, the median value was \$93,300 - slightly lower than the Town. The 2010 Census figures relating to housing value have not yet been released.

According to the Sullivan MLS, the median sale price for a single family home in the first quarter of 2011 was \$120,000, while the average sales price was \$150,987. (www.catskill4sale.com)

### ***Housing Type***

Single family homes in 2000 accounted for 1,332 units, up from 1,290 in 1990 and comprised 85.8% (84.8% in 1990) of the housing stock in Town of Highland with 1,316 of those being detached and 16 being attached units. The number of two-family units almost doubled from 1990 from 32 to 61 in 2000. The number of multi-family units decreased from 51 units in 1990 to only 33 in 2000. The number of mobile homes decreased to 132 (142 units in 1990), or 8.5% of all housing in Highland. Again, 2010 Census data is not yet available.

### ***Housing Costs***

The median rent within the Town was slightly below the County in 2000, \$521 compared to \$545. This is interesting, as the median mortgage in 2000 was \$1,024, almost double.

### ***Housing Needs***

The majority of the housing stock was built prior to 1990 (78.43%) with approximately 12%, or 212 units, being built over the last decade. This aging building stock will need maintenance and rehabilitation to ensure the sustainability of it over time. The Town will also benefit from housing rehabilitation assistance through the Community Development Block Grant program to help Town of Highland homeowners finance the upgrade of units. New programs are available from various sources to make energy efficient upgrades and improvements to existing housing stock.

To meet the housing needs of the Town, it must ensure that its land use regulations do not unnecessarily raise the cost of moderate income housing by requiring excessive lot sizes or adding too many regulatory oversight costs. This can be accomplished using cost-effective Conservation Subdivision designs as well as using sustainable building practices such as solar orientation and minimizing land development costs.

## Goals

***The intent of this plan is to maintain and improve the quality of life for the current and future residents of the Town. The Committee has identified ten goals, explained the rationale behind these goals in a supporting statement for each goal, and listed key strategies or objectives for meeting these goals.***

- 1. To preserve and extend the enjoyment of peace and tranquility to residents and provide an improved quality of life for the Town.**

**Supporting statement:** Quality of life encompasses a broad range of amenities, priorities and values. Over the past ten years, Highland residents have engaged in several community visioning and community design exercises (in 2004, 2006 and 2011) to help them define and articulate their notions of quality of life. Participants identified physical safety; access to clean air and water; peace and quiet; privacy balanced with a sense of community; enjoyment of the area's natural beauty, wildlife and open spaces; small town atmosphere; affordability; fair and equitable property taxes; quality schools; employment opportunities and access to recreational, cultural and historical resources as important factors in their definition of "quality of life."

**Strategies:**

- a. *Ensure that the existing ordinances pertaining to excessive noise and lighting are adequate and revise if necessary to strengthen.*
- b. *Plan for the Town's aging population by identifying and encouraging the development of adequate housing and services for senior citizens.*
- c. *Foster age appropriate civic and recreational activities for the youth of the Town of Highland.*
- d. *Encourage communication and collaboration among civic and cultural organizations to maximize their resources and the benefits they deliver to the community.*
- e. *Coordinate and participate with adjoining towns and neighboring townships in Pennsylvania, through membership in the Upper Delaware Council, to protect the Delaware River and its tributaries.*
- f. *Ensure that the Town's land use regulations continue to be in substantial conformance with the Land and Water Use Guidelines in the River Management Plan for land within the Congressionally-designated Upper Delaware Scenic and Recreational River Corridor.*
- g. *Maintain the 3-acre minimum lot size as currently required in R-2 districts.*
- h. *Investigate options for the use of zoning regulations such as conservation subdivisions to help preserve open space.*
- i. *Support our school and library with programs that nurture good citizenship and recognize the potential talents with the goal of developing their strengths.*
- j. *Preserve representative government and home rule by fostering local participation in the political, social and economic decision making in the Town.*

- 2. To preserve the high quality and quantity of our fresh water sources, including surface and groundwater supply and drinking water and the Delaware River and its tributaries, as resources vital to our health, safety, economy, and recreation.**

**Supporting statement:** Water is our most precious resource. As more parts of the world experience extreme shortages of fresh drinking water, our access to high quality water is necessary both for our own prosperity and for the survival of millions of residents of New York, Pennsylvania and New Jersey who depend upon water supplies that originate in the Catskills. The Town of Highland embraces its obligation to protect the quality and availability of fresh water for ourselves and for those who are served by the Delaware River Watershed.

Strategies:

- a. *Since many aquifers are not mapped, research and create a map that shows the aquifers in the Town.*
- b. *Conduct a groundwater study to map the location, depth and supply to better understand this resource and to continue to meet the consumption needs of town residents and businesses.*
- c. *Compile detailed data on the quality, quantity and depth of all surface water resources – lakes, ponds, rivers, wetlands – in the Town.*
- d. *Conduct a study to establish baseline data for private water wells in the Town of Highland.*
- e. *Through such organizations as the Delaware River Basin Commission and the Upper Delaware Council, support the prohibition of large scale water withdrawals for commercial use within the watershed.*
- f. *Research and establish standards and definitions for “large-scale water withdrawals” within the Town of Highland.*
- g. *Develop storm water management techniques for new projects so as to minimize erosion and run-off, flooding potential and water contamination and pollution.*

- 3. To conserve the quality and quantity of land, air, water, forest, wildlife, mineral, historic and scenic resources for the use and enjoyment of both residents and visitors.**

**Supporting statement:** Just as the preservation of the area’s environmental integrity and natural beauty is central to residents’ notions of quality of life, it is also a vital element in the Town’s ability to build a healthy and sustainable local economy. These resources help to define what is important to the residents of our Town and should be the foundation for maintaining and preserving our quality of life.

Strategies:

- a. *Consider a river district overlay consistent with the River Management Plan, with special protection of the Delaware River watershed, water quality, and viewshed.*
- b. *Research the possibility of creating an historic district for the area around River Road and Route 97 in Barryville.*
- c. *Produce a viewshed analysis to locate scenic resources to protect for the future.*
- d. *Explore ways to inventory critical environmental areas and wildlife habitat and encourage owners to take action for their protection*
- e. *Identify important lands, including agricultural and woodland areas, for protection to ensure open space for future generations.*

- f. Encourage preservation of large forested tracts within the Town through conservation easements and other programs.*
- g. Develop a regulation for clear cutting that uses best forestry practices and prevents erosion and damage to adjoining properties, without ruling out farm fields.*
- h. Consider a Heritage Tree ordinance or other mechanism for identifying and preserving significant trees*
- i. Develop a plan for the Town owned access to the Delaware River.*
- j. Continue efforts to eradicate invasive plant species such as Japanese knotweed in the Town by educating property owners about effective, environmentally responsible methods to accomplish this goal.*
- k. Inventory and catalog potential sites that may be suitable for public fishing access.*

**4. To encourage the development of housing, business, and community facilities that are energy efficient and utilize sustainable materials and technologies.**

**Supporting statement:** The quality of our housing, commercial buildings and community facilities is vital to our safety and well-being, and important to our future economic development. The Town of Highland recognizes the desirability of safe and affordable housing for residents of all ages. Energy efficiency, renewable energy sources (wind, solar, geothermal), and the use of building materials and systems that conserve energy and resources and preserve human health both in their manufacture and their operation will make our buildings less expensive to run and more attractive to home-buyers and environmentally responsible businesses. Energy efficient town buildings will save the taxpayers money and provide more comfortable and safe facilities for the use of the community.

**Strategies:**

- a. Perform energy audits on all Town facilities, access available resources to make town buildings energy efficient, and use these projects to educate the public about these measures.*
- b. Encourage energy audits for homeowners and businesses and assist them with accessing state funding for energy retrofits and other improvements.*
- c. Research and implement “best practices” standards for sustainable, energy efficient construction of both residential and commercial buildings.*
- d. Revise town code regulations regarding wind farms and other renewable energy technologies and develop a permitting process.*
- e. Amend zoning to allow electric charging stations for electric vehicles for residential and commercial use in all areas of the town.*
- f. Facilitate planning for senior housing (i.e. adult homes, bungalow style, assisted living, etc.) to accommodate our aging population.*
- g. Use zoning, a floating zone or Planned Unit Development to encourage the creation of senior housing, including accessory use, with attention to the aesthetic issues that may arise.*

- 5. To ensure that every dwelling and place of work is supported by an adequate untainted water supply, sewage treatment and disposal system or septic system, solid waste disposal, electrical, telephone, broadband and mobile telephony access.**

**Supporting statement:** Adequate shelter and water, appropriate disposal of waste, and access to up-to-date communications systems are all necessary for the health, safety and welfare of our citizens and their ability to establish and operate businesses within the Town.

Strategies:

- a. *Ensure that developments comply with sewage, storm water management and erosion/sedimentation control planning requirements in both site plan and subdivision review processes.*
- b. *Support efforts at county and state level to achieve broadband access and universal access to mobile telephony*
- c. *Prohibit non-agricultural holding ponds that are used to store contaminated and/or polluted waters.*
- d. *Work with County and State agencies to ensure continued appropriate waste disposal, and encourage residents and businesses to reduce waste through recycling and other consumer choices.*

- 6. To promote the safe, quiet, efficient and sustainable circulation of people and goods throughout the Town and to sustain a strong road infrastructure.**

**Supporting statement:** Road infrastructure accounts for 47% of the Town's annual budget. Public safety and enjoyment of peace and quiet, as well as the success of our local businesses, all depend upon thoughtful control and management of pedestrian and vehicular traffic and maintenance of our roadways. Road use issues also affect the preservation of the town's rural character, historic and vernacular buildings, and scenic resources, including the Upper Delaware Scenic Byway.

Strategies:

- a. *Manage vehicular access in new development in order to maximize safety and efficiency.*
- b. *Conserve and protect existing roads through such mechanisms as road use agreements so as to minimize the expense of repairing and maintaining roads.*
- c. *Promote "walkable" hamlet centers to promote safety and reduce the number of short trips within these areas.*
- d. *Plan for bike trails throughout the Town as both a means of transportation and the potential for tourism and economic development.*
- e. *Work with NYSDOT on ways of reducing the speed on NYS Route 97 in Barryville, either through enforcement of the existing speed limit or by traffic calming techniques.*
- f. *Budget adequately for the Highway Replacement Plan to maintain Town highway infrastructure as needed.*
- g. *Create a plan/system to perform car counts on all Town roads as needed.*
- h. *Research the safety of dust control measures and adopt a policy that prohibits the use of deleterious substances such as industrial brine for road spraying and dust control.*

- i. Continue to explore opportunities to control expenses by sharing facilities such as road salt storage and maintenance facilities for town highway department vehicles.*
- j. Review Town signage policies and enforcement to promote effective direction of visitors to area businesses while reducing signage clutter and addressing aesthetic issues.*

**7. To preserve and enhance the Town's rural character, cultural assets and historical heritage, including its longstanding commitment to hunting, hiking, fishing and outdoor recreation as a source of enjoyment and as a foundation of the local economy.**

**Supporting statement:** Tourism, hunting and fishing, and other forms of outdoor recreation are important economic engines in the Town of Highland. There is ample evidence that open space, beautification, historic preservation and opportunities to experience the arts and culture are all contributing factors in the success of these enterprises, as well as the satisfaction and well-being of residents. The Town of Highland has a role to play in encouraging the preservation of buildings, landscapes and natural resources that give the town its special character, and in encouraging and supporting cultural development.

**Strategies:**

- a. Develop design guidelines for commercial construction in hamlet centers that require new buildings to harmonize with local vernacular architecture and, whenever possible, require preservation and adaptive re-use of historic, traditional and vernacular buildings.*
- b. Compile an inventory of significant buildings, natural features and heritage sites and encourage their preservation and restoration, including encouraging property owners to have appropriate sites listed on the National and State registries.*
- c. Encourage cultural development, including arts and cultural organizations, within the Town through public private partnerships and such organizations as the New York State Council on the Arts and the National Endowment for the Arts.*
- d. Develop and promote heritage tourism opportunities in the Town that build upon the D & H Canal, the Silver Age Resorts, Minisink Battleground, and the Delaware Aqueduct/Roebling Bridge.*
- e. Develop and promote eco- tourism opportunities in the Town that build upon assets such as the Delaware River and the work of the Eagle Institute.*
- f. Explore opportunities to create camp grounds and other outdoor amenities for residents and visitors (such as Hickok Brook MUA).*
- g. Develop pedestrian, bicycle and moped trails and driving tours throughout the Town, starting with a route connecting the Roebling Bridge to Barryville.*
- h. Work with organizations such as the Greater Barryville Chamber of Commerce and the Sullivan Visitors Association to plan, publicize and promote events and activities in the area (hiking, biking, canoeing, cross-country skiing, 5K/10K), as well as maintain a calendar.*
- i. Provide local businesses with materials and information to help promote “things to do” in the Town of Highland and to educate employees to help with this effort.*

**8. To maintain a balanced and equitable tax base.**

**Supporting statement:** High property taxes are a concern in every town in New York State. The Town of Highland will benefit from the broadening of the local tax base, and has a role to play in encouraging the establishment of successful year-round businesses that build upon wise use of our natural and cultural assets.

**Strategies:**

- a. *Provide adequate budget for the assessor's office to ensure accurate and timely assessments.*
- b. *Encourage seasonal businesses to expand to year round operation, for example, by creating winter events and attractions.*
- c. *Inventory sites/businesses to plan for year round service businesses that will be needed as seasonal business expand to year round.*
- d. *Work with existing organizations such as the Sullivan County Economic Development Corporation and its partners to link to resources and develop a marketing plan that promotes the protection of our natural assets and resources.*
- e. *Develop a plan to optimize the use of the Town's Senior Center.*

**9. To protect buildings and residents from the harm of flood, fire, detrimental land use; industrial, noise and light pollution; air pollution, water degradation and depletion; and impairment of their natural resources and property values.**

**Supporting statement:** Appropriate land use, "smart growth" development strategies, effective emergency planning, adequate constabulary and animal control, and the protection of our natural resources contribute to our overall safety. In particular, we have focused upon the need to minimize the danger and severity of floods and the possibility of water degradation or pollution. In order to protect both residents and property from adverse effects, the Town of Highland will implement best practices, enforce town building code, provide effective emergency planning, and make sure Town residents are aware of emergency plans and resources.

**Strategies:**

- a. *Develop a system to inform residents about emergency planning procedures and coordinate outreach with the school.*
- b. *Ensure that housing values are protected by allowing only compatible land uses on adjacent areas.*
- c. *Discourage development in the flood plain in accordance with the National Flood Insurance Program guidelines.*
- d. *Revisit commercial lighting ordinances and incorporate "dark skies" best practices to protect the health of both humans and wildlife from unnecessary nighttime light pollution.*
- e. *In order to control the degradation of the environment that large scale quarrying has historically brought about, revise the Town's zoning to define allowable quarrying operations to include the removal of materials for use onsite by property owners and the incidental exchange or sale of material locally, so as to prevent the air pollution, noise and damage to roads and infrastructure typically associated with large scale quarrying.*
- f. *Ensure adequate funds for the local constabulary.*

**10. To encourage the development of environmentally responsible economic opportunities that uphold the values expressed in this plan.**

**Supporting statement:** Existing businesses in the Town of Highland rely directly or indirectly upon the area's natural beauty and build upon its potential. It is vital that we protect these assets as we encourage ongoing economic development. The Town has a role to play in engaging citizens in economic planning, accessing and distributing information that will be helpful to local businesses, and encouraging the establishment of businesses that will help preserve and enhance our quality of life.

Strategies:

- a. *Define and prohibit industrial uses that compromise the natural resources in the Town, specifically the high quality water resources.*
- b. *Encourage small scale specialty farming (i.e. organic and biodynamic farms), support sustainable agriculture and the creation of value added local products*
- c. *Engage the community in economic planning that encourages sustainable, environmentally responsible businesses and avoids boom-and-bust cycles of business activity that cause long-term harm to the local economy and environment.*
- d. *Help local residents access educational opportunities, grants and low interest loans for the creation of desirable businesses.*
- e. *Attract economic development that maintains and improves the quality of life in the Town. Such businesses include but are not limited to: tourism – eco-tourism, heritage tourism, year-round attractions and activities; hunting, fishing, hiking, camping and other recreational land use; local service/retail businesses; sustainable agriculture, specialized agriculture and value added local products; light manufacture/assembly; marketing and communications businesses; telecommuting.*
- f. *Foster synergies among local businesses to maximize their success through package deals and other cooperative ventures.*
- g. *Provide leadership for regional cooperation in economic development opportunities that address the Delaware River.*
- h. *Support the development of the proposed Scenic Byway Visitor Center at Fort Delaware and ensure coordination of Town activities*
- i. *Promote and encourage businesses to use the Hickok Brook Multiple Use Area.*
- j. *Work with and support the National Park Service and the Upper Delaware Council in efforts to negotiate with the rail line to allow access to the Right-of-Way for hiking, biking, rail car tours, etc.*
- k. *Work with and support the National Park Service and the Upper Delaware Council in efforts to secure the Right-of-Way of the D&H Canal and plan for the future development and use as a hiking trail.*
- l. *Promote local events and businesses to encourage camping visitors to explore other recreational and cultural opportunities in the Town of Highland during their visits to our area.*

## **Implementation Plan**

The Implementation Plan summarizes the strategies identified for each of Highland's 10 overarching planning goals. It prioritizes strategies with a star; suggests a time frame for implementation (S = short term, M = middle term and L = long term); identifies the key topic or category of the strategy; identifies the leaders and potential partners for each strategy; and where possible, suggests potential sources of funding to help research, plan or implement the strategy.

Key Priority	Task	Goal	Timeframe	Subject	Key Leaders	Funding Opportunities	Status
1a	★ Ensure that the existing ordinances pertaining to excessive noise and lighting are adequate and revise if necessary to strengthen.	1	S	Zoning	Planning Board	UDC TAG	
1b	Plan for the Town's aging population by identifying and encouraging the development of adequate housing and services for senior citizens.	1	L	Zoning	Planning Board		
1c	Foster age appropriate civic and recreational activities for the youth of the Town of Highland.	1	M	Community Development	Town Board		
1d	★ Encourage communication and collaboration among civic and cultural organizations to maximize their resources and the benefits they deliver to the community.	1	O	Government Policy	Town Board <i>(liaison?)</i>		
1e	★ Coordinate and participate with adjoining towns and neighboring townships in Pennsylvania, through membership in the Upper Delaware Council, to protect the Delaware River and its tributaries.	1	O	Government Policy	Town Board UDC Rep		
1f	Ensure that the Town's land use regulations continue to be in substantial conformance with the Land and Water Use Guidelines in the River Management Plan for land within the Congressionally-designated Upper Delaware Scenic and Recreational River Corridor.	1	S	Zoning	Planning Board	UDC TAG, NPS	
1g	★ Maintain the 3-acre minimum lot size as currently required in R-2 districts.	1	S	Zoning	Planning Board	UDC TAG	
1h	Investigate options for the use of zoning regulations such as conservation subdivisions to help preserve open space.	1	O	Government Policy	Town Board <i>Local Groups</i>		
1i	Support our school and library with programs that: nurture good citizenship and recognize the potential talents with the goal of developing their strengths.	1	O	Government Policy	Town Board		
1j	Preserve representative government and home rule by fostering local participation in the political, social and economic decision making in the Town.	1	O	Government Policy	Town Board		
2a	★ Since many aquifers are not mapped, research and create a map that shows the aquifers in the Town.	2	M	Natural Resources	Planning Board <i>EEC</i>	UDC TAG NYSDEC, EPA	
2b	★ Conduct a groundwater study to map the location, depth and supply to better understand this resource and to continue to meet the consumption needs of town residents and businesses.	2	M	Natural Resources	Planning Board <i>EEC</i>	UDC TAG NYSDEC, EPA	
2c	★ Compile detailed data on the quality, quantity and depth of all surface water resources - lakes, ponds, rivers, wetlands - in the Town.	2	M	Natural Resources	Planning Board <i>EEC</i>	UDC TAG NYSDEC, EPA	
2d	★ Conduct a study to establish baseline data for private water wells in the Town of Highland.	2	S	Natural Resources	Planning Board <i>EEC</i>		
2e	★ Through such organizations as the Delaware River Basin Commission and the Upper Delaware Council, support the prohibition of large scale water withdrawals for commercial use within the watershed.	2	S	Government Policy	Town Board/UDC Rep		
2f	★ Research and establish standards and definitions for "large-scale water withdrawals" within the Town of Highland.	2	S	Zoning	Planning Board	UDC TAG	
2g	★ Develop stormwater management techniques for new projects so as to minimize erosion and run-off, flooding potential, and water contamination and pollution.	2	M	Zoning	Planning Board <i>DPEM</i>		
3a	★ Consider a river district overlay consistent with the River Management Plan, with special protection of the Delaware River watershed, water quality, and viewshed.	3	S	Zoning	Planning Board <i>DPEM</i>	UDC TAG	
3b	Research the possibility of creating an historic district for the area around River Road and Route 97 in Barryville.	3	M	Economic Development	Planning Board <i>County Historian</i>		
3c	Produce a viewshed analysis to locate scenic resources that are important to protect for the future.	3	L	Natural Resources	Planning Board <i>DPEM</i>		
3d	★ Explore ways to inventory critical environmental areas and wildlife habitat and encourage owners to take action for their protection.	3	M	Natural Resources	Planning Board		
3e	Identify important lands, including agricultural and woodland areas, for protection to ensure open space for future generations.	3	L	Natural Resources	Planning Board <i>DPEM</i>		
3f	Encourage preservation of large forested tracts within the Town through conservation easements and other programs.	3	L	Zoning	Planning Board <i>DPEM</i>		

Key	Priority	Task	Goal	Timeframe	Subject	Key Leaders	Funding Opportunities	Status
3g		Develop a regulation for clear cutting that uses best forestry practices and prevents erosion and damage to adjoining properties, without rilling out farm fields.	3	S	Zoning	Planning Board DPEM	UDC TAG	
3h		Consider a Heritage Tree ordinance or other mechanism for identifying and preserving significant trees.	3	L	Zoning	Planning Board	UDC TAG	
3i	★	Develop a plan for the Town owned access to the Delaware River.	3	M	Government Policy	Town Board Planning Board, Special Committee		
3j	★	Continue efforts to eradicate invasive plant species such as Japanese knotweed in the Town by educating property owners about effective, environmentally responsible methods to accomplish this goal.	3	O	Natural Resources	Town Board NPS, EEC, Town Hwy Dept.		
3k		Inventory and catalog potential sites that may be suitable for public fishing access.	3	M	Natural Resources	Planning Board DPEM		
4a	★	Perform energy audits on all Town facilities, access available resources to make town buildings energy efficient, and use these projects to educate the public about these measures.	4	S		Town Board EEC, NYSERDA	NYSERDA	
4b	★	Encourage energy audits for homeowners and businesses and assist them with accessing state funding for energy retrofits and other improvements.	4	S		Town Board EEC	NYSERDA	
4c	★	Research and implement "best practices" standards for sustainable, energy efficient construction of both residential and commercial buildings.	4	M		Planning Board EEC		
4d	★	Revise town code regulations regarding wind farms and other renewable energy technologies and develop a permitting process.	4	S	Zoning	Planning Board Town Board	UDC TAG	
4e		Amend zoning to allow electric charging stations for electric vehicles for residential and commercial use in all areas of the town.	4	S	Zoning	Planning Board		
4f		Facilitate planning for senior housing (i.e. adult homes, bungalow style, assisted living, etc.) to accommodate our aging population.	4	L	Zoning	Planning Board Town Board		
4g		Use zoning, a floating zone or Planned Unit Development to encourage the creation of senior housing, including accessory use, with attention to the aesthetic issues that may arise.	4	S	Zoning	Planning Board	UDC TAG	
5a	★	Ensure that developments comply with sewage, stormwater management and erosion/sedimentation control planning requirements in both site plan and subdivision review processes.	5	O	Zoning	Planning Board Building Dept		
5b	★	Support efforts at county and state level to achieve broadband access and universal access to mobile telephony.	5	M	Economic Development	Town Board		
5c	★	Prohibit non-agricultural holding ponds that are used to store contaminated and/or polluted waters.	5	S	Zoning	Planning Board	UDC TAG	
5d		Work with County and State agencies to ensure continued appropriate waste disposal, and encourage residents and businesses to reduce waste through recycling and other consumer choices.	5	O	Government Policy	Town Board EEC		
6a	★	Manage vehicular access in new development in order to maximize safety and efficiency.	6	S	Zoning	Planning Board	UDC TAG	
6b	★	Conserve and protect existing roads through such mechanisms as road use agreements so as to minimize the expense of repairing and maintaining roads.	6	S	Government Policy	Town Board Hwy Dept.		
6c		Promote "walkable" hamlet centers to promote safety and reduce the number of short trips within these areas.	6	O	Community Development	Planning Board		
6d		Plan for bike trails throughout the Town as both a means of transportation and the potential for tourism and economic development.	6	M	Economic Development	Planning Board		
6e		Work with NYSDOT on ways of reducing the speed on NYS Route 97 in Barryville, either through enforcement of the existing speed limit or by traffic calming techniques.	6	M	Government Policy	Town Board Constables		
6f		Budget adequately for the Highway Replacement Plan to maintain Town highway infrastructure as needed.	6	O	Government Policy	Town Board Hwy Dept.	Town Budget	

Key Priority	Task	Goal	Timeframe	Subject	Key Leaders	Funding Opportunities	Status
6g	Create a plan/system to perform car counts on all Town roads as needed.	6	M	Government Policy	Hwy Dept.	Town Budget	
6h ★	Research the safety of dust control measures and adopt a policy that prohibits the use of deleterious substances such as industrial brine for road spraying and dust control.	6	S	Government Policy	Planning Board EED/Hwy Dept.		
6i	Continue to explore opportunities to control expenses by sharing facilities such as road salt storage and maintenance facilities for town highway department vehicles.	6	O	Government Policy	Town Board Hwy Dept.		
6j	Review Town signage policies and enforcement to promote effective direction of visitors to area businesses while reducing signage clutter and addressing aesthetic issues.	6	O	Government Policy	Town Board Planning Board/ GBCC/Signage Committee		
7a	Develop design guidelines for commercial construction in hamlet centers that require new buildings to harmonize with local vernacular architecture and, whenever possible, require preservation and adaptive re-use of historic, traditional and vernacular buildings.	7	M	Zoning	Planning Board Town Board/Special Committee/Town Historian	UDC TAG	
7b	Compile an inventory of significant buildings, natural features and heritage sites and encourage their preservation and restoration, including encouraging property owners to have appropriate sites listed on the National and State registries.	7	M	Natural Resources	Planning Board County Historian/ Special Committee		
7c	Encourage cultural development, including arts and cultural organizations, within the Town through public private partnerships and such organizations as the New York State Council on the Arts and the National Endowment for the Arts.	7	M	Economic Development	Town Board Appoint Liaison/GBCC		
7d	Develop and promote heritage tourism opportunities in the Town that build upon the D&H Canal, the Silver Age Resorts, Minisink Battleground, and the Delaware Aqueduct/Roebing Bridge.	7	M	Economic Development	Town Board GBCC	SCVA	
7e	Develop and promote eco-tourism opportunities in the Town that build upon assets such as the Delaware River and the work of the Eagle Institute.	7	S	Economic Development	Town Board Special Committee	SCVA	
7f ★	Explore opportunities to create camp grounds and other outdoor amenities for residents and visitors (such as Hickok Brook MUA).	7	L	Economic Development	Town Board		
7g	Develop pedestrian, bicycle and moped trails and driving tours throughout the Town, starting with a route connecting the Roebing Bridge to Barryville.	7	M	Economic Development	Town Board Planning Board/GBCC		
7h	Work with organizations such as the Greater Barryville Chamber of Commerce and the Sullivan Visitors Association to plan, publicize and promote events and activities in the area (hiking, biking, canoeing, cross-country skiing, SK/10K), as well as maintain a calendar.	7	M	Economic Development	Town Board GBCC/SCVA		
7i	Provide local businesses with materials and information to help promote "things to do" in the Town of Highland and to educate employees to help with this effort.	7	M	Economic Development	Town Board GBCC	SCVA, Sullivan Renaissance	
8a	Provide adequate budget for the assessor's office to ensure accurate and timely assessments.	8	O	Government Policy	Town Board	Town Budget	
8b	Encourage seasonal businesses to expand to year round operation, for example, by creating winter events and attractions.	8	O	Economic Development	Town Board Planning Board/GBCC		
8c ★	Inventory site/businesses to plan for year round service businesses that will be needed as seasonal business expand to year round.	8	M	Economic Development	Town Board GBCC		
8d	Work with existing organizations such as the Sullivan County Economic Development Corporation and its partners to link to resources and develop a marketing plan that promotes the protection of our natural assets and resources.	8	M	Economic Development	Town Board SCEDC		
8e ★	Develop a plan to optimize the use of the Town's Senior Center.	8	S	Government Policy	Town Board Senior Groups, Local Organizations		

Key	Priority	Task	Goal	Timeframe	Subject	Key Leaders	Funding Opportunities	Status
9a	★	Develop a system to inform residents about emergency planning procedures and coordinate outreach with the school.	9	S	Government Policy	Town Board Constables, Planning Board, SCOEEM		
9b	★	Ensure that housing values are protected by allowing only compatible land uses on adjacent areas.	9	S	Zoning	Planning Board Building Dept	UDC TAG	
9c	★	Discourage development in the flood plain in accordance with the National Flood Insurance Program guidelines.	9	S	Zoning	Planning Board	UDC TAG	
9d	★	Revisit commercial lighting ordinances and incorporate "dark skies" best practices to protect the health of both humans and wildlife from unnecessary nighttime light pollution.	9	S	Zoning	Planning Board EEC	UDC TAG	
9e	★	In order to control the degradation of the environment that large scale quarrying has historically brought about, revise the Town's zoning to define allowable quarrying operations to include the removal of materials for use onsite by property owners and the incidental exchange or sale of material locally, so as to prevent the air pollution, noise and damage to roads and infrastructure typically associated with large scale quarrying.	9	S	Zoning	Town Board Planning Board	UDC TAG	
9f		Ensure adequate funds for the local constabulary.	9	O	Government Policy	Town Board	Town Budget	
10a	★	Define and prohibit industrial uses that compromise the natural resources in the Town, specifically the high quality water resources.	10	S	Zoning	Town Board Planning Board	UDC TAG	
10b		Encourage small scale specialty farming (i.e. organic and biodynamic farms), support sustainable agriculture and the creation of value added local products.	10	M	Zoning	Planning Board EEC		
10c		Engage the community in economic planning that encourages sustainable, environmentally responsible businesses and avoids boom-and-bust cycles of business activity that cause long-term harm to the local economy and environment.	10	S	Economic Development	Town Board		
10d		Help local residents access educational opportunities, grants and low interest loans for the creation of desirable businesses.	10	S	Economic Development	Town Board GBCC/SCEDC	SCEDC	
10e		Attract economic development that maintains and improves the quality of life in the Town. Such businesses include but are not limited to: tourism - eco-tourism, heritage tourism, year-round attractions and activities; hunting, fishing, hiking, camping and other recreational land use; local service/retail businesses; sustainable agriculture, specialized agriculture and value added local products; light manufacture/assembly, marketing and communications businesses; telecommuting.	10	S	Economic Development	Town Board Planning Board, SCEDC		
10f		Foster synergies among local businesses to maximize their success through package deals and other cooperative ventures.	10	M	Economic Development	Town Board GBCC/SCVA		
10g		Provide leadership for regional cooperation in economic development opportunities that address the Delaware River.	10	M	Economic Development	Town Board SCEDC/DPEM		
10h		Support the development of the proposed Scenic Byway/Visitor Center at Fort Delaware and ensure coordination of Town activities.	10	S	Economic Development	Town Board		
10i		Promote and encourage businesses to use the Hickok Brook Multiple Use Area.	10	S	Economic Development	Town Board SCEDC/GBCC		
10j		Work with and support the National Park Service and the Upper Delaware Council in efforts to negotiate with the rail line to allow access to the Right-of-Way for hiking, biking, rail car tours, etc.	10	L	Economic Development	Town Board		
10k		Work with and support the National Park Service and the Upper Delaware Council in efforts to secure the Right-of-Way of the D&H Canal and plan for the future development and use as a hiking trail.	10	M	Economic Development	Town Board		
10l		Promote local events and businesses to encourage camping visitors to explore other recreational and cultural opportunities in the Town of Highland during their visits to our area.	10	S	Economic Development	Town Board GBCC		

## **Relationships to Adjoining Communities, the County and the Region and Environmental Impacts**

The environmental impacts attendant to the recommendations contained in this Plan have been reviewed during the process of preparing it. Findings with respect to these environmental impacts are as follows:

### *Environmental Impacts of Recommendations*

Many of the recommendations of this Plan directly address land use and environmental concerns but the economic development suggestions, if implemented, could cause some additional development and traffic. However, the Plan anticipates growth and establishes a framework for dealing effectively with it. This plan, assembled with direct participation by the Town of Highland, is focused on tourism promotion of a type and level consistent with maintaining the area's character and high quality of life.

The remainder of this Comprehensive Plan takes a similar stance with respect to development. The Town welcomes growth that will promote the scenic beauty of the Town and protect its natural resources and rural character. Rather, it is the intent of the Town of Highland to create new economic opportunities for its residents, using its land use regulations to ensure this growth is high quality in nature.

### *Impacts That Cannot Be Mitigated*

There are no environmental impacts that cannot be mitigated by good site plan review procedures and the proposed revisions to the Town's Zoning Law. This Plan provides a proper vehicle for the mitigation of any environmental impacts. Those procedures will be enhanced by referral to the goals and objectives as outlined in this Plan.

### *Irreversible Commitments of Environmental Resources*

There are no recommendations contained in this Plan for actions that would constitute an irreversible commitment of environmental resources. Indeed, many of the recommendations relate to protection of those resources. Moreover, it is anticipated all actions would be subject to individual review under SEQRA (State Environmental Quality Review Act).

### *Alternatives*

The various alternatives for development of the Town have been considered in the context of the land use and economic development discussions contained herein. There are no development alternatives available to the Town that are not environmentally sound. The emphasis is on low impact development. The Town could, of course, attempt to resist new commercial and residential development, but that course of action will do nothing to improve the economic environment, whereas carefully planned development subject to site plan review can actually incorporate environmental improvements to deal with environmental impacts.

*Conclusion*

This Plan, if implemented, will cause no adverse effects on the environment that could be classified as significant. Rather, the Plan will significantly improve the environment by upgrading infrastructure and laying a framework for future development. It provides specific goals and strategies, relating to environmental protection, that can be employed as a foundation for land use regulations and in site plan review. It also provides for low impact forms of development (e.g. recreation and passive tourism promotion) that are consistent with protection of the environment.

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The Eagle Institute, Barryville NY, Lori McKean, Executive Director

Town of Highland Assessment Data

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