

MASTER PLAN

**BOROUGH OF MOUNTAIN LAKES
MORRIS COUNTY
NEW JERSEY**

Adopted: October 24, 2013

CONTENTS

	Introduction
Element I	Community Characteristics
Element II	Statement of Objectives, Principles, Assumptions, Policies And Standards
Element III	Land Use Plan
Element IV	Housing Element and Fair Share Plan
Element V	Circulation Plan
Element VI	Conservation Plan
Element VII	Community Facilities and Utilities Plan
Element VIII	Recreation Plan
Element IX	Recycling Plan
Element X	Historic Preservation Plan
Element XI	Relationship to Other Plans
Element XII	Summary of Major Findings and Recommendations
Element XIII	Stormwater Management
Appendix A	Property Designated for Purpose of Conservation, Park Lands and Open Space
Appendix B	Existing Land Use Map
Appendix C	Future land Use
Appendix D	Community Facilities and Recreation Areas Map

ACKNOWLEDGEMENTS

This Mountain Lakes Master Plan results from the contributions and comments of many concerned and dedicated Mountain Lakes citizens, too many to list.

MOUNTAIN LAKES PLANNING BOARD

2013

James Bailey, Chairman

Martin Kane, Vice Chairmen
Daniel Happer, Mayor
Robert Tovo, Borough Manager
John Zamierowski
Thomas Dagger

Corey Nachshen
Blair Bravo, Councilwoman
John Horan
Nick DeVenezia
Bethany Russo

MOUNTAIN LAKES BOROUGH COUNCIL

2013

Daniel Happer, Mayor

Douglas McWilliams, Deputy Mayor
Peter Holmberg
John Lester

Blair Bravo
Frank Borin
Jason Bradley

BOROUGH STAFF

2013

Robert Tovo, Borough Manager

Cynthia Shaw, Board Administrator/Secretary
Michele Reilly, Borough Clerk
Susan Kimball, Borough Planner

Peter Henry, Board Attorney
William Ryden, Borough Engineer
Paul Philips, Borough Planner

Parts of this Master Plan were prepared by Susan Kimball, PP/AICP, License number 2280, and Paul Philips, PP/AICP, License number 3046, under the direction of the Mountain Lakes Planning Board.

INTRODUCTION

The Municipal Land Use Law (MLUL), the legal basis for municipal planning in New Jersey, requires that every municipal zoning ordinance must be based on a Master Plan. In compliance with the MLUL, this plan provides the planning basis for the Borough of Mountain Lakes. In addition, its overall purpose is to coordinate the land use policies of the Borough and to provide a clear description of the Borough, its goals and the policies that should be adopted to implement those goals.

This Master Plan is an evolutionary result of previous Mountain Lakes Master Plans, firmly rooted and building upon those plans. A number of major themes continue to be emphasized in this Master Plan while additional topics are addressed.

The importance of preserving Mountain Lakes' historic legacy as a planned residential park community is still vivid today. The long-standing goal of preserving the unique and historic character of established residential neighborhoods is continuing. More emphasis is placed on a better understanding of the qualities that make them unique including:

- the importance of natural features, vegetation, terrain, lakes and especially the preserved open space areas.
- heighten awareness of historical structures and their relation to the towns' past.
- implementation of a new ordinance to aid historic homeowners in avoiding demolition of their homes by granting incentives.
- promote the protection and preservation of historic resources/structures, particularly those designated as Key Landmarks

This document consists of all the elements required by the Municipal Land Use Law. Each element includes a review of existing characteristics, analysis of trends and needs, statement of goals and objectives and a proposed plan¹.

BACKGROUND AND HISTORY OF THE MASTER PLAN

MASTER PLAN TIMELINE

December 3, 1963 - First Master Plan
December 5, 1979 - Revised Master Plan
April 5, 1982 – Reexamination Report
December 22, 1986 – Adoption of the Housing Element
July 28, 1988 – Reexamination Report
July 28, 1994 – Reexamination Report
July 20, 1995 – Amend Land Use – Park Land, Open Space, Conservation Area (App A)
Amend Housing Element and Fair Share Plan
September 28, 1995 – Adoption of Master Plan (4 Elements required by MLUL)
May 23, 1996 – Amendment to Land Use and Housing Elements
October 24, 1996 – Adoption of Master Plan
March 27, 1997 – Amend Land Use Element
October 24, 2002 – Reexamination Report
March 31, 2005 – Amend Land Use and Housing Element

¹ Housing Element (IV) will be finalized following resolution of COAH requirements.

November 17, 2005 – Amend Housing Element and Fair Share Plan
May 25, 2006 – Amend Land Use Element
June 29, 2006 – Adopt Stormwater Management Plan Element
September 25, 2008 – Reexamination Report
July 23, 2009 – Public Hearing Highlands Element (not adopted)
January 11, 2010 – Draft Housing Element and Fair Share Plan (not adopted)

The first comprehensive Master Plan for the Borough was adopted in 1963 and was based upon the state enabling law predating the MLUL. A new Master Plan was adopted in 1979 prepared by the Master Plan Committee of the Planning Board with the professional assistance of Tore Hultgren, P.P. specifically following the requirements of the MLUL. The Master Plan was reexamined in April of 1982 and in 1986 a Housing Element amendment to the 1979 plan was prepared in conformance with an amendment to the MLUL. The plan was reexamined in July of 1988 and 1994 as required by law. In 1994 the need for a substantial revision and updating of the Master Plan became apparent, recognizing the significant changes that had occurred since 1979.

On September 28, 1995, a new Borough Master Plan consisting of elements on our *Community Characteristics*, the *Statement of Objectives, Principles, Assumptions and Policies*, *Land Use*, and the *Housing Element and Fair Share Plan* were adopted. These were prepared with the professional assistance of Kimball & Kimball, Professional Planners and William Harrison who assisted in the preparation of the background data about the Borough. Subsequently, on October 24, 1996, the four mandatory elements, the eight non-mandatory elements of the Master Plan, were prepared by the Master Plan Committee, together with the amendments to the previously adopted Land Use Plan and Housing Plan (prepared by the Housing Study Committee) were adopted. The Land Use Element was subsequently amended in March 27, 1997 concerning the Rush/Weichert Site, Fox Hill neighborhood and adjoining lands.

In 2002 an eight member Master Plan Reexamination Committee headed by Louise Davis was formed. They prepared a report highlighting the changes in major planning issues since the adoption of the 1996 Master Plan. The committee updated most of the statistical information as well as changes pertaining to such areas as land use, traffic control, water quality and the increased need for recreational space. The report was adopted on October 24, 2002.

In 2005, Duggan Kimball of Kimball and Kimball, Professional Planners, prepared an amendment to both the Land Use Element and the Housing Element and Fair Share Plan. In the amendment he addressed the future development of the property described as the *Fusee* property (Blk. 88, Lot 18) and the adjacent lot (Blk. 88 Lot 17.01). The amendment was a direct result of the Borough's desire to facilitate the construction of affordable housing addressing its "second round" fair share obligation pursuant to The Council on Affordable Housing (COAH) rules. The above mentioned amendment was adopted on March 31, 2005. Later in 2005 the Planning Board and Borough Council once again engaged Kimball and Kimball to prepare an amendment to the Housing Element and Fair Share Plan. On November 17, 2005 the Planning Board adopted an amendment providing the planning framework for a petition to the Council on Affordable Housing (COAH) for substantive certification in regard to the requirements declared for third round affordable housing obligations.

On May 25, 2006 another amendment to the Land Use Element of the Master Plan was adopted. This amendment, prepared by the Master Plan Subcommittee, removed the requirement for senior housing on the *King of Kings* backlands since it would be handled elsewhere in the Borough. A month later, on June 29, 2006, the Planning Board adopted a new chapter to the Master Plan, the *Stormwater Management Plan Element*. The element was prepared by Mark

Prusina, the Public Works Manager, reviewed by William Ryden, the Borough Engineer, and edited by Duggan Kimball, the Planning Board Planner, as required by the states storm water management rules.

In 2004 the New Jersey *Highlands Water Protection and Planning Act* was passed recognizing the Highlands Region. The legislation created the Highlands Council who adopted the *Highlands Regional Master Plan* effective September 8, 2008. Since Mountain Lakes was fully located in the Highlands Region the Borough Council formed a committee chaired by Cathy Harvey to update the municipal Master Plan to include a Highlands Element that would set forth policies to guide the future land use and development within the Borough. On July 23, 2009 the Planning Board held a public hearing to review the draft Highlands Element, prepared by Susan Kimball the Borough Planner, but did not adopt it. At the same time Susan Kimball created an updated draft, dated January 11, 2010, of the Housing Element and Fair Share Plan. The element incorporated the COAH adjusted fair share obligation based on actual development plus the Highlands growth projections. The draft was never adopted.

In 2008, while the Highlands Committee was working on the Highlands Element, the Planning Board formed another committee chaired by Barbara Palmer and made up of representatives from our different committees and commissions through out the Borough. Their charge was to prepare a reexamination of the Master Plan. The report was reviewed by Duggan Kimball and adopted by resolution on September 25, 2008. The report addresses the five specific areas set forth by the Municipal Land Use Law (MLUL) for reexamination since the 1996 Master Plan adoption and the 2002 reexamination report. The first recommendation of the committee was to incorporate all the previously mentioned amendments to the 1996 Master Plan and create a new edition of said plan. To that end the Planning Board, under the direction of the Chair James Bailey, has been working on a review of the entire Master Plan with several chapters revised and adopted between September of 2010 and February 2011. All the elements of the plan have been reviewed by Susan Kimball and Paul Philips, both Planners for the Planning Board, during this revision process. In 2011 the state changed the required time for Master Plan re-examination from 6 years to 10 years. Once adopted our 2013 Master Plan will not have to be reviewed until 2023.

MAJOR PLANNING ISSUES SINCE 1996

Some of the major events and changes significant to planning that have occurred since 1996 in Mountain Lakes are:

- Between 1996 and 2008 the value of all real estate increased significantly. Homeowners began renovating and expanded their homes also increasing the value of the Borough housing stock. In 2008 the housing bubble burst drastically reducing said value.
- Residents continue to use landscape planting to enclose their individual properties.
- Many of the community's long-time residents wishing to remain in the Borough have relocated to smaller homes and condominiums. The Fusee property was developed to address this need.
- The Borough's constitutional "fair share" obligation was partially fulfilled in the development of the Fusee property while any future obligation is uncertain and is on hold due to the state review of COAH
- Minor subdivisions/development has reduced the amount of land available for general construction.
- The Borough has suffered the loss of some of our tree canopy due to the aging of our shade tree stock and an increase in the number of major storms that have occurred. An

ordinance was passed and amended to insure the preservation and protection of street trees and shrubs and protect trees in the setback area of residential lots.

- The Borough Dams were repaired and updated to comply with state regulations. Debris was removed from the canal connecting Wildwood Lake and Mountain Lake.
- The Borough expanded its recycling program.
- All three schools, the department of public works building and the library were renovated and expanded. Renovation of the Borough Hall is still on going.
- The Highlands Act was passed placing Mountain Lakes in the planning area of the Highlands Region.
- Traffic congestion on Route 46 and within the Borough remains high due to our dependence on the automobile for transportation. Additional sidewalks were installed around the schools to increase the safety of children walking to school.
- Concern about maintaining the water quality of the Borough lakes and water supply aquifers is still a priority for the Borough.
- A new ordinance was adopted to aid historic homeowners, helping them avoid demolishing their homes by granting expanded bulk incentives.
- Due to the substantial increase in the use of existing recreational facilities and the addition of more recreation programs the Borough built two new recreation fields and changed the grass football field into a turf field. We rebuilt the swim lanes at Birchwood Beach and upgraded all the playgrounds in the community.

MAJOR PLANNING ISSUES AND PROPOSALS

The following is a summary of major planning concerns and the major new proposals included in and recommended by this plan.

- **Community Character** – Continue to educate the community about the Boroughs historically significant landscape pattern as a planned community.
- **Route 46 B Zone** – Seeks to explore improvements in this zone as well as ways to promote its redevelopment
- **Housing** – The Borough is awaiting the States' determination of the direction of COAH (Council on Affordable Housing) and how it applies to the Borough since being identified as a planning area within the Highlands region.
- **Community Center Development** – The Borough continues to explore the possibility of a community center.
- **Recreation** – This plan recommends options for the Borough's traditional commitment to active recreational opportunities for all its citizens.
- **Historic Preservation** – The Borough has a large concentration of Craftsman-influenced homes. The Borough has adopted a new ordinance that encourages maintaining the historic structure by offering modified bulk incentives. The plan recommends identifying and preserving particular historical structure.

I. COMMUNITY CHARACTERISTICS

The Borough of Mountain Lakes is a small community of 3.1 square miles in area and 4,160 in population (2010 U.S. Census). It is primarily a residential community of large single family homes on relatively small lots.

REGIONAL SETTING

Mountain Lakes is located in the east-central section of Morris County, between the suburban communities of Denville and Parsippany-Troy Hills. To the east are the urbanized sections of the metropolitan region; to the south, the population center of Morris County. To the west is additional suburban development while the areas to the north of the Borough are more rural in character.

Major highways such as Interstate Routes 287, 280 and 80 link Mountain Lakes with the New York metropolitan area and major cities in the State of New Jersey. Limited train and bus services are available.

This area is the most densely populated in the County and is below average in terms of open space provided by federal (none), state and county governments. The importance of open space to the region, provided by the individual communities, is reflected in this Master Plan for Mountain Lakes.

Mountain Lakes borders on four other communities: Denville and Boonton Townships, the Town of Boonton and Parsippany-Troy Hills Township. The land is primarily residential, single-family housing on both sides of the boundary between Mountain Lakes and the first three communities listed. Most of the Intervale Road area (Parsippany-Troy Hills) is also low-density residential with two exceptions, both located in Parsippany-Troy Hills: an economic development office zone bounded by Intervale Road, the railroad and Fanny Road, and an office and commercial area (the old Dodge Tract) located on the northern side of Route 46 and east of Intervale Road. The Intervale Road economic development zone was formerly developed with industrial uses and should be monitored for environmental impact on surrounding areas.

The Route 46 area in Parsippany-Troy Hills bordering Mountain Lakes includes a variety of commercial office and research uses located in specialized economic development areas, as well as small sections of residential use of medium to high density.

ENVIRONMENTAL FACTORS

Mountain Lakes is located on the border of the New Jersey Highlands, an area of rugged relief underlain by hard crystalline rock and the Triassic Lowlands, a relatively low area of moderate relief generally underlain by soft sedimentary rocks. The Highlands form the northwestern four-fifths of the Borough and the Triassic Lowlands form the southeastern one-fifth of the Borough. The groundwater aquifers within the Borough, including a semi-confined aquifer, have been delineated in a study prepared by Geraghty & Miller, Inc. in 1978. The impact of human development on these aquifers is a major concern, especially the impact of runoff from Route 46 and development in recharge areas located outside of the Borough. The quantity of available water is important as well, and the Borough is making a concerted effort to conserve water.

Most of the Borough is within the Whippany River watershed; less than ten percent drains into the Rockaway River. Surface waters in Mountain Lakes represent the upper reaches of streams and, as is characteristic of headwater areas, there is little flood-plain formation due to the relatively rapid drop in elevation. Nevertheless, high water tables exist in several places of more level topography.

In terms of land forms, the Borough consists of numerous small manmade lakes and the valleys associated with glaciated landscapes. The southwestern third of the land consists of soils associated with a terminal moraine of the Wisconsin Glaciations: small, sandy ridges interspersed with pockets of poorly drained depressions formed by melting ice chunks. In contrast, the northern sections are characterized as highlands with steeper ridges of shallow depth to bedrock with frequent deposits of glacial boulders of large size both on and below the soil surface in the more level areas.

Mountain Lakes includes rich vegetation, both natural and in the form of landscaping. In particular, the Borough has extensive areas of woodlands which have a very significant impact on the quality of life in the Borough. As these woodlands mature they are experiencing increased stress due to competition for light and nutrients. Leaf dumping by residents and their landscapers stresses the edges of some Borough-owned large areas of woodlands and also isolated lots within the Borough. The extensive lake areas of the Borough are also under stress due to the effects of eutrophication. Together the woodlands and the manmade lakes form the most important and prominent environmental features in the Borough; they are indeed the central natural design elements around which the Borough was originally planned. Healthy woodlands and lakes constitute major environmental assets that should be monitored and protected.

LAND USE AND INFRASTRUCTURE

About 97 percent of the land in the borough is developed or in public ownership. The developed land, with few exceptions, is of small lots and in residential use. It is comprised of about 1,200 single-family homes, 115 townhouses and fewer than 50 apartments. The bulk of the Borough-owned land provides for community facilities, utilities and opens space, or constitutes environmentally important conservation areas. Commercial and light industrial land uses are limited to Route 46, within the "Midvale Market area" (just north of the railroad) and at Fanny Road and Morris Avenue. There are two categories of privately-owned vacant land in the Borough: about 34 vacant lots (mostly undersized and impacted by substantial environmental constraints) scattered throughout the entire Borough, except for two tracts of about 8 and 9 acres. The appendix contains a map showing the existing land use of all properties in the Borough.

The Borough's local and collector streets have access to Route 46 which connects with Interstate Routes 287, 280 and 80 within short distances of the Borough. The northern sections of Mountain Lakes have access to Route 287 (south) via Fanny and Intervale Roads. Sanitary sewerage and storm drainage systems are available in all of the community. Other utilities as well as a full supply of public service facilities are also provided.

POPULATION CHARACTERISTICS

The Borough's population as of 2010 was 4,160; down from 4,256 in 2000. (U.S. Census for 2010 and 2000) The population of Mountain Lakes decreased by approximately 2 percent between 2000 and 2010, while Morris County's as a whole increased by 4.7 percent. Mountain Lakes has retained a relatively stable population, with a small decrease, as reflected by small declines in

household size and number of households also shown between 2000 and 2010. Morris County has seen a growth in developed land over the past decade, while Mountain Lakes has been fully developed.

Prior to 2010, Mountain Lakes had recorded having an average household size larger than Morris County as a whole. Though these decreases in the last few decades have been in line with the rest of the country, new development across Morris County has led to the County's average household size increasing to nearly even.

POPULATION
(Source: U.S. Census)

	1970	1980	1990	2000	2010
Mountain Lakes	4,739	4,153	3,847	4,256	4,160
Morris County	383,454	407,630	421,353	470,212	492,270

NUMBER AND SIZE OF HOUSEHOLDS
(Source: U.S. Census)

	1970	1980	1990	2000	2010
Mountain Lakes number of households	1,168	1,180	1,239	1,330	1,313
Mountain Lakes average household size	4.06	3.52	3.10	3.20	3.17
Morris Co. average household size	3.49	3.09	2.83	2.72	3.19

The average number of children per household in Mountain Lakes remains significantly larger than for the County.

CHILDREN (Birth-18 yrs) PER HOUSEHOLD
(Source: U.S. Census)

	1970	1980	1990	2000	2010
Mountain Lakes	1.88	1.33	0.93	1.14	1.22
Morris County	1.33	0.93	0.68	.69	0.65

The population of senior citizens in Mountain Lakes has seen a substantial increase in recent decades. The population of those 55 and over has increased 94% since 1970, a trend that can be expected to continue.

SENIOR CITIZEN POPULATION & PERCENT OF TOTAL POPULATION
MOUNTAIN LAKES, NJ
 (Source: U.S. Census)

AGE	1970	1980	1990	2000	2010
55-64	285 (6.0%)	402 (9.4%)	430 (11.2%)	441 (10.3%)	491(11.8%)
65-74	138 (2.9%)	108 (2.6%)	243 (6.3%)	410 (9.6%)	247 (5.9%)
75-84	-	86 (2.1%)	88 (2.3%)	129 (3.0%)	133 (3.2%)
85 and over	-	6 (0.1%)	22 (0.6%)	14 (0.3%)	39 (0.9%)
55 and over	513 (10.8%)	602 (14.5%)	783 (20.4%)	994 (23.0%)	910 (21.9%)
65 and over	228 (4.8%)	200 (4.8%)	353 (9.2%)	553 (12.9%)	419 (10.1%)
75 and over	90 (1.9%)	92 (2.2%)	110 (2.9%)	143 (3.3%)	172 (4.13%)

EDUCATIONAL, OCCUPATIONAL AND INCOME CHARACTERISTICS

The Mountain Lakes adult population is relatively well educated when compared to the County as a whole. Moreover, recent decades have seen a trend toward an increasingly well educated population. In 2010 the percentage of the population that completed 4 years of college was 81.8% of the adult population as compared to 71.5% in 1990 and 76.1% in 2000.

EDUCATION
Maximum Level Completed (Persons 25 years old and over)
 (Source: U.S. Census)

	1970	1980	1990	2000	2010
High school graduates (% of population)	2,233 (94.9%)	2,214 (93.8%)	2,442 (98.5%)	2,582 (98.4%)	2,460 (99.7%)
College graduates (% of population)	1,282 (54.5%)	1,405 (59.5%)	1,772 (71.5%)	1,997 (76.1%)	2020 (81.8%)
Population (25 yrs and over)	2,353	2,361	2,480	2,624	2,468

This high level of education of the Borough's population is reflected in its occupational characteristics. A very high proportion of the working population is employed in managerial and professional specialties.

OCCUPATION CHARACTERISTICS (16 years and older)

(Source: U.S. Census)

EMPLOYED PERSONS	1970	1980	1990	2000	2010
Managerial and professional specialty	1,048	1,045	1,123	1,239	1,110
Technical and administrative support	368	467	576	-	
Sales and office occupations	-	-	-	356	426
Service	59	82	76	108	48
Farming, forestry and fishing	4	3	0	0	
Construction, extraction and maintenance occupations	-	-	-	52	15
Precision production, crafts and repair	61	84	63	-	
Production, transportation and material moving occupations	-	-	-	46	0
Operators, fabricators and laborers	80	71	19	-	
Total	1,620	1,752	1,857	1,801	1,599

The level of educational and professional attainment is reflected in the family income statistics for the Borough. The median income for a family in Mountain Lakes in 2010 was \$181,600 compared to \$114,694 for Morris County as a whole.

FAMILY INCOME

(Source: U.S. Census)

	1969	1979	1989	1999	2010
\$0-9,999 (%)	93 (8.3%)	4 (0.3%)	20 (1.9%)	17 (1.4%)	10 (0.9%)
\$10,000-24,999 (%)	589 (52.1%)	114 (10.5%)	22 (2.0%)	26 (2.1%)	24 (2.2%)
\$25,000-49,999 (%)	358 (31.6%)	404 (37.3%)	57 (5.2%)	76 (6.3%)	52 (4.7%)
\$50,000-74,999 (%)	91 (8.0%) ¹	404 (37.3%)	174 (15.8%)	110 (9.1%)	71 (6.5%)
\$75,000-99,999 (%)		158 (14.6%) ²	171 (15.5%)	112 (9.2%)	50 (4.6%)
\$100,000-124,999 (%)			233 (21.1%)		
\$100,000-149,999 (%)				250 (20.6%)	234 (21.4%)
\$125,000 or more (%)			426 (38.6%)		
\$150,000 or more (%)				623 (51.3%)	665 (59.8%)

MEDIAN FAMILY INCOME

(Source: U.S. Census)

	1969	1979	1989	1999	2010
Mountain Lakes	\$22,423	\$50,582	\$109,536	\$153,227	\$181,600
Morris County	\$13,421	\$29,283	\$62,749	\$77,340	\$114,694
New Jersey	\$11,407	\$22,907	\$47,589	\$65,370	\$84,904

II. STATEMENT OF OBJECTIVES, PRINCIPLES, ASSUMPTIONS, POLICIES AND STANDARDS

ASSUMPTIONS

The basic assumption underlying the goals and objectives of the Master Plan is that the Borough of Mountain Lakes is a small, fully developed community with an established, unique character based upon its pattern of development as a planned residential community and the high proportion of Craftsman influenced homes. Potential for further development in the Borough is confined largely to redevelopment and two undeveloped tracts.

The lakes and the open space provided by Borough-owned land contribute significantly to the uniqueness of the Borough. The primarily residential character of the community is characterized by well-kept homes of medium to large size in a wooded setting with a population that puts great emphasis on high quality education and active recreation. Although Mountain Lakes is a fully developed community, effort must be made to address the constitutional obligation to provide its "fair share" of affordable housing to the extent feasible. Some changes will need to be made in the Borough policies and plans because of changing needs and circumstances, which will be discussed in detail in this plan.

OBJECTIVES

The following objectives constitute the basis for this Master Plan:

Retain the traditional character of Mountain Lakes.

Community Character- Mountain Lakes is a largely developed community with a character primarily based upon well-kept single family homes. Individual lot sizes are relatively small with neighborhoods integrated with large areas of Borough-owned wooded open space. This pattern of community-based clustered development in a natural setting is fundamental to the character of the Borough and should be protected and promoted.

Housing- The dominant character of single family homes should be maintained.

Historic Preservation- Mountain Lakes has a unique historic heritage significant in the history of planning in the United States. A planned community from its beginning, it was deliberately designed to create a park-like atmosphere emphasizing the preservation and enhancement of natural features. In addition, the Borough is recognized as having one of the largest concentrations of Craftsman influenced homes in the country. These historically significant features should be protected.

Protect and enhance the Borough's environmental resources.

Lakes- The lakes are the most prominent natural features in the Borough. They were the central design element around which the community was planned and they fundamentally influence the character and quality of life of the community, contributing natural beauty and very important recreational opportunities. The natural process of eutrophication represents a great concern. The quality of the surface water and the surrounding areas should be closely monitored and maintained.

Aquifers- The groundwater resources which are the source of the Borough's potable water supply need to be carefully monitored and protected from pollution and other negative impacts that may come as a result of uncontrolled development. Intergovernmental cooperation will be crucial since recharge areas are largely located outside of the Borough.

Parkland- A high proportion of Mountain Lakes is preserved as parkland in scattered large and small parks and green areas located throughout the Borough. This pattern of development is an alternative to the more standard suburban pattern of privately owned open space reflected in large lot single family development. Emphasis should be placed on extending, protecting and connecting the publicly owned parkland areas. The health of the woodlands should be monitored and protected.

Provide for the appropriate development of the Borough.

Commercial/Retail Development- Commercial retail and service development in the Borough is largely confined to the Route 46 corridor with a small pocket in the Midvale Market area. Any redevelopment should put emphasis on visual attractiveness, pedestrian accessibility, and mixed use opportunities.

Community Facilities/Infrastructure- The Borough should continue its planned maintenance of facilities and infrastructure. Coordination of work and/or cooperation with other governmental entities for cost efficiency should be emphasized.

Provide for safe and convenient pedestrian and vehicular circulation and access.

Pedestrian Circulation and Access- Mountain Lakes has a pedestrian tradition based upon a pattern of formal and informal paths, narrow streets, lack of fences and relatively compact neighborhoods. This tradition should be promoted and extended by fostering these patterns and providing additional pedestrian links where possible and appropriate.

Vehicular Circulation and Access- Although many areas of Mountain Lakes are accessible by foot, the residents are increasingly dependent on the automobile. While the overall automobile traffic levels have stabilized, certain changes in the use of the automobile have led to incidences of congestion, for example at school drop-off and pick-up times. Alternatives to the automobile which emphasize pedestrian access within the Borough and mass transit links to outside the Borough and the discouragement of through-traffic should be supported.

Maintain the Borough's traditional commitment to education and recreation.

Education- Mountain Lakes has long had a special commitment to the quality of its public schools. That commitment should be continued.

Recreation- Active recreation has been a focus of community life in the Borough. That focus and tradition should be maintained and encouraged.

III. LAND USE PLAN

In accordance with the Municipal Land Use Law, a Land Use Plan is a required master plan element providing the rational planning basis of a community's regulation of development. Accordingly, this plan is intended to provide the rational basis for the borough's existing land use regulations and as a guide for future amendments.

LAND USE PLAN OVERVIEW

As a nearly fully developed and primarily residential community, the Borough's land use policies can be generally summarized as protecting and continuing the established development pattern and the character of existing residential neighborhoods while protecting the existing topography and park like atmosphere that was an integral part of the original concept in the community's planned layout. The primary focus of the Borough's development regulations are, and should be, to this end. Following are the major goals of this Land Use Plan.

- To preserve the established development pattern of the community.
- To foster development and redevelopment that is compatible with the traditional, unique (and in some cases historic), character of residential neighborhoods and protects natural resources.
- To encourage and maintain the beauty and appearance of the Borough's parks and natural land areas.
- To encourage the redevelopment of the Route 46 business corridor and improvements in the Midvale Market area, which serves as a focal point – i.e. a town center - for the community
- To sustain and protect water resources.

LAND USE OBJECTIVES

The following are the primary future land use objectives.

1. Maintain a relationship of mutual benefit among the different land uses.
2. Encourage, protect and continue the unique character of residential neighborhoods and the overall character of Mountain Lakes as a planned community.
3. Protect water resources, including the lakes, streams, dams, well heads and aquifers.
4. Protect natural resources, native vegetation, and sensitive topographic features of the community
5. Encourage development and redevelopment of commercial areas, especially along Route 46, in a manner that is more coordinated and visually attractive.
6. Encourage mixed-use development in the Midvale Market area (the Borough's traditional town center) in a manner consistent with its established historic character.
7. Encourage the rehabilitation of substandard units and affordable housing in accordance with the Housing Plan Element.
8. Promote the preservation of historic sites and landmarks and all contributing resources in the Mountain Lakes Historic District.

MOUNTAIN LAKES - A PLANNED COMMUNITY

Mountain Lakes was conceived by Herbert J. Hapgood, a land developer, and Arthur T. Holton, a landscape engineer in the early 1900s. These men were inspired by the natural beauty of the area

and the marketing advantages of a direct link to New York City by rail. Its original development was unique because of the size of their concept and, most importantly, because it was conceived as a whole community.

The overall development concept was to create an "ideal planned community" centered around man-made lakes. The lakes not only formed the focus for the design and the future life of the community but also fundamentally influenced the layout for the roads and surrounding neighborhoods. Planned as a residential park community in the tradition of Llewellyn Park, Riverside Park and Tuxedo Park, Mountain Lakes was developed with a pattern that deliberately set out to create a park-like atmosphere with lakes, unspoiled natural brooks and improvements such as roads and houses placed within the natural contours of the landscape.

Partly as a result of the original concept and partly as a result of good planning by the Borough Council, large areas of the Borough were preserved from development. These open space areas are located throughout the Borough and contribute substantially to its park-like atmosphere. This planned community pattern is important and fundamental to the character of Mountain Lakes and should be preserved.

NATURAL CHARACTERISTICS AND ENVIRONMENTAL CONCERNS

Environmentally, the Borough of Mountain Lakes is characterized by large trees, significant shrubbery and the lakes. These features constitute the major environmental assets, both now and in the future. In addition to many acres of woodland, much of the current vegetation is a result of landscaping activities from the early years of the Borough. Going forward, replacement of aging trees and protection of the topography assures the continuation of the community's character. The homes blend well with the surrounding trees and shrubbery. The environmental and recreational features of the lakes are utilized to the largest extent possible.

Mountain Lakes is located along the boundary between the New Jersey Piedmont and Highlands regions. This boundary location sets the foundation for the Borough's distinctive character of a community nestled within hills and valleys. This contributes to other community characteristics such as the prevalence of steep slopes and areas of high groundwater table. The Pleistocene Glaciation was an important event influencing Mountain Lakes' character. During that era this was an area where the ice sheet became stationary for a time forming a terminal moraine where sediments and rock were released. This resulted in the prevalence of boulderstone throughout the town.

The lakes, which give the Borough its name, are central to the character and life of the community. The protection of the lakes along with streams, well heads, aquifers and dams is critical and needs to be sustained. Eutrophication has been a growing concern for many years and land development is one of a number of important factors which can affect and accelerate the process. Future development options that minimize the impact of eutrophication should be given priority. Policies to prevent eutrophication should be periodically reviewed, upgraded as necessary, and enforced. Education of the community regarding eutrophication is important.

A periodic reexamination of the Environmental Resources Inventory provides an important opportunity to reexamine the Borough's land use policies in terms of the impact of future development on natural resources and environmental concerns. It has long been an important goal to maintain an appropriate balance between future development and the preservation of important natural resources. Protecting and promoting indigenous plants, shrubs, and shade trees,

protecting the current topography, and preventing the introduction of invasive species are critical environmental concerns.

EXISTING LAND USE CHARACTERISTICS

The 1,884 acres of land (including lakes) in the Borough are about 99 percent developed or are public land. The zoning is 94 percent residential and conservation, with the remainder in "Commercial" or "Office/Light Industrial" districts. Appendix B shows the existing land use of all properties in the Borough. The distribution among the different land uses is as follows:

EXISTING LAND USES

(Source: 2011 Tax Records)

USE	VACANT (acres)	DEVELOPED (acres)	UNDER DEVELOPMENT	TOTAL (approx. acres)
Single -family	11.7	683.2	11.4	706
Farm Land *	9.7	0	0	9.7
Public Open Space	492.3	0	0	492.3
Private ** Open Space	24.2	0	0	24.2
Commercial***	1.1	110.5	0	111.6
Public/Religious School Building	1.9	125.1	0	127
Industrial	0	4.4	0	4.4
Railroad,	0	62.8	0	62.8
Streets +	0	178.9	0	178.9
Lakes	0	166.5	0	166.5
Total	540.9	1331.4	11.4	1883.4

* This is property along Willow Road that is farmland assessed

** Privately owned land that cannot be developed

*** Business, Office and Clubs

+ based on GSI Mapping

With 706 acres, residential is the single most dominant existing land use. The lakes, which cover about 167 acres and constitute an integral part of the residential area, have an importance and impact on the character of the community and on community life. Except as specifically addressed in this plan, the pattern of existing land use in Mountain Lakes is functionally, environmentally and structurally sound and there is no reason to anticipate any significant changes in those uses within the planning period of 10 or more years.

The amount of vacant land is only 24.35 acres. When environmentally constrained areas such as wetlands, streams and steep slopes are subtracted from this small acreage, the potential for future new development is very limited.

RESIDENTIAL LAND USE

Mountain Lakes has throughout its history been primarily a residential community of larger single-family dwellings. The issue of housing needs and opportunities is more fully discussed in the Housing Plan Element. There are eight residential zones, which are identified in the following table. The average residential density in Mountain Lakes is 0.8 housing units per acre.

RESIDENTIAL LOT SIZES AND DISTRIBUTION

(Source: Tax Records, Zoning Ordinance)

ZONE	MINIMUM LOT SIZE (sq. ft.)	AVERAGE LOT SIZE, ESTIMATED (sq. ft.)	DISTRIBUTION OF LAND (%)
R-AA	22,500	35,850	24%
R-A	15,000	26,600	66%
R-AH	Min. 8 Acres		.5%
R-1	10,000	13,500	3%
R-2	8,000	12,500	2%
RC-1	15,000		.75%
RC-2	15,000		.75%
RC-3	6,500		3%

Neighborhood Characteristics

The single-family residential neighborhoods in Mountain Lakes traditionally have certain land use characteristics in common, which should be protected and perpetuated. Lot size is of course an important characteristic. Another is a sense of spaciousness and openness in most single-family neighborhoods. This is related to but not wholly determined by lot size. Indeed it exists in many neighborhoods despite relatively modest lot sizes. This results from the fact that the scale of homes in relation to land area has been traditionally relatively modest. Even though many of the original homes were quite large, many in-fill homes have been relatively small, resulting in an overall modest floor area to land area ratio.

As many already large homes were expanded and many small homes greatly enlarged, a diminished sense of spaciousness and openness in many residential neighborhoods resulted. Concern about this trend led to two ordinance amendment initiatives. The most important of these was the enactment of floor area ratio (F.A.R.) limitations to limit the size of structures in

relationship to the size of the lot upon which they are situated. The other initiative was to increase the required side yard setback requirements to ensure a minimum standard for light and air between buildings. The following is a table showing these requirements by zone district.

STANDARD F.A.R. AND SETBACK REQUIREMENTS
(Source: Land Use Ordinance)

ZONE DISTRICT	MAX. F.A.R.	SIDEYARD SETBACK
R-AA	13 %	25 feet
R-A	17 %	25 feet
R-AH	30.5	25 feet
R-1	20 %	10 feet/combined 30 ft
R-2	20 %	10 feet/combined 25 ft
RC-1	15 %	25 feet
RC-2	20 %	25 feet
RC-3	20 %	25 feet

Historically, Mountain Lakes was an early community that instituted F.A.R. for residential requirements. Initially, F.A.R. levels were chosen in order to assure that relatively few existing structures would be made non-conforming. In addition, they allowed future expansion of existing small to medium sized homes to occur up to a size that was typical of the largest existing dwellings. Few properties were made non-conforming by the enactment of the larger setback standards. These initiatives eliminated the most extreme examples of the trend toward a diminished sense of spaciousness in the Borough's neighborhoods.

Since 1996, the F.A.R. limit was reduced and additional zoning controls were added to maintain neighborhood character, including controls on building height and grade changes. In 2012 Ordinance 08-12 was adopted amending the Land Use ordinance to provide incentives for owners of approximately 490 historic homes to preserve, and maintain the current character of, their homes by offering bonus Floor to Area Ratio (FAR), Improved Lot Coverage (ILC) and side setback requirements for homes that satisfy the eligibility criteria set forth in the ordinance.

Land Use Policies for Residential Areas

Since the preparation of the 1996 Master Plan, two vacant parcels (the "Rush/Weichert" and "Fusee/Park Place/Legacy at Mtn. Lks." parcels) were approved for development in accordance with the recommendations contained in the COAH-certified Housing Element and Fair Share Plan. As a result, the existing residential areas in Mountain Lakes are now essentially fully developed. The overarching land use policy for the Borough's residential areas is to preserve established development patterns.

The few remaining vacant areas are largely unsuitable for high intensity or dense development because of the presence of wetlands and/or steep slopes. The Borough's land use policies for these areas should reflect these facts and be designed to protect and continue the established

character of residential neighborhoods. Land acquisition should be considered, where feasible, to preserve remaining undeveloped areas as open space.

Since so little vacant land exists that is suitable for residential development, future residential development potential is primarily limited to the redevelopment of existing residential properties and the possibility of mixed-use development of areas that traditionally are commercial in character. This is more fully discussed below.

NONRESIDENTIAL LAND USE

Although Mountain Lakes is primarily a residential community, prominent commercial areas do exist. Located just north of the railroad line is the Midvale area (Business Zone A). Although not large in land area, this commercial area is a focal point for the community and is thought of as the "town center". It is centrally located within the Borough and is close to the train station, post office and library.

On the east-bound side of Route 46 is the Business Zone B. Office/Light Industry (OL-1 and OL-2) zoned areas are located along the west-bound side of Route 46 with an OL-2 site at the intersection of Morris and Fanny Road. Even though the total amount of land in these nonresidential use areas is only about 116 acres, with about 1.09 vacant at this time, their visual prominence along the state highway gives them an importance out of proportion to their land area.

The following are the Borough's future land use policies for Business Zones A & B, including major changes, recommended by this plan. In a number of cases they result from changing needs and priorities and will require amendments of the Borough's Land Use Ordinances in order to be implemented.

Midvale Area - Town Center (Business Zone A)

Mountain Lakes has a strong sense of itself as a community of shared values and pride of place. The lakes, parks and schools have traditionally been important factors contributing to community identity, interaction and pride. Borough future land use policies should encourage the enhancement of the Midvale area as the community focal point or town center.

The town center envisioned by this plan is an area with relatively small-scale land uses such as a convenience/general store, eating establishment, library and post office where residents can conveniently interact. The Midvale area has historically been the closest to this concept of a community center in the Borough. All of the aforementioned uses are or have been located in this area.

Any development or redevelopment of the Midvale area must be compatible and consistent with the existing scale and character of the area. The following policies that will promote these goals are recommended by this plan.

1. Borough land use policies should support the continued existence of a market similar to those that existed earlier in the Midvale area.
2. The zoning for the area should be reconsidered in terms of permitting mixed uses (commercial and residential uses) that take advantage of staggered demand for limited parking spaces. In particular, a few units of affordable housing should be permitted for the upper floors of mixed use buildings (first floor office/retail) in the area. This

development option would help address the Borough's desire to provide affordable housing.

3. Increased vehicular traffic and speed have been concerns in the area. The Borough should examine cost effective ways to address these concerns, including traffic-calming improvements that will encourage traffic to slow down, discourage through-traffic, and promote increased pedestrian safety.
4. Additional parking, if needed, should be added in a manner that is attractive and does not substantially change the character and pedestrian orientation of the area.
5. Public improvements to streets, sidewalks and other public areas should be considered to make the area more attractive and suitable for public interaction and use. Possible improvements could include pedestrian crossings, a landscaped traffic island and landscaping (including plantings in sidewalk and parking areas).
6. As commercial redevelopment occurs in the area, it should contribute to the above recommended improvement plans on a pro-rata basis, to the extent permitted by law.
7. Any redevelopment of the Midvale area needs to promote the preservation of the Market and the Mountain Lakes Garage Buildings as stated in the Historical Preservation Plan.

Route 46E Business Corridor (Business Zone B)

This area located between Route 46 and the railroad (and includes one business office on the north side) constitutes about 23 percent of the commercial land, and is almost fully developed. The current zoning permits business offices and retail/service uses on relatively small minimum-sized lots (20,000 sq. ft).

This area has undergone a long and gradual period of economic decline. Although some development/redevelopment has occurred in recent years, a sustained and more coordinated redevelopment of the area is unlikely, particularly due to current economic conditions affecting the state and nation as a whole. Additional factors pose practical difficulties for redevelopment because the lots are characteristically shallow, sandwiched between the railroad and the state highway, under diverse ownership, and subject to conventional zoning standards that treat each use individually.

The Borough's land use policies should encourage a more coordinated approach to redevelopment of the B Zone. Business owners could be encouraged to work together and zoning regulations could be revised to provide greater flexibility in development standards. The Borough could consider either a comprehensive revision of the B district's zoning regulations or a more targeted approach for a specific area by designating an overlay zone for some portion of the district. In the case of an overlay zone, the underlying standards of the B zone would remain in place, except as varied by special standards applicable to only the designated area. In either case (comprehensive rezoning or an overlay zone); consideration could be given to broadening the permitted uses, allowing a greater level of development (e. g. greater height), encouraging shared parking arrangements and flexible setbacks to promote flexibility in site development. Any development in this zone needs to consider the protection of the Borough's major wellhead.

PUBLIC AND SEMI-PUBLIC LAND USES

Public and semi-public land uses constitute a major category in Mountain Lakes. About 825 acres are included, distributed as follows:

PUBLIC, SEMI-PUBLIC USES

(Source: Tax Records, 2011)

USE	ACRES (approx)
Public (excluding lakes)	619
Semi-public	39
Lakes	167
Total	825

The public uses include designated local and county parks and conservation areas, the Board of Education properties (70.35 acres) and land for public administration, public safety and public works. A number of scattered lots in public ownership are areas with development constraints and accordingly belong in the conservation category. These lots also add to the wooded character of the community.

Parks, Open Space and Conservation Areas

Major designated parks include the Richard M. Wilcox Park, which extends (together with an isolated 19 acre tract of land purchased by the Morris County Park Commission with matching Green Acres funds), from Crystal and Birchwood Lakes along the Denville boundary to the Boonton Township line. Halsey A. Frederick Memorial Park is located between Powerville and Fanny Roads, south of the YMCA facility. Two areas of park land are located between Intervale Road and the railroad, and a few other parks of smaller size are to be found at the different lakes and elsewhere in the Borough. Memorial Park with monuments honoring the Borough's dead in major conflicts is located on Lake Drive adjacent to Barton Road.

The Borough has a history of not selling Borough-owned property; Appendix A contains a listing of properties dedicated to park, recreational use and environmental protection. The list has been updated to reflect the addition of land purchased since the adoption of the 1996 Master Plan

The preservation of these open space areas is a critical part of this plan because of Mountain Lakes' long established land use pattern. The existing land use pattern in most neighborhoods was established in the early part of the 20th century as part of the original development of the community essentially as a "residential park." The residential characteristics of Mountain Lakes are supported by publicly owned open space areas that are located throughout the community. This planned community pattern is important and fundamental to the scale and character of Mountain Lakes and should be preserved.

Semi-public Facilities

The semi-public uses include the Wilson School, four churches, a lodge, the YMCA, and other private recreation facilities.

SEMI-PUBLIC USES
(Source: Tax Records, 2011)

USES	ACRES (approx.)
Wilson School	2.6
Community Church	2.5
St. Catherine's Church	11.0
King of Kings Church	5.0
St. Peter's Church	1.4
St. Johns Masonic Lodge	1.1
YMCA	7.7
Park Lakes Tennis	6.5
Mountain Lakes Club	1.6
Total	39.4

SUMMARY OF MAJOR LAND USE POLICIES

The following is a summary of the major land use policies and recommendations for action to implement this plan.

Land Use Policies

1. Preserve the dominant residential character of Mountain Lakes by continuing the established mix and intensity of uses.
2. Preserve the traditional character of residential neighborhoods.
3. Maintain and protect the many Borough-owned properties (including conservation easements) that serve as important open space and conservation areas.

Continue to encourage diversity in housing options within the Borough by providing opportunities for the development of affordable housing.

Land Use Recommendations

1. Promote the cooperation among property owners in planning of the Route 46 business corridor, including a review of zoning requirements to achieve plan objectives.
2. Promote the redevelopment of the Midvale area to enhance its viability and functionality as the town center.
3. Review the development standards based on the recently completed Environmental Resources Inventory, including an investigation of whether there should be more control over grade changes and disturbance of steep slopes.
4. The Land Use Ordinances should be examined and amended, when appropriate, to incorporate any changes in the Municipal Land Use Law.

IV. Housing Element and Fair Share Plan

Note: *In order to proceed with the completion of the Master Plan a preliminary Housing Element is being prepared. Considering that at the time of the preparation of this Housing Element the status of COAH regulations and implementation are unclear, it is not possible to formulate an informed Housing Element. This approach to the Housing Element is due to current political and judicial issues and has no reflection on the intent of the Borough of Mountain Lakes.*

The Borough of Mountain Lakes will review and revise this Housing Element when the COAH regulations have been resolved.

INTRODUCTION & BACKGROUND

Mountain Lakes is a small, primarily residential community, with an essentially stable population. It began as a planned residential community developed around five lakes in the early part of the 20th century. A historic district comprising a majority of the Borough has been placed on the State and National Registers of Historic Places. Its historic significance is that of an early planned community in the United States, as well as its architecture and landscape architecture relating to the period between 1908 and 1938. More recently, development has been limited to the infill of isolated residential lots and the redevelopment of a few isolated properties.

THE FAIR HOUSING ACT AND COAH

Enacted in 1985, the New Jersey Fair Housing Act created the Council on Affordable Housing (COAH), to provide an administrative alternative to the courts in reviewing and mediating fair housing litigation. COAH adopts rules governing the periodic calculation of fair share obligations (referred to as a fair share “round” or “cycle”) and the methods by which each cycle’s obligation may be addressed by communities. Participating in COAH’s administrative process and receiving *substantive certification* of a municipal fair share plan provides a municipality with legal protection from *Mount Laurel* litigation during the period of certification, now ten years.

PRIOR ROUND FAIR SHARE OBLIGATION

COAH determined the fair share obligations for each New Jersey municipality covering the first and second rounds based on anticipated growth trends and data from the most recent available census. The “first round” obligations were published in 1986 and covered the period from 1987-1993. The “second round” covered the cumulative 12-year period from 1987-1999 and in some cases, included an adjustment (lowering) of the first round obligation due to actual growth versus previously projected trends. Mountain Lakes’ cumulative first and second round obligation (now referred to as the prior round obligation) was 91 units, comprised of 80 units of new construction and 11 units of rehabilitation. However, COAH granted the Borough a *vacant land adjustment*, lowering the new construction portion of the prior round obligation to the Borough’s *realistic development potential* (RDP) of 18 units with an adjustment or *unmet need* of 62 units.

GROWTH SHARE OBLIGATION

In 2004 COAH adopted “third round” rules establishing a new methodology known as “growth share” by which municipalities would make their own projections of growth for the period 2004-2014 and provide affordable housing in proportion to market rate development: one affordable unit for every eight market rate residential units and one affordable unit for every 25 jobs attributed to nonresidential development.

The Borough submitted a third round Housing Element & Fair Share Plan to COAH in December 2005. The plan projected growth that would generate an affordable housing obligation of approximately six units (subsequent projections lowered the estimate to three units). However, in January 2007, as a result of lawsuits filed by developers and others challenging COAH’s rules, the Appellate Court invalidated many important aspects of the rules and placed all affordable housing plans then being processed by COAH, including Mountain Lakes’ plan, “on hold” pending the agency’s adoption of new rules.

In response to the 2007 Court Decision, COAH adopted new regulations in 2008, established its own growth projections for all municipalities, modified the growth share ratios to generate significantly more affordable housing (one affordable unit for every four market rate residential units and one affordable unit for every 16 jobs), and extended the third round cycle through 2018.

In adopting the revised rules in 2008, COAH projected that between 2004 and 2018 as many as 150 new dwellings would be built in the Borough, and employment attributed to new development would grow by 1060 new jobs, all despite the fact that there is little vacant land available in the Borough. By applying the higher growth share ratios to these projections results in a COAH-projected third round affordable housing obligation of 96 units. The revised rules permit an adjustment of COAH’s growth projections based on development capacity, but no adjustment can be granted for that portion of the fair share obligation generated by actual development that has taken place since January 1, 2004.

THE HIGHLANDS REGIONAL MASTER PLAN AND ADJUSTED THIRD ROUND GROWTH PROJECTION

Shortly before COAH adopted its original third round rules in 2004, the Legislature enacted the Highlands Water Protection and Planning Act, which established the Highlands Council and called for the development of a regional master plan to carry out the Act’s objectives.

The Highlands Regional Master Plan (RMP) was adopted by the Highlands Council in July 2008 and approved by the Governor in September 2008. In approving the RMP, Governor Corzine issued an Executive Order requiring that the Highlands Council and COAH work cooperatively and that the Highlands Council determine adjusted fair share obligations for communities that conform to the RMP.

In early 2009 the Highlands Council conducted a review of the remaining vacant land in the Borough, existing conditions, and available infrastructure. A build-out analysis prepared by the agency projects a small amount of future development - five additional residences and approximately 5,100 square feet of nonresidential development - if the Borough conforms to the Highlands RMP.

SUMMARY OF MOUNTAIN LAKES' THIRD ROUND AFFORDABLE HOUSING OBLIGATION AND FAIR SHARE PLAN

The total third round fair share obligation is comprised of three components described below.

Third Round Rehabilitation Share

This portion of the obligation refers to the number of substandard units in the Borough occupied by low and moderate income households. COAH has determined that Mountain Lakes has a rehabilitation share of zero. This supersedes the prior round rehabilitation obligation.

The Remaining Prior Round Obligation

COAH certified the Borough's prior round Housing Element & Fair Share Plan on March 5, 1997. As part of certification COAH granted the Borough a *vacant land adjustment* in recognition of the Borough's insufficient land capacity to satisfy the COAH-determined 80-unit new construction portion of the obligation. Instead, the Borough's *realistic development potential* was determined to be 18 units, which was satisfied with inclusionary zoning and a regional contribution agreement (RCA). The *unmet need* of 62 units was addressed by establishing a Borough-wide overlay zone requiring affordable housing as part of any new residential development comprised of five or more units.

The Borough has met the terms of its prior round substantive certification. Payment for a 12-unit RCA with the City of Orange was completed in 1997. Also in 1997, zoning was enacted establishing the Affordable Housing Overlay Zone (addressing unmet need) and for the inclusionary "Fusee" (renamed Legacy of Mountain Lakes) site to permit the construction of 34 multifamily dwellings, including six affordable units.

Third Round Growth Share Obligation

The growth share obligation based on development that has occurred since January 1, 2004 and the Borough's future development capacity, in accordance with a build-out analysis prepared by the Highlands Council, is 11 units.

In April 2005, the Fusee (renamed Legacy of Mountain Lakes) site zoning was expanded to encompass adjacent land and permit the construction of ten additional dwellings, including two affordable units. Site plan approval was granted in 2006. These two affordable units, plus two compliance bonus credits, will satisfy four units of the projected growth share obligation. The balance of the obligation can be satisfied by implementing an accessory apartment program to encourage residents to establish affordable accessory apartments for occupancy by low and moderate income households.

PART 1: HOUSING ELEMENT

The Municipal Land Use Law (MLUL) requires a Housing Element as a mandatory part of the municipal Master Plan. Every Housing Element must contain the following information.

1. An inventory and analysis of the municipality's housing stock, demographic characteristics, and existing and future employment characteristics;
2. A projection of future housing construction;
3. A determination of the municipality's present and prospective fair share of low and moderate income housing and its capacity to accommodate low and moderate income housing; and

4. A consideration of the land that is most appropriate for the construction of low and moderate income housing including land owned by developers who have expressed a commitment to provide affordable housing.

INVENTORY OF HOUSING STOCK

Age of Housing

The age of the housing stock is sometimes a gauge of the overall condition of housing in a community. However, in a community such as Mountain Lakes, it is indicative of the attractive and desirable historic qualities of the area. Most homes in Mountain Lakes were constructed prior to 1960; 576 units were built before 1939 as shown in the table below.

AGE OF HOUSING

(Source: 2010 Census)

Year structure built	No. of Units	% of total
2001 to 2010	60	4.2
1999 to March 2000	18	1.3
1995 to 1998	43	3.0
1990 to 1994	62	4.4
1980 to 1989	95	6.7
1970 to 1979	74	5.2
1960 to 1969	104	7.4
1940 to 1959	382	27.0
1939 or earlier	576	40.7

NOTE: Actual sum may not equal 100% due to rounding.

Condition of Housing

The 2010 Census data contains information of housing deficiencies that serve as indicators of the need (or lack thereof) for rehabilitation. The data reveals that housing in the Borough is in excellent condition. There is no overcrowding in the Borough's housing stock. All units were reported to have 1.00 or less persons per room.

Housing Values

In 2010, the median housing value of all occupied housing units was \$888,200. The lowest values reported (less than \$50,000) was report for 9 housing units. Over ninety three percent were valued over \$500,000. Median contract rent reported for 2007-2011 (Five Year Estimate) was \$1,984. Sixty two units reported paying rent. All 62 reported rents exceeding \$1,500/month with a median of 2000 plus dollars.

Occupancy Characteristics

The 2010 U.S. Census reported that out of a total of 1,314 housing units, 1,278 units were occupied and 36 were vacant. The U.S. Census reports that of the 1278 occupied units, 1204 were owner-occupied and 74 were renter-occupied. The 2010 County report showed that there were 1255 owner-occupied units and another 58 renter-occupied units. Despite the conflicting numbers, both show that the predominance of homes are owner-occupied. The average household size of owner-occupied units was 3.17 persons, slightly higher than the renter occupied average of 3.16 persons. The vast majority (1,144) were family households, while 169 were non-family households.

Housing Types

Like most Morris County communities, owner-occupied single-family detached dwellings are predominant in the Borough. The Census shows that 1-unit detached structure predominate at 90.3%. Dwellings in the Borough are typically large. The median number of rooms per unit was reported to be 9 plus rooms and 58 % of the homes had 9 or more rooms. The 2010 U.S. Census reports an occupancy rate of 97.3% and a vacancy rate of 2.7%.

The Census also reports that 39.1% of the homes were built prior to 1940 while the next largest period of building homes was from 1950 to 1959 with 19.3%. There were seven other decades reported, all were below 10%.

The following table displays housing types:

HOUSING TYPES

(Source: 2007-2011 Five Year Estimate/2010 Census)

Type of Unit	Total units	Percent
1 unit, detached	1,186	90.3
1 unit, attached	98	7.5
2 units	9	0.7
3 or 4 units	21	1.6
Mobile home	0	-
Other	0	-
TOTAL	1,314	100

Affordable Housing

Park Place (now Legacy of Mountain Lakes) began construction in 2009. The developers' plan was to build and sell 43 units in a sequential manner based on the successful sale of the initial units. The first building containing 4 units was constructed. Due to economic conditions, sales of these units were delayed. Additionally, a second building was constructed and this was made up of 8 affordable housing units. All of these units were sold and are occupied.

Since the developers of Park Place (now Legacy of Mountain Lakes) were unable to sell the initial units completion of the project was not possible. The properties and their interests were sold to Hornrock Properties, LLC

Although, the overall Park Place (now Legacy of Mountain Lakes) project was not completed the construction, sale and occupancy of the affordable housing portion was completed. Thus, the Borough of Mountain Lakes provided eight affordable unit toward its' COAH requirements.

Substandard Housing

As described under "Condition of Housing" above, there are no units in Mountain Lakes that were in substandard condition and in need of rehabilitation. Similarly, COAH determined that the Borough's *rehabilitation share* is zero.

GOALS & OBJECTIVES

The overarching goal of this plan is to comply with the constitutional fair housing mandate in a manner consistent with the Borough's general Master Plan goals. The following objectives are intended to fulfill this important goal.

1. Preserve the existing housing stock and maintain COAH credit for the units approved as part of the Borough's prior round affordable housing plan.
2. Provide a realistic opportunity for additional affordable housing if required by revised or current regulations in a manner compatible with the established character, residential densities, and development capacity of the Borough.
3. Maximize the efficient use of existing resources through the reuse and/or conversion of existing dwellings to affordable housing, and provide for new affordable housing consistent with COAH regulations.
4. Guide new residential development in a manner that will be compatible with the Borough's development capacity consistent with the policies and objectives of the Highlands Regional Master Plan.
5. Provide that, to the extent economically feasible, all new residential development should include a percentage of housing affordable to households of low and moderate income at a ratio of not less than one affordable unit for every four market rate units.
6. Reduce long term housing costs and conserve resources by promoting development that: is based on sustainable site design and the preservation of environmental resources; includes energy efficient technology; promotes the efficient use of available infrastructure and the adaptive reuse or redevelopment of existing buildings.
7. Support a variety of housing types and promote quality residential development and housing design that provides adequate light, air and open space.

THE FOLLOWING INFORMATION/DESCRIPTIONS/REQUIREMENTS MAY BE AFFECTED FOLLOWING THE COURTS' DECISION ON THE STATUS OF COAH REQUIREMENTS.

DETERMINATION OF AFFORDABLE HOUSING NEED AND CAPACITY TO ACCOMMODATE GROWTH

The MLUL requires a determination of the municipality's *present* and *prospective* affordable housing need.

COAH had determined the present need or rehabilitation share for all communities and developed projections of housing construction and employment growth by which a municipality could calculate its prospective need or growth share obligation. The Highlands Council also made projections of future development, upon which a municipality may base its growth share obligation if it conforms to the Highlands Regional Master Plan.

Present Need (Rehabilitation Share)

Prospective Need (Growth Share)

The Borough's Capacity to Accommodate Residential and Nonresidential Growth

The MLUL requires that the Housing Element address whether the community has the capacity to accommodate its present and prospective housing needs, including its fair share of low and moderate income housing. In addition, the Highlands Council requires an assessment of how conformance with the Highlands RMP will affect the Borough's ability to accommodate growth projections and affordable housing.

In particular, the following topics are to be addressed: existing and planned infrastructure, anticipated demand, anticipated land use patterns, municipal economic development policies,

constraints on development (including COAH's scarce resource restraint) and measures to address constraints.

Most of Mountain Lakes is served by public water utilities (Mountain Lakes Water Department, Denville, Boonton and Parsippany-Troy Hills) and public wastewater utility systems (Parsippany-Troy Hills Sewer Authority).

Consideration of Land for the Construction of Affordable Housing

The Municipal Land Use Law also requires that the Borough take under consideration the commitments of any developers who have expressed an interest in constructing affordable housing in the Borough. Inclusionary zoning has been enacted to produce affordable housing in satisfaction of the Borough's prior round fair share obligation and a portion of the third round obligation. No other property owners have expressed an interest in providing affordable housing.

The actual Fair Share Plan and the included topics that will be part of the Housing Element will be prepared following the resolution of COAH's future requirements.

PART 2: FAIR SHARE PLAN

A Fair Share Plan describes the completed and/or proposed mechanisms that address the total fair share obligation. It is adopted as part of the Master Plan to guide its implementation through municipal land use and development regulations. The Borough Council is responsible for implementing the plan, by enacting ordinances and providing any required funding to carry out the plan, and for obtaining approval from Superior Court or petitioning COAH for *substantive certification*.

Some potential topics that could be included in this Housing Element are described below:

THE 1987-2018 TOTAL FAIR HOUSING OBLIGATIONS

TABULAR SUMMARY OF THE PLAN FOR THE
TOTAL 1987-2018 FAIR SHARE OBLIGATION

AFFORDABLE HOUSING ADDRESSING THE PRIOR ROUND OBLIGATION

AFFORDABLE HOUSING ADDRESSING THE
PROJECTED GROWTH SHARE OBLIGATION

PROPOSED PROGRAMS, PROJECTS AND/OR UNITS
ADDRESSING THE GROWTH SHARE OBLIGATION

IMPLEMENTATION SCHEDULE

RELATIONSHIP OF THIS PLAN TO THE HIGHLANDS REGIONAL MASTER PLAN

RELATIONSHIP OF THIS PLAN TO THE STATE
DEVELOPMENT & REDEVELOPMENT PLAN

V. CIRCULATION PLAN

The Circulation Plan is the element of the master plan covering streets, sidewalks, paths, bikeways and public transportation facilities. The overall purpose of this element is to help guide and coordinate Borough policies relating to these facilities.

CIRCULATION OVERVIEW/BACKGROUND

Mountain Lakes is a community whose road layout and development pattern were established before the dominance of the automobile on American life. As a result, the Borough's streets and transportation facilities reflect, and to a great extent, influence a Borough character that is more pedestrian oriented than is typical of most modern American suburban communities designed to accommodate the automobile. The continuation of this distinction is of great importance and concern to the Borough.

In order to rationally address public policy affecting circulation and transportation, it is important to have an understanding of the dynamics of change in our area. Following are some of the major events relating to circulation planning leading up to this point.

- Increasing congestion on local Borough roads has for many years been a concern. This long term trend is impacted by two major factors both of which require a regional response:
 1. Local streets are being used as alternatives to major highways such as Route 46, I-80 and I-287 during periods of heavy congestion.
 2. Development in surrounding communities is directly impacting Borough streets. This has a special impact because of the development pattern of commercial development to the east and residential development to the north.
- The diminished use of public transportation for commuting to work is a long term trend in our area. Census statistics confirm the continuation of this trend in recent years even among Borough residents who have convenient access to commuter rail transportation. The increasing price of gasoline may affect this trend.
- New Jersey Transit has a long term goal of linking public transportation in our region. A major milestone in the implementation of this goal was linking the Boonton Line, which serves the Borough, to the other elements of the northern New Jersey metropolitan public transportation system. Although this was an important improvement in public transportation linkage to and from the Borough, it does not seem to be convenient enough to increase public transportation use.
- There has been a growing perception of concern for the safety of children in relation to their use of streets and paths in the Borough. School pick-up and drop-off times produce traffic congestion.
- There needs to be an increased recognition of the importance of the Borough path system to the life and character of the community, linking neighborhoods and other destinations in order to provide safe recreational opportunities for residents of all ages.

CIRCULATION OBJECTIVES

The following are the major circulation-related objectives that should be pursued by Borough officials and policies.

1. Minimize vehicular traffic on local streets from within and outside the Borough by creating opportunities to encourage and promote public transportation alternatives and Park and Ride facilities, and carefully monitor NJDOT plans for improvements to Route 46.
2. Actively continue the Mountain Lakes tradition of encouraging improvements that enhance pedestrian and bicycling circulation, access and safety.
3. Continue the pattern of narrow, curvilinear local roads that are central to the character of Mountain Lakes.

CIRCULATION CONDITIONS IN MOUNTAIN LAKES

The Borough has jurisdiction over all roads in the community except for Route 46, a State highway, and the Boulevard, a County road. The Borough police supervise traffic on all streets in Mountain Lakes including State and County roads. Following is a description of the major existing modes of transportation in the Borough and, where appropriate, proposals for improvements.

Roads

There are about 28 miles of two-lane paved streets within the Borough, about 26 of which are Borough-owned. There are 2.2 miles of County-owned roads in the Borough (the Boulevard) and 1.5 State-owned (Route 46). Local Borough-owned streets for the most part have a pavement width of 16 to 20 feet and a right-of-way width of 30 to 50 feet. The two widest and most heavily traveled roads in the Borough are the Boulevard (a County-owned and maintained roadway) and Route 46 (owned and maintained by the New Jersey Department of Transportation). Recent traffic counts of selected roadways by the County indicate a leveling off of the trend of increasing traffic on many Borough roads. However, traffic remains at levels higher than they were originally designed to accommodate. In addition, much of this traffic results from commuters having no origin or destination in Mountain Lakes, to simply avoid congestion on major roadways such as Route 46, I-80 and I-287.

Boulevard - Of all the roads in Mountain Lakes, the Boulevard is perhaps the most important to the Borough and its character because it is in many ways the "Main Street" of the community. The Boulevard is an approximate 30 foot wide, two lane road lying within a Morris County right of way, and identified as County Road 618. The right of way is 60 feet wide from the intersection with Route 46 to near North Crane Road, and then widens to 80 feet from Crane Rd to Tower Hill Rd. From Tower Hill Rd to Powerville Rd the right of way is 115 feet. From Powerville Rd to Fanny Rd it reverts back to 80 feet. In addition to the improved roadway, a pedestrian walking path lies within the County right of way. Although it functions as a connection between Mountain Lakes and Boonton Township, its location at the center of this community makes maintaining its traditional design, scale and character very important. To this end, the County and Boonton Township should be urged to pursue policies that limit the increase in traffic on the Boulevard, especially for heavy truck traffic for which it was not designed.

Route 46 - Route 46 is the largest and most heavily used road in Mountain Lakes. A four-lane divided highway, it has a right-of-way width that varies from 100 to 180 feet. Borough traffic makes up only a very small percentage of the total of this major regional roadway. Traffic congestion during peak periods on Route 46 has had an unfortunate spill-over effect of increasing traffic on local Borough streets resulting from commuters avoiding the congestion. A traffic light has been placed by the New Jersey Department of Transportation at the intersection of Peartree Road with Route 46. The purpose of the light is to provide an alternative to the median cuts, which were closed for safety reasons.

Major improvements to 46 to reduce congestion would only have a short term benefit because they would stimulate further development to the west. This in turn would ultimately worsen the spill-over of traffic onto local streets. For this reason, NJDOT plans should be carefully monitored by the Borough and widening should not be supported. More modest improvements to Route 46 that further objectives of safety and improved circulation, however, should be supported.

Morris Avenue - By design, Morris Avenue is a typical Borough street. The level of traffic on it, however, is somewhat higher. This fact, combined with the lack of sidewalks north of Briarcliff Road, makes speeding a special concern, which should be addressed on a continuous basis.

Intervale Road - The widening and straightening of Intervale Road has been proposed in the past. This proposal, however, is not in the best interests of Mountain Lakes. There has been no safety problem demonstrated with its current design. In fact, its curves may help to slow down traffic from Route 46. Widening and straightening would increase traffic speeds and increase the risk of more serious accidents. In addition, Intervale is an important gateway into Mountain Lakes. For these reasons, the design of this road, which is maintained by the Borough, should be in keeping with the character of the rest of the Borough's streets.

Midvale Road - This road has become one of the major thruways in town due to residential and cut-through traffic. Speed bumps and a three-way stop have been placed at Midvale and Crescent, which has served to reduce and slow traffic.

Fanny Road - Fanny Road, although owned by Boonton, is an important access route for cars to and from Mountain Lakes. It is also heavily used by bicyclists and pedestrians. Curves on Fanny require caution at least in part because of the presence of bicyclists and pedestrians. Improvements to the roadway, however, would result in it becoming a major thoroughfare, a result that should not be supported. Repairs to the railroad overpass bridge on the municipal border with Parsippany have been completed and include sidewalks for pedestrians. There is concern that recent and planned new development will continue to increase traffic volume at the 4-way intersection of Fanny Road and Morris Avenue.

All Streets - Borough streets and intersections are generally safe and adequate for the amount of traffic they handle now and for the foreseeable future. Street upgrades and maintenance are now on a routine schedule, the curvilinear design of many Borough streets dates from the original plan for the community. It discourages speeding, an increasingly severe problem in many communities. Speeding, however, is an important concern requiring the effort and vigilance of the Borough police. Parking of large vehicles on the narrow streets, particularly landscaping trucks and trailers, presents a significant safety concern.

Vehicular and pedestrian safety must be an important public policy concern for the Borough. The Borough police are in a position to be aware of safety problems. Reports from them and other sources about safety issues should be carefully considered and evaluated on a case by case basis.

Sidewalk/Bikeways/Paths

The Borough has a network of paths and sidewalks which link neighborhoods, schools, lake areas, sports activities, the Midvale Market area and other public and private destinations, including the sidewalks on Powerville Road built in 2008. This network includes a variety of pedestrian/bike pathways differing in width, surface improvement, ownership and types of usage. They range from informal paths, traditionally used by children, to sidewalks used by all ages. A map of these paths has been created by the former Trails Committee to inform residents. The increasing prevalence of Lyme disease and poison ivy creates the need for more emphasis by the Borough on trimming and controlling underbrush along pathways. Sidewalk upgrades and maintenance are now on a routine schedule.

Public Transportation

Bus - There are limited public transportation options for travelers and commuters to and from the Borough. Bus service by the Lakeland Bus Company, with regular stops on the Boulevard (with a small Park and Ride lot) and on Route 46, links the Borough to New York City. The Borough is located in the county-wide Morris Area Paratransit System (MAPS). MAPS is a transportation service funded by the State casino tax and the Board of Freeholders providing transportation for employment, medical and social services, day care, shopping, recreational, nutritional, and educational purposes to senior citizens and disabled residents.

Rail- the Boonton commuter rail line is operated by New Jersey Transit with a station stop (the old station building is no longer used in connection with the line). The Boonton line currently connects with Dover to the west and New York City via Newark to the east.

CIRCULATION AND TRANSPORTATION PROPOSALS

Listed below are transportation related proposals and recommendations for the Borough.

Curvilinear and Narrow Road System

Mountain Lakes is a compact and essentially fully developed community whose layout and pattern of development strongly reflect an era that predates the dominance of the automobile. An important part of this pattern forming the essential character of the community is its narrow and curvilinear road design. The continuation of road policies that call for narrow and curvilinear road design consistent with the existing pattern should be strongly supported.

Consistent with this policy, alternatives to double access requirements for larger new developments should be supported where possible. These should include emergency access ways that are not fully paved and are less destructive and impacting than a full road improvement.

Midvale Market Area

The Land Use Plan Element of this Master Plan has recommended the long term goal of enhancing the role of the Midvale Market area as a community center for the Borough. Mixed use zoning has been recommended as part of that planning. Any such rezoning, however, must

carefully consider the traffic implications on the surrounding residential areas. In support of the goal of enhancing this area's role as a community center, pedestrian safety and access improvements as well as vehicular parking improvements are needed. The following improvements are recommended to be considered by the Borough Council with the advice of the Borough Engineer.

- Crosswalk improvements should be considered to slow traffic and emphasize the pedestrian right-of-way and safety. Particular attention should be paid to the crosswalk at the intersection of Morris Avenue and Midvale Road, which is especially important for the safe passage of children to and from school.
- Other improvements in the Midvale area should be considered including moving or trimming back hedges from the cartway to improve the line of sight.
- Sidewalk improvements should be considered to make the area more attractive to pedestrians.

Trails and Paths

The Borough's extensive system of pathways (informal paths and trails, formal sidewalks and bikeways) is one of the important attributes that sets Mountain Lakes apart from most other communities. The importance of this path system to the quality of life in the Mountain Lakes community can be measured in a number of ways. First, it creates a community infrastructure that elevates the importance of pedestrians in relation to the automobile. Second, the path system supports a healthier environment for children, families and citizens of all ages, providing healthy and safe options for activity and recreation. Third, it is an important integrating influence, enhancing a sense of community by linking neighbors and neighborhoods. For these reasons, it is important that the pathway system be maintained and improved where possible and appropriate. Where connections can be made to improve accessibility to the system in areas not currently connected, they should be made. In particular, any new residential developments should be connected to the system.

A pedestrian/bikeway has been part of the bridge repair/replacement over the rail line on Fanny Road at the municipal boundary with Parsippany. A pathway from the ball field to the YMCA should be pursued with Boonton. This pathway will provide a safe alternative for pedestrians along a heavily traveled roadway and will connect the residential neighborhood on the Legacy at Mountain Lakes tract to the rest of the community.

New Jersey Highway Access Management Code

The Highway Access Management Code was enacted to maintain the traffic carrying capacity of New Jersey's state highway system by more strictly regulating access to state highways in connection with any new development/redevelopment. This objective should be fully supported by the Borough.

Two aspects of the Code will, in particular, have a direct impact on local planning on Route 46. One is a regulatory system that in essence limits the amount of development that can occur on property whose access is to the state highway. Under the Code, the NJ Department of Transportation can limit development based on a formula factoring frontage and projected traffic (from the proposed development), even if local zoning would permit more development. This new layer of regulatory requirements should be kept in mind in the planning of any development along the highway.

Maintenance of Borough Roads and Curbs

The maintenance of Borough roads and curbs are on a schedule and have shown notable improvement over the last decade. The schedule has made it possible to assure that needed work is done in a logical and timely way and makes capital budgeting more systematic and predictable. The Borough should continue to assure that proper sight distances are maintained at intersections, especially by the proper trimming of shrubbery.

VI. CONSERVATION PLAN

The purpose of this Conservation Plan element is to examine the natural resource characteristics of Mountain Lakes, especially in terms of areas of environmental concern.

CONSERVATION OVERVIEW/BACKGROUND

The preservation and enhancement of natural environmental features and resources was a centrally important consideration in the development of Mountain Lakes as a planned residential community in the early part of the 20th century. The Borough's original design created the lakes as the central focus of the planned new community. Large land areas were also left undeveloped as woodlands. Roads and residential neighborhoods were laid out to deliberately create a park-like atmosphere by interweaving these man-made elements with the preserved natural features. This resulted in a community with a distinct character interrelating and balancing man-made and natural features that attracted a population dedicated to the conservation of natural resources. The Borough and its citizens have, for generations, conserved and protected this natural heritage.

CONSERVATION OBJECTIVES

The Borough should pursue the following objectives:

- Maintain, review and analyze the Environmental Resource Inventory (ERI).
- Continue to support the efforts of the Commissions and Committees that oversee the natural resources of Mountain Lakes (i.e. Environmental, and Shade Tree, Lakes Management, Woodlands Management etc.) and provide financial support and personnel as required.
- Periodically review the reports/concerns of these Commissions and Committees.
- Assure that the quality of the groundwater is protected and potential sources of contamination are identified and remediated.
- Maintain the quality of the lakes using state-of-the-art monitoring, testing, treatment, cleaning as well as educational programs.
- Protect from development the Borough properties that have been set aside for parks, open spaces or conservation areas.
- Increase efforts to educate residents of all ages on ways to protect the natural environment.
- Participate in regional environmental groups and programs.
- Maintain the quality of the woodlands and the tree canopy on both private and public land.
- Actively consider the acquisition of sensitive and environmentally desirable properties.
- Limit damage from disturbance of steep slopes.

NATURAL RESOURCE CHARACTERISTICS OF MOUNTAIN LAKES

The following is a description of the major natural resource features of special importance to the Borough of Mountain Lakes.

General

The natural resources that are of special importance to Mountain Lakes are its numerous lakes and its extensive vegetation, especially woodlands. The wildlife found in these resources constitutes a natural asset and is typical of the rural-suburban fringe to which the Borough belongs. To the extent that significant portions of these areas are publicly owned and dedicated to parks, open space or for conservation purposes they are relatively well protected. Other natural resources that are more vulnerable and require or deserve special protection are:

- Major existing or potential groundwater resources.
- Erosion-prone soils, especially in steep areas and where surface-water sedimentation may occur.
- Ecologically important wetlands, which in some areas, also serve as natural storm-water detention facilities.

The utilization of natural resources for the benefit of the residential community, most notably the lakes and preserved woodland areas, has created a community with a distinctive character blending natural and man-made features. This character has been described as a park-like setting.

The preservation of the lakes, parks and large open space conservation areas has historically been the focus of the Borough's conservation efforts. The preservation of the many small block-by-block parcels located throughout the Borough is collectively also important. Together they serve to filter air pollution, absorb unpleasant noises, regulate temperature variations, control soil erosion, provide privacy, create pleasant views and personalize individual landscapes. This is particularly important to Mountain Lakes, which has a typical lot size of one-half acre or less, which is significantly smaller than the typical lot size of most other Morris County communities.

Lakes

Collectively, the Borough's surface waters are an important part of the headwaters of the Whippany watershed; 90 percent of the Borough's surface water drains to the Whippany River while the remaining 10 percent drains to the Rockaway River watershed.

The lakes, in order from the topographically highest to the lowest altitude, are: Birchwood, Crystal, Sunset, Olive, Shadow, Cove, Reservoir (Grunden's Pond) Mountain, and Wildwood. Taken together, the five largest lakes contain about 155 acres of surface water, with Mountain Lake, the largest, at about 80 acres. The lakes and their connecting waterways are owned by the Borough and used for both passive and active recreation. They are used extensively for swimming, fishing and non-power boating. Lake water is tested and treated regularly during the summer months to maintain the health of the lakes so they will accommodate these types of activities.

The preservation of the lakes and quality of surface waters and the slowing of the process of eutrophication depend upon the extent to which pollution can be avoided and treatment and cleaning procedures are performed. Non-point pollution from roads, parking lots, lawns, etc., should be controlled or reduced by the provision and enforcement of proper construction and maintenance standards as well as routine cleaning of streets and storm drains. Sedimentation resulting from erosion also falls in the category of potential hazards that can be mitigated by appropriate criteria for development and maintenance. Phosphate pollution resulting from runoff from lawns remains a particular concern.

The original dams that created the Borough's lakes were constructed at the beginning of the 20th century and all but the Sunset dam have been upgraded. The upgrade of the Sunset dam is part of a current and on-going study. Routine inspections and reports containing dam assessment, repairs and maintenance are submitted to the State of New Jersey.

Flooding and Detention Areas

Soils that are subject to flooding at least every two years can be found in the northeastern sections of the Borough, in areas near the intersection of Morris Avenue and Fanny Road, and below the railroad behind Midvale Acres and Yorke Village. These areas, as well as some sections along Pocono Road and Laurel Hill Road, serve as natural detention areas. All or at least most of this land is in Borough ownership. All of this land is a prime subject for preservation by specific purpose dedication.

Groundwater

The Borough's potable water supply is dependent upon four wells that are Borough-operated. Two of the wells are located within the Borough while two are in Denville. One well located off the east side of Rt. 46 provides the majority of the towns' needs. Assurance of an adequate water supply, in case of large demand or a temporary problem with the main well needs to be maintained. Additionally, Mountain Lakes has inter-connection arrangements with nearby towns to provide water in case of a catastrophic event. The depth to groundwater provides generally adequate pollution protection. However, faults, unfavorable soil conditions, or the negative pressure caused by pumping could cause infiltration of pollution under certain circumstances.

The Borough's groundwater protection ordinance and the prime aquifer ordinance outline specific recommendations for uses and performance standards for land development over the aquifer and its recharge zone. As required, the Borough tests the water for numerous minerals, contaminants and pollutants, to assure its quality.

Vegetation

The vegetation in Mountain Lakes includes the natural, wooded areas in the western and eastern sections of the Borough, and many scattered stands of natural woods, planted trees and extensive landscaping along the Boulevard and in most of the residential sections of the community. Much of this vegetation dates to the origin of the Borough in the early part of the 20th century as a planned community. In recent decades, Borough policies have encouraged the selective preservation of trees as part of the planning for new development. The environmental character of Mountain Lakes is, to a large extent, a result of the preservation of large trees, woods and mature vegetation.

This legacy, however, is slowly but substantially changing as a result of two important trends. The Borough's woodlands and vegetation are aging and much is in declining health. This fact will have an increasing significance to natural resource preservation concerns in the Borough. In addition, many privately owned natural wooded areas are giving way to extensive formal landscaping. This is the result of changing tastes in landscaping of many individual homeowners, favoring more open, cultivated planting materials. This is reducing the structural diversity of the vegetative understory away from denser natural species. As a corollary, this loss of vegetation is resulting in a loss of song birds in the Borough. These factors are slowly changing the natural resource and environmental characteristics of Mountain Lakes.

Excessive deer population has resulted in the loss of low scrubs and vegetation. Programs to limit the deer population were initiated in 2005 and have been successful in culling the deer population such that low level vegetation is returning. The Woodlands Management Committee has instituted a program to educate, identify and remove invasive species in the community. In order to achieve long term success, this needs to be a continuing program.

CONSERVATION PROPOSALS

The following are the major proposals and/or policies related to the conservation of natural resources in Mountain Lakes.

Preservation of Park Lands, Open Space and Conservation Areas

The Borough should continue the long established policy of preserving and protecting the extensive Borough-owned areas dedicated for park, open space and conservation purposes. The preservation of these areas is important for environmental reasons and to the character of the community. Many of these areas were set aside from development because they contain environmentally sensitive lands including steep, erosion-prone slopes, detention and water recharge areas, soils with high water table and most of the natural woods. Most of these areas are located within the passive sections of dedicated parks or within other Borough-owned land. The preservation of these lands constitutes a major protection of natural resources providing safety against erosion and sedimentation in the surface waters. The Borough should consider acquiring any remaining available vacant parcels whose preservation as open space would be beneficial in protecting environmental resources or preserving the character of the community.

Lakes and Streams

Protecting the water quality of the Borough's lakes is centrally important to the character of the community and the way of life of its citizens. The following measures should be carefully considered by the Borough:

- Reexamination of the width of the buffer required for water quality purposes for all water bodies in the Borough. In addition, measures for encouraging more natural vegetation in the buffer should be an on-going project.
- Minimizing the use of salt for snow removal.
- The non-phosphorous fertilizer ordinance addressed the concern about phosphorous that was contributing to the pollution of the lakes. Follow-up measures should also be considered such as increased public education about the environmental hazards to the lakes of the use of fertilizers, pesticides and herbicides to further the goal of reducing non-point source pollution.
- Explore public easements to access lakes for cleaning and to protect woods and streams.

Groundwater

The Borough should do what it can to protect groundwater resources in order to protect public health and safety and to avoid major public expense for remedial solutions to remove contamination or to develop alternative supplies. The following measures are recommended:

- Enforce development and maintenance standards designed to protect the identified aquifer recharge areas in the Borough.

- Consult and cooperate with adjacent communities to encourage protection of aquifer recharge areas within their jurisdiction.
- Develop well-head protection standards in accordance with state guidelines.

Woodlands/Vegetation

Mature indigenous vegetation in woodlands and in residential neighborhoods has long been a central characteristic of Mountain Lakes. Change in the extent and structure of this vegetation which is occurring as a result of the natural process of aging and because of changing individual preferences in landscaping will inevitably have important repercussions on both the character and environmental health of the Borough. Residents should be educated to the importance of preservation of the natural flora of the Borough, especially the older growth vegetation and specimen trees. An ordinance has been adopted restricting the cutting of trees. Education will continue to be a priority for preserving the natural flora of the Borough, especially the older growth vegetation and specimen trees. The primary objectives for the woodlands should be to:

- Evaluate current conditions.
- Develop a woodlands management plan with recommendations for maintaining healthy woodlands.

Environmental Resource Inventory (ERI)

An Environmental Resource Inventory completed in 2011 will serve as a baseline. In the future, a periodic review of this inventory should be performed to properly report the nature and character of the community and to determine if changes should be made to the development regulations to address environmental concerns.

Community Forestry Management Plan

The Community Forestry Management Plan specifies goals and objectives of the Shade Tree Commission. It is a 5 year plan that was first approved by the state of New Jersey in 2001, and has been updated every 5 years under the direction of the Shade Tree Commission. Having approved status from the state provides tree related liability protection for the Borough and makes grant money available for the implementation of stated goals and objectives. The Borough should continue this practice.

VII. COMMUNITY FACILITIES AND UTILITIES PLAN

Mountain Lakes has, for many years, been an essentially fully developed community served by public water supplies and waste disposal systems. New construction in recent years has been largely limited to the renovation and redevelopment of pre-existing developed properties and infill development on relatively small parcels of land in otherwise developed areas.

FACILITIES OVERVIEW/BACKGROUND

New large-scale development is very limited in Mountain Lakes due to a lack of vacant developable land. One notable exception is the recent development of Legacy at Mountain Lakes (formerly the "Fusee" site) where potable water for the development is being provided by the neighboring town of Boonton and all other services will be provided by Mountain Lakes. There are only two other sites with significant vacant land, each being comprised of approximately 8 acres. One is located in the Willow Road area and the second is located on the northerly side of Route 46 (the rear portion of the King of Kings property). Any development of these properties would likely be significantly constrained by environmental factors.

The trend in redevelopment is expected to continue. As such, no major extensions of public utilities in Mountain Lakes are projected to be needed. Due to the limited potential for new development, the focus of this element is to provide a general description of the facilities and utilities that currently exist in the Borough and to make recommendations for their maintenance and improvement.

The following are the significant issues relating to community facilities and utilities in Mountain Lakes leading up to this point.

- The Borough Hall's condition is problematic and needs renovations and upgrades.
- Federal and State law require the inspection and repair of dams. All major dams have been renovated or repaired since 1996. Minor repair work on the Sunset Lake dam was completed in 2008 but the dam may need further work.
- Impact from development, especially in adjacent communities, and escalating water consumption patterns have increased concern about the Borough's potable water supply.
- The Borough's schools have long been recognized as among the best in the state; a fact important to the residents and to the character of the community.

FACILITIES AND UTILITIES OBJECTIVES

The following are the major facilities and utilities objectives that should be pursued by Borough officials and should continue to be reflected in Borough policies.

1. Maintain, upgrade and replace existing facilities in a manner that minimizes public expenditures.
2. Promote capital budgeting for ongoing maintenance/replacement of facilities/utilities in a manner that will maintain them in good condition and spread out the costs.
3. Encourage inter-municipal cooperation for the provision, maintenance and upgrading of municipal services, facilities and utilities where possible.
4. Promote the efficient utilization of all community facilities.

COMMUNITY FACILITIES

The following are the major public facilities in Mountain Lakes:

Public Schools

Public schools are the most important public facilities in the Borough. The Borough has a long tradition of commitment to public education and its public schools, which is reflected in its state-wide reputation for excellence. Approximately 70 percent of local taxes are committed to their support. A high level of commitment to public education has been a cornerstone of Mountain Lakes' attractiveness to families and should be continued. School facilities plans are submitted to the County Superintendent annually to outline the District's plans for renovations and maintenance. The Borough Board of Education regularly evaluates future facility needs. Any proposals need to be carefully evaluated by the entire community.

Existing School Facilities - Three school buildings, located in a campus setting, are currently utilized for regular classes. There is another school building for classes for hearing impaired students.

EXISTING SCHOOL FACILITIES
(Source: Mountain Lakes Board of Education)

SCHOOL / LOCATION (Site Acreage)	YEAR BUILT / EXPANDED	SIZE	FUNCTION
Lake Drive School, Lake Drive and the Boulevard (2.4 acres)	1914 expanded 1920	175 student capacity	Regional facility for the hearing impaired, more than 90 sending Districts
Wildwood Elementary School, Glen Road (14.1 acres)	1953 expanded 1965, 1999	590 student capacity *	Grades K through 5
Briarcliff Middle School, Briarcliff Road (12.7 acres)	1936 expanded 1999	381 student capacity*	Grades 6 through 8
Mountain Lakes High School , Powerville Road (41.1 acres)	1958 expanded 1972, 2005	715 student capacity *	Grades 9 through 12

* Based on Board of Education Long Range Facilities Plan for 2005-2010.

Recent School Improvements - In 2005, following passage of a referendum, and with a significant contribution of State funds, the High School received an overall facelift plus the addition of a new media center, band room, new classrooms, training center and a second gym. The addition of a new hallway greatly improved the traffic flow of the building.

In 2003, two new playing fields were completed on land in the Halsey A. Frederick Memorial Park. In 2007, the football field, now referred to as Wilkins' Field, was resurfaced with artificial turf that will allow greater usage at times of the year when natural grass fields cannot be utilized due to their wet condition.

SCHOOL ENROLLMENT
(Source: Mountain Lakes Board of Education)

	1969-70	1979-80	1989-90	1999-00	2009-10
Mt. Lakes Students	1,793	1,224	856	1,180	1,209
Non-resident Students	16	12	41	33	12
Hearing impaired	-	51	136	224	164
Boonton Twp HS Students	-	-	-	189	270
TOTAL	1,809	1,287	1,033	1,626	1655

Public Library

The Mountain Lakes Free Public Library is located at Elm Road adjacent to the Post Office. The Library has over 40,000 books and over 3,000 audio/visual items. A major renovation was made in 1996 for better utilization of the existing space. In 2002 the Children's Room was expanded. A large meeting room is in the lower floor of the building, specifically dedicated to and heavily used by community organizations. This room was renovated in 2006 to make it handicapped accessible and a bathroom was added. A Borough archives room was also added. Through their library cards Mountain Lakes residents also have access to the M.A.I.N. (Morris Automated Information Network) system.

Borough Hall

The Borough Hall houses the Borough Administration, School District Administration, Police and Volunteer Fire Departments, Council Chambers and meeting rooms. In 1996, an individual stair elevator was installed in compliance with the Americans with Disabilities Act. The Court services were moved to Denville in May 2010.

In 2008 the Borough established a Facilities Committee to study Borough Hall. The committee determined that the building did not provide the space that the building user groups required; particularly space for the Police Department. The Borough Council decided not to proceed with the expansion at that time due to overall cost, the state of the economy, and the possibility of establishing shared services with the neighboring communities.

Fire Department

The Mountain Lakes Volunteer Fire Department is housed within the Borough Hall. Facilities available to the Fire Department are fully utilized. The facilities consist of three bays which house two pumpers and one rescue vehicle. There is a small meeting room/kitchen facility which serves multiple functions primarily for the Fire Department's office and meeting space, but also for the Police Department's lunch room, holding/interview room and various other functions on an as-

needed basis. The facility does not have a decontamination area for hazardous materials which the Fire Department considers to be a risk.

The following objectives remain paramount to the Department in order to maintain and improve the level of service and protection.

- Maintain adequate response time.
- Maintain adequate pumping capacity.
- Enhance the water supply system for improved hydrant yields where necessary.
- Attract and retain qualified volunteer officers and staff.

Attention to the water system is a continuing long-term issue that the Borough is addressing. Almost all areas of the Borough except for a few small dead end roads have eight inch water mains which are adequately sized for fire-fighting purposes. The Borough's practice of periodically replacing aging fire trucks, upgrading water delivery for fire-fighting, and upgrading communications systems should continue. The Borough replaced the rescue vehicle in 2008 and one pumper in 2010. Mutual aid arrangements continue to exist on a voluntary, reciprocal and "as available" basis.

Although additional future development is projected to be modest, the regulatory and compliance environment affecting the Fire Department is expected to continue to be more stringent. In addition, it has become more difficult to attract volunteers in recent years. The Borough will need to monitor these trends and respond accordingly to avoid diminution of fire protection service.

Department of Police

Formed in 1924, the 13 person police force with 7 vehicles is committed to providing a safe environment, proactive policing and assistance to all the Borough entities. The headquarters for the Department of Police is housed in the lower level of the Borough Hall as is the Fire Department and its equipment. In 2008 the Borough switched to a County dispatch system to handle 911 emergency, fire and police calls.

Department of Public Works

The Department of Public Works headquarters is located in the same block as the Borough Hall, with access from Pocono Road. The facilities include the Borough Garage and storage area as well as an office for the director, a meeting room and personnel rooms. The twelve bays in the garage are used to capacity by the Department's vehicles of various sizes and types. Vehicles and other equipment are replaced in accordance with a schedule reflected in the Capital Improvement Program.

Most of the normal Borough maintenance (streets, parks, lakes, dams, buildings and grounds) and some construction of new facilities are done by the Department of Public Works (DPW). Other responsibilities include the public water, sanitary sewerage and storm drainage systems and the Recycling Center (behind the Borough Garage). The Department's buildings and equipment are generally adequate for the purposes and no major expansions are expected.

DAMS

The federal and state governments have required inspections and upgrading, repair and /or replacement of all earthen dams. All major Borough dams, with the exception of Sunset Lake have been substantially rebuilt. Active monitoring and maintenance of the dams in the Borough is being done.

PUBLIC UTILITIES

The utilities in or serving Mountain Lakes include the following.

UTILITIES

FUNCTION	AGENCY
Electricity	Jersey Central Power and Light Co
Natural Gas	New Jersey Natural Gas Company
Telephone / Internet/ TV (landline)	Verizon, Cablevision
Potable water	Mountain Lakes Water Utility
Sanitary sewage collection	Mountain Lakes Sewer Utility
Sanitary sewage treatment	Parsippany-Troy Hills Sewer Utility
Solid wastes collection/disposal	Borough of Mountain Lakes *
Recycling	Borough of Mountain Lakes *
Storm drainage	Borough of Mountain Lakes

*Municipal contract with private scavenger for residential and public building pick-up, individual private contracts for businesses.

Energy, Telephone and Cable TV

Electricity, telephone and cable TV utilities are furnished primarily through overhead lines. These services are available throughout the Borough. Natural gas is available in most sections of the Borough. Heating oil is truck-delivered to individual homes by a number of purveyors.

Public Potable Water

For the most part, all homes and nonresidential units in the Borough are served by public water provided by the municipal system (53 homes in the Lake Arrowhead area are served by Denville.) The number of customers is about 1,520 (4Q, 2010), including 84 commercial customers. There are no major industrial water consumers in the community.

Water Supply - There are four working wells serving the community. Well #5 is located near the Boulevard, south of Route 46, and provides for most of the Borough's needs. In 2000 an air stripper was added to Well #5 in order to eliminate trace contamination. Another well located at Tower Hill Road and two wells in Denville assist meeting firm capacity requirements. With the

three other wells recently upgraded, the Borough has 100% back-up capacity. The treated water meets all governmentally mandated quality requirements and the Environmental Commission reviews the monthly quality read-outs for all the wells. The long term impact on groundwater quality and quantity from development in our region is a major concern, especially because the aquifer, upon which the Borough depends for its water, crosses municipal boundaries into areas of rapid development.

Distribution System - Potable water is stored in two tanks, with a combined capacity of 1,500,000 gallons, located on Lookout Road opposite Summit Avenue. The Borough pumps between 700,000 (off-season) and 1,000,000 (peak summer season) gallons of water per day. The distribution system does not show any major weaknesses in serving the Borough's existing development. Pressure is adequate except for some spots in the vicinity of the storage tank. There are two small streets still serviced by 2 inch water mains. However, the existing capacity has been deemed adequate due to the small number of homes on these streets. Water leakage, (defined as unaccounted for unbilled water usage) was 27 percent in 2008, while in 2010 it was lowered to 14 percent. There is an ongoing plan of repair. Not all of the leaks are within the control of the Borough since many occur in old service lines between the curb box and the meter to the house and are the customer's responsibility.

Water System Needs - Regular maintenance and gradual improvements and extensions of the public water system should provide adequate services to the existing development. Consumption patterns and trends should be monitored.

Sanitary Sewer System

The Borough's sanitary sewerage system was installed in 1977-78. Residential and commercial development since then has been integrated into the system. The one residential street (Arden Road) not included in 1977-78 was added in 1996; it is the only residential street using a pumping station in the otherwise all-gravity collection system. The only other pumping station (private) is on Morris Avenue by the Park Place property.

The Parsippany-Troy Hills Sewer Utility provides secondary and tertiary treatment of the collected wastes, under a contract based on a maximum flow of 520,000 gallons per day generated by the residences. Another 120,000 gallons per day has been allocated for non-residential customers. This capacity should be adequate for present and future development in Mountain Lakes.

Storm Drainage

The storm drainage system in the community has been mapped. Most of the drainage water infiltrates the ground or ends up in the lakes. Flooding does not constitute a major problem in Mountain Lakes as it is a headwater area. Excessive rain storms will, on occasion, flood a number of basements. Run off problems have been identified in several areas and are being addressed with installation of additional catch basins and lateral connections. Ten detention or retention areas have been built in the Borough as part of residential and commercial developments.

As a headwater area, the community should continue to take responsibility to provide zero increase in surface-water run off in connection with major developments for the benefit of the downstream communities. In addition, the Borough's Surface Water Management regulations should provide for mitigation of pollution in storm water of such developments. The Borough also follows New Jersey Surface Water Management regulations, aggressively maintaining catch

basins and lateral connections, replacing when necessary. See the Stormwater Management plan, adopted in 2006.

FACILITY AND UTILITY PROPOSALS

The following are the major community facility and utility related proposals that should be pursued by Borough officials and embodied in Borough policies.

Public Schools

The Borough's traditional strong commitment to public education should continue. However, it must be recognized that there are limits to that commitment. High property taxes, in large part resulting from that commitment, may make it difficult to address other important municipal needs. High property taxes may also make it difficult for some residents (including many long term residents on fixed incomes) to afford to remain in the Borough.

The Borough's future school age population is not expected to grow substantially. Due to the lack of vacant developable land, little new residential development is anticipated. The Board of Education monitors fluctuations in the school population and takes appropriate actions to adjust to changes. No significant changes are expected in the near future. However, the inclusion of Boonton Township students into the high school requires additional monitoring since unlike Mountain Lakes there are substantial areas of land in Boonton Township that could be developed.

Utilization of Buildings

There has been increased emphasis on the efficient utilization of community facilities and activities. In the absence of a community center, numerous spaces are used for gatherings - Borough Hall, Library, schools, churches and Mountain Lakes Club (often for a fee unless sponsored by a club member).

To some extent, additional meeting room space for community groups and volunteer committee functions may be provided through more efficient coordination of scheduling and dual use of existing facilities. As a first priority, ways of encouraging the efficient and flexible use of built space and better coordination between the Board of Education and Borough Council and among

Borough service groups and agencies should be pursued in order to minimize the need to build additional space. The overall goal should be to ensure adequate accessible space for meeting and training for resident committees, boards, organizations, and municipal employees and for storage of public records

Shared Services

The Borough is a small community; as such, some services cannot be provided as efficiently as might be the case in a larger municipality. In order to control costs and maintain service quality, the Borough has established some shared services with other communities. Currently, the Borough shares 19 services and equipment with other towns. The Borough is part of a county dispatch system for police and fire. It has agreements with Denville, Boonton and Parsippany for sharing water services and fire department resources should the need arise. Court services are shared with Denville. Within the community the Borough has entered into a shared service agreement with the Board of Education (BOE). The positions of Director of Department of

Public Works (Borough) and Superintendent of Building and Grounds (BOE) are held by one person.

In 2009, the Borough Council commissioned a study of shared services that could impact the Borough's need for space and affect future capital and operating costs. After a long process with a great deal of public involvement, the community expressed a willingness to share additional services as long as the quality of service was not impaired. The identification of potential opportunities for such cooperation and alliances should be broadly-scoped.

Infrastructure Upgrading/Replacement

Many of the pipes in the Borough water distribution system are old. Replacement or upgrading is an ongoing project. Road resurfacing, curb replacement and storm drainage improvements should be coordinated with the important project of protecting the water quality in the Borough lakes.

Potable Water Supply

The Borough should continue to monitor the quality and quantity of the potable water supply. Extensive testing of the water is conducted periodically as required by the State of New Jersey. The Borough water utility should continue to schedule minor improvements to the distribution system in an orderly fashion with specific reference to the judicious replacement of any remaining two-inch lines deemed to warrant replacement. Water line loops should be completed where feasible to provide better fire-fighting flow conditions. Water system leaks should continue to be aggressively identified and eliminated.

Storm Drainage

The Borough's traditional approach of gradually improving the storm drainage system should be continued.

Americans with Disabilities Act Compliance

With the passage of the Americans with Disabilities Act in 1990, a major effort was made to make all public buildings barrier free and accessible to those with disabilities.

VIII. RECREATION PLAN

The Recreation Plan Element covers the comprehensive system of public recreational facilities and assets in Mountain Lakes. The purpose of this element is to help guide and coordinate Borough policies relating to these facilities and assets.

RECREATION OVERVIEW/BACKGROUND

The original development of Mountain Lakes as a planned community in the early part of the 20th century emphasized the recreational values associated with its physical features and park-like setting. The lakes in particular have, from the community's origin, been major recreational assets attracting a population with an orientation towards active outdoor recreation. The large areas of open space support a wide range of recreation, formal and informal.

Mountain Lakes has a long tradition and a strong commitment to active recreation. A wide variety of recreational activities, organized and informal, is supported by the Borough, directly and indirectly. This is in part the result of the community's commitment to public education. The Borough's public schools are among the best in the state and part of this excellence is reflected in the athletic programs and facilities provided by the local schools. This, however, is only part of the explanation for Mountain Lakes' close association with recreation.

This plan's continued commitment to active recreation follows a long tradition in Mountain Lakes. The main focus of this plan, however, is to recognize and accommodate some important recreational trends that are reshaping recreational needs in the Borough.

Following are some of the major changes and trends relating to recreation in the Borough leading up to this point which form the basis of this plan.

- There is an increased use of recreational facilities which is the result of two important trends:
 1. The increased participation by all ages. Children are becoming involved in organized active recreational sports at an earlier age than in the past, in many cases as early as 3 or 4 years old.
 2. Equal numbers of girls are becoming actively involved in many sports. There is an increase in nontraditional sports as well as year round activity in a single sport. There is also increase in the number of children who participate in more than one sport within a season.
- There is more emphasis on regional recreational opportunities and organizations that is also having an impact on increased use of local facilities.
- The need for additional recreational facilities is felt at all times, especially after school and weekends when the competition for facilities is most acute.
- The increased, and often continuous, use of active recreational facilities has resulted in the deterioration of many of those facilities, especially playing fields.
- There are few undeveloped areas left in the Borough that are suitable for the expansion of recreational facilities without unreasonable expense. This fact requires that better and more efficient management of existing facilities must be an important part of satisfying the increased demand. The town built two additional fields in Halsey A. Frederick Park in 2003, and in 2007, placed artificial turf on the existing football field now known as Wilkins Field.

- Parents have become more actively involved with their children's recreation. This has had two important results:
 1. More emphasis on a controlled recreational atmosphere.
 2. More emphasis on organized sports.
- There has been vocal public pressure on the Recreation Commission to expand and improve opportunities and facilities in the Borough for a variety of specific active sports, especially competitive sports. The major sources of this pressure are the parents of children.
- If the Borough is to maintain an overall balanced recreational program, emphasis on passive recreational activities and activities that respond to the needs of various ages will also need to be increased.
- The main emphasis has traditionally been on recreation for children in Mountain Lakes. This emphasis should be continued while not neglecting recreational opportunities for adults, families and the general community.

RECREATION OBJECTIVES

The following are the major recreation-related objectives that should be pursued by Borough officials and should be reflected in Borough policies.

1. Continue the Borough's strong commitment to providing a diversity of recreational opportunities to all its citizens and especially its children.
2. Expand recreational opportunities to all segments of the Borough population where reasonably possible within the scope of limited resources.
3. Improve recreational opportunities in the Borough through better management and more efficient utilization of existing facilities while taking advantage of the limited circumstances that will permit an expansion of recreational facilities.
4. Expand and support programs that enhance community spirit and the appreciation of our natural resources and park-like surroundings.
5. Maintain partnerships with neighboring communities for recreational facilities and programs.
6. Periodically review the physical facilities (e.g. fields, track, courts, swimming areas, etc.) to determine their adequacy.

RECREATION OPPORTUNITIES IN MOUNTAIN LAKES

An important strength of the Borough's recreation system is its diversity. A wide variety of recreational opportunities exist in Mountain Lakes, many of which are directly or indirectly publicly supported. The importance of continuing this strength is often overlooked from the point of view of a particular sport or recreational interest. The diversity of recreational interests and constituents in the Borough's population requires a reasonable balancing of recreational resources among a wide variety of activities and interests.

The Borough Recreation Commission and staff have been able to support a wide variety of recreational activities, including a summer structured recreation program for young children. The responsiveness of the Commission and staff to the desires of various groups and interests is a major asset that brings challenges. The major assets are the great number of citizens and the wide variety of interests served. The major challenges are the need to make compromises among various interests for limited resources and the stress that is put upon those resources.

Existing Lake-oriented Facilities

The following lake-oriented facilities are currently available to residents.

FACILITY	LOCATION	FUNCTION
Island Beach	Mountain Lake, off the Boulevard	Swimming, boating, picnics, entertainment, sailing instruction. Concession stand.
Midvale Boat Dock	Mountain Lake, off Lake Drive	Boating, swimming, fishing
The Cove	Mountain Lake, off Morris Avenue	Boating, ice skating, fishing
Birchwood Beach	Birchwood Lake, off West Shore Drive	Swimming, fishing, boating, basketball, volleyball, hiking, picnics, competitive swimming and diving. Concession stand.

All of the above are active recreation areas. Additional passive recreation areas should be added to the list: Briarcliff Park, the Bird Sanctuary, Memorial Park and areas of Richard M. Wilcox Park beyond Birchwood Beach.

Existing Public Active Recreational Facilities

Active recreation facilities, other than those that are lake-oriented, include a number of ball and play fields, some of which are shared with the schools.

FACILITY	LOCATION	FUNCTION
Jan Wilson Memorial Basketball Court	Romaine Road	Basketball
Alden L. Haswell Memorial Field	Midvale Road	Lacrosse, soccer, youth sports
Wildwood Field	Glen Road	Playground
Al Scerbo and Charlie Pitcher Fields	Fanny Road	Baseball
Doublier Memorial Tennis Courts	Powerville Road	Tennis
Two New Fields	Halsey Fredrick Park	Lacrosse, soccer, field hockey
Basketball Court	Lake Drive School	Basketball

Other School Facilities	Miscellaneous locations	Playgrounds, practice fields
Tower Hill Sled Run	Off Tower Hill Rd	Sledding
William N. Taft Memorial Field	North Pocono and W. Shore Roads	Youth sports, soccer, playground

Existing Private and Quasi-public Active Recreational Facilities

Among the private and quasi-public facilities for active recreation in the Borough are the following.

FACILITY	LOCATION	FUNCTION
Mountain Lakes Club	Lake Drive	Tennis, swimming, boating, bowling
Park Lakes Tennis Club	Rainbow Trail	Tennis and paddle tennis
Mountain Lakes Racquet Club	Route 46 and Boulevard	Indoor tennis
Lakeland Hills Family YMCA	Fanny Road	Swimming, basketball, weight lifting, play ground, picnic area, volleyball, etc.

RECREATION PROPOSALS

Following are the major proposals related to the future of public recreation in Mountain Lakes.

Lakes

The Borough's lakes and their connecting waterways represent the cornerstone of recreational opportunities in Mountain Lakes. The wide variety of recreational opportunities afforded by them has had a fundamental effect on shaping the character of the community and its population. One result is a population unusually dedicated to active recreation.

As indicated in the Conservation Plan Element, the lakes are experiencing the natural process of eutrophication. As a high priority, Borough policies and programs, under the leadership of the Borough Council, should continue to support the lakes and their recreational benefits.

Maintain Commitment to Recreational Diversity

Recreation in Mountain Lakes has long been characterized by a high degree of community participation. The Borough, the Board of Education and the Recreation Commission should continue to be sensitive to the changing desires of the community, within the context of

maintaining the Borough's traditional commitment to a diversity of recreational opportunity. In particular, more emphasis is needed in programs provided to all ages and to non-athletic recreational activities.

Scheduling and Efficient Use of Existing Facilities

The Borough has recreation facilities and programs of which the community is justly proud. There are increasing demands on these facilities and programs and the opportunities for major expansions to existing facilities are very limited for fiscal and practical reasons. Priorities should be set by the Borough and the Board of Education for the use of the facilities that:

- Foster the Borough's overall recreation goals of maintaining diversity of recreational opportunities.
- Establish an equitable balance between competing recreation demands.
- Provide for the long term "health" and upkeep of recreational facilities

Management and Maintenance of Playing Fields

The Borough, in collaboration with the Board of Education, should create a plan to assess the condition and use of all the recreational fields, and create a management plan to maintain and utilize those facilities. This plan should be updated on a regular basis.

IX. RECYCLING PLAN

The Recycling Plan Element sets forth the goals and policies for Mountain Lakes to fulfill its social and statutory responsibilities to minimize solid waste and to maximize the reuse of reusable and renewable resources. This element also has the purpose of coordinating Borough policies in this regard with those of the County and State.

RECYCLING OVERVIEW AND BACKGROUND

By the early 1980s, it became clear that there was a crisis in New Jersey concerning the disposal of solid waste. The crisis resulted from contradictory trends of an ever increasing amount of solid waste and an ever decreasing amount of available and suitable places to dispose of it. The 1987 Statewide Mandatory Source Separation and Recycling Act, amended in 1992, brought widespread recycling to New Jersey and remains the foundation of today's recycling programs. In accordance with requirements of the Act, each county is a designated solid waste management district charged with the responsibility of developing a solid waste management plan consistent with the state's goals and objectives. The 2007 Morris County District Solid Waste Management Plan Amendment strengthens definitions of mandated recyclables, education and outreach to generators, and enforcement efforts. In 2009, the Borough adopted a new Solid Waste Recycling Ordinance (Ord. #09-09) to incorporate the requirements of the County Plan Update.

Well before these state initiatives, Mountain Lakes was in the forefront of recycling efforts because many residents, as early as the 1970s, recognized the benefits of recycling reusable materials long before it was made mandatory. -As recycling efforts produced increasing results in the 1980s, the Borough established a permanent recycling materials collection facility which has evolved over the years based on current requirements. Residential collection of recyclable materials has been in place since 1994.

The Historic Preservation Committee purchased a container in the late 1990s which stores irreplaceable parts of Mountain Lakes' historic housing. The HPC collects and distributes these pieces, so that they may be recycled to be used as repair pieces for historic homes.

RECYCLING OBJECTIVES

The Mountain Lakes recycling program should have three primary objectives.

1. Provide all Borough residents with information explaining the environmental and economic benefits of recycling to the Borough and to society at large.
2. Provide a simple, convenient and cost effective recycling collection system that maximizes recycling and minimizes the amount of solid waste disposal.
3. Match residents' individual costs of solid waste disposal to the amount of solid waste they generate.

MOUNTAIN LAKES RECYLING PROGRAM

Mountain Lakes is committed to the implementation of an effective municipal solid waste management program emphasizing source separation and recycling in a convenient and cost effective manner, maximizing recycling and minimizing the amount of solid waste disposal, in compliance with current State and County recycling mandates.

Annually, the Borough mails a notice about recycling requirements and opportunities to generators, both residents and businesses and institutions. The Borough also completes and submits an annual recycling tonnage report to the State Department of Environmental Protection and the Morris County Municipal Utilities Authority. In 2009, the Borough Council appointed a Municipal Recycling Enforcement Coordinator.

Residential Recycling

Residential recycling is accomplished by pick-up once each week by a private contractor hired by the Borough through the municipal solid waste contract. Homeowners may also bring various recyclable materials to the Recycling Center located at the Borough Public Works Depot on Pocono Road. Christmas trees are collected after the holiday season as part of the municipal contract. The following mandated recyclable materials are collected at residences:

- Glass
- Plastics
- Metals
- Magazines
- Newspaper
- Junk Mail
- Cardboard
- Shredded Office Paper

Those materials, as well as batteries, motor oil, anti-freeze, tires, scrap metal, appliances, electronic waste, leaves, brush and used clothing are also collected at the Public Works Depot and then sold to provide income for the Borough.

Nonresidential Recycling

Commercial, industrial and institutional establishments are also required to recycle mandated materials. Each is responsible for establishing its own recycling program for the collection, transportation and marketing of designated recyclable materials. Private contractors may handle the recyclables or the business may bring them to the Borough Recycling Center. Documentation of tonnage of material recycled must be submitted in accordance with the Recycling Ordinance. Mountain Lakes' municipal properties and Board of Education facilities have their source-separated recyclables collected as part of the municipal solid waste contract.

Recycling Facilities for Large Developments

The Borough requires the submission of a recycling plan with any application to the Planning Board for subdivision or site plan approval of multifamily dwellings of three or more units, single family developments of 50 or more units, or any commercial, institutional or industrial development of 1,000 square feet or more of land. The issuance of a Certificate of Occupancy will be dependant upon a contract with a hauling company for the collection and recycling of source-separated materials.

The Municipal Land Use Law requires standards and requirements as part of site plan and subdivision review that will promote recycling of designated materials. In particular, section 40:55-D-38b(9) requires recycling facilities be included in large developments. The Borough Land Use Ordinances are consistent with the State Recycling Act and Mountain Lakes Recycling Ordinance.

Maintain Commitment to Recycling

Mountain Lakes can be proud of the results of its long term efforts to establish an effective recycling program in the Borough. The maintenance and expansion of that commitment over the long term should be an important objective. The Borough has renovated and updated the Recycling Center. Due to high volume usage, various structural repairs were made, including renovation and updating of facilities, signage and surveillance equipment.

X. HISTORIC PRESERVATION PLAN

Mountain Lakes has features and sites that have substantial historic significance on the local, state and national levels. The purpose of this Historic Preservation Plan element is to identify those historically significant features and sites and to establish strategies for their protection and preservation. It is a central premise of this plan that these features and sites are critical to the character of the Borough and that they are important to the Borough's unique character.

HISTORIC PRESERVATION OVERVIEW/BACKGROUND

The following are the major events and significant issues relating to Historic Preservation in Mountain Lakes leading up to and taken into account in the formulation of this plan.

- In 1978 the Borough Council established a Landmarks Committee with the task of identifying major historic resources in the Borough.
- In 1985, Chairman of the Landmarks Committee John Steen, in response to a request from the Borough Council, reported on the Committee's vision for historic preservation in Mountain Lakes. That vision included application for state and national historic district registration.
- In 1986, Mountain Lakes celebrated, with various events, the 75th anniversary of its beginnings as a planned residential park community. This sparked a greater interest and awareness of the Borough's history on the part of many of its citizens.
- In 1987, Mr. Steen recommended to the Borough Council that state and national historic district registration be applied for in order to establish official recognition of the substantial historic significance in Mountain Lakes. For financial reasons, that recommendation was not pursued.
- In 1988, the Borough Council became concerned about the demolition of houses that were part of the original development of Mountain Lakes as a planned residential park community (the Hapgood and Belhall homes). As a result, the Ordinance Committee of the Planning Board was asked to recommend an ordinance for the establishment of a Historic Preservation Commission (HPC). The commission was established in 1990 and completed a survey of most houses in the Borough.
- In 1992, the Borough Council created the position of Borough Historian with the appointment of John Steen in recognition of the importance of the many historically significant sites and features in the Borough.
- By 1992, the HPC had developed specific recommendations for a historic district and standards for historic preservation review procedures and design criteria, at the request of the Borough Council. These were presented to the community in a series of open meetings in 1993. Substantial public concern was expressed that the specific proposals would infringe on individual property rights. As a result, the recommendations were not adopted.
- Subsequently, in late 1993, the Borough Council, with the support of others concerned about historic preservation in the Borough, determined that a new approach should be

pursued. As a result, the HPC was reconstituted as the Historic Preservation Committee with a revised mandate. Public education should be the main thrust and should include efforts to foster a greater awareness in the general public of what is historically significant in Mountain Lakes, its great importance to the character and unique sense of place of the Borough, and to the preservation of property values.

- In 1994 and '95 the *Arts and Crafts Quarterly* magazine sponsored two symposia, part of which included bus tours in Mountain Lakes.
- To assist resident's understanding of the issues involved in renovation and alteration projects, the HPC wrote and published *Historic Mountain Lakes Restoration and Renovation Handbook*. Published in 1996, it is available for sale in the Library.
- In 1999, the League of Women Voters reaffirmed their position taken in a 1987 Housing Trends Study supporting establishment of a Historic District.
- In 1999, the Borough Council convened a Character Committee to study options for preservation. They studied the issues and surveyed the residents. Three- quarters of survey responders favored an historic district on the New Jersey and National Registers of Historic Places. In 2000, Borough Council supported the Committee's recommendations and requested the HPC prepare a nomination to the New Jersey and National Registers.
- Beginning in 2000 and continuing through 2005, the HPC prepared a nomination under the leadership of Joan Nix. The district was officially listed on the New Jersey Register of Historic Places on 7/22/2005 and listed on the National Register on 9/7/2005. Before the nomination was sent on to the State Historic Preservation Office (SHPO), the HPC presented the nomination to the Borough and Council in a town-wide meeting. Council sent a resolution endorsing the nomination to SHPO with the application.
- In 2008, the HPC proposed to Council that there be a commemorative book prepared in time for Mountain Lakes' one hundred year anniversary. The book project was begun in March 2008.
- In 2012, the HPC proposed and the Council adopted an ordinance designed to encourage Hapgood and Belhall homeowners to preserve their homes.

HISTORIC PRESERVATION OBJECTIVES

It should be the policy of Mountain Lakes to promote and encourage the preservation of those buildings, structures, and districts that exemplify its cultural, social, economic and architectural history. Historic landscapes, landmark sites, landmark structures and districts are among the types of properties the Borough intends to preserve for the education, pleasure and general welfare of its citizens and guests. Elements of these policies are to:

- Safeguard the heritage of Mountain Lakes by identifying, designating, and regulating historic landmarks and historic districts
- Preserve the residential park setting
- Continue the use of historic landmarks and districts
- Prevent demolition of historic resources

HISTORY OF MOUNTAIN LAKES

The area that would become Mountain Lakes was originally home to the Lenape who settled here around 10,000 BC. They remained through the first European settlements of the 17th century, before moving westward after the treaty of Easton in 1758. From the first European settlements until 1910, the year that the development of Mountain Lakes began, land titles and boundaries were shifted through disputed ownerships and deeds of dubious legality.

In the late 17th Century, the area was known as Old Forges. By 1700 it was part of Whippanong, then the Hanover area, and by 1759 it had become part of the Great Boonton Tract. In 1798 a small portion was part of Boonton Township, and the rest was included in Hanover Township, an arrangement that would last until the incorporation of Mountain Lakes Borough. The area began to attract settlers in the 18th Century, as Old Boonetown, now Boonton, became a center for iron works and gristmills. Workers, traders, and farmers, primarily of English and Dutch origin, established their families and built homes, some of which are still standing.

In 1908, surveyor Lewis Van Duyne of Boonton approached Herbert J. Hapgood with the idea for development of the then virgin area located on the eastern face of the highlands overlooking the Passaic River Valley. Van Duyne had become familiar with the area while surveying for the future Jersey City Reservoir. That year, Van Duyne and Hapgood began to purchase the land that would become Mountain Lakes, at fifteen dollars an acre, consisting of swampy meadows and woodlots which were losing their value with the increasing popularity of coal. Van Duyne and Hapgood, however, saw value in the development of the area based upon its natural beauty and its proximity to the Lackawanna Railroad.

Work on Mountain Lakes Residential Park began in the winter of 1908-09 with the commencement of clearing and the construction of the basic elements that would set its character as a residential park community: the roads and dams. Man-made lakes were created (Mountain and Wildwood) which formed the focus for the design of the community around which roads and residential lots were laid out. Home construction began in 1910 and the first residents arrived in 1911. The beginning of trolley service in 1910 was a significant asset not only for the new residents but for the workmen clearing the site and building the homes.

In 1914 Joseph Yaccarino opened a grocery store in the Midvale Stores building on Midvale Road, which was followed by a drugstore, a luncheonette, a taxi service, and a dry cleaning and tailor shop. The building also contained the first school in Mountain Lakes, as well as the first library, and hosted church services by the Community Church before the current church was built, also in 1914. Half the stores were later destroyed by fire. The Mountain Lakes Club, which at the time cost the extravagant sum of more than \$30,000 to build, was opened the same year. The same year, the local post office opened, the cornerstone of the Community Church was laid, and the Education Department of the Woman's Club began a library with one hundred books donated by members.

Nearly 500 homes were constructed between 1911 and 1923 when Hapgood's operation declared bankruptcy. During this period, the Mountain Lakes Association was formed under the leadership of John L. Houston and Lawrence Luellen (the first resident of the new community and the originator of the Lily Paper Cup). This group, a liaison between the homeowners and developers, was responsible for initiating many improvements before the incorporation of the Borough. Reflecting on this period, the 1934 Mountain Lakes Yearbook explained that:

"the development companies having failed and new owners being about to come into possession, the citizens were confronted with the possibilities that the property restrictions which had prevailed from the beginning might be disregarded as to the lands which were then unsold, thus destroying the high character of Mountain Lakes. It was recognized that this danger might be avoided and the favorable development of the community and the welfare of its people might best be secured by its incorporation under a distinct municipal government."

A new era for the Borough began in 1923 with the re-establishment of Hapgood's operations under the new Belhall Company and the incorporation of Mountain Lakes as a municipality in 1924. Trolley service ended in 1928 when the track was taken up and the right-of-way became a sidewalk along the Boulevard. In the late 1920's and early 1930's, the Borough became an automobile-oriented community as roads were paved and area highways improved. By 1931 about six hundred homes were completed and Mountain Lakes was established on a scale sufficient to support a self-sustaining community. The Depression forced the Belhall Company into bankruptcy and its assets were liquidated by 1937 to pay creditors.

In 1938-39 the Borough was able to seize the opportunity to acquire many of the remaining undeveloped building lots, an important and far-sighted act by the new municipality. Many of these areas were eventually incorporated into large preserved open space areas, setting into place the final important element which established the character of the Mountain Lakes community. In the years after the war, other large tracts including Birchwood, Crystal, and Sunset Lakes were acquired and incorporated into the Borough's open space. The preservation of these areas and their dedication as open space for the enjoyment of all residents became a cornerstone of Borough land use policy.

Many of these features and structures from Mountain Lake's early development period still exist today.

CRITERIA OF SIGNIFICANCE

The criteria for evaluation of a site, building, structure or object as to whether it should be listed is provided by the U.S. Department of the Interior. These evaluation criteria were used as the basis for evaluation of Mountain Lakes' resources which are in the Historic Registers.

"National Register Criteria for Evaluation

The quality of significance in American history, architecture, archeology, engineering is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of significant persons in the past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That has yielded or may be likely to yield information important in history or prehistory."

The Mountain Lakes Historic District qualifies for National Register Criterion A and C in the areas of community planning and development and landscape design as a planned residential park suburb; and in the area of architecture for the concentration of Craftsman style homes .

HISTORIC SITES SURVEYS

Mountain Lakes was the subject of a brief outline survey by Acroterion, contracted for by Morris County Heritage Commission in 1987. The preparers found that there were resources of historic significance in the borough which would need a more intensive survey effort. In 1990, a partial survey of the Borough was completed.

Between 2000 and 2004, an intensive field survey was completed by HPC-trained volunteers; eventually encompassing 1,631 resources (contributing and non-contributing) within the district. A comprehensive body of information on individual historic properties was compiled through a combination of historic map analysis, archival research and field surveys and incorporated in the nomination to the New Jersey and National Registers of Historic Places. A copy of the nomination is held in Borough Hall, a copy is held at the Mountain Lakes Library, a copy resides in Trenton with the NJ SHPO, and there is a fourth copy in Washington D.C.

LOCATION AND SIGNIFICANCE OF HISTORIC SITES AND HISTORIC DISTRICTS

One historic district and one historic site are currently listed in the New Jersey Register of Historic Places (SR) and the National Register of Historic Places (NR). The district is the Mountain Lakes Historic District (SHPO Opinion: 9/11/2000; SR: 7/22/2005; NR: 9/7/2005). The historic site is the Grimes Farm, aka Jonathan Grimes Farmstead at 4 Craven Road (SR: 10/6/1976; NR: 4/1/1977).

As the Mountain Lakes Historic District is extensive, the National Register nomination is included by reference here. Its boundaries encompass the original area Hapgood envisioned as his planned suburb. The district is roughly bounded by Pocono Road to the west, the border between Denville and Mountain Lakes in the Tourne to the north, Rock Lane and Powerville Road to the east and the railroad right-of-way to the south. The 1,397 acre district is bisected by Boulevard and contains all of the lakes wholly within the Borough. The contributing resources in Mountain Lakes Historic District are listed in the 2005 Mountain Lakes Historic District National Register nomination. Based on the information contained in the nomination, at that time there are 738 contributing buildings, 43 contributing sites, and 306 contributing structures.

In addition, there are four properties which are listed on the Morris County Inventory of Historic Sites. These are the Righter House at 99 Pocono Road, the Mountain Lakes Railroad Station at 99 Midvale Road, the Lake Drive School at 10 Lake Drive, and the Community Church at 48 Briarcliff Road. Each of these is a part of the Mountain Lakes Historic District.

HISTORIC PRESERVATION PROPOSALS

The previous Historic Preservation Element of the Master Plan had an objective to "promote the preservation of Mountain Lakes' historic resources through a better understanding among Borough citizens, public officials, property owners and prospective developers/re-developers of what is historically significant." It recommended education and public awareness as a means to promote preservation. Although these strategies have been helpful, they have fallen short in

several areas including: prevention of demolitions of historic structures and the modification of the original topography.

In 2012, Ordinance 08-12 was adopted amending the Land Use ordinance to provide incentives for owners of approximately 490 historic homes ("Contributing Dwellings") to preserve, and maintain the current character of, their homes by offering bonus Floor Area Ratio (F.A.R.), Improved Lot Coverage (I.L.C.) and side setback requirements for homes that satisfy the eligibility criteria set forth in the ordinance.

The Borough Council should consider additional historic preservation ordinance(s). The basic purpose of such ordinance(s) would be to promote the protection and preservation of historic resources/structures, particularly those designated as Key Landmarks; reduce the demolitions of Hapgood and Belhall residential structures; minimize topography changes; and permit the Planning Board and Zoning Board of Adjustment to take historic significance into account when hearing applications.

Historic Preservation Ordinance(s) should:

1. Establish a list of Key Landmarks. The initial Key Landmarks would be the entrance gates to the Borough at the Boonton Township border on the Boulevard and at Crane Road, the Train Station, Lake Drive School, Briarcliff School, the Community Church, St. Peters Church, the Mountain Lakes Club, the original Midvale Stores building, the Mountain Lakes Garage, the Grimes House and the Esplanade. This ordinance would allow for the expansion of the list of Key Landmarks as needed.
2. Prohibit demolition or the significant alteration of the exteriors of Key Landmarks
3. Prepare a list of municipally designated historic landmarks. This list would include all of the contributing structures, sites and buildings in the National and State Register of Historic Place's Mountain Lakes Historic District, and certain structures outside of that area.

PRESERVATION OF HISTORIC DWELLINGS

Following the passage of Ordinance 08-12 the Borough Council needs, on a periodic basis, to formally review the effectiveness of the ordinance. The Historic Preservation Committee (HPC) should provide a report to the Council describing the status and activities associated with the Contributing Dwellings. The report should summarize all activities as well as potential deterioration of any historic dwellings.

The Borough Council should promote the establishment of programs to assure that a large percentage of these dwellings are permanently preserved. The Borough Council should periodically reconsider the reorganization of the Historic Preservation Committee into a Commission as provided for in the state Municipal Land Use Law.

EVALUATION OF IMPACT OF OTHER MASTER PLAN ELEMENTS

New Jersey Municipal Land Use Law (MLUL) requires that each Element of the Master Plan be integrated and evaluated with the other Elements of the Plan. This Historic Preservation Element strives to fulfill the requirements. Historic districts, buildings, structures and archaeological sites are intimately and irrevocably linked with past, present and future land use.

Proposals for future land use, housing, circulation, conservation, community facilities, recreation etc, can directly affect these resources. This historic preservation plan seeks to find a balance between, on the one hand, the preservation, maintenance and interpretation of the Borough's critical historic resources, and on the other hand, the community's need for ongoing changes in land use. As required by statute, an analysis of the impact of other Master Plan elements on the Historic Preservation Plan is required. A summary of the results of this analysis, shown below, demonstrate that the other Elements support or have no impact on the Goals and Objectives of the Historic Preservation Element.

I - Community Characteristics

The regional setting, environmental factors, land use, and census data, demonstrate and support future historic preservation within the Borough.

II - Statement of Objectives, Principles, Assumptions, Policies and Standards

The assumption of a unique character of Mountain Lakes combined with the objectives of retaining that character as well as the environmental resources to support historic development.

III - Land Use Plan

The Land Use objectives of continuing the unique character of the residential neighborhood as a planned community, protecting natural resources, as well as the encouragement to develop commercial properties on route 46, will help to ensure historic preservation within the borough.

IV - Housing Element and Fair Share Plan

This Element does not contain any proposals that will affect historic preservation.

V - Circulation Plan

This Element deals with the streetscape, trails and public transportation of Mountain Lakes and does not alter any efforts for historic preservation.

VI - Conservation Plan

Stressing the environmental resources of the community, this Element supports the unique characteristics of the community and does not impose any restrictions on historic preservation.

VII - Community Facilities and Utilities Plan

This Element describes public facilities under the control of Mountain Lakes. The Historic Preservation Committee monitors these facilities for historic significance.

VIII - Recreation Plan

This Element describes the public recreational facilities and assets in Mountain Lakes. It deals with the scheduling, use, maintenance and possible expansion of these facilities and does not suggest any plans that would impact historic preservation.

IX - Recycling Plan

No impact on historic preservation.

XI - Relationship to other Plans

No impact on historic preservation.

XII - Summary of Major Findings and Recommendations

This element contains a Major Finding that clearly supports historic preservation within Mountain Lakes.

XIII - Stormwater Management Plan

No impact on historic preservation.

XI. RELATIONSHIP TO OTHER PLANS

The purpose of this element is to evaluate the relationship of this Master Plan to those of adjacent communities, Morris County, the State of New Jersey, and the Morris County Solid Waste Management Plan, as required by NJSA 40:55D-28(19)d. The intent of this requirement is to encourage compatible development across municipal borders and minimize conflict with plans from larger geographic areas.

RELATIONSHIP TO PLANS OF ADJACENT MUNICIPALITIES

Mountain Lakes shares a contiguous border with four municipalities, all located in Morris County: Boonton Township, Town of Boonton, Parsippany-Troy Hills Township, and Denville Township. Of these four, Boonton Township, Parsippany-Troy Hills, and Denville are much larger in area than Mountain Lakes and have more potential for future development.

Township of Boonton

The Township of Boonton borders Mountain Lakes to the north. The character of Boonton Township is more rural than the communities surrounding Mountain Lakes along the Route 80 corridor to the east, south, and west, but many portions of the Township developed rapidly in the 1990s. As development has continued in Boonton Township, road congestion has followed. The Boulevard (County Route 618) is a portion of the northern border between the two municipalities and acts as a connector between Boonton Township, Mountain Lakes, and Route 46. However, the Boulevard is also a spine of Mountain Lakes, running its full north-south length. As referenced in the Circulation Element of this Master Plan, the County and Boonton Township should work in conjunction with Mountain Lakes to promote policies that decrease the congestion and intensity of use along this roadway.

Much of Boonton Township is designated as an Environmentally Sensitive Planning Area by the State Plan and efforts have been made to decrease development there. The border of Mountain Lakes and Boonton Township is dominated by the Tourne County Park which is operated by the Morris County Park Commission and lies in both municipalities, as well as neighboring Denville. The Tourne is designated as a conservation area by each municipality. Other uses near the municipal border are mostly single-family dwellings on lots of approximately one half-acre or more in the R-20 zone in Boonton Township, and single-family dwellings on similar sized lots in the R-A zone in Mountain Lakes. These existing land uses are included in Boonton Township's 2005 Land Use Plan and are generally consistent with existing and anticipated future land uses for that portion of Mountain Lakes.

Town of Boonton

The Town of Boonton borders Mountain Lakes to the east. Though similar in area to Mountain Lakes, and similarly almost fully developed, Boonton is among the oldest and densest municipalities in Morris County. Fanny Road marks the largest portion of the boundary between the municipalities and features a mix of uses, including Legacy of Mountain Lakes development (located on the former Fusee tract), single-family residential, athletic fields, and the Lakeland Hills YMCA. The Fanny Road Bridge over the railroad, located at the municipal boundaries of Mountain Lakes, Boonton, and Parsippany-Troy Hills, was replaced by NJDOT prior to 2008.

Mountain Lakes and Boonton should consider jointly creating a pedestrian path connecting the foot of this bridge to the nearby YMCA and Park Place development.

Generally, the existing and future land use planning and zoning is consistent between the two municipalities. Per Boonton's 1999 Master Plan, the existing and future land use designation for this area is low-density, single-family residential, which is compatible with adjacent uses in Mountain Lakes.

Township of Parsippany-Troy Hills

Mountain Lakes shares a border with the Township of Parsippany-Troy Hills to the south (Route 46 and the New Jersey Transit Railroad right-of-way) and east (along Intervale Road and the railroad right-of-way). The land uses along the municipal borders are varied and diverse, including single-family residential, highway business, and a specialized economic development & office zone located in Parsippany between Intervale Road and I-287. Existing and future land use plans are consistent between the municipalities per Parsippany-Troy Hills' most recent Land Use Plan. Additionally, the existing railroad right-of-way comprises much of the border between the municipalities and acts as a physical barrier and buffer between uses. As the Route 46 corridor has suffered commercial decline over the past decade, both municipalities have designated its improvement and redevelopment a priority and should strive for cooperation on this matter.

Township of Denville

The Township of Denville lies to the west of Mountain Lakes. Denville's border is comprised of a portion of Tourne Park, with single-family residential uses approaching to Route 46 and a small strip of commercial uses along the highway. These uses are generally compatible to one another on either side of the boundary with Mountain Lakes, with residential development increasing in density closer to Route 46. Generally, the existing and anticipated future land use is consistent between the two municipalities, with no changes proposed in Denville's Master Plan or Reexamination report. Mountain Lakes should strive to coordinate with Denville in the improvement and redevelopment of the Route 46 business corridor, which has been designated a priority in the past by both municipalities.

RELATIONSHIP TO COUNTY AND STATE PLANS

Morris County Master Plan

Morris County's Master Plan elements were each adopted over the course of several decades, from the 1970s to the 1990s, with the exception of the Comprehensive Farmland Preservation Element of 2008. In 2007, a "State of the County" report was prepared to update existing conditions and trends in planning and development that were originally identified in the 1975 Future Land Use Plan Element. In this report, no specific planning initiatives are proposed for Mountain Lakes, and generally, the Borough has followed the development patterns of similar areas throughout the County as described within.

Morris County Solid Waste Management Plan

The Morris County Municipal Utilities Authority was appointed in 1988 as the implementing agency for the Morris County Solid Waste Management Plan and is responsible for maintaining and amending the Solid Waste Management Plan. The Solid Waste Management Plan was originally adopted in 1979, updated in 1985, and has been continually amended through 2012. The Recycling Element of this Master Plan (Chapter 9) reflects that the Borough has adopted and implemented recycling regulations that are in accordance with the most recent Morris County Solid Waste Management Plan requirements, as well as statewide recycling goals. All solid waste collected within the Borough is disposed of in compliance with the Morris County Solid Waste Management Plan.

The New Jersey State Development and Redevelopment Plan

The most recent New Jersey State Development and Redevelopment Plan (State Plan) was adopted in March 2001 by the State Legislature. Since that time, the State Planning Commission has issued a working Draft Final State Plan, which is slated to be adopted after a series of public hearings. The purpose of the state plan is to act as a statement of policy that coordinates statewide planning and development activities while establishing planning objectives. Municipal master plans should be evaluated and modified to reflect the policies of the State Plan, as necessary.

The State Plan “provides a balance between growth and conservation by designating planning areas that share common conditions with regard to development and environmental features.” Mountain Lakes is located in the Metropolitan Planning Area, or Planning Area 1 (PA1). Generally, the State Plan encourages growth through redevelopment and infill, where appropriate, in PA1, while encouraging cooperation between communities. Mountain Lakes is not designated as a “center” by the State Plan, or a central place within a planning area where growth should be attracted or contained. The 2009 Draft Final State Plan Policy Map does not change the PA1 designation.

Representatives of counties and municipalities throughout the state had direct input on the draft State Plan through the cross-acceptance process. As part of Cross-Acceptance III, the Borough requested that the State Plan institute policy guidelines appropriate for built-out municipalities that are not in need of redevelopment and that all permanently protected open space be shown on the official State Plan Map. However, the Master Plan and draft State Plan are generally consistent in their goals.

XII. SUMMARY OF MAJOR FINDINGS AND RECOMMENDATIONS

FINDINGS

The following is a summary of the major findings contained within this Master Plan.

Community Character - Mountain Lakes is a fully developed and primarily residential community with a unique character based primarily on its history as a planned residential development of single-family homes and its proliferation of natural and recreation-oriented features, including municipally-owned open space and lakes.

Population Trends - The Borough's population of children per household is much higher than that of the county as a whole, a historical trend that continues through the present. In addition, the senior citizen population has been increasing for the past several decades and this trend is expected to continue in the future.

Residential & Recreational Land Uses - Single-family residential is the dominant character and land use throughout the Borough. More diverse housing options have been recently developed and there are currently few privately-owned, developable parcels remaining in the Borough. There are nearly 500 acres of public open space throughout the Borough.

Non-Residential Land Use - Two commercial centers exist within the Borough: the Route 46 corridor provides a highway-oriented retail and business area, while the Midvale Market area serves as a community-oriented focal point. The Route 46 East business corridor has sustained a long period of economic decline, and recent redevelopment efforts have been hampered by national and regional economic conditions.

Vehicular Traffic - As neighboring communities have developed over the past several decades, vehicular traffic has increased on important connector roads through residential neighborhoods in the Borough, leading to safety and quality-of-life issues.

Connections & Pathways - One of Mountain Lakes' most important attributes is an extensively developed set of pathways, including trails, sidewalks and bikeways that provide connectivity throughout the Borough. This pathway system encourages pedestrian movement, supports healthy activity options for children and families, and creates a sense of community by linking neighborhoods.

Commitment to Public Education - The Borough's schools have long been recognized as among the best in the state and are a source of community pride. The High School was recently remodeled and new playing fields were constructed and remodeled.

Need for Upgraded Facilities - Borough Hall is in declining condition and needs renovations and upgrades to provide appropriate space for users, including the Police Department and community groups.

Potable Water Supply - The Borough's potable water supply has been a mounting issue, leading to some recent residential developments importing water service from nearby

municipalities. While no major utility expansions are necessary due to the lack of remaining developable land, consumption patterns and trends continue to be monitored within the Borough.

Diverse Recreation Facilities & Programs - The Recreation Commission is committed to providing diverse recreational opportunities meeting the needs of a variety of citizens and their interests. In the face of limited resources, efficient and coordinated use of facilities is of critical importance for the Borough.

Recycling - The Borough has a long-standing commitment to recycling that has included the updating and renovation of the Recycling Center and the provision of a recycling plan for major developments.

Historic Preservation - Mountain Lakes' history as a planned residential park community is one of its most important attributes and is a key contributor to the Borough's character. The majority of the Borough, including areas with concentrations of original Craftsman-influenced Hapgood and Belhall homes, is included in the Mountain Lakes Historic District, which was added to the State and National Registers of Historic Places in 2005.

RECOMMENDATIONS

The following summarizes the major recommendations outlined within this Master Plan.

Future Land Use & Zoning

- Preserve the Borough's dominant residential character by continuing the established mix and intensity of uses, and especially the traditional/historic character of its residential neighborhoods
- Identify appropriate development and redevelopment opportunities in non-residential areas, including provision for affordable housing or senior housing to allow long-time residents to "age in place."
- Maintain and protect Borough-owned property and conservation easements to ensure dedicated open space and recreation areas
- Pursue a redevelopment strategy for the Route 46 corridor that encourages cooperation between property owners and include revised zoning regulations to provide greater flexibility in terms of both use and bulk standards; consider either a comprehensive revision of the B zoning district or an overlay zone that broadens permitted uses and allows a greater intensity of development.
- Promote Midvale Town Center area as a community focal point; consider rezoning the area to permit mixed uses, such as ground floor community retail establishments with apartment housing above.
- Address concerns with respect to vehicular traffic and speed in the Midvale area through traffic-calming improvements to encourage pedestrian safety; consider improvements to streets, sidewalks, public spaces, and parking areas in accordance with the character and pedestrian orientation of the neighborhood (e.g., crosswalks and landscaping within traffic islands).

Conservation & Water Supply

- Continue to advocate policies that protect Borough-owned property and preserve dedicated open space, recreation areas and environmentally sensitive features.

- Protect the quality of the Borough's water bodies, groundwater and vegetation through ordinances, maintenance standards and community cooperation.
- Continue to schedule and complete minor improvements throughout the system to maintain a satisfactory quality and quantity of potable water.

Circulation

- Monitor the plans of NJDOT, Morris County and neighboring communities to ensure that no additional vehicular traffic from new development is diverted onto Borough streets.

Education and Community Facilities

- Continue the traditional commitment to public school excellence while recognizing that increasing property taxes used to fund the district may also render it difficult for some residents to afford living in the Borough; monitor development in Boonton Township that may send additional students to the High School
- Maintain and upgrade existing facilities in a manner that will keep them in good condition while minimizing additional public expenditures by promoting capital budgeting, efficient utilization and shared services where possible
- Continue exploring long-term plans for inter-municipal shared services in order to efficiently and productively provide services while controlling costs and maintaining quality.
- Promote coordinated and shared utilization of existing community facilities (in lieu of constructing a dedicated community center) to ensure adequate meeting space for Borough groups and activities.

Recreation

- Continue to support the Recreation Commission's commitment to providing a diversity of recreational activities, while understanding and balancing the changing interests and competing demands of the Borough's citizens; place particular emphasis on all-age activities and non-athletic recreation.

Historic Preservation

- Implement the comprehensive Historic Preservation Ordinance adopted in July 2012, which established a Historic Preservation Committee, and also provides for zoning incentives for preserving contributing Hapgood and Belhall residences within the Borough.

XIII. STORMWATER MANAGEMENT PLAN

The purpose of this plan element is to document the Borough's strategy for addressing stormwater related impacts. It contains all of the requirements described in N.J.A.C. 7:8 Stormwater Management Rules addressing groundwater recharge, and stormwater quantity standards for new major development (defined as projects that add one quarter acre of impervious surface and/or disturb one or more acres of land). The overall intent is to minimize the adverse impact of stormwater runoff on water quality and the loss of groundwater recharge that provides base flow in receiving water bodies.

STORMWATER MANAGEMENT OBJECTIVES

The following are the Borough's major stormwater management objectives that should be reflected in the Borough ordinances and policies:

- To reduce flood damage to property.
- To minimize, to the extent practical, any increase in stormwater runoff from any new development.
- To reduce soil erosion from any development or construction project.
- To assure that existing and proposed culverts and bridges, and other instream structures, are adequate.
- To maintain or increase groundwater recharge.
- To prevent an increase in nonpoint source pollution, to the greatest extent feasible.
- To maintain the integrity of stream channels for their biological functions, as well as for drainage.
- To minimize pollutants in stormwater from new and existing development.
- To restore, enhance and maintain the chemical, physical, and biological integrity of the waters of the State.
- To protect public health.
- To safeguard fish and aquatic life and scenic and ecological values.
- To enhance the domestic, municipal, recreational, industrial, and other uses of water.
- To protect public safety through the proper design and operation of stormwater basins.

This element contains the following recommendations for implementing these objectives:

- Specific stormwater design and performance standards are outlined that should be implemented in all new development.
- Stormwater management controls are proposed addressing the impacts from existing development.
- Preventive and corrective maintenance strategies are included for ensuring the long-term effectiveness of stormwater management facilities.

Safety standards are outlined for stormwater infrastructure to protect public safety.

EFFECTS OF LAND DEVELOPMENT ON THE HYDROLOGIC CYCLE

Land development typically alters the hydrologic cycle of a site dramatically, and ultimately, an entire watershed. Prior to development, native vegetation either directly intercepts precipitation or draws that portion that has infiltrated into the ground and returns it to the atmosphere through evaporation. Development removes beneficial vegetation and replaces it with lawn or impervious cover, reducing the site's evaporation and infiltration rates. Clearing and grading a site removes depressions that store rainfall. Construction activities also compact the soil and diminish its infiltration ability, resulting in increased volumes and rates of stormwater runoff from the site. Impervious areas that are connected to each other through gutters, channels, and storm sewers transport runoff more quickly than natural areas. This shortening of the transport or travel time quickens the rainfall-runoff response of the drainage area, causing flow in downstream waterways to peak faster and higher than natural conditions. These increases can create and aggravate existing downstream flooding and erosion problems and increase the quantity of sediment in the channel.

Filtration of runoff and removal of pollutants by surface and channel vegetation is eliminated by storm sewers that discharge runoff directly into a stream. Increase in impervious area can also decrease opportunities for infiltration which, in turn, reduces stream base flow and groundwater recharge. Reduced base flows and increased peak flows produce greater fluctuations between normal and storm flow rates, which can increase channel erosion. Reduced base flows can also negatively impact the hydrology of adjacent wetlands and the health of biological communities that depend on base flows. Finally, erosion and sedimentation can destroy habitat, dooming species which cannot adapt.

Land development often results in the accumulation of pollutants on the land surface that runoff can mobilize and transport to streams. It also increases runoff peaks, volumes, and loss of groundwater recharge. New impervious surfaces and cleared areas created by development can accumulate a variety of pollutants from the atmosphere, fertilizers, animal wastes, and leakage and wear from vehicles. Pollutants can include metals, suspended solids, hydrocarbons, pathogens, and nutrients.

Land development can adversely affect water quality and stream biota in subtle ways, in addition to increased pollutant loading. For example, stormwater falling on impervious surfaces or stored in detention or retention basins can become heated and raise the temperature of the downstream waterway, adversely affecting cold water fish species such as trout. Development can remove trees along stream banks that normally provide shading, stabilization, and leaf litter that falls into streams and becomes food for the aquatic community.

LAND USE AND POPULATION

Chapters I and III of this Plan describe the Borough's land use and population characteristics as an essentially fully developed community. According to the 2000 census, the Borough has 4,256 residents, an increase of 409 persons over the 1990 census data. Accompanying the population increase were 118 new housing units in the same 10 year period. The Borough has approximately 35 acres of developable vacant land remaining, so no significant population change is expected in the future. The Borough is within the State Plan Designation PA-1

Metropolitan Planning Area. The State exempts previously developed sites in PA-1 that are undergoing redevelopment from the State infiltration requirements to prevent ground water pollution from possible contamination on those sites. Undeveloped land in PA-1 is not exempt. Mountain Lakes has historically endeavored to be a good steward of the environment and will continue to work towards a no net increase in storm water runoff from developing properties.

SURFACE WATER AND GROUNDWATER

Troy Brook is the main watercourse in the Borough conducting nearly all of the Borough's storm water. There are five lakes in the Borough, which are in series in the headwater tributary drainage area of Troy Brook. Mountain Lakes lies within both the Whippany River watershed and the Rockaway River watershed, with approximately 1,680 acres draining to the Whippany, and approximately 190 acres draining to the Rockaway. There are designated wetland areas in the Borough.

According to the NJDEP, "A Well Head Protection Area (WHPA) in New Jersey is a map area calculated around a Public Community Water Supply (PCWS) well in New Jersey that delineates the horizontal extent of ground water captured by a well pumping at a specific rate over a two, five, and twelve-year period of time for unconfined wells. The confined wells have a fifty foot radius delineated around each well serving as the well head protection area to be controlled by the water purveyor in accordance with Safe Drinking Water Regulations (see NJAC 7"10-11.7(b)1)."

WHPA delineations are conducted in response to the Safe Drinking Water Act Amendments of 1986 and 1996 as part of the Source Water Area Protection Program (SWAP). The delineations are the first step in defining the sources of water to a public supply well. Within these areas, potential contamination will be assessed and appropriate monitoring will be undertaken as subsequent phases of the NJDEP SWAP. A significant portion of the Borough is covered by Tiers 1, 2 & 3 well head protection areas. The Conservation Plan (Chapter VI) of the Mountain Lakes Master Plan recommends that well head protection standards be developed in accordance with the state guidelines.

WATERSHED MANAGEMENT AREA

Mountain Lakes lies in Watershed Management Area 6, which includes the Whippany and Rockaway River watersheds. Watershed Management Area 6 (WMA 6) represents the area drained by waters from the upper reaches of the Passaic River Basin, including the Passaic River from its headwaters in Morris County to the confluence of the Pompton River. WMA 6 is characterized by extensive suburban development and reliance upon ground water sources for water supply. WMA 6 lies in portions of Morris, Somerset, Sussex and Essex counties and includes the Upper and Middle Passaic River, Whippany River and Rockaway River Watersheds.

Within WMA 6, further drainage area designations are delineated by hydraulic unit code (HUC) designations. The HUC system starts with the major watersheds in the WMA, and then subdivides into progressively smaller sub watersheds.

A drainage area with a hydrologic unit code (HUC) designation with 14 numbers, or HUC-14, is one of several sub watersheds of a larger watershed with 11 numbers, or a HUC-11. Two HUC-11 divisions are within Mountain Lakes; the Whippany River basin, and the Rockaway River basin. There is one HUC-14 division within the Whippany River basin, and four HUC-14 divisions within the Rockaway River basin.

WATER QUALITY

The New Jersey Department of Environmental Protection (NJDEP) has established an Ambient Biomonitoring Network (AMNET) to document the health of the State's waterways. There are over 800 AMNET sites throughout the state of New Jersey. These sites are sampled for benthic macroinvertebrates by NJDEP on a five-year cycle. Streams are classified as non-impaired, moderately impaired, or severely impaired based on the AMNET data. The data are used to generate a New Jersey Impairment Score (NJIS), which is based on a number of biometrics related to benthic macroinvertebrate community dynamics. There are 49 AMNET sites in Watershed Management Area 6 in the upper Passaic, Whippany, Rockaway and Dead River watersheds.

Within the Borough of Mountain Lakes, there is one AMNET site, AN0236, which is located on Troy Brook at Lake Drive. The next downstream AMNET site is AN0237 which is located on Troy Brook in Parsippany-Troy Hills at Beverwyck Road.

EXISTING STORMWATER MANAGEMENT

Stormwater management to protect ground and surface water quality has long been a goal of the Borough of Mountain Lakes as evidenced by the following:

1. Borough stormwater ordinances that address stormwater quantity and quality.
2. Borough groundwater ordinances that address groundwater quality and recharge.
3. Stream corridor and lake protection measures.
4. Compliance with Residential Site Improvement Standards.
5. Participation in the Rockaway River and Whippany River Basin programs.
6. Planning Board and Board of Adjustment approvals which include requirements for surface water and groundwater management plans.
7. Department of Public Works activities including:
 - Covered storage of all salt/sand materials
 - Proper fueling and maintenance of vehicles
 - Proper housekeeping for all DPW facilities
 - Inspection of storm drains and catch basins
 - Regular cleaning and/or maintenance of drains and basins
 - Street sweeping program

These measures and policies should be continued.

DESIGN AND PERFORMANCE STANDARDS

The Borough has reviewed its ordinances for consistency with State standards contained in N.J.A.C. 7:8-5. The Borough's design and performance standards for stormwater management are consistent, minimizing the adverse impact of stormwater runoff on water quality and water quantity *and loss of groundwater recharge in receiving water bodies*. The design and performance standards include the language for maintenance of stormwater management measures consistent with the stormwater management rules at N.J.A.C. 7:8-5-8 Maintenance Requirements, and language for safety standards consistent with N.J.A.C. 7:8-6 Safety Standards for Stormwater Management Basins. The ordinances should be submitted to the County for review and approval within 24 months of the effectiveness date of the Stormwater Management Rules.

PLAN CONSISTENCY

The Borough is not within a Regional Stormwater Management Planning Area and no Total Maximum Daily Loads (TMDL's) have been developed for waters within the Borough. Therefore this plan does not need to be consistent with any regional stormwater plans (RSWMPs) nor any TMDL's. If any RSWMPs or TMDLs are developed in the future, this Municipal Stormwater Management Plan should be updated to be consistent.

The Borough is within the Whippany River Basin and much information on the basin and its characteristics has been developed as part of the Whippany River Plan.

This Municipal Stormwater Management Plan is consistent with the Residential Site Improvement Standards (RSIS) at N.J.A.C. 5:21. The Borough should utilize the most current update of the RSIS in the stormwater review of residential areas. This Municipal Stormwater Management Plan should be updated to be consistent with any future updates of the RSIS.

The Borough's Stormwater Management Ordinance requires all new development and redevelopment plans to comply with New Jersey's Soil Erosion and Sediment Control Standards. During construction, Borough inspectors observe on-site soil erosion and sediment control measures and report any inconsistencies to the local Soil Conservation District.

NONSTRUCTURAL MANAGEMENT STRATEGIES

Mountain Lakes has reviewed the Borough Master Plan and Ordinances with regard to incorporating nonstructural stormwater management strategies and has made amendments where necessary and appropriate to be consistent with new State rules.

LAND USE/BUILD-OUT ANALYSIS

The Borough has a vacant land area of less than one square mile and thus is not required to do a build-out analysis.

MITIGATION PLANS

The Borough has reviewed the need for mitigation options. No mitigation is required at this time in light of the fact that there is only a small amount of vacant developable land remaining.

RECOMMENDATIONS FOR IMPLEMENTING STORMWATER CONTROL ORDINANCES

Adequate ordinances are in place in the Borough protecting stormwater quality including ordinances addressing: pet waste control, litter control, improper dumping, feeding of non-confined wildlife, and yard waste. They have been implemented and will be enforced by Borough officials.

APPENDIX A

PROPERTY DESIGNATED FOR PURPOSES OF CONSERVATION, PARK LANDS AND OPEN SPACE IN THE BOROUGH OF MOUNTAIN LAKES

Block	*Lot	Zone	Acres	Remarks
6	1	R-A	0.830	
6	12	OL-2	23.250	
6	15	OL-2	4.060	
9	1	R-1	0.070	
9	13	R-1	.115	
9	14	R-1	0.301	
9	22	R-1	0.51	
15	5	R-1	0.610	
17	16	R-1	0.250	
21	33	R-A	0.367	
21	37	R-A	0.261	
21	40	R-A	.426	
21	41	R-A	0.1894	
21	42	R-A	0.1894	
22	10.01	R-A	2.670	
22	20	R-A	1.960	Lots 23 and 24 (1.51 acres) are part of Lyman Wilson Memorial Park
23	39	C	3.760	
23	56	C	0.550	
23	71	R-A	0.160	
24	1	C	8.692	Lot 2 (6.34 ac) is part of William N. Taft Memorial Field
26	1	C	83.460	Part of Richard M. Wilcox Park
27	4	C	2.410	
27	26	C	9.940	Part of Richard M. Wilcox Park
28	9	C	28.180	Part of Richard M. Wilcox Park
29	1	C	15.570	Part of Richard M. Wilcox Park
29	2	C	2.32	
30	1	C	8.950	Part of Richard M. Wilcox Park; Lots 1-20 are Birchwood Beach
30	66	C	0.702	Part of Richard M. Wilcox Park
30	70	C	2.000	Part of Richard M. Wilcox Park
31	29	C	7.110	Part of Richard M. Wilcox Park
32	1	C	22.290	Part of Richard M. Wilcox Park
33	8.01	R-A	0.020	
34	5	R-AA	3.050	
35	1	R-AA	5.080	
36	1	C	3.450	
37	1	C	5.000	
38	12	C	2.290	

Block	*Lo	Zone	Acres	Remarks
39	1	C	2.48	
39	22	C	1.780	
40	1	C	0.420	
40	19	C	6.430	
41	1	C	6.670	Part of Richard M. Wilcox Park
42	29	C	3.25	
45	10	C	1.270	
46	15	R-A	0.257	
47	8	R-A	0.740	
48	28	R-AA	0.580	
50	23	R-AA	0.580	
52	13	R-AA	0.470	
52	19.02	R-AA	0.800	
52	45	R-AA	1.760	
52	54	R-AA	0.830	
53	15	R-AA	1.200	
53	52	R-AA	6.060	
54	12	R-AA	0.520	
56	14	R-AA	0.630	
56	34	R-AA	0.630	
56	39	R-AA	0.930	
56	52.02	R-AA	0.300	
56	58.01	R-AA	0.413	
57	1	R-AA	0.570	
58	10	R-AA	0.870	
58	24	R-AA	0.390	
58	30	R-AA	0.850	
59	39	R-A	1.070	
59	46	R-A	0.430	
60	5	R-A	0.420	
60	9	R-A	0.420	
60	13	R-A	0.800	
60	27	R-A	0.640	
61	25	R-A	0.720	
61	31	R-A	0.770	
61	38	R-A	0.580	
61	45	R-A	0.500	
62	20.01	R-A	0.240	
62	25	R-A	1.060	
62	33	R-A	0.826	
62	38	R-A	0.550	
63	11	R-A	0.459	
63	17	R-A	0.720	
64	8	R-A	0.230	
64	11	R-A	0.570	

Block	*Lot	Zone	Acres	Remarks
64	19	R-A	0.650	
65	13	R-A	0.710	
66	16	R-A	3.160	
68	4	R-A	0.730	
68	10	C	2.770	Part of Halsey A. Frederick Mem. Park
69	11	C	2.580	Part of Halsey A. Frederick Mem. Park
70	6	R-A	0.918	
74	4	R-A	0.520	
74	21	R-A	0.460	
75	7	R-A	1.290	
75	27	R-A	1.100	
76	28	R-A	2.11	
78	33	R-A	0.270	Briarcliff Park
78	42	R-A	0.800	Wildwood Dam
78	67	R-A	0.554	Wildwood Park
80	1	R-A	0.690	Frank B. Kaufmann Memorial Park
80	28	R-A	0.640	
81	15.02	R-A	0.210	Memorial Park
86	9	R-A	0.410	
86	13	R-A	0.410	
86	18	R-A	0.380	
86	22	R-A	0.260	
86.01	1	R-A	0.280	
86.01	24	R-A	4.090	Practice field leased to Bd. of Education
86.01	32	R-A	0.340	
86.01	33	R-A	0.400	
86	40	R-A	0.62	
86	41	R-A	0.86	
88	1	R-A	0.560	
88	6	R-A	0.210	
88	9	R-A	0.410	
88	14	C	0.410	Part of Halsey A. Frederick Mem. Park
88	17	C	52.004	Part of Halsey A. Frederick Mem. Park (contains Little League fields)
88	21	C	2.750	Part of Halsey A. Frederick Mem. Park (contains Marcel Doublier Tennis Court)
88	27	R-A	2.030	Only Lot 27 (0.69 ac) is part of Halsey A. Frederick Park and in Zone C
91	1	R-A	0.460	
91	14	R-A	0.210	
91	35	R-A	0.670	
91	39	R-A	0.690	
91	43	R-A	0.580	

Block	Lot*	Zone	Acres	Remarks
91	50.02	R-A	0.470	
91	55	R-A	0.420	
94	9.01	R-A	0.210	
94	16	R-A	0.380	
100	29	R-A	1.240	Island Beach parking area
101	30.02	R-A	0.430	Midvale Boat Landing
101	71	R-A	0.950	Part of Thorlief Fliflet Bird Sanctuary
101	79	R-A	1.610	Part of Thorlief Fliflet Bird Sanctuary
104	44	R-A	0.280	
104	71	R-A	0.430	
104	78	R-A	0.360	
105	15	R-A	0.510	
105	27	R-A	0.140	
106	9.01	R-A	0.193	
107	10	R-A	0.600	
108	10	R-A	1.710	
110	33	R-A	0.499	
110	40	R-A	0.132	
110	46	R-A	0.170	
110	57	R-A	0.720	
110	61	R-A	0.620	
111	10.02	R-A	0.350	
111	19	R-A	0.360	
112	6	R-A	0.630	
112	45	R-A	0.340	
114	1	R-A	0.170	
114	20	R-A	0.410	
124	1	R-A	0.560	50 ft. R/W off Scarborough Road
127.04	13.01	R-2	0.790	
127.05	6	R-2	0.218	
127.05	16	C	0.289	
127.06	1	C	38.58	
129	1	C	6.950	
129.01	18.02	R-A	2.430	
129.02	1	R-A	8.270	Part of Haswell Memorial Field
129.03	13	C	3.86	Part of Haswell Memorial Field
131	2	R-2	0.260	
131	3	R-A	0.310	Island Beach
138	1	C	0.590	Part of Linear Park

***2009 tax map lot numbers**

Properties Listed below are Lakes**

79	1	R-A	26.13	Wildwood Lake
131	1	R-A	79.26	Mountain Lake
132	1	R-A	2.46	Grunden's Pond
133	1	R-A	.97	Cove Lake
134	1	R-A, AA	3.25	Olive and Shadow Lakes
135	1	R-A, AA	15.67	Sunset Lake
136	1	R-AA	20.05	Crystal Lake
137	1	R-AA	14.27	Birchwood Lake

Properties Listed Below are County-owned Open Space

27	16	R-AA	15.29
28	13	C	3.97

Municipal Properties devoted to Community Purposes

1	2	R-A	1.96	Train Station
4	22.01	B	1.23	Well #5
21	38	R-A	21.47	Borough Hall & DPW
42	12	R-AA	.62	Water Tank
53	1	R-AA	2.18	Well #2
98	5	R-A	1.26	Public Library
108	1	A	.11	Utility Tower

School Property owned by the Board of Education

77	1	R-A	1.49	Parcel by Wildwood School
86.01	23	R-A	41.21	Mountain Lakes High School
87	1	R-A	12.66	Briarcliff School
87	12	R-A	12.58	Wildwood School
100	5	R-A	2.41	Lake Drive school

Notes:

The following are parts of Borough rights-of-way and are included in this listing as dedicated for purposes of conservation, park land and open space:

Part of Linear Park - That part of the Boulevard (from the westerly sideline of N. Crane Rd. as extended southerly 30 feet, to the northeasterly borough line) parallel to the northerly Morris County ROW line of the Boulevard, Area is approximately 10.99 acres.

Esplanade - A symmetrically shaped tract (approximately 0.39 acres) between Block 1, Lot 3 and the southern end of the Esplanade right-of-way, and bounded on the westerly side by Block 99 and on the easterly side by Block 98.

Basketball Court - Part of Romaine Rd adjacent to Lot 10 of Block 107, Approx 0.04 acres.

Lakes** - The lakes and their connecting waterways are owned by the Borough and used for active and passive recreation.